MyHOME
automation

TECHNICAL
SHEETS

bticino

Index

Technical sheets

This document collects all product technical sheets My HOME, broken down by system belonging.
For each device, the corresponding technical sheet offers information on:

- Product description;
- Related items;
- Dimensional and technical data;
- Configuration;
- Wiring diagram, if required.

The technical sheets may also be viewed by accessing the "Professionals" section of the **www.bticino.com**

![BTicino logo]

MyHOME_Screen10

| 0672 67 | MH4892 |
| 0672 68 | MH4893 |

Description

MyHOME_Screen10 with 16:9 10" LCD screen and new graphic interface
- management of all My Home and Video door entry system functions
- navigation by rooms
- management of multimedia contents through USB connection, SD Card, LAN network, or IP
- management of customised profiles
- possibility of customising background images
Installation: the device is suitable for wall mounted installation using the bracket supplied.
Available in white and in black. No additional surround plate needed.

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Local power supply (1 – 2):	22–27 Vdc
Local max. absorption (1 – 2):	370 mA
Max. absorption from SCS BUS:	50 mA
Operating temperature:	5 – 45 °C

Front view

Rear view

Dimensional data

A	B	C
315 mm	200 mm	24 mm

Legend

1. Microphone
2. 10" touch screen colour LCD display
3. Call answer pushbutton
4. Door lock release
5. Switching on/Camera scrolling
6. Monitor off
7. USB connector
8. Mini-USB connector for the connection to
9. Secur Digital memory card connector
10. Line termination ON/OFF micro-switch
11. Sound system output connector
12. 2 WIRE video BUS/SCS connector
13. 1 - 2 power supply connector
14. LAN connection signalling LED
15. RJ45 connector for Ethernet connection
16. Loudspeakers
17. Safety spring

![legrand logo] MQ00758-b-EN   24/04/2014

Description

Device drawing

Configuration

Assembly, Installation

Dimensional data

Technical data

Legend

Wiring diagrams

Configuration

MyHOME_Screen10 must be configured using the software.
In order to receive/transfer the configuration performed, or to update the firmware, connect the device to the PC using one of the following solutions:
- USB-miniUSB cable;
- Ethernet cable.

USB connection

Ethernet connection

Switch

For the configuration download the software from the website www.homesystems-legrandgroup.com

![legrand logo]   MQ00758-b-EN   24/04/2014   ![bticino logo]

2
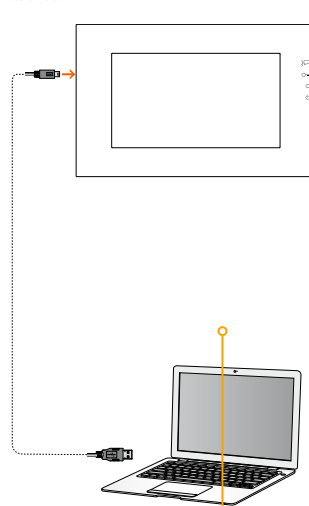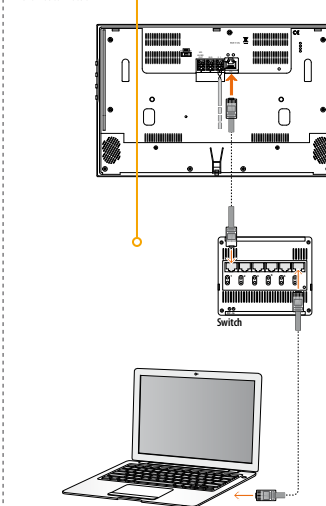
DIGITAL TOOLS SERVICES RANGE

Customer service

SALES INFORMATION
Numero Verde 800-837035

Toll free number for the request of technical documentation and business information available from Monday to Friday from 8.30 a.m. to 6.30 p.m.

ESTIMATE SERVICE
Numero Verde 800-293000

Toll free number for free estimate service operating from Monday to Friday from 8:30 a.m. to 6:30 p.m. for:

Video door entry system
low voltage electric distribution boards
Video Surveillance and CCTV
MyHome Home Automation

TECHNICAL SERVICE

Authorized Technical Assistance Center for assistance under warranty and out of warranty on products and systems.

SALES SUPPORT

A capillary network of technical-sales representatives able to support customers in their choice of products.

www.professionisti.bticino.it

The website with all the information on products and technical content to download.

BUILDING BLOG

The Blog dedicated to installers for insights, information and direct contact with BTicino.

www.buildingblog.it

MYOPEN COMMUNITY

The community of the home automation system integrators, with insights and services on the new applications.

www.myopen-legrandgroup.com

PROMOTIONS

The website of promotions: enter your information, see your score and choose the gift.

MY HOME PRO

Join the program dedicated to home automation installers: courses and dedicated services.

BTicino mobile

ON-LINE CATALOGUE

A useful tool for finding all technical information on products and much more

www.catalogo.bticino.it

CATALOGS APP

A rich library always up to date with all the catalogs of the brands distributed by BTicino in Italy.

MY HOME GUIDE APP

The technical design and installation guide of a MyHome home automation system, always updated on your Ipad and Iphone.

COVER PLATES CONFIGURATION APP

An APP to configure the light point, combining controls and colors of AXOLUTE and LIVINGLIGHT cover plates, save or share the image obtained.

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YOUTUBE - BTICINO PROFESSIONAL

The YouTube channel where you can find videos and animations for the various product ranges.

www.youtube.com/user/bticinoprofessional
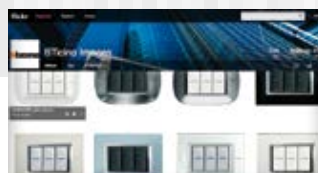
FLICKR - IMAGE CHANNEL

The BTicino channel to view and download images of various products.

www.flickr.com/photos/bticino

TWITTER BTICINO

The fastest way to stay informed about new products and initiatives proposed by BTicino.

https://twitter.com/bticinoitalia

Remote control 5 pushbuttons

Description

Remote control with 5 scenario control pushbuttons.
The device can be set to operate as an IR remote control (mode not possible for ZigBee® Radio automation devices).

Technical data

Power supply:	No. 2 batteries, 1.5 V LR03
Duration of the batteries:	2 years
Operating temperature:	5 – 45 °C
Technology:	2.4 GHz Radiofrequency ZigBee® standard
Radio frequency capacity:	100 m free field, 10 m in rooms with concrete walls
Infrared capacity:	10 m free field

Dimensional data
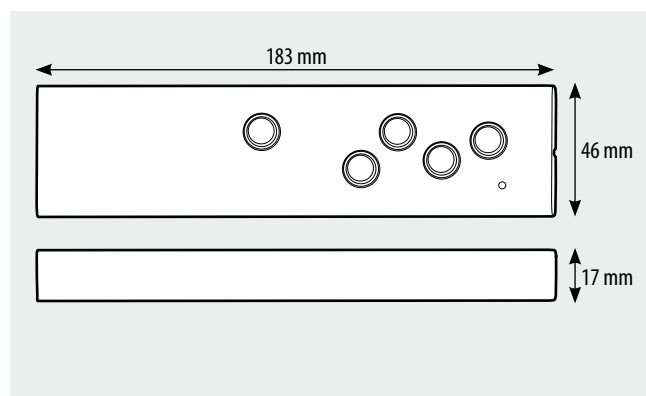
Front view

Rear view

Configuration

"Push and Learn" self-learning type.
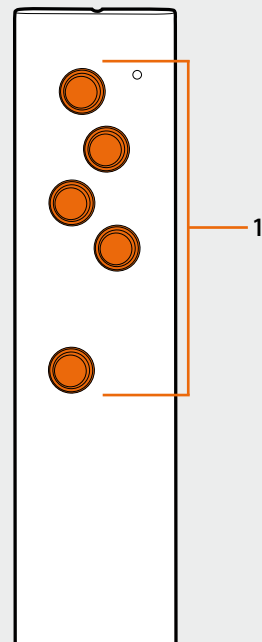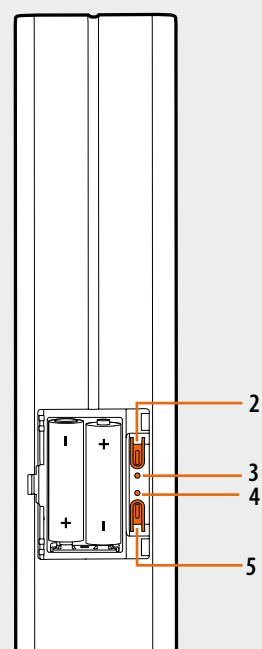
Legend

1. Scenario activation pushbutton

2. NETWORK key

3. NETWORK LED

4. LEARNING LED

5. LEARNING key

Remote control 4 pushbuttons

573 70   3528N

Description

Remote control with 4 scenario control pushbuttons.

Technical data

Power supply:	No. 1 lithium battery, 3V, CR2032 type
Duration of the batteries:	5 years
Operating temperature:	5 – 45 °C
Technology:	2.4 GHz Radiofrequency ZigBee® standard
Capacity:	80 m free field, 15 m in rooms with concrete walls

Dimensional data

50 mm

21 mm

76 mm

Configuration

"Push and Learn" self-learning type.

Front view

6

5

1

2

3

4

Rear view

7

8
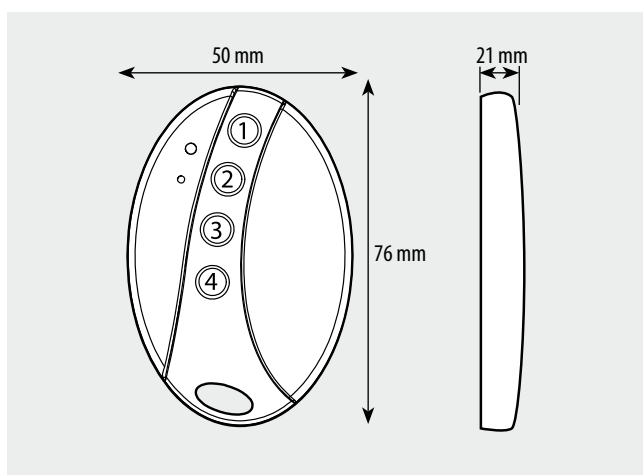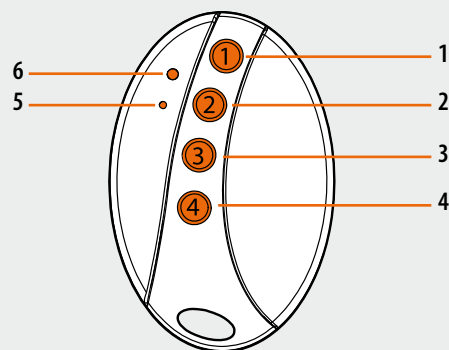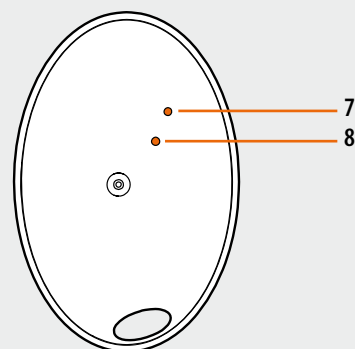
Legend

1. Scenario no. 1 activation pushbutton

2. Scenario no. 2 activation pushbutton·

3. Scenario no. 3 activation pushbutton

4. Scenario no. 4 activation pushbutton

5. LEARNING LED

6. LEARNING key

7. NETWORK LED

8. NETWORK key

Integration module switch 1X2500W RF

Description

Actuator for the control of a load with maximum power 2500 W, with ON/OFF control pushbutton for system testing.
In enclosure suitable for installation inside false ceilings.

Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	2.4 GHz Radiofrequency ZigBee® standard
Capacity:	150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage	Incandescent lamp	Halogen lamp	Fluorescent tube lamp	Ferromagnetic transformer
Voltage				
230 Vac	2500 W	2500 W	1250 W	2500 VA
110 Vac	1250 W	1250 W	625 W	1250 VA

Voltage	Electronic transformer	Compact fluorescent tube lamp	LED lamps	Motors
Voltage				
230 Vac	2500 W	1250 W	1250 W	250 VA
110 Vac	1250 W	625 W	625 W	125 VA

Dimensional data

50 mm

38 mm

141 mm

Configuration

"Push and Learn" self-learning type.

Front view

Legend

1. NETWORK key
2. NETWORK LED
3. ON/OFF key
4. LEARNING LED
5. LEARNING key

Wiring diagram
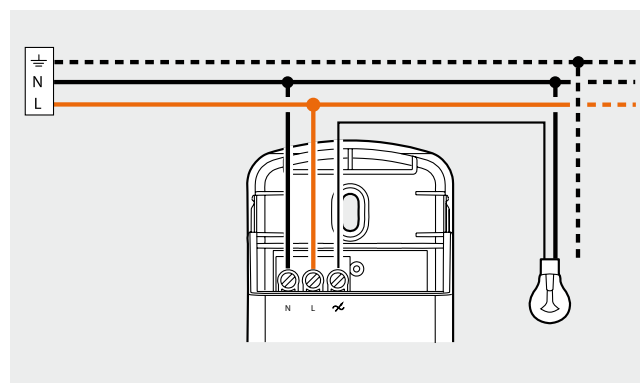
Important:
– Protect the device with a 10 A fuse.
– Connect a load before performing any "scenario" learning procedure.
– For conventional type transformers, a load with power 60% higher than their rated power must be connected.
– For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)

Integration module dimmer 1 X 600W all load RF

Description

Dimmer actuator for the control of a load with maximum power 600 W, with ON/OFF control and adjustment pushbuttons for system testing.
In enclosure suitable for installation inside false ceilings.

Technical data

Power supply: 100 – 240 Vac 50/60 Hz
Operating temperature: 5 – 45 °C
Technology: 2.4 GHz Radiofrequency ZigBee® standard
Capacity: 150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven: see following table

Voltage		Incandescent lamp	Halogen lamp	Ferromagnetic transformer	Electronic transformer
Voltage					
230 Vac	Max.	600 W	600 W	450 VA	600 VA
	Min.	60 W	60 W	60 VA	60 VA
110 Vac	Max.	300 W	300 W	225 VA	300 VA
	Min.	60 W	60 W	60 VA	60 VA
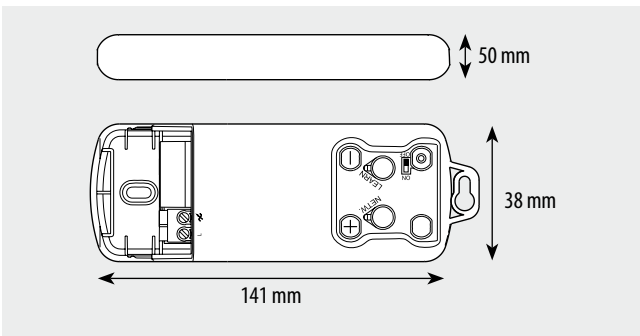
Dimensional data

Configuration

"Push and Learn" self-learning type.
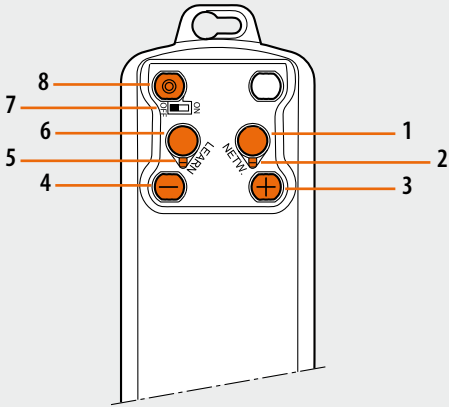
Front view

Legend

1. NETWORK key
2. NETWORK LED
3. + key: press and release to switch the load ON at 66% of its power, press and hold down to increase the power to the maximum value
4. - key: press and release to switch the load ON at 33% of its power, press and hold down to decrease the power to the minimum value
5. LEARNING LED
6. LEARNING key
7. Load selection micro-switch: ON / OFF
8. ON/OFF key

Wiring diagram
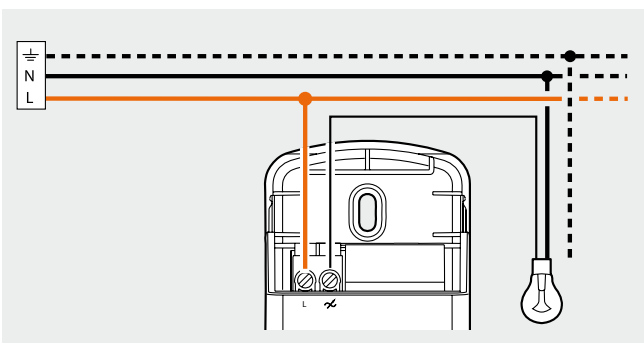
Important:
– Connect a load before performing any "scenario" learning procedure.
– For conventional type transformers, a load with power 60% higher than their rated power must be connected.
– For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)

Integration module dimmer 0-10V 1000W RF

Description

Actuator for the control of Ballasts for 0-10 V type Fluorescent tube lamps with power up to 1000 W max. The device has pushbuttons for ON/OFF control and for the adjustment of the power to the load for system testing.
In enclosure suitable for installation inside false ceilings.

Technical data

Power supply: 100 – 240 Vac 50/60 Hz
Operating temperature: 5 – 45 °C
Technology: 2.4 GHz Radiofrequency ZigBee® standard
Capacity: 150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven: see following table

Voltage	Ballast 0 – 10 V
230 Vac	1000 VA
110 Vac	500 VA

## Dimensional data

50 mm
38 mm
141 mm

Configuration

"Push and Learn" self-learning type.

Wiring diagram

N
L
10 V
N
N L

Front view

7
6
5
4
1
2
3

Legend

1. NETWORK key

2. NETWORK LED

3. + key: press and release to switch the load ON at 66% of its power, press and hold down to increase the power to the maximum value

4. - key: press and release to switch the load ON at 33% of its power, press and hold down to decrease the power to the minimum value

5. LEARNING LED

6. LEARNING key

7. ON/OFF key

Important:
– Connect a load before performing any "scenario" learning procedure.
– For conventional type transformers, a load with power 60% higher than their rated power must be connected.
– For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)

Mobile switched dimmer socket RF ZigBee
for Schuko Standard
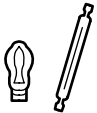
Description

Actuator device to be used with an electric socket, for dimmer control of a load with maximum power 500 W. The mobile socket can be managed with one or more radio controls or locally using an appropriate pushbutton that can be found on the top section of the device.

The device is protected from overheating caused by overload through an appropriate protection circuit that intervenes automatically by reducing the power to the load.

Technical data

Power supply: 100 – 240 Vac; 50/60 Hz
Operating temperature: 5 – 45 °C
Technology: Radio 2.4 GHz standard ZigBee®
Capacity: 150 m free field;
                                       15 m in rooms with concrete walls
Power/absorption of the loads driven: see following table

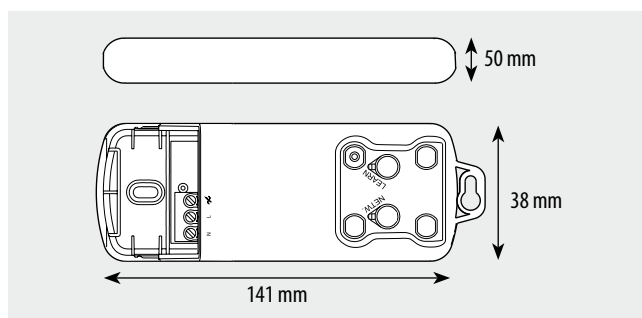| Voltage		Incandescent lamp	Halogen lamp	Ferromagnetic transformer	Electronic transformer
Voltage					
230 Vac	max.	500 W	500 W	500 VA	500 VA
	min.	50 W	50 W	60 VA	60 VA
110 Vac	max.	250 W	250 W	250 VA	250 VA
	min.	50 W	50 W	60 VA	60 W

Dimensional data
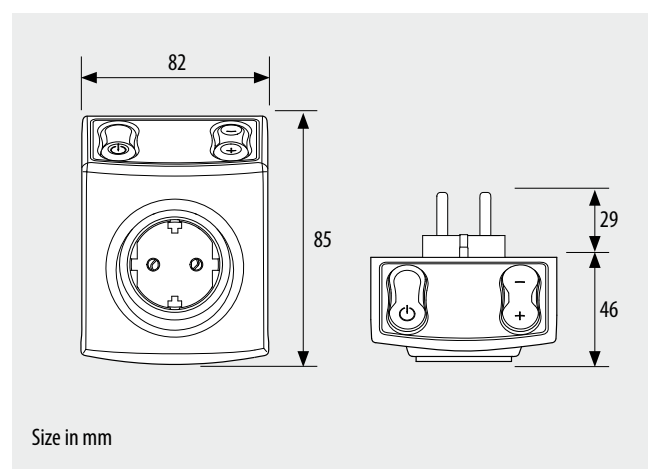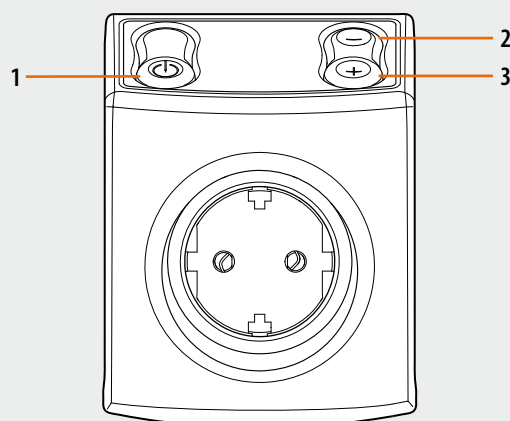
Size in mm

Configuration

"Push and Learn" self-learning type.

Front view

Detail point 1
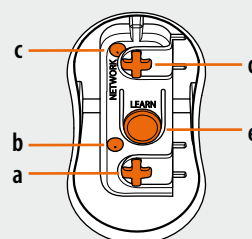
Legend

1. ON/OFF key. The programming pushbuttons and LEDs can be found under the protection:

   a. CONTROL key
   b. LEARNING LED
   c. NETWORK LED
   d. NETWORK key
   e. LEARNING key

2. – key: press and hold down to decrease the power to the minimum value.

3. + key: press and hold down to increase the power to the maximum value

Assembly, installation

Socket

Mobile switch socket RF ZigBee for Schuko Standard
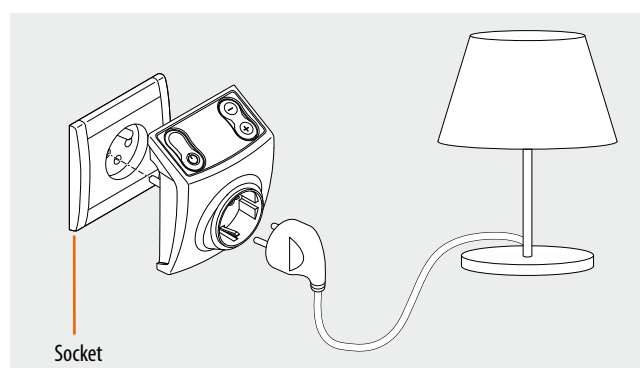
Description

Actuator device to be used with an electric socket, for ON/OFF control of a load with maximum power 2500 W. The mobile socket can be managed with one or more radio controls or locally using an appropriate pushbutton that can be found on the top section of the device.

Technical data

Power supply:	100 - 240 Vac; 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field;
	15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage	Incandescent lamp	Halogen lamp	Fluorescent tube lamp	Ferromagnetic transformer
Voltage				
230 Vac	2500 W	2500 W	1250 W	2500 VA
110 Vac	1250 W	1250 W	625 W	1250 VA

Voltage	Electronic transformer	Compact fluorescent tube lamp	LED lamps
Voltage			
230 Vac	2500 W	1250 W	1250 W
110 Vac	1250 W	625 W	625 W

Dimensional data
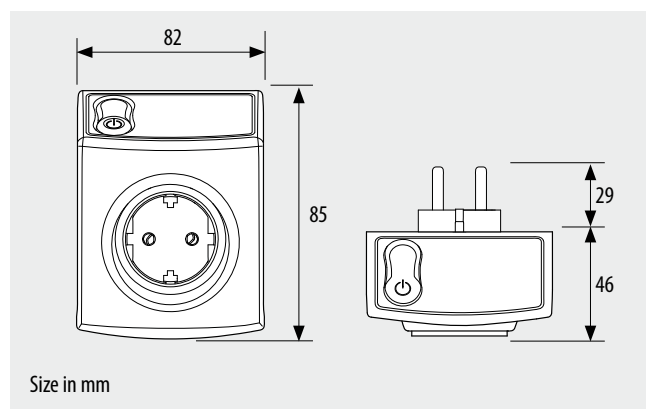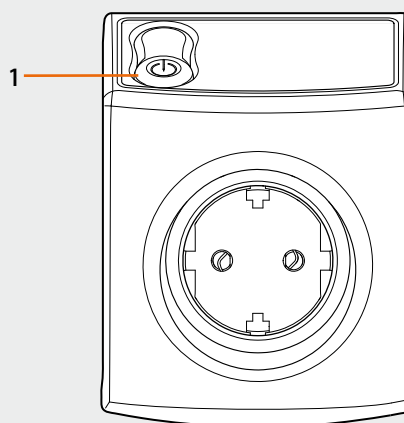
Size in mm

Configuration

"Push and Learn" self-learning type.

Front view

Detail point 1
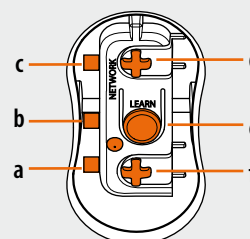
Legend

1. ON/OFF key. The programming pushbuttons and LEDs can be found under the protection:

    a. CONTROL key LED
    b. LEARNING LED
    c. NETWORK LED
    d. NETWORK key
    e. LEARNING key
    f. CONTROL key

Assembly, installation

Socket
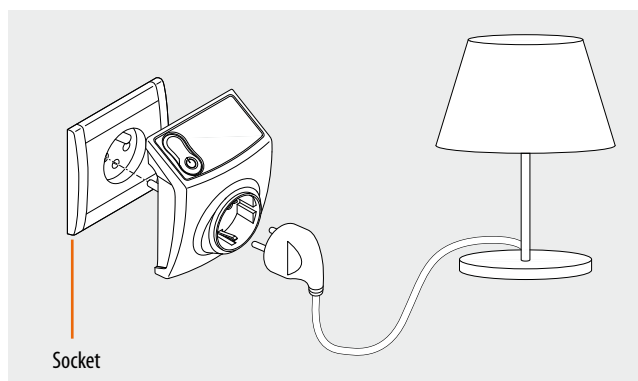
Individual roller blind controller RF ZigBee for mounting in technical compartment

0883 27   3576

Description

Actuator device for the control of rolling shutter and shutter motors with maximum power 500 VA.

The actuator is inside an appropriate enclosure for installation in rolling shutter boxes or junction boxes.

Related items

Shutter control RF HA/HB4599 (Axolute), L/N4599N (Livinglight), 067264 (Celiane/Arteor), 078428 e 079128 (Mosaic), 663097 (Nereya) e 665111 (Niloe).

Technical data

Power supply:	100 - 240 Vac; 50/60 Hz
Operating temperature:	5 – 45 ℃
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field;
	15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage	Shutter motor
230 Vac	500 VA
100 Vac	270 VA

Dimensional data

120
27
35
55

Size in mm
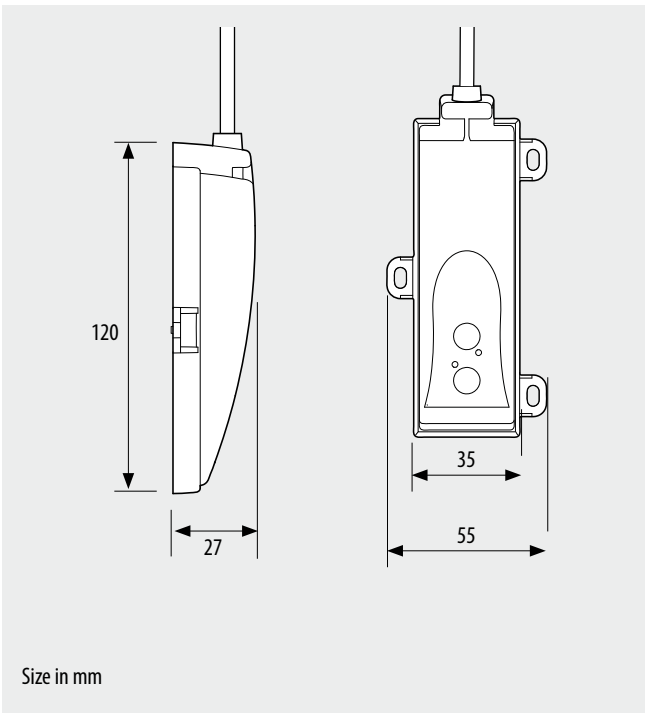
Configuration

"Push and Learn" self-learning type.

Front view
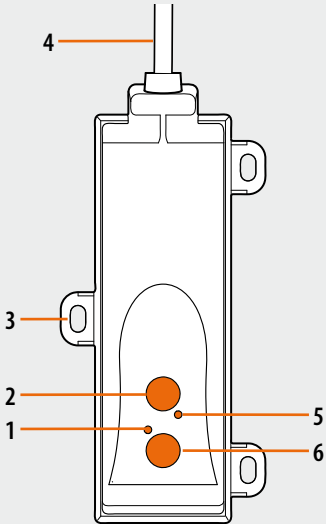
Legend

1. LEARNING LED
2. NETWORK key
3. Fixing hook
4. Wiring for connection to the power line and to the load
5. NETWORK LED
6. LEARNING key

Wiring diagram

Important: Connect a load before performing any "scenario" learning procedure.

L'legrand   MQ00491-c-EN   24/09/2013   bticino

Individual roller blind controller RF ZigBee for mounting in technical compartment

Configuration

Select the operating mode

The device may operate in two different modes:
- Bistable (to operate the rolling shutter press and immediately release the UP or DOWN keys).
- Monostable (to operate the rolling shutter press and hold down the UP or DOWN keys).
  The device is supplied configured in bistable mode. It will be possible to change the operating mode at any time by pressing and holding down for more than 4 seconds both the UP and DOWN pushbuttons at the same time.

> 4 sec.

Use of the device in bistable mode

Opening and closing the rolling shutter:
Press and release the UP and DOWN pushbuttons.

Shutter control

Shutter control

Adjustment of the blade position:
Press the UP and DOWN pushbuttons for more than 1 second.

Shutter control

> 1 sec.

Shutter control

> 1 sec.

Individual roller blind controller RF ZigBee for mounting in technical compartment

Use of the device in monostable mode

Opening and closing the rolling shutter:
Press and hold down the UP and DOWN Pushbuttons until the desired rolling shutter position.

Shutter control

Shutter control

Saving of the PRESET position (opening the rolling shutter to a preset position)
The rolling shutter control device for the management of the actuator can also be enabled to set the rolling shutters to a preset position, using the appropriate pushbutton (Preset).
The procedure for storing the position is performed in two different stages:
- calibration of the up and down movements times of the rolling shutter;
- saving of their positions. .

Calibration of the up and down movements times of the rolling shutter;:

1. Check if the rolling shutter motor is equipped with a traditional, or with an electronic "limit switch".

2. Fully open the rolling shutter.

3. In case of traditional limit switch, press the pushbutton shown in the picture for more than 4 seconds. Press the pushbutton for less than 1 second in case of electronic limit switch.

4. The rolling shutter will close completely, will open completely, and then will move to the half open position. During this stage do not operate the device.

5. The device has saved the rolling shutter full opening and full closing time. Now proceed with saving the desired position (Preset).

> 4 sec.

Shutter control

<1 sec.

Shutter control

100%   **0%**   **50%**

Saving the rolling shutter position:

1. Operate the UP and DOWN PUShbuttons of the radio control to move the rolling shutter to the desired position.

2. To save the desired position press the Preset pushbutton of the rolling shutter radio control for more than 10 seconds.

>10 sec.

3. From now on, irrespective of its position, when the Preset pushbutton of the control device is pressed the rolling shutter will move to the previously saved position.

RF ZigBee transmitter with auxiliary inputs (2 inputs)

Description

This device gives the possibility of integrating traditional control devices (Two-way switch, switch, or pushbutton) in MY HOME radio systems.

The interface has 3 cables identified with C, 1, and 2 respectively, which connect to a two-way switch, or to a pushbutton.

The definition of the type of device connected (two-way switch, or pushbutton), and therefore of the interface operating mode, is done using appropriate pushbuttons found on the device itself; the preset mode (at the factory) requires connection to a two-way switch.

By configuring the A, PL, and MOD sockets, it will be possible to use this interface, together with the SCS/ZigBee gateway, for the radio extension of a MY HOME BUS system. The device is inside a Basic container with reduced sizes, for installation in flush mounted boxes, junction boxes, rolling shutter boxes, and trunking. Particularly advantageous is the installation inside junction boxes, positioning the item at the back of the flush mounted box, behind traditional devices.

Related items

Gateway SCS/ZigBee: HC/HD/HS4578 (Axolute),
                                       L/N/NT4578N (Livinglight),
                                       067250 (Arteor/Celiane)

Technical data

Power supply:	No. 1 lithium battery, 3V, CR2032 type
Duration of the battery:	5 years
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150m free field;
	15m in rooms with concrete walls

Dimensional data

Size: basic module

Front view
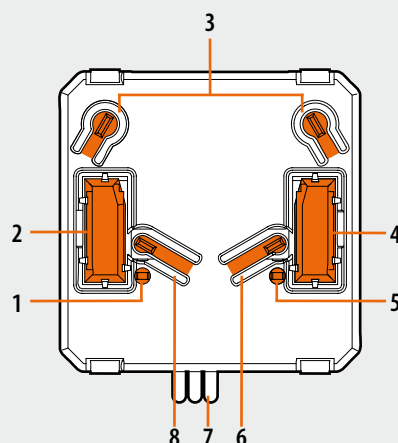
Legend

1. LEARNING LED
2. SCS My Home Configurator socket
3. Local CONTROL key
4. SCS My Home Configurator socket
5. NETWORK LED
6. NETWORK key
7. Wiring for connection to traditional devices
8. LEARNING key

Wiring diagram
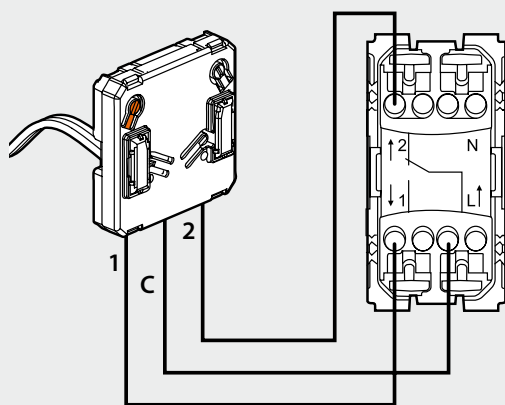
Connection to a two-way switch
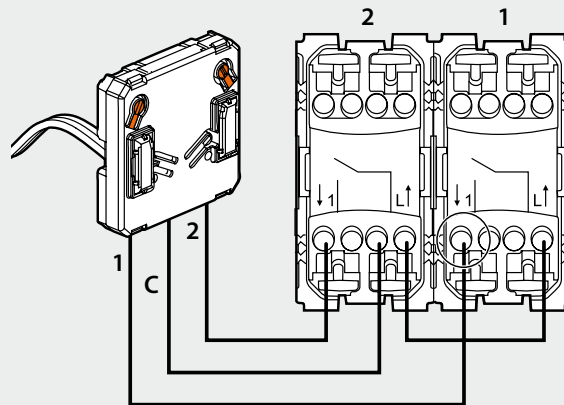
Connection to two pushbuttons

RF ZigBee transmitter with auxiliary inputs (2 inputs)

Configuration

Configuration of the ZigBee network
"Push and Learn" self-learning type.

Definition of the interface operating mode
The interface is already configured during production for connection to a two-way switch or to a switch. If connecting one or more pushbuttons, change the operating mode as indicated below:

1. Press the two pushbuttons on the interface for at least 5 seconds.
2. When the two LEDs (green on the left and orange on the right) flash slowly, release the pushbuttons. The interface is now preset for connection to one or more pushbuttons.
To restore "switch/two-way switch" mode, press the two interface pushbuttons for at least 5 seconds, and release them when the two LEDs come on steady (not flashing).
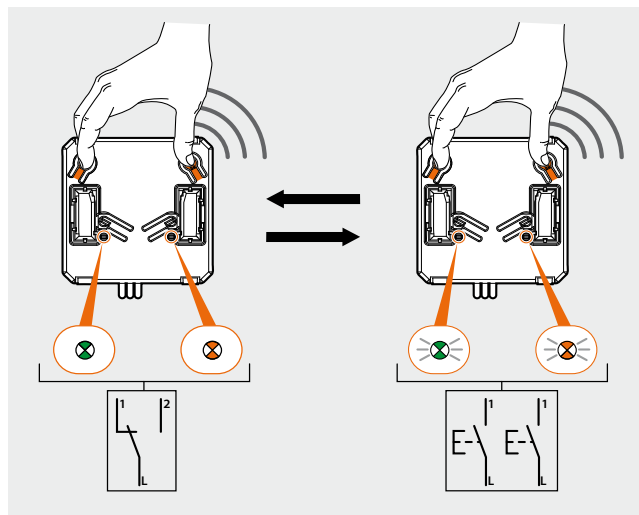
Operating test
After completing the wiring and defining the operating mode, the operation of the interface can be tested using the traditional devices connected, or the two pushbuttons:
- If the interface is in "two-way switch" mode, use the left pushbutton to send an ON command to the radio actuator associated to the two-way switch. Use the right pushbutton to send the OFF command.

- If the interface is in "pushbutton" mode, use the right pushbutton cyclically to send a cyclic ON and OFF command to the radio actuator associated with the P1 pushbutton. Use the left pushbutton to send a cyclic ON and OFF command to the radio actuator associated with the P2 pushbutton.

Open Web Net/Zigbee Gateway
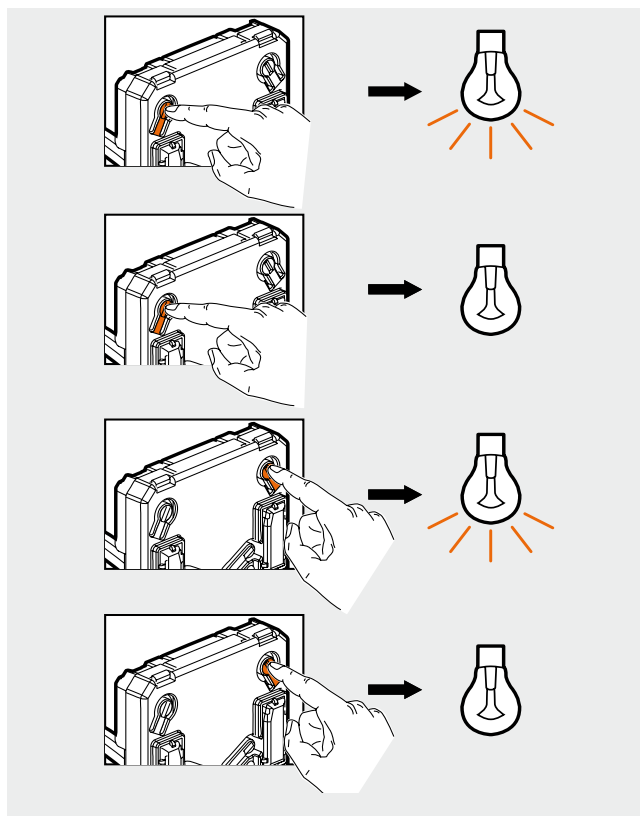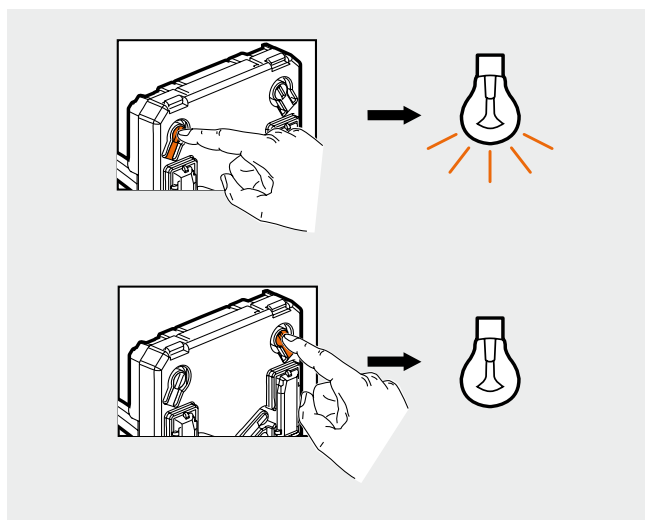
Description

Interface for interaction with the functions of the ZigBee radio system using a Personal Computer and an Open Web Net communication protocol.

The device must be connected to a USB port of the computer and features a radio transmitter for sending/receiving data to and from ZigBee devices installed in the electric system.

Technical data

Power supply:	From USB 2.0 socket
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

Front view
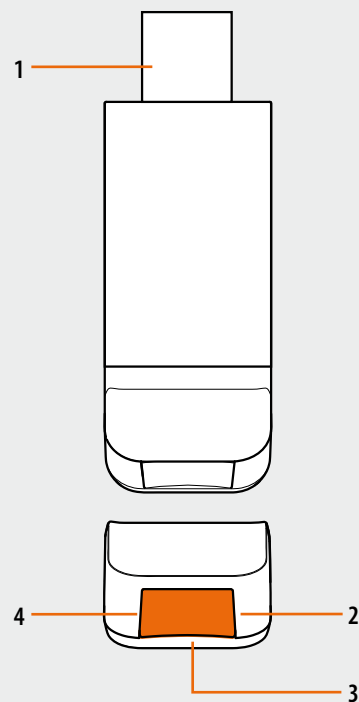
Side view
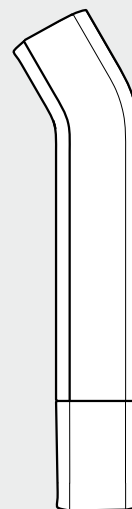
Legend

1. USB connector

2. Data traffic indicator LED

3. NETWORK key

4. NETWORK LED

Open Web Net/Zigbee Gateway

0883 28   3578

Configuration

Connecting the device to the network
1. In the system identify the actuator device with "Zigbee network coordinator" function, and press the NETWORK key for 3 seconds.

3 sec.
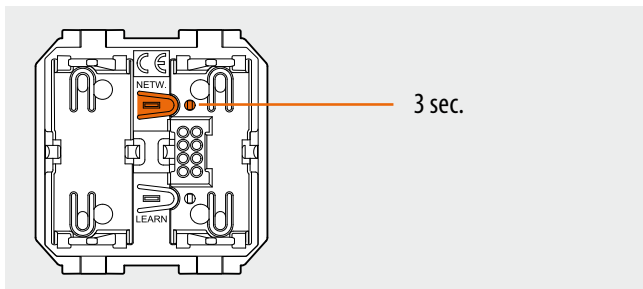
2. The NETWORK LED (yellow) will come on steady, and after a few instants will start flashing quickly.
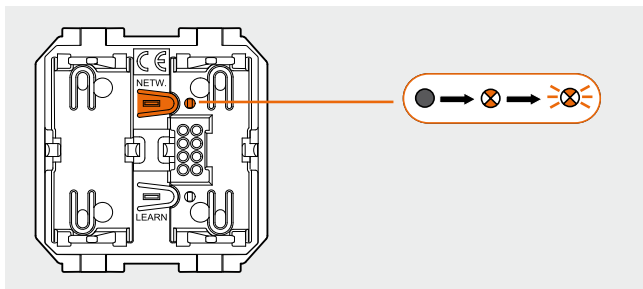
3. Press the NETWORK key on the interface. The NETWORK LED will come on steady during the network search procedure and then will start flashing slowly.
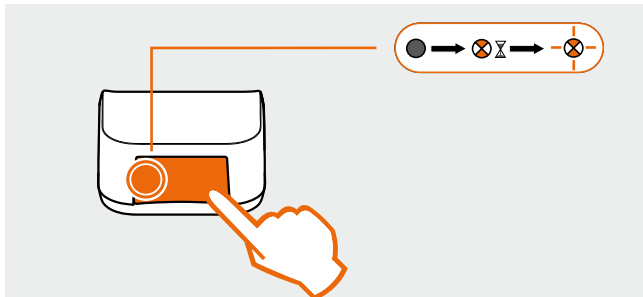
4. To complete the procedure press the NETWORK KEY of the Coordinator device; The corresponding NETWORK LED will flash three times while the interface NETWORK LED will turn off.
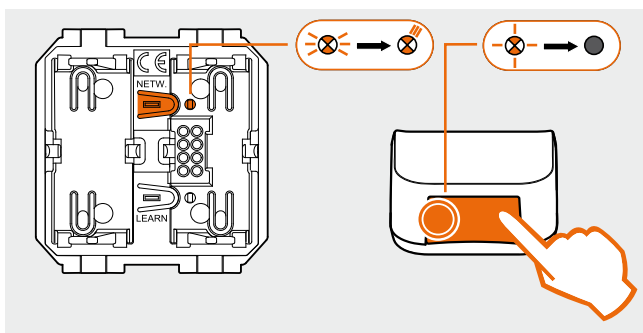
Disconnecting the interface from the network
1. Press the NETWORK key on the interface. The NETWORK LED will flash quickly.
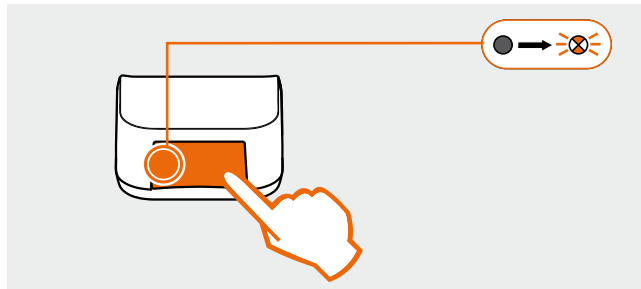
2. Press the NETWORK key again for at least 10 seconds. The NETWORK LED will flash quickly twice and then will turn off. The interface is no longer connected to the ZigBee network.

10 sec.

L-legrand   MQ00493-b-EN   04/07/2013   **bticino**

16

Wireless movement detector RF ZigBee surface mounting

088291   3579
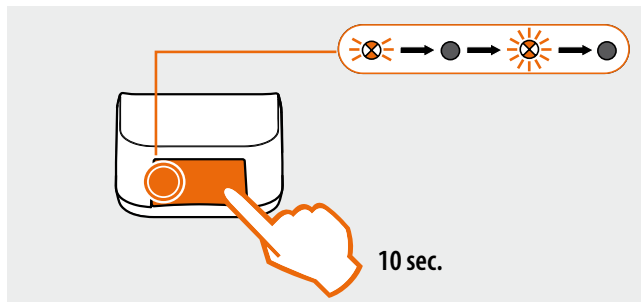
Description

Each scenario can consist of the timed activation of one or more ON/OFF and/or Dimmer actuators, depending on the brightness of the room and the presence (scenario 1), or absence (scenario 2) of people inside the area covered by the IR sensor. To be used with the ON/OFF radio actuators and dimmers in the «ZigBee radio system» range.

Technical data

Power supply:	No. 2 batteries, AA 1.5V LR06
Duration of the batteries:	2 years
Timing ON:	15 minutes (1)
Minimum brightness threshold for scenario activation:	1000lux (1)
IR sensor sensitivity:	100% (1)
Operating temperature:	5 – 45 ℃
Technology:	Radio 2.4 GHz standard ZigBee®
Radio frequency capacity:	100 m free field, 10 m in rooms with concrete walls

Note (1): the values can be changed using the BMSO4001 and BMSO4003 remote controls

IR sensor covering area: see drawings on page 2

Dimensional data
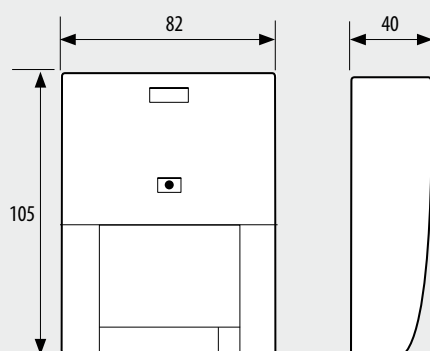
Front view

Rear view

Size in mm
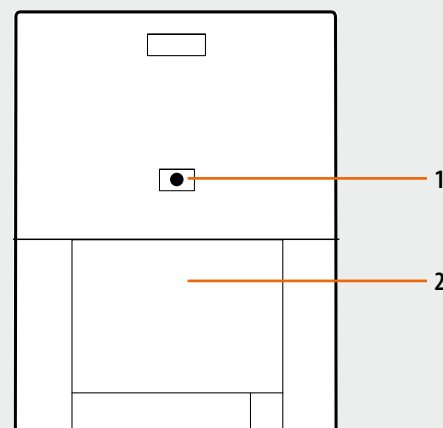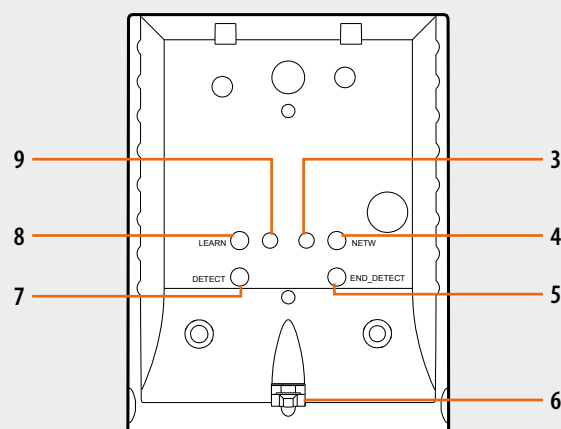
Legend

1. LED:

- Exhausted battery (flashing slowly)

- presence of people detected inside the area (flashing)

2. Fresnell lens (the IR sensor is underneath)

3. NETWORK LED

4. NETWORK key

5. END DETECT key for the creation of scenario No. 2

6. Closing screw. Remove to open the sensor and replace the batteries

7. DETECT key for the creation of scenario no. 1

8. LEARNING key

9. LEARNING LED

Wireless movement detector RF ZigBee surface mounting

Dimensional data - IR sensor covering area

Passage sensor

90°

12 m

Installation height 2.3 m

2.3 m

1.5 m

1.2 m

12 m

Installation height 0.4 m

0.4 m

0.2 m

0.2 m

3 m
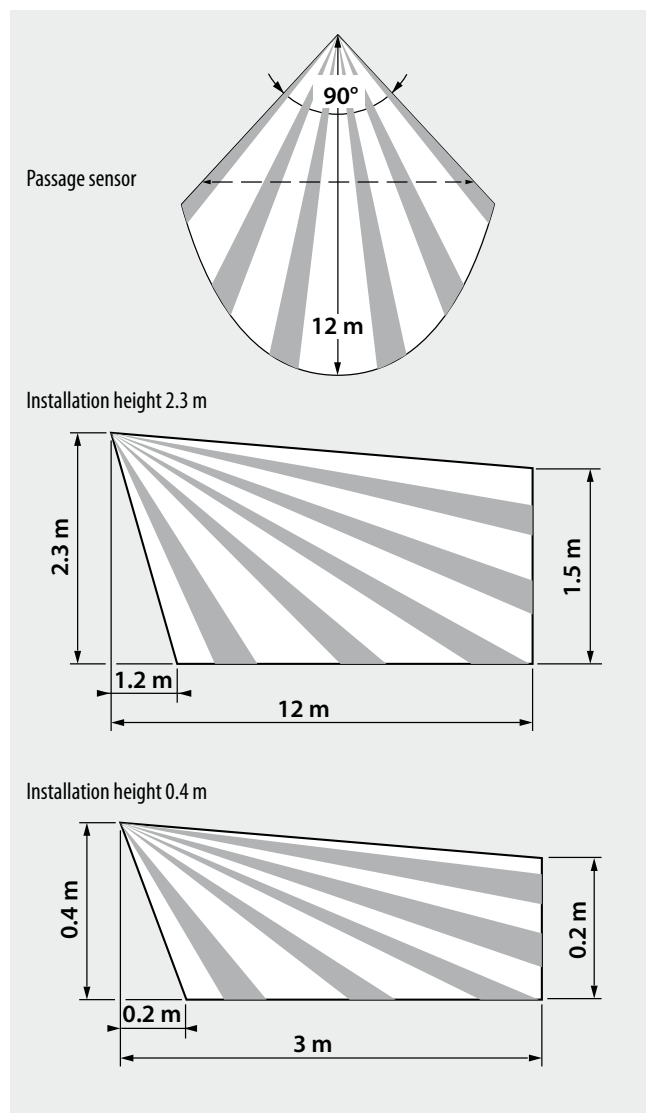
Configuration

Configuration of the device inside the network: "Push and Learn" self-learning type.
Configuration of the time period, of the IR sensor sensitivity, and of the brightness threshold.
The device is supplied with the following factory set parameters:
- AUTO mode
- Timing ON: 15 minutes
- IR sensitivity: 100%
- Brightness threshold for activation: up to 1000 lux maximum
Other modes can be configured using remote controls BMS04001 and BMS04003 (see the instruction leaflet for the details).

Creation of scenario 1 – active when people are present in the area controlled by the sensor.

1. Press the sensor LEARNING key. The LEARNING LED will come on steady, and then will flash slowly.
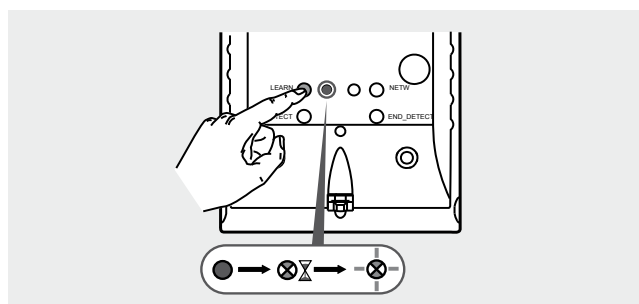
2. Then press the DETECT pushbutton. The LEARNING LED will flash quickly.
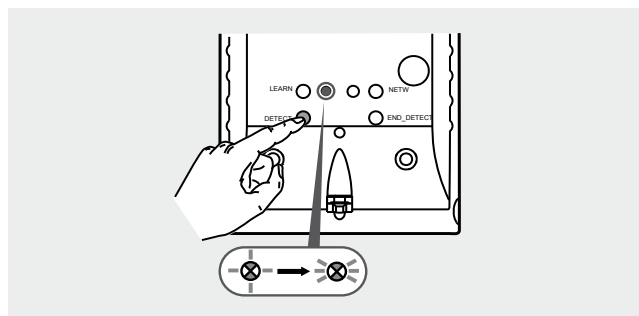
3. Press the LEARNING key of the actuator used for the scenario.
The LEARNING LED will come on steady, and then will flash slowly.
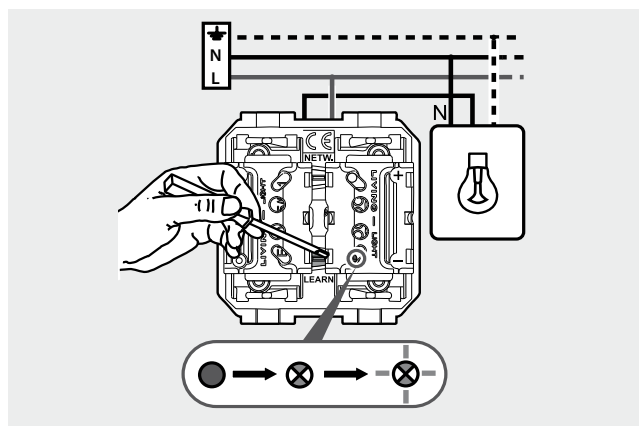
4. Press the ON pushbutton of the actuator. The connected load will come on and the LEARNING LED will flash more quickly.
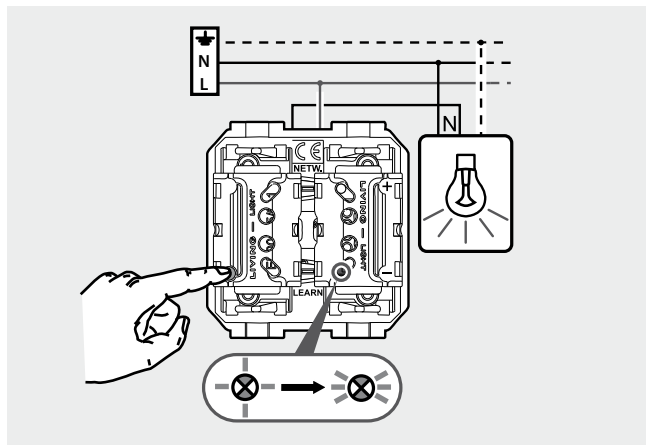
5. Repeat the procedures at points 3 and 4 for each actuator to associate to the scenario during its creation.

6. Press the sensor LEARNING key. The corresponding LEARNING LED and those of all the associated actuators will go off.
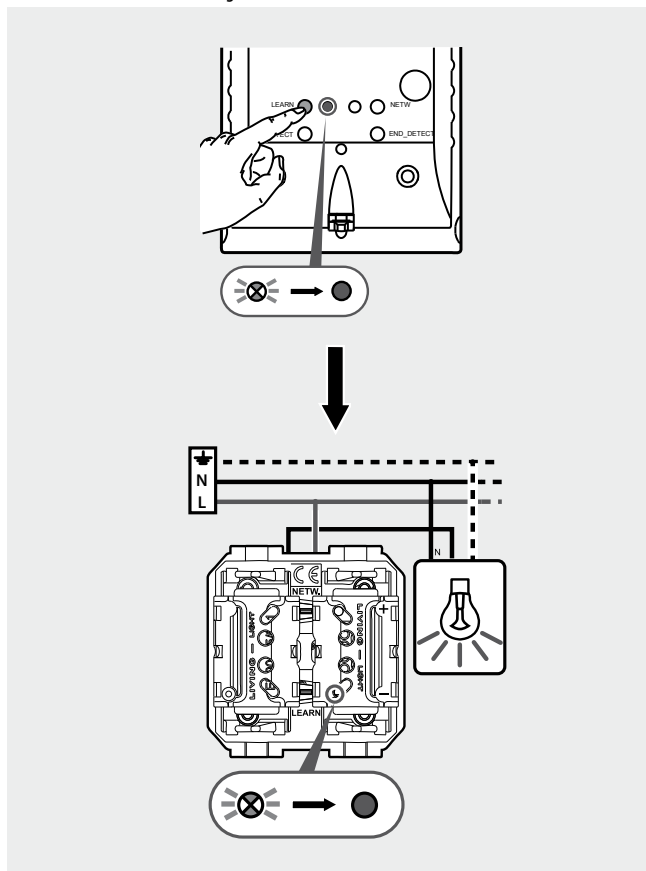
Creation of scenario 2 – active when people leave the area controlled by the sensor.

1. Repeat the operations described for the creation of scenario 1, using the END DETECT pushbutton to perform the operations described in point 2.
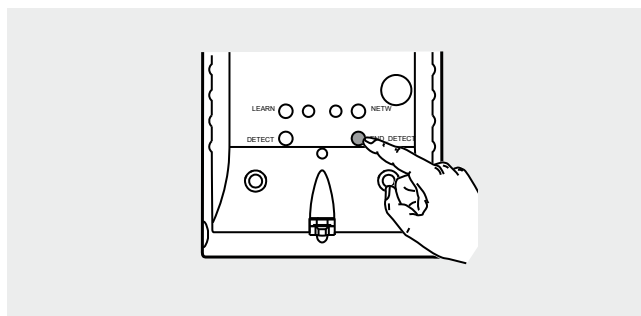
NOTE: For more information on the amendment of the set scenarios (addition and removal of actuators) refer to the instruction leaflet supplied with the sensor.

Wireless temperature sensor RF ZigBee surface mounting

Description

Device capable of activating several actuators (scenarios) based on the measured temperature.
It is possible to manage up to 2 scenarios: the first activates when the temperature falls below a T1 level, the second when the temperature exceeds a T2 level.
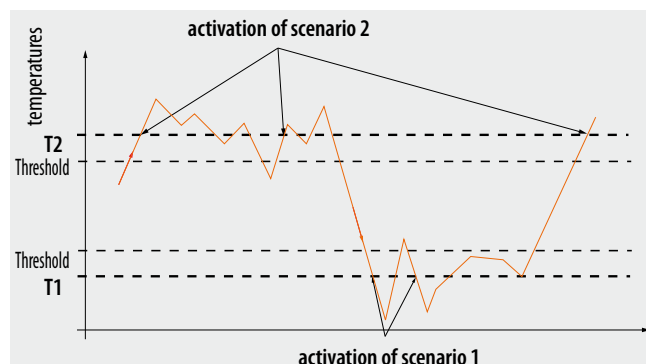
The sensor is battery powered, it features an LCD display for the display of the measured temperature, and a probe with ±0.5°C precision tolerance. It can be easily wall mounted using screws.

Technical data

Power supply:	No. 2 batteries, 1.5 V AAA type
Duration of the battery:	2 years
Measured temperature range:	(-25) – (+ 40) ° C
Tripping threshold:	1° C
Precision:	±0.5 °C
Operating temperature:	0 – 40 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15m in rooms with concrete walls

Dimensional data

76 mm

116 mm
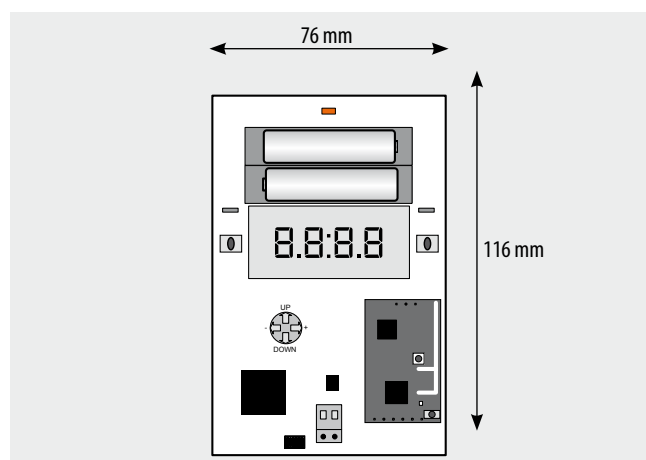
Configuration

Configuration of the ZigBee network: "Push and Learn" self-learning type. For the association of the scenarios that can be enabled based on the temperature measured refer to the installation manual supplied with the sensor.

Front view

Internal view
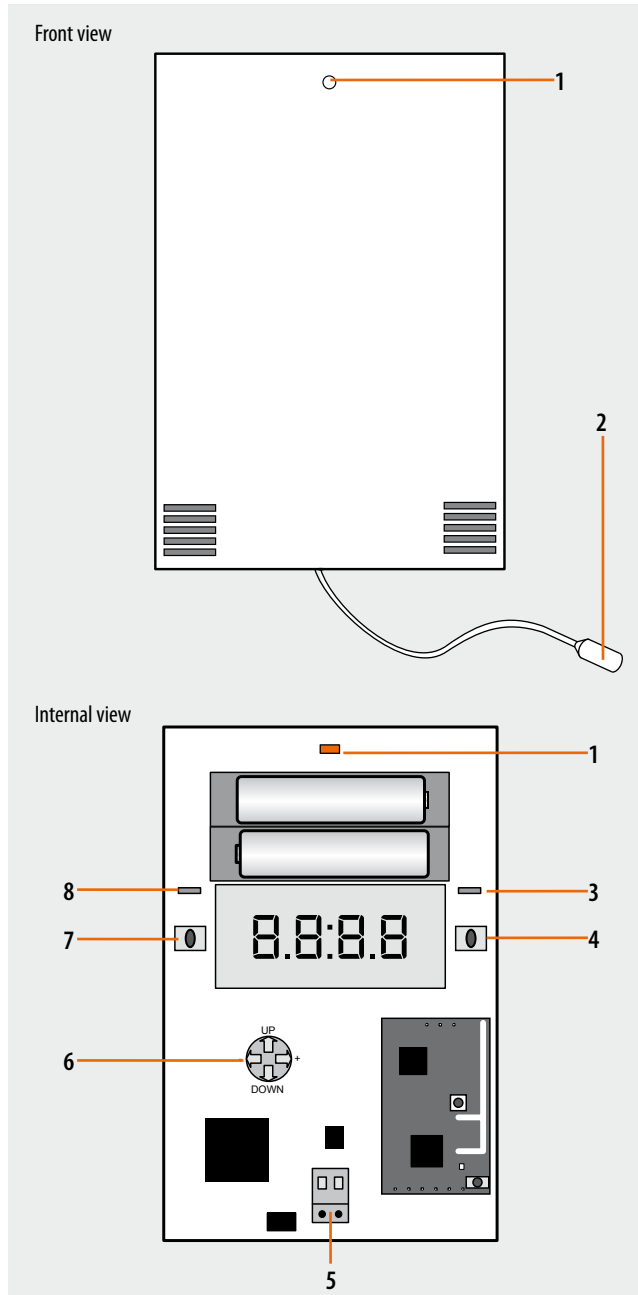
Legend

1. Battery exhausted LED
2. Measurement probe
3. LEARNING LED
4. LEARNING key
5. Probe connection clamp
6. Configuration menu navigation joystick
7. NETWORK key
8. NETWORK LED

L7 legrand   MQ00494-b-EN   04/07/2013   **bticino**

Gateway SCS/ZigBee®

Description

Device for interfacing the ZigBee® radio Automation system with the My Home BUS Automation system.

It makes it possible to extend a wire Automation system and to management the corresponding actuators, using the ZigBee® radio controls. .

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Absorption:	20 mA
Maximum number of ZigBee® devices that can be managed:	32
Operating temperature:	5 – 45 ℃
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

Dimensional data

Size: 2 flush mounted modules

Configuration

The interface must be configured by assigning the address following the procedure used for BUS Automation systems.

A = Room 1 – 9
PL = Light Point 1 – 9
M = - (no configurator)

Note: assign an address not used for other Automation devices.

Front view
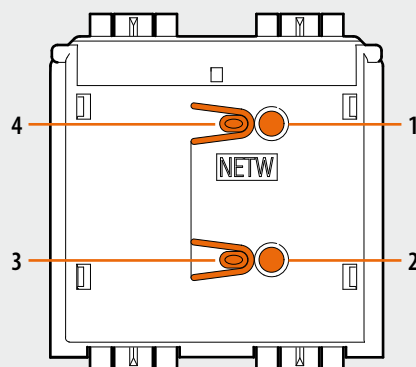
Rear view
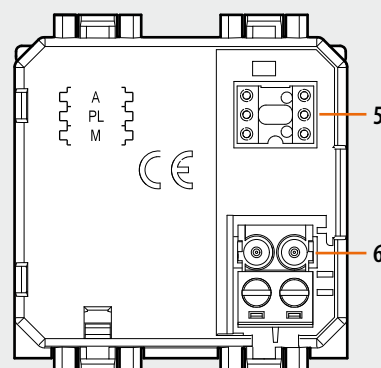
Legend

1. NETWORK LED

2. LEARNING LED

3. LEARNING key

4. NETWORK key

5. Configurator socket (A,PL and M)

6. BUS clamp

Transceiver for technical alarms

Description

Device to be used together with a detector, for the protection of the home from water, gas, or smoke. In case of danger, the device will send a radio signal to the radio actuator for the activation of acoustic/luminous indicators, or for the control of a solenoid valve for the isolation of the water or gas pipes at the entrance of the house.

Related items

Actuator: 672 33 (Celiane),
                                   H/LN4587 (Axolute), (Livinglight)

Technical data

Power supply: 12 Vdc (also with 12 Vac L/N/NT4541 transformer)
Operating temperature: 5 – 45 ℃
Technology: Radio 2.4 GHz standard ZigBee®
Capacity: 150 m free field, 15 m in rooms with concrete walls

Dimensional data

Size: 2 flush mounted modules

Configuration

"Push and Learn" self-learning type.

Front view
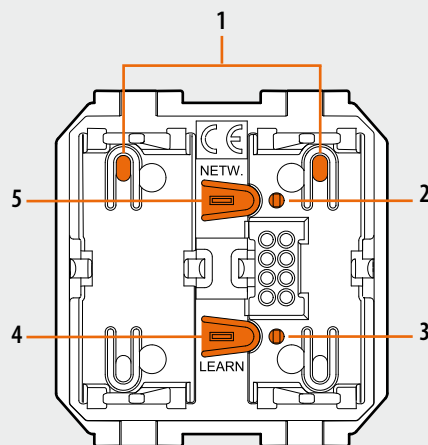
Legend

1. ON/OFF key
2. NETWORK LED
3. LEARNING LED
4. LEARNING key
5. NETWORK key

Wiring diagram

Radio interface H/LN4586 0675 25

Gas detector

230 V

12 Vdc

12 Vac transformer

![legrand]   MQ00397-c-EN   24/09/2013   ![bticino]

Actuator RF for technical alarms
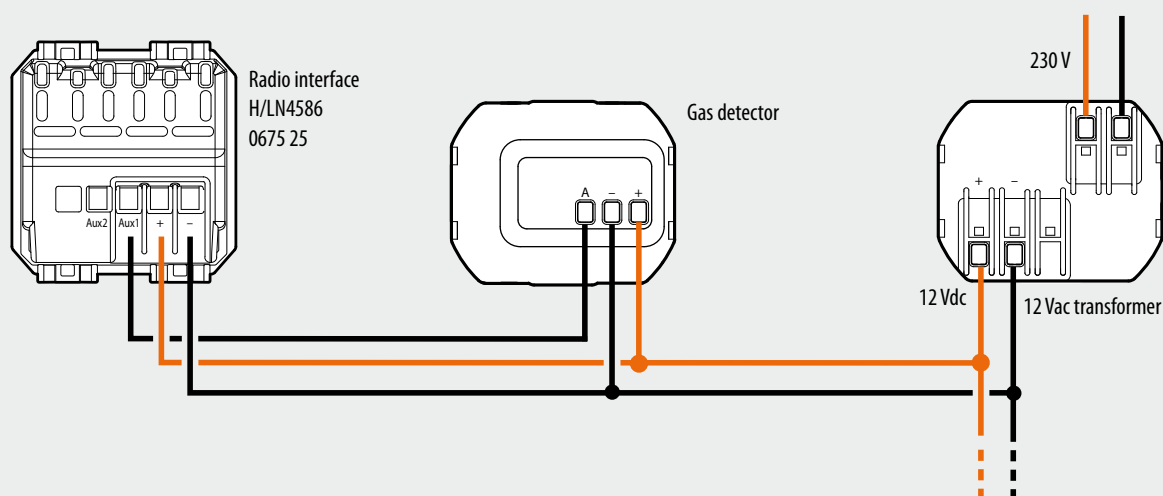
Description

Radio actuator device with relay output to be used for the notification of an alarm through the activation of visual/acoustic indicators, or for the control of a solenoid valve for the isolation of the water or gas pipes at the entrance of the house.
The actuator is used together with the specific Radio interface for technical alarms, H/LN4586.

Related items

The actuator is used in conjunction with the specific radio gateway for technical alarms H4586 (Axolute) and LN4586 (Livinglight).

Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven:	2500 W (240 Vac)
	1250 W (100 Vac)

Dimensional data

Size: 2 flush mounted modules

Configuration

"Push and Learn" self-learning type.

Wiring diagram
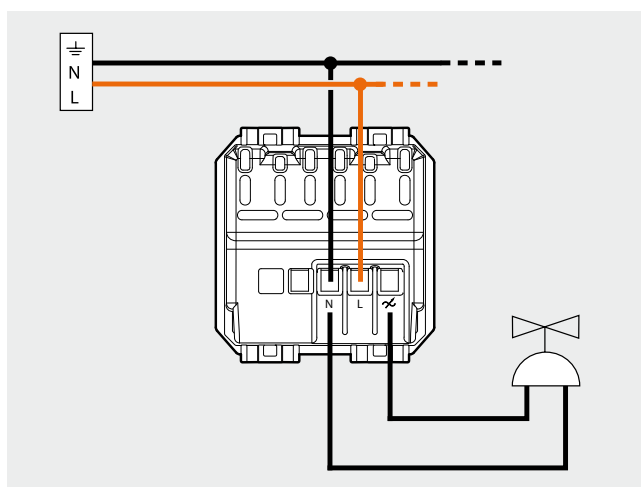
Front view
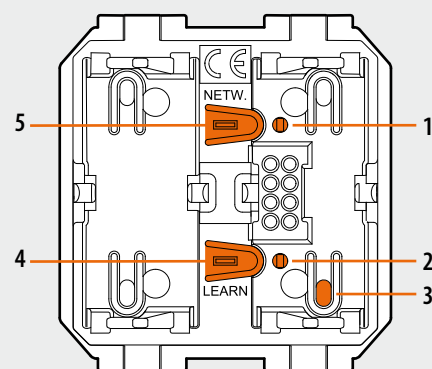
Legend

1. NETWORK LED
2. LEARNING LED
3. Key
4. LEARNING key
5. NETWORK key

4 scenario control RF

Description

Radio control device used for saving and managing up to 4 scenarios max.

Technical data

|	
Power supply:	No. 1 lithium battery, 3 V, CR2032 type
Duration of the batteries:	5 years
Operating temperature:	5 – 45 ℃
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

Dimensional data

Size: 2 modules

Configuration

Radio system: "Push and Learn" self-learning type.

Wire system: If the device is integrated with the BUS Automation system using the Gateway SCS/Zigbee interface, it will be possible to manage scenarios saved in the scenario module item F420, which address must be specified by connecting the configurators to the A, PL, and M housings as indicated:

Use with scenario module F420:

A = Room

PL = Light point

M = operating mode (1 – 4). It associates to the 4 pushbuttons the scenarios saved by the scenario module (max. 16). The correspondence between the 4 control keys and the scenario numbers saved in the module is as follows:

| Configurator in M	Scenario saved
1	scenario 1 – 4
2	scenario 5 – 8
3	scenario 9 – 12
4	scenario 13 – 16

Scenario programming

To program, change or delete a scenario, the programming of Module F420 must be enabled. This is confirmed by the status LED turning green (press the lock/unlock key of the scenario module for at least 0.5 seconds). After this has been done, proceed as follows:

1. press one of the four control keys to which the scenario should be associated to for 4 seconds. The corresponding LED starts flashing;
2. Set the scenario using the corresponding controls for the various Automation, Temperature control, Sound system, etc. functions;
3. confirm the scenario by quickly pressing the corresponding key on the control to exit the programming mode;
4. to change a scenario, or to create new ones to use with the other keys, repeat the procedure starting from point 1;

To recall an already set scenario, a quick pressure of the corresponding key on the scenario control is enough.

NOTES:

Once the necessary operations have been completed, lock the programming procedure, by pressing the lock/unlock key of the scenario module for at least 0.5 seconds, until the corresponding LED turns red.

To delete a scenario, proceed as follows:

1. The scenario module must be enabled for programming;
2. press the pushbutton of the to delete for at least 10 seconds. The corresponding LED will flash quickly for approx. 2 seconds, confirming that the scenario has been deleted. If the LED does not flash, the procedure has been unsuccessful.

To reset the whole memory, press the DEL key of the scenario module for 10 seconds. The yellow LED, "reset scenarios", will flash quickly.

Front view
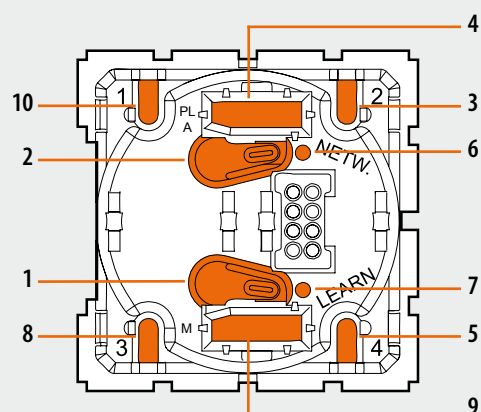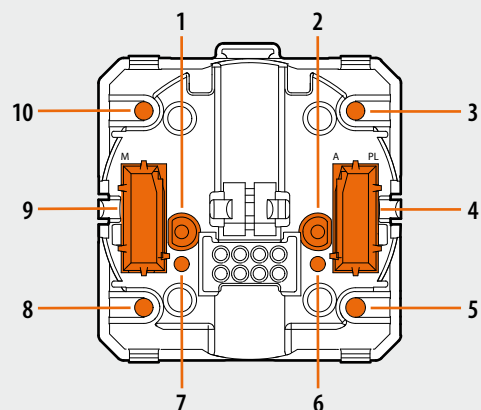
Legend

1. LEARNING key
2. NETWORK key
3. Scenario no. 2 key
4. Configurator socket (A, PL)
5. Scenario no. 4 key
6. NETWORK LED
7. LEARNING LED
8. Scenario no. 3 key
9. Configurator socket (M)
10. Scenario no. 1 key

Switch without neutral 400W
with LEDS status

Description

Actuator for the control of loads with maximum power 400 W, with ON/OFF LED.
For the connection of the device to the load and to the electric system no neutral conductor is required.

Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage		Incandescent lamp	Halogen lamp	Ferromagnetic transformer	Electronic transformer
Voltage					
230 Vac	Max.	400 W	400 W	400 VA	400 VA
	Min.	60 W	60 W	60 VA	60 VA
110 Vac	Max.	200 W	200 W	200 VA	200 VA
	Min.	60 W	60 W	60 VA	60 VA

Dimensional data

Size: 2 flush mounted modules

Configuration

"Push and Learn" self-learning type.

Wiring diagram

Front view

Legend

1. NETWORK key
2. NETWORK LED
3. LEARNING LED
4. ON/OFF key
5. Load ON/OFF LED
6. LEARNING key

Important:
– Connect a load before performing any "scenario" learning procedure.
– For conventional type transformers, a load with power 60% higher than their rated power must be connected.
– For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)

Universal switch RF with neutral 2500W
with LEDS status

078447   663089   H4591
079147   0672 33   LN4591

Description

Actuator for the control of different loads with maximum powers up to 2500 W, with ON/OFF LED.

Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage	Incandescent lamp	Halogen lamp	Fluorescent tube lamp	Ferromagnetic transformer
Voltage				
230 Vac	2500 W	2500 W	1250 W	2500 VA
110 Vac	1250 W	1250 W	625 W	1250 VA

Voltage	Electronic transformer	Compact fluorescent tube lamp	LED lamps	Motors
Voltage				
230 Vac	2500 W	1250 W	1250 W	250 VA
110 Vac	1250 W	625 W	625 W	125 VA

Dimensional data

Size: 2 flush mounted modules

Configuration

"Push and Learn" self-learning type.

Front view

Legend

1. NETWORK key
2. NETWORK LED
3. LEARNING LED
4. ON/OFF key
5. Load ON/OFF LED·
6. LEARNING key

Wiring diagram

Important:
– Connect a load before performing any "scenario" learning procedure.
– For conventional type transformers, a load with power 60% higher than their rated power must be connected.
– For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)

Universal switch RF with neutral 2 X 1000W
with LEDS status

078448	**H4592**
079148 **0672 34**	**LN4592**

Description

Actuator for the control of 2 different loads with maximum powers up to 1000 W, with ON/OFF LED.

Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 ℃
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

Power/absorption of the loads driven: see following table

Voltage	Incandescent lamp	Halogen lamp	Fluorescent tube lamp	Ferromagnetic transformer
Voltage				
230 Vac	2 x 1000 W	2 x 1000 W	2 x 500 W	2 x 1000 VA
110 Vac	2 x 500 W	2 x 500 W	2 x 250 W	2 x 500 VA

Voltage	Electronic transformer	Compact fluorescent tube lamp	LED lamps	Motors
Voltage				
230 Vac	2 x 1000 W	2 x 500 W	2 x 500 W	2 x 100 VA
110 Vac	2 x 500 W	2 x 250 W	2 x 250 W	2 x 50 VA

Dimensional data

Size: 2 flush mounted modules

Configuration

"Push and Learn" self-learning type.

Front view
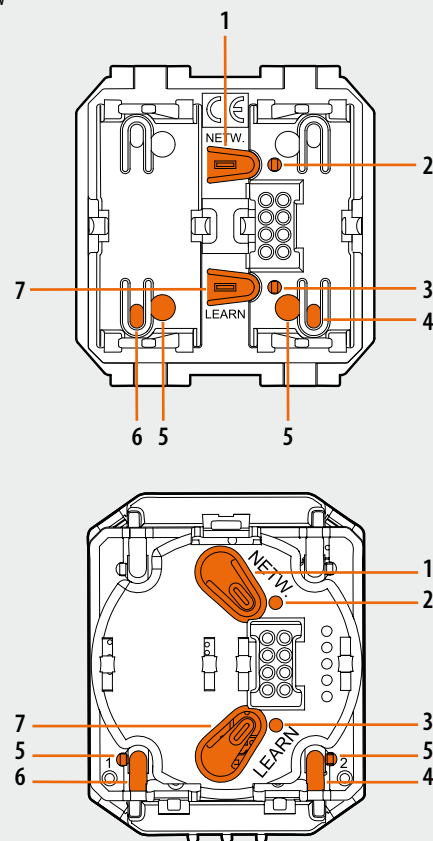
Legend

1. NETWORK key
2. NETWORK LED
3. LEARNING LED
4. ON/OFF key
5. Load ON/OFF LED
6. ON/OFF key
7. LEARNING key

Wiring diagram
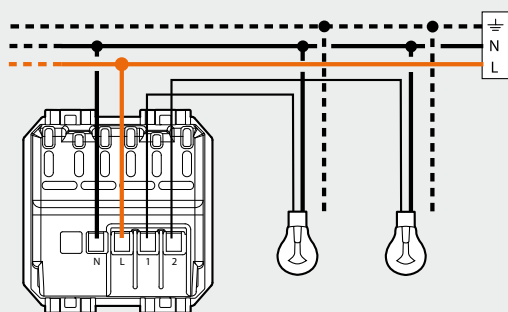
Important:
– Connect a load before performing any "scenario" learning procedure.
– For conventional type transformers, a load with power 60% higher than their rated power must be connected.
– For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA).

MQ00402-c-EN   24/09/2013

All load dimmer RF without neutral
300W with LEDS bargraphe

Description

Actuator for the control of different loads with maximum powers 300 W, with ON/OFF LED. For the connection of the Dimmer to the load and to the electric system no neutral conductor is required. The selection of the ON/OFF mode based on the load to drive (resistive or inductive) is performed using a micro-switch.

Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage		Incandescent lamp	Halogen lamp	Ferromagnetic transformer	Electronic transformer
Voltage					
230 Vac	Max.	300 W	300 W	300 VA	300 VA
	Min.	60 W	60 W	60 VA	60 VA
110 Vac	Max.	150 W	150 W	150 VA	150 VA
	Min.	60 W	60 W	60 VA	60 VA

Dimensional data

Size: 2 flush mounted modules

Wiring diagram
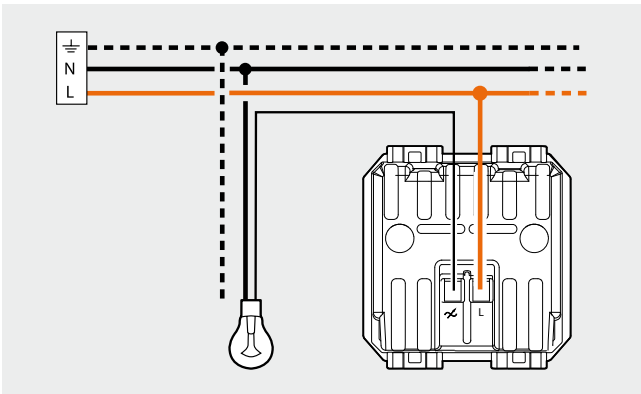
Important:
– Connect a load before performing any "scenario" learning procedure.
– For conventional type transformers, a load with power 60% higher than their rated power must be connected.
– For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)

Front view
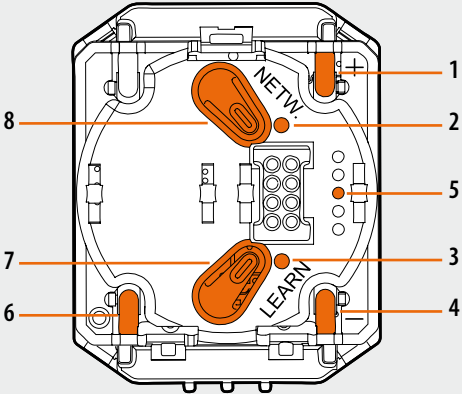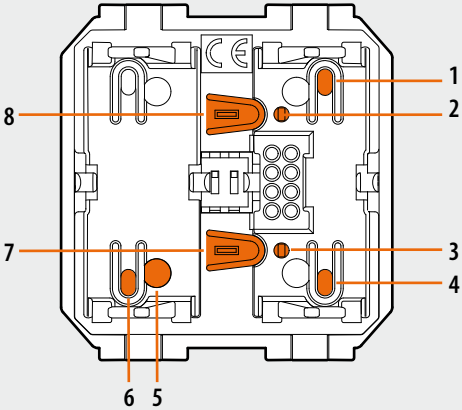
Legend

1. **+ key**: press and release immediately to activate the load at 66% of its power; press and hold down to increase the power to the maximum value.
2. NETWORK LED
3. LEARNING LED
4. **- key**: press and release immediately to activate the load at 33% of its power; press and hold down to decrease the power to the minimum value.
5. Load ON/OFF LED
6. ON/OFF key
7. LEARNING key
8. NETWORK key

Configuration

"Push and Learn" self-learning type.

Dimmer RF for ballasts 0-10V 1000W

Description

Actuator for the control of Ballasts for 0-10 V type Fluorescent tube lamps with power up to 1000 W max , with ON/OFF LED.

Technical data

Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with
concrete walls	
Power/absorption of the loads driven:	see following table

Voltage	Ballast 0 – 10 V
230 Vac	1000 VA
110 Vac	500 VA

Dimensional data

Size: 2 flush mounted modules

Configuration

"Push and Learn" self-learning type.

Front view

Legend

1. NETWORK key
2. + key: press and release immediately to activate the load at 66% of its power; press and hold down to increase the power to the maximum value.
3. NETWORK LED
4. LEARNING LED
5. - key: press and release immediately to activate the load at 33% of its power; press and hold down to decrease the power to the minimum value.
6. Load ON/OFF LED
7. ON/OFF key
8. LEARNING key

Wiring diagram

Important:
– Connect a load before performing any "scenario" learning procedure.
– For conventional type transformers, a load with power 60% higher than their rated power must be connected.
– For the calculation of the controllable power take into account the efficiency of standard transformers (e.g.: transformer for a 50 W lamp with an efficiency of 0.78 => power actually absorbed by the transformer = 64 VA)

Shutter switch RF with preset function

Description

Actuator for the control of electric rolling shutter or shutter motors with maximum power 500 VA.

Technical data

|	
Power supply:	100 – 240 Vac 50/60 Hz
Operating temperature:	5 – 45 ℃
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls
Power/absorption of the loads driven:	see following table

Voltage		Shutter motor
230 Vac	Max.	500 VA
	Min.	270 VA
110 Vac	Max.	250 VA
	Min.	135 VA

Front view
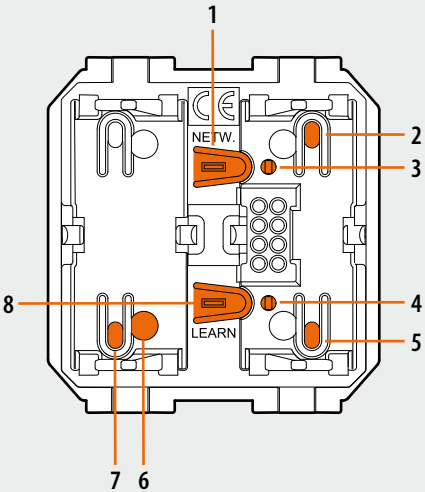
Legend

1. NETWORK key
2. UP key
3. NETWORK LED
4. LEARNING LED
5. DOWN key
6. Load ON/OFF LED
7. STOP key
8. LEARNING key

Dimensional data

Size: 2 flush mounted modules

Shutter switch RF with preset function

Configurazione

"Push and Learn" self-learning type.

Select the operating mode

The device may operate in two different modes:
- Bistable (to operate the rolling shutter press and immediately release the UP or DOWN keys).
- Monostable (to operate the rolling shutter press and hold down the UP or DOWN keys).
  The device is supplied configured in bistable mode. It will be possible to change the operating mode at any time by pressing and holding down for more than 4 seconds both the UP and DOWN keys of the rolling shutter control at the same time.
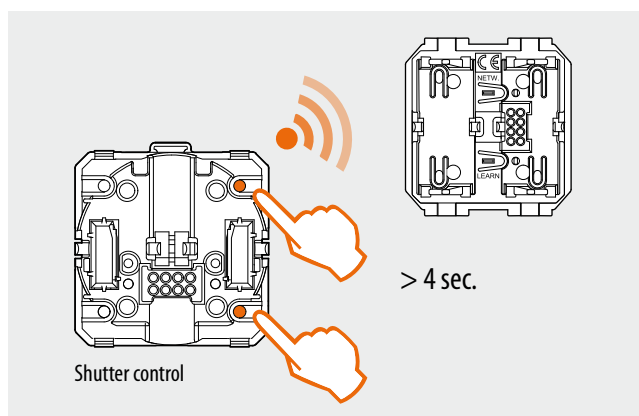
> 4 sec.

Shutter control

Use of the device in bistable mode

Opening and closing the rolling shutter:
Press and release the UP and DOWN keys.
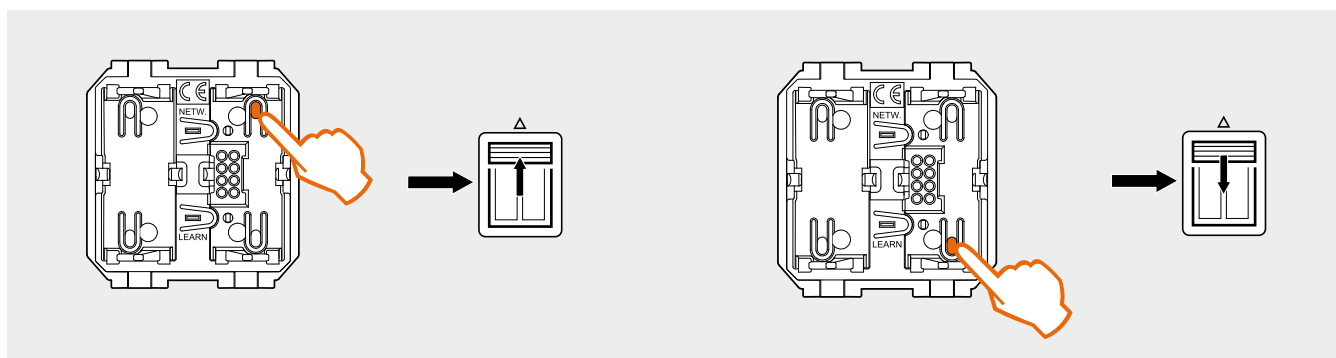
Adjustment of the blade position:
Press the UP and DOWN keys for more than 1 second.

> 1 sec.

> 1 sec.

L legrand

bticino
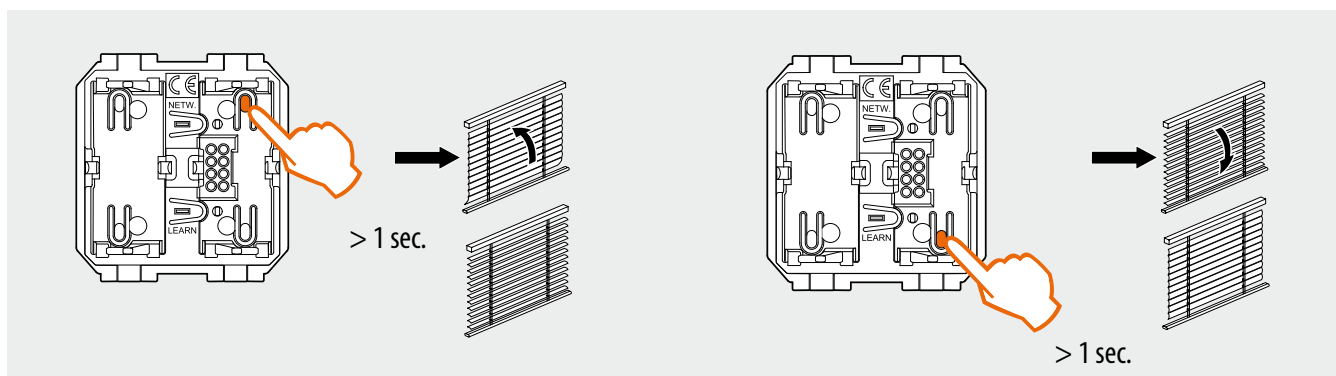
Shutter switch RF with preset function

078427   663096   H4595

0672 63   079127   665112   LN4595

Use of the device in monostable mode

Opening and closing the rolling shutter:
Press and hold down the UP and DOWN keys until the desired rolling shutter position.
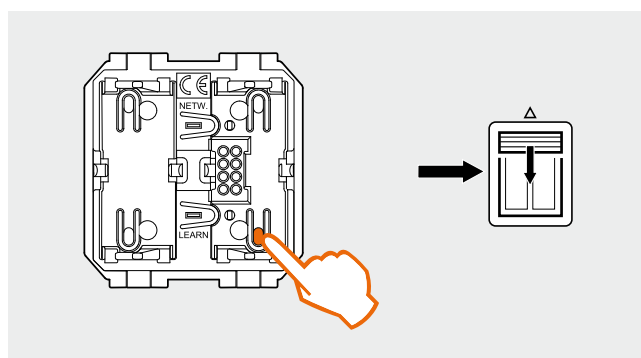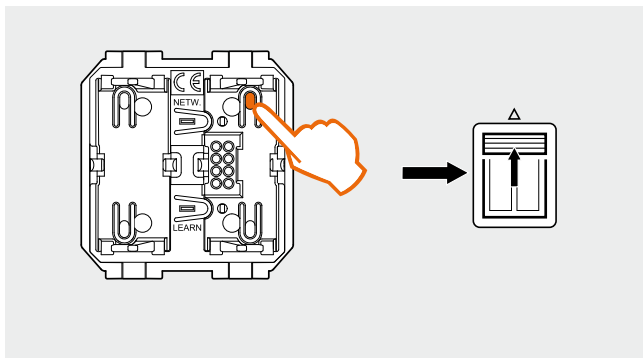
Saving of the PRESET position (opening the rolling shutter to a preset position)

In addition to the operating modes specified, this device can be used to also set the rolling shutters to a preset position by only pressing one key.
The procedure is performed in two different stages:
- calibration of the up and down movements times of the rolling shutter;
- saving of their positions.

Calibration of the up and down movements times of the rolling shutter;

1. Check if the rolling shutter motor is equipped with a traditional, or with an electronic "limit switch".

2. Fully open the rolling shutter.

3. In case of traditional limit switch, press the key shown in the picture for more than 4 seconds. Press the key for less than 1 second in case of electronic limit switch.

4. The rolling shutter will close completely, will open completely, and then will move to the half open position. During this stage do not operate the device.

5. The device has saved the rolling shutter full opening and full closing time. Now proceed with saving the desired position (Preset).

> 4 sec.

Shutter control

< 1 sec.

Shutter control

100%   0%   50%

Shutter switch RF with preset function

Saving the rolling shutter position:

1. Operate the UP and DOWN keys of the radio control to move the rolling shutter to the desired position.

2. To save the desired position press the Preset key of the rolling shutter radio control for more than 10 seconds.

> 10 sec.
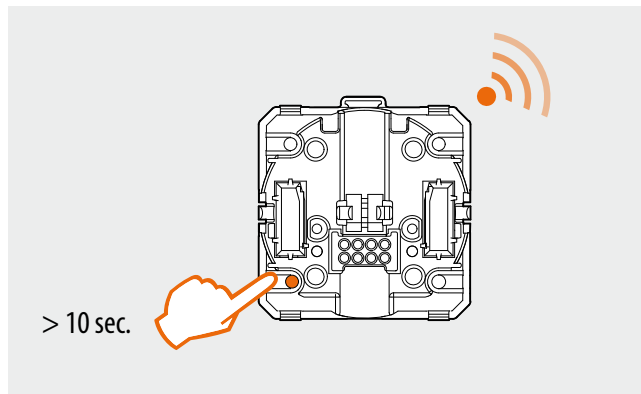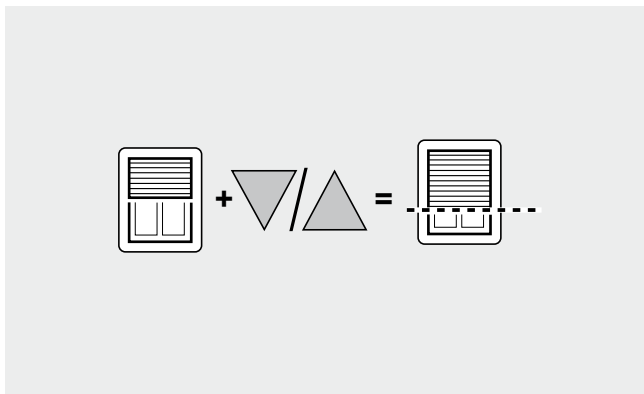
3. From now on, irrespective of its position, when the Preset key of the control device is pressed the rolling shutter will move to the previously saved position.

Wiring diagram
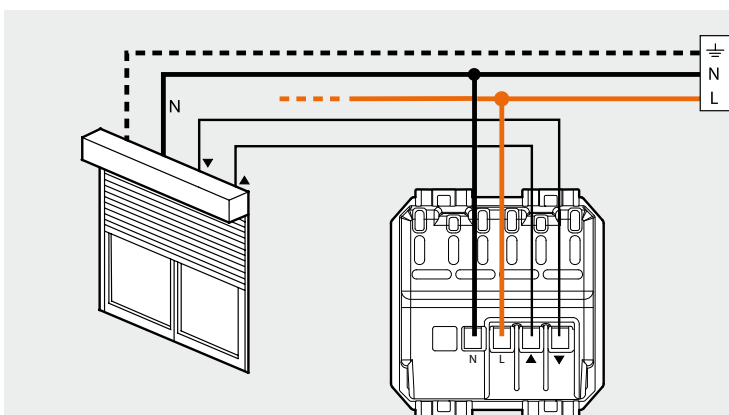
N
N
L

Important:
– Connect a load before performing any "scenario" learning procedure.

N L ▲ ▼

Switch control RF 1 gang

078443	663090	HA/HB4596
0672 35	079143	655101	L/N4596N

Description

Radio control device for the control of an ON/OFF or Dimmer actuator or group of actuators.

When controlling Dimmer actuators, it will only possible to switch the load on/off, but not to adjust the power level (dimmer function).

Technical data

Power supply:	No. 1 lithium battery 3 V, CR2032 type
Duration of the batteries:	5 years
Operating temperature:	5 – 45 ℃
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

Dimensional data

Size: 2 modules

Configuration

Radio system: "Push and Learn" self-learning type.

Wire system: if the device is integrated in the BUS Automation system using the Gateway SCS/Zigbee interface it will be possible to manage BUS actuators, which address must be configured by connecting the configurators to the A, PL, and M housings as indicated.

A = Room
PL = Light Point
M = Operating mode

Configurator in M	Function
0	Cyclical ON/OFF
1	ON timed - 1 minute
2	ON timed - 2 minutes
3	ON timed - 3 minutes
4	ON timed - 4 minutes
5	ON timed - 5 minutes
6	ON timed - 15 minutes
7	ON timed - 30 minutes
8	ON timed - 500 ms
0/I	Cyclical ON/OFF
OFF	OFF control
ON	ON control
PUL	monostable ON/OFF control (key)

Front view

Legend

1. LEARNING key
2. NETWORK key
3. Configurator socket (A,PL)
4. ON/OFF key
5. NETWORK LED
6. LEARNING LED
7. Configurator socket (M)

Switch control RF 2 gangs

Description

Radio control device for the control of two separate or two groups of ON/OFF or Dimmer type actuators.

When controlling Dimmer actuators, it will only possible to switch the load on/off, but not to adjust the power level (dimmer function).

Technical data

Power supply:	No. 1 lithium battery 3 V, CR2032 type
Duration of the batteries:	5 years
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

Dimensional data

Size:	2 modules

Configuration

Radio system: "Push and Learn" self-learning type.

Wire system: If the device is integrated in the BUS Automation system using the Gateway SCS/Zigbee interface it will be possible to manage BUS actuators, which address must be configured by connecting the configurators to the A, PL1, PL2, and M housings as indicated.

A = Room

PL1 = Light Point N°1

PL2 = Light Point N°2

M = Operating mode (see table)

Configurator in M	Function
0	Cyclical ON/OFF
1	ON timed - 1 minute
2	ON timed - 2 minutes
3	ON timed - 3 minutes
4	ON timed - 4 minutes
5	ON timed - 5 minutes
6	ON timed - 15 minutes
7	ON timed - 30 minutes
8	ON timed - 500 ms
0/I	Cyclical ON/OFF
OFF	OFF control
ON	ON control
PUL	Monostable ON/OFF control (key)

Front view

Legend

1. LEARNING key
2. NETWORK key
3. Configurator socket (A, PL1)
4. ON/OFF key No. 2
5. NETWORK LED
6. LEARNING LED
7. ON/OFF key No. 1
8. Configurator socket (PL2, M)

Dimming control 1 gang

Description

Radio control device for the control of an ON/OFF or Dimmer actuator, or a group of actuators.
When controlling ON/OFF actuators, it will only possible to switch the load on/off.

Technical data

Power supply:	No. 1 lithium battery 3 V, CR2032 type
Duration of the batteries:	5 years
Operating temperature:	5 – 45 ℃
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

Dimensional data

Size: 2 modules for surface mounted installation

Configuration

"Push and Learn" self-learning type.
If the device is integrated in the BUS Automation system using the Gateway SCS/Zigbee interface it will be possible to manage BUS dimmer actuators, which address must be configured by connecting the configurators to the A and PL.

Front view
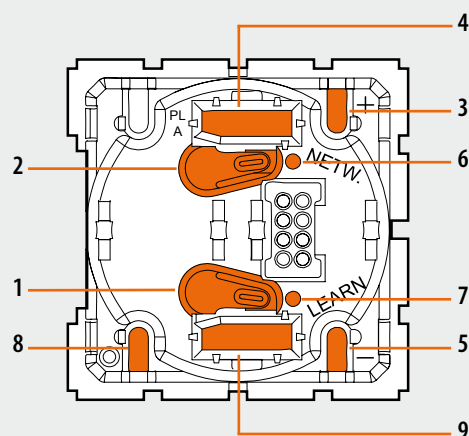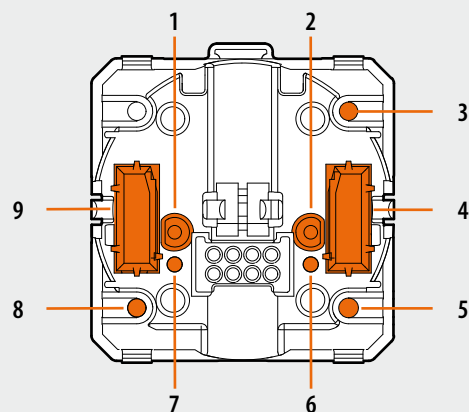
Legend

1. LEARNING key
2. NETWORK key
3. + key: press and release to switch the load ON at 66% of its power, press and hold down to increase the power to the maximum value
4. Configurator socket (A,PL)
5. - key: press and release to switch the load ON at 33% of its power, press and hold down to decrease the power to the minimum value
6. NETWORK LED
7. LEARNING LED
8. ON/OFF key
9. Configurator socket (not used)

Shutter control RF

Description

Radio control device for the control of one actuator or of one group of actuators for the control of motorized rolling shutters or shutters. It has a STOP/PRESET pushbutton to stop the movement of the rolling shutter/shutter, and to move it to a preset position.

Technical data

Power supply:	No. 1 lithium battery 3 V, CR2032 type
Duration of the batteries:	5 years
Operating temperature:	5 – 45 °C
Technology:	Radio 2.4 GHz standard ZigBee®
Capacity:	150 m free field, 15 m in rooms with concrete walls

Dimensional data

Size: 2 modules

Configuration

"Push and Learn" self-learning type.
If the device is integrated in the BUS Automation system using the Gateway SCS/Zigbee interface it will be possible to manage 2 relay actuator, which address must be configured by connecting the configurators to the A, PL, and M housings as indicated:

A = Room
PL = Light Point
M = operating mode (see below)

Configurator in M	Function
↑↓	Press and immediately release UP and DOWN keys to rise or lower the rolling shutter; to stop the movement press the STOP key.
↑↓ M	Press and hold down the UP or DOWN keys to send the command to rise or lower the rolling shutter; to stop the movement release the pushbutton.

Configuration

Select the operating mode

The device may operate in two different modes:
- Bistable (to operate the rolling shutter press and immediately release the UP or DOWN keys).
- Monostable (to operate the rolling shutter press and hold down the UP or DOWN keys).
  The device is supplied configured in bistable mode. It will be possible to change the operating mode at any time by pressing and holding down for more than 4 seconds both the UP and DOWN pushbuttons at the same time.

Front view
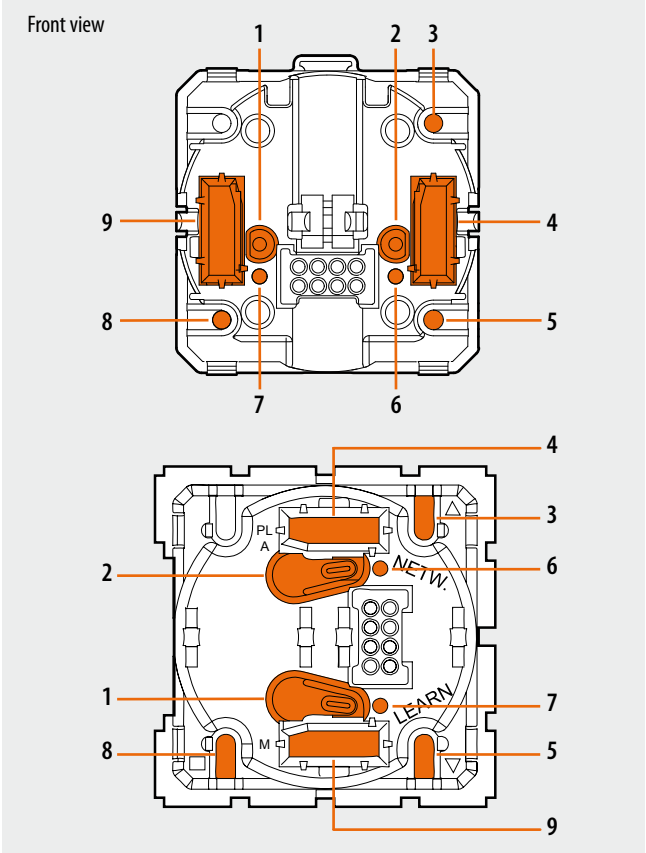
Legend

1. LEARNING key
2. NETWORK key
3. UP key
4. Configurator socket (A,PL)
5. DOWN key
6. NETWORK LED
7. LEARNING LED
8. STOP/PRESET key. Stops the rolling shutter during its movement. If pressed when the rolling shutter is stopped, it activates its movement to a preset position, saved in the Shutter actuator H/LN4595.
9. Configurator socket (M)
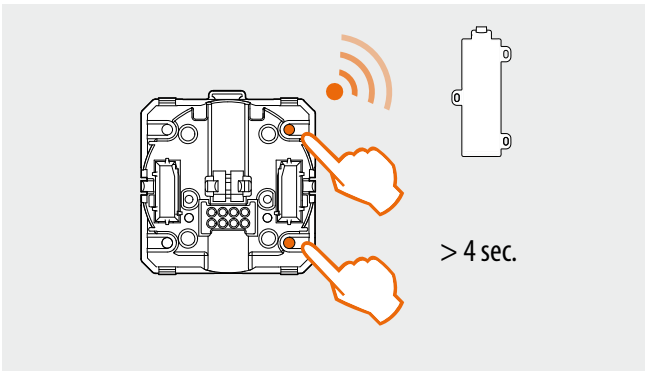
> 4 sec.

Use of the device in bistable mode

Opening and closing the rolling shutter:
Press and release the UP and DOWN pushbuttons.
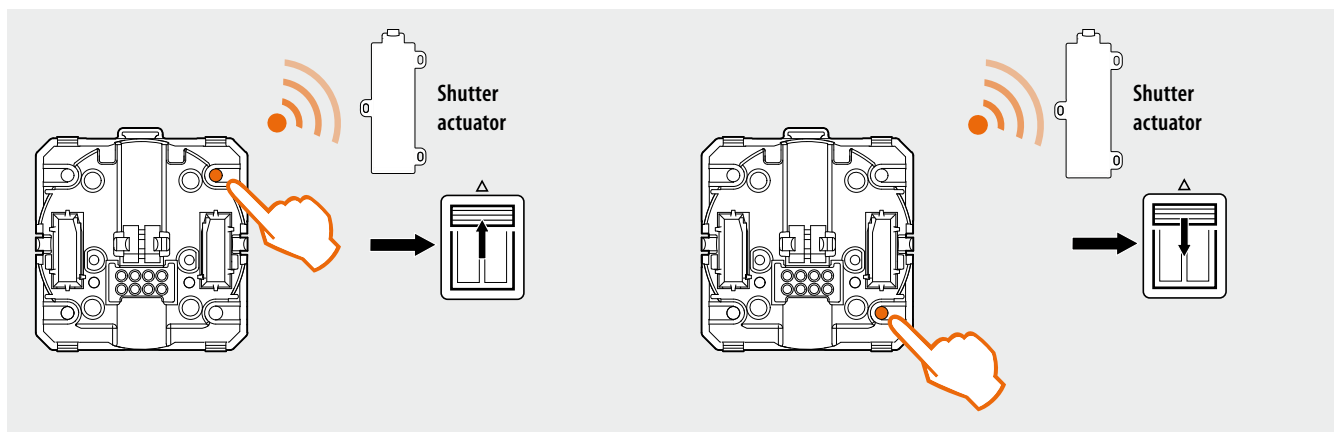
Adjustment of the blade position:
Press the UP and DOWN pushbuttons for more than 1 second.
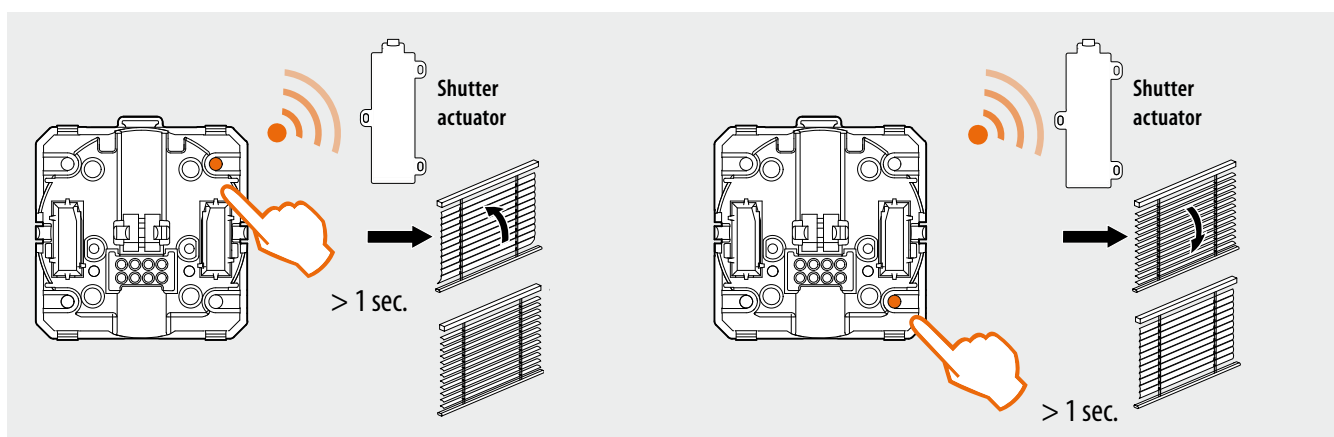
Use of the device in monostable mode

Opening and closing the rolling shutter:
Press and hold down the UP and DOWN Pushbuttons until the desired rolling shutter position.
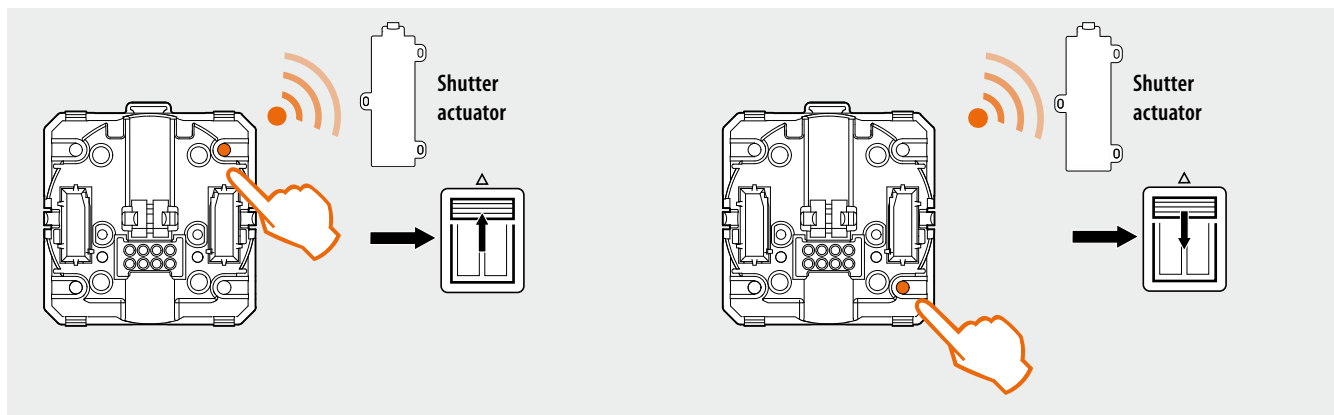
Shutter control RF

Saving of the PRESET position (opening the rolling shutter to a preset position)

In addition to the operating modes specified, this device can be used to also set the rolling shutters to a preset position by only pressing one pushbutton.
The procedure is performed in two different stages:
- calibration of the up and down movements times of the rolling shutter;
- saving of their positions.

Calibration of the up and down movements times of the rolling shutter;

1. Check if the rolling shutter motor is equipped with a traditional, or with an electronic "limit switch".

2. Fully open the rolling shutter.

3. In case of traditional limit switch, press the pushbutton shown in the picture for more than 4 seconds. Press the pushbutton for less than 1 second in case of electronic limit switch.

4. The rolling shutter will close completely, will open completely, and then will move to the half open position. During this stage do not operate the device.

5. The device has saved the rolling shutter full opening and full closing time. Now proceed with saving the desired position (Preset).

> 4 sec.

< 1 sec.

100% 0% 50%

Saving the rolling shutter position:

1. Operate the UP and DOWN PUShbuttons of the radio control to move the rolling shutter to the desired position.

2. To save the desired position press the Preset pushbutton of the rolling shutter radio control for more than 10 seconds.

> 10 sec.

3. From now on, irrespective of its position, when the Preset pushbutton of the control device is pressed the rolling shutter will move to the previously saved position.

Technical sheets - Automation

Basic Actuator

Description

This actuator can be used in flush-mounted boxes, junction boxes, shutter boxes and ducts. Particularly advantageous is the installation inside junction boxes, positioning the item at the back of the flush mounted box, behind lowered control devices. The actuator has cables for connecting to the BUS and to the load to be controlled and an LED.

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	13 mA

Power/Consumption of driven loads:

	Incandescent lamps Halogen lamps		LED lamps Compact fluorescent lamps		Ferromagnetic transformers	
230 Vac	460 W	2 A	40 W	Max. 1 lamp	2 A cosφ 0.5	460 VA

Size: basic module

Front view
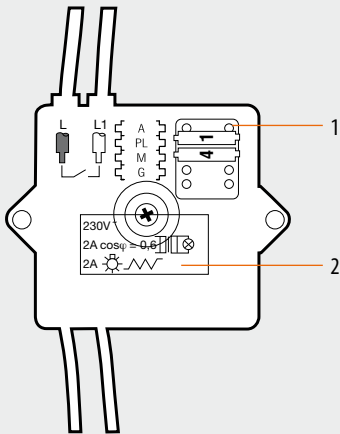
Side view
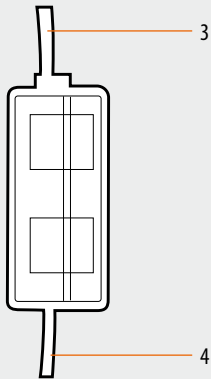
Legend

1. Configurator socket
2. LED
3. Cables 0.75 mm² for load connection
4. Cables for connecting to the BUS

Basic Actuator

Configuration

When installed in a Lighting Management system, the device can be configured in the following ways:
- Plug & Go: automatic procedure for pairing devices connected to the inputs and outputs. The procedure is activated on powering the device. It is only available for Room Controllers or, in the case of other devices, paired with the Room Controllers.

- Push & Learn: procedure for pairing different connected devices or changing the assignments defined automatically in the Plug & Go procedure. For more details, please refer to the specific document.
- Software Configuration: using the Virtual Configurator software; for more details, please refer to the specific manual.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9
Group		Group 1 - Group 10: 0-255	G=0-9

1.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [1]	0 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes

To use the "Actuator as a slave with PUL function" and to select the type of load (Actuator, Lamp, Solenoid Valve, Differential Reset, Fan, Irrigation, Controlled Outlet, Lock) and for the "Local button mode" use MYHOME_Suite virtual configuration.

NOTE 1): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. Only for a point-point type control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed.
Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light off immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

Basic Control Actuator

Description

This device features a compact size and can be used in flush-mounted boxes, junction boxes, shutter boxes and ducts. Particularly advantageous is the installation inside junction boxes, positioning the item at the back of the flush-mounted box, behind lowered automation devices or behind conventional devices (pushbuttons, switches, etc.). This actuator/control accepts a traditional button with N/O contact on input. The control/actuation device has a BUS input made with blue cables, an input for connecting the external pushbutton via the grey and black cables and a relay contact for load control via the two white cables.

Technical data

Power supply via SCS BUS: 27 Vdc
Operating power supply with SCS BUS: 18 – 27 Vdc
Current draw: 13 mA
Power/Consumption of driven loads:

	Incandescent lamps Halogen lamps		LED lamps Compact fluorescent lamps		Ferromagnetic transformers	
230 Vac	460 W	2 A	40 W	Max. 1 lamp	2 A cosφ 0.5	460 VA

Front view   Side view

Legend

1. Configurator socket
2. LED
3. Cables 0.75 mm^2 for load connection
4. BUS

Dimensions

Size: basic module

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.
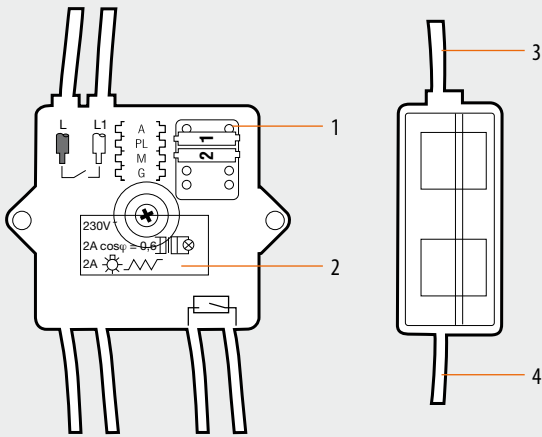
For a list of the procedures and their meanings, please refer to the instructions on this sheet and to the "Glossary" section of the Guide to designing and installing My Home.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9
Group		Group 1 - Group 10: 0-255	G=0-9

1.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Master Actuator	Master	M=0
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA
Pushbutton (ON monostable) ignores Room and General controls	Master PUL OFF Delay = 0	M=PUL

To use the "Actuator as a slave with PUL function", to select the type of load (Actuator, Lamp, Valve, Differential Reset, Fan, Irrigation, Controlled Outlet, Lock) use MYHOME_ Suite virtual configuration.

1.2.1 ON/OFF control:

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Cyclic.		M=0
ON		M=ON
OFF		M=OFF
ON with top button, OFF with bottom button.		M=0/I
Timed ON	0.5sec	M=8
	30sec	M=7
	1min	M=1
	2min	M=2
	3min	M=3
	4min	M=4
	5min	M=5
	15min	M=6

NOTE: For timed ON with period 0 to 255 hours and "Timed OFF" control, use MYHOME_Suite virtual configuration

Basic contacts interface

Description

This device lets you integrate traditional control devices (switches, pushbuttons, etc.) in advanced systems with BUS operating logic.

Therefore, it is possible to extend the use of the BUS system in rooms where traditional systems are already present or in historic and prestigious rooms whereby the complete or partial remaking of the electric system would entail heavy masonry work. The old but valuable switch with its no longer compliant wiring can therefore continue to be used with it, as the connection to the load to be controlled is carried out safely by connecting it with its respective interface with no-voltage contact.

Contact PL1 controls light point PL1, contact PL2 controls light point PL2. The interface has a LED for signalling it is working properly and three cables for connecting to traditional devices. This device is made in a Basic enclosure and therefore features a compact size and can be used in flush-mounted boxes, junction boxes, shutter boxes and ducts. Particularly advantageous is the installation inside junction boxes, positioning the item at the back of the flush-mounted box, behind lowered automation devices or behind conventional devices (pushbuttons, switches, etc.).

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	3.5 mA

Dimensions

Size: basic module

Legend

1. Configurator seat (note that this must only be used in MyHome systems with the physical configuration)
2. LED
3. Cables for connection to traditional devices
4. BUS

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

When used as a component of the Lighting Management system, use the specific types of configuration (Plug&go, Project&Download).

The interface consists of two independent control units, which are identified with the positions PL1 and PL2 in the physical configuration and the term Module 1 and Module 2 in the MYHOME_Suite virtual configuration. The two units can send:
- commands to two actuators for two independent loads (On, Off or adjustment) identified with the address PL1 and PL2 and the mode specified in M or;
- a command to the F420 scenario module;
- a double command intended for a single load (motor for blinds Up-Down, curtains Open-Close) identified with the address PL1=PL2 and specified Configuration mode M. The interface has an LED for indicating proper operation and three terminals for connection to traditional devices such as:
- two N/O (normally open) and N/C (normally closed) traditional switches or buttons;
- a switch.

List of Functions

The device performs the following functions:
1. LIGHT SWITCH
2. AUTOMATION CONTROL
3. DEVICE LOCKING/UNLOCKING
4. SCENARIO MODULE CONTROL
5. PROGRAMMED SCENARIO ACTIVATION
6. PLUS PROGRAMMED SCENARIO ACTIVATION
7. AUXILIARY CONTROL
8. SOUND SYSTEM CONTROL

See the following pages for the configuration procedures.

Basic contacts interface

Function selection

To configure the contact numbers use MYHOME_Suite virtual configuration

1. Light switch

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL1, PL2=0-9
Room		0-10	A=AMB
Group		1-255	A=GR
General		General	A=GEN

Installation and destination level:
The special control can also be used in systems where there are SCS/SCS interfaces (F422). By installing the control on the BUS of an interface (installation level), you can control one or more actuators located on the BUS of another interface (destination level).

Function		Virtual configuration (MYHOME_Suite)	Physical configuration
Destination level	Local bus	1-15	I= 1-9
	Riser bus	riser	I=CEN
	Complete system	entire system	I=0

NOTE: With the virtual configuration, for the room, group and general controls, you can set a light point address for the return of the load status

1.2 Mode

1.2.1 ON/OFF control:

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Type of contact to terminals PL1 and PL2	Normally open (N/0)	SPE=0
	Normally closed (N/C)	SPE=7
Cyclic		SPE=0, M=0
ON		SPE=0, M=ON
OFF		SPE=0, M=OFF
Cyclic (N/0 contact only)		SPE=1, M=7
Button		SPE=0, M=PUL
ON with button at PL2, OFF with button at PL1		SPE=0, M=O/I
Timed ON	0.5sec	SPE=0, M=8
	2sec	SPE=8, M=1
	30sec	SPE=0, M=7
	1min	SPE=0, M=1
	2min	SPE=0, M=2
	3min	SPE=0, M=3
	4min	SPE=0, M=4
	5min	SPE=0, M=5
	10min	SPE=8, M=2
	15min	SPE=0, M=6

For timed ON with period 0-255 hours, 0-59 minutes and 0-59 seconds use MYHOME_ Suite virtual configuration

1.2.2 ON/OFF Control and ADJUSTMENT (Point-to-Point only):

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
ON/OFF and cyclic ADJUSTMENT ON/OFF when pressing briefly and adjustment when holding down	SPE=0, M=0
ON with button at PL2, OFF with button at PL1 and DIMMER when held down	SPE=0, M=0/I
ON with adjustment at 10%	SPE=3, M=1
ON with adjustment at 20%	SPE=3, M=2
ON with adjustment at 30%	SPE=3, M=3
ON with adjustment at 40%	SPE=3, M=4
ON with adjustment at 50%	SPE=3, M=5
ON with adjustment at 60%	SPE=3, M=6
ON with adjustment at 70%	SPE=3, M=7
ON with adjustment at 80%	SPE=3, M=8
ON with adjustment at 90%	SPE=3, M=9

For the functions of "Cyclic with custom point-to-point adjustment", "Cyclic with custom adjustment", "Cyclic dimmer without adjustment", "Custom dimmer ON without adjustment", "Custom dimmer OFF without adjustment", "ON with custom adjustment", "OFF with custom adjustment", use MYHOME_Suite virtual configuration.

1.2.3 Blink command

When an actuator receives a blink command, it implements it by closing and opening the relay for a time equal to T that can be configured as shown in the table.
Combine it with a command configured OFF to switch it off.

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
Blink 0.5 s	SPE=2, M=0
Blink 1 s	SPE=2, M=1
Blink 1.5 s	SPE=2, M=2
Blink 2 s	SPE=2, M=3
Blink 2.5 s	SPE=2, M=4
Blink 3 s	SPE=2, M=5
Blink 3.5 s	SPE=2, M=6
Blink 4 s	SPE=2, M=7
Blink 4.5 s	SPE=2, M=8
Blink 5 s	SPE=2, M=9

For blinking with a period of from 5.5 to 8 seconds, use MYHOME_Suite virtual configuration

Basic contacts interface

2. Automation control

2.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL1, PL2=0-9
Room		0-10	A=AMB
Group		1-255	A=GR
General		general	A=GEN

Installation and destination level:

The special control can also be used in systems where there are SCS/SCS interfaces (F422). By installing the control on the BUS of an interface (installation level), you can control one or more actuators located on the BUS of another interface (destination level).

Function		Virtual configuration (MYHOME_Suite)	Physical configuration
Destination level	Local bus	1-15	I= 1-9
	Riser bus	riser	I=CEN
	Complete system	entire system	I=0

NOTE: With the virtual configuration, for the room, group and general controls, you can set a light point address for the return of the load status

2.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Type of contact to terminals PL1 and PL2	Normally open (N/0)	SPE=0
	Normally closed (N/C)	SPE=7
Bistable control		PL1=PL2 SPE=0 M=↑↓
Monostable control		PL1=PL2 SPE=0 M=↑↓M

3. Device locking/unlocking

3.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL1, PL2=0-9
Room		0-10	A=AMB
Group		1-255	A=GR
General		General	A=GEN

Basic contacts interface

3.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Type of contact to terminals PL1 and PL2	Normally open (N/O)	SPE=0
	Normally closed (N/C)	SPE=7
Disable		SPE=1 , M=1
Enable		SPE=1, M=2

To configure the "Installation level" and the "Destination level" and use MYHOME_Suite
virtual configuration

4. Scenario module control

4.1 Addressing

Function	Virtual configuration (MYHOME_Suite)	Physical configuration
Room (of the scenario module)	0-10	A=1-9
Light point (of the scenario module)	0-15	PL1, PL2=0-9

NOTE: PL2 must be equal to PL1, or not be configured (in which case the button connected to
terminal PL2 is disabled)

4.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Type of contact to terminals PL1 and PL2	Normally open (N/O)	SPE=0
	Normally closed (N/C)	SPE=7
Scenario modification and activation		
Scenario No.	1-16	SPE=6[1], M=1-8
Scenario activation		
Scenario No.	1-16	SPE=4[2], M=1-8

For Delayed activation of the top/bottom button use MYHOME_Suite virtual configuration

NOTE 1): With SPE=6 you can call and program scenarios within module F420. M=1-8: group of
scenarios to be controlled (see table).

NOTE 2): With SPE=4 it is only possible to call up the scenario saved in module item F420. M=1-8:
group of scenarios to be controlled (see table).

Scenario programming

To program, change or delete a scenario you need to enable programming module
F420 so that the status LED is green (press the locking/unlocking button on the scenario
module for at least 0.5 seconds) and then continue with the following steps:

1) press one of the four special control buttons to which the scenario should be associated
to for 3 seconds and the corresponding LED will start blinking;

2) set the scenario using the corresponding controls for the various Automation,
Temperature control, Sound system, etc. functions;

3) confirm the scenario by briefly pressing the corresponding button on the special
control to exit the programming mode;

4) to change a scenario, or to create new ones to use with the other buttons, repeat
the procedure starting from point 1. To recall an already set scenario, briefly pressing
the corresponding button on the control is enough. If you want to delete a scenario
completely, press and hold down the corresponding button for approximately 10 seconds.

M	First contact PL1	Second contact PL2
1	1	2
2	3	4
3	5	6
4	7	8
5	9	10
6	11	12
7	13	14
8	15	16

A=0-9 and PL1=1-9 are the room and the light point of the scenario module to be controlled. PL2
must be equal to PL1 or not be configured (in which case the second contact is disabled).

Basic contacts interface

5. Programmed scenario activation

Enabling buttons for sending a command to the scenario programmer MH200N.
The address of the assigned command in positions A and PL must be unique and match

the scenario to be activated. The control can be connected at any point in the system (local bus or riser).

5.1 Addressing

		Virtual configuration (MYHOME_Suite)	Physical configuration
Addressing type			
	Room	0-10	A=1-9
	Lighting point	0-15	PL1, PL2=1-9

NOTE: If PL1=PL2 the two buttons connected to the interface activate two different scenarios.
If PL1≠PL2 the two buttons activate the same scenario

5.2 Mode

	Virtual configuration (MYHOME_Suite)	Physical configuration
Type of contact to terminals PL1 and PL2	Normally open (N/O)	SPE=0
	Normally closed (N/C)	SPE=7
Button PL1	0-31	SPE=0 M=CEN
Button PL2	0-31	SPE=0 M=CEN

6. Plus Light Management scenario activation

For the configuration please refer to MY HOME_ Suite

7. Plus programmed scenario activation

To configure the address 1 - 2047 of the scenario and the number of buttons 0 - 31 on
the control device, use MYHOME_Suite virtual configuration

8. Auxiliary control

For the configuration please refer to MY HOME_ Suite

9. Sound system control

This mode allows you to control the amplifiers and the sources of the Sound System.

9.1 Addressing

You can manage a single amplifier (point-to-point control), some amplifiers (room control) and all the amplifiers in the system (general control).

Virtual configuration (MYHOME_Suite)			Physical configuration
Addressing type		Parameter / setting	
Point-to-point	Room	0-9	0-9
	Sound point	0-9	0-9
Room	Room	0-9	A=AMB
			PF=0-9
General		General	A=GEN

9.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	Parameter / setting	
Type of contact to terminals PL1 and PL2	Normally open (N/O)	SPE=0
	Normally closed (N/C)	SPE=7
ON/volume +		SPE=5 , M=0 (for button on PL1)
OFF/volume -		SPE=5, M=0 (for button on PL2)
Change track		SPE=5, M=1 (for button on PL1)
Click on source		SPE=5, M=1 (for button on PL2)

For the "Cyclical ON/OFF" function and to select sources 1-9 use the MYHOME_Suite virtual configuration

Follow Me mode

Enables, upon powering the amplifier, activating the last source switched on.

Virtual configuration (MYHOME_Suite)			Physical configuration
Function		Parameter / setting	
Switch back on from the last source	YES	YES	M=0
	NO	Definition of the source 1-4	M=1-4 [1]

NOTE 1): indicates the sound source to be activated before switching on the amplifier.

For example:

By properly configuring the interface, the following functions are performed:

M=0 ON/OFF mode

Contact on PL1:
Briefly pressing sends out the following sequence:
- ON sources, PL2 indicates the source to be activated before switching on the amplifier.
  If PL2=0 source 1 is turned on (follow-me mode)
- ON amplifier A/PL1

On holding down:
- For point-to-point commands if the amplifier is already on, only the volume is adjusted
  (VOL+); if the amplifier is off, the switch-on sequence is sent first.
- For GEN or AMB commands only the volume is adjusted.

Contact on PL2:
Briefly pressing sends the OFF command for the amplifier A/PL1
Pressing and holding down adjusts the volume (VOL-)

In this operating mode:

Point-to-point command
A=1-9 amplifier room
PL1=0-9 amplifier sound point

Room control
A=AMB
PL1=1-9 room of amplifiers where the command is directed

General control
A=GEN
PL1=0
PL2=1-4 indicates the source to be activated before switching on the amplifier.
If PL2=0 follow-me mode is turned on

M=1 Cycle source/Cycle track mode

Contact N1: cycle source
Contact N2: cycle track

In this operating mode:

Room controls
A=1-9 is the amplifier room

General controls
A=GEN for general controls
PL1=PL2=0

Wiring diagram
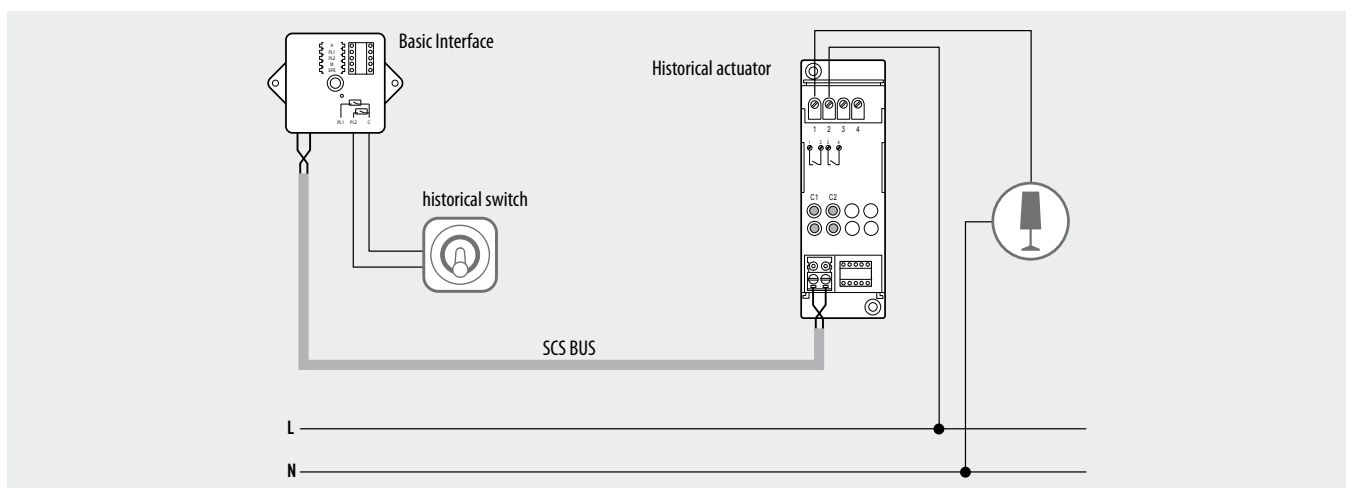
IR remote control

Description

The IR remote control is a device capable of performing the following functions:
- directly drive traditional devices with integrated IR receivers currently on our catalogue;
- interface to the SCS BUS using the receiver My Home, for the creation of controls for 1 relay actuators for single loads, and for 2 relay actuators for double loads (shutters motor etc.), adjust the dimmer, generate or recall scenarios saved in the scenario module, or operate sound systems and video door entry systems.

The IR remote control includes:
- 16 keys that may be lit individually by a blue LED.
  When a key is pressed, its light comes on and stays on until released, when the light gradually goes OFF;
- 16 windows for entering an icon representing the function saved by the pushbutton;
- a buzzer emitting an audible signal when the key is pressed
- a standard 3.5mm jack input, enabling the remote control to be used through a signal coming from a sensor for disabled people.

Related articles:
- L4425 traditional 1-channel receiver with relay output,
- L4426 traditional 2-channel receiver with output having 2 interlocked relays,
- BUS IR receiver L/N/NT4654N and HC/HS4654 and AM5834

Technical data

Power supply:	3 Vdc (2 AAA type, 1.5 V batteries)
Absorption:	such to ensure that the batteries will last for a period of 2 years, based on 100 pressures per day
Operating temperature:	5 – 35 °C
Frequency:	36.7 KHz in PCM modulation

Configuration

Inside the battery housing is a 4-way Dip Switch type changeover switch with two positions, for selecting the operating modes as indicated in the table.

Dip Switch changeover switch with factory configuration
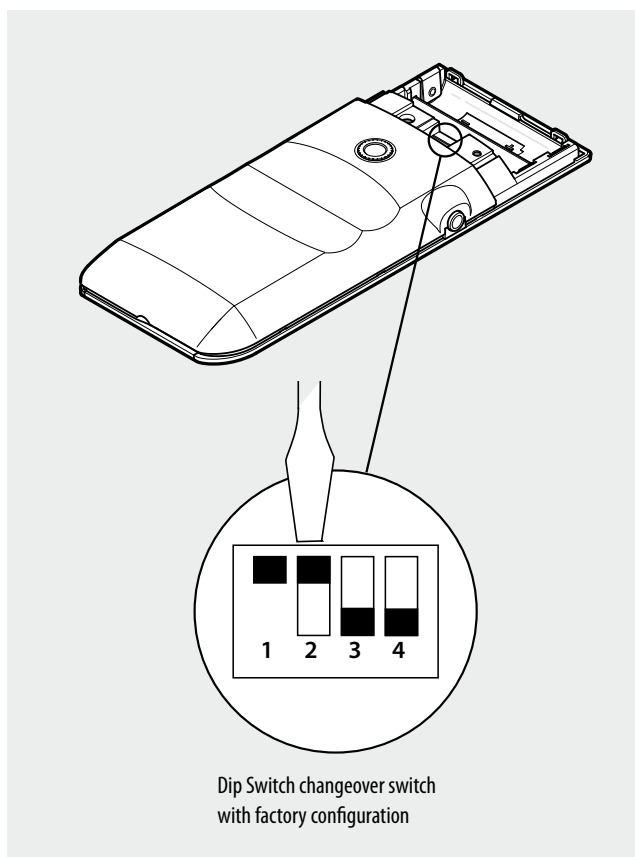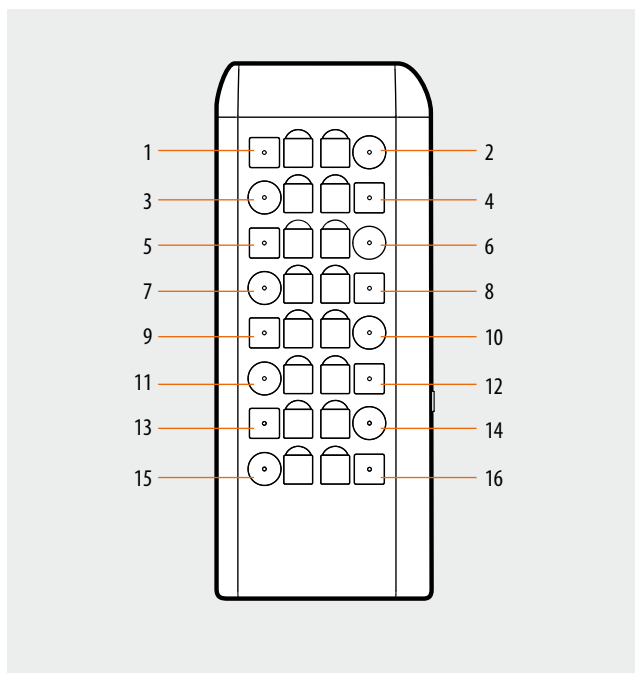
IR remote control

Switch		Position	Operating mode
Switch 1	▮▯▯▯ 1 2 3 4	Up Key lighting = ON	It lights up when the remote control key is pressed.
	▮▯▯▯ 1 2 3 4	Down Key lighting = OFF	It does not light up when the remote control key is pressed.
Switch 2	▯▮▯▯ 1 2 3 4	Up Audible signal = ON	An audible signal is emitted when a key is pressed.
	▯▮▯▯ 1 2 3 4	Down Audible signal = OFF	No audible signal is emitted when a key is pressed.
Switch 3	▯▯▮▯ 1 2 3 4	Up	Programming of the key scanning speed for the disabled user function.
	▯▯▯▯ 1 2 3 4	Down	Normal operation.

Remote control functions for disabled people

The radio control is provided with a 3.5 mm standard mono jack input for connecting a detector (for disabled people) and a screw connection for installation on wheelchair or on bedside. Thanks to signals issued by an external sensor, the main functions of the remote control can also be recalled by a disabled person (control devices that enable to recover the residual capacity of movement of a disabled person).

SCANNING OF KEYS - the first signal from the external sensor starts the remote control keys scanning sequence; the key reached by the scanning sequence may be identified by a luminous and/or audible signal.

KEY SELECTION - the second signal from the sensor stops the scanning sequence when the selected key is reached.

CONTROL ACTIVATION - the third signal from the sensor corresponds to a standard pressure of the selected key. A short pressure corresponds to the key being pressed for a short time, and then released; in case of extended pressure, the remote control will wait for a fourth signal from the sensor, which will be interpreted as the key being released. The time between the third and the fourth signal is interpreted as an extended pressure.

⚠ - If the control activation (third closing) does not occur within three times the selected scanning time, the scanning procedure starts again.
- Time out due to extended pressure from jack: 1 min.

The scanning time of each individual key may be changed whilst in **programming** mode.

1 - Move switch no. 3 to programming mode (UP).

2 - The first four keys light up.

3 - Press one of the lit keys to perform a scanning test to ascertain the associated time.

Scanning times are as follows:

Key 1 = 2 sec.

Key 2 = 1 sec.

Key 3 = 0.5 sec.

Key 4 = 0.3 sec.

4 - Press and hold down the key corresponding to the desired time for at least 2 seconds.

5 - The successful completion of the programming procedure is confirmed by the pressed key flashing

6 - Move switch no. 3 to normal operation mode (DOWN).

SCS Dimmer 1-10V 1x4.3A
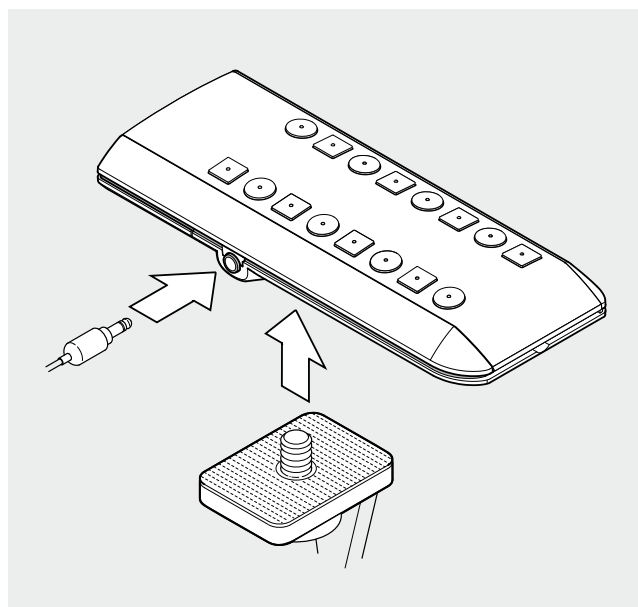
Description

Modular DIN device powered at 100 – 240 Vac for dimming loads interfaced with ballast 1-10 V. The loads can be adjusted via any control device and/or sensor connected and properly configured, or by using the button on the device.
The device is a component in the Lighting Management system and can also be installed in a My Home system.

Technical data

Power supply:	100-240 Vac @ 50/60 Hz
Maximum current draw:	165 mA
Number of outputs:	1 x 4.3 A
Protection index:	IP20
Impact resistance:	IK04
Operating temperature:	(-5) – (+ 45) °C
Max. number of connectable ballasts:	160
Type of connection:	RJ45
	clamp input 2 x 2.5 mm^2
	clamp output 2 x 1.5 mm^2 and 1 x 2.5 mm^2
Power/Consumption of driven loads:	Incandescent lamps, halogen lamps, compact fluorescent lamps and LEDs via Ballast 1-10V:
	- 240 Vac 4.3 A / 1000 VA
	- 110 Vac 4.3 A / 500 VA

Standards, Certifications, Marks

Directive:
– Electromagnetic Compatibility Directive 2004/108/EC
Installation regulations:
– CEI 64-8
Product regulations:
– IEC 60669-2-1
– EN 50428
Environmental regulations:
– EU Directive 2002/96/EC: WEEE (Waste Electrical and Electronic Equipment)
– EU Directive 2002/95/EC: RoHS (Restriction of Hazardous Substances)

Dimensions

Size: 6 DIN modules
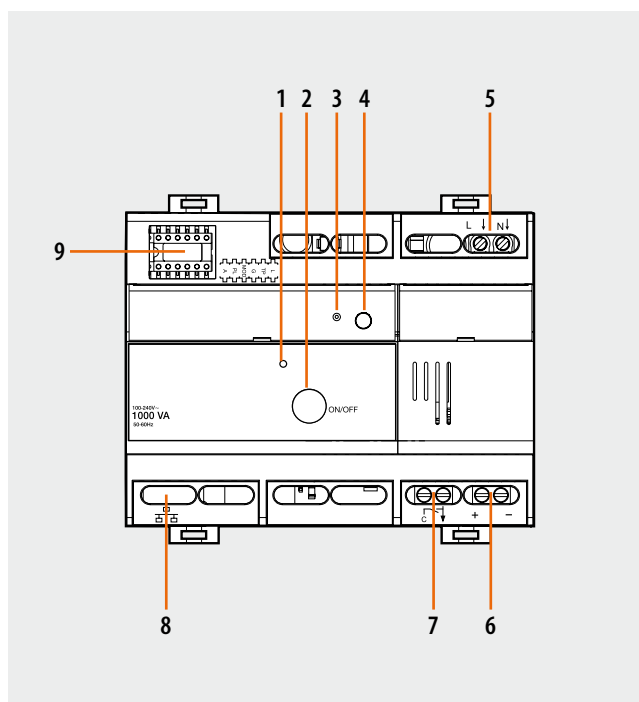
Legend

1. Load status indication LED
2. Load activation pushbutton
3. Learn Mode status indication LED
4. Learn Mode pushbutton
5. Clamps for the connection to the power supply
6. Output voltage terminals 1 – 10 V
7. Contact terminals
8. BUS RJ45 connector
9. Configurator socket (note that this must only be used in My Home systems with the physical configuration)

SCS Dimmer 1-10V 1x4.3A

Configuration

1. Lighting Management System

When installed in a Lighting Management system, the device can be configured in the following way:

- Software Configuration: using the Virtual Configurator software; for more details, please refer to the specific manual.

2. My Home system

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many

more options than the physical configuration.
For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

2.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A = 0-9
	Lighting point	0-15	PL = 1-9
Groups		Group 1 - Group 10 = 0-255	G = 0-9

2.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [1]	0 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes
Selection of the minimum brightness level [2]	1-100	L=0	1 Volt
		L=1	1.5 Volt
		L=2	2 Volt
		L=3	0 Volt
		L=4	0.5 Volt
Selection of the type of load used [3]	Fluorescent lamps	TYPE=0	Fluorescent lamps
	LED lamp	TYPE=1	LED lamp

NOTE 1): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed. The ON control activates the Master actuator and the Slave actuator at the same time. The next OFF control deactivates the Master actuator and keeps the Slave actuator active for the period of time set with configurator 1 - 4 connected to M of the Master actuator as indicated in the table.

NOTE 2): In the physical configuration, the configurator in the L position establishes the minimum output voltage between terminals 1 and 2 when the load is on, thus allowing the minimum brightness level to be selected. 5 different voltage levels can be selected, so that the standard 0-10V is possible as well as the standard 1-10V.

NOTE 3): In the physical configuration, the configurator in the TYPE position determines the type of load used on the basis of the table. If ballasts for fluorescent lamps with typical switching ON delay of 1.5s are used, the device will send the soft/start switching ON command taking account of the delay. If power supply units for LED lamps must be controlled instead, the device will send an immediate soft/start switching ON command.

To use the "Actuator as a slave with PUL function" and to adjust the voltage, use MYHOME_Suite virtual configuration.

Maintenance

Do not use acetone, detergents for removing tar, or trichloroethylene.
Maintenance using the following products:
- Hexane (En 60669-1);
- Methylated spirit;
- Soap and water;
- Diluted ammonia;

- Bleach, diluted 10%;
- Glass detergents.

WARNING:
An initial test is required in order to use other special maintenance products.

Operating mode

When in Test mode, by pressing the pushbutton of the actuator it will be possible to enable or disable the associated load.

ON-OFF

DIMMING

0%   100 %

0%

Wiring diagram

SCS Dimmer 1-10V 1x4.3A

Wiring diagrams with EASYWAY system

SCS actuator 2x16A

BMSW1002
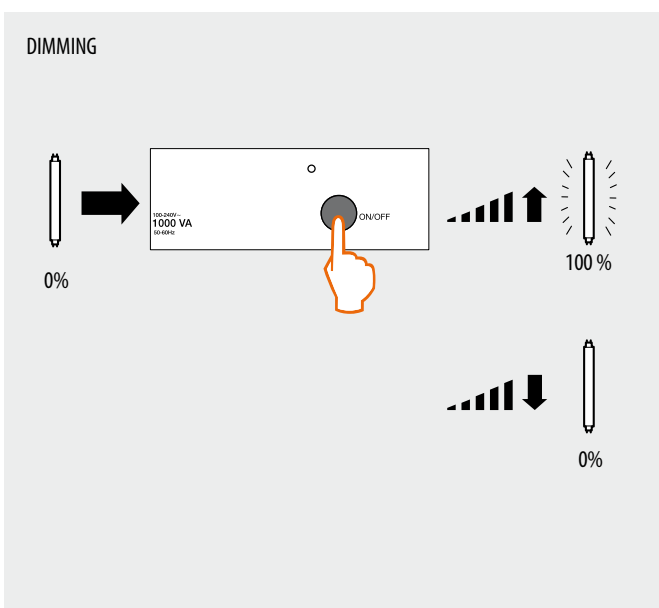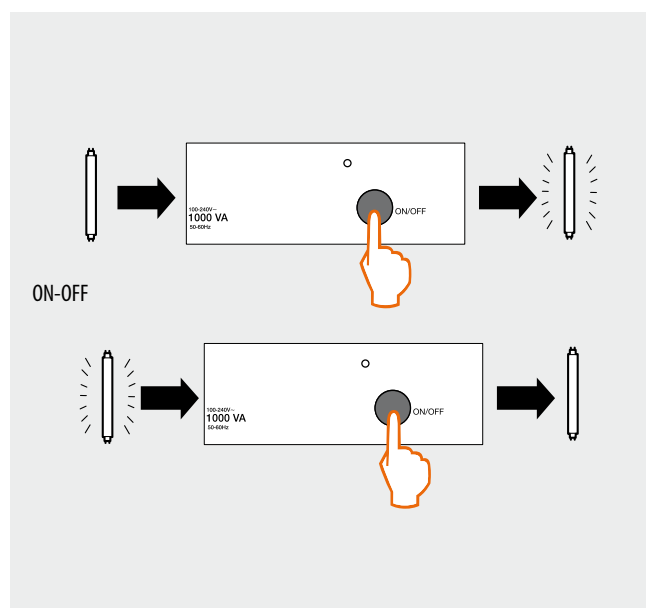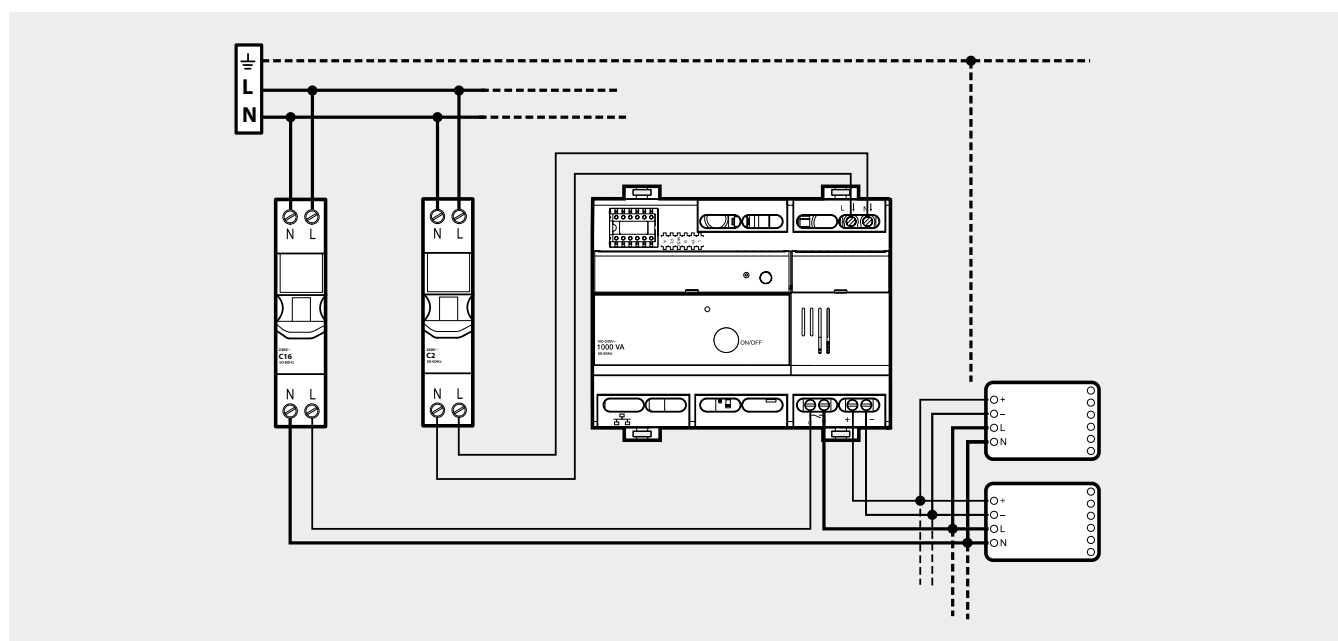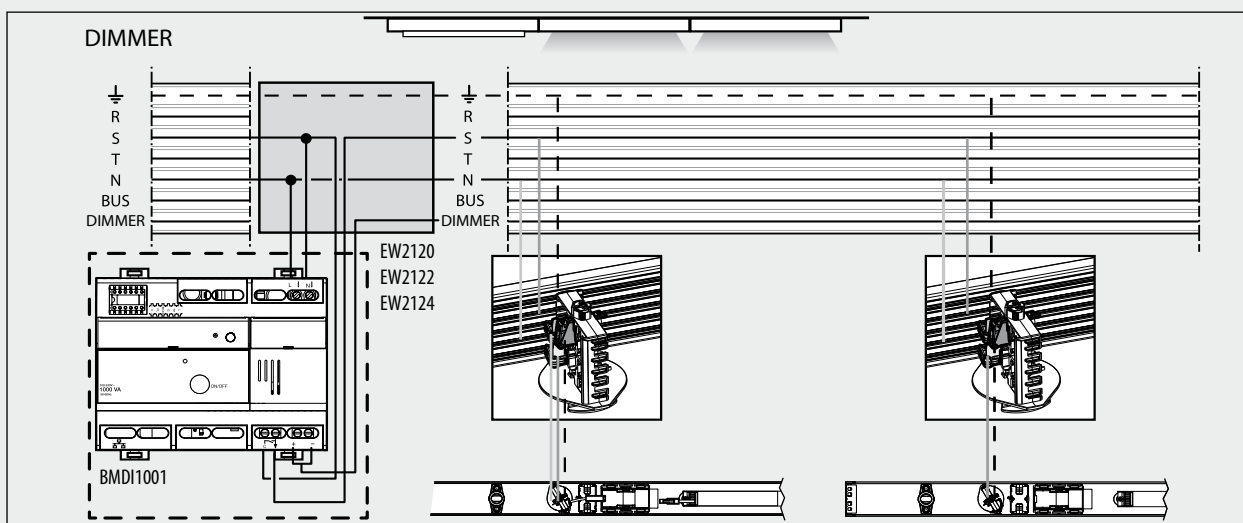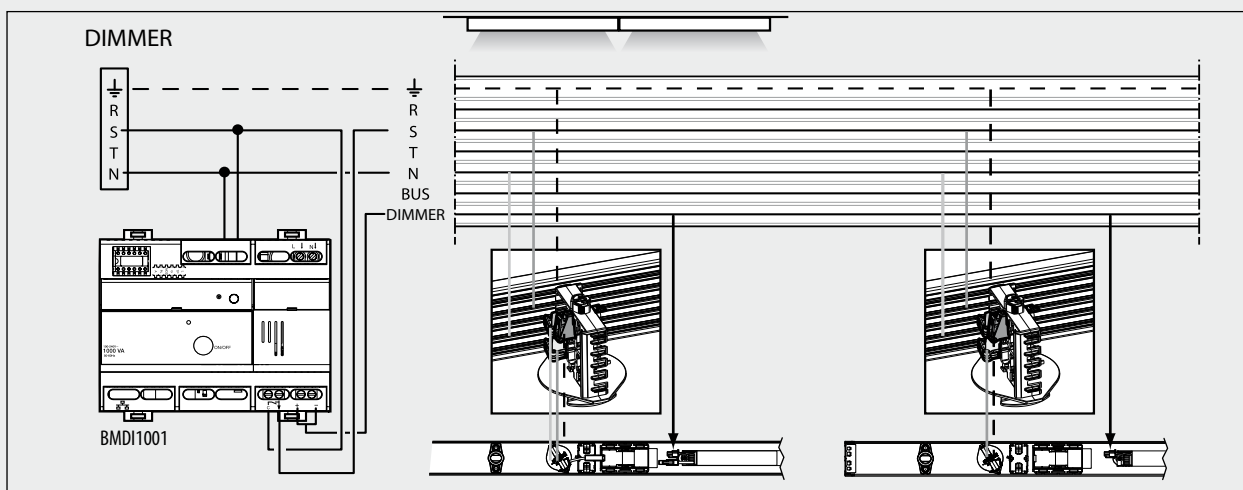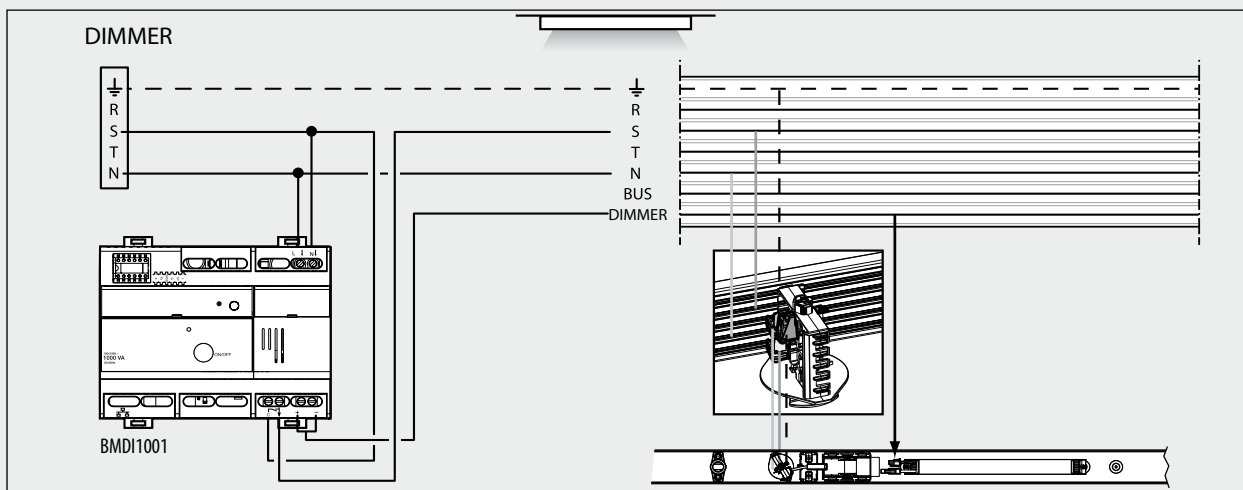
Description

Actuator with 2 independent relays for single loads up to 16 A at 230 Vac, and installation inside DIN rail switchboards or distribution boards.

This device is fitted with local load control pushbuttons.

The PL1 and PL2 positions can never have the same configurator, because the device cannot manage the interlocking of the two relays. This means that it cannot manage motors of rolling shutters, curtains, etc. The device is a component in the Lighting Management system and can also be installed in a My Home system.

Regulations

Directive:
– Electromagnetic Compatibility Directive 2004/108/EC
Installation regulations:
– CEI 64-8
Product regulations:
– IEC 60669-2-1
– EN 50428
Environmental regulations:
– EU Directive 2002/96/EC: WEEE (Waste Electrical and Electronic Equipment)
– EU Directive 2002/95/EC: RoHS (Restriction of Hazardous Substances)

Dimensions

Size: 4 DIN modules

Technical data

Power supply:	100 - 240 Vac @ 50/60 Hz
Number of outputs:	2 x 16 A
Current draw in operation:	5 mA
Power consumption on standby:	0.8 W
Operating temperature:	(-5) – (+45) °C
Type of connection:	RJ45
	clamp input 2 x 2.5 mm^2
	clamp output 2 x 1.5 mm^2 and 1 x 2.5 mm^2
Protection index:	IP20
Impact resistance:	IK04
Cable section:	2.5 mm^2
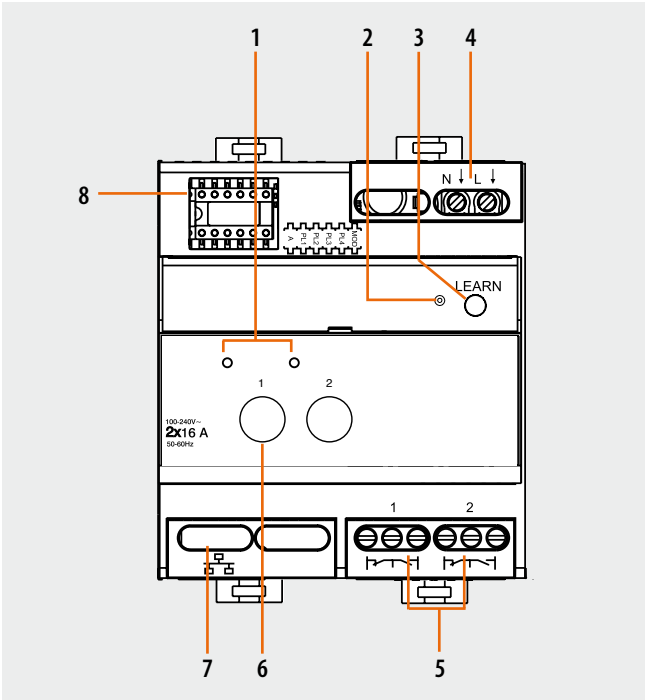
Legend

1. L1, L2 load status indication LED
2. Learn Mode status indication LED
3. Learn Mode pushbutton
4. Clamps for the connection to the 100 – 240 Vac power supply
5. L1, L2 load connection clamps
6. L1, L2 load activation pushbutton
7. BUS RJ45 connector
8. Configurator socket (note that this must only be used in My Home systems with the physical configuration)

Power/Consumption of driven loads:

	- Halogen lamps - Incandescent lamps	Linear fluorescent lamps		- Halogen lamps - Electronic transformers - Ferromagnetic transformers		Compact fluorescent lamps		LED lamps	
230 V~	3680 W		10x(2x36 W)		3680 VA		1150 VA		1 x 500 VA	
		16 A		4,3 A		16 A		5 A		2,1 A
110 V~	1760 W		5x(2x36 W)		1760 VA		550 VA		1 x 250 VA	

Configuration

1. Lighting Management System

When installed in a Lighting Management system, the device can be configured in the following ways:
- Push & Learn: procedure for pairing different connected devices or changing the assignments defined automatically in the Plug & Go procedure. For more details, please refer to the specific document.

- Software Configuration: using the Virtual Configurator software; for more details, please refer to the specific manual.

2. My Home system

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

2.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL1, PL2 = 1-9
Groups		Group 1 - Group 10 = 0-255	G1, G2 = 0-9

2.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [1]	0 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes

NOTE 1): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed. Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light off immediately and leaves the fan working for the time set with configurator 0 to 4 in M of the Master actuator as indicated in the table. This mode is only operative if PL1≠PL2.

WARNING: The PL1 and PL2 positions must never have the same configurator

To use the "Actuator as a slave with PUL function", to select the "Type of load" (Actuator, Lamp, Valve, Differential Reset, Fan, Irrigation, Controlled Outlet, Lock) use MYHOME_ Suite virtual configuration.

Maintenance

Do not use acetone, detergents for removing tar, or trichloroethylene.
Maintenance using the following products:
- Hexane (En 60669-1);
- Methylated spirit;
- Soap and water;
- Diluted ammonia;
- Bleach, diluted 10%;
- Glass detergents.
WARNING:
An initial test is required in order to use other special maintenance products.

Operating mode

When in Test mode, by pressing the pushbutton of the actuator it will be possible to enable or disable the associated load.

Wiring diagram

Wiring diagrams with EASYWAY system

ON/OFF

BMSW1002

ON/OFF

BMSW1002

ON/OFF

EW2120
EW2122
EW2124

BMSW1002

SCS actuator 4x16A

Description

Actuator with 4 independent relays for single loads up to 16 A at 230 Vac, and installation inside DIN rail switchboards or distribution boards.
This device is fitted with local load control pushbuttons.
The device cannot manage the interlocking of the relays. This means that it cannot manage motors of rolling shutters, curtains, etc.

The actuator is a component in the Lighting Management system and can also be installed in a My Home system.

Standards, Certifications, Marks

Directive:
– Electromagnetic Compatibility Directive 2004/108/EC
Installation regulations:
– CEI 64-8
Product regulations:
– IEC 60669-2-1
– EN 50428
Environmental regulations:
– EU Directive 2002/96/EC: WEEE (Waste Electrical and Electronic Equipment)
– EU Directive 2002/95/EC: RoHS (Restriction of Hazardous Substances)
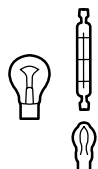
Dimensions

Size: 6 DIN modules

Technical data

Power supply:	110 -240 Vac @ 50/60 Hz
Number of outputs:	4 x 16 A
Power consumption in operation:	0.8 W
Power consumption on standby:	(-5) – (+45) °C
Type of connection:	RJ45
	clamp input 2 x 2.5 mm^2
	clamp output 2 x 1.5 mm^2 and 1 x 2.5 mm^2
Protection index:	IP20
Impact resistance:	IK04
Cable section:	2.5 mm^2

Legend

1. L1, L2, L3, L4 load status indication LED.
2. Learn Mode status indication LED
3. Learn Mode pushbutton
4. Clamps for the connection to the 230 Vac power supply
5. L1, L2, L3, L4 load connection clamps.
6. L1, L2, L3, L4 load activation pushbutton.
7. BUS RJ45 connector
8. Configurator socket (note that this must only be used in My Home systems with the physical configuration)

Power/Consumption of driven loads:

	Halogen lamps		Linear fluorescent lamps		- Electronic transformers - Ferromagnetic transformers		Compact fluorescent lamps		LED lamps	
230 V~	3680 W	16 A	10x(2x36 W)	4,3 A	3680 VA	16 A	1150 VA	5 A	1 x 500 VA	2,1 A
110 V~	1760 W		5x(2x36 W)		1760 VA		550 VA		1 x 250 VA	

SCS actuator 4x16A

Configuration

1. Lighting Management System

When installed in a Lighting Management system, the device can be configured in the following ways:
- Push & Learn: procedure for pairing different connected devices or changing the assignments defined automatically in the Plug & Go procedure. For more details, please refer to the specific document.

- Software Configuration: using the Virtual Configurator software; for more details, please refer to the specific manual.

2. My Home system

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

2.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL1, PL2, PL3, PL4 = 1-9

To configure the "Groups" use MYHOME_Suite virtual configuration

2.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [1]	0 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes

NOTE 1): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed. Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The

OFF control switches the light off immediately and leaves the fan working for the time set with configurator 0 to 4 in M of the Master actuator as indicated in the table.
This mode is only operative if PL1≠PL2≠PL3≠PL42).

To use the "Actuator as a slave with PUL function", to select the "Type of load" (Actuator, Lamp, Valve, Differential Reset, Fan, Irrigation, Controlled Outlet, Lock) and to select the "Local button mode" (Cyclical, ON/OFF, ON-OFF, Pushbutton, Timed ON) use MYHOME_Suite virtual configuration.

Maintenance

Do not use acetone, detergents for removing tar, or trichloroethylene.
Maintenance using the following products:
- Hexane (En 60669-1);
- Methylated spirit;
- Soap and water;
- Diluted ammonia;
- Bleach, diluted 10%;
- Glass detergents.
WARNING:
An initial test is required in order to use other special maintenance products.

Operating mode

When in Test mode, by pressing the pushbutton of the actuator it will be possible to enable or disable the associated load.
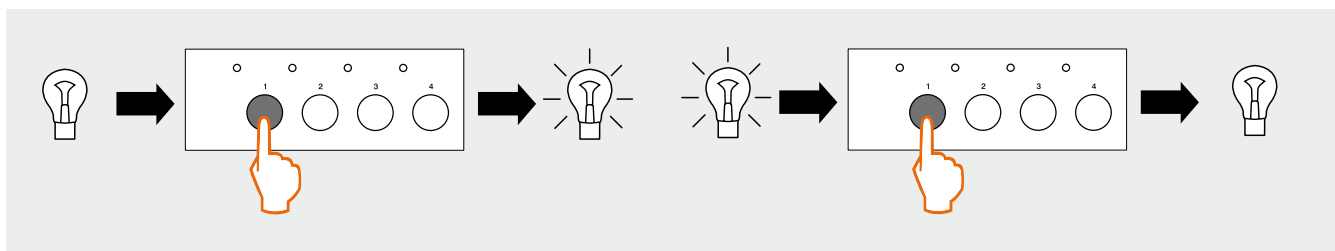
Wiring diagram
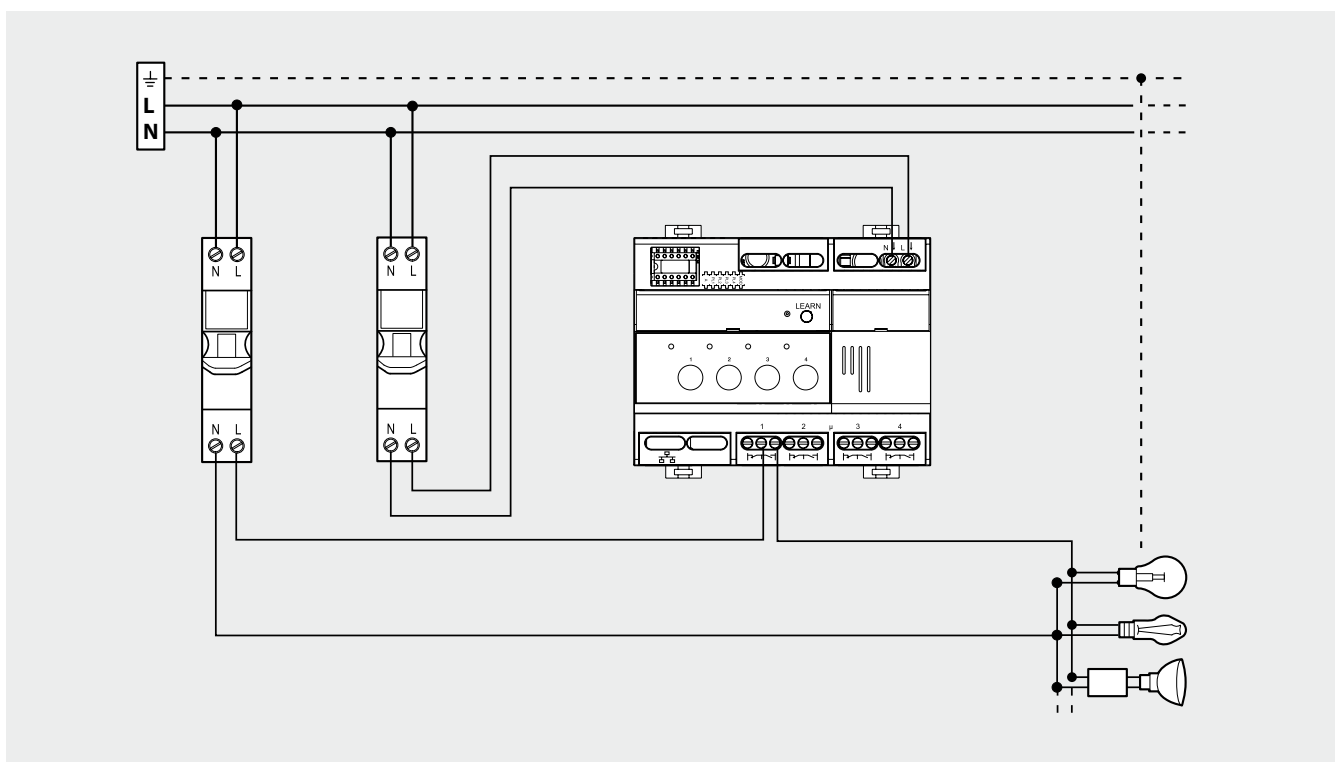
Power supply

Description

The power supply must be used to supply power to the MY HOME and Lighting Management systems. On the output, the unit supplies a 27 Vdc continuous low voltage, with a maximum current of 1 A (BUS terminals). It is electronically protected (without fuses) against short circuit and overload.

It's a double insulation safety device in accordance with CEI EN60065, and can therefore be used in conjunction with a SELV source in accordance with paragraph 11.1.2.5 of CEI 64-8-4.

The power supply unit is fitted inside a 8 DIN rail module enclosure, and its installation must be in accordance with the regulations of the country of use.

In general, the following requirements must be met:
- The power supply must always be installed in appropriate enclosures.
- The device must be kept away from water drips and sprays.
- Care must be taken not to obstruct the air vents.
- A two-pole circuit breaker must be installed, with contact separation of at least 3 mm located nearby the power supply. The circuit breaker is used to disconnect the power supply from the mains, and to protect it.

Technical data

Power supply voltage:	230 Vac ± 10% @ 50/60 Hz
Input MAX power consumption:	300 mA
Output voltage:	27 Vdc
Maximum power delivered:	1.2 A
Maximum power consumption:	11 W
Reference standards:	EN60065
Protection index:	IP30
Operating temperature:	5 – 40 ℃
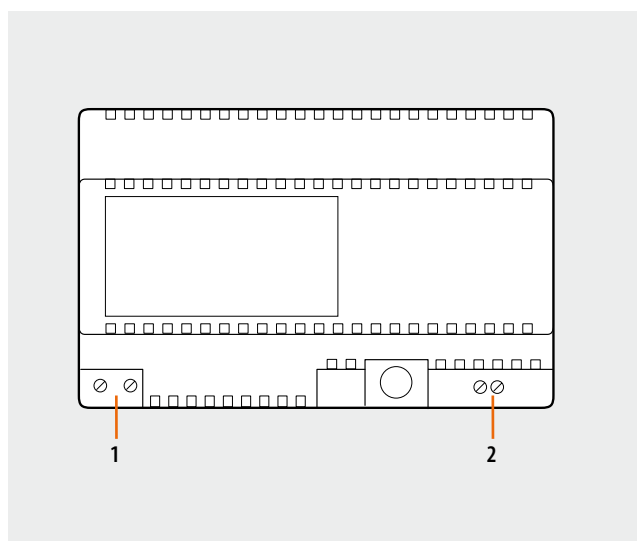
Legend

1. Clamps for connection to the power supply voltage
2. Clamps (BUS) for the connection of the BUS/SCS

Dimensional data

Size: 8 DIN modules

Compact power supply unit
SCS BUS

Description

The power supply unit can be used to power systems that use the SCS BUS. On the output, the unit supplies a 27 Vdc continuous low voltage, with a maximum current of 600 mA. It is protected by a built-in fuse (not replaceable) against short circuit and overload.

It is a double insulation safety device in accordance with CEI EN60065, and can therefore be used in conjunction with a SELV source in accordance with paragraph 411.1.2.5 of CEI 64-8-4. The power supply unit is fitted inside a 2 module DIN rail enclosure, and its installation must be in accordance with the regulations of the country of use.

In general, the following requirements must be met:

- The power supply unit must always be installed in appropriate enclosures.
- The device must be kept away from water drips and sprays.
- Care must be taken not to obstruct the air vents.
- A two-pole circuit breaker must be installed, with contact separation of at least 3 mm located nearby the power supply unit. The circuit breaker is used to disconnect the power supply from the mains, and to protect it.

Technical data

PRI (AC power input)

Rated voltage:	220 – 240 V
Rated current:	175 – 185 mA
Working voltage range:	187 – 265 V
Working frequency range:	47 – 63 Hz
Power consumption at full load:	21.5 W max
Dissipated power:	5.3 W max
Efficiency at full load:	80% typ.
Power on standby:	less than 1 W
Operating temperature:	5 – 40°C
Built-in fuse (PRI side):	F1 T2A 250V (NOT REPLACEABLE)

SCS

Rated voltage:	27 V +/- 100 mV
Rated current:	0 – 0.6 A
Rated power:	16.2 W
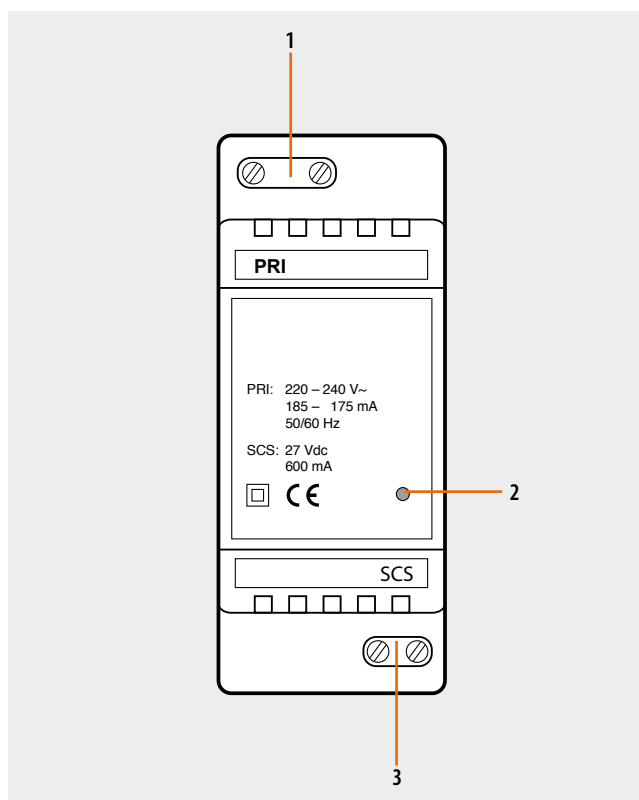
Legend

1. Clamps (PRI) for connection to the power supply voltage
2. LED: – green (power supply unit on)
   – red (output current overload)
3. Clamps (SCS) for the connection of the BUS/SCS

Dimensional data

2 DIN modules

Rolling shutter actuator

Description

Actuator device in DIN enclosure with 2 interlocked relays, 3 pushbuttons, and 3 LEDs. The actuator has been designed to be used with specific advanced control devices for the management of shutters.

However, the actuator can also be used with all other control devices, although in that case the Preset function will not be available.

Preset function:

In addition to the UP/DOWN Monostable and Bistable operating modes, depending on the configuration of the corresponding control device, it will also be possible to set the shutter to a specific position (Preset). For further details see the technical sheet of the advanced shutter control.

The Preset function can also be managed using the Scenario Module (enabling of scenarios with preset shutter positions). In this case take the shutter into the desired position when saving the scenario.

Note: The scenario module must have been produced after week 29-2012.

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Max. current draw:	16 mA
Operating temperature:	0 – 40 °C
Power/consumption of driven loads:	250 Vac - 2 A
Protection index:	IK04
Impact resistance:	IP20

Standards, Certifications, and Marks

- EN50090-2-2: Home and building electronic systems (HBES)
- EN50090-2-3: General functional safety requirements for products intended to be integrated in HBES
- EN50428: Switches and related accessories for use in home and building electronic systems (HBES)

Dimensional data

Size: 2 DIN modules
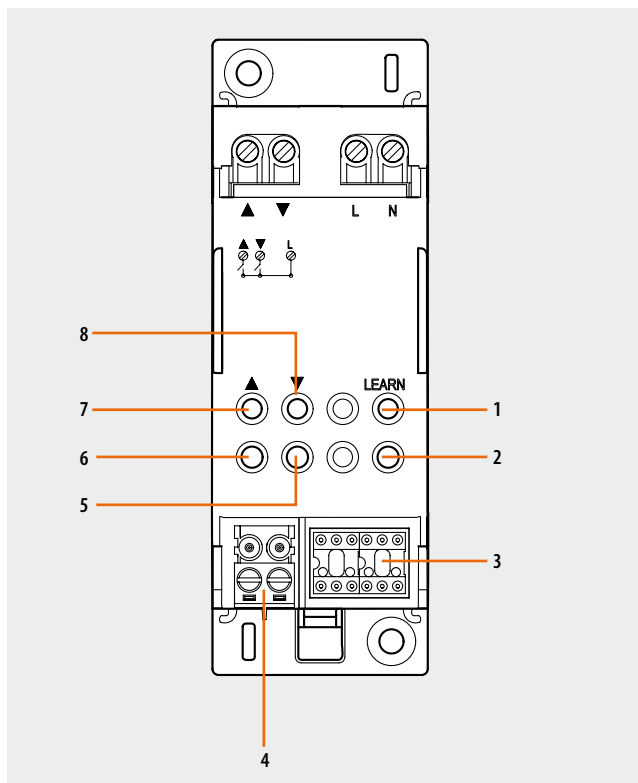
Legend

1. Push&Learn configuration and shutter position configuration pushbutton
2. LED: on during the calibration procedure
3. Configurator socket (to be used only in My Home systems with physical configuration)
4. BUS clamp
5. DOWN LED: ON when the shutter is moving downwards.
6. UP LED: ON when the shutter is moving upwards. flashing during the virtual configuration.
7. UP shutter pushbutton
8. DOWN shutter pushbutton

Rolling shutter actuator

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9
Group		Group 1 - Group 10: 0-255	G=0-9

1.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Master Actuator [1]	Master	M=0
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA
Pushbutton (ON monostable) the actuator ignores Room and General controls	Master PUL	M=PUL

NOTE 1): Operation based on the mode configured in the control device. After acquiring the positions of the rolling shutter (open and closed), it will be possible to ensure 100 different positions.

To use the "Actuator as a slave with PUL function" and to define the Preset positions, use MYHOME_Suite virtual configuration.

1.2.1 Type of motor

Virtual configuration (MYHOME_Suite)		Physical configuration
Type	**Parameter / setting**	
Standard with automatic calibration	Standard automatic	Type=-
Standard with manual calibration	Standard	Type=1
Pulse	Pulse	Type=2

NOTE: To adjust the "Stop pulse duration" and "Up or down pulse duration" use MYHOME_Suite virtual configuration.

1.3 Operating mode for pulse motors with a 3rd limit switch:

After inserting 2 in the Type socket and 9 in the Pre position of the device, when the STOP pushbutton of the control is pressed while the shutter is still, the shutter will move to the position of the 3rd limit switch.

Calibration of the shutter position

This operation is necessary for correct operation of the actuator, which will have to save the shutter maximum opening and closing positions.

If no calibration is performed, the actuator cannot be managed by the control devices, but only locally, by pressing the corresponding front pushbuttons.

Depending on the type of motor to manage, different procedures will have to be followed:
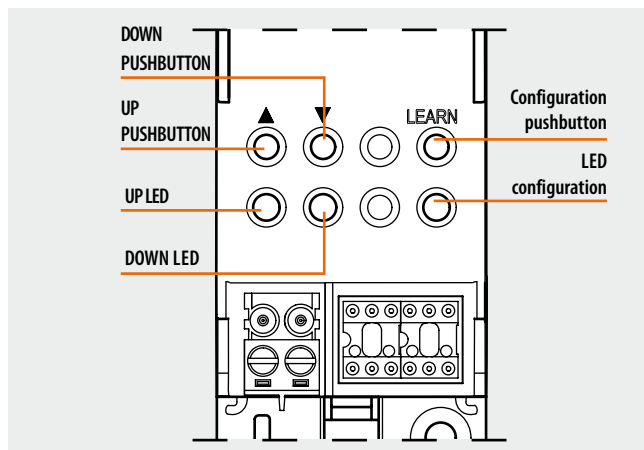
Automatic calibration

It applies to standard motors.

1. Press the configuration pushbutton for at least 3 seconds. The corresponding LED comes on.
2. Press and release the "UP" pushbutton. The shutter moves upwards and the "UP" LED comes on.
3. Once the shutter has reached the maximum opening position, it will automatically start to move downwards until fully closed. The "DOWN" LED comes on. During this stage, the actuator measures and saves the time it takes the shutter to close (*).
4. The shutter will then automatically start moving upwards, until the maximum opening position has been reached. The "UP" LED comes on. During this stage, the actuator measures and saves the opening time.
5. The switching off of the LED associated to the configuration pushbutton and of the "UP" LED confirm the completion of the calibration procedure.

Note (*): If what described at point 3 is not automatically completed, proceed with the manual calibration of the device, and connect configurator 1 to the Type socket of the actuator.

Manual calibration

It applies to standard or pulse motors.

1. Press the configuration pushbutton for at least 3 seconds. The corresponding LED comes on
2. Press and release the "UP" pushbutton. The shutter moves upwards and the "UP" LED comes on.
3. Once the shutter has reached the maximum opening position, press the "DOWN" pushbutton. The shutter will move downwards, and the "DOWN" LED will come on. During this stage, the actuator measures and saves the time it takes the shutter to close
4. When the shutter is fully closed, press the "UP" pushbutton. The shutter moves upwards and the "UP" LED comes on. During this stage, the actuator measures and saves the time it takes the shutter to open
5. Once the shutter maximum opening position has been reached, press the "DOWN" pushbutton again. The "UP" LED will turn off. The calibration procedure has now been completed; the LED associated to the configuration pushbutton will turn off, to confirm that the operation has been completed successfully.

WARNING: The calibration precision, and therefore the control of the shutter position, depends on the accuracy with which the limit switch positions are manually detected during the calibration itself.

Wiring diagram

Standard motor with electronic limit switch
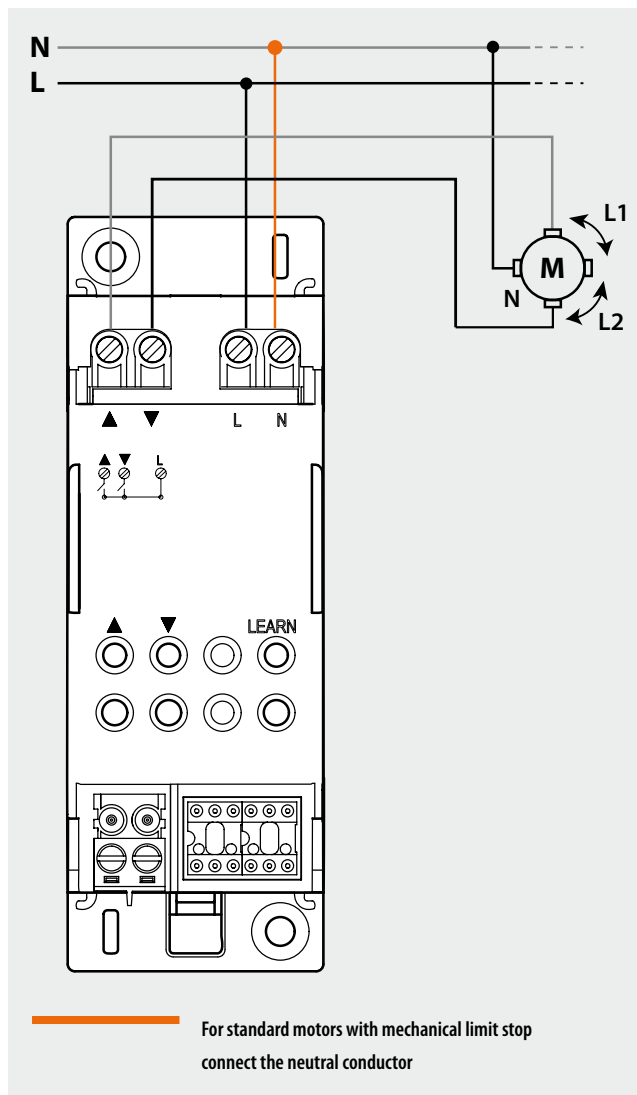
For standard motors with mechanical limit stop connect the neutral conductor

Pulse motor

For the connection refer to the indications supplied with the motor interface.

1 relay actuator 10A
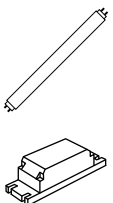
Description

Actuator for installation in DIN rail distribution boards or switchboards. This device incorporates a 2-way relay and a local load control pushbutton that is active only when the actuator is configured.

The device can be installed in a My Home system and use the physical or virtual configuration, in which case, by configuring positions G1, G2 and G3 it is possible to assign the actuator to up to three distinct groups. When installed as a component of the Lighting Management system, specific configuration procedures are used (Plug&go, Project&Download).

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	22 mA
Number of outputs:	1x10 A
Dissipated power with max. load:	1.5 W
Operating temperature:	(-5) – (+45) ℃

Power/Consumption of driven loads:

Incandescent lamps Halogen lamps		LED lamps Compact fluorescent lamps		Linear fluorescent lamps Electronic transformers		Ferromagnetic transformers	
230 Vac	2300 W	10 A	500 W	Max. 10 lamps	920 W	4 A	4 A cosφ 0.5	920 VA

Protection index:	IK04
Impact resistance:	IP20

Legend

1. Configurator socket (note that this must only be used in My Home systems with the physical configuration)
2. BUS connector
3. Load status LED
4. Load control button

Dimensions

Size:	2 DIN modules

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.
  For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

When installed in a Lighting Management system, the actuator can be configured in the following ways:
- PLUG&GO
- PROJECT&DOWNLOAD

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9
Group		Group 1 - Group 10 = 0-255	G1, G2, G3 = 0-9

1 relay actuator 10A

1.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [1]	0 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes

NOTE 1): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. Only for a point-point type control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed.

To use the "Actuator as a slave with PUL function" and to select the type of load (Actuator, Lamp, Valve, Differential Reset, Fan, Irrigation, Controlled Outlet, Lock) use MYHOME_Suite virtual configuration.

Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light off immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

Wiring diagram

1 NC relay actuator 10A
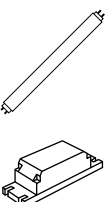
F411/1NC

Description

Actuator for installation in DIN rail distribution boards or switchboards. This device incorporates a two-way NC relay and a local load control pushbutton. When compared with actuator F411/1N, the device inverts the relay control logic: at switching ON the relay contacts are always closed (status ON – LED ON), and open following an OFF control (LED OFF). In this way, if there is no power input from the BUS, the device will remain in the ON status, keeping the load ON. In the configurator sockets the device shows the positions G1, G2 and G3, in additions to positions A, PL, and M, which make it possible for up to 3 separate belonging groups to be assigned to the actuator.

Front view

Technical data

Power supply from BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	22 mA
Operating temperature: 5 - 35 °C	
Power/Consumption of driven loads:	

	Incandescent lamps Halogen lamps		LED lamps Compact fluorescent lamps		Linear fluorescent lamps Electronic transformers		Ferromagnetic transformers	
230 Vac	2300 W	10 A	500 W	Max. 10 lamps	920 W	4 A	4 A cosφ 0.5	920 VA

Protection index:	IK04
Impact resistance:	IP20

Legend

1. Configurator socket
2. BUS
3. LED
4. Button

Dimensions

Size:	2 DIN modules

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL = 1-9
Groups		Group 1 - Group 10 = 0-255	G1, G2, G3=0-9

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bticino

1 NC relay actuator 10A

F411/1NC

1.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	Parameter / setting		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [1]	0 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes

NOTE 1): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. Only for a point-point type control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed. The value of the configurator listed in the table defines the final time, after which the actuator deactivates its own SLAVE.

To use the "Actuator as a slave with PUL function", use MYHOME_Suite virtual configuration.
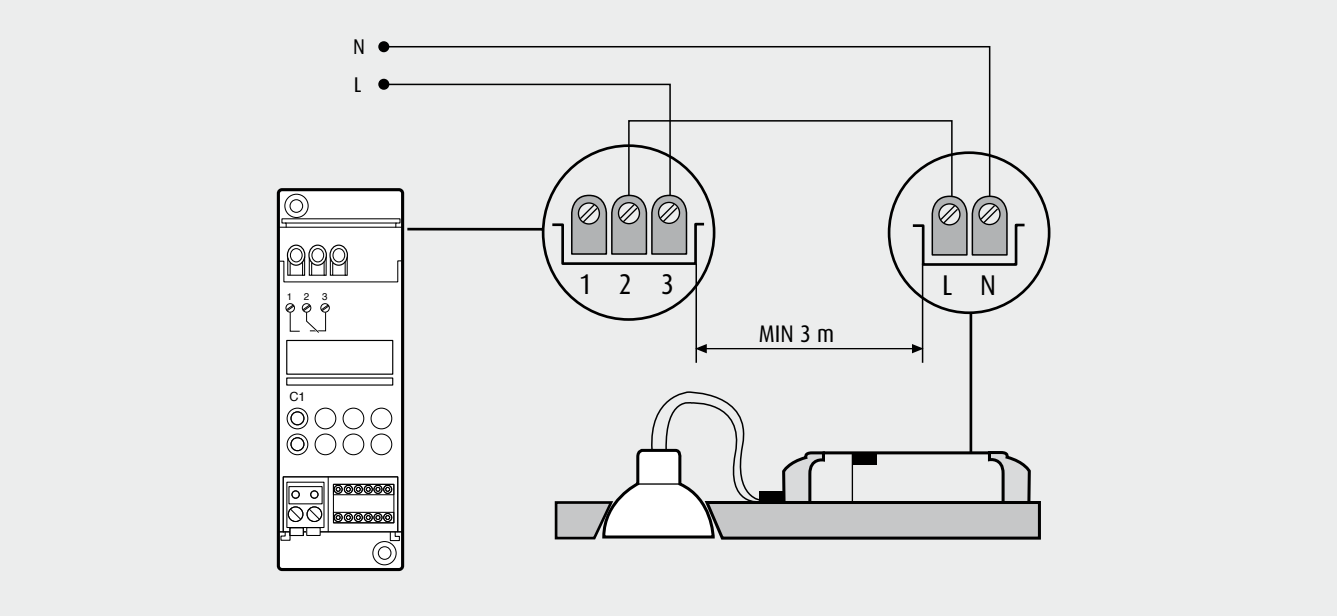
Wiring diagram

2 relay actuator 6A
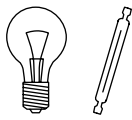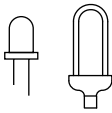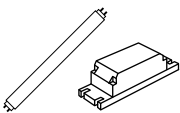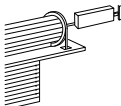
Description

Actuator for installation in DIN rail distribution boards or switchboards. This device incorporates two independent relays for the activation of 2 loads, and includes local control pushbuttons for each individual load that are active only when the actuator is configured. The device can be installed in a MY HOME system and configured physically or virtually. In this case when the PL1 and PL2 positions are configured using the same configurator the device interlocks the relays, to which it is possible to connect motors of rolling shutters, curtains, etc. When installed as a component of the Lighting Management system, specific configuration procedures are used (Plug&go, Project&Download).

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	28 mA
Number of outputs:	2x6A
Dissipated power with max. load:	1.7 W[1]
Operating temperature:	(-5) – (+45) °C
Number of outputs:	2x6A

Power/Consumption of driven loads:

	Incandescent lamps Halogen lamps		LED lamps Compact fluorescent lamps	
230 Vac	1380 W	6 A	250 W	Max. 4 lamps

	Linear fluorescent lamps Electronic transformers		Ferromagnetic transformers		Geared motors for rolling shutters	
	230 W	1 A	2 A cosφ 0.5	460 VA	460 W	2 A

Protection index:	IK04
Impact resistance:	IP20

NOTE: 1) The dissipated power indicated is that corresponding to the device with all the relays loaded at the maximum load.

With lower loads also the dissipated power is lower and may be calculated by means of the following formula: $P[mW]=140+400*N+10*[Ic1+Ic2]$

P: dissipated power in mW, N: number of loaded relays, IN: load current corresponding to the N relay.

Dimensions

Size: 2 DIN modules

List of Functions

The device performs the following functions:
1. LIGHT SWITCH
2. AUTOMATION CONTROL

See the following pages for the configuration procedures.
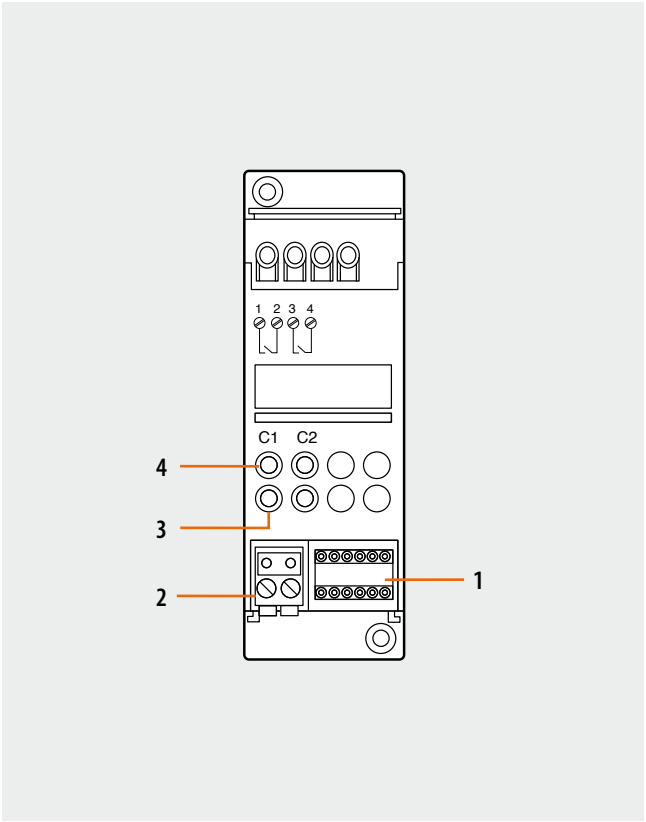
Legend

1. Configurator socket (note that this must only be used in My Home systems with the physical configuration)
2. BUS connector
3. Load status LED
4. Load control button

---

2 relay actuator 6A

F411/2

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from
  www.homesystems-legrandgroup.com; this mode has the advantage of offering many
  more options than the physical configuration.
  For a list of the procedures and their meanings, please refer to the instructions in this
  sheet and to the "Function Descriptions" help section in the MYHOME_Suite software
  package.

When installed in a Lighting Management system, the actuator can be configured in the
following ways:
- PLUG&GO
- PROJECT&DOWNLOAD

1. Light switch

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9
Group		Group 1 - Group 10 = 0-255	G1 = 0-9

1.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [1]	0 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes

NOTE 1): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MY-HOME_Suite) and of 1-4 minutes using the physical configuration. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed. The value of the configurator listed in the table defines the final time, after which the actuator deactivates its own Slave.
This mode is only operative if PL1≠PL2.

To use the "Actuator as a slave with PUL function" and to adjust the "OFF delay", the "Type of load" (Actuator, Lamp, Valve, Differential Reset, Fan, Irrigation, Controlled Outlet, Lock) and the "Local button mode" (Cyclical, ON/OFF, ON-OFF, Pushbutton, Timed ON) use MYHOME_Suite virtual configuration.

---

2. Automation control

2.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL1, PL2=1-9
Group		Group 1 - Group 10: 0-255	G1:0-9

NOTE: If PL1=PL2 the 2 relays are interlocked

2.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL	
Timed stop. The actuator switches off after the set time has elapsed. This mode is only operative if PL1=PL2.	1-60 seconds, 2-10 minutes, ∞	M=0	1 minute
		M=1	2 minutes
		M=2	5 minutes
		M=3	10 minutes
		M=4	Until the motor's limit stop
		M=5	20 seconds
		M=6	10 seconds
		M=7	5 seconds
		M=8	15 seconds
		M=9	30 seconds

To use the "Actuator as a slave with PUL function" and to adjust the "OFF delay", the "Type of load" (Actuator, Rolling Shutter, Curtain, Gate, Rocker) and the "Local button mode" (Cyclical, ON/OFF, ON-OFF, Pushbutton, Timed ON) use MYHOME_Suite virtual configuration.

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2 relay actuator 6A

F411/2

Wiring diagrams

Diagram for connecting light devices

MIN 3 m
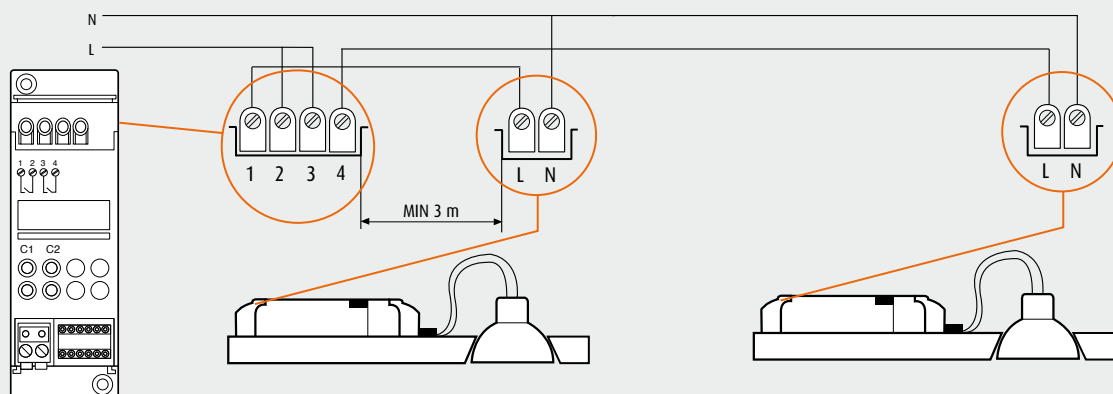
Diagram for the control of a 230 Vac motor with 2 windings

F411/2 actuator

M = AC motor
with 2 windings

L$_1$-N = clockwise rotation
L$_2$-N = anticlockwise rotation

---
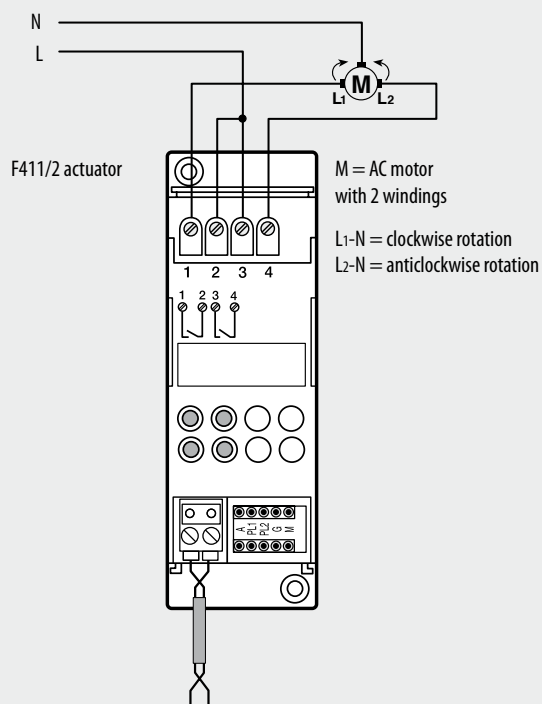
2 NC relay actuator
in DIN module
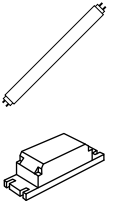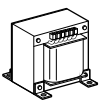
Description

Actuator for installation in DIN rail distribution boards or switchboards. This device incorporates two independent relays for the activation of 2 loads, and includes local control pushbuttons for each individual load.

When compared with actuator F411/2, this device inverts the relay control logic: at switching ON the relay contacts are always closed (status ON – LED ON), and open following an OFF control (LED OFF) In this way, if there is no power input from the BUS, the device will remain in the ON status, keeping the loads ON.

Technical data

Power supply from BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	28 mA

Power/Absorption of driven loads:

	Incandescent lamps Halogen lamp		Linear fluorescent lamp Electronic transformer		Ferromagnetic transformers	
230 Vac	1380 W	6 A	150 W	0.65 A	1 A cosφ 0.5	230 VA

Operating temperature:	0 – 40 °C
Size:	2 DIN modules

Front view

Legend

1. Configurator socket
2. BUS
3. LED
4. Pushbutton

Configuration

The actuator performs all the basic functions that can directly be configured on the control device, with the exception of those requiring the use of two interlocked relays.

The following table lists the operating modes possible with the configurator connected to position M of the same actuator.

Possible function	Configurator in M
Pushbutton (ON monostable) ignores Room and General controls	PUL
Actuator as Slave. Receives a control sent by a Master actuator with the same address	SLA
Master Actuator with OFF control delayed on the corresponding Slave actuator. Only for a point-point type control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed [1].	1 – 4 [1]

1) The value of the configurator listed in the table defines the final time, after which expiry the actuator deactivates its own SLAVE

Configurator	Time (minutes)
1	1
2	2
3	3
4	4

4 relay actuator 2A
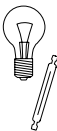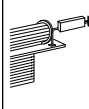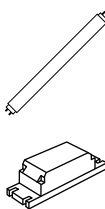
Description

Actuator for installation in DIN rail distribution boards or switchboards. This device incorporates four independent relays with a common terminal for the activation of four loads, and includes local control pushbuttons for each individual load.

The device can be installed as part of a My Home system, and configured physically or virtually. In this case if two adjoining positions (e.g. PL2 and PL3) are assigned the same configurator, the actuator may set two of the four relays in interlocking mode, for the control of loads such as rolling shutter motors, curtain motors, etc. If all the PL positions have the same configurator, the actuator sets the four relays for the control of motorised shutters. When installed as a component of the Lighting Management system, specific configuration procedures are used (Plug&go, Project&Download).

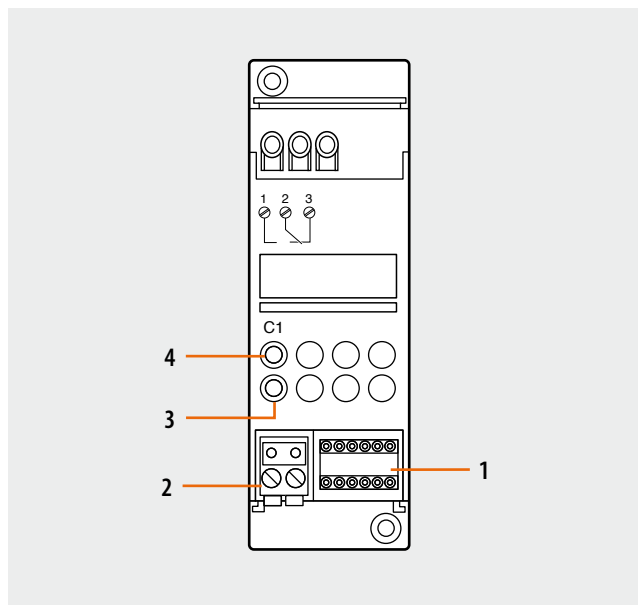## Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	40 mA
Number of outputs:	4x2 A
Dissipated power with max. load:	3.2 W[1]
Operating temperature:	(-5) – (+45) °C
Power/Consumption of driven loads:	

	Incandescent lamps Halogen lamps		Geared motors for rolling shutters		LED lamps Compact fluorescent lamps		Linear fluorescent lamps Electronic transformers		Ferromagnetic transformers	
230 Vac	460 W	2 A	460 W	2 A	70 W	Max. 2 lamps	70 W	0.3 A	2 A cosφ 0.5	460 VA

Protection index:	IK04
Impact resistance:	IP20

NOTE: 1) The dissipated power indicated is that corresponding to the device with all the relays loaded at the maximum load.

With lower loads also the dissipated power is lower and may be calculated by means of the following formula: $P[mW]=140+400*N+10*[Ic1+Ic2+...IcN]$

P: dissipated power in mW, N: number of loaded relays, IcN: load current corresponding to the N relay.

Dimensions

Size: 2 DIN modules

List of Functions

The device performs the following functions:
1. LIGHT SWITCH
2. SHUTTER AUTOMATION CONTROL
3. ROLLING SHUTTER AUTOMATION CONTROL

See the following pages for the configuration procedures.
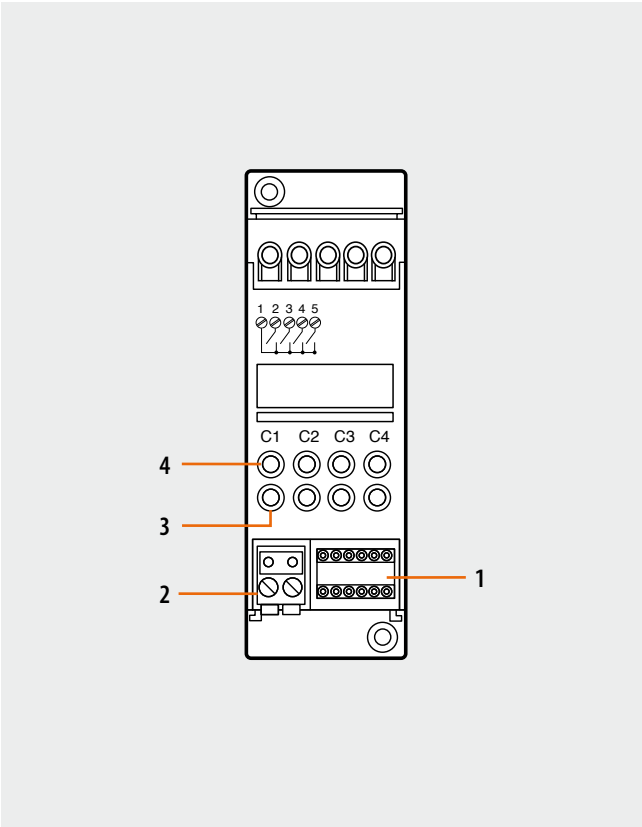
Legend

1. Configurator socket (note that this must only be used in My Home systems with the physical configuration)
2. BUS connector
3. Load status LED
4. Load control button

4 relay actuator 2A

F411/4

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.
  For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

When installed in a Lighting Management system, the actuator can be configured in the following ways:
- PLUG&GO
- PROJECT&DOWNLOAD

1. Light switch

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9

NOTE: To configure the "Group" address use MYHOME_Suite virtual configuration

1.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Master Actuator	Master	M=0
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL

To use the "Actuator as a slave with PUL function" and to adjust the "OFF delay", the "Type of load" (Actuator, Lamp, Valve, Differential Reset, Fan, Irrigation, Controlled Outlet, Lock) and the "Local button mode" (Cyclical, ON/OFF, ON-OFF, Pushbutton, Timed ON) use MYHOME_Suite virtual configuration.

2. Shutter automation control

2.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9

NOTE: To configure the "Group" address use MYHOME_Suite virtual configuration

2.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration		
Function	**Parameter / setting**			
Master Actuator	Master	M=0		
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA		
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL		
Timed stop for shutter motor drives. The actuator switches off after the set time has elapsed. This mode is only operative if PL1=PL2=PL3=PL4 with relay interlocking in pairs.	1-60 seconds, 2-10 minutes, ∞	PL1=PL2=PL3=PL4	M=0	20 seconds
			M=1	15 seconds
			M=2	25 seconds
			M=3	60 seconds

To use the "Actuator as a slave with PUL function" and for the "Local button mode" (Cyclical, ON/OFF, ON-OFF, Pushbutton, Timed ON) use MYHOME_Suite virtual configuration.

3. Rolling shutter automation control

3.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=0-9
	Lighting point	0-15	PL=1-9

NOTE: To configure the "Groups" use MYHOME_Suite virtual configuration

3.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration		
Function	**Parameter / setting**			
Master Actuator	Master	M=0		
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA		
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL		
Timed stop for rolling shutter motor drive. The actuator switches off after the set time has elapsed. This mode is only operative if PL...=PL...+1 (same configurators), therefore with the two relays interlocked.	1-60 seconds, 2-10 minutes, ∞	PL...=PL+1	M=0	1 minute
			M=1	2 minutes
			M=2	5 minutes
			M=3	10 minutes
			M=4	Until the motor's limit stop
			M=5	20 seconds
			M=6	10 seconds
			M=7	5 seconds
			M=8	15 seconds
			M=9	30 seconds

4 relay actuator 2A

Wiring diagrams

Diagram for connecting light devices

Diagram for shutter movement control
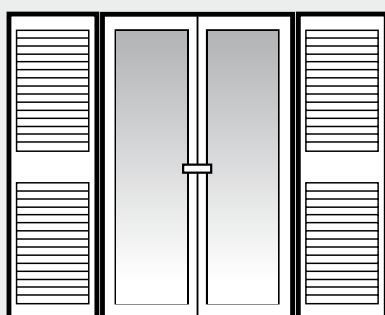
M1 = motor controlling the internal rabbet shutter
M2 = motor controlling the external rabbet shutter
PL1 and PL2 = contacts: they must be interlocked to each
other and must always be fitted to the
internal rabbet shutter
PL3 and PL4 = contacts: they must be interlocked to each
other and must always be fitted to the
external rabbet shutter

WARNING: configure PL1 = PL2 = PL3 = PL4
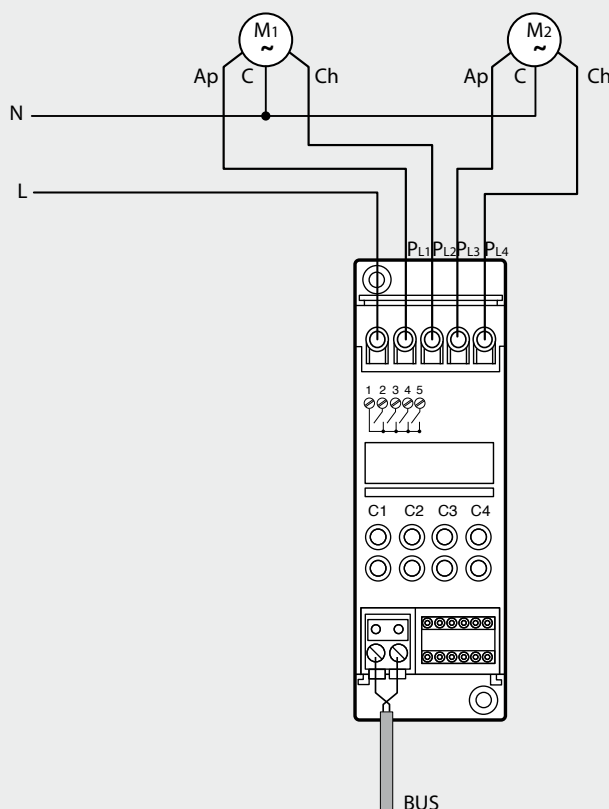
Operation:
- The opening of the shutter with external rabbet must start before the one with internal
rabbet. The opening of PL1 will start 3 seconds after the start of PL3.
- The closing of the shutter with external rabbet must start after the one with internal
rabbet. The closing of PL4 will start 3 seconds after the start of PL2.
- The total time for the full opening/closing of the shutters must be adjustable between 15
and 25 seconds. This adjustment is possible during installation, based on the size of the
shutters, to allow for strong winds.

Dimmer for Electronic Ballast 1-10V

Description

Control device for electronic ballast or driver power supply units with dimmer function; it can supply fluorescent lamps or LED lamps and adjust their brightness depending on the voltage, with values between 1 and 10V (max. 6mA), with which they are driven. From any specially configured control point and connected to the BUS system one can switch the lights connected on and off or set their brightness. Briefly pressing the control button is enough to switch the load on or off, while holding it down will adjust the brightness. The minimum brightness level and the type of load connected (Ballast for fluorescents or driver for LEDs) can be selected during the configuration.

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	30 mA
Operating temperature:	(-5) – (+45) ℃
Linear fluorescent lamps:	2A
	460W@230Vac
	220W@110Vac
	Max 10 ballast type T5, T8, compact or driver for LEDs
Dissipated power with max. load:	1 W
Protection index:	IK04
Impact resistance:	IP20

Dimensions

Size: 2 DIN modules
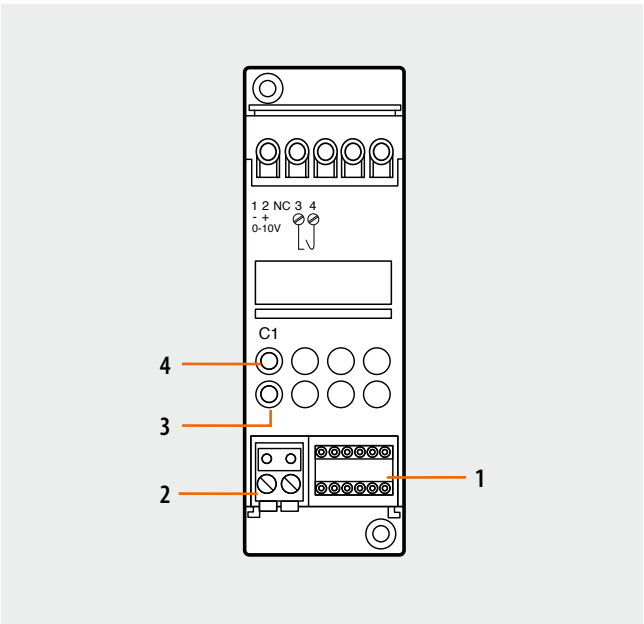
Legend

1. Configurator socket (note that this must only be used in My Home systems with the physical configuration).
2. BUS connector
3. Load status LED
4. Load on/off button

Configuration

1. My Home system

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9
Group		Group 1 - Group 10 = 0-255	G = 0-9

Dimmer for Electronic Ballast 1-10V

1.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [1]	0 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes
Selection of the minimum brightness level [2]	1-100	L=0	1 Volt
		L=1	1.5 Volt
		L=2	2 Volt
		L=3	0 Volt
		L=4	0.5 Volt
Selection of the type of load used [3]	Fluorescent lamps	TYPE=0	Fluorescent lamps
	LED lamp	TYPE=1	LED lamp

NOTE 1): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed. The ON control activates the Master actuator and the Slave actuator at the same time. The next OFF control deactivates the Master actuator and keeps the Slave actuator active for the period of time set with configurator 1 - 4 connected to M of the Master actuator as indicated in the table.

To use the "Actuator as a slave with PUL function", for additional options of the "Type of load" (Dali standard, DSI, Halogen lamp, Trailing edge LED / electronic transformers) and for adjusting the voltage, use MYHOME_Suite virtual configuration.

NOTE 2): In the physical configuration, the configurator in the L position establishes the minimum output voltage between clamps 1 and 2 when the load is on, thus allowing the minimum brightness level to be selected. 5 different voltage levels can be selected, so that the standard 0-10V is possible as well as the standard 1-10V.

NOTE 3): In the physical configuration, the configurator in the TYPE position determines the type of load used on the basis of the following table. If ballasts for fluorescent lamps with typical switching ON delay of 1.5s are used, the device will send the soft/start switching ON command taking account of the delay. If power supply units for LED lamps must be controlled instead, the device will send an immediate soft/start switching ON command.

2. Lighting Management System

When installed in a Lighting Management system, the device can be configured in the following ways:
- Push & Learn: procedure for pairing different connected devices or changing the assignments defined automatically in the Plug & Go procedure. For more details, please refer to the specific document.

- Software Configuration: using the Virtual Configurator software; for more details, please refer to the specific manual.

Dimmer for Electronic Ballast 1-10V

F413N

Wiring diagram

≥ 3 m

N

L

L N + −

− + NC NO L

Ballast
LED driver

Fluorescent lamp
LED lamp

1 2 NC 3 4
− +
0-10V

C1

SCS BUS

Dimmer 1000VA

F414   F414/127
F415   F415/127
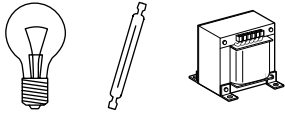
Description

Item F414 and item F414/127 control resistive loads and ferromagnetic transformers while item F415 and item F415/127 control electronic transformers. After connecting the dimmer directly to the BUS and the load, it is possible to adjust the brightness of the light from any appropriately configured control point. Briefly pressing the control button is enough to switch the load on or off, while holding it down will adjust the brightness. The actuator is able to signal any load faults such as, for example, lamp failure. It is also protected by a fuse, easily replaceable should it blow.
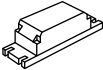
Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw F414-F414/127:	9 mA
Current draw F415-F415/127:	22 mA
Number of outputs F414-F414/127:	1x4 A (9 A for F414/127)
Number of outputs F415-F415/127:	1x1.7 A (3.6 A for F415/127)
Operating temperature:	(-5) – (+45) °C
Dissipated power with max. load F414:	10 W
Dissipated power with max. load F415:	11 W
Protection index:	IK04
Impact resistance:	IP20

F414 Power/Consumption of driven loads:

		Incandescent lamps - Halogen lamps - Ferromagnetic transformers
F414	230 Vac 50 Hz	0.25 – 4.3 A / 60 – 1000 VA
F414/127	110 Vac 50 Hz	0.5 – 9 A / 60 – 1000 VA

F415 Power/Consumption of driven loads:

		Electronic transformers *)
F415	230 Vac 50 Hz	0.25 – 1.7 A / 60 – 400 VA
F415/127	110 Vac 50 Hz	0.9 – 3.6 A / 60 – 400 VA

NOTE *): For incandescent lamps (eg halogen) at low voltage

Dimensions

Size: 4 DIN modules
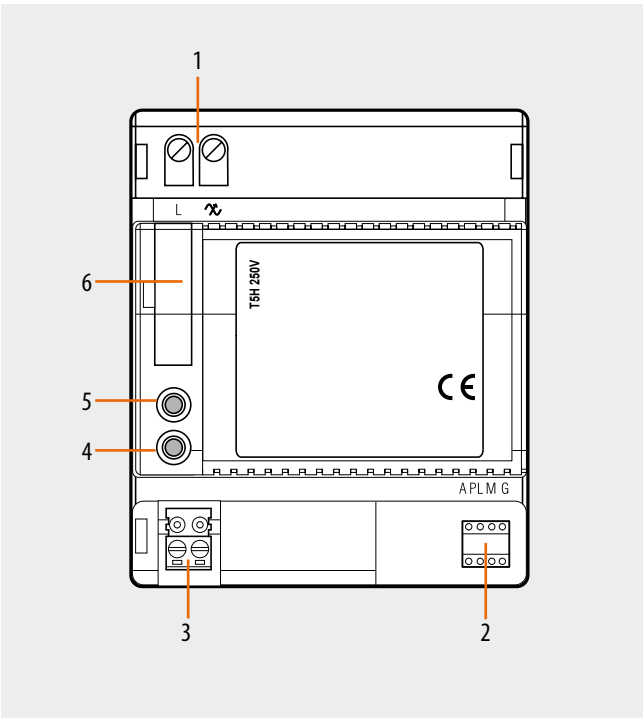
Legend

1. Load connection clamp
2. Configurator socket (note that this must only be used in My Home systems with the physical configuration)
3. BUS connector
4. Load control button
5. Load status LED
6. Fuse

Dimmer 1000VA

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A = 1-9
	Lighting point	0-15	PL = 1-9
Group		Group 1 - Group 10 = 0-255	G = 0-9

1.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	Parameter / setting		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [1]	0 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes

NOTE 1): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed.

The ON control activates the Master actuator and the Slave actuator at the same time. The next OFF control deactivates the Master actuator and keeps the Slave actuator active for the period of time set with configurator 1 - 4 connected to M of the Master actuator as indicated in the table.

To use the "Actuator as a slave with PUL function" and adjust the "Minimum brightness level at power-on" use MYHOME_Suite virtual configuration

Dimmer 1000VA

F414   F414/127
F415   F415/127

Wiring diagram
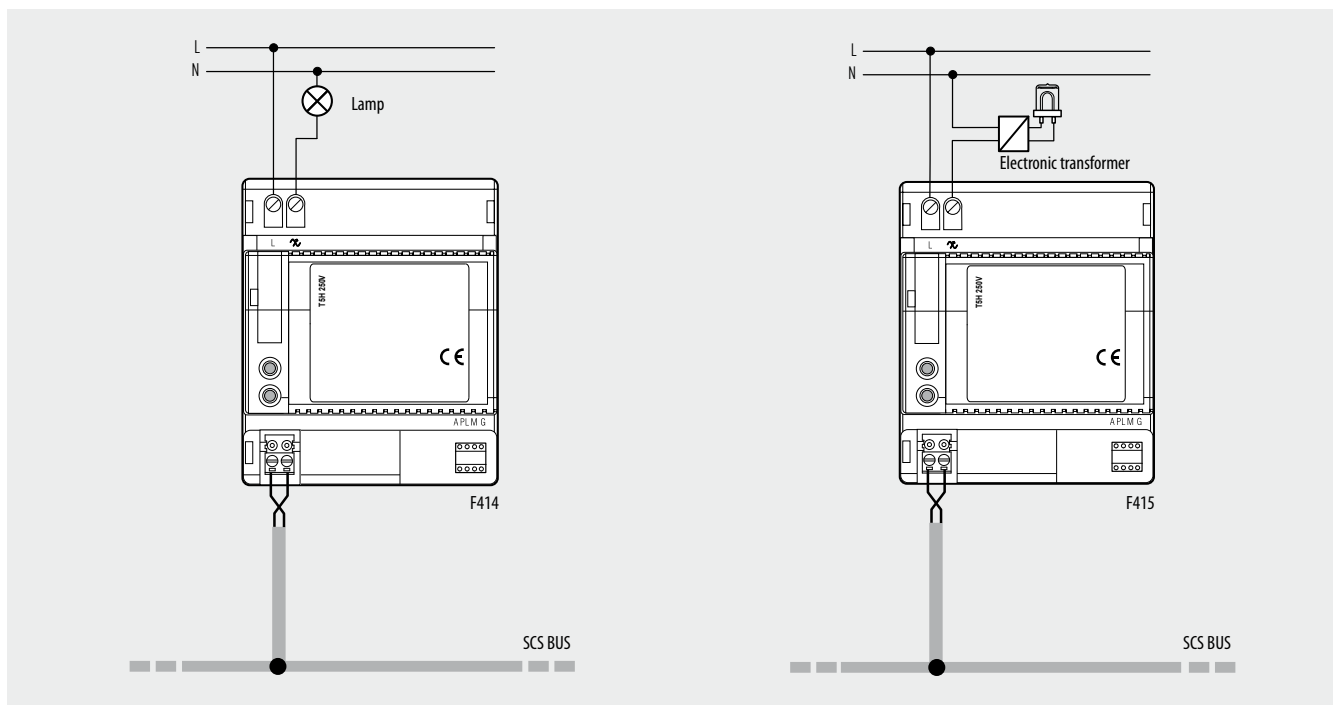
SCS Dimmer 1x4.3A

Description

Control device powered at 100 – 240 Vac for dimming resistive loads, ferromagnetic transformers and electronic transformers. The loads can be adjusted via any control device and/or sensor connected and properly configured, or by using the button on the device. The device is able to signal any load faults such as, for example, lamp failure. The device is a component in the Lighting Management system and can also be installed in a My Home system.

Standards, Certifications, Marks

Directive:
– Electromagnetic Compatibility Directive 2004/108/EC
Installation regulations:
– CEI 64-8
Product regulations:
– IEC 60669-2-1
– EN 50428
Environmental regulations:
– EU Directive 2002/96/EC: WEEE (Waste Electrical and Electronic Equipment)
– EU Directive 2002/95/EC: RoHS (Restriction of Hazardous Substances)

Dimensions

Size: 6 DIN modules

Technical data

Power supply:	100 -240 Vac @ 50/60 Hz
Number of outputs:	1 x 4.3 A
Power consumption on standby:	0.3 W
Operating temperature:	(-5) – (+45) °C
Type of connection:	– RJ45
	– clamp input 2 x 2.5 mm^2
	– clamp output 2 x 1.5 mm^2 and 1 x 2.5 mm^2
Protection index:	IP20
Impact resistance:	IK04
Weight:	327 g
Cable section:	2.5 mm^2

Legend

1. Learn LED
2. Button for forcing the type of load
3. Button for manual load forcing
4. Clamps for the connection to the 230 Vac power supply
5. Load connection clamps
6. Load adjustment/ON control button
7. Load adjustment/OFF control button
8. BUS RJ45 connector
9. Load type indicator:
   Green: Inductive
   Orange: Capacitive
10. Load indicator:
    LED OFF: load OFF
    LED ON green: load ON from 1% to 100%.
    LED ON orange: fault with load
11. Configurator socket (note that this must only be used in My Home systems with the physical configuration)

Power/Consumption of driven loads:

	Incandescent lamp		Halogen lamps		Ferromagnetic transformers		Electronic transformers	
230 V~	1000 W	4.3 A	1000 W	4.3 A	1000 VA	4.3 A	1000 VA	4.3 A
110 V~	600 W		600 W		600 VA		600 VA	

WARNING: Devices that operate with an electronic transformer or a ferromagnetic transformer cannot be connected on the same line

SCS Dimmer 1x4.3A

Configuration

1. Lighting Management System

When installed in a Lighting Management system, the device can be configured in the following ways:
- Plug & Go: automatic procedure for pairing devices connected to the inputs and outputs. The procedure is activated on powering the device. It is only available for Room Controllers or, in the case of other devices, paired with the Room Controllers.

- Push & Learn: procedure for pairing different connected devices or changing the assignments defined automatically in the Plug & Go procedure. For more details, please refer to the specific document.
- Software Configuration: using the Virtual Configurator software; for more details, please refer to the specific manual.

2. My Home system

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

2.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A = 1-9
	Lighting point	0-15	PL = 1-9
Group		Group 1 - Group 10 = 0-255	G1, G2, G3 = 0-9

2.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [1]	0 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes

NOTE 1): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. Only for a point-point type control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed.

Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light off immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

To use the "Actuator as a slave with PUL function" and adjust the "Minimum brightness level at power-on" use MYHOME_Suite virtual configuration.

Maintenance

Do not use acetone, detergents for removing tar, or trichloroethylene.
Maintenance using the following products:
- Hexane (En 60669-1);
- Methylated spirit;
- Soap and water;
- Diluted ammonia;
- Bleach, diluted 10%;
- Glass detergents.
WARNING:
An initial test is required in order to use other special maintenance products.

Operating mode

When in Test mode, by pressing the pushbutton of the actuator it will be possible to enable or disable the associated load.

ON-OFF

DIMMING

Manual forcing of the type of load

CAPACITIVE

< 1 s

< 1 s

< 1 s = ON

FORCED
INDUCTIVE

FORCED
CAPACITIVE

< 1 s

INDUCTIVE

10 s = confirm changes
< 1 s = exit without saving changes

SCS Dimmer 1x4.3A

Wiring diagram

SCS Dimmer 2x1.7A

Description

Control device powered at 100 – 240 Vac for dimming resistive loads, ferromagnetic transformers and electronic transformers. The loads can be adjusted via any control device and/or sensor connected and properly configured, or by using the button on the device. The actuator is able to signal any load faults such as, for example, lamp failure. The device is a component in the Lighting Management system and can also be installed in a My Home system.

Standards, Certifications, Marks

Directive:
– Electromagnetic Compatibility Directive 2004/108/EC
Installation regulations:
– CEI 64-8
Product regulations:
– IEC 60669-2-1
– EN 50428
Environmental regulations:
– EU Directive 2002/96/EC: WEEE (Waste Electrical and Electronic Equipment)
– EU Directive 2002/95/EC: RoHS (Restriction of Hazardous Substances)

Dimensions

Size: 6 DIN modules

Technical data

Power supply:	100 -240 Vac @ 50/60 Hz
Number of outputs:	2 x 1.7 A
Power consumption on standby:	0.9 W
Operating temperature:	(-5) – (+45) °C
Type of connection:	– RJ45
	– clamp input 2 x 2.5 mm^2
	– clamp output 2 x 1.5 mm^2 and 1 x 2.5 mm^2
Protection index:	IP20
Impact resistance:	IK04
Cable section:	2.5 mm^2

Legend

1. Learn LED
2. Learn pushbutton
3. Button for manual load forcing
4. Clamps for the connection to the 230 V ac power supply
5. Load 2 connection clamps
6. Load 1 connection clamps
7. Load 2 adjustment/ON control button
8. Load 2 adjustment/OFF control button
9. Load 2 malfunctioning LED
10. Load 1 adjustment/ON control button
11. Load 1 adjustment/OFF control button
12. Load 1 malfunctioning LED
13. BUS RJ45 connector
14. Configurator socket (note that this must only be used in My Home systems with the physical configuration)
15. Load 1 indicator: LED OFF: load OFF
    LED ON green: load ON from 1% to 100%.
    LED ON orange: fault with load
16. Load 2 indicator: LED OFF: load OFF
    LED ON green: load ON from 1% to 100%.
    LED ON orange: fault with load

Power/Consumption of driven loads:

	Incandescent lamp		Halogen lamps	
230 V~	2 x 400 W	2 x 1.7 A	2 x 400 W	2 x 1.7 A
110 V~	2 x 200 W		2 x 200 W	

	Ferromagnetic transformers		Electronic transformers	
230 V~	2 x 400 VA	1.7 A	2 x 400 VA	2 x 1.7 A
110 V~	2 x 200 VA		2 x 200 VA	

WARNING: Devices that operate with an electronic transformer or a ferromagnetic transformer cannot be connected on the same line

SCS Dimmer 2x1.7A

Configuration

1. Lighting Management System

When installed in a Lighting Management system, the device can be configured in the following ways:
- Plug & Go: automatic procedure for pairing devices connected to the inputs and outputs. The procedure is activated on powering the device. It is only available for Room Controllers or, in the case of other devices, paired with the Room Controllers.

- Push & Learn: procedure for pairing different connected devices or changing the assignments defined automatically in the Plug & Go procedure. For more details, please refer to the specific document.
- Software Configuration: using the Virtual Configurator software; for more details, please refer to the specific manual.

2. My Home system

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

2.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL1, PL2=1-9
Group		1-255	G1, G2=1-9

2.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [1]	0 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes

NOTE 1): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. Only for point-point control. The ON control activates the Master actuator and the Slave actuator at the same time. The next OFF control deactivates the Master actuator and keeps the Slave actuator active for the period of time set.

To use the "Actuator as a slave with PUL function" and adjust the "Minimum brightness level at power-on" with values 1-100, use MYHOME_Suite virtual configuration.

Maintenance

Do not use acetone, detergents for removing tar, or trichloroethylene.
Maintenance using the following products:
- Hexane (En 60669-1);
- Methylated spirit;
- Soap and water;
- Diluted ammonia;
- Bleach, diluted 10%;
- Glass detergents.
WARNING:
An initial test is required in order to use other special maintenance products.

Operating mode

When in Test mode, by pressing the pushbutton of the actuator it will be possible to enable or disable the associated load.

ON-OFF

DIMMING

Manual forcing of the type of load

< 1 s

CAPACITIVE

< 1 s

< 1 s = ON

FORCED
INDUCTIVE

FORCED
CAPACITIVE

< 1 s

INDUCTIVE

10 s = confirm changes
< 1 s = exit without saving changes
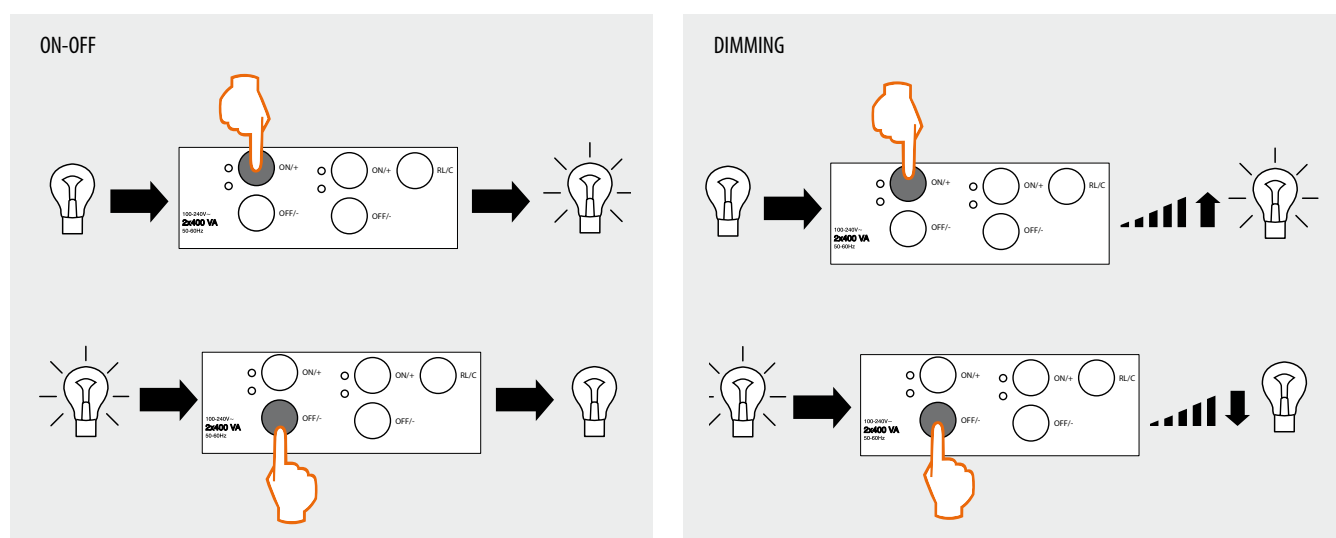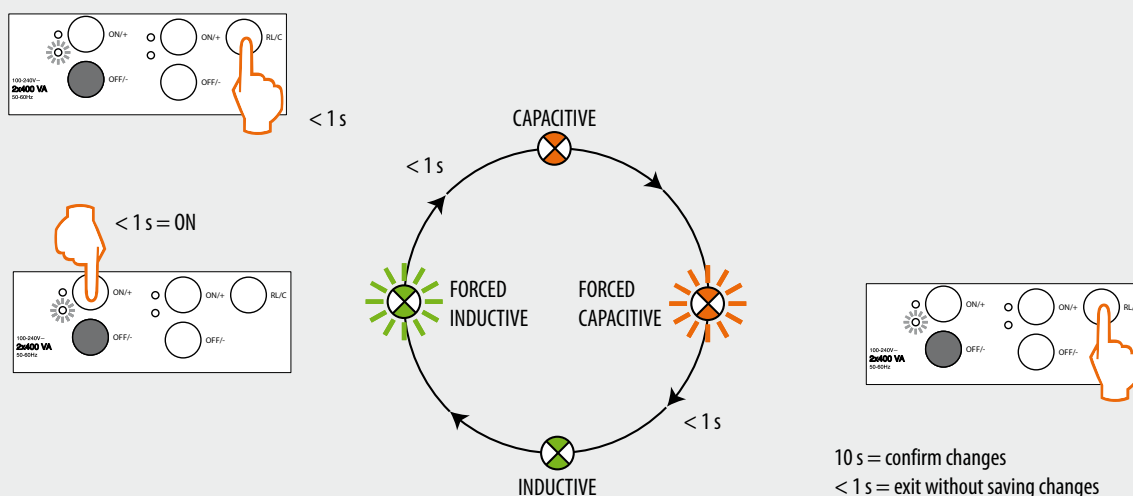
Wiring diagram
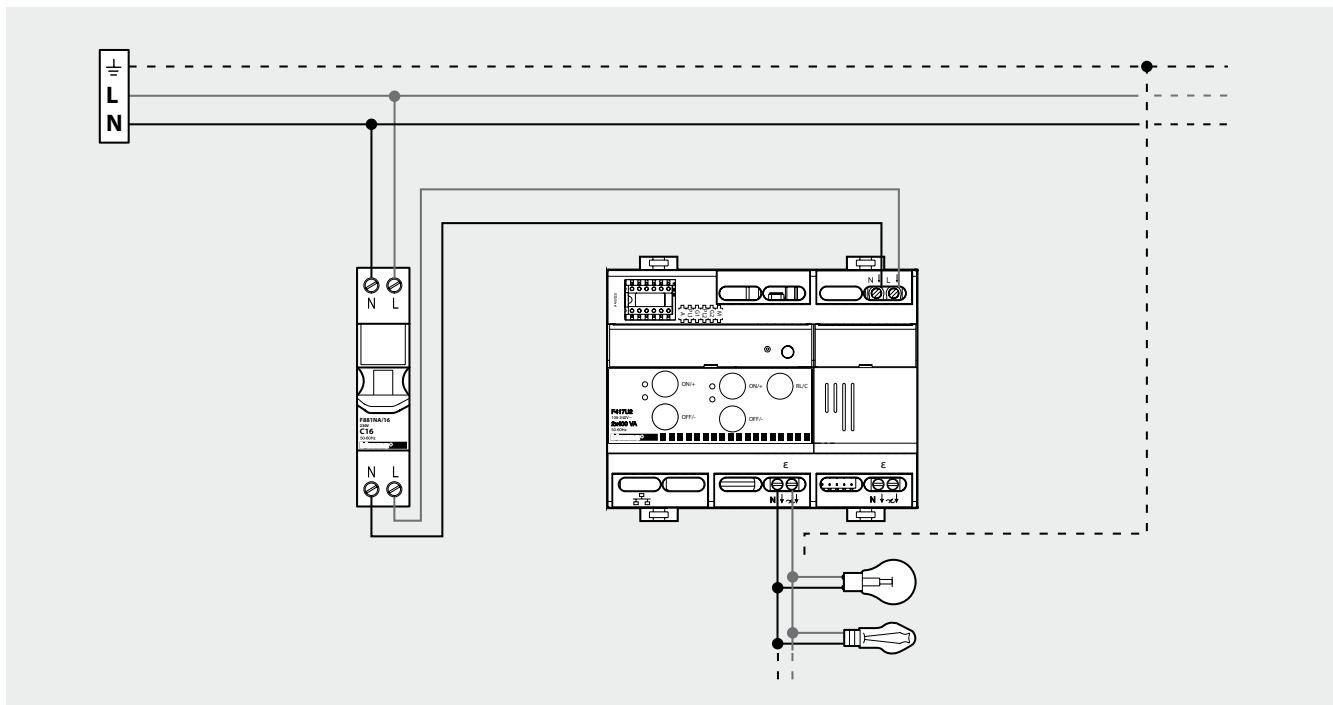
Dimmer for energy saving lamps

Description
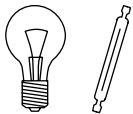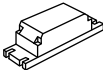
Dimmer for the management of LEDs, dimmable lamps, dimmable compact fluorescent lamps (CFL), halogen energy saving lamps and electronic transformers. After connecting the dimmer to the BUS and to the load, it is possible to adjust the intensity of the light from any control point, properly configured.

By briefly pressing the local control key, it is possible to turn on or off the load, while with a long press it is possible to adjust the light intensity.

The dimmer can adjust the load with 100 different levels of light intensity, and it is possible to set the switch-on time and the minimum level of power dimmed.

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with BUS SCS:	18 – 27 Vdc
Max. consumption:	10 mA
Number of outputs:	1x 0.9 A
Operating temperature:	(-5) – (+35) °C
Dissipated power with max. load:	2.5 W (230 Vac)
	1.9 W (127 Vac)
Protection index:	IK04
Level of robustness:	IP20

Driven loads power/absorption:

	Incandescent lamps Halogen lamps	Dimmable LED lamps
50 and 60 Hz		
@ 230 Vac	1 W - 300 W	1 VA - 300 VA*

	Compact dimmable fluorescent lamps	Halogen lamps with electronic transformers
50 and 60 Hz		
@ 230 Vac	1 VA - 300 VA*	1 VA - 300 VA

Note (*): for the most common dimmable and CFL LEDs available on the market, the 300VA power corresponds to about 200W.
For the choice of LED lamps compatible with the dimmer refer to the table shown after the «Wiring diagram» chapter

Standards, Certifications and Marks

- EN 60669-2-1: Switches for household and similar fixed electrical installations;
- EN 50090-2-2: Home and building electronic systems (HBES);
- EN 50090-2-3: Home and building electronic systems (HBES), general functional safety;
- EN 50428: Switches for household and similar fixed electrical installations.

Dimensions

Overall size: 4 DIN modules
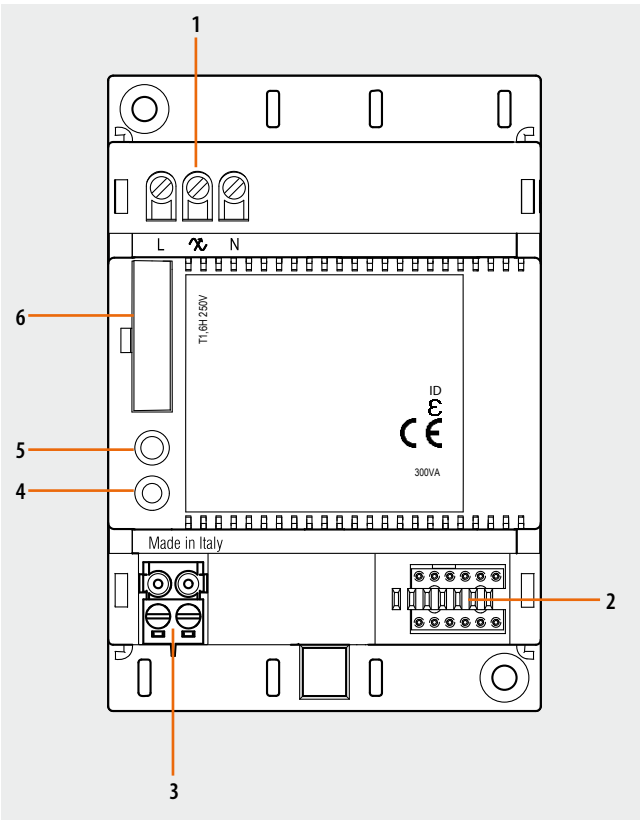
Legend

1. Load
2. Configurator seat (to be used only in My Home systems with physical configuration)
3. BUS
4. ON/OFF button and light intensity adjustment
5. Led
   - off: BUS not present
   - green on: load off
   - orange on: load on
   - orange/green fast flashing: device not configured
   - orange/green slow flashing:device in configuration or malfunction of the load
6. Fuse

Dimmer for energy saving lamps

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9
Group		Group 1 - Group 10: 0-255	G=0-9

1.2 Mode

Virtual configuration (MYHOME_Suite)			Physical configuration	
Function		**Parameter / setting**		
Master Actuator		Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator which has the same address		Slave	M=SLA	
Button (On monostable) ignores Room and General controls		Master PUL	M=PUL	
Delay OFF: Master actuator with OFF control delayed on the corresponding Slave actuator. [1]		0 - 255	M=1	1 minute
			M=2	2 minutes
			M=3	3 minutes
			M=4	4 minutes
Selection of the type of load used	Switching on at the minimum level and then it sets to the stored level	Inductive LED	TY=0	min default level=10%
	Switching on at the maximum level and then it sets to the stored level	Inductive CFL	TY=1	min default level=37%
	Switching on at the minimum level and then it sets to the stored level	Capacitive LED/electronic transformers	TY=2	min default level=10%
	Switching on at the maximum level and then it sets to the stored level	Capactive CFL	TY=3	min default level=37%
	Switching on at the minimum level and then it sets to the stored level	Halogen lamp	TY=4	min default level=1%

NOTE 1): In the Master and Master PUL mode it is possible to set a 0-255 seconds OFF delay (through MYHOME_Suite) and 1-4 minutes delay through the physical configuration. Only for point-to-point control. With the OFF control the Master actuator is disabled, the Slave actuator is disabled after the time set with the configurators has elapsed.

The ON control activates at the same time the Master actuator and the Slave actuator. The following OFF control disables the Master actuator and keeps the Slave actuator active for the period of time set by the configurator 1 - 4 inserted in M of the Master actuator as shown in the table.

To use the "Actuator as slave with PUL function " use the MYHOME_Suite virtual configuration.

Dimmer for energy saving lamps

1.3 Minimum advanced level

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
The configurator in this position defines the minimum value of the light intensity obtainable by means of the dimmed adjustment.	0-100	MIN=0	0[1]
		MIN=1	1%
		MIN=2	5%
		MIN=3	10%
		MIN=4	15%
		MIN=5	20%
		MIN=6	25%
		MIN=7	30%
		MIN=8	35%
		MIN=9	40%

NOTE 1): The default value is set to ensure the best performance according to the configurator in TY position.

Warning:

For proper operation of the actuator set the type of lamp to be driven using the configurator in TY position. If the lamp does not turn on or shows unstable operation, select, using the configurator in the MIN or virtual configuration position, the minimum level of light intensity until to obtain the value that allows the proper operation of the lamp.

Wiring diagram

BUS SCS
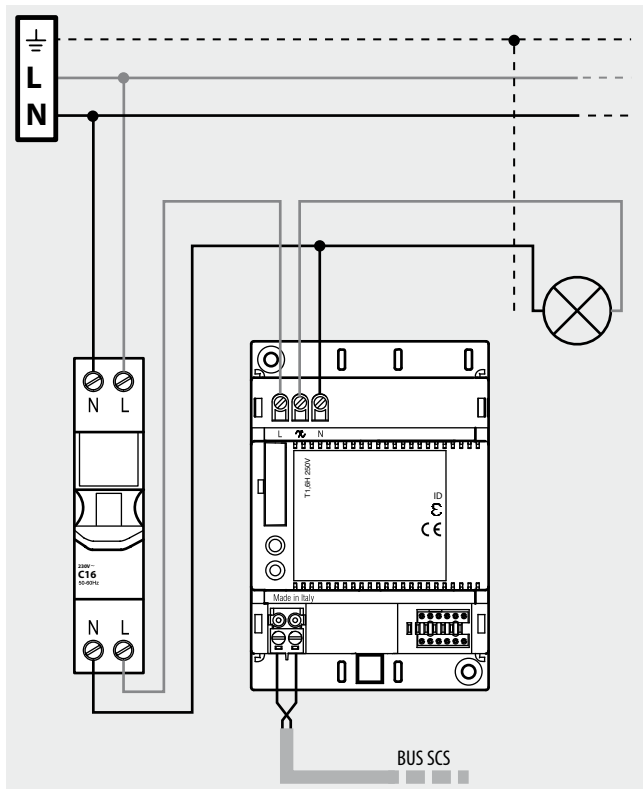
Dimmer for energy saving lamps

Dimmable LED bulbs compatible with dimmer art. F418

This list is intended to be used as a guide when selecting bulbs to be used with My Home dimmers; they have been tested by Legrand for dimming compatibility with bulbs contained on the list. Please be aware that bulb manufacturers can modify their bulbs at any time, without notice to Legrand, and therefore Legrand cannot ensure future compatibility.

Brand	Base	Code		Power	Dimmer mode	Max number of lamps
PHILIPS [2]	GU5.3 [1]	MASTER LED spot LV	MLGU537FXW24R MLGU537FWW24R MLGU537FCW24R MLGU537FXW36R MLGU537FWW36R MLGU537FCW36R	7 W	Inductive (TY=0)	Up to 10
	G53	LEDSpot LV AR111	MLR11110XW24R MLR11110WW24R MLR11110XW40R MLR11110WW40R	10W	Inductive (TY=1)	Up to 10
			MLR11115XW24R MLR11115WW24R MLR11115XW40R MLR11115WW40R	15W		
TOSHIBA	GU10	LDRC0640MU1EUD2		7,1 W	Inductive (TY=0)	Up to 10
	GU10	LDRC0627WU1EUD		6,5 W	Inductive (TY=0)	Up to 10
	E27	LDRC0927WE7EUD		9 W	Inductive (TY=0)	Up to 10
	E27	LDRC1627ME7EUD		16 W	Inductive (TY=0)	Up to 10
	E27	LDRC2027ME7EUD		19,7 W	Inductive (TY=0)	Up to 10
	E27	LDAC0627E7EUD		6 W	Inductive (TY=0)	Up to 10
	E27	LDAC0827WE7EUD		7,5 W	Inductive (TY=0)	Up to 10
	E14	LDGC0627CE4EUD		6 W	Inductive (TY=0)	Up to 10
	E14	LDCC0627CE4EUD		6 W	Inductive (TY=0)	Up to 10
GE	GU10	98174		6 W	Capacitive (TY=2)	Up to 10
	GU10	97266		4,5 W	Inductive (TY=0)	Up to 10
OSRAM	GU10	902251		5,2 W	Inductive (TY=0)	Up to 10
SYLVANIA	GU10	26365		5,5 W	Capacitive (TY=2)	Up to 10
VISION-EL	GU10	7411C		4 W	Inductive (TY=0)	Up to 6

Note (1): To have good results put MIN=1

Nota (2): Lamps tested in collaboration with Philips.

Memory Module

Description

The memory module is connected to the system and saves the status of all the devices. This device is very useful in case of a black-out or short power cuts (minimum 400 mS), because it can reset the status of all the lamps controlled by the system once the power returns. The reset operations take about 10 seconds.

Just one memory module can be connected to the BUS for each system installed (i.e. one for each power supply unit), unless two or more systems are being connected using the SCS/SCS gateway (item F422) configured in physical expansion mode. In this case just one is needed for all the systems connected together. The device must be put into operation once the system is already installed and powered.

The multicolour LED indicates the status of the device:
- OFF: device too far from the power supply unit
- steady green: normal operation
- steady orange: system not yet acquired
- steady red: device exclusion phase
- blinking red: acquisition phase in progress
- blinking orange: incorrect or missing configuration

Technical data

- Power supply from SCS BUS: 27 Vdc from the BUS
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Current draw: 5 mA
- Operating temperature: 0 - 40 ℃

Dimensions

Size: 2 DIN modules
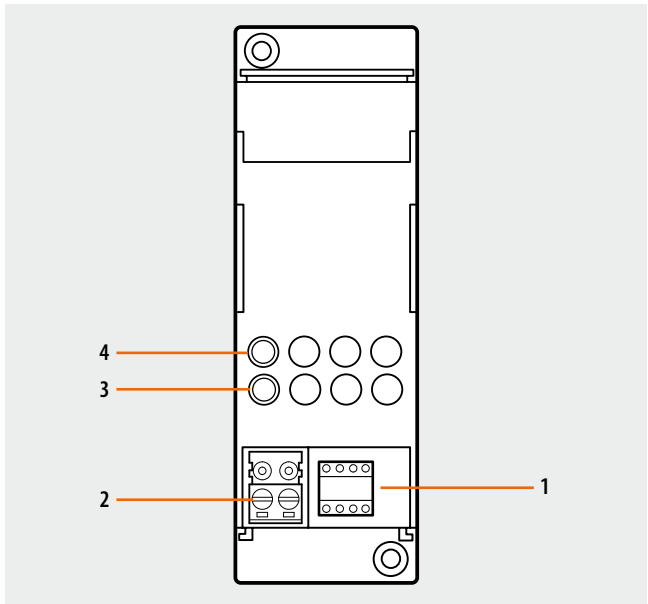
Legend

1. Configurator socket
2. BUS
3. Multicolour LED
4. Button

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=0-9
	Lighting point	0-15	PL=1-9

Programming

- Connect the memory module, switch the BUS ON and make sure that the loads of the dimmers are connected and powered (all the loads must be OFF).
- Press the button on the front for at least five seconds, when the red LED comes on with a steady light release the button. Release the button.
- Switch the loads which are not to be managed ON one by one (all the loads left OFF will be managed).
- Press the device button within 30 minutes, the red LED will start to flash quickly to show that the device is performing the learning procedure.
- After about 30 seconds the LED turns steady green to signal that the learning procedure has ended and the memory module is operative.
- If the programming procedure has not been completed within 30 minutes, the LED shines orange to signal that the system status has not been saved. At the end of the programming procedure a test should be performed to check that the device is set correctly.
- Switch on some of the controlled loads (i.e. those not explicitly excluded during the programming procedure).
- Switch off, simulating a black-out, for at least 15 seconds.
- Switch back on again; after a few seconds the status of the controlled loads must be reset (i.e. those which were ON before the black-out must switch back ON), while the unmanaged loads must however remain OFF.

NOTES:
- The rolling shutter actuators are not managed.
- The timed switchings ON will be activated as simple switchings ON.
- It is important to configure the Memory module with a different A and PL address to that of an actuator.
- For modifications to the system, repeat the save procedure.

WARNING:
The memory module is installed near the power supply unit (possibly in the same electrical panel); the distance must however be no greater than 10 metres.

Contact interface
in DIN module

F428

Description

This device lets you integrate traditional control devices (switches, pushbuttons, etc.) in advanced systems with BUS operating logic.

Therefore, it is possible to extend the use of the Lighting Management system in rooms where traditional systems are already present or in historic and prestigious rooms whereby the complete or partial remaking of the electric system would entail heavy masonry work. The old but valuable switch with its no longer compliant wiring can therefore continue to be used with it, as the connection to the load to be controlled is carried out safely by connecting it with its respective interface with no-voltage contact.

Contact N1 controls light point PL1, contact N2 controls light point PL2.

It is possible to connect:
- Two N/O (normally open) and N/C (normally closed) traditional switches or buttons;
- A switch.

The device is fitted with 2 LEDs to signal contact closure, programming/deletion, and the status of the control devices.

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	9 mA
Dissipated power with max. load:	0.2 W

Dimensions

Size: 2 DIN modules

Legend

1. Clamps for connection to traditional devices
2. Configurator socket (note that this must only be used in My Home systems with the physical configuration).
3. BUS
4. LED
5. Button

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

When used as a component of the Lighting Management system, use the specific types of configuration (Plug&go, Project&Download).

The interface consists of two independent control units, which are identified with the positions PL1 and PL2 in the physical configuration and the term Module 1 and Module 2 in the MYHOME_Suite virtual configuration. The two units can send:
- commands to two actuators for two independent loads (On, Off or adjustment) identified with the address PL1 and PL2 and the mode specified in M or;
- a command to the F420 scenario module;
- a double command intended for a single load (motor for blinds Up-Down, curtains Open-Close) identified with the address PL1=PL2 and specified Configuration mode M. The interface has an LED for indicating proper operation and three terminals for connection to traditional devices such as:

- two N/O (normally open) and N/C (normally closed) traditional switches or buttons;
- a switch.

List of Functions

The device performs the following functions:
1. LIGHT SWITCH
2. AUTOMATION CONTROL
3. DEVICE LOCKING/UNLOCKING
4. SCENARIO MODULE CONTROL
5. PROGRAMMED SCENARIO ACTIVATION
6. PLUS LIGHTING MANAGEMENT SCENARIO ACTIVATION
7. PLUS PROGRAMMED SCENARIO ACTIVATION
8. SOUND SYSTEM CONTROL

See the following pages for the configuration procedures.

A	PL1	PL2	M	SPE
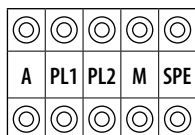
The interface includes two independent control units, identified with positions N1 and N2. The two units can send:
- Commands to two actuators for two independent loads (On, Off or adjustment) identified with the address PL1 and PL2 and the mode specified in M
or;
- A command to the F420 scenario module;
- A double command intended for a single load (motor for rolling shutter Up/Down, Open/Close curtains) identified with the address PL1 = PL2 and mode specified M.

Function selection

To configure the contact numbers use MYHOME_Suite virtual configuration

1. Light switch

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL1, PL2=0-9
Room		0-10	A=AMB
Group		1-255	A=GR
General		General	A=GEN

With the virtual configuration, for the room, group and general controls, you can set a light point address for the return of the load status You can also configure the "Installation level" and the "Destination level".

1.2 Mode

1.2.1 ON/OFF control:

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Type of contact to terminals N1 and N2	Normally open (N/O)	SPE=0
	Normally closed (N/C)	SPE=7
Cyclic		SPE=0, M=0
ON		SPE=0, M=ON
OFF		SPE=0, M=OFF
Cyclic (N/O contact only)		SPE=1, M=7
Button		SPE=0, M=PUL
ON with button at N2, OFF with button at N1		SPE=0, M=0/I
Timed ON	0.5sec	SPE=0, M=8
	2sec	SPE=8, M=1
	30sec	SPE=0, M=7
	1min	SPE=0, M=1
	2min	SPE=0, M=2
	3min	SPE=0, M=3
	4min	SPE=0, M=4
	5min	SPE=0, M=5
	10min	SPE=8, M=2
	15min	SPE=0, M=6

For timed ON with period 0-255 hours, 0-59 minutes and 0-59 seconds use MYHOME_Suite virtual configuration

1.2.2 ON/OFF Control and ADJUSTMENT (Point-to-Point only):

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
ON/OFF and cyclic ADJUSTMENT ON/OFF when pressing briefly and adjustment when holding down	SPE=0, M=0
ON with button at N2, OFF with button at N1 and DIMMER when held down	SPE=0, M=0/I
ON with adjustment at 10%	SPE=3, M=1
ON with adjustment at 20%	SPE=3, M=2
ON with adjustment at 30%	SPE=3, M=3
ON with adjustment at 40%	SPE=3, M=4
ON with adjustment at 50%	SPE=3, M=5
ON with adjustment at 60%	SPE=3, M=6
ON with adjustment at 70%	SPE=3, M=7
ON with adjustment at 80%	SPE=3, M=8
ON with adjustment at 90%	SPE=3, M=9

For the functions of "Cyclic with custom point-to-point adjustment", "Cyclic with custom adjustment", "Cyclic dimmer without adjustment", "Custom dimmer ON without adjustment", "Custom dimmer OFF without adjustment", "ON with custom adjustment", "OFF with custom adjustment", use MYHOME_Suite virtual configuration.

1.2.3 Blink command
When an actuator receives a blink command, it implements it by closing and opening the relay for a time equal to T that can be configured as shown in the table.
Combine it with a command configured OFF to switch it off.

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
Blink 0.5 s	SPE=2, M=0
Blink 1 s	SPE=2, M=1
Blink 1.5 s	SPE=2, M=2
Blink 2 s	SPE=2, M=3
Blink 2.5 s	SPE=2, M=4
Blink 3 s	SPE=2, M=5
Blink 3.5 s	SPE=2, M=6
Blink 4 s	SPE=2, M=7
Blink 4.5 s	SPE=2, M=8
Blink 5 s	SPE=2, M=9

For blinking with a period of from 5.5 to 8 seconds, use MYHOME_Suite virtual configuration

2. Automation control

2.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL1, PL2=0-9
Room		0-10	A=AMB
Group		1-255	A=GR
General		general	A=GEN

With the virtual configuration, for the room, group and general controls, you can set a
light point address for the return of the load status You can also configure the "Installation
level" and the "Destination level".

2.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Type of contact to terminals N1 and N2	Normally open (N/0)	SPE=0
	Normally closed (N/C)	SPE=7
Bistable control		PL1=PL2 SPE=0 M=↑↓
Monostable control		PL1=PL2 SPE=0 M=↑↓M

3. Device locking/unlocking

3.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL1, PL2=0-9
Room		0-10	A=AMB
Group		1-255	A=GR
General		General	A=GEN

3.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Type of contact to terminals N1 and N2	Normally open (N/0)	SPE=0
	Normally closed (N/C)	SPE=7
Disable		SPE=1 , M=1
Enable		SPE=1, M=2

To configure the "Installation level" and the "Destination level" and use MYHOME_Suite
virtual configuration

4. Scenario module control

4.1 Addressing

Function	Virtual configuration (MYHOME_Suite)	Physical configuration
Room (of the scenario module)	0-10	A=1-9
Light point (of the scenario module)	0-15	PL1, PL2=0-9

NOTE: PL2 must be equal to PL1, or not be configured (in which case the button connected to terminal PL2 is disabled)

4.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	Parameter / setting	
Type of contact to terminals N1 and N2	Normally open (N/O)	SPE=0
	Normally closed (N/C)	SPE=7
Scenario modification and activation		
Scenario No.	1-16	SPE=6[1), M=1-8
Scenario activation		
Scenario No.	1-16	SPE=4[2), M=1-8

NOTE: For Delayed activation of the top/bottom button use MYHOME_Suite virtual configuration
NOTE 1): With SPE=6 you can call and program scenarios within module F420. M=1-8: group of scenarios to be controlled (see table).

NOTE 2): With SPE=4 it is only possible to call up the scenario saved in module item F420. M=1-8: group of scenarios to be controlled (see table).

M	First contact PL1	Second contact PL2
1	1	2
2	3	4
3	5	6
4	7	8
5	9	10
6	11	12
7	13	14
8	15	16

A=0-9 and PL1=1-9 are the room and the light point of the scenario module to be controlled. PL2 must be equal to PL1 or not be configured (in which case the second contact is disabled).

Scenario programming

To program, change or delete a scenario you need to enable programming module F420 so that the status LED is green (press the
locking/unlocking button on the scenario module for at least 0.5 seconds) and then continue with the following steps:

1) press one of the four special control buttons to which the scenario should be associated to for 3 seconds and the corresponding LED will start blinking;

2) set the scenario using the corresponding controls for the various Automation, Temperature control, Sound system, etc. functions;

3) confirm the scenario by briefly pressing the corresponding button on the special control to exit the programming mode;

4) to change a scenario, or to create new ones to use with the other buttons, repeat the procedure
starting from point 1. To recall an already set scenario, briefly pressing the corresponding button on the control is enough. If you want to delete a scenario completely, press and hold down the corresponding button for approximately 10 seconds.

5. Programmed scenario activation

Enabling buttons for sending a command to the scenario programmer MH200N.
The address of the assigned command in positions A and PL must be unique and match the scenario to be activated. The control can be connected at any point in the system (local bus or riser).

5.1 Addressing

		Virtual configuration (MYHOME_Suite)	Physical configuration
Addressing type			
	Room	0-10	A=1-9
	Lighting point	0-15	PL1, PL2=1-9

NOTE: If PL1=PL2 the two buttons connected to the interface activate two different scenarios.
If PL1≠PL2 the two buttons activate the same scenario

5.2 Mode

	Virtual configuration (MYHOME_Suite)	Physical configuration
Type of contact to terminals N1 and N2	Normally open (N/O)	SPE=0
	Normally closed (N/C)	SPE=7
Button N1	0-31	SPE=0 M=CEN
Button N2	0-31	SPE=0 M=CEN

6. Plus Light Management scenario activation

For the configuration please refer to MY HOME_ Suite

7. Plus programmed scenario activation

To configure the address 1 - 2047 of the scenario and the number of buttons 0 - 31 on
the control device, use MYHOME_Suite virtual configuration

8. Sound system control

This mode allows you to control the amplifiers and the sources of the Sound System.

8.1 Addressing

You can manage a single amplifier (point-to-point control), some amplifiers (room control) and all the amplifiers in the system (general control).

Virtual configuration (MYHOME_Suite)			Physical configuration SPE=8
Addressing type		**Parameter / setting**	
Point-to-point	Room	0-9	0-9
	Sound point	0-9	0-9
Room	Room	0-9	A=AMB
			PF=0-9
General		General	A=GEN

8.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Type of contact to terminals N1 and N2	Normally open	SPE=7
	Normally closed	SPE=0
ON/volume +		SPE=5 , M=0 on button N1
OFF/volume -		SPE=5, M=0 on button N2
Change track		SPE=5, M=1 on button N1
Click on source		SPE=5, M=1 on button N2
Follow me	YES	SPE=5, M=0
	NO	PL2=0 follow me, PL2=1-4 source

For the "Cyclical ON/OFF" function and to select sources 1-9 use the MYHOME_Suite virtual configuration

Wiring diagram

Interface
DIN module

C   N1   N2

N1   N2

Actuator

1   2   3   4

C1   C2

SCS BUS

M

L

N

SCS/DALI
gateway
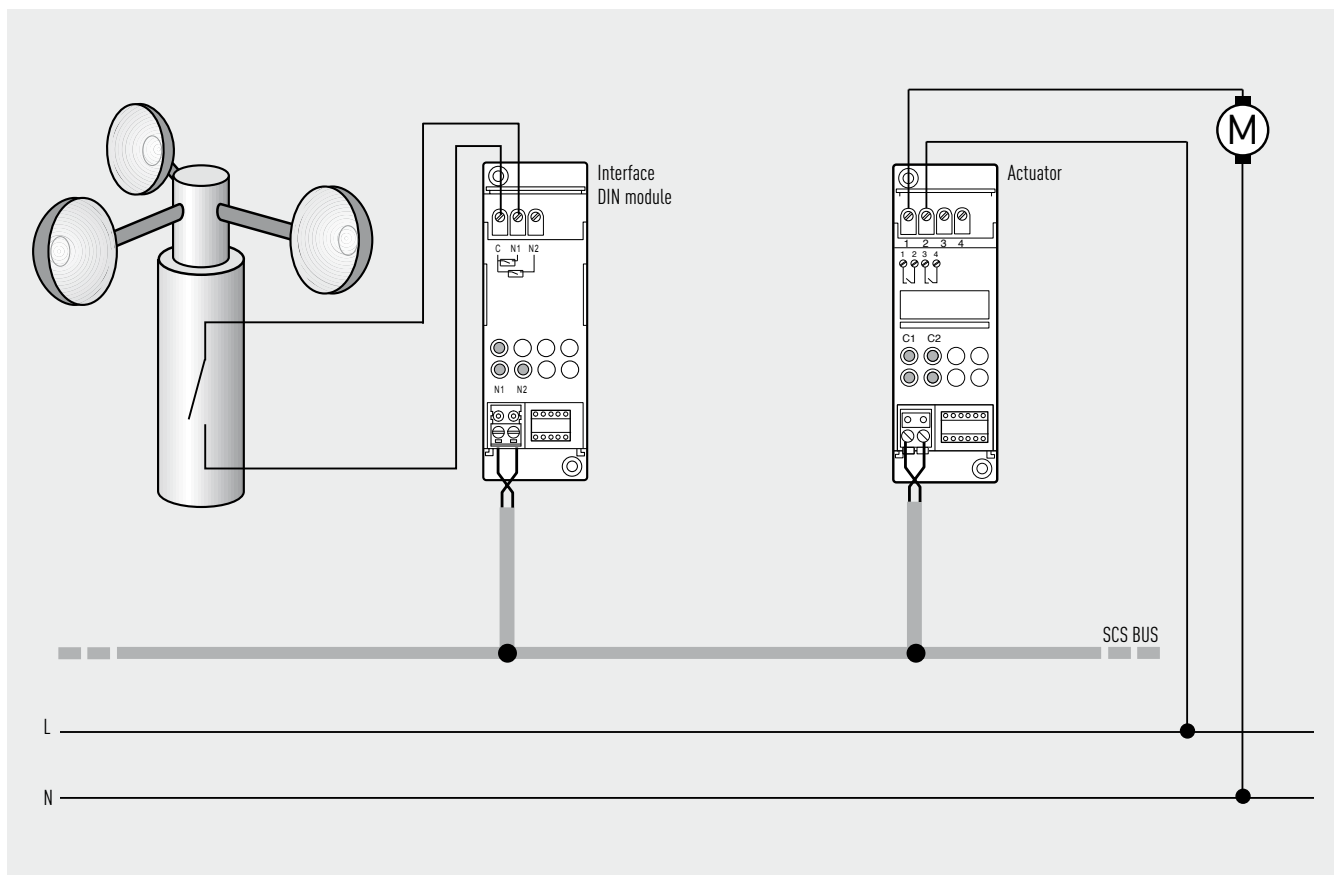
Description

The device is an interface between My Home/Lighting Management systems and devices driven using the DALI (Digital Addressable Lighting Interface) protocol. It has 8 independent outputs to which up to 16 DALI devices can be connected for each output. Three pushbuttons with notification LEDs set the operating mode. Key P1 sets up the device for the virtual configuration, key P2 is used to select one of the 8 outputs which connect with the DALI devices and key P3 is used to switch the output which has been selected with key P2 ON, OFF and to dim it. On pressing key P3 quickly one can switch the load ON or switch it OFF cyclically,
while pressing it for a long time adjusts the brightness.
The device can be installed in a My Home system and use the physical or virtual configuration, or as a component of the Lighting Management system and use the specific configuration types (Plug&go, Project&Download).

Technical data

Power supply:	110 – 240 Vac @ 50/60 Hz; 110 – 240 Vdc
Current draw:	5 mA
Operating temperature:	(-5) – (+45) ℃
Dissipated power:	4 W
No. of DALI outputs:	8 x 16 ballast

Dimensions

Size: 6 DIN modules
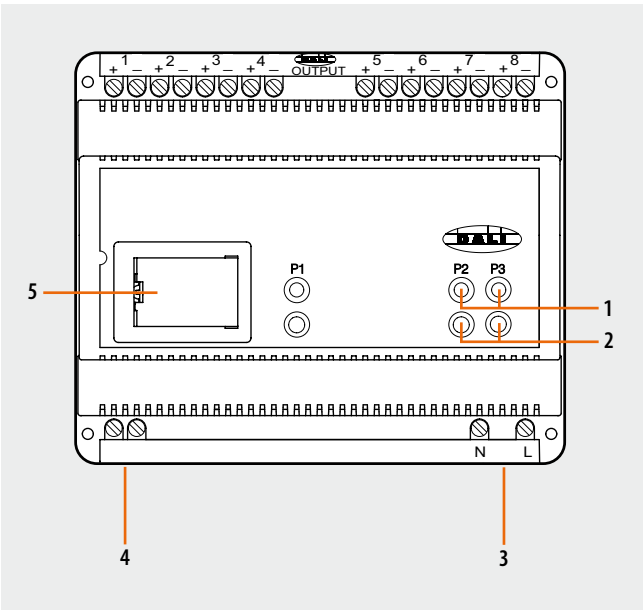
Legend

1. Push-buttons
2. LED
3. Power supply
4. BUS
5. Configurator socket

Configuration

1. Lighting Management System

When installed in a Lighting Management system, the actuator can be configured in the
  following ways:
- PLUG&GO
- PROJECT&DOWNLOAD

2. MyHome System

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

2.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	takes the PL number from the output number to which the load is connected
Group		Group 1 - Group 10 = 0-255	G1, G2, G3 = 0-9

Depending on the configurator connected to A, the outputs will take the following address:

		OUTPUT							
		1	2	3	4	5	6	7	8
A=	1	A=1 PL=1	A=1 PL=2	A=1 PL=3	A=1 PL=4	A=1 PL=5	A=1 PL=6	A=1 PL=7	A=1 PL=8
	2	A=2 PL=1	A=2 PL=2	A=2 PL=3	A=2 PL=4	A=2 PL=5	A=2 PL=6	A=2 PL=7	A=2 PL=8
	3	A=3 PL=1	A=3 PL=2	A=3 PL=3	A=3 PL=4	A=3 PL=5	A=3 PL=6	A=3 PL=7	A=3 PL=8
	4	A=4 PL=1	A=4 PL=2	A=4 PL=3	A=4 PL=4	A=4 PL=5	A=4 PL=6	A=4 PL=7	A=4 PL=8
	5	A=5 PL=1	A=5 PL=2	A=5 PL=3	A=5 PL=4	A=5 PL=5	A=5 PL=6	A=5 PL=7	A=5 PL=8
	6	A=6 PL=1	A=6 PL=2	A=6 PL=3	A=6 PL=4	A=6 PL=5	A=6 PL=6	A=6 PL=7	A=6 PL=8
	7	A=7 PL=1	A=7 PL=2	A=7 PL=3	A=7 PL=4	A=7 PL=5	A=7 PL=6	A=7 PL=7	A=7 PL=8
	8	A=8 PL=1	A=8 PL=2	A=8 PL=3	A=8 PL=4	A=8 PL=5	A=8 PL=6	A=8 PL=7	A=8 PL=8
	9	A=9 PL=1	A=9 PL=2	A=9 PL=3	A=9 PL=4	A=9 PL=5	A=9 PL=6	A=9 PL=7	A=9 PL=8

Note: The PL configurator is not required for the physical configuration, as the value is set by the output to which the DALI device is connected. All the outputs belong to the same group connected to G.

1.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [1]	0 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes

To use the "Actuator as a slave with PUL function", to change the "Minimum level" of the brightness (1 to 100) for additional options of the "Type of load" (Dali standard) use MYHOME_Suite virtual configuration.

NOTE 1): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. Only for a point-point type control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed.
Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light off immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

SCS/DALI
gateway

Wiring diagram

MAX. 16 DEVICES
PER OUTPUT

SCS BUS

L
N

Telephone actuator

Description

The telephone actuator enables remote control of two users (e.g. boilers, garden watering, staircase light, garden light, rolling shutters, etc.) using the fixed, or the mobile telephone line.

Remote control and programsng are protected by a password consisting in a 4 digit code that can be customised by the customer; the default code is 1234. During the programsng procedure, it is possible to select three operating modes:

- LIGHTING
  It can be used to enable/disable users such as staircase lights, garden lights, boilers, etc.
- AUTOMATISMS
  It can be used to activate the rolling shutter motors (up/down movement), as well as other motors.
- TEMPERATURE CONTROL
  To enable or disable the boilers; used together with the BTicino timer thermostat.

The activation, deactivation, check and programsng controls must be sent from the actuator using only a DTMF telephone; if other types of telephones are used, the actuator does not work. In order to control more than two users, it is possible to install on the same telephone line up to four actuators, in parallel on the line.

The operation of the actuators is guaranteed even if an answering machine is installed on the telephone line.

Technical data

Network Power supply:	230 Vac ± 10 % 50Hz
Dissipated power:	11 VA
Absorption:	50 mA
Operating temperature:	0 – 35 ℃
Telephone network:	analogue (PSTN)
Weight:	270 grams
Connection to the telephone network:	two-wire with telephone pair
Connection to the PABX	two-wire with telephone pair
Dialling system:	only with touch tone dialling (DTMF)
Relay number:	2 with independent control and changeover contacts
Relay output contacts:	230 Vac 6A resistive, 2A inductive both between N-NC and N-NO

Dimensional data

3 DIN modules.

Front view
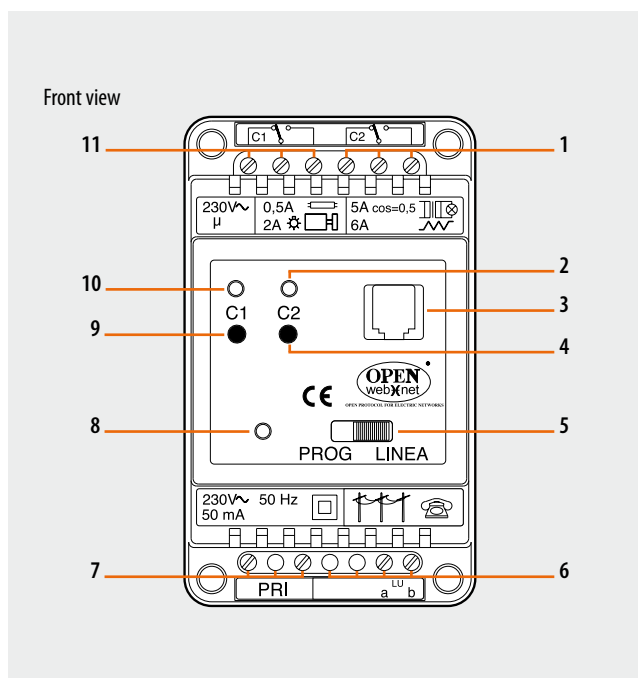
Legend

1. Screw clamps (C2): uscita contatti in scambio del relè 2
2. Yellow LED: relay (C2) status. ON = relay active
3. RJ8 female connector: to connect the actuator to the telephone using the cable supplied, and activate the programming procedure
4. Pushbutton (C2) for local activation of relay 2
5. PROG/LINE selector:
   - in PROG position: operation in programming mode
   - in LINE position: normal operation
6. Screw clamps (LU): telephone line input
7. Screw clamps (PRI): power supply 230 Vac
8. Green LED : operating mode:
   OFF = actuator faulty or incorrectly powered
   On steady = powered and normal operation
   ON flashing = powered and in programming mode operation
9. Pushbutton (C1) for local activation of relay 1
10. Yellow LED: relay (C1) status. ON = relay active
11. Screw clamps (C1): output of changeover contacts of relay 1

Configuration

The programming procedure is performed using a standard touch tone telephone, connected to the RJ8 socket of the actuator, using the appropriate cable, supplied as standard.

To program the telephone actuator move the selector (3) to "PROG", and enter the commands on the telephone connected to the connector (4). The programming cable is supplied as standard.
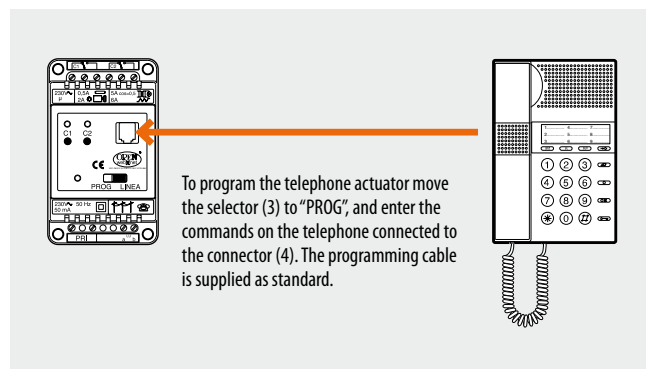
The actuator can be programmed to operate in three different modes:
- lighting: to enable or disable lights, boilers, etc.;
- automation: to activate the rolling shutter motors (closing – opening), or other motors;
- temperature control: to activate or deactivate the heating or the air conditioning system to be used with the BTicino timer thermostat item HC/HS/HD/L/N/NT4451 and item AM5721.

Also, in the three operating modes the two relays can themselves be programmed to operate with the monostable function (once timed, the relay closes for the programmed time; ideal, for example, when timed switching on of the staircase lights is required), or bistable (ON - OFF, at every command the relay changes its status and keeps it until a new command is received, behaving as a switch).

The actuator can also be connected to an internal telephone extension (shunted), when a PABX BTicino telephone switchboard is present (to expand the number of relays that can be selected remotely); it is also possible to connect in parallel to each other on the same telephone line up to 4 actuators, even if an answering machine is also installed.

At the end of each programming operation the actuator sends to the telephone receiver a confirmation (programming correct) or an error (programming failed) tone.

LIGHTING MODE
In this mode the two relays can be enabled independently, and can also be programmed with different functions.
A user can be activated with "impulsive" monostable operation using relay 1 (Example 1: timed switching on of the staircase light), and with "ON/OFF" bistable operation using relay 2 (Example: boiler activation/deactivation).

TEMPERATURE CONTROL MODE
This mode enables to combine the telephone actuator to the operation of the BTicino timer thermostat, item HC/HS/HD/L/N/NT4451 and item AM5721.
Using this mode, it is possible to remotely change the operation of the timer thermostat. If the timer thermostat is in any AUTO, MAN, ANTIFREEZE, PARTY, HOLIDAY, or OFF condition, by activating the following controls on the actuator:
- ANTIFREEZE, the timer thermostat will switch to the antifreeze condition, until an unlocking command is received;
- AUTO, the timer thermostat will switch to the automatic condition.

AUTOMATISM MODE
In this mode, the two relays are both controlled using the same command and cannot be activated independently from each other.
Therefore, when relay 1 is programmed, the actuator will automatically also manage relay 2.
The AUTOMATISM mode is recommended for controlling users interlocked with each other, such as the operation of a rolling shutter (up/down), motors (forward/backwards), etc.

For more details see the instruction leaflet supplied with the device.

Wiring diagrams

max. 230 V
6 A resistive
2 A inductive
U
User 2

max. 230 V
6 A resistive
2 A inductive
U
User 1

Telephone line

Telephone
actuator

230V~ 0,5A 5A cos=0,5
μ 2A 6A

C1 C2

bticino
F461/2 CE
OPEN webXnet

PROG LINEA

230V~ 50 Hz
50 mA

PRI

Telephone
protection

a b
IN

PLT1

OUT
a b

It is possible to connect up to 4 devices on the same
telephone call. The devices must be numbered
progressively. It is very important that each device
has its own unique identification number.

230 Vac
50 Hz

NOTE:
The devices must be numbered
progressively during the programming
procedure. It is very important that each
device has its own unique identification
number.

Telephone line

V- V-

U1 U2

V- V-

U7 U8

Telephone
protection
PLT1

a b
IN

OUT
a b

230V~ 0,5A 5A cos=0,5
μ 2A 6A

C1 C2

bticino
F461/2 CE
OPEN webXnet

PROG LINEA

230V~ 50 Hz
50 mA

PRI

Actuator No. 1
(main)

Actuator No. 4
(secondary)

230V~ 0,5A 5A cos=0,5
μ 2A 6A

C1 C2

bticino
F461/2 CE
OPEN webXnet

PROG LINEA

230V~ 50 Hz
50 mA

PRI

AUTO DAY

20.0°C

0 2 4 6 8 10 12 14 16 18 20 22

Timer thermostat

CE

NA C NC

Remote ext NTC

To the loads
to be controlled

230 Vac
50 Hz

Remote
activation

Contact open
automatic program
(last one selected)

Contact closed
manual antifreeze
program

GSM telephone actuator

Description

The F462 GSM actuator is a GSM terminal suitable for the remote management of all the heating systems, particularly if there is no fixed telephone line.

It is also possible to control two remote inputs and one remote output.

The communication is between a mobile phone and the GSM modem of the device, using an SMS message.

The F462 GSM actuator connected to a timer thermostat, item L/N/NT4450 enables, using appropriate SMS messages, to read the status of the timer thermostat (measured room temperature, program set, etc.), to change the set program, and change certain temperature control parameters; In alternative, it can be used with the timer thermostat, item HC/HD/HS/L/N/NT4451 , with the ON-OFF function only.

The device is capable of sending an SMS message to the telephone numbers saved inside the device itself, when an alarm situation caused by the closing/opening of the contacts occurs.

Technical data

Power supply:	10 – 20 Vac/Vdc
Absorption:	Idle 30mA 500mA MAX
Contact output:	4(2)A-250Vac
Contacts free from voltage	
Quad band:	E GSM850/900/1800/1900 MHz
Output power:	Class 4 (2W) for 850/900 MHz
	Class 1 (1W) for 1800/1900 MHz
Sensitivity:	107dBm@ 850/900MHz
	106dBm@ 1800/1900MHz
Protection index:	IP40 (when correctly installed)

Dimensional data

4 DIN modules

Front view
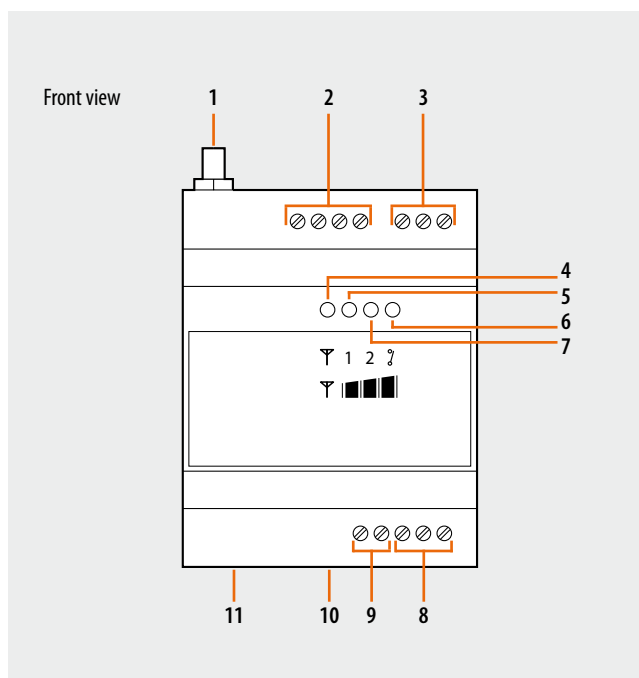
Legend

1. Outdoor antenna connector
2. Alarm input connections
3. Relay or HC/HS/L/N/NT4451 timer thermostat output connections
4. Network status LED: OFF = Not powered
     FLASHING QUICKLY = Searching for network
     FLASHING SLOWLY = Standby
5. Input 1 (alarm 1) status LED, and field intensity notification
6. Relay status LED, and field intensity notification
7. Input 2 (alarm 2) status LED, and field intensity notification
8. L/N/NT4450 timer thermostat connections
9. Power supply input
10. Battery connector
11. SIM card housing (remove the bottom cover)

GSM telephone actuator

Configuration

The device configuration operations consist in defining the coded SMS messages following several criteria depending on the control to actuate remotely, or remote status information for the managed devices. As a coding example here is the message for the control of the timer thermostat (item L/N/ NT4450).

– #STATUS to know the status of the timer thermostat, the alarms and the relays
– #FROST to set the antifreeze program
– #ECONOMY to set the MANUAL program with temperature T1
– #COMFORT to set the MANUAL program with temperature T3
– #AUTO to set the AUTOMATIC program
– #RESUME to return to the program set on the timer thermostat.

For the full list of codes see the instruction manual supplied with the device

Wiring diagrams

ALARM NOTIFICATIONS

NC*

ELECTRIC USER OR ITEM HC/HS4451 L/N/NT4451

| In1 | gnd | In2 | gnd | n.c. | NO | NC | CM |

CT3MA

| BAT | A | B | 3 | 2 | 1 |

EXTERNAL BATTERY

POWER SUPPLY

| 3 | 2 | 1 |

TIMER THERMOSTAT Item L/N/NT4450

*NC = NOT CONNECTED

Description

RFID key card switch for the connection of the power supply to the hotel room (13.56 MHz frequency key card detection). Thanks to the LED backlit slot, the device can be found in the dark. An automatic switch off delay can also be set.
It can be used with key cards with sizes between 45 mm and 54 mm (ISO).
The device can be configured in two different ways:
- **Physical configuration**, by inserting the configurators in the appropriate housings.
- **Configuration using the MyHOME_Suite software**, which can be downloaded from the website www.homesystems-legrandgroup.com; this last type of configuration has the advantage of offering many more options when compared with the physical configuration.

Technical data

Power supply from SCS BUS:	18-27 Vdc
Max. absorption:	6 mA
Stand-by absorption:	5 mA
Operating temperature:	(-10) – (+45) °C
RFID key card frequency:	13.56 MHz

Standards, Certifications, Marks

EN 60669-2-1
EN 50090-2-2
EN 50090-2-3
EN 50428

Dimensional data

Size: 2 flush mounted modules

Front view
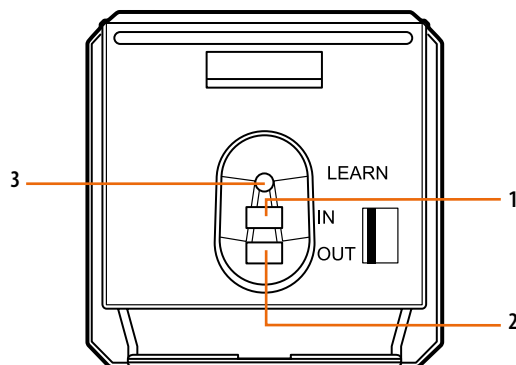
Rear view
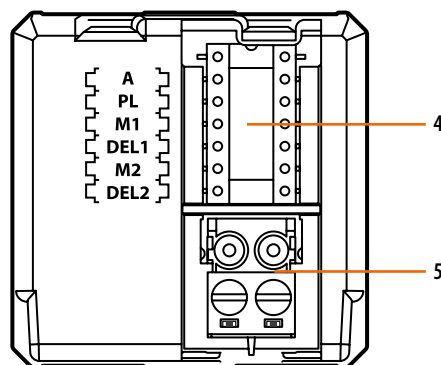
Legend

1. Programming key: Learn IN
2. Programming key: Learn OUT
3. LED
4. Configurator socket
5. SCS BUS connector

BUS SCS
RFID key card switches

0 675 66   H4648
5 727 36   LN4648
5 722 36

Physical configuration

Two modes:
- CENTRALIZED, to recall scenarios managed by the scenario programmer. When the key card is inserted and removed, the device forwards a signal to the scenario programmer, which depending on the scenarios set will activate the corresponding functions programmed.

A = 1-9 (CEN command address)
PL = 1-9 (CEN command address)
M1 = CEN
DEL1 = no configurator
M2 = no configurator
DEL2 = no configurator

Note: the insertion of the key card corresponds to "Pushbutton 1" of the control, while the removal of the key card corresponds to "Pushbutton 2" of the control

- SCENARIO, where by inserting the key card a group of actuators is enabled, and an entrance scenario is activated (through the scenario module), and by removing the key card an exit scenario is activated (through the scenario module), thanks to which all the group actuators will switch off and then disable after a set time delay.

A = 1-9 (as scenario module)
PL = 1-9 (as scenario module)
M1 = 1-8 (activation of the corresponding scenario: see table B)
DEL1 = 0 - 9 (switching on time delay at the insertion of the key card: see table A)
M2 = no configurator
DEL2 = 0 - 9 (switching off time delay after the removal of the key card: see table A)

Table A

Configurator value	Time
0	0
1	1 min
2	2 min
3	3 min
4	4 min
5	5 min
6	10 min
7	15 min
8	15 sec
9	30 sec

Table B

Configurator value	Scenario - Group
1	Scenario-group (Sce1=1, Sce2=9, Gr=1)
2	Scenario-group (Sce1=2, Sce2=10, Gr=2)
3	Scenario-group (Sce1=3, Sce2=11, Gr=3)
4	Scenario-group (Sce1=4, Sce2=12, Gr=4)
5	Scenario-group (Sce1=5, Sce2=13, Gr=5)
6	Scenario-group (Sce1=6, Sce2=14, Gr=6)
7	Scenario-group (Sce1=7, Sce2=15, Gr=7)
8	Scenario-group (Sce1=8, Sce2=16, Gr=8)

Note: Sce 1 = scenario activated on insertion
Sce 2 = scenario activated on removal
Gr = group of actuators

Configuration using the MyHOME_Suite software

This is performed using the appropriate MyHOME_Suite application. This mode has the advantage of offering many more options when compared with the physical configuration. The software configuration requires Ethernet connection between the system and the PC, through the IP MH201 scenario module.

Ethernet connection to the system

HUB Switch
Ethernet network
MH201
Ethernet network
BUS-SCS
PC for configuration

SCENARIO mode programming

SCENARIO mode programming
This operation is performed to create a link between the key card switch and the scenario module. The procedure is as follows:
1) Power the key card switch. Check that the scenario module is in programming mode, with the green LED on;
2) Press and hold down programming key 1 (Learn IN) or 2 (Learn OUT) until the LED starts flashing (approximately 3 seconds);
3) Create the scenario using the system controls and actuators;
4) Once the scenario has been saved, briefly press programming key 1 (Learn IN) or 2 (Learn 2) to exit the programming status;
5) The scenario module will also have to exit programming status (see the scenario module technical information).

Cancelling the programming in SCENARIO mode:
1) Power the key card switch. Check that the scenario module is in programming mode, with the green LED on:
2) Press and hold down programming key 1 (Learn IN) or 2 (Learn 2) for 8 seconds. after 3 seconds the LED will turn on, after a further 5 seconds it will turn off again;
3) Release the key;
4) The LED flashing, followed by the LED switching off, indicates that the programming has been cancelled;
5) The scenario module will also have to exit programming status (see the scenario module technical information).

1. Programming key: Learn IN
2. Programming key: Learn OUT
3. LED

Wiring diagrams

Principle and configuration diagram for a hotel room

ITEM	DESCRIPTION
E49	Power supply
LN4651	Key card reader outside the door and indicators
348210	Key card
LN4648	Key card switch
LN4653	DND and MUR controls
LN4652	8 key scenario control
LN4691	Thermostat with display
MH201	IP scenario module
F430R8	Air conditioning actuator
F411/1N	DIN module 1 relay actuator

ROOM
CORRIDOR
RECEPTION

General note: the devices listed in the legend are for the LivingLight series.

A	The general switch GS (TM+EL) must be selected based on the absorption of the services installed.
B	The TM switch must be selected based on the power supply used.
C D	The TM switch must be selected based on the loads connected.
E	The actuator to be used depends on the type of air conditioning system installed.
F	If the current supplied by the E49 is not sufficient to power the SCS system, it is possible to use the E46ADCN power supply.

Description

Hotel room power supply key card switch. Thanks to the LED backlit slot, the device can be found in the dark. An automatic switch off delay can also be set.
It can be used with key cards with sizes between 45 mm and 54 mm (ISO).
The device can be configured in two different ways:
- **Physical configuration**, by inserting the configurators in the appropriate housings.
- **Configuration using the MyHOME_Suite software**, which can be downloaded from the website www.homesystems-legrandgroup.com; this last type of configuration has the advantage of offering many more options when compared with the physical. configuration.

Technical data

Power supply from SCS BUS:	18-27 Vdc
Max. absorption:	6 mA
Stand-by absorption:	5 mA
Operating temperature:	(-10) – (+45) ℃

Standards, Certifications, Marks

EN 60669-2-1
EN 50090-2-2
EN 50090-2-3
EN 50428

Dimensional data

Size: 2 flush mounted modules

Front view

Rear view

Legend

1. Programming key: Learn IN
2. Programming key: Learn OUT
3. LED
4. Key card detection microswitch
5. Configurator socket
6. SCS BUS connector

Physical configuration

Two modes:
- CENTRALIZED, to recall scenarios managed by the scenario programmer. When the key card is inserted and removed, the device forwards a signal to the scenario programmer, which depending on the scenarios set will activate the corresponding functions programmed.

A = 1-9 (CEN command address)
PL = 1-9 (CEN command address)
M1 = CEN
DEL1 = no configurator
M2 = no configurator
DEL2 = no configurator

Note: the insertion of the key card corresponds to "Pushbutton 1" of the control, while the removal of the key card corresponds to "Pushbutton 2" of the control

- SCENARIO, where by inserting the key card a group of actuators is enabled, and an entrance scenario is activated (through the scenario module), and by removing the key card an exit scenario is activated (through the scenario module), thanks to which all the group actuators will switch off and then disable after a set time delay.

A = 1-9 (as scenario module)
PL = 1-9 (as scenario module)
M1 = 1-8 (activation of the corresponding scenario: see table B)
DEL1 = 0 - 9 (switching on time delay at the insertion of the key card: see table A)
M2 = no configurator
DEL2 = 0 - 9 (switching off time delay after the removal of the key card: see table A)

Table A	
Configurator value	**Time**
0	0
1	1 min
2	2 min
3	3 min
4	4 min
5	5 min
6	10 min
7	15 min
8	15 sec
9	30 sec

Table B	
Configurator value	**Scenario - Group**
1	Scenario-group (Sce1=1, Sce2=9, Gr=1)
2	Scenario-group (Sce1=2, Sce2=10, Gr=2)
3	Scenario-group (Sce1=3, Sce2=11, Gr=3)
4	Scenario-group (Sce1=4, Sce2=12, Gr=4)
5	Scenario-group (Sce1=5, Sce2=13, Gr=5)
6	Scenario-group (Sce1=6, Sce2=14, Gr=6)
7	Scenario-group (Sce1=7, Sce2=15, Gr=7)
8	Scenario-group (Sce1=8, Sce2=16, Gr=8)

Note: Sce 1 = scenario activated on insertion
Sce 2 = scenario activated on removal
Gr = group of actuators

Configuration using the MyHOME_Suite software

This is performed using the appropriate MyHOME_Suite application. This mode has the advantage of offering many more options when compared with the physical configuration. The software configuration requires Ethernet connection between the system and the PC, through the IP MH201 scenario module.

Ethernet connection to the system

HUB Switch
Ethernet network
MH201
Ethernet network
BUS-SCS
PC for configuration

SCENARIO mode programming

SCENARIO mode programming:
This operation is performed to create a link between the key card switch and the scenario module. The procedure is as follows:
1) Power the key card switch. Check that the scenario module is in programming mode, with the green LED on;
2) Press and hold down programming key 1 (Learn IN) or 2 (Learn OUT) until the LED starts flashing (approximately 3 seconds);
3) Create the scenario using the system controls and actuators;
4) Once the scenario has been saved, briefly press programming key 1 (Learn IN) or 2 (Learn 2) to exit the programming status;
5) The scenario module will also have to exit programming status (see the scenario module technical information).

Cancelling the programming in SCENARIO mode:
1) Power the key card switch. Check that the scenario module is in programming mode, with the green LED on:
2) Press and hold down programming key 1 (Learn IN) or 2 (Learn 2) for 8 seconds. after 3 seconds the LED will turn on, after a further 5 seconds it will turn off again;
3) Release the key;
4) The LED flashing, followed by the LED switching off, indicates that the programming has been cancelled;
5) The scenario module will also have to exit programming status (see the scenario module technical information).

1. Programming key: Learn IN
2. Programming key: Learn OUT
3. LED
4. Key card detection microswitch

Wiring diagrams

Principle and configuration diagram for a hotel room

ITEM	DESCRIPTION
E49	Power supply
LN4650	Outside the door indicator
LN4649	Key card switch
LN4653	DND and MUR controls
LN4652	8 key scenario control
LN4691	Thermostat with display
MH201	IP scenario module
F430R8	Air conditioning actuator

General note: the devices listed in the legend are for the LivingLight series.

A The general switch GS (TM+EL) must be selected based on the absorption of the services installed.

B The TM switch must be selected based on the power supply used.

C D The TM switch must be selected based on the loads connected.

E The actuator to be used depends on the type of air conditioning system installed.

F If the current supplied by the E49 is not sufficient to power the SCS system, it is possible to use the E46ADCN power supply.

To the fan-coil or temperature control system

E F430R8

ZA	= 2
ZB	= 7
N	= 1
LOAD	= –

N L V1 V2 V3 Heating Cooling

D TM3

3513

Magnet / Contact / Contact / Magnet / NC contact / Protection line

C TM1 — To other room services

B TM2

A GS (TM+EL)

230 V 50 Hz

F E49 — MyHOME

ZA	= 2
ZB	= 7
TYPE	= 1
HEAT	= 7
COOL	= CEN
PUMP	= –
IN	= 3

H4691 LN4691 0 674 59

ECO ON ECO WINDOW CLOSED WINDOW OPEN

BUS SCS — To other devices

A	= 9
PL	= 8
M	= CEN
LED	= –

H4652 LN4652 0 675 92

R1	= 2
R2	= 7
M	= –

H4653 LN4653 0 675 93

DND MUR

A	= 9
PL	= 9
M1	= CEN
M2	= –
DEL1	= –
DEL2	= –

H4649 LN4649 0 675 65 5 727 35 5 722 35

ROOM
CORRIDOR
RECEPTION

MH201

Transformer

Bell 12 Vac/dc – 230 Vac max 1A

230 Vac

L1 L

127

R1	= 2
R2	= 7
M	= 2
L	= 0
A	= 1
PL	= 1
T	= 2

H4650 LN4650 0 675 90

Ethernet network
Ethernet network

HUB Switch
Other rooms
PC for room management

Special control

Description

Special control, flush-mounted with two modules, equipped with 4 buttons and a two-colour LED that can be adjusted/switched off with the button on the control. The control allows you to create both standard and special functions (timed On, scenario control, dimmer, sound system and video door entry functions).

Technical data

Power supply via SCS BUS: 27 Vdc
Operating power supply with SCS BUS: 18 – 27 Vdc
Current draw at maximum LED brightness: 6 mA for H4651M2
                                            7.5 mA for 067553
                                            8.5 mA for L4651M2
                                            and AM5831M2
Operating temperature: 5 – 35°C

Dimensions

Size: 2 flush-mounted modules

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.
For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

List of Functions

The device performs the following functions:
1. LIGHT SWITCH
2. AUTOMATION CONTROL
3. DEVICE LOCKING/UNLOCKING
4. SCENARIO MODULE CONTROL
5. PROGRAMMED SCENARIO ACTIVATION
6. PLUS PROGRAMMED SCENARIO ACTIVATION
7. VIDEO DOOR ENTRY FUNCTIONS
8. SOUND SYSTEM CONTROL

See the following pages for the configuration procedures.

Legend

1. LED
2. Top buttons
3. Bottom buttons
4. LED
5. LED control/off button
6. Configurator socket (note that this must only be used in My Home systems with the physical configuration)
7. BUS

LED Adjustment   PUSH

PUSH t > 2 s

Special control

Function selection

1. Light switch

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9
Room		0-10	A=AMB, PL=1-9
Group		1-255	A=GR, PL=1-9
General		general	A=GEN, PL=-

Installation and destination level:

The special control can also be used in systems where there are SCS/SCS interfaces (F422). By installing the control on the BUS of an interface (installation level), you can control one or more actuators located on the BUS of another interface (destination level).

Function		Virtual configuration (MYHOME_Suite)	Physical configuration
Destination level	Local bus	1-15	I= 1-9
	Riser bus	riser	I=CEN
	Complete system	entire system	I=0

To configure the installation level use MYHOME_Suite virtual configuration.

1.2 Mode

1.2.1 ON/OFF control:

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Cyclic		SPE=0, M=0
ON		SPE=0, M=ON
OFF		SPE=0, M=OFF
Button		SPE=0, M=PUL
ON with top button, OFF with bottom button.		SPE=0, M=0/I
Timed ON	0.5sec	SPE=0, M=8
	2sec	SPE=1, M=7
	30sec	SPE=0, M=7
	1min	SPE=0, M=1
	2min	SPE=0, M=2
	3min	SPE=0, M=3
	4min	SPE=0, M=4
	5min	SPE=0, M=5
	10min	SPE=1, M=8
	15min	SPE=0, M=6

For custom timed ON with period 0 to 255 hours use MYHOME_Suite virtual configuration.

Special control

1.2.2 ON/OFF Control and ADJUSTMENT (Point-to-Point only):

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
ON/OFF and cyclic ADJUSTMENT ON/OFF when pressing briefly and adjustment when holding down	SPE=0, M=0
ON with top button, OFF with bottom button and DIMMER when held down	SPE=0, M=0/I
ON with adjustment at 10%	SPE=3, M=1
ON with adjustment at 20%	SPE=3, M=2
ON with adjustment at 30%	SPE=3, M=3
ON with adjustment at 40%	SPE=3, M=4
ON with adjustment at 50%	SPE=3, M=5
ON with adjustment at 60%	SPE=3, M=6
ON with adjustment at 70%	SPE=3, M=7
ON with adjustment at 80%	SPE=3, M=8
ON with adjustment at 90%	SPE=3, M=9

1.2.3 ON/OFF Control and ADJUSTMENT (custom Point-to-Point only).

Virtual configuration (MYHOME_Suite)		Physical configuration		
Parameter / setting		Switch-on time (s)	Switch-on level 1 to 99%	
ON/OFF and cyclic ADJUSTMENT ON/OFF when pressing briefly and adjustment when holding down.	Soft-start and soft-stop setting from 0 to 255 seconds and switch-on level from 0 to 100%.	1		SPE=5 M=0
		2		SPE=5 M=1
		3		SPE=5 M=2
		5		SPE=5 M=3
		10	LIV1=0 – 9, LIV2=0 – 9 [1]	SPE=5 M=4
		20		SPE=5 M=5
		40		SPE=5 M=6
		60		SPE=5 M=7
		120		SPE=5 M=8
		255		SPE=5 M=9
ON with top button, OFF with bottom button and DIMMER when held down.	Soft-start and soft-stop setting from 0 to 255 seconds, switch-on level from 0 to 100%	1		SPE=9 M=0
		2		SPE=9 M=1
		3		SPE=9 M=2
		5		SPE=9 M=3
		10	LIV1=0 – 9, LIV2=0 – 9 [2]	SPE=9 M=4
		20		SPE=9 M=5
		40		SPE=9 M=6
		60		SPE=9 M=7
		120		SPE=9 M=8
		255		SPE=9 M=9

NOTE 1: Selection of fixed adjustment level from 1% to 99% via positions LIV1=0 – 9 and LIV2=0 – 9. The management is cyclic with ON at the selected level and OFF. If LIV1=LIV2=0, the control allows cyclically switching ON (at the last saved level) and OFF when pressing briefly. In the case of point-to-point controls the adjustment is made by pressing and holding down.

NOTE 2: selection of fixed adjustment level from 1% to 99% via positions LIV1=0–9 and LIV2=0–9. The control is ON at the selected level with the top button and OFF with the bottom button. If LIV1=LIV2=0, the control allows switching ON (at the last saved level) by briefly pressing the top button and OFF with the bottom button; only in the case of point-to-point controls will pressing and holding down enable making the adjustment (upwards with the top button and downwards with the bottom button) on 100 levels.

1.2.4 Blink command

When an actuator receives a blink command, it implements it by closing and opening the relay for a time equal to T that can be configured as shown in the table.

Combine it with a command configured OFF to switch it off.

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
Blink 0.5 s	SPE=2, M=0
Blink 1 s	SPE=2, M=1
Blink 1.5 s	SPE=2, M=2
Blink 2 s	SPE=2, M=3
Blink 2.5 s	SPE=2, M=4
Blink 3 s	SPE=2, M=5
Blink 3.5 s	SPE=2, M=6
Blink 4 s	SPE=2, M=7
Blink 4.5 s	SPE=2, M=8
Blink 5 s	SPE=2, M=9

For blinking with a period of from 5.5 to 8 seconds, use MYHOME_Suite virtual configuration

2. Automation control

2.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9
Room		0-10	A=AMB, PL=1-9
Group		1-255	A=GR, PL=1-9
General		general	A=GEN, PL=-

Installation and destination level:

The special control can also be used in systems where there are SCS/SCS interfaces (F422). By installing the control on the BUS of an interface (installation level), you can control one or more actuators located on the BUS of another interface (destination level).

Function		Virtual configuration (MYHOME_Suite)	Physical configuration
Destination level	Local bus	1-15	I= 1-9
	Riser bus	riser	I=CEN
	Complete system	entire system	I=0

To configure the installation level use MYHOME_Suite virtual configuration.

2.2 Mode

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
Bistable control	SPE=0 M=↑↓
Monostable control	SPE=0 M=↑↓M

Special control

3. Device locking/unlocking

3.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9
Room		0-10	A=AMB, PL=1-9
Group		1-255	A=GR, PL=1-9
General		general	A=GEN, PL=-

Installation and destination level:

The special control can also be used in systems where there are SCS/SCS interfaces (F422). By installing the control on the BUS of an interface (installation level), you can control one or more actuators located on the BUS of another interface (destination level).

Function		Virtual configuration (MYHOME_Suite)	Physical configuration
Destination level	Local bus	1-15	I= 1-9
	Riser bus	riser	I=CEN
	Complete system	entire system	I=0

To configure the installation level use MYHOME_Suite virtual configuration.

3.2 Mode

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
Disable (bottom button)	SPE=1 , M=1
Enable (bottom button)	SPE=1, M=2
Disable (top button) - Enable (bottom button)	SPE=1, M=3

4. Scenario module control

4.1 Addressing

Function	Virtual configuration (MYHOME_Suite)	Physical configuration
Room (of the scenario module)	0-10	A=1-9
Light point (of the scenario module)	0-15	PL=1-9

Installation and destination level:

The special control can also be used in systems where there are SCS/SCS interfaces (F422). By installing the control on the BUS of an interface (installation level), you can control one or more scenario modules located on the BUS of another interface (destination level).

Function		Virtual configuration (MYHOME_Suite)	Physical configuration
Destination level	Local bus	1-15	I= 1-9
	Riser bus	riser	I=CEN
	Complete system	entire system	I=0

To configure the installation level use MYHOME_Suite virtual configuration.

4.2 Mode

Virtual configuration (MYHOME_Suite)			Physical configuration
Function	**Parameter / setting**		
Scenario activation and modification	Scenario top button	1-16	SPE=6, M=1-4 [1]
	Scenario bottom button	1-16	
Scenario activation	Scenario top button	1-16	SPE=4, M=1-9 [2]
	Scenario bottom button	1-16	

For Delayed activation of the top/bottom button use MYHOME_Suite virtual configuration

NOTE 1): With the special control you can retrieve, create, or modify 4 scenarios saved in the scenario module F420. Each button on the control can be linked with one of the saved scenarios by configuring position M, as shown in the table.

NOTE 2): Repeating scenario 1 – 9 of the scenario module F420 whose address is indicated in positions A and PL of the control (complete the control with a double button cover).

Value of configurator M	Button 1 (T1)	Button 2 (T2)	Button 3 (T3)	Button 4 (T4)
1	scenario 1	scenario 2	scenario 3	scenario 4
2	scenario 5	scenario 6	scenario 7	scenario 8
3	scenario 9	scenario 10	scenario 11	scenario 12
4	scenario 13	scenario 14	scenario 15	scenario 16

NOTE: M = 1-4 identifies the group of scenarios to be controlled with the four buttons T1, T2, T3 and T4.

Scenario programming

To program, change or delete a scenario you need to enable programming module F420 so that the status LED is green (press the locking/unlocking button on the scenario module for at least 0.5 seconds) and then continue with the following steps:

1) press one of the four special control buttons to which the scenario should be associated to for 3 seconds and the corresponding LED will start blinking;

2) set the scenario using the corresponding controls for the various Automation, Temperature Control, and Sound System functions;

3) confirm the scenario by briefly pressing the corresponding button on the special control to exit the programming mode;

4) to change a scenario, or to create new ones to use with the other buttons, repeat the procedure starting from point 1. To recall an already set scenario, briefly pressing the corresponding button on the control is enough. If you want to delete a scenario completely, press and hold down the corresponding button for approximately 10 seconds.

Buttons for managing scenarios

Button 1
Button 1 LED
Button 3 LED
Button 3
Button 2
Button 2 LED
Button 4 LED
Button 4

Special control

5. Programmed scenario activation

Enabling buttons for sending a command to the scenario programmer MH200N.
The address of the assigned command in positions A and PL must be unique and match the scenario to be activated. The control can be connected at any point in the system (local bus or riser).

5.1 Addressing

		Virtual configuration (MYHOME_Suite)	Physical configuration
Addressing type			
	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9

5.2 Mode

	Virtual configuration (MYHOME_Suite)	Physical configuration
Top button	0-31	SPE=0 M=CEN
Bottom button	0-31	SPE=0 M=CEN
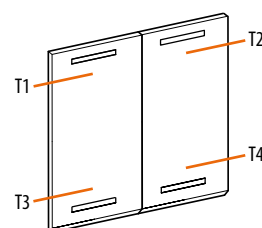
6. Plus programmed scenario activation

To configure the number 1 - 2047 of the scenario and of the buttons 0 - 31 on the control device, use MYHOME_Suite virtual configuration

7. Video door entry functions

7.1 Unlocking control

7.1.1 Addressing

Addressing type	Virtual configuration (MYHOME_Suite)	Physical configuration
Address of the external unit	0-95	A=1-9 PL=1-9 [1]
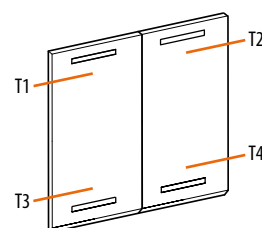
Note 1): Define the address P (two digits) of the external unit whose lock is to be controlled with button T3 (bottom left).
Button T4 (bottom right) controls the lock of the external unit P+2. Button T1 (top left) controls the lock of the external unit P+1 and button T2 (top right) that of the external unit P+3.

Destination level

Virtual configuration (MYHOME_Suite)	Physical configuration
Same command level	SPE=7 M=1

To set the Riser or Backbone destination level use MYHOME_Suite virtual configuration

Special control

7.2 Floor call control

7.2.1 Addressing
Define the address (two digits) of the internal unit to call by using the control device.

Addressing type	Virtual configuration (MYHOME_Suite)	Physical configuration
Address of the internal unit	0-99	A=1-9 PL=1-9

Type of call:

Virtual configuration (MYHOME_Suite)	Physical configuration
Function	
Point-to-point	SPE=7 M=2

To configure the "General" call use MYHOME_Suite virtual configuration

7.3 Control for stair lighting

7.3.1 Addressing
The device takes on the function of the stair lights power button of the internal unit identified by its address (two digits).

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Address of the internal unit from which the lights are controlled.	0-99	SPE=7 M=3
		A=1-9, PL=1-9

---

8. Sound system control

This mode allows you to control the amplifiers and the sources of the Sound System.

8.1 Addressing

You can manage a single amplifier (point-to-point control), some amplifiers (room control) and all the amplifiers in the system (general control).

Virtual configuration (MYHOME_Suite)			Physical configuration SPE=8
Addressing type		**Parameter / setting**	
Point-to-point	Room	0-9	A=0-9
	Sound point	0-9	PL=0-9
Room	Room	0-9	A=AMB
			PF=0-9
General		General	A=GEN

Special control

Follow Me mode

Enables, upon powering the amplifier, activating the last source switched on.

Virtual configuration (MYHOME_Suite)			Physical configuration
Function		**Parameter / setting**	
Switch back on from the last source	YES	YES	M=0
	NO	Definition of the source 1-4	M=1-4 [1)

NOTE 1): indicates the sound source to be activated before switching on the amplifier.

For example:

- if A=1, PL/PF = 1 and M=3 the command will control the amplifier with address A=1 and PF=1 and activate source number 3.
  The buttons on the special control perform the following functions:

1) Briefly pressing T1 sends out the following sequence:
   - sources ON, source 1 is turned on only if M=0;
   - amplifier ON

2) Pressing and holding down T1:
   - for point-to-point commands if the amplifier is already on only the volume (VOL+) is controlled; if the amplifier is switched off the switch-on sequence is sent first;
   - for Room, Group and General controls only the volume is controlled.

3) Pressing and holding down T3 controls the volume (VOL-).
   Briefly pressing it sends the OFF command to the amplifier.

4) Pressing button T2 changes the source.

5) Button T4 is the control for the active source

8 key multifunction control
BUS SCS
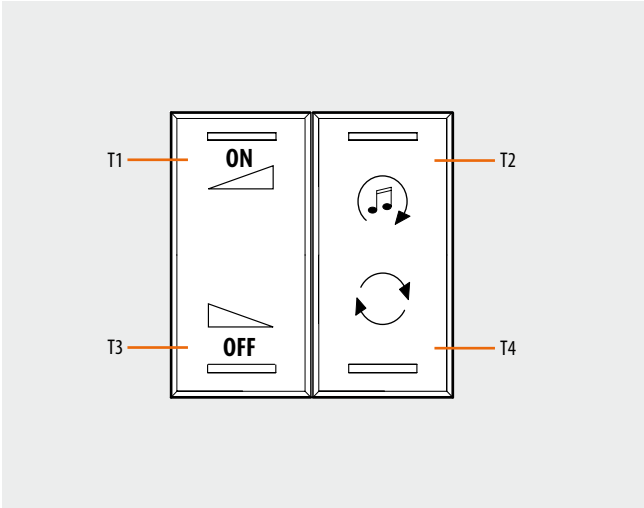
Description

Flush mounted multifunction control, with 8 backlit keys in the centre section, where the icons indicating the functions allocated to the keys can be found.
The device can be configured in two different ways:
- **Physical configuration**, by inserting the configurators in the appropriate housings.
- **Configuration using the MyHOME_Suite software**, which can be downloaded from the website www.homesystems-legrandgroup.com; this last type of configuration has the advantage of offering many more options when compared with the physical. configuration.

Irrespective of the mode implemented, an A/PL address must always be assigned to the control.

In can be programmed in 4 operating modes:
- **The self-learning mode** (cyclical or non cyclical) gives the possibility of associating to each key the majority of the typical controls of the automation, sound, and video door entry (staircase lights, door lock, call to the floor, door lock and camera cycling) systems, in addition to the auxiliary controls.
- **The scenario mode** gives the possibility of recalling, programming and deleting 8 scenarios of a scenario module.
- **The swivelling mode** gives the possibility of driving 4 light points of shutters in succession (room or group).
- **CEN mode** gives the possibility of using the control together with scenario programmer MH200N or MH201.

Front view

Rear view

Related items

3541 - 0 675 95   A5 sheets with symbol customisations, BLACK
3542 - 0 675 96   A5 sheets with symbol customisations, WHITE

Technical data

Power supply from SCS BUS:	18 – 27 Vdc	
Absorption:	with LEDs Off:	5 mA
	with LEDs On at 100%:	20 mA
Operating temperature:	0 – 40 °C	
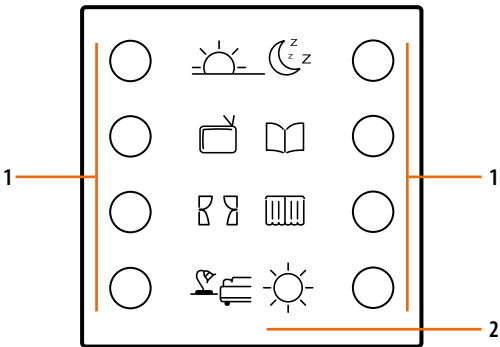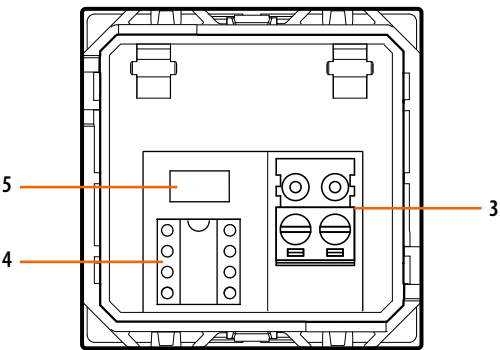
Legend

1. Kyes
2. Customisable labels
3. Clamps for connection to the SCS BUS
4. Configurator socket
5. Programming pushbutton for self-learning and scenario modes

Standards, Certifications, Marks

EN 60669-2-1
EN 50090-2-2
EN 50090-2-3
EN 50428

Dimensional data

Size: 2 flush mounted modules

Physical configuration

◎	**A**	◎
◎	**PL**	◎
◎	**M**	◎
◎	**LED**	◎

A room
PL light point
M mode (see the dedicated section)
LED backlight setting
(see the dedicated section)

Configurator A
room address

Configurator PL
light point address

Configurator M

1) Self-learning mode M=0
This mode of operation gives the possibility of associating an individual control to any key of the device. It is possible to create, delete or modify each control. The device may be configured using any A/PL address already present in the system, or a unique address not used by other devices.

Programming the keys
The procedure to associate each key to a different control is as follows:
1) Press and release the programming key on the back of the device; the backlighting LEDs will flash slowly:
2) Press the key to program within 20 seconds: the LEDs start flashing much quicker, indicating the activation of the programming mode;
3) Set the control to associate to the key using the controls and/or the corresponding actuator; the LEDs will start flashing slowly;
4) At this point it is possible to repeat points 2 and 3 for all the keys, including those that have already been associated, to change their association association;
5) Quickly press the programming pushbutton, or wait 20 seconds to exit the programming procedure.

Cancelling the programming of the keys
1) Press and release the programming key; the backlight LEDs will flash slowly:
2) Within 20 seconds press and hold down for 4 seconds the key to cancel; from now on the key cancelled will no longer activate any control until programmed again;
3) The LEDs come on at full power for 4 seconds, after which it will be possible to repeat point 2 to cancel the programming of other keys;
4) Press and quickly release the programming pushbutton, or wait 20 seconds to exit the programming procedure.
NOTE: To delete the programming of all the keys at the same time, press and quickly release the programming key; the LEDs start flashing slowly; press and hold down again for 10 seconds the pushbutton on the back: the LEDs come on for approximately 4 seconds, confirming the cancellation of all programming.

2) Non-cyclical self-learning mode M=6
This mode is a variation of the self-learning mode (M=0), where, however, the keys never operate cyclically. Therefore, if for example the ON of an actuator or dimmer is acquired, the pair of keys is automatically configured to switch on, or increase the intensity level, for the left key, and switch off, or decrease the intensity level, for the right key. If, on the other hand, a single function is learnt (e.g. recalling of a scenario), the other key of the pair remains without function, or retains the previous function. The device may be configured using any A/PL address already present in the system, or a unique address not used by other devices.

3) Scenario module M = 1 – 2
This operating mode can only be used if the system includes a scenario module F420; the matching is achieved by assigning to both the items the same address, identified by A=0-9 and PL=1-9. The user can create, cancel, or modify the scenarios found in the scenario module, and can recall them using the keys.
The procedure gives the possibility of saving up to 16 scenarios using two devices.

The following table shows the correspondence between the number of the scenario saved in the scenario module, and the keys of the control in the possible configurations:

Key number	M=1	M=2
Key 1	Scenario 1	Scenario 9
Key 2	Scenario 2	Scenario 10
Key 3	Scenario 3	Scenario 11
Key 4	Scenario 4	Scenario 12
Key 5	Scenario 5	Scenario 13
Key 6	Scenario 6	Scenario 14
Key 7	Scenario 7	Scenario 15
Key 8	Scenario 8	Scenario 16

Programming a scenario with the F420 module
For the programming of the scenario, the procedure is as follows:
1) The F420 scenario module must be configured with self-learning enabled (it is necessary to press the self-learning key so that the corresponding LED turns green; if the LED is red, self-learning is disabled);
2) Press and release the programming key on the back of the multifunction control; the LEDS start flashing slowly (1 sec. ON and 1 sec. OFF);
3) Within 20 seconds press the key corresponding to the scenario to program on the multifunction control; its LEDs start flashing quickly, indicating the activation of the programming mode;
4) Set the scenario, using the controls and/or actuators of the system;
5) Press the programming key of the multifunction control again to exit programming and complete the procedure: the LEDs start flashing slowly again; it is now possible to repeat points 2, 3, and 4 for all the scenarios; the same procedure must also be used to change the scenarios already set;
6) Press and quickly release the self-learning pushbutton on the F420 module, or wait 20 seconds to complete the procedure (red LED on).
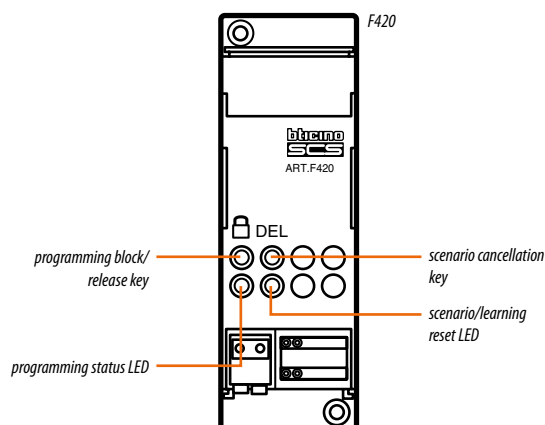
Deleting a scenario

To delete the scenario, the procedure is as follows:

1) The F420 scenario module must be in configuration mode with self-learning enabled;
2) Press and release the programming key of the multifunction control; the LEDS start flashing slowly (1 sec. ON and 1 sec. OFF);
3) Within 20 seconds press and hold down for 4 seconds the key of the scenario to be cancelled on the multifunction control;
4) The LEDs flash quickly for 4 seconds, after which it will be possible to repeat point 2 to delete the other programming.
5) Press and quickly release the programming pushbutton on the back of the control, or wait 20 seconds to exit the deleting procedure.

NOTE: to reset the whole memory, it will be necessary to directly act on the scenario module: press "DEL" for ten seconds, after enabling the scenario module for programming.

4) Swivelling modes M=0/I; ↑↓; ↑↓M

These modes ensure quick installation without the need for further learning, or scenario modules, enabling the control of 4 light points or shutters with consecutive addresses.

The **A PL** address is the light point or shutter controlled by the first pair of keys (the keys are paired horizontally), the subsequent pairs controls the subsequent light points or shutters.

If the **Amb** or **Gr** configurators are connected to **A**, in the same way, the 4 pairs of keys control consecutive rooms or groups starting from the one indicated by the **PL** configurator.

Possible function	Value of M configurator
ON/OFF control: On control with the left key, Off control with the right key. For point-to-point controls the key perform the On/Off function with a short pressure and the adjustment with an extended pressure: for the other controls, only On/Off are performed	0/I
Control (UP/DOWN for shutters): up and down control, until fully open or closed	↑↓
Monostable control (UP/DOWN for shutters): up and down control, for the time the key is pressed	↑↓ M

5) Scenario programmer mode, M=CEN

The matching between a scenario configured in the scenario programmer MH200N or MH201, and the corresponding controls keys of the multifunction control, is completed during the programming of the scenario itself using the dedicated software.
Always assign to the control a unique A/PL address on the system (it must not be used by any other device installed on the BUS); the A=0, PL=0 configuration is not acceptable. This operating mode can only be used if the system includes a scenario programmer (MH200 or MH201).

**LED configurator
Setting the backlight intensity**

The configurator in the LED housing gives the possibility of setting the backlight at the desired level; see table:

LED configurator	Brightness level
0	default setting = 30%
1	level 10 %
2	level 15 %
3	level 20 %
4	level 25 %
5	level 30 %
6	level 40 %
7	level 50 %
8	level 60 %
9	level 80 %
OFF	level OFF
ON	level 100 %

Configuration using the software in a typical hotel system

This is performed using the appropriate MyHOME_Suite application. This mode has the advantage of offering many more options when compared with the physical configuration. The software configuration requires Ethernet connection between the system and the PC, through the IP MH201 scenario module.

Ethernet connection to the system

PC for room management

Basic control for
2 independent loads

<div align="right">
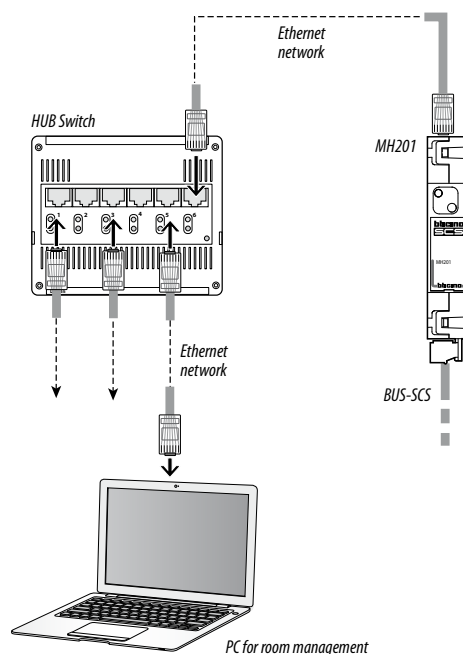
067552   H4652/2
L4652/2   AM5832/2

</div>

Description

Two-module flush-mounted control equipped with four buttons and a two-colour LED. The LEDs can be controlled/switched off with the button on the control. The device can drive a single actuator for single or double loads or two actuators for single loads or for independent double loads.

The device can be installed in a My Home system and use the physical or virtual configuration, or as a component of the Lighting Management system and use the specific configuration types (Plug&go, Push&Learn, Project&Download).

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with BUS SCS:	18 – 27 Vdc
Current draw at maximum LED brightness:	6 mA for H4652/2
	8.5 mA for L4652/2,
	AM5832/2 and 067552

Dimensions

Overall size: 2 flush-mounted modules

Configuring My Home

The device can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via the MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com: this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

List of Functions

The device performs the following functions:
1. LIGHT SWITCH
2. AUTOMATION CONTROL
3. PROGRAMMED SCENARIO ACTIVATION
4. PLUS PROGRAMMED SCENARIO ACTIVATION

See the following pages for the configuration procedures.

Legend

1. LED
2. Top buttons
3. Bottom buttons
4. LED
5. LED control/off button
6. Configurator seat (note that this must only be used in My Home systems with the physical configuration)
7. BUS

LED Adjustment

PUSH t > 2 s
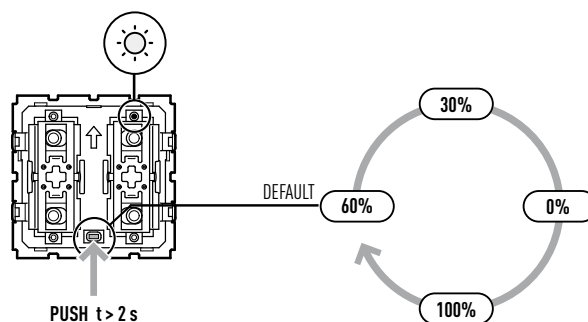
Basic control for 2 independent loads

067552   H4652/2
L4652/2   AM5832/2

Function selection

1. Light switch

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A1, A2=1-9
	Lighting point	0-15	PL1, PL2=1-9
Room		0-10	A1, A2=AMB, PL1, PL2=1-9
Group		1-255	A1, A2=GR, PL1, PL2=1-9
General		General	A1, A2=GEN

1.2 Mode

1.2.1 ON/OFF control:

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Cyclic.		M1, M2=0
ON		M1, M2=ON
OFF		M1, M2=OFF
Button		M1, M2=PUL
Timed ON	0.5sec	M=8
	30sec	M=7
	1min	M=1
	2min	M=2
	3min	M=3
	4min	M=4
	5min	M=5

1.2.2 ON/OFF Control and ADJUSTMENT (Point-to-Point only):

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
ON/OFF and cyclic ADJUSTMENT. ON/OFF when pressing briefly and adjustment when holding down.	M1, M2=0
ON with top button, OFF with bottom button and DIMMER when held down	M1, M2=0/1

For the "ON/OFF with adjustment" function, "Timed ON" with parameter 2sec, 10min, 15min, "Blinking", "Cyclic with custom point-to-point adjustment", "ON/OFF with custom point-to-point adjustment", "Cyclic with custom adjustment" and "Custom cyclic dimmer with no adjustment" use virtual configuration via MYHOME_Suite

With the virtual configuration, for the room, group or general controls, you can set a lighting point address for the return of the load status

Basic control for 2 independent loads

2. Automation control

2.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A1, A2=1-9
	Lighting point	0-15	PL1, PL2=1-9
Room		0-10	A1, A2=AMB, PL1, PL2=1-9
Group		1-255	A1, A2=GR, PL1, PL2=1-9
General		general	A1, A2=GEN

NOTE: With the virtual configuration, for the room, group or general controls, you can set a
lighting point address for the return of the load status

2.2 Mode

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
Bistable control	M1, M2=↑↓
Monostable control	M1, M2=↑↓M
Bistable control and lath control	M1, M2=6

3. Programmed scenario activation

3.1 Addressing

		Virtual configuration (MYHOME_Suite)	Physical configuration
Addressing type			
	Room	0-10	1-9
	Lighting point	0-15	1-9

3.2 Mode

	Virtual configuration (MYHOME_Suite)	Physical configuration
Top button	0-31	M1, M2=CEN
Bottom button	0-31	M1, M2=CEN

NOTE: If used only for CEN controls (M1=M2=CEN), do not configure A2, PL2.
T1-T4= scenario buttons 1-4
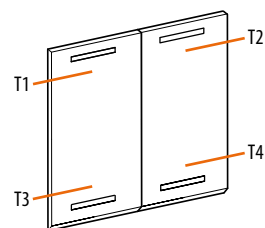
4. Plus programmed scenario activation

To configure address 1 - 2047 of the scenario and number 0 - 31 use MYHOME_Suite
virtual configuration

Lighting Management Configuration

If the device is installed in a Lighting Management system it can be configured in the
following ways:
- Plug&go (see dedicated technical guide)
- Push&Learn
- Project&Download, with the Virtual Configurator software you can perform all the
  functions listed below:
- dual light control
- dual CEN control
- dual CEN PLUS control
- dual AUX control

Basic control for
3 independent loads

Description

Three module flush mounted control, with six pushbuttons and LEDs, which signal the status of the control.

List of Functions

The device performs the following functions:
1. LIGHT SWITCH
2. AUTOMATION CONTROL
3. PROGRAMMED SCENARIO ACTIVATION
6. PLUS PROGRAMMED SCENARIO ACTIVATION

See the following pages for the configuration procedures.

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	9 mA

Dimensions

Size: 3 flush-mounted modules

Configuring My Home

The device can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.
For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.
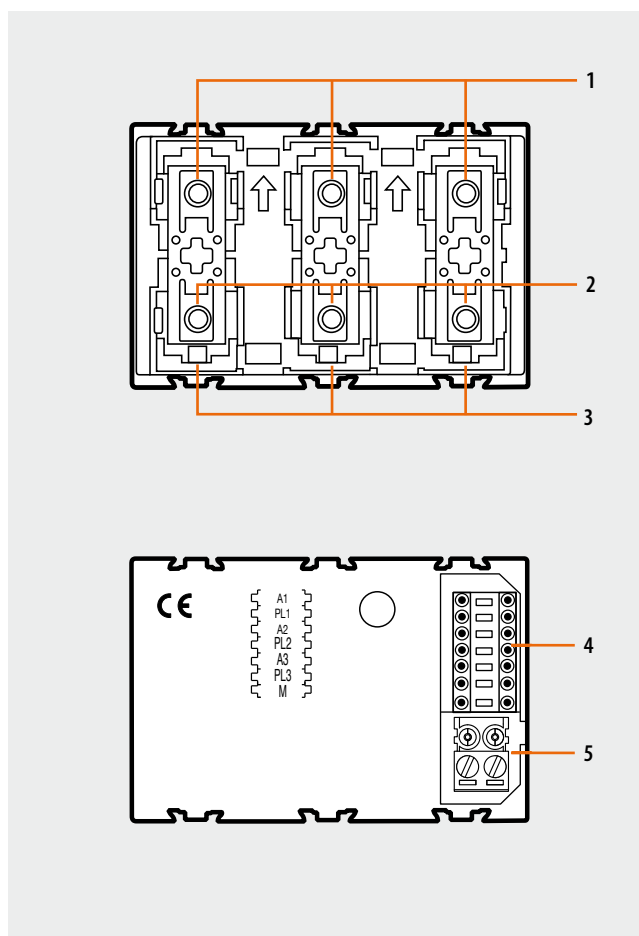
Legend

1. Top buttons

2. Bottom buttons

3. LED

4. Configurator socket (note that this must only be used in My Home systems with the physical configuration)

5. BUS

Basic control for
3 independent loads

067554   H4652/3
AM5832/3   L4652/3

Function selection

1. Light switch

1.1 Addressing

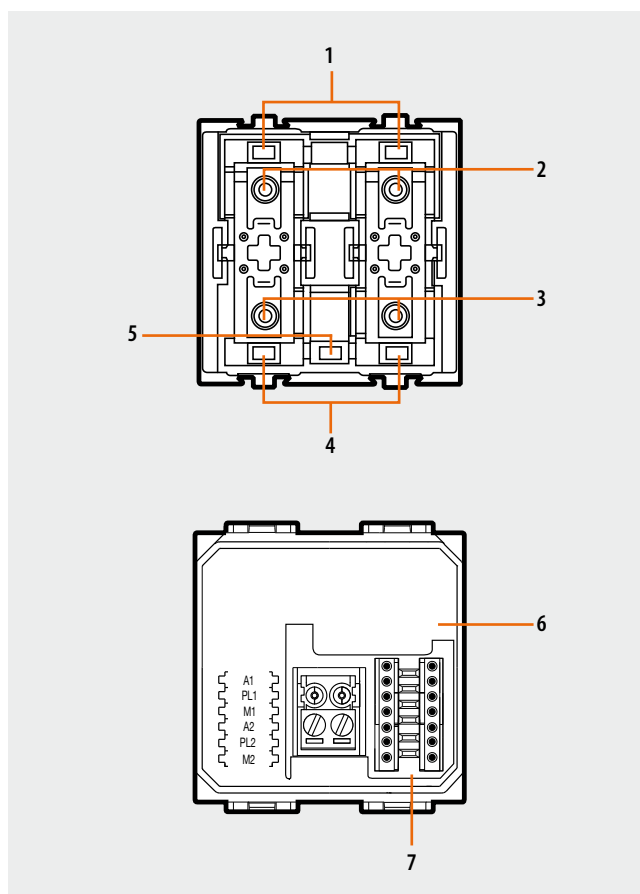| Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A1, A2, A3=1-9
	Lighting point	0-15	PL1, PL2, PL3=1-9
Room		0-10	A1, A2, A3=AMB, PL1, PL2, PL3=1-9
Group		1-255	A1, A2, A3=GR, PL1, PL2, PL3=1-9
General		General	A1, A2, A3=GEN

1.2 Mode

1.2.1 ON/OFF control:

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Cyclic.		M=0 See table for functions/button covers

For custom timed ON with period 0 to 255 hours use MYHOME_Suite virtual configuration.

1.2.2 ON/OFF Control and ADJUSTMENT (Point-to-Point only):

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
ON/OFF and cyclic ADJUSTMENT. ON/OFF when pressing briefly and adjustment when holding down.	See table for functions/button covers
ON with top button, OFF with bottom button and DIMMER when held down	See table for functions/button covers

To configure the mode as Cyclic, Timed ON, Cyclic Dimmer, ON/OFF, with adjustment, OFF, ON and PUL, use MYHOME_Suite virtual configuration. You can also set a reference address for the load status for a room or group control.
For the physical configuration, the device consists of three independent controls and on the back of the device there are three separate A and PL positions, which relate to the keys on the front of the control. From left to right, the three buttons correspond to control 1 (A1, PL1), control 2 (A2, PL2), and control 3 (A3, PL3). See table at end of sheet.

2. Automation control

2.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A1, A2, A3=1-9
	Lighting point	0-15	PL1, PL2, PL3=1-9
Room		0-10	A1, A2, A3=AMB, PL1, PL2, PL3=1-9
Group		1-255	A1, A2, A3=GR, PL1, PL2, PL3=1-9
General		general	A1, A2, A3=GEN

With the virtual configuration, for the room, group and general controls, you can set a light point address for the return of the load status

MQ00290-c-EN   01/08/2013

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2.2 Mode

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
Bistable control	M=3 and see table for function/button cover at end of sheet
Monostable control	M=6 and see table for function/button cover at end of sheet

NOTE: For the physical configuration, the device consists of three independent controls and on the back of the device there are three separate A and PL positions, which relate to the keys on the front of the control. From left to right, the three buttons correspond to control 1 (A1, PL1), control 2 (A2, PL2), and control 3 (A3, PL3). See table at end of sheet.

3. Programmed scenario activation

3.1 Addressing

		Virtual configuration (MYHOME_Suite)	Physical configuration
Addressing type			
	Room	0-10	A=1-9 (do not configure A2, A3)
	Lighting point	0-15	PL=1-9 (do not configure PL2, PL3)

3.2 Mode

	Virtual configuration (MYHOME_Suite)	Physical configuration
Top button	0-31	M=CEN
Bottom button	0-31	M=CEN

T1-6= scenario buttons 1-6
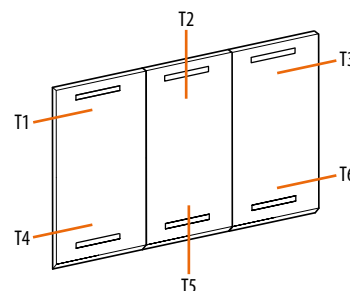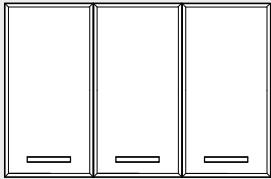
4. Plus programmed scenario activation
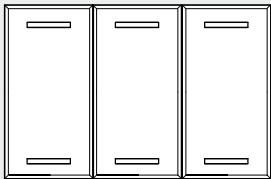
To configure address 1 - 2047 of the scenario and of the number of 0 - 31 use MYHOME_ Suite virtual configuration
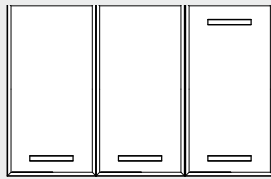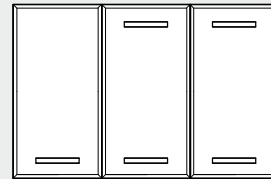
Table for function/ button cover to use

Value of configurator in position M	Button covers used/function
no configurator	Cyclic ON-OFF

Note: If the control is assigned to a dimmer actuator with operating modes cyclical ON-OFF, ON (upper key) and OFF (lower key) the brightness can also be adjusted.

Value of configurator in position M	Button covers used/function	
1	Cyclic ON-OFF	up-down
4	Cyclic ON-OFF	monostable up-down
7	Cyclic ON-OFF	ON (top button) OFF (bottom button)

Value of configurator in position M	Button covers used/function
3	up-down
6	monostable up-down
9	ON (top button) OFF (bottom button)
CEN	enabling the T1-T2-T3 (upper) and T4-T5-T6 (lower) keys to manage scenarios of the programmer MH200N.*

Note (*): Do not configure positions A2, PL2 and A3, PL3.

Value of configurator in position M	Button covers used/function	
2	Cyclic ON-OFF	up-down
5	Cyclic ON-OFF	monostable up-down
8	Cyclic ON-OFF	ON (top button) OFF (bottom button)

Touch control

Description

Touch control with two or three modules with which you can send commands for automation, sound system, and manage scenarios stored in the scenario module.

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Maximum current draw:	18 mA
Operating temperature:	5 – 35°C
Size:	2 flush-mounted modules for HC/HS4653/2
Size:	3 flush-mounted modules for HC/HS4653/3

Configuration

The device can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.
For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.
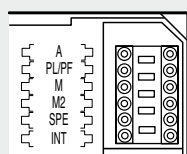
A	room
PL/PF	lighting point / sound point
M	mode
M2	mode 2
SPE	special
INT	LED brightness adjustment

Legend

1. Luminous indicator
2. Hot spot

List of Functions

The device performs the following functions:
1. LIGHT SWITCH
2. AUTOMATION CONTROL
3. DEVICE LOCKING/UNLOCKING
4. SCENARIO MODULE CONTROL
5. PROGRAMMED SCENARIO ACTIVATION
6. PLUS LIGHT MANAGEMENT SCENARIO ACTIVATION
7. PLUS PROGRAMMED SCENARIO ACTIVATION
8. VIDEO DOOR ENTRY FUNCTIONS
9. SOUND SYSTEM CONTROL

See the following pages for the configuration procedures.

Touch control

Function selection

1. Light switch

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=0-9
Room		0-10	A=AMB
Group		1-255	A=GR
General		General	A=GEN

With the virtual configuration, for the room, group and general controls, you can set a light point address for the return of the load status

You can also configure the "Installation level" and the "Destination level".

1.2 Mode

1.2.1 ON/OFF control:

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	Parameter / setting	
Cyclic (point-to-point)		SPE=0, M=0
ON		SPE=0, M=ON
OFF		SPE=0, M=OFF
Cyclic		SPE=1, M=7
Button		SPE=0, M=PUL
Timed ON	0.5sec	SPE=0, M=8
	2sec	SPE=8, M=1
	30sec	SPE=0, M=7
	1min	SPE=0, M=1
	2min	SPE=0, M=2
	3min	SPE=0, M=3
	4min	SPE=0, M=4
	5min	SPE=0, M=5
	10min	SPE=7, M=2
	15min	SPE=0, M=6

For the timed ON control with period 0-255 hours, 0-59 minutes and 0-59 seconds use MYHOME_Suite virtual configuration

1.2.2 ON/OFF Control and ADJUSTMENT (Point-to-Point only):

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
ON/OFF and cyclic ADJUSTMENT. ON/OFF when pressing briefly and adjustment when holding down.	SPE=0, M=0
ON and point-to-point dimmer	SPE=0, M=ON
OFF and point-to-point dimmer	SPE=0, M=OFF
ON with adjustment at 10%	SPE=3, M=1
ON with adjustment at 20%	SPE=3, M=2
ON with adjustment at 30%	SPE=3, M=3
ON with adjustment at 40%	SPE=3, M=4
ON with adjustment at 50%	SPE=3, M=5
ON with adjustment at 60%	SPE=3, M=6
ON with adjustment at 70%	SPE=3, M=7
ON with adjustment at 80%	SPE=3, M=8
ON with adjustment at 90%	SPE=3, M=9

For the functions of "Cyclic with custom point-to-point adjustment", "Cyclic with custom adjustment", "Cyclic dimmer without adjustment", "Custom dimmer ON without adjustment", "Custom dimmer OFF without adjustment", "ON with custom adjustment", "OFF with custom adjustment", "ON and dimmer" and "OFF and dimmer" use MYHOME_Suite virtual configuration

1.2.3 Blink command

When an actuator receives a blink command, it implements it by closing and opening the relay for a time equal to T that can be configured as shown in the table.

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
Blink 0.5 s	SPE=2, M=0
Blink 1 s	SPE=2, M=1
Blink 1.5 s	SPE=2, M=2
Blink 2 s	SPE=2, M=3
Blink 2.5 s	SPE=2, M=4
Blink 3 s	SPE=2, M=5
Blink 3.5 s	SPE=2, M=6
Blink 4s	SPE=2, M=7
Blink 4.5 s	SPE=2, M=8
Blink 5 s	SPE=2, M=9

For blinking with a period of from 5.5 to 8 seconds, use MYHOME_Suite virtual configuration

2. Automation control

To configure use MYHOME_Suite virtual configuration.
The possible single functions are:
- UP bistable control
- DOWN bistable control
- UP monostable control
- DOWN monostable control

3. Device locking/unlocking

To configure use MYHOME_Suite virtual configuration.

4. Scenario module control

4.1 Addressing

Function	Virtual configuration (MYHOME_Suite)	Physical configuration
Room (of the scenario module)	0-10	A=1-9
Lighting point (of the scenario module)	0-15	PL=0-9

4.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	Parameter / setting	
Scenario modification and activation	1-16	SPE=6[1), M,M2=1-16

To configure the "Installation level" and the "Destination level" and for Button activation delays use MYHOME_Suite virtual configuration

NOTE 1): By setting configurator 6 in position SPE, the touch control allows you to recall, program and delete any one of the 16 scenarios contained in a Scenario Module F420.

The scenario number can be selected using the configurators 1 - 9 in positions M and M2, as in the following table. In positions A and PL you need to indicate the address of the Scenario Module to be controlled.

M	M2	Scenario number
0	1	1
0	2	2
...	...	...
1	6	16

Programming a scenario

1) Programming the Scenario Module requires enabling programming;
2) Move your hand toward the area of the control sensors (the LEDs will come on at full brightness) and hold your hand in place, after 3 seconds the LEDs will lower their brightness level; now move your hand away from the control;
3) The LEDs will start flashing at a very low frequency, indicating activation of the programming mode;
4) Set the scenario using the controls and/or the corresponding actuators;
5) Briefly move your hand toward the control to exit programming mode, the LEDs will stop blinking and return to the lower brightness level.

Deleting a scenario

1) The Scenario Module must be enabled for programming;
2) Move your hand toward the area of the control sensors (the LEDs will come on at full brightness) and hold your hand in place, after 3 seconds the LEDs will lower their brightness level; keep you hand in position for approximately another 5 seconds;
3) The LEDs will start flashing at a high frequency, indicating deletion of the scenario, and will then return to the lower brightness level.

NOTE: To delete all the scenarios of the Scenario Module use the reset button directly on the Scenario Module.

5. Programmed scenario activation

Enabling the device for sending a command to the scenario programmer MH200N. The address of the assigned command in positions A and PL must be different to the addresses assigned to the actuators. The control can be connected at any point in the system (local bus or riser).

5.1 Addressing

Virtual configuration (MYHOME_Suite)			Physical configuration
Addressing type	Room	0-10	1-9
	Lighting point	0-15	1-9

5.3 Mode

	Virtual configuration (MYHOME_Suite)	Physical configuration
Button	0-31	SPE=0 M=CEN Button No.1

To configure in "only press/release" and "press/hold/release" mode use MYHOME_Suite
virtual configuration

6. Plus Light Management scenario activation

See MYHOME_Suite virtual configuration

7. Plus programmed scenario activation

To configure the number 1 - 2047 of the scenario and of the buttons 0 - 31 on the
control device, use MYHOME_Suite virtual configuration

8. Video door entry functions

8.1 Unlocking control

8.1.1 Addressing

Addressing type	Virtual configuration (MYHOME_Suite)	Physical configuration
Address of the external unit	0-95	A=1-9 PL=1-9 [1)

To configure the "External unit address" and the "Riser", "Building" and "Backbone" levels
use MYHOME_Suite virtual configuration

Note 1): Define the address (two digits) of the external unit whose lock is to be controlled.

Destination level

Virtual configuration (MYHOME_Suite)	Physical configuration
Same command level	SPE=9 M=1

To set the Riser or Backbone destination level use MYHOME_Suite virtual configuration

8.2 Control for stair lighting

8.2.1 Addressing
The device takes on the function of the stair lights power button of the internal unit identified by its address A and PL (two digits).

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Address of the internal unit from which the lights are controlled.	0-99	SPE=9 M=3
		A=1-9, PL=1-9

8.3 Floor call control

8.3.1 Addressing
Define the address (two digits) of the internal unit to call by using the control device.

Addressing type	Virtual configuration (MYHOME_Suite)	Physical configuration
Address of the internal unit	0-99	A=1-9 PL=1-9

Type of call:

Virtual configuration (MYHOME_Suite)	Physical configuration
Function	
Point-to-point	SPE=9 M=2

NOTE: To configure the "General" call use MYHOME_Suite virtual configuration

9. Sound system control

This mode allows you to control the amplifiers and the sources of the Sound System.

9.1 Addressing

You can manage a single amplifier (point-to-point control), some amplifiers (room control) or all the amplifiers in the system (general control).

Virtual configuration (MYHOME_Suite)			Physical configuration
Addressing type		**Parameter / setting**	
Point-to-point	Room	0-9	A=0-9
	Sound point	0-9	PF=0-9
Room	Room	0-9	A=AMB
			PF=0-9
General		General	A=GEN

Follow Me mode

Enables, upon powering the amplifier, activating the last source switched on.

Virtual configuration (MYHOME_Suite)			Physical configuration
Function		**Parameter / setting**	
Switch back on from the last source	YES	YES	SPE=8 M=0
	NO	Definition of the source 1-4	SPE=8 M=1-4 [1]

NOTE: For the "ON/volume +", "OFF/volume -", Change track", Click source", "Cyclic ON/OFF" function, to switch back on from the last source and to select sources 1-9 use MYHOME_Suite virtual configuration

NOTE 1): indicates the sound source to be activated before switching on the amplifier.

Selecting LED brightness (INT configurator)

Enables, upon powering the amplifier, activating the last source switched on.

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
At rest and with the load off the LEDs are illuminated at 30%, with the load on (only for point-to-point light controls) at 60%	0 - 10	INT = -
At rest and with the load off the LEDs are illuminated at 45%, with the load on (only for point-to-point light controls) at 70%	0 - 10	INT = 1
At rest and with the load off the LEDs are off, with the load on (only for point-to-point light controls) at 30%	0 - 10	INT = OFF

NOTE: There could be a difference in brightness and colour from one device to another (even in the same production batch) due to the construction technology.

IR Receiver

Description

The receiver allows you to add or replace the manual control with the remote control via the remote controls 3527N and 3529.

The buttons on the remote control can be paired with: commands intended for actuators with 1 relay for single loads, commands for actuators with 2 relays for double loads (rolling shutter motor, etc.), scenario controls, and sound system and video door entry controls. On the front of the device, in addition to the IR receiving lens, there is a programming button and a LED to indicate reception of the IR signal sent from the remote control and the programming phase.

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	8.5 mA
Operating temperature:	5 – 35°C
Size:	2 flush-mounted modules

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com.

Depending on the configuration of the positions A, PL1, PL2, PL3, PL4 and M it is possible to set the IR receiver for 5 different operating modes.

Front view

Rear view
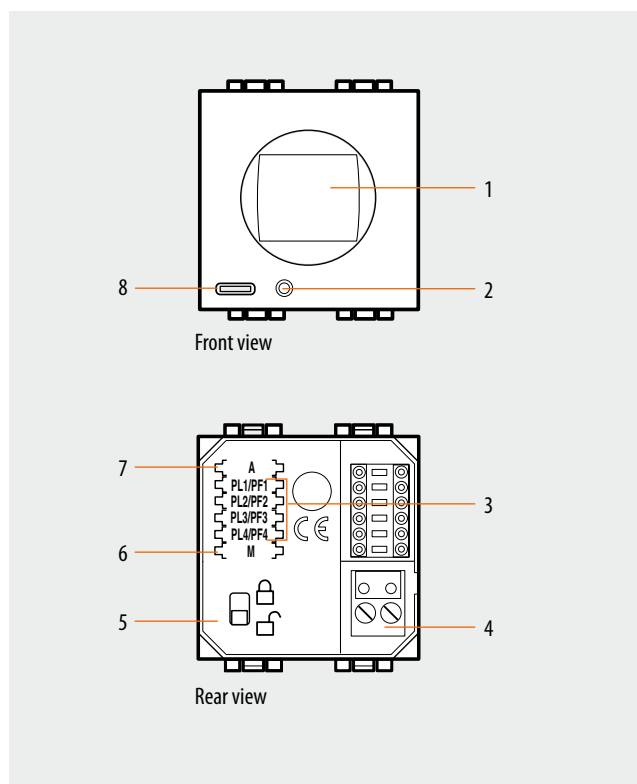
Legend

1. Receiving lens
2. Programming/reset button
3. Channel selection
4. BUS
5. Switch to enable programming
6. Operating modes
7. Control destination room number
8. LED

Mode	M	Possible functions
A - remote control	1 – 4	repeat 4 generic controls (On/Off, Up/Down) with 4 buttons on the remote control. The required commands are saved by the receiver during installation by inserting the configurators in positions A, PL1 - PL4 and M. Changing the preset functions requires reconfiguring the IR receiver.
B - advanced scenarios	CEN	activate scenarios managed by the MH200N scenario programmer.
C - self-learning remote	none	repeat generic controls (On/Off, Up/Down) with the buttons on the remote control. In this case the commands are saved by the receiver with a self-learning procedure. The customer can at any time change the order and the saved commands to be called via the remote control.
D - scenario module control	6	control, via the remote control, up to 16 scenarios saved in the scenario module F420.
E - sound system	9	control, via the remote control, the amplifier you want to control.

1) Mode "A" (remote control) M = 1 – 4

This mode allows you to pair the remote control buttons with generic controls (ON/OFF, UP/DOWN) intended for single or double loads. The correspondence between the remote control buttons and the controlled loads is determined during installation by the configuration of positions A and PL1 - PL4 of the IR receiver, as shown in the table below. The buttons on the remote control can be paired with:

- point-to-point controls, ie for single or double loads (rolling shutter motor) whose address is specified by the configurator 1 – 9 in positions PL1 – PL4. The different operating modes are determined by pairing the configurators with the respective PL positions.

- commands intended for actuators for single and double loads, belonging to the room defined by the configurator 1 – 9 in position A. In this case, the operating modes are defined by the configurators marked with the graphics of the function performed, set in positions PL1 – PL4.

Function	Type of control	Position A	Position PL1/PF1	Position PL2/PF2	Position PL3/PF3	Position PL4/PF4
Cyclical ON/OFF when pressing briefly + adjustment (dimmer)	lighting point in the room indicated in A	1 – 9	1 – 9	1 – 9	1 – 9	1 – 9
Cyclical ON/OFF	control for Room 2)	1 – 9	AMB	AMB	AMB	AMB
up-down rolling shutters 1)	lighting point in the room indicated in A	1 – 9	1 – 9	1 – 9		
				1 – 9	1 – 9	
					1 – 9	1 – 9
				1 – 9		1 – 9
				1 – 9	1 – 9	
				1 – 9		1 – 9
up-down rolling shutters monostable 1)	control for Room 2)	1 – 9	↑↓M	↑↓M		
				↑↓M	↑↓M	
					↑↓M	↑↓M
				↑↓M		↑↓M
				↑↓M	↑↓M	
				↑↓M		↑↓M
up-down rolling shutters until limit stop 1)	control for Room 2)	1 – 9	↑↓	↑↓		
				↑↓	↑↓	
					↑↓	↑↓
				↑↓		↑↓
				↑↓	↑↓	
				↑↓		↑↓
control for ON	control for Room 2)	1 – 9	ON	ON	ON	ON
control for OFF	control for Room 2)	1 – 9	OFF	OFF	OFF	OFF

1) The two PL positions must have the same configurator. The "Up" control is paired with the first PL position and the "Down" command with the second PL position.

2) The control is intended for the devices belonging to the room indicated in A.

Example 1: If positions PL2 and PL3 on the receiver have configurator 7, the remote control operates the double actuator No. 7 of the room indicated in A, raising the rolling shutters with button 2 and lowering them with button 3.

Example 2: If positions PL2 and PL3 on the receiver have configurator ↑↓ and position A has configurator 2, the remote control operates all the actuators in room 2, raising the rolling shutters with button 2 and lowering them with button 3.

IR Receiver

In this room it is possible to install up to 4 IR receivers, which enables managing up to a maximum of 16 separate commands. The correspondence between the channels of a remote control and the respective IR receiver is established by configuring position M of the IR receiver.

Configurator in M	Remote control channel
1	CH1 to CH4
2	CH5 to CH8
3	CH9 to CH12
4	CH13 to CH16

2) Mode "B" (advanced scenarios) M=CEN

In this mode, the remote control IR 3529 is used as a "scenario control" to activate one or more advanced scenarios stored in the Scenario Programmer MH200N. The IR receiver must also be configured in positions A and PL with the numeric configurators to define the respective address in the system. Pairing one or more buttons on the remote control (up to 6) with the scenarios created and stored in the Scenario Programmer MH200N is done when creating the scenario with the MyHOME_Suite software package.

3) Mode "C" (self-learning remote) M=0

This mode allows you to pair a single command with any button on the remote control. With a single receiver you can pair up to 16 commands with a remote control. Configure the receiver with address A=0 and PL = 1 – 9 that cannot be used by actuators.

Commands that the receiver can learn:
- Actuator ON/OFF (cyclical ON/OFF operation for briefly pressing and adjustment for holding down)
- Timed ON
- Flashing
- Rolling shutters UP and DOWN (up-down until the limit stop)
- Actuator Lock/Unlock
- Lights auxiliary ON/OFF (cyclical ON/OFF operation)
- Rolling shutters auxiliary UP/DOWN (up-down until the limit stop)
- Video door entry system (lock and stair lights)
- Sound system (managing the amplifier to be controlled)

To pair each remote control channel with a different command, the procedure is as follows:

1) Press the programming button on the receiver for 3 seconds: the LED will come on with a steady light;
2) Within 20 seconds, press the remote control button for the channel you want to program: the LED will start flashing, indicating activation of the programming mode;
3) Set the command you want to assign to the remote control button, using the controls and/or the corresponding actuator: the LED will come on with a steady light;
4) You can now repeat steps 2 and 3 for all the buttons, including any button that you have already assigned in case you want to change it;
5) Press the button to exit the programming mode: the LED will go out;

To clear the programming of one of the remote control channels, the procedure is as follows:

1) Press the programming button for at least 8 seconds: after 3 seconds, the LED will come on with a steady light; after another 5 seconds it will turn off; release the button within 4 seconds: the LED will come on steady;
2) Within 20 seconds, press the remote control button for the channel you want to clear: the LED will start flashing quickly for approximately 4 seconds, confirming deletion;
3) From this moment onward, the cleared button will no longer activate any command until it is reprogrammed. To clear the programming of all the remote control channels at the same time, press the programming button for approximately 12 seconds: after 3 seconds, the LED will come on with a steady light; after another 5 seconds it will go out; after another 4 seconds it will flash quickly for approximately 4 seconds, confirming deletion of all programming.

NOTE: With the switch in the "padlock closed" position, programming and clearing the IR receiver is disabled.

4) Mode "D" (scenario module control) M=6

This mode enables creating, deleting or modifying the scenarios contained in the scenario module F420 and calling them up using the remote control. The procedure allows saving up to 16 scenarios, using all 16 channels of the remote control.

In order to program, change or cancel a scenario, it is necessary to enable the programming mode of the Module item F420 so that the programming status LED is green (press the lock/unlock button for at least 0.5 seconds) and the switch on the back of the IR receiver must be in the "padlock open" position. The procedure is as follows:

1) Press the programming button on the receiver for 3 seconds: the LED will come on with a steady light; release the button;
2) Within 20 seconds, press the remote control button for the scenario you want to program: the LED will start flashing, indicating activation of the programming mode;
3) Set the scenario using the controls and/or the corresponding actuators;
4) Press the button to exit the programming mode: the LED will go out;
5) Repeat steps 1 to 4 for all the scenarios you want to program.

5) Mode "E" (sound system) M=9

In the sound system, the IR receiver can manage up to 4 amplifiers. The command is always in "follow me (*)" mode and the functions that can be performed are:

- **Button A:** pressing briefly runs the "On" command, whereas holding it down adjusts the volume up
- **Button B:** pressing briefly runs the "Off" command, whereas holding it down adjusts the volume down
- **Button C:** cycles through the saved radio stations or changes CD track
- **Button D:** cycles through the sources

To cancel a scenario, the procedure is as follows:

1) Press the programming button on the receiver for 8 seconds: after 3 seconds, the LED will come on with a steady light; after another 5 seconds it will turn off; release the button within 4 seconds: the LED will come on steady;
2) Within 20 seconds, press the remote control button for the scenario you want to cancel; when the scenario module sends confirmation of the cancellation, the LED will blink quickly for approximately 2 seconds and then go out;
3) Repeat steps 1 and 2 for all the scenarios you want to cancel.

To reset the entire memory you must act directly on the scenario module. If you want to disable the ability to program or cancel scenarios with the IR receiver, set the switch on the back in the "padlock closed" position.

NOTE: Configure the device with address A=0 and PL=1 – 9 that cannot be used by actuators. For example, if the scenario module is configured with A=0 and PL=3, the IR receiver must be set to A=0; PL=3 and M=6.

Buttons A-B-C-D are paired with the remote control buttons as shown in the table:

	Button A	**Button B**	**Button C**	**Button D**
PF1	Ch 1	Ch 2	Ch 3	Ch 4
PF2	Ch 5	Ch 6	Ch 7	Ch 8
PF3	Ch 9	Ch 10	Ch 11	Ch 12
PF4	Ch 13	Ch 14	Ch 15	Ch 16

Where:
- PF1 = 0 – 9 address of the 1st amplifier to control
- PF2 = 0 – 9 address of the 2nd amplifier to control
- PF3 = 0 – 9 address of the 3rd amplifier to control
- PF4 = 0 – 9 address of the 4th amplifier to control
- A   = 1 – 9 destination room of the control

NOTE (*): Follow Me mode allows you to have the same music in another room after turning off the amplifier in the room you previously occupied and switching on the one in the room where you are now.

Touch control

Description

The touch control is a device in which conventional buttons are replaced by capacitive sensors. The device can then carry out some typical functions of a SCS control when you simply touch its surface. It is available in flush-mounted versions with 3 or 4 modules, with respectively 6 and 8 buttons. Each zone corresponding to a button is marked in the centre by a light-blue LED. When the user brings a finger near to it, the brightness increases significantly and remains bright until the finger is moved away. YOU can change the level of brightness of the LEDs with the adjustment button. The control can operate in four different modes: self-learning, scenarios, rocker, CEN.
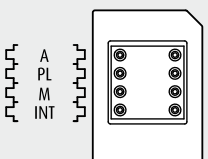
- **The self-learning mode** (cyclic or non-cyclic) allows you to pair each button with most of the typical controls of automation, sound and video door entry systems (stair lights, door openers, floor calls, lock and camera cycling), as well as the auxiliary controls. Available only with the physical configuration. With MYHOME_Suite virtual configuration you can associate each button with a specific function.
- **Scenario mode:** allows you to recall, program and delete 6 or 8 scenarios of a scenario module.
- **Rocker mode:** enables piloting 3 or 4 consecutive lighting points or roller shutters (or rooms or groups).
- **Scenario programmer mode**: allows you to use the control with the scenario programmer MH200N.

To enable cleaning the device you can temporarily disable the sensitive areas by pressing two end zones diagonally. The LEDs will start flashing in sequence and normal operation will be returned after 10 seconds have elapsed without any further pressing.

front view

Button 1   Button 3   Button 5   Button 7

Button 2   Button 4   Button 6   Button 8

rear view

1

2

3

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Maximum current draw HD/HC/HS4657M3:	20 mA
Maximum current draw HD/HC/HS4657M4:	25 mA
Maximum current draw 573912/13:	35 mA
Operating temperature:	0–40°C

Legend

1. Button for programming and setting LED brightness
2. Configurator socket
3. BUS

Configuration

A	room
PL	lighting point
M	mode
SET	LED display mode

The device can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

List of Functions

The device performs the following functions:
1. LIGHT SWITCH
2. AUTOMATION CONTROL
3. DEVICE LOCKING/UNLOCKING
4. SCENARIO MODULE CONTROL
5. PROGRAMMED SCENARIO ACTIVATION
6. PLUS PROGRAMMED SCENARIO ACTIVATION
7. VIDEO DOOR ENTRY FUNCTIONS
8. SOUND SYSTEM CONTROL

Touch control

Function selection

1. Self-learning mode

This mode is available only with the physical configuration. With MYHOME_Suite virtual configuration you need to associate each button with the specific function. For both modes, you will have to configure the addresses of the device.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=0-9
Room		0-10	A=AMB
Group		1-255	A=GR
General		general	A=GEN

Installation and destination level:
The special control can also be used in systems where there are SCS/SCS interfaces (F422). By installing the control on the BUS of an interface (installation level), you can control one or more actuators located on the BUS of another interface (destination level).

Function		Virtual configuration (MYHOME_Suite)	Physical configuration
Destination level	Local bus	1-15	I= 1-9
	Riser bus	riser	I=CEN
	Complete system	entire system	I=0

To configure the installation level use MYHOME_Suite virtual configuration.

NOTE: With the virtual configuration, for the room, group and general controls, you can set a light point address for the return of the load status

1.2 Configuration

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Associating the buttons on the touch control with the single commands performed by the control devices and/or actuators	_ 1)	M=0
Cyclic self-learning: This mode is a variant of the self-learning mode (**M=0**), in which, however, the buttons never work cyclically. So if, for example, ON is learned for an actuator or dimmer, the pair of buttons is automatically configured to turn on or increase the level of brightness for the top button, turn off or decrease the level of brightness for the bottom one. Whereas, if a single function is learned (e.g. calling up a scenario), the other button of the pair will remain without any function or keep the function it had previously. The device can be configured either with any A/PL address already in the system or with a unique address not used by other devices.	_ 1)	M=6

NOTE 1): MYHOME_Suite allows you for each button to define all the operating modes for the functions: light switch, automation control, scenario module control, programmed scenarios, PLUS Lighting Management scenario, PLUS programmed scenario, sound system and video door entry functions.

Touch control

1.3 Programming the buttons

To associate each button with a different command, the procedure is as follows:
1) Briefly press the button on the back, the LEDs will light up in rotation;
2) Within 20 seconds, touch the button you want to program: the LED will start flashing, indicating activation of the programming mode;
3) Set the command you want to assign to the button, using the controls and/or the corresponding actuator, the LEDs will start to rotate;
4) You can now repeat steps 2 and 3 for all the buttons, including any button that you have already assigned in case you want to change it;
5) Briefly press the programming button or wait 20 seconds to exit programming.

Deleting button programming
1) Briefly press the button on the back, the LEDs will light up in rotation;
2) Within 20 seconds, press the button you want to delete and hold it for 4 seconds; from this moment onwards the deleted button will no longer activate any command until it is reprogrammed;
3) The corresponding LED will blink for 4 seconds alternately with the others, after which you can repeat step 2 to delete other programming;
4) Briefly press the button or wait 20 seconds to exit deletion.

NOTE: To delete the programming for all the buttons simultaneously, briefly press the button on the back, the LEDs will light up in rotation; press again and hold down the button on the back for 10 seconds: the LEDs will blink for approximately 4 seconds, thus confirming deletion of all the programming.
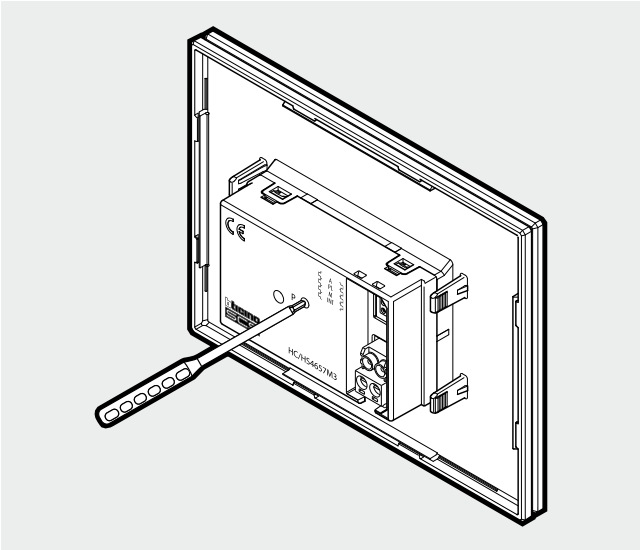
NOTE: Use only the screwdriver supplied to operate the P button for programming and LED brightness adjustment.

2. Device locking/unlocking

To configure use MYHOME_Suite virtual configuration

3. Scenario module control

This operating mode is only used if the system has a scenario module F420, the combination is made by assigning the same address to both items. The user can create, delete or modify the scenarios contained in the scenario module and is able to call them up using the buttons. The procedure allows you to save up to 16 scenarios using two devices with 8 buttons, or three devices with 6 buttons.

3.1 Addressing

Function	Virtual configuration (MYHOME_Suite)	Physical configuration
Room (of the scenario module)	0-10	A=1-9
Lighting point (of the scenario module)	0-15	PL=0-9

To configure the "Installation level" and the "Destination level" and for Button activation delays use MYHOME_Suite virtual configuration

3.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Modifying and activating a scenario, Scenario button	1-16	M=1-4 [1)]

NOTE 1): Match between the number of the scenario stored in the scenario module and the control buttons in the possible configurations:

3-module control (6 scenarios)

Button number	**M=1**	**M=4**	**M=3**
Button 1	Scenario 1	Scenario 7	Scenario 13
Button 2	Scenario 2	Scenario 8	Scenario 14
Button 3	Scenario 3	Scenario 9	Scenario 15
Button 4	Scenario 4	Scenario 10	Scenario 16
Button 5	Scenario 5	Scenario 11	
Button 6	Scenario 6	Scenario 12	

4-module control (8 scenarios)

Button number	**M=1**	**M=2**
Button 1	Scenario 1	Scenario 9
Button 2	Scenario 2	Scenario 10
Button 3	Scenario 3	Scenario 11
Button 4	Scenario 4	Scenario 12
Button 5	Scenario 5	Scenario 13
Button 6	Scenario 6	Scenario 14
Button 7	Scenario 7	Scenario 15
Button 8	Scenario 8	Scenario 16

Programming a scenario

To program the scenario, the procedure is as follows:
1) The F420 scenario module must be configured with self-learning enabled (you need to press the self-learning button so that the corresponding LED is green, self-learning is not enabled if it is red);
2) Briefly press the button on the back, the LEDs for the buttons enabled for the scenario with programming function will blink 1 sec. ON and 1 sec. OFF;
3) Touch the button corresponding to the scenario to be programmed: the LED will begin to flash (on receiving the update of the scenario module) indicating activation of the programming mode;
4) Set the scenario using the controls and/or the corresponding actuators;
5) Touch the button to exit programming: the LEDs will start flashing in rotation and you can now repeat steps 2, 3 and 4 for all the scenarios, including any button that you have already assigned in case you want to change it;
6) Briefly press the button or wait 20 seconds to exit programming.

Deleting a scenario

1) The F420 scenario module must be configured with self-learning enabled;
2) Briefly press the button on the back, the LEDs will light up in rotation;
3) Within 20 seconds, press the button corresponding to the scenario that you want to delete and hold it for 4 seconds;
4) The deleted device button LEDs will blink for 4 seconds, after which you can repeat step 2 to delete other programming.
5) Briefly press the button or wait 20 seconds to exit deletion.

NOTE: To reset the entire memory you need to act directly on the scenario module: hold down the "DEL" button for 10 seconds after enabling the scenario module for programming.
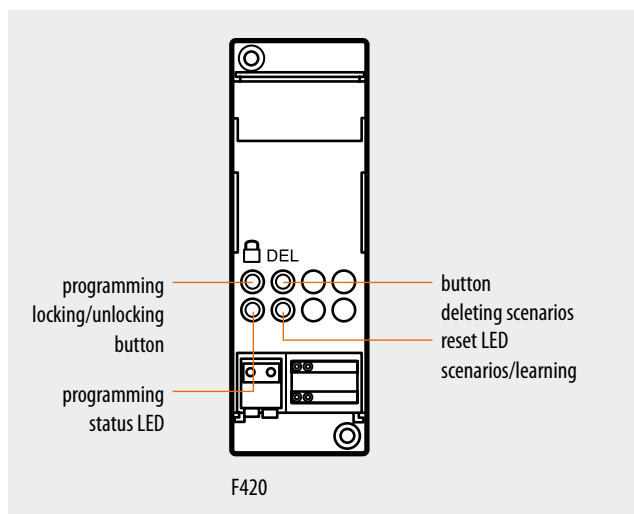
programming locking/unlocking button

programming status LED

DEL

button deleting scenarios

reset LED scenarios/learning

F420

4. Programmed scenario activation

Enabling buttons for sending a command to the scenario programmer MH200N. The address of the assigned command in positions A and PL must be different to the addresses assigned to the actuators. The control can be connected at any point in the system (local bus or riser).

4.1 Addressing

		Virtual configuration (MYHOME_Suite)	Physical configuration
Addressing type	Room	0-10	1-9
	Lighting point	0-15	1-9

4.2 Mode

	Virtual configuration (MYHOME_Suite)	Physical configuration
Button [1)]	0-31	M=CEN

The association between a scenario configured in the programmer MH200N and the related touch control activation buttons (identified with 1-6 or 1-8 with physical configuration and 0-31 with MYHOME_Suite) is made when programming the device MH200N.

5. Plus Light Management scenario activation

To configure use MYHOME_Suite virtual configuration.

6. Plus programmed scenario activation

To configure the number 1 - 2047 of the scenario and of the buttons 0 - 31 on the control device, use MYHOME_Suite virtual configuration.

7. Video door entry functions

To configure the Address for the external unit of the level use MYHOME_Suite virtual configuration.

7.1 Unlocking control

To configure the Address for the external unit of the level use MYHOME_Suite virtual configuration.

7.2 Stair lights switch

To configure use MYHOME_Suite virtual configuration.

7.3 Floor call control

To configure use MYHOME_Suite virtual configuration.

8. Sound system control

To configure use MYHOME_Suite virtual configuration.

Touch control

Selecting LED brightness

With the physical configuration, you can adjust the brightness of the LEDs by holding down (t>2s) the button on the back. The button works on 3 levels of brightness: from a default value (25%) the brightness varies every 2 seconds showing the 3 settable levels, as shown in the following drawing. To select the desired level simply release the button. With the virtual configuration you can adjust the brightness of the LEDs on 10 different levels.
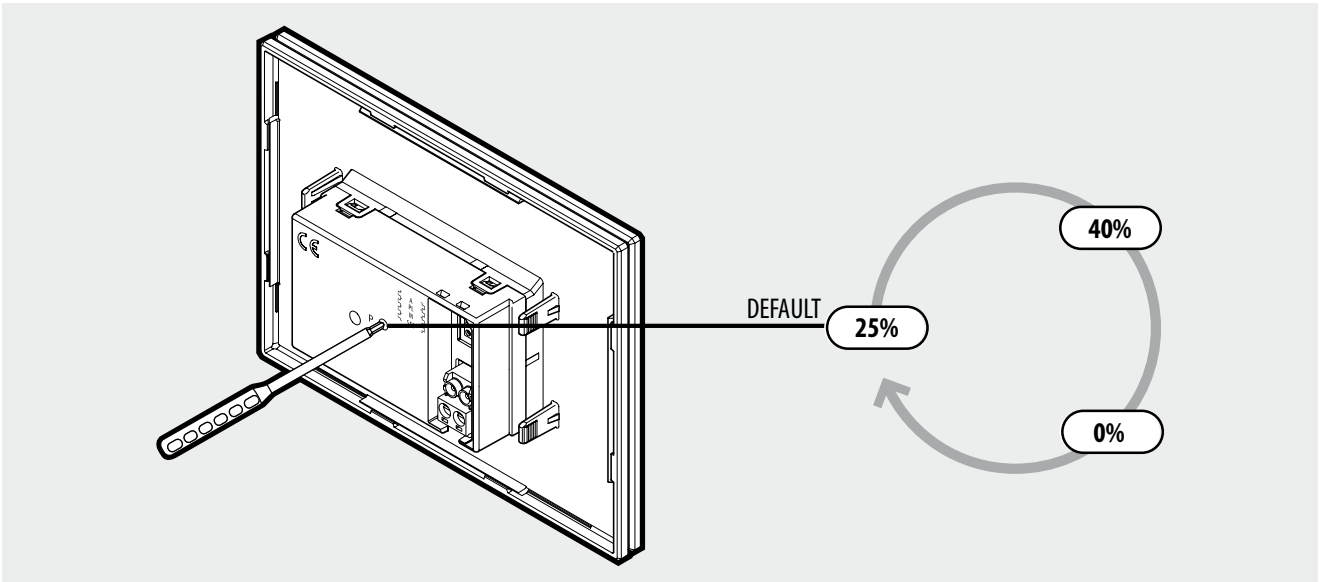
If you have chosen to illuminate the buttons when they are pressed (status return), the brightness level depends on the setting of the LEDs, as indicated below:

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	Parameter / setting	LED brightness level	Fade brightness
LED brightness	1-10	25 %	65 %
LED fade		40 %	70 %
		0 %	20 %

NOTE: There could be a difference in brightness and colour from one device to another (even in the same production batch) due to the construction technology.

Touch control

Selecting the LED display mode

You can choose:
- whether at rest to keep the LEDs that are not used/configured off or on;
- whether to illuminate the LEDs or not when you press the corresponding button
  (status return); to obtain an optimal status return effect it is recommended to set a
  low LED brightness level.
- whether or not to give the illuminating buttons a "fade" effect.

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Feedback update	YES, NO	SET=0-7 [1)

NOTE 1): To choose the configurator, see the following table:

Configurator in SET position	Behaviour
0	• LED ON even if button not configured • No status return • Fade effect on
1	• LED ON even if button not configured • No status return • Fade effect off
2	• LED ON only if configured (not configured -> LED OFF) • No status return • Fade effect on
3	• LED ON only if configured (not configured -> LED OFF) • No status return • Fade effect off
4	• LED ON even if button not configured • Status return on • Fade effect on
5	• LED ON even if button not configured • Status return on • Fade effect off
6	• LED ON only if configured (not configured -> LED OFF) • Status return on • Fade effect on
7	• LED ON only if configured (not configured -> LED OFF) • Status return on • Fade effect off

⚠ **After installing the device wait two minutes for auto-calibration to end.**
During this time, commands may be automatically sent to the system.

PIR+US flush-mounted SCS Green Switch

574048   067226   HD/HC/HS4658
574098   AM5658   L/N/NT4658N

Description

This devices features a PIR and US (ultrasound) movement detector, and a brightness sensor for automatic activation of various types of loads following the detection of a movement, and a brightness level lower than the set level.

The enabling/disabling of the load can also be performed manually using the appropriate front pushbutton and/or using an external BUS control device.

IT is possible to configure several operating modes; for the detailed descriptions see page 4.

Standards, Certifications, Marks

Directive:
– Electromagnetic Compatibility Directive 2004/108/EC
  Installation regulations:
– CEI 64-8
  Product regulations:
– IEC 60669-2-1
– EN 50428
  Environmental regulations:
– EU Directive 2002/96/EC: WEEE (Waste Electrical and Electronic Equipment)
– EU Directive 2002/95/EC: RoHS (Restriction of Hazardous Substances)

Dimensional data

Size: 2 flush mounted modules

A	B	C
45	45	51
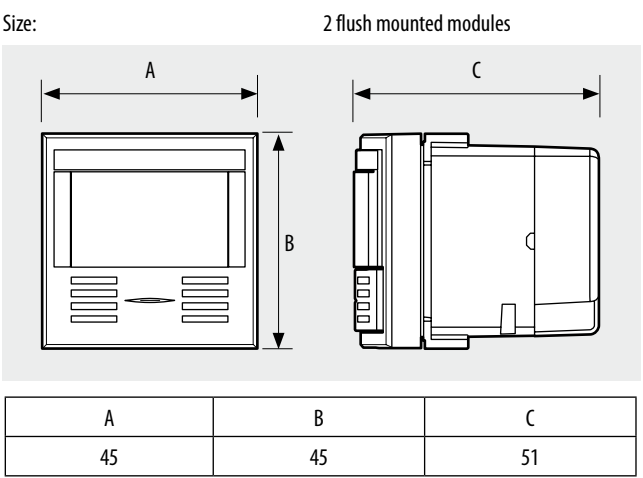
Technical data

Voltage:	27 V⎓
Current draw:	17 mA
Connection between sensor and actuator:	SCS BUS connector
Sensor type:	movement detector (PIR+US) with 180° detection angle and brightness sensor.
Flush mounted box depth:	40 mm
Weight:	60 g
Impact resistance:	IK04
Penetration of solids and liquids:	IP20
Time delay:	from 5 sec to 59 min. 59 sec
Brightness:	from 20 lux to 1275 lux
Operating temperature:	from - 5 ℃ to + 45 ℃
Storage temperature:	from - 20 ℃ to + 70 ℃

Front view

Legend

1. PIR sensor
2. LEARN LED
3. US sensor
4. ON-OFF button
5. LEARN button
6. Movement detector sensor (under the lens)
7. Infrared transmitter (under the lens)
8. Brightness sensor

PIR+US flush-mounted SCS Green Switch

574048	067226	HD/HC/HS4658
574098	AM5658	L/N/NT4658N

Installation

Positioning the sensor

Position the sensor so that it is not affected by the artificial light already present in the room.

Settings

Sensor parameters		Default value	Adjustable parameters	Configuration remote control	
				88230 BMSO4001	88235 BMSO4003
Time delay		15 mn	3,5,10,15,20 min	–	✓
			30s - 255 h 59 min 59s	✓	–
Sensitivity		PIR (very high) / US (high)	Low, medium, high, very high	✓	✓
Brightness threshold		300 lux	20, 100, 300, 500, 1000 lux	–	✓
			0 - 1275 lux	✓	–
Operating mode	**Auto**	Not active	ON/OFF	✓	✓
	Walkthrough	ON	ON/OFF	✓	✓
	Eco	Not active	ON/OFF	✓	✓
Detection mode	**Initial**	PIR and US	PIR and/or US, PIR, US	✓	–
	Holding	PIR or US	PIR and/or US, PIR, US	✓	–
	Retrigger	PIR or US	PIR and/or US, PIR, US, OFF	✓	–
Alarm		Not active	ON/OFF	✓	–
Advanced mode	**Calibration**	–	0 - 99995 lux	✓	–
	Adjustment	Not active	ON/OFF	✓	–
	Contribution of light	Automatic	Automatic - 1275 lux	✓	–

Time delay
The period of time after which the load is switched off if no movement is detected. The time restarts whenever the sensor detects a movement.

Sensitivity
Adjustment of the sensitivity of the detection technology used.

Brightness threshold
Lighting level below which the sensor activates the load and above which it switches it off.

Operating mode:

Auto
The load is automatically switched on:
- upon detection of a movement if the level of natural light is insufficient.
The load is automatically switched off:
- if no movement is detected at the end of the set time delay + standby time.
- or if the level of natural light is insufficient (adjustment on).
Each new detection causes automatic switching on if the light is insufficient.

Walkthrough

legrand

bticino

If a movement is detected for a time of less than 20 s, the sensor will decrease the set time delay to 3 minutes. If the set delay time set is already less than three minutes, it will remain as such.

Eco

The load is switched on manually while switching off is automatic:
- if no movement is detected at the end of the set delay time.
After switching off the load, if any movement is detected within 30 s, the load is automatically switched back on (retrigger function on). At the end of this time interval, the load must be switched back on manually.

Detection mode
Set of technologies used for detection.

Initial: set of technologies used for the first detection.

Holding: set of technologies used after the first detection.

Retrigger: set of technologies used for the Retrigger function.
After switching off, any new detection within 30 seconds will cause the load to switch back on automatically. After 30 seconds, the load must be switched back on manually. Available only in Eco mode.
Alarm: before switching off the load the sensor emits an audible warning signal. Intervals: 1 minute, 30 seconds, and 10 seconds.

Advanced mode:

Calibration
To calibrate the sensor, it is necessary to measure the lighting level present using a lux meter and send the value to the sensor using a configuration remote control (BMSO4001).
Calibration procedure:
Step 1: with only artificial light.
Switch the load on at maximum intensity and close the shutters (if you cannot do this then wait for sunset).
Measure the level of lighting and send it to the sensor via the remote control.
Step 2: with only natural light.
Turn off the load and open the shutters.

Adjustment
This function allows the sensor to switch off the load 10 minutes (plus a safety threshold to avoid inappropriate switching off) after the lighting level exceeds the brightness threshold, even though movement has been detected.

Contribution of light: amount of supplementary light supplied by switching on the load.
When the contribution of light parameter is set to "auto" the sensor automatically calculates the contribution of light.

Modification of the parameters using the configuration remote controls

• **BMSO4001 - 088230:** advanced configuration remote control
• **BMSO4003 -088235:** simplified configuration remote control
When the sensor receives an IR command from a configuration remote control, it beeps to confirm that the modification has been acquired.
For more information on the parameters please refer to the technical info sheet of the remote control BMSO4001.

Restoring the factory settings:
1st   press: Briefly press LEARN, the LED will blink slowly.
2nd   press: Press and hold LEARN for 10 seconds until the LED flashes quickly.

Performance

Height

Small movements | Large movements

≈ 6 m (PIR/US)   3 m (PIR/US)

5 m (PIR/US)

8 m (PIR/US)

PIR+US flush-mounted SCS Green Switch

574048	**067226**	**HD/HC/HS4658**
574098	**AM5658**	**L/N/NT4658N**

Configuration

1. Lighting Management System

When installed in a Lighting Management system, the device can be configured in the following ways:
- Plug & Go: automatic procedure for pairing devices connected to the inputs and outputs. The procedure is activated on powering the device. It is only available for Room Controllers or, in the case of other devices, paired with the Room Controllers.

- Push & Learn: procedure for pairing different connected devices or changing the assignments defined automatically in the Plug & Go procedure. For more details, please refer to the specific document.
- Software Configuration: using the Virtual Configurator software; for more details, please refer to the specific manual.

2. My Home system

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

3. Physical configuration

The sensor parameters are defined by 6 configurator sockets and the functions depend on the operating mode:

Local: A = 1 – 9

Light point: PL = 1 – 9

Mode: M = 0 – 4

Sensitivity of the movement sensor: S = 0 – 3

Control timer: T = 0 – 9

Sensitivity of the lights sensor: D = 0 – 5

Warning: the addresses A = 0 and PL = 0 do not exist

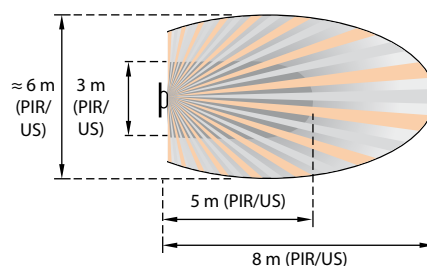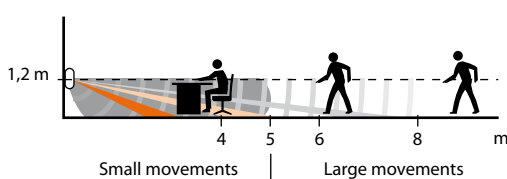| Available functions	Configurator mode
The sensor controls the light unit, the address of which defined in A and PL. When a movement is detected, and if the measured brightness is below the configured value, the system switches on the specified light unit and keeps it on until the expiry of the period configured using the configurator on T (automatic mode). The Sensitivity of the PIR movement detector is configured using the configurator on S. For appropriate operation, the sensitivity of the light sensor must be configured using the configurator on D. If a user manually switches off the lights, a control action can be used to disable the movement detector until a movement is detected, for a period set by T.	**0**
In this mode, the sensor only works based on the light conditions, and the movement sensor is disabled. When the brightness falls below the threshold configured, the system switches on the light unit, switching it off again when the brightness exceeds the set threshold (automatic mode). Configure A = 1 -9 and PL = 1 - 9, configurators GEN, AMB and GR cannot be connected. In this mode, configurators S and T are not connected.	**1**
In this mode the sensor does not manage the lights directly, but sends movement and brightness signals to the scenario programmer MH200N. In this case, the sensor address is entered in A and PL and must be unique inside the system. Therefore it is not possible to connect configurators GEN, AMB, and GR. In this mode the S and T configurators are not connected because these parameters are directly managed by the scenario programmer.	**2**
In this mode the system directly manages a light unit, ensuring a consistent brightness level inside the room (this mode is only effective if the sensor manages the dimmer). The system switches the lights on when a movement is detected and keeps them on based on the presence of people and the lighting threshold configured (automatic mode). When a movement is detected, and if the measured brightness is below the configured threshold, the sensor switches the specified light unit on and keeps it on until the expiry of the period configured using the configurator on T. During operation, the sensor keeps a constant brightness level, depending on the configurator on D. For example, when the brightness of the natural light increases, the sensor reduces the brightness of the light unit controlled. For appropriate operation, the brightness sensitivity threshold of the sensor must be configured using the D configurator. The threshold value can be modified using a brightness control. The new value is then configured as the new sensor threshold, until the next activation.	**3**
In this mode, the sensor only operates on the basis of the brightness conditions, and directly manages a light unit to ensure a constant brightness level inside the room (this mode is only effective if the sensor manages the dimmer). The movement sensor is disabled. The lights are manually switched on, and automatically switched off by the sensor, based on the configured brightness threshold (eco mode). Therefore, when the lights are off, the sensor does not switch them on; but it waits for the user to switch them on manually. During operation, the sensor keeps a constant brightness level, depending on the configurator on D. For example, when the brightness of the natural light increases, the sensor reduces the brightness of the light unit controlled. When the lights are off, if the level of natural light decreases, the sensor does not switch them on, but it waits for the user to switch them on manually. For appropriate operation, the brightness sensitivity threshold of the sensor must be configured using the D configurator. The threshold value can be modified using a brightness control. The new value is then configured as the new sensor threshold, until the next activation.	**4**

Warning: To manage scenarios using the sensor signals, via the MH200N scenario programmer, the sensor must be configured in Mode 2.

![Legrand logo] MQ00473-f-EN   09/06/2014   ![bticino logo]

PIR+US flush-mounted SCS Green Switch

574048   067226   HD/HC/HS4658
574098   AM5658   L/N/NT4658N

1) Duration of the lights timer depending on the configurator on T:

Configurator on T	Lights timer in minutes
No configurator	15
1	0.5
2	1
3	2
4	5
5	10
6	15
7	20
8	30
9	40

2) Sensitivity of the PIR movement detector depending on the configurator on S:

Configurator on S	Sensitivity
No configurator	Low
1	Medium
2	High
3	Very high

3) Sensitivity of the lights sensor depending on the configurator on D:

Configurator on D	Sensitivity in lux
No configurator	300
1	20
2	100
3	300
4	500
5	1000

Maintenance

Keep the lenses clean.

Clean the surface with a cloth.

Do not use: acetone, detergents for removing tar, or trichloroethylene.

Maintenance using the following products: - Hexane (En 60669-1)

- Methylated spirit
- Soapy water
- Diluted ammonia
- Bleach, diluted 10%
- Glass detergents

Wiring diagram

BUS/SCS

PIR flush-mounted SCS Green Switch

574046	**067225**	**L/N/NT4659N**
574096	**AM5659**	**HD/HC/HS4659**

Description

This devices features a PIR movement detector and a brightness sensor for automatic activation of various types of loads following the detection of a movement and a brightness level lower than the set level.

IT is possible to configure several operating modes; for the detailed descriptions see page 4.

Standards, Certifications, Marks

Directive:
– Electromagnetic Compatibility Directive 2004/108/EC
Installation regulations:
– CEI 64-8
Product regulations:
– IEC 60669-2-1
– EN 50428
Environmental regulations:
– EU Directive 2002/96/EC: WEEE (Waste Electrical and Electronic Equipment)
– EU Directive 2002/95/EC: RoHS (Restriction of Hazardous Substances)

Dimensional data

Size: 2 flush mounted modules
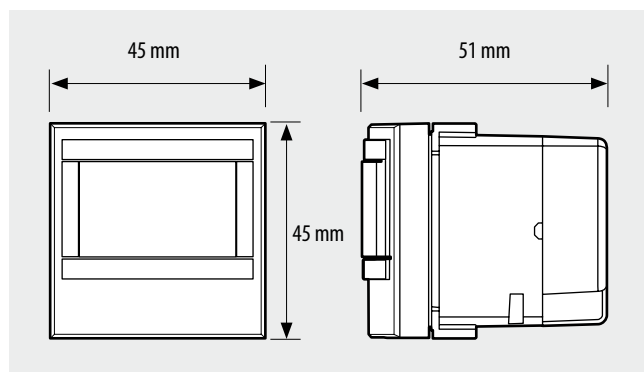
Technical data

Voltage:	27 V=
Maximum current draw:	15 mA
Connection between sensor and actuator:	SCS BUS connector
Sensor type:	PIR movement detector with 180° detection angle and brightness sensor.
Flush mounted box depth: 40 mm	
Weight:	60 g
Impact resistance:	IK04
Penetration of solids and liquids:	IP20
Time delay:	from 5 sec to 59min. 59 sec
Brightness:	from 20 lux to 1275 lux
Operating temperature:	from -5℃ to +45℃
Storage temperature:	from -20 ℃ to +70 ℃

Front view

Legend

1. PIR sensor
2. LEARN LED
3. LEARN button
4. Brightness sensor
5. Movement sensor (under the lens)
6. Two-way IR transmitter (under the lens)

PIR flush-mounted SCS Green Switch

574046	**067225**	**L/N/NT4659N**
574096	**AM5659**	**HD/HC/HS4659**

Installation

Positioning the detector

Position the sensor so that it is not affected by the artificial light already present in the room.

Settings

Sensor parameters		Default value	Adjustable parameters	Configuration remote control	
				88230 **BMSO4001**	**88235** **BMSO4003**
Time delay		15 mn	3,5,10,15,20 min	–	✓
			30s - 255 h 59 min 59s	✓	–
Sensitivity		PIR (very high)	Low, medium, high, very high	✓	✓
Brightness threshold		300 lux	20, 100, 300, 500, 1000 lux	–	✓
			0 - 1275 lux	✓	–
Operating mode	**Auto**	Not active	ON/OFF	✓	✓
	Walkthrough	ON	ON/OFF	✓	✓
	Eco	Not active	ON/OFF	✓	✓
Detection mode	**Initial**	PIR	Cannot be modified	✓	–
	Holding	PIR	Cannot be modified	✓	–
	Retrigger	PIR	PIR/OFF	✓	–
Alarm		Not active	ON/OFF	✓	–
Advanced mode	**Calibration**	–	0 - 99995 lux	✓	–
	Adjustment	Not active	ON/OFF	✓	–
	Contribution of light	Automatic	Automatic - 1275 lux	✓	–

Time delay
The period of time after which the load is switched off if no movement is detected. The time restarts whenever the sensor detects a movement.

Sensitivity
Adjustment of the sensitivity of the detection technology used.

Brightness threshold
Lighting level below which the sensor activates the load and above which it switches it off.

Operating mode:

Auto
The load is automatically switched on:
- upon detection of a movement if the level of natural light is insufficient.
The load is automatically switched off:
- if no movement is detected at the end of the set time delay + standby time.
- or if the level of natural light is insufficient (adjustment on).
Each new detection causes automatic switching on if the light is insufficient.

PIR flush-mounted SCS Green Switch

Walkthrough

If a movement is detected for a time of less than 20 s, the sensor will decrease the set time delay to 3 minutes. If the set delay time set is already less than three minutes, it will remain as such.

Eco

The load is switched on manually while switching off is automatic:
- if no movement is detected at the end of the set delay time.
After switching off the load, if any movement is detected within 30 s, the load is automatically switched back on (retrigger function on). At the end of this time interval, the load must be switched back on manually.

Detection mode

Set of technologies used for detection.

Initial: set of technologies used for the first detection.

Holding: set of technologies used after the first detection.

Retrigger: set of technologies used for the Retrigger function.
After switching off, any new detection within 30 seconds will cause the load to switch back on automatically. After 30 seconds, the load must be switched back on manually. Available only in Eco mode.

Alarm: before switching off the load the sensor emits an audible warning signal. Intervals: 1 minute, 30 seconds, and 10 seconds.

Advanced mode:

Calibration

To calibrate the sensor, it is necessary to measure the lighting level present using a lux meter and send the value to the sensor using a configuration remote control (BMSO4001).
Calibration procedure:
Step 1: with only artificial light.
Switch the load on at maximum intensity and close the shutters (if you cannot do this then wait for sunset).
Measure the level of lighting and send it to the sensor via the remote control.
Step 2: with only natural light.
Turn off the load and open the shutters.

Adjustment

This function allows the sensor to switch off the load 10 minutes (plus a safety threshold to avoid inappropriate switching off) after the lighting level exceeds the brightness threshold, even though movement has been detected.

Contribution of light: amount of supplementary light supplied by switching on the load.
When the contribution of light parameter is set to "auto" the sensor automatically calculates the contribution of light.

Modification of the parameters using the configuration remote controls

- **BMSO4001-088230:** advanced configuration remote control
- **BMSO4003-088235:** simplified configuration remote control
When the sensor receives an IR command from a configuration remote control, it beeps to confirm that the modification has been acquired.
For more information on the parameters please refer to the technical info sheet of the remote control BMSO4001.

Return to factory settings:
1st press: Briefly press LEARN, the LED will blink slowly.
2nd press: Press and hold LEARN for 10 seconds until the LED flashes quickly.

Performance

Height

Small movements | Large movements

≈ 6 m (PIR) 3 m (PIR) 5 m (PIR) 8 m (PIR)
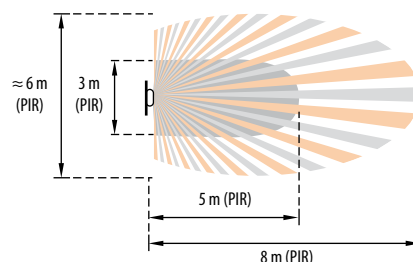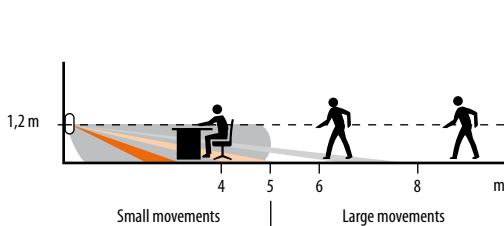
PIR flush-mounted SCS Green Switch

574046	067225	L/N/NT4659N
574096	AM5659	HD/HC/HS4659

Configuration

1. Lighting Management System

When installed in a Lighting Management system, the device can be configured in the following ways:
- Plug & Go: automatic procedure for pairing devices connected to the inputs and outputs. The procedure is activated on powering the device. It is only available for Room Controllers or, in the case of other devices, paired with the Room Controllers.

- Push & Learn: procedure for pairing different connected devices or changing the assignments defined automatically in the Plug & Go procedure. For more details, please refer to the specific document.
- Software Configuration: using the Virtual Configurator software; for more details, please refer to the specific manual.

2. My Home system

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

3. Physical configuration

The sensor parameters are defined by 6 configurator sockets and the functions depend on the operating mode:
Local: $A = 1 - 9$
Light point: $PL = 1 - 9$
Mode: $M = 0 - 4$

Sensitivity of the PIR movement sensor: $S = 0 - 3$
Control timer: $T = 0 - 9$
Sensitivity of the lights sensor: $D = 0 - 5$
Warning: the addresses $A = 0$ and $PL = 0$ do not exist

| Available functions	Configurator mode
The sensor controls the light unit, the address of which defined in A and PL. When a movement is detected, and if the measured brightness is below the configured value, the system switches on the specified light unit and keeps it on until the expiry of the period configured using the configurator on T (automatic mode). The Sensitivity of the PIR movement detector is configured using the configurator on S. For appropriate operation, the sensitivity of the light sensor must be configured using the configurator on D. If a user manually switches off the lights, a control action can be used to disable the movement detector until a movement is detected, for a period set by T.	0
In this mode, the sensor only works based on the light conditions, and the movement sensor is disabled. When the brightness falls below the threshold configured, the system switches on the light unit, switching it off again when the brightness exceeds the set threshold (automatic mode). Configure A = 1 -9 and PL = 1 - 9, configurators GEN, AMB and GR cannot be connected. In this mode, configurators S and T are not connected.	1
In this mode the sensor does not manage the lights directly, but sends movement and brightness signals to the scenario programmer MH200N. In this case, the sensor address is entered in A and PL and must be unique inside the system. Therefore it is not possible to connect configurators GEN, AMB, and GR. In this mode the S and T configurators are not connected because these parameters are directly managed by the scenario programmer.	2
In this mode the system directly manages a light unit, ensuring a consistent brightness level inside the room (this mode is only effective if the sensor manages the dimmer). The system switches the lights on when a movement is detected and keeps them on based on the presence of people and the lighting threshold configured (automatic mode). When a movement is detected, and if the measured brightness is below the configured threshold, the sensor switches the specified light unit on and keeps it on until the expiry of the period configured using the configurator on T. During operation, the sensor keeps a constant brightness level, depending on the configurator on D. For example, when the brightness of the natural light increases, the sensor reduces the brightness of the light unit controlled. For appropriate operation, the brightness sensitivity threshold of the sensor must be configured using the D configurator. The threshold value can be modified using a brightness control. The new value is then configured as the new sensor threshold, until the next activation	3
In this mode, the sensor only operates on the basis of the brightness conditions, and directly manages a light unit to ensure a constant brightness level inside the room (this mode is only effective if the sensor manages the dimmer). The movement sensor is disabled. The lights are manually switched on, and automatically switched off by the sensor, based on the configured brightness threshold (eco mode). Therefore, when the lights are off, the sensor does not switch them on; but it waits for the user to switch them on manually. During operation, the sensor keeps a constant brightness level, depending on the configurator on D. For example, when the brightness of the natural light increases, the sensor reduces the brightness of the light unit controlled. When the lights are off, if the level of natural light decreases, the sensor does not switch them on, but it waits for the user to switch them on manually. For appropriate operation, the brightness sensitivity threshold of the sensor must be configured using the D configurator. The threshold value can be modified using a brightness control. The new value is then configured as the new sensor threshold, until the next activation.	4

Warning: To manage scenarios using the sensor signals, via the MH200N scenario programmer, the sensor must be configured in Mode 2.

PIR flush-mounted SCS Green Switch

1) Duration of the lights timer depending on the configurator on T:

Configurator on T	Lights timer in minutes
No configurator	15
1	0.5
2	1
3	2
4	5
5	10
6	15
7	20
8	30
9	40

2) Sensitivity of the PIR and US movement detector depending on the configurator on S:

Configurator on S	Sensitivity
No configurator	Low
1	Medium
2	High
3	Very high

When using the configurators it is not possible to distinguish between the sensitivity of the detection technologies, both of which will have the value set by the configurator S.

3) Sensitivity of the lights sensor depending on the configurator on D:

Configurator on D	Sensitivity in lux
No configurator	300
1	20
2	100
3	300
4	500
5	1000

Maintenance

Keep the lenses clean.
Clean the surface with a cloth.
Do not use: acetone, detergents for removing tar, or trichloroethylene.
Maintenance using the following products: - Hexane (En 60669-1)
    - Methylated spirit
    - Soapy water
    - Diluted ammonia
    - Bleach, diluted 10%
    - Glass detergents

Wiring diagram

Rolling shutter management control

Use

Two-module flush-mounted lowered control with 3 pushbuttons and 3 two-colour LEDs designed to be used ONLY with advanced actuators (flush mounted or DIN module) specifically intended for rolling shutter management.

Preset function:
In addition to the Monostable and Bistable UP/DOWN operating modes, by pressing the STOP pushbutton the control gives the possibility of moving the shutter to a specific position (Preset) saved by the actuator. IT is also possible to set a different position as required by the user.
The function can only be set with the configuration of "control-actuator" addresses of the Point-Point type, or with Room, Group, and General controls, after configuring the reference actuator (position Ar and PLr). For more details see the Configuration chapter on the following page.

Related items

Actuator item F401, H/LN4661M2 and AM5861M2

Technical data

Power supply from BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Power consumption on standby:	7 mA max
Operating temperature:	0 – 40°C

Standards, Certifications, and Marks

- EN50090-2-2: Home and building electronic systems (HBES);
- EN50090-2-3: General functional safety requirements for products intended to be integrated in HBES;
- EN50428: Switches and related accessories for use in home and building electronic systems (HBES).

Dimensional data

Size: 2 flush mounted modules

Front view
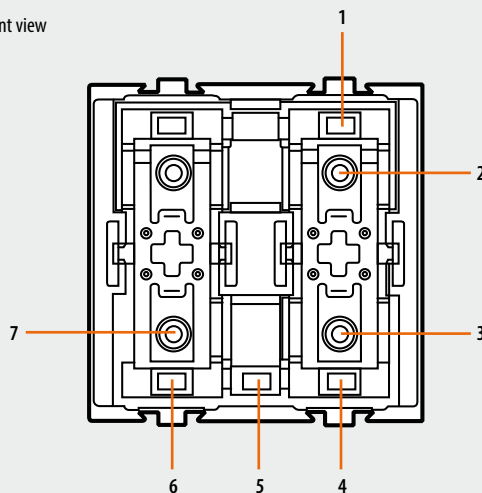
Rear view
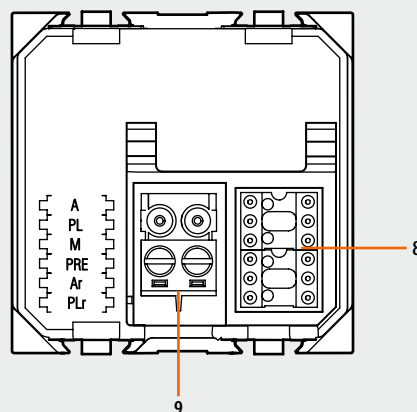
Legend

1. UP LED: orange (green + red) or purple (red + blue) when the shutter is moving up. Green or blue when the shutter is still or moving down;
2. UP SHUTTER PUSHBUTTON;
3. DOWN SHUTTER PUSHBUTTON;
4. DOWN LED: orange (green + red) or purple (red + blue) when the shutter is moving down. Green or blue when the shutter is still or moving up;
5. Push&Learn configuration pushbutton and LED brightness adjustment (see page 2);
6. Preset LED: ON orange (green + red) or purple (red + blue), when the shutter is moving to the saved position (Preset). Flashing during the virtual configuration;
7. STOP button: Press when the shutter is still, to move it to the Preset position. Press when the shutter is moving, to stop it at the current position;
8. Configurator socket;
9. BUS cable clamp.

Rolling shutter management control

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9
Room		0-10	A=AMB, PL=1-9
Group		1-255	A=GR, PL=1-9
General		General	A=GEN

1.2 Definition of the reference actuator for updating the control status

Function		Virtual configuration (MYHOME_Suite)	Physical configuration
	Room	0-10	Ar=1-9
	Lighting point	0-15	PLr=1-9

NOTE: Ar and PLr = configure these two positions only when needing to manage several actuators with a General, Room or Group type control. The Ar and PLr positions correspond to the address of the reference actuator for control status update.

Function		Virtual configuration (MYHOME_Suite)	Physical configuration
Installation level	Local bus	1-15	not configurable
	Riser bus	riser	not configurable
	Standard	standard	not configurable
Destination level	Local bus	1-15	I= 1-9
	Riser bus	riser	I=CEN
	Complete system	entire system	I=0

1.3 Mode

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
Bistable control	M= ↑↓
Monostable control	M= ↑↓M
Lath control and bistable control [1]	M=1
Bistable control and lath control [2]	M=2

NOTE 1): Bistable mode when pressed for longer than 1.5 s.
NOTE 2): Lath control when pressed for longer than 1.5 s.

1.3 Selecting the Preset position

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Rolling shutter opening 10%	1	Pre=1
Rolling shutter opening 20%	2	Pre=2
Rolling shutter opening 30%	3	Pre=3
Rolling shutter opening 40%	4	Pre=4
Rolling shutter opening 50%	5	Pre=5
Rolling shutter opening 60%	6	Pre=6
Rolling shutter opening 70%	7	Pre=7
Rolling shutter opening 80%	8	Pre=8
Rolling shutter opening 90%	9	Pre=9

Operating mode for pulse motors with a 3rd limit switch.
After inserting the configurators 2 in the Type socket and 9 in the Pre position of the device, when the STOP pushbutton of the control is pressed while the shutter is still, the shutter will move to the position of the 3rd limit switch. If there is no Configurator, the "Preset" function is not active.
G1 = defines the 1 to 9 group of actuators it belongs to.

Saving the rolling shutter position (preset)

Irrespective of the device configuration mode used, it is possible to change the Preset position based on the needs of the user. The procedure is as follows:

1. Use the control device, or the flush mounted actuator, to move the shutter to the desired position.
2. Press the STOP pushbutton for at least 10 seconds. The actuator assigned to the control saves the position of the shutter.
3. To confirm that the position has been saved correctly, the two LEDs, UP and DOWN, come on orange (green + red) or purple (red + blue) for 2 seconds.

Irrespective of the shutter position, once this has been stopped by pressing the STOP pushbutton, it will be possible to move it to the preset position.

LED ADJUSTMENT

1. Press the configuration pushbutton for at least 2 seconds.
2. Hold down the pushbutton; the brightness of the LED will change every 2 seconds as shown in the drawing.
3. Once the desired brightness level has been reached, release the pushbutton.

PUSH t > 2 s

DEFAULT

30%

0%

60%

100%
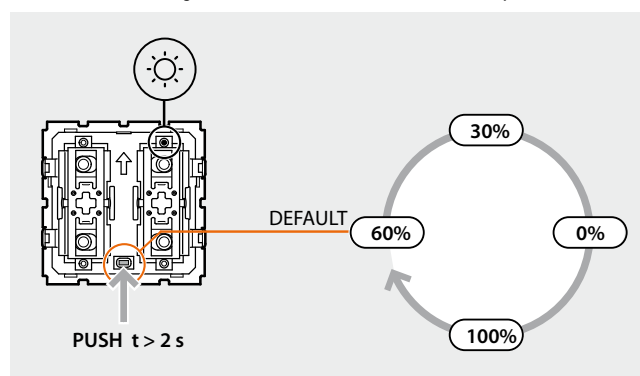
Rolling shutter actuator

Use

Flush-mounted two-module actuator device with 2 internal relays with 3 buttons and 3 two-colour LEDs, designed to work in conjunction with specific control devices for rolling shutters (UP, DOWN and lath position).

However, the actuator can also be used with all other control devices, although in that case the Preset function will not be available.

Preset function:

In addition to the Monostable and Bistable UP/DOWN operating modes, by pressing the STOP pushbutton the actuator enables moving the shutter into a specific position (Preset). When operating in this mode, the Preset LED will light up.

The device is supplied with 9 preset positions, which can be selected by connecting the numeric configurators 1 to 9 to the "Pre" socket on the back of the actuator.

IT is also possible to set a different position as required by the user; for the configuration modes see the next page.

The Preset function can also be managed using the Scenario Module (enabling of scenarios with preset shutter positions). In this case take the shutter into the desired position when saving the scenario.

Note: The scenario module must have been produced after week 29-2012.

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Max. current draw:	16 mA
Operating temperature:	0 – 40℃
Power/consumption of driven loads:	250 Vac – 2 A

Standards, Certifications, and Marks

- EN50090-2-2: Home and building electronic systems (HBES)
- EN50090-2-3: General functional safety requirements for products intended to be integrated in HBES
- EN50428: Switches and related accessories for use in home and building electronic systems (HBES)

Dimensional data

Size: 2 flush-mounted modules

Front view

Rear view

Legend

1. UP LED: orange (green + red) or purple (red + blue) when the shutter is moving up. Green or blue when the shutter is still or moving down.
2. UP SHUTTER PUSHBUTTON
3. DOWN SHUTTER PUSHBUTTON
4. DOWN LED: orange (green + red) or purple (red + blue) when the shutter is moving down. Green or blue when the shutter is still or moving up.
5. Push&Learn configuration and shutter position configuration pushbutton
6. Preset LED: ON orange (green + red) or purple (red + blue) when the shutter is moving into the Preset position. Flashing during virtual configuration.
7. STOP button: Press when the shutter is still, to move it to the Preset position. Press when the shutter is moving, to stop it at the current position.
8. Configurator socket (to be used only in My Home systems with physical configuration)
9. BUS clamp
10. Clamps (3 x 2.5 mm²) for connection to the load

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL=1-9
Group		Group 1 - Group 10: 0-255	G=0-9

1.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Master Actuator [1]	Master	M=0
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA
Pushbutton (ON monostable) the actuator ignores Room and General controls	Master PUL	M=PUL

NOTE 1): Operation based on the mode configured in the control device. After acquiring the positions of the rolling shutter (open and closed), it will be possible to ensure 100 different positions.

To use the "Actuator as a slave with PUL function" and to define the Preset positions, use MYHOME_Suite virtual configuration.

1.2.1 Type of motor

Virtual configuration (MYHOME_Suite)		Physical configuration
Type	**Parameter / setting**	
Standard with manual calibration	Standard	Type=1
Pulse	Pulse	Type=2

NOTE: To adjust the "Stop pulse duration" and "Up or down pulse duration" use MYHOME_Suite virtual configuration.

1.2.2 Control mode via actuator button

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
Bistable control [1]	M= ↑↓
Monostable control	M= ↑↓M
Lath control and bistable control [2]	M=1
Bistable control and lath control [3]	M=2

NOTE 1): After acquiring the two positions, closed and open shutter, it will be possible to manage 100 different positions.

NOTE 2): Bistable mode when pressed for longer than 1.5 s.
NOTE 3): Lath control when pressed for longer than 1.5 s.

1.2.3 Selecting the Preset position

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Rolling shutter opening 10%	1	Pre=1
Rolling shutter opening 20%	2	Pre=2
Rolling shutter opening 30%	3	Pre=3
Rolling shutter opening 40%	4	Pre=4
Rolling shutter opening 50%	5	Pre=5
Rolling shutter opening 60%	6	Pre=6
Rolling shutter opening 70%	7	Pre=7
Rolling shutter opening 80%	8	Pre=8
Rolling shutter opening 90%	9	Pre=9

Operating mode for pulse motors with a 3rd limit switch
After inserting the configurators 2 in the Type socket and 9 in the Pre position of the device, when the STOP pushbutton of the control is pressed while the shutter is still, the shutter will move to the position of the 3rd limit switch. If there is no Configurator, the "Preset" function is not active.

NOTE: The proper operation of the PRESET function with shutters provided with adjustable louver blades, can only be guaranteed by using pulse motors.

To set the "Preset P1-P9: 0-100" use MYHOME_Suite virtual configuration.

Mode of operation of the contacts L1 and L2 of the actuator configured TYPE=2 for the management of the 3° end of stroke.

Default operation TYPE=2 PRE=1-8

STOPPED SHUTTERS

Press ON	➜	L1 closes for 0.5 s
Press DOWN	➜	L2 closes for 0.5 s
Press STOP	➜	PRESET control sending

MOVING SHUTTERS

Press ON	➜	L1 closes for 0.5 s
Press DOWN	➜	L2 closes for 0.5 s
Press STOP	➜	L1 + L2 close for 0.5 s

Operation TYPE = 2 PRE = 9

STOPPED SHUTTERS

Press ON	➜	L1 closes for 0.5 s
Press DOWN	➜	L2 closes for 0.5 s
Press STOP	➜	L1 + L2 close for 0.5 s

MOVING SHUTTERS

Press ON	➜	L1 closes for 0.5 s
Press DOWN	➜	L2 closes for 0.5 s
Press STOP	➜	L1 + L2 close for 0.5 s

Calibration of the shutter position

UP LED

UP PUSHBUTTON

DOWN PUSHBUTTON

DOWN LED

Configuration pushbutton
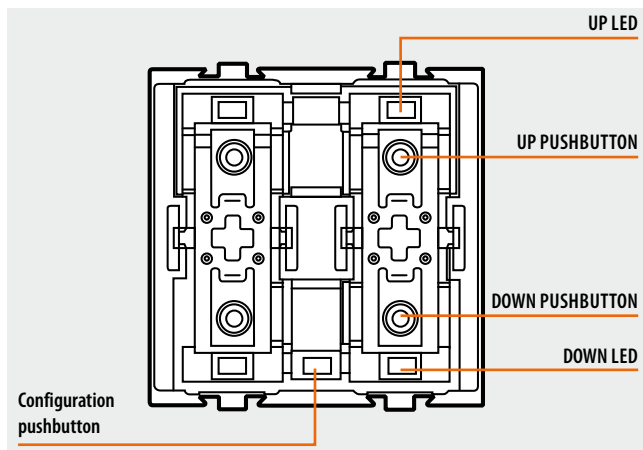
Manual calibration of the shutter position

This operation is **necessary** for correct operation of the actuator and enables saving the shutter opening and closing positions.

If no calibration is performed, the actuator cannot be managed by the control devices, but only locally, by pressing the corresponding front pushbuttons; in this case, it will send controls at 5-second intervals to the motor.

1. Press the configuration pushbutton for at least 3 seconds. All the LEDs will come on orange (green + red), or purple (red + blue).

2. Release the configuration pushbutton. The LED indicating the "UP" position will start flashing quickly.

3. Press and release the "UP" pushbutton. The shutter will move upwards and the "UP" LED will flash slowly.

4. Once the shutter has reached the maximum opening position, press the "DOWN" pushbutton. The shutter will move downwards and the "DOWN" LED will flash slowly. During this stage, the actuator measures and saves the time it takes the shutter to close.

5. When the shutter is fully closed, press and release the "UP" pushbutton. The shutter will move upwards, and the "UP" LED will flash slowly to enable the actuator to measure and save the time it takes the shutter to open.

6. When the shutter maximum opening position is reached, press the "OWN" pushbutton again to complete the calibration procedure. The "UP'" position LED will become green or blue.

WARNING: The calibration precision, and therefore the control of the shutter position, depends on the accuracy with which the limit switch positions are manually detected during the calibration itself.

Saving the new rolling shutter position (preset)

The Preset function lets you set the shutter in one of the 9 positions that can be selected with the configurator in the Pre socket. IT is in any case possible to set a different position as required by the user. The procedure, which can be performed from the control device, or the actuator, is as follows:

1. Press the "UP" and "DOWN" pushbuttons to move the shutter into the desired position.

2. Press the STOP pushbutton for at least 10 seconds. The actuator saves the position of the shutter.

3. To confirm that the position has been saved correctly, the two LEDs, UP and DOWN, come on orange (green + red) or purple (red + blue) for 2 seconds.

Irrespective of the shutter position, once this has been stopped by pressing the STOP pushbutton, it will be possible to move it to the preset position.

LED ADJUSTMENT

DEFAULT

30%

0%

60%

100%

PUSH t > 5 s
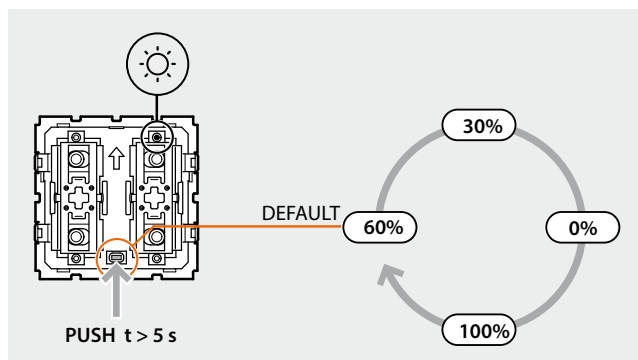
1. Press the configuration pushbutton for at least 5 seconds. All the LEDs will come on orange (green + red), or purple (red + blue) after 3 seconds, and after another 5 seconds will turn green or blue again;

2. Hold down the pushbutton, the brightness of the LED will change every 2 seconds as shown in the drawing;

3. Once the desired brightness level has been reached, release the pushbutton.

Wiring diagram

Traditional motor:
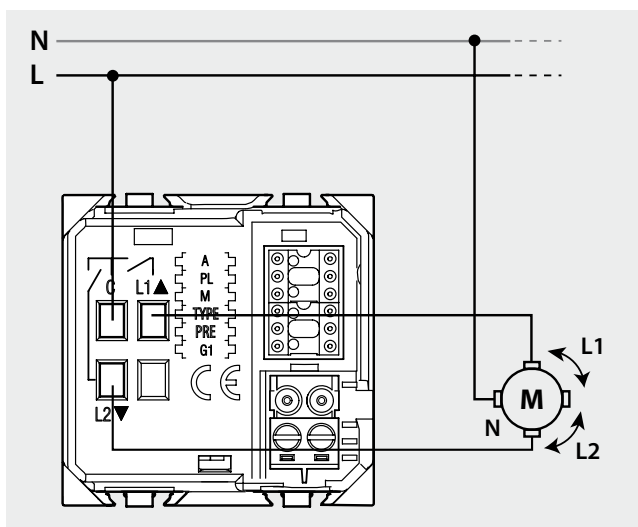
N

L

A
PL
M
TYPE
PRE
G1

L1

L2

L1

N

L2

M

Pulse motor

For the connection refer to the indications supplied with the motor interface.

Halogen-free (white) AV SCS/BUS cable

L4669HF

Description

This white SCS-BUS cable has been purposely designed and built for the installation of systems in rooms with a high risk of fire. Produced without halogens, the cable will burn without releasing toxic substances or heavy, dense smoke, significantly increasing the safety level.

This cable is used for the distribution of the power supplies and the operating signals to all system BUS devices.

It consists of a white external sheath and two twisted conductors, of cross-section 0.50 mm^2, brown and brown/white in colour. It is sold in coils of 200 m.

It is therefore ideal for use in:
- Free way inside trunking, walkways and conduits
- Inside walls via suitable conduits
- Underground via suitable conduits.

The white SCS-BUS cable is suitable for underground installation.

Technical data

Insulation voltage: 450/750 V
Can be buried: YES protected by suitable conduits
External sheath colour: white (RAL 9010)
External sheath diameter: 5.2 +/- 0.1 mm
External sheath thickness: 0.8 mm
External sheath material: LDFRPE Thermoplastic quality M1, hardness 95 A Shore
Number of internal conductors: 2 unshielded twisted flexible conductors with sheath
Colour of internal conductors: brown – brown/white
Sheath thickness of internal conductors: 0.45 mm
Sheath material of internal conductors: LDPE Polyethylene
Conductor material: red electrolytic copper
Conductor section: 0.52 mm^2 (7 x 0.308 mm2)
Operating temperature: (-15) – (+70) °C
Maximum short circuit temperature: 150℃
Coil length: 200 m

Standards, Certifications, Marks

Reference standards: The cable complies with the tests required by the following regulations: UL13, UL1581, EN60811, EN50289, EN50290, EN60228, EN50265-2-1, EN50395, EN50396 as described in document IMQ CPT 062.

Marks obtained:
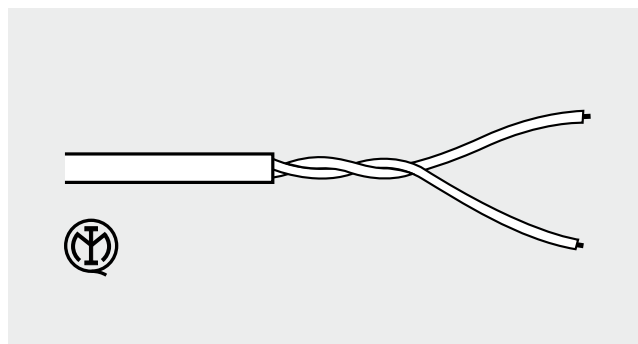
Installation notes

Cable burying

The SCS BUS 336904 cable can be buried (protected by suitable conduits) along with other signal cables if the voltages are < 50 V.

It is absolutely forbidden to run the cable 336904 together with power cables, where the voltages are > 50 V. Failure to comply with the installation rules authorises BTicino to disclaim all liability for the operation of existing plants.

Installation with other cables

Although the white cable constructively ensures the electrical insulation necessary for installation with 450/750 V cable systems, there is no assurance of immunity from electromagnetic interference that could occur if the cable were to be laid in the same conduits through which the power cables run.

It is highly recommended to install the SCS-BUS white cable and the power cables in different conduits.

BUS cable

Description

This cable is used for the distribution of the power supplies and the operating signals to all system devices.

The cable consists of a grey external sheathing and two twisted flexible conductors with a section of 0.35 mm², one blue and one white.

The cable is sold in 2 different type of coils:

- 100 m coil, item L4669
- 500 m coil, item L4669/500
- 1000 m coil, item L4669KM1

The cable has 300/500 V insulation. Using the clear clamp protections included in all the devices, the systems can also be installed in the same boxes and ducts as the power lines (110 Vac, 127 Vac and 230 Vac).

<u>**The grey BUS/SCS cable is not suitable for underground installation.**</u>

Technical data

nsulation voltage:	300/500 V
Can be buried:	NO
External sheath colour:	grey (RAL 7001)
External sheath diameter:	5.5 +/- 0.1 mm
External sheath thickness:	0.8 mm
External sheath material:	PVC (RZ)
Number of internal conductors:	2 unshielded twisted flexible conductors with sheath
Colour of internal conductors:	white and blue
Sheath thickness of internal conductors:	0.60 mm
Sheath diameter of internal conductors:	PVC (R2)
Conductor material:	red electrolytic copper
Conductor section:	0.35 mmq (12 x 0.20 mmq)
Operating temperature:	15 - 70 °C
Maximum short circuit temperature:	150 °C
Coil length:	100 m or 500 m

Standard, Certification, Marks

Reference standards: It complies with the tests required by the following regulations: EN60811, EN50289, EN50290, EN60228, 50265-2-1,EN50395, EN50396 as described inside the IMQ CPT 062 document
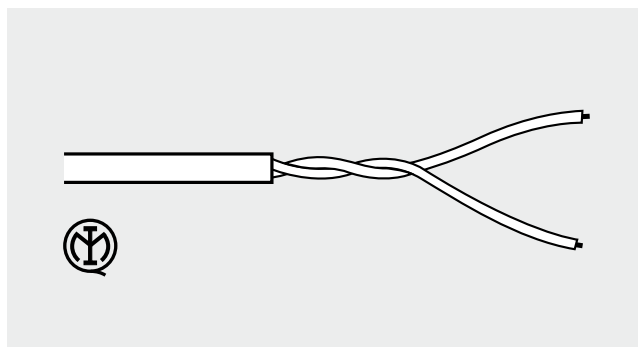
Warning

Although the construction of the grey cable ensures 300/500 V category electric insulation, correct system operation is not guaranteed when installed together with the power cables in the following cases:

- industrial environments,

In residential/service sector environments, when the power cables provide power supply to:

- lift,
- inverters,
- pumps,
- motors and controlled motors,
- metal iodines lamps.

Control/actuator

Description

This device, with 4 pushbuttons and 4 two-colour LEDs at the front, is fitted with 2 independent relays to control:
- 2 loads or 2 groups of loads that are independent;
- 1 single load (rolling shutter motor).
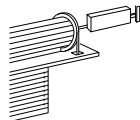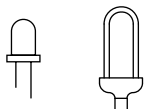
The actuator may also be configured for the management of the connected load, whilst at the same time operating as a "control device" for the management of one or more remote actuators, with operating modes typical of a 2-module basic control.
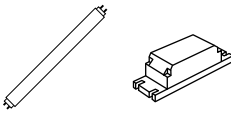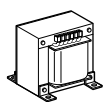
More specifically, after the configuration, it is possible to set the following modes of operation:
1. Actuator for single load (lighting or shutter automation) with local control.
2. Actuator for 2 independent loads (lighting) with 2 local controls.
3. Actuator for 1 load (lighting) with local control by the left button and remote actuator or scenario control by the right button.
4. Actuator for 1 load (shutter automation) with local control by the left button and remote actuator or scenario control by the right button.

Front

Rear

Technical data

Power supply from BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Power consumption on standby:	14 mA max
Operating temperature:	0 – 40℃
Operating temperature:	(-5) – (+45) ℃
Power/consumption of driven loads:	

	Incandescent lamps - Halogen lamps		Geared motors for rolling shutters		LED lamps Compact fluorescent lamps	
230 Vac	460 W	2 A	460 W	2 A	70 W	Max. 2 lamps

Linear fluorescent lamps - Electronic transformers		Ferromagnetic transformers	
70 W	0,3 A	2 A cosφ 0,5	460 VA
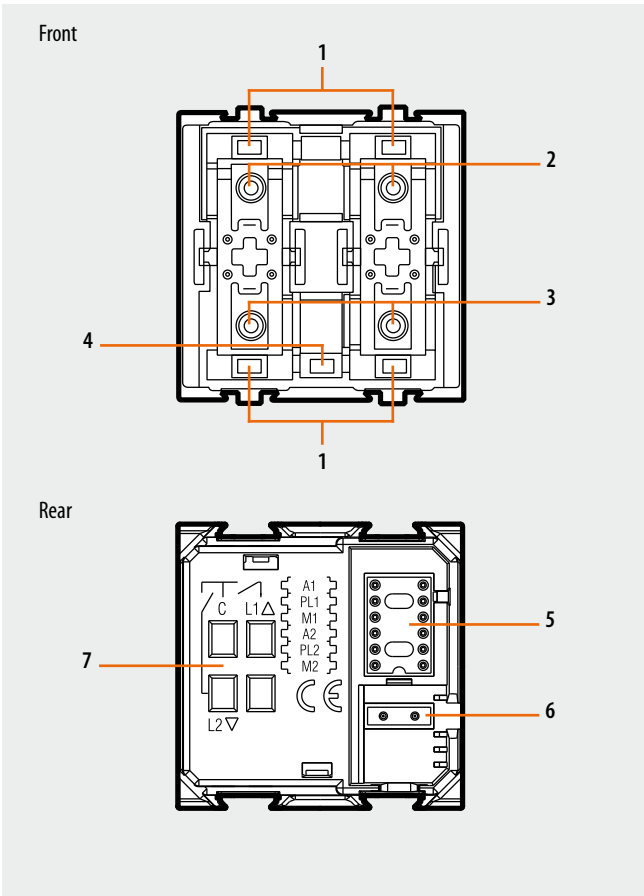
Legend

1. LED:

   LIVING LIGHT: green with motor stopped, or orange (green + red) with motor in operation

   green with light OFF, and orange with light ON

   AXOLUTE: blue with motor stopped, or blue + red with motor in operation

   blue with light OFF, or blue + red with light ON

2. Top buttons
3. Bottom buttons
4. LED control/off button
5. Configurator socket (note that this must only be used in My Home systems with the physical configuration)
6. BUS
7. Clamps (3 x 2.5 mm²) for connection to the load

Dimensions

Size: 2 flush-mounted modules

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

With the virtual configuration, the functions performed by the front buttons are independent of the functions of the local actuators.
The software lets you configure 4 independent addresses: 2 for the actuators and 2 for the front controls.
For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the «Function Descriptions» help section in the MYHOME_Suite software package.

Function selection

1. Lighting Actuator Mode (1 load) or shutter automation with local control

Configure A1, M1 and PL1 to define the local actuator address and mode.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Apartment	Room	0-10	A1=0-9
	Lighting point	0-15	PL1=1-9

To configure the group address (1-10) from 0 to 255, use MYHOME_Suite virtual configuration.

1.2 Lighting

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	Parameter / setting		
Master Actuator - Cyclical ON/OFF	Master	M1=0	
ON with top button, OFF with bottom button	-	M1=0/I	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M1=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL OFF Delay = 0	M1=PUL	
Master Actuator with OFF control delayed on the corresponding Slave actuator.[1]	Master PUL OFF Delay = 1 - 255	M1=1	1 minute
		M1=2	2 minutes
		M1=3	3 minutes
		M1=4	4 minutes
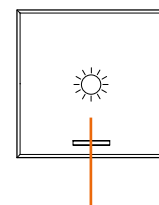
Light management "actuator" button cover

To define the type of load (lamp, solenoid valve, etc.), use MYHOME_Suite virtual configuration.

NOTE 1): Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set on the Master actuator has elapsed. Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light off immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

1.3 Automation

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Rolling shutter UP/DOWN with STOP after 2 minutes. The actuator ignores the Room and General controls	Master PUL	M1=OFF	
Rolling shutter UP/DOWN with STOP after the set time	Master, Slave	M1=5	1 minute
		M1=6	2 minutes
		M1=7	5 minutes
		M1=8	infinite
UP/DOWN monostable	-	M1= ↑↓M	
UP/DOWN bistable	-	M1=↑↓	

Copritasto "attuatore" gestione tapparella

To use the "Actuator as a slave with PUL function", the "Load Type" (Actuator, Rolling Shutter, Curtain, Gate, Rocker) and define the STOP time 1-60 sec., 2-10 min., use MY-HOME_Suite virtual configuration.

2. Lighting Actuator Mode (2 separate loads) with local controls

In this mode, the actuator manages two separate loads, connected to the contacts C-L1 and C-L2 of the two relays, locally controlled with both front buttons, right (load connected in C-L2) and left (load connected in C-L1).

2.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Apartment	Room	0-10	A1, A2=0-9
	Lighting point	0-15	PL1, PL2=1-9

To configure the group address (1-10) from 0 to 255, use MYHOME_Suite virtual configuration.

2.2 Lighting

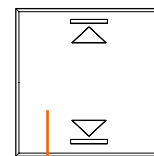| Virtual configuration (MYHOME_Suite)		Physical configuration		
Function	**Parameter / setting**			
Master Actuator - Cyclical ON/OFF	Master	M2=0	M1=CEN	
ON with top button, OFF with bottom button	-	M2=0/I	M1=CEN	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M2=SLA	M1=CEN	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL OFF Delay = 0	M2=PUL	M1=CEN	
Master Actuator with OFF control delayed on the corresponding Slave actuator.[1]	Master PUL OFF Delay = 1 - 255	M2=1	M1=CEN	1 minute
		M2=2	M1=CEN	2 minutes
		M2=3	M1=CEN	3 minutes
		M2=4	M1=CEN	4 minutes
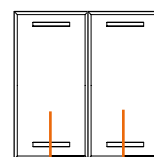
Lights 1 management "actuator" button cover

Lights 1 management "actuator" button cover

To define the type of load (lamp, solenoid valve, etc.), use MYHOME_Suite virtual configuration.

NOTE 1): Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set on the Master actuator has elapsed. Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light off immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

3. Actuator for 1 load (lighting) with local control by the left button and remote actuator or scenario control by the right button

3.1 Addressing

Configure A1, M1 and PL1 to define the local actuator address and mode of operation (controlled by the left button) as specified in paragraphs 1.1 and 1.2.
Configure A2 PL2 to define the address of the remote actuator to be managed, according to the following table:

Light management "actuator" button cover

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A2=1-9
	Lighting point	0-15	PL2=1-9
Room		0-10	A2=AMB, PL2=1-9
Group		1-255	A2=GR, PL2=1-9
General		General	A2=GEN

3.2 Mode of operation of the remote control

See chapter 5.

4. Actuator for 1 load (shutters automation) with local control by the left button and remote actuator or scenario control by the right button

4.1 Addressing

Configure A1, M1 and PL1 to define the local actuator address and mode of operation (controlled by the left button) as specified in paragraphs 1.1 and 1.3.
Configure A2 PL2 to define the address of the remote actuator to be managed, according to the following table:

Rolling shutter management "actuator" button cover

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A2=1-9
	Lighting point	0-15	PL2=1-9
Room		0-10	A2=AMB, PL2=1-9
Group		1-255	A2=GR, PL2=1-9
General		General	A2=GEN

To configure the reference addresses for the Room and the Light Point of an actuator use MYHOME_Suite virtual configuration.

4.2 Mode of operation of the remote control

See chapter 5.

5. Mode of operation of the control by the right button

5.1 ON/OFF control

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Cyclic.		M2=0
ON		M2=ON
OFF		M2=OFF
Button		M2=PUL
Timed ON	0.5sec	M2=8
	30sec	M2=7
	1min	M2=1
	2min	M2=2
	3min	M2=3
	4min	M2=4
	5min	M2=5
	15min	M2=6

Remove actuator "control" button cover

Or

Remove actuator "control" button cover
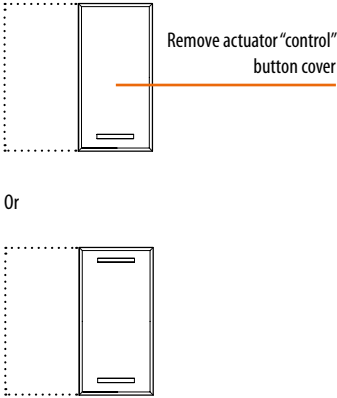
5.1.1 ON/OFF Control and ADJUSTMENT (Point-to-Point only):

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
ON/OFF and cyclic ADJUSTMENT. ON/OFF when pressing briefly and adjustment when holding down.	M2=0
ON with top button, OFF with bottom button and DIMMER when held down	M2=0/I

For the "ON/OFF with adjustment" function, "Timed ON" with parameter 2sec, 10min, 15min, "Blinking", "Cyclic with custom point-to-point adjustment", "ON/OFF with custom point-to-point adjustment", "Cyclic with custom adjustment" and "Custom cyclic dimmer with no adjustment" use virtual configuration via MYHOME_Suite

5.2 Automation

Virtual configuration (MYHOME_Suite)	Physical configuration
Parameter / setting	
Bistable control	M2=↑↓
Monostable control	M2=↑↓M

Remove actuator "control" button cover
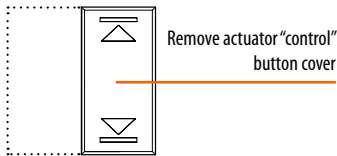
For bistable control + lath control use MYHOME_Suite virtual configuration

5.3 Programmed scenario activation

5.3.1 Addressing

Addressing type		Virtual configuration (MYHOME_Suite)	Physical configuration
	Room	0-10	A2=1-9
	Lighting point	0-15	PL2=1-9

Scenarios activation
key cover
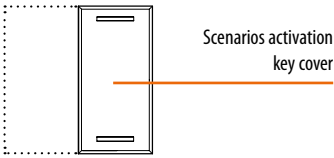
5.3.2 Mode

	Virtual configuration (MYHOME_Suite)	Physical configuration
Top button	0-31	M2=CEN
Bottom button	0-31	M2=CEN

The scenarios can only be activated with the button on the right. If the device is configured in PHYSICAL CONFIGURATION mode, the activated scenarios will be 1 and 2.

5.4 Plus programmed scenario activation

To configure the number 1 - 2047 of the scenario and of the buttons 0 - 31 on the control device, use MYHOME_Suite virtual configuration

Wiring diagrams

Wiring diagram for light connection
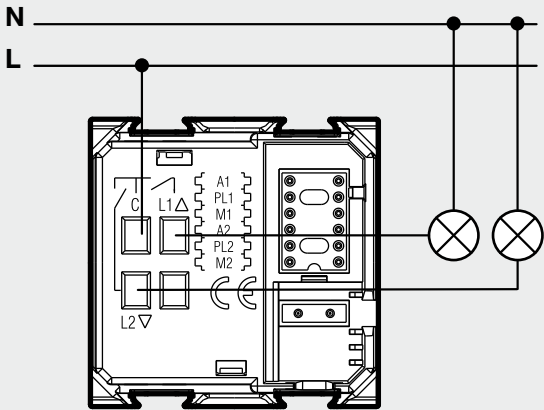
Wiring diagram for rolling shutter connection
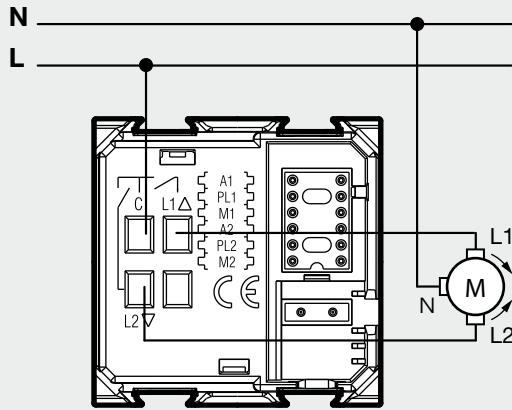
Flush-mounted 1-relay actuator
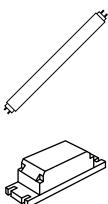
H4671/1   L4671/1
64390 AM5851/1

Description

Device to control a single load with a built-in electromechanical relay.

Technical data

Power supply via SCS BUS: 27 Vdc from the BUS
Operating power supply with BUS: 18 – 27 Vdc
Current draw: 16.5 mA
Power/Consumption of driven loads:

	Incandescent lamps Halogen lamps		LED lamps Compact fluorescent lamps		Linear fluorescent lamps Electronic transformers		Ferromagnetic transformers	
230 Vac	1380 W	6 A	150 W	Max. 3 lamps	150 W	0.65 A	2 A cosφ 0.5	460 VA

Dissipated power with max. load: 0.9 W
Size: 2 flush-mounted modules

Front view
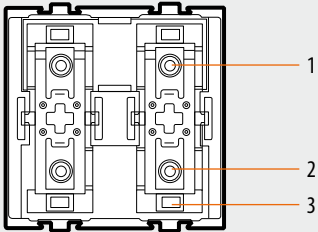
Rear view
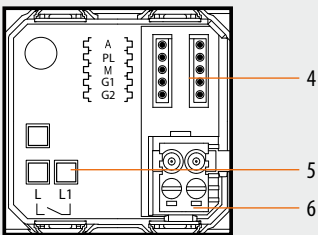
Legend

1. Top button
2. Bottom button
3. LED
4. Configurator socket
5. Power line (max 2x2.5 mm^2)
6. BUS

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite) / Physical configuration
Point-to-point	Room	1-9
	Lighting point	1-9
Group		G1, G2=0-9

MQ00072-e-EN   05/06/2014

Flush-mounted 1-relay actuator

1.2 Mode

Virtual configuration (MYHOME_Suite) / Physical configuration	
Function	**Parameter / setting**
Master Actuator - Cyclical ON/OFF	M=0
ON with top button, OFF with bottom button	M=0/I
Actuator as Slave. Receives a command sent by a Master actuator with the same address	M=SLA
Pushbutton (ON monostable) ignores Room and General controls	M=PUL
Master Actuator with OFF control delayed on the corresponding Slave actuator. [1]	M=1 1 minute M=2 2 minutes M=3 3 minutes M=4 4 minutes

Use 2-module button cover with dual function
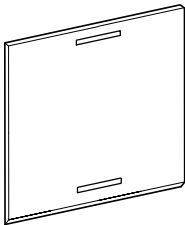
NOTE 1): Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set on the Master actuator has elapsed. Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light off immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table. The control must be configured in socket M = 0/1.

Dimmer actuator 300VA

Description

The device is a dimmer for controlling resistive loads and ferromagnetic transformers. It is used to turn on and off and adjust the brightness of the load. It can be controlled via the BUS or the local button. Briefly pressing the button turns the load on or off, while holding it down adjusts the brightness.

The actuator is able to signal any load faults such as, for example, lamp failure. It is also protected by a fuse, easily replaceable should it blow.

The LED on the actuator changes colour depending on the status of the device:
- green/blue: power ON, load OFF
- red: load ON
- blinking: incorrect configuration

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	9 mA
Operating temperature:	0 – 40°C
Power/Consumption of driven loads:	

	Incandescent lamps Halogen lamps		Ferromagnetic transformers	
230 Vac	60 - 300 W	0.25 - 1.30 A	0.25 - 1.30 A	60 - 300 VA

Dissipated power with max. load: 3 W

Dimensions

Size: 2 flush-mounted modules

Connection
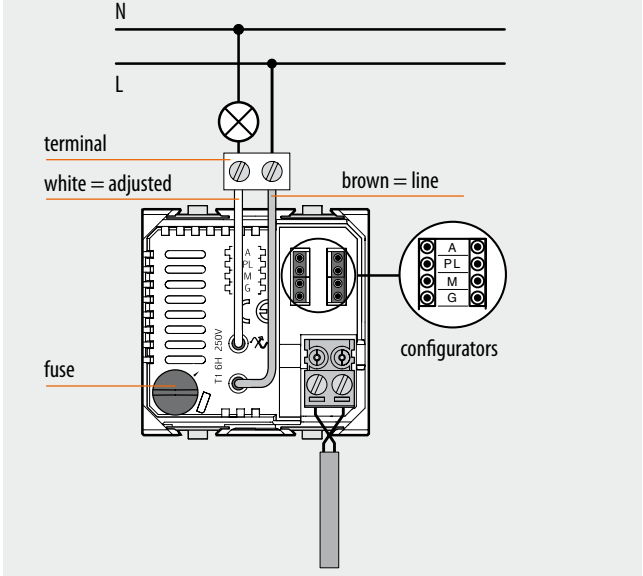
Front view
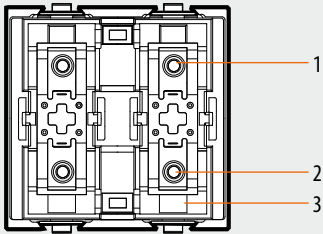
Rear view
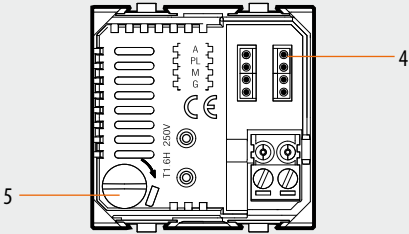
Legend

1. Top button
2. Bottom button
3. LED
4. Configurator socket
5. Fuse

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in their sockets marked on the back of the device:
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions on this sheet and to the "Glossary" section of the Guide to designing and installing My Home.

Dimmer actuator 300VA

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	1-9	A=1-9
	Lighting point	1-9	PL = 1-9
Groups		G=0-9	G=0-9

1.2 Mode

	Virtual configuration (MYHOME_Suite) and physical configuration	
Function	**Parameter / setting**	
Master Actuator (Cyclical ON/OFF)	M=0	
ON with top button, OFF with bottom button. [1]	M=0/I	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	M=PUL	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [2]	M=1	1 minute
	M=2	2 minutes
	M=3	3 minutes
	M=4	4 minutes

NOTE 1):
Use 2-module button cover with dual function
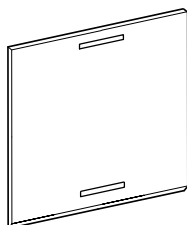
NOTE 2): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. Only for point-point control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set on the Master actuator has elapsed. Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time.
The OFF control switches the light off immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

Scenario control

Description

Control device to activate, create and change 4 scenarios stored in the scenario module item F420 or activate the ones saved in the scenario programmer MH200N.

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	9 mA

Dimensions

Size:	2 flush-mounted modules

HD4680 - HC4680 - HS4680 - L4680
N4680 - NT4680 - 574504 - 574503

067217 - 067218 - 573902 - 573903
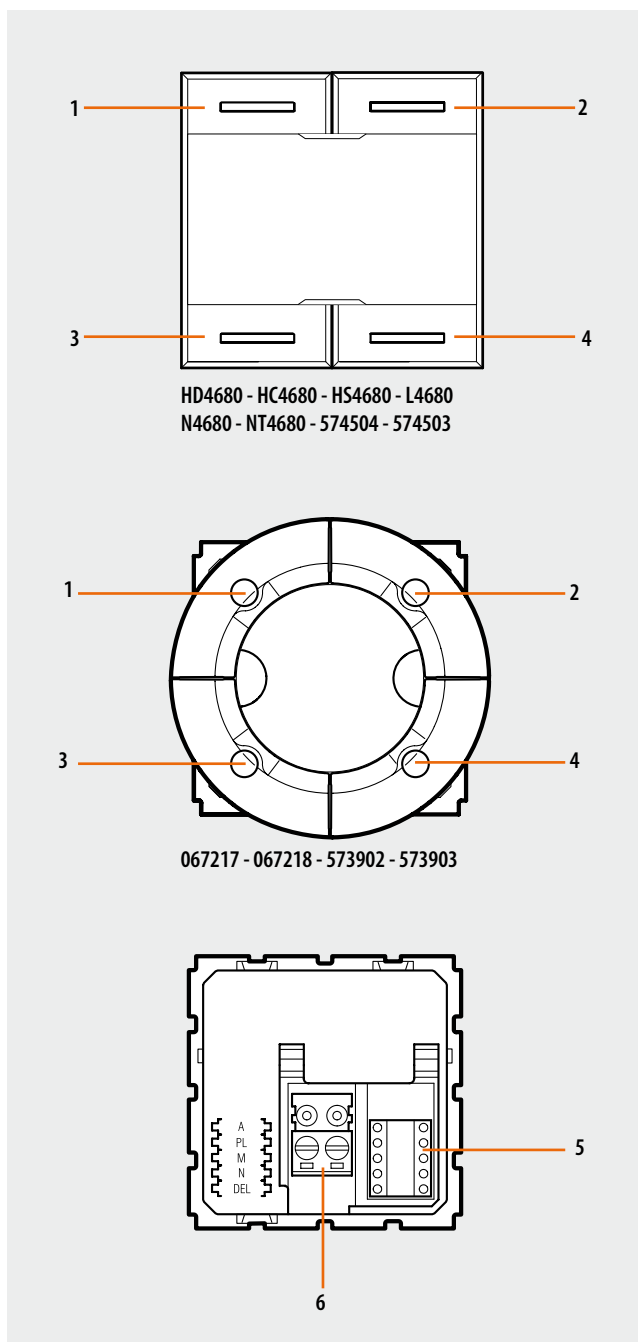
Legend

1. Button 1
2. Button 2
3. Button 3
4. Button 4
5. Configurator socket
6. BUS

Scenario control

HD4680	HC4680	HS4680	L4680	N4680	NT4680
067217	067218	574504	574503	573902	573903

Configuration

1. Lighting Management System

When installed in a Lighting Management system, the device can be configured in the following ways:
- Project&Download, with the Virtual Configurator software you can perform all the functions listed below:
- double scenario control

- double CEN control
- double PLUS scenario control
- double CEN PLUS control
For more information on the functions see the glossary before the Technical sheets chapter.

2. My Home system

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

Function selection

1. Scenario module control

1.1 Addressing

Function	Virtual configuration (MYHOME_Suite)	Physical configuration
Room (of the scenario module)	0-10	A=0-9
Light point (of the scenario module)	0-15	PL=1-9

Installation and destination level:
The special control can also be used in systems where there are SCS/SCS interfaces (F422). By installing the control on the BUS of an interface (installation level), you can control one or more actuators located on the BUS of another interface (destination level).

Function		Virtual configuration (MYHOME_Suite)	Physical configuration
Destination level	Local bus	1-15	I= 1-9
	Riser bus	riser	I=CEN
	Complete system	entire system	I=0

To configure the installation level use MYHOME_Suite virtual configuration.

NOTE: Positions A and PL of the scenario control must correspond to those in the scenario module item F420. The association of each key of the control to one of the scenarios stored by the module is made by configuring socket M. It is possible to configure positions N and DEL to set the number of the scenario to be activated with a delay (from 15s to 15m).

1.2 Mode

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Scenario modification and activation		
Scenario top button	1-16	M=1-4 [1]
Scenario bottom button	1-16	

NOTE 1): Correspondence between the 4 keys of the control and the scenarios stored in the module item F420:

Scenario control

HD4680   HC4680   HS4680   L4680   N4680   NT4680
067217   067218   574504   574503   573902   573903

Value of configurator M	Button 1 (T1)	Button 2 (T2)	Button 3 (T3)	Button 4 (T4)
1	scenario 1	scenario 2	scenario 3	scenario 4
2	scenario 5	scenario 6	scenario 7	scenario 8
3	scenario 9	scenario 10	scenario 11	scenario 12
4	scenario 13	scenario 14	scenario 15	scenario 16

1.2.1 Defining scenario activation delay

It is possible to set a delay to be assigned to one or all the scenarios before actuation is performed:

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Delay activation		
Top button delay	0, 1-60s , 90s, 2-10m, 15m	DEL=0-9, N=0-5 *)
Bottom button delay	0, 1-60s , 90s, 2-10m, 15m	DEL=0-9, N=0-5 *)

NOTE (*): The Configurator in the DEL position determines the scenario activation delay.

Value of configurator DEL	Delay
0	No delay
1	1 minute
2	2 minutes
3	3 minutes
4	4 minutes
5	5 minutes
6	10 minutes
7	15 minutes
8	15 seconds
9	30 seconds

Selecting scenarios to delay

Value of configurator N	Button 1 (T1)	Button 2 (T2)	Button 3 (T3)	Button 4 (T4)
0	None	None	None	None
1	Delay ON	None	None	None
2	None	Delay ON	None	None
3	None	None	Delay ON	None
4	None	None	None	Delay ON
5	Delay ON	Delay ON	Delay ON	Delay ON

2. Programmed scenario activation

In this mode, pressing a button activates a scenario stored in the scenario programmer MH200N.

2.1 Addressing

	Virtual configuration (MYHOME_Suite)	Physical configuration
Addressing type		
Room	0-10	A=1-9
Lighting point	0-15	PL=1-9

Scenario control

2.2 Scenario number

	Virtual configuration (MYHOME_Suite)	Physical configuration
Top button	0-31	SPE=0 M=CEN
Bottom button	0-31	SPE=0 M=CEN
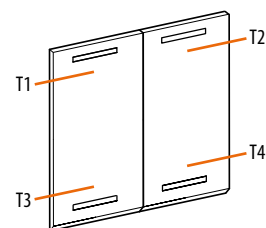
NOTE: T1-T4 = scenario buttons 1-4

3. PLUS programmed scenario activation

To configure address 1 - 2047 of the scenario and of the number of buttons 0 - 31 use MYHOME_Suite virtual configuration

Scenario programming

In order to program, change or cancel a scenario, it is necessary to enable the programming mode of the Module item F420 so that the status LED is green (press the lock/unlock key on the Scenario Module for at least 0.5 seconds); continue with the following operations:

1) Press one of the four control keys the scenario should be associated to for 4 seconds. The corresponding LED starts flashing.

2) Set the scenario using the corresponding controls for the various Automation, Temperature control, Sound system, etc. functions.

3) Confirm the scenario by quickly pressing the corresponding key on the control to exit programming mode.

4) To change or create new scenarios to be linked to the other keys, repeat the procedure starting from point 1. To recall an already set scenario, briefly pressing the corresponding button on the control is enough.

NOTES:
Once the operations have been performed lock the programming, pressing the lock/unlock pushbutton, of the scenario module, for at least 0.5 seconds, so that the corresponding LED becomes red.

To delete a scenario, proceed as follows:

1) The scenario module must be enabled for programming.

2) Press the pushbutton of the scenario you want to cancel for at least 10 seconds: the corresponding LED will start flashing quickly for about 2 seconds, thus indicating that the scenario has been cancelled. If the LED does not flash, it means that the control has failed.

To erase the entire memory keep the DEL pushbutton on the Scenario module pressed for 10 seconds, the yellow "reset scenarios" LED flashes quickly.

Buttons for managing scenarios

Radio IR detector
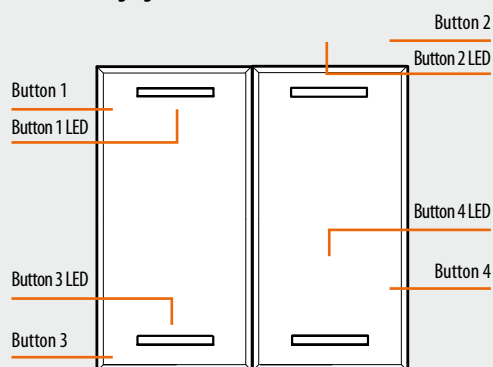
Description

This device, sensitive to the movement of warm bodies, is suitable for the protection of interiors. The configuration can be changed to adjust the tripping sensitivity and set the system to perform typical Automation functions, such as, for example, the delayed switching on of lights, when the person crosses the protected area.

The sensor is powered by a 3.6V AA battery and is self protected against opening. Its free field range is 100 m.

After some detections, these sensors automatically deactivate for 3 minutes, to prevent the intruder to guess the sensor covering area. It also permits to save energy, thus extending the life of the battery.

Technical data

- Power supply: 3.6 V lithium battery - type 1/2 AA
- Operating temperature: 5 - 40°C (indoor use)
- Minimum battery duration: 3 years
- Radio frequency: 868.35 MHz
- Range: 100 metres free field
      (metal, concrete walls and metal plates reduce coverage)
- Modulation: FSK

CONFORMITY DECLARATION

Item 3440 meets the essential requirements of directive 1999/5/CE, as it complies with the following standards:

ETSI EN300 220-3 ETSI EN301 489-3 EN60950 EN50090-2-2 EN50090-2-3.

Year of approval of the CE mark in accordance with the above directive: 2007

Front view
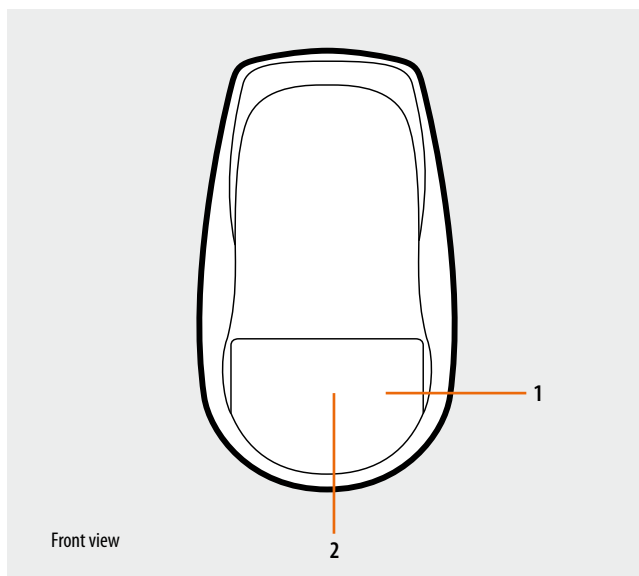
Legend

1 - Fresnel lens;

2 - LED: Two red flashes signal an alarm; only one flash indicates that the battery is exhausted.

Dimensional data

Covering range

Radio IR detector
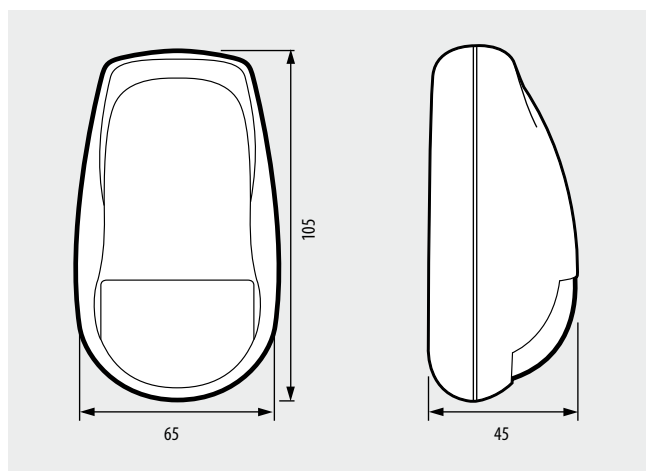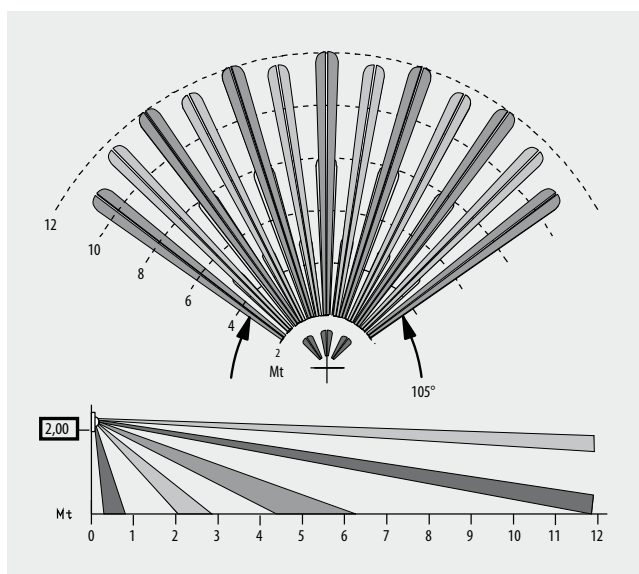
Configuration

Infrared radio detectors require assigning of the zone they belong to, of the progressive sensor number within the zone, setting of the detection mode and the allocation of an auxiliary prealarm channel.

WARNING: the configuration operations must be performed with the battery disconnected.

Z

This configurator assigns the number of the appropriate zone to the detector.
Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

N

This configurator assigns the progressive number of the detector inside the appropriate zone.
Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

MOD

This configurator sets the sensor detection mode.
It can be used, for EXAMPLE, when the device is directed towards a possible source of disturbance (window or radiator), and its position cannot be changed.

Configurator	Mode
0	1st level of sensitivity (1 high sensitivity impulse)
1	1st level of sensitivity (pulse counter[1] - high sensitivity)
2	2nd level of sensitivity (1 high sensitivity impulse)
3	3rd level of sensitivity (1 high sensitivity impulse)
4	1st level of sensitivity (1 high sensitivity impulse) delayed[2]
5	1st level of sensitivity (pulse counter[1] - high sensitivity) delayed[2]
6	2nd level of sensitivity (1 high sensitivity impulse) delayed[2]
7	3rd level of sensitivity (1 high sensitivity impulse) delayed[2]
9	The device sends an auxiliary type alarm through the specified channel in the AUX position only when the system is armed

NOTE:
1) Use the pulse counter function to avoid false alarms caused by thermal variations (radiators etc.).
2) Feature available on central units produced starting from week 08W06.

AUX

This configurator activates the prealarm function and assigns an auxiliary channel (AUX).
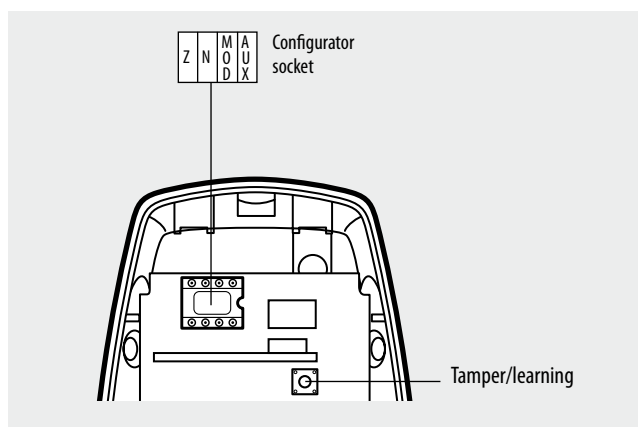To enable and use the AUX channels, refer to the description for wired IR detectors.

NOTE: When the system is armed, the detector generates a normal burglary alarm.

AUTOMATION – TIMED CONTROL mode:

Passive IR detectors can generate and send an ON timed control directly to one or more actuators of the automation system.

Configurator socket

Tamper/learning

ON timed control

For this mode, configure in the Z and N positions of the detector the addresses A and PL of the actuator to control respectively.
To the MOD position connect the ON configurator to enable the time delay function.
The switching ON period is set by connecting numerical configurators 1 to 9 to the AUX position as shown in the following table:

AUX	1	2	3	4	5	6	7	8	9
Time	1 min.	2 min.	3 min.	4 min.	5 min.	15 min	30 sec.	0.5 sec.	2 sec.

AUTOMATION mode – GENERIC CONTROL USING AUXILIARY CHANNELS

In this case, the control intended for the actuator is managed by a control device, item H/L4651M2 or AM5831M2, which, based on its own operating mode, set in its own M position, activates the actuator with address set in A and PL.
The communication between the detector and the associated control device item H/L4651M2 or AM5831M2 is established by defining an auxiliary channel that has been configured in the IR detector by connecting the AUX configurator to the MOD position and specifying, with numeric configurators 1-9 in the AUX position, the number of the auxiliary channel. Obviously, in order to univocally set the auxiliary channel, also the AUX position of the control must have the same configurator as the IR detector.

Pairing IR radio sensors

1. Switch the system to "maintenance" mode.
2. Press the programming pushbutton of the radio receiver for five seconds, until the red LED comes on.
3. Press the sensor tamper contact twice.
4. If the pairing of the device has been performed correctly, the red LED of the radio receiver will go off.
   If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.
5. To pair other devices, repeat from step 2.
6. Perform self learning of the system from the central unit.
7. Exit "maintenance" mode.

Cancelling the IR radio sensors

1. Switch the system to maintenance mode.
2. Remove the power supply from the receiver.
3. Press and hold the programming pushbutton while reconnecting the power supply to the radio receiver.
4. After 5 seconds the LED flashes orange. If the pushbutton is released at this time, only the remote controls are cancelled. After 10 seconds the LED starts flashing quickly. If the pushbutton is released now, only the sensors are cancelled.
5. After releasing the pushbutton, the LED becomes fixed orange. When the LED goes off, cancellation has been completed.
6. Perform self-learning of the system from the central unit and exit "maintenance" mode.

Radio glass-breaking detector

Description

This sensor protects doors and windows and generates an alarm signal in case of unwanted opening. The device consists of two elements:
- a magnet, to be installed on the window /door, with corresponding bracket/spacer;
- a battery powered radio transmitter with NC contact to be installed on the window/door frame.

The alarm is generated when, by opening the door or the window, the magnet is moved away from the corresponding radio transmitter. Up to 3 NC additional contacts can be connected to the device, protecting 3 more units (doors/windows).

Magnet   Radio transmitter

Technical data

- Power supply:	3.6 V lithium battery - type 1/2 AA
- Operating temperature:	+5 – +40°C (indoor use)
- Minimum battery duration:	3 years
- Radio frequency:	868.35 MHz
- Range:	100 metres free field
	(metal, concrete walls and metal plates reduce coverage)
- Modulation:	FSK

CONFORMITY DECLARATION

Item 3442 meets the essential requirements of directive 1999/5/CE, as it complies with the following standards:

ETSI EN300 220-3 ETSI EN301 489-3 EN60950 EN50090-2-2 EN50090-2-3

Year of approval of the CE mark in accordance with the above directive: 2007

Dimensional data

Radio transmitter

Magnet

Transmitter internal view
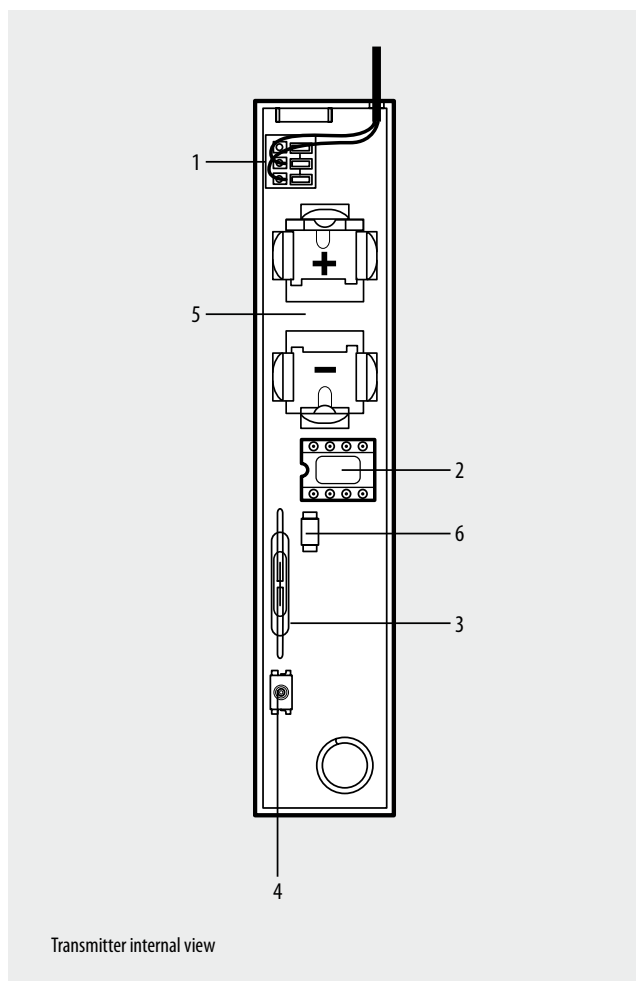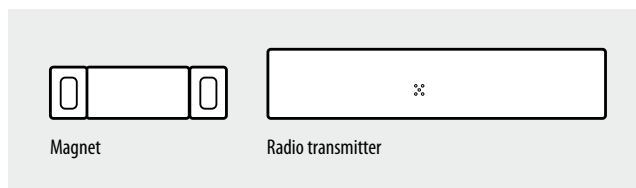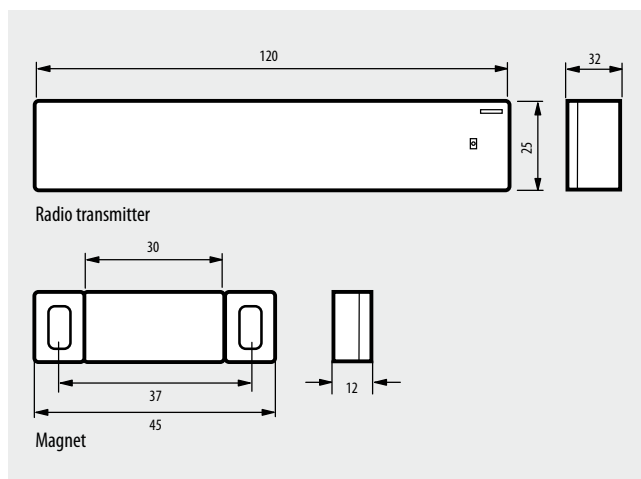
Legend

1 - Additional contact line clamp;

2 - Configurator socket;

3 - Magnetic contact;

4 - Tamper/learning;

5 - Battery housing;

6 - LED: two red flashes signal an alarm; only one flash indicates that the battery is exhausted.

Radio glass-breaking detector

Configuration

The device requires allocation of the zone it belongs to, the progressive number of the sensors within the same zone, and the setting of the detection mode, as well as the possible allocation of an auxiliary prealarm channel.
WARNING: the configuration operations must be performed with the battery disconnected.

Z

This configurator assigns the number of the appropriate zone to the detector.
Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

N

This configurator assigns the progressive number of the detector inside the appropriate zone. Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

MOD

The configurator connected to this socket specify the detection mode associated to the NC contact supplied and any other, max. 3, NC contacts connected to the internal clamp.

Configurator	Operating mode
0	Not delayed
2	Delayed[1]
9	The device sends an auxiliary type alarm through the specified channel in the AUX position only when the system is armed.
AUX	Prealarm function. With the system armed or disarmed, the device sends an auxiliary type alarm through the specified channel in the AUX position. If the zone it belongs to is divided, the auxiliary command is disabled.

NOTE[1]: function available only with central units item 3485/B, item 3486 and HC/HD/HS/L/N/NT4601.

AUX

The configurator in the AUX socket activates the auxiliary function of the corresponding auxiliary channel. It therefore enables controlling auxiliary actuator devices, provided that they have been configured using the same auxiliary channel.

NOTE: to complete the activations using the relay actuator type HD/HC/ HS/L/N/NT4614 and AM5794 see the appropriate technical sheet.

NOTE: When the system is armed, the detector generates a normal burglary alarm.

Configurator socket

Transmitter internal view

Radio glass-breaking detector

Configuration

Pairing magnetic contacts

1. Switch the system to "maintenance" mode.
2. Press the programming pushbutton of the radio receiver for five seconds, until the red LED comes on.
3. Press the tamper contact twice.
4. If the pairing of the device has been performed correctly, the red LED of the receiver will go off. If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.
5. To pair other devices, repeat from step 2.
6. Close the sensors to deactivate the tamper.
7. Perform self learning of the system from the central unit.
8. Exit "maintenance" mode.

Cancelling magnetic contacts

1. Switch the system to maintenance mode.
2. Remove the power supply from the radio receiver.
3. Press and hold the programming pushbutton while reconnecting the power supply to the radio receiver.
4. After 5 seconds the LED flashes orange. If the pushbutton is released at this time, only the remote controls are cancelled.
   After 10 seconds the LED starts flashing quickly. If the pushbutton is released now, only the sensors are cancelled.
5. After releasing the pushbutton, the LED becomes fixed orange. When the LED goes off, cancellation has been completed.
6. Perform self-learning of the system from the central unit and exit "maintenance" mode.

Tamper/learning
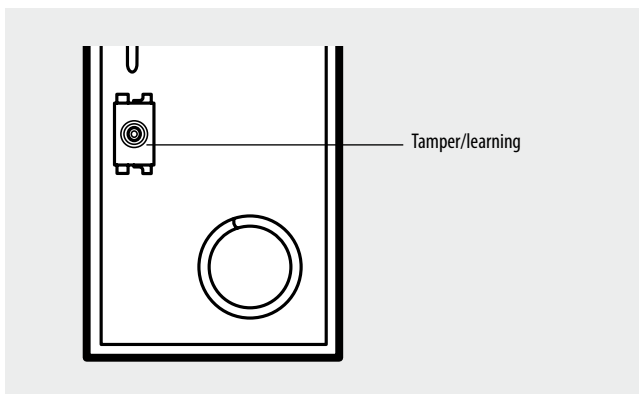
Wiring diagram

In addition to the standard NC magnetic contact, the sensor can also control the opening of other optional NC contacts (max. of 3) connected to an appropriate clamp of the transmitting unit, as shown in the following diagram.

WARNING: For correct operation of the device the corresponding magnetic contact, or any additional magnetic contacts, must be activated within 12 hours from the moment the device starts operation.

Tamper line *

N.C.

Balance resistance 68K Ω
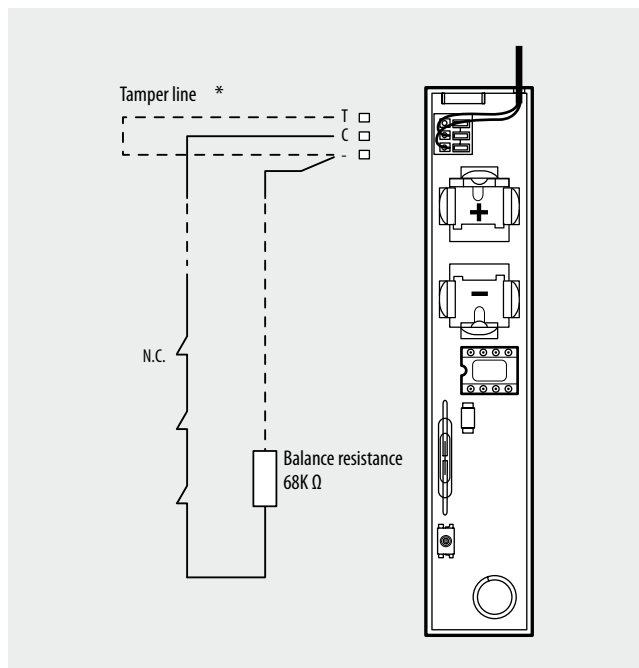
Note (*): short circuit contacts – and T if no tamper line is installed

Radio glass-breaking detector

Description

This device generates an alarm signal when the sensor detects the vibrations cause by the breaking of door or window glass. It consists of two elements:
- a vibration sensor, to be installed on the glass of the door or window to protect;
- a battery powered radio transmitter, to be installed on the frame;
Also supplied is an NC contact with additional magnet for the protection of doors and windows.

Technical data

- Power supply:	3.6 V lithium battery - type 1/2 AA
- Operating temperature:	5 – 40°C (indoor use)
- Minimum battery duration:	3 years
- Radio frequency:	868.35 MHz
- Range:	100 metres free field (metal, concrete walls and metal plates reduce coverage)
- Modulation:	FSK

CONFORMITY DECLARATION

Item 3444 meets the essential requirements of directive 1999/5/CE, as it complies with the following standards:

ETSI EN300 220-3 ETSI EN301 489-3 EN60950 EN50090-2-2 EN50090-2-3

Year of approval of the CE mark in accordance with the above directive: 2007

Dimensional data

120   32   25

Radio transmitter

32   9   32

Sensor

Radio transmitter   Sensor

1
5
2
6
3
4

Transmitter internal view
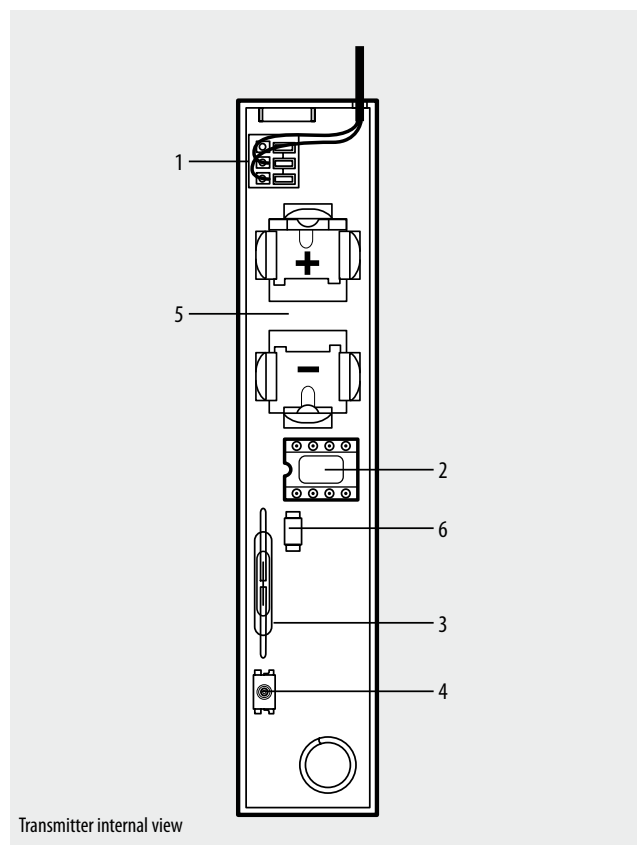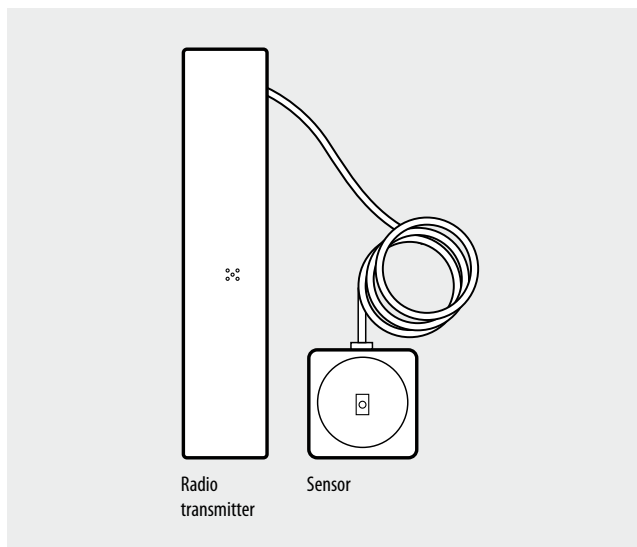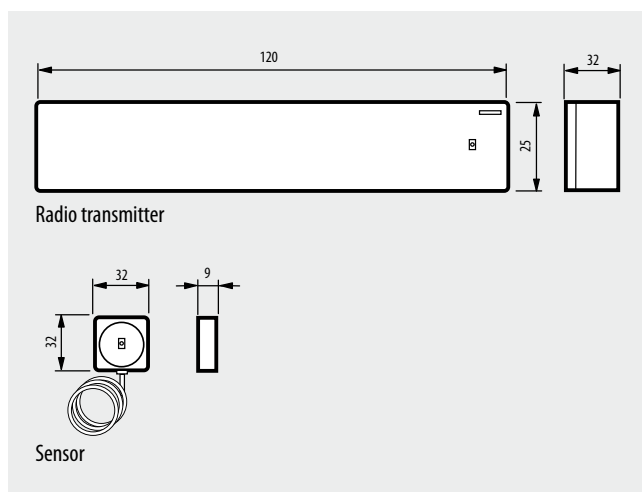
Legend

1 - Sensor connection clamp;
2 - Configurator socket;
3 - Additional Magnetic contact;
4 - Tamper/learning;
5 - Battery housing;
6 - LED: two red flashes signal an alarm; only one flash indicates that the battery is exhausted.

Configuration

The device requires allocation of the zone it belongs to, the progressive number of the sensors within the same zone, and the setting of the detection mode, as well as the possible allocation of an auxiliary prealarm channel.

WARNING: The configuration operations must be performed with the battery disconnected

Z
This configurator assigns the number of the appropriate zone to the detector. Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

N
This configurator assigns the progressive number of the detector inside the appropriate zone. Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

MOD
The configurator connected to this socket specifies the detection mode associated to the glass-breaking sensor supplied and the NC contact with additional magnet.

Configurator	Operating mode
0	Not delayed
2	Delayed[1]
9	The device sends an auxiliary type alarm through the specified channel in the AUX position only when the system is armed.
AUX	Prealarm function. With the system armed or disarmed, the device sends an auxiliary type alarm through the specified channel in the AUX position. If the zone it belongs to is divided, the auxiliary command is disabled.

NOTE[1]: function available only with central units item 3485/B, item 3486 and HC/HD/HS/L/N/NT4601.

AUX
The configurator in the AUX socket activates the auxiliary function of the corresponding auxiliary channel. It therefore enables controlling auxiliary actuator devices, provided that they have been configured using the same auxiliary channel.

NOTE: to complete the activations using the relay actuator type HD/HC/ HS/L/N/NT4614 and AM5794 see the appropriate technical sheet.

NOTE: When the system is armed, the detector generates a normal burglary alarm.

Transmitter internal view

Radio glass-breaking detector

Configuration

Pairing detectors

1. Switch the system to "maintenance" mode.
2. Press the programming pushbutton of the radio receiver for five seconds, until the red LED comes on.
3. Press the tamper contact twice.
4. If the pairing of the device has been performed correctly, the red LED of the receiver will go off. If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.
5. To pair other devices, repeat from step 2.
6. Close the sensors to deactivate the tamper.
7. Perform self learning of the system from the central unit.
8. Exit "maintenance" mode.

Cancelling detectors

1. Switch the system to maintenance mode.
2. Remove the power supply from the radio receiver.
3. Press and hold the programming pushbutton while reconnecting the power supply to the radio receiver.
4. After 5 seconds the LED flashes orange. If the pushbutton is released at this time, only the remote controls are cancelled.
   After 10 seconds the LED starts flashing quickly. If the pushbutton is released now, only the sensors are cancelled.
5. After releasing the pushbutton, the LED becomes fixed orange. When the LED goes off, cancellation has been completed.
6. Perform self-learning of the system from the central unit and exit "maintenance" mode.

Tamper/learning

Wiring diagram

The sensor must be connected using the transmitting unit as shown in the figure.
Do not extend the probe cable.

WARNING: For correct operation of the device the glass-breaking detector, or any additional magnetic contacts, must be activated within 12 hours from the moment the device starts operation.

Glass-breaking detector

1 m

Tamper line   (*)

To the glass-breaking detector
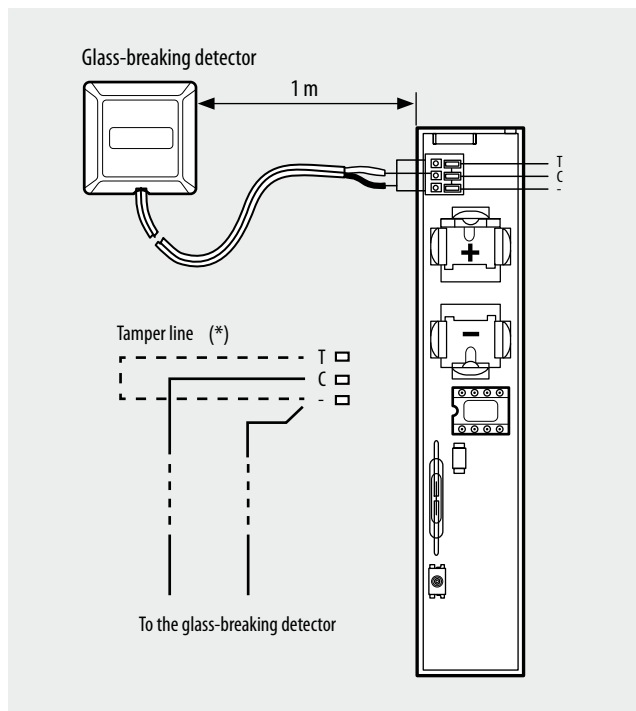
Note (*): short circuit contacts – and T if no tamper line is installed

Radio rolling shutter
opening detector

Description

This device is the radio version of the wired detector, item 3514. It generates an alarm if anyone attempts to open a rolling shutter.

It consists of two elements:
- a coil guide type rope detector to be fitted to the rolling shutter;
- a battery powered radio transmitter to be installed inside the box of the rolling shutter or on the frame of the window to be protected.

Also supplied is an NC contact with additional magnet for the protection of doors and windows.

The alarm is generated when the rope of the detector changes length following an attempt to open the rolling shutter.

Technical data

- Power supply: 3.6 V lithium battery - type 1/2 AA
- Operating temperature: 5 – 40°C (indoor use)
- Minimum battery duration: 3 years
- Radio frequency: 868.35 MHz
- Range: 100 metres free field
                (metal, concrete walls and metal plates reduce coverage)
- Modulation: FSK

CONFORMITY DECLARATION

Item 3445 meets the essential requirements of directive 1999/5/CE, as it complies with the following standards:

ETSI EN300 220-3 ETSI EN301 489-3 EN60950 EN50090-2-2 EN50090-2-3

Year of approval of the CE mark in accordance with the above directive: 2007

Radio transmitter

Rope rolling shutter detector

Dimensional data

Radio transmitter

Rope rolling shutter detector

Configuration

The device requires allocation of the zone it belongs to, the progressive number of the sensors within the same zone, and the setting of the detection mode, as well as the possible allocation of an auxiliary prealarm channel.

WARNING: The configuration operations must be performed with the battery disconnected

Z

This configurator assigns the number of the appropriate zone to the detector. Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

N

This configurator assigns the progressive number of the detector inside the appropriate zone. Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

MOD

The configurator connected to this position, specifies the detection mode associated to the rolling shutter sensor.

Configurator	Operating mode
0	Not delayed
2	Delayed[1]
9	The device sends an auxiliary type alarm through the specified channel in the AUX position only when the system is armed.
AUX	Prealarm function. With the system armed or disarmed, the device sends an auxiliary type alarm through the specified channel in the AUX position. If the zone it belongs to is divided, the auxiliary command is disabled.

NOTE[1]: function available only with central units item 3485/B, item 3486 and HC/HD/HS/L/N/NT4601.

AUX

The configurator in the AUX socket activates the auxiliary function of the corresponding auxiliary channel. It therefore enables controlling auxiliary actuator devices, provided that they have been configured using the same auxiliary channel.

NOTE: to complete the activations using the relay actuator type HD/HC/ HS/L/N/NT4614 and AM5794 see the appropriate technical sheet.

NOTE: When the system is armed, the detector generates a normal burglary alarm.

Transmitter internal view

Legend

1 - Rope rolling shutter detector connection clamp;
2 - Battery housing;
3 - LED: two red flashes signal an alarm; only one flash indicates that the battery is exhausted.

Configuration

Pairing detectors

1. Switch the system to "maintenance" mode.
2. Press the programming pushbutton of the radio receiver for five seconds, until the red LED comes on.
2. Press the tamper contact twice.
4. If the pairing of the device has been performed correctly, the red LED of the receiver will go off. If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.
5. To pair other devices, repeat from step 2.
6. Close the sensors to deactivate the tamper.
7. Perform self learning of the system from the central unit.
8. Exit "maintenance" mode.

Cancelling detectors

1. Switch the system to maintenance mode.
2. Remove the power supply from the radio receiver.
3. Press and hold the programming pushbutton while reconnecting the power supply to the radio receiver.
4. After 5 seconds the LED flashes orange. If the pushbutton is released at this time, only the remote controls are cancelled. After 10 seconds the LED starts flashing quickly. If the pushbutton is released now, only the sensors are cancelled.
5. After releasing the pushbutton, the LED becomes fixed orange. When the LED goes off, cancellation has been completed.
6. Perform self-learning of the system from the central unit and exit "maintenance" mode.

Tamper/learning

Wiring diagram

1,5m

+
C
-

Red wire   Green wire   Black wire

Rope rolling shutter detector

battery

WARNING: For correct operation of the device the rolling shutter detector must be activated within 12 hours from the moment the device starts operation.

NOTE: do not extend the cable of the detector.

Radio remote control for teleassistance

Description

Radio device with three pushbuttons, for sending remote assistance requests.
Pressing the larger pushbutton a radio signal is sent, which is transferred on the BUS of the Burglar-alarm system through the radio receiver item HC/HD/HS/L/N/NT4618.
The two round pushbuttons are used to configure the device and for resetting (silencing) the current alarm.

Technical data

- Power supply: 3 V lithium battery - type CR2032
- Operating temperature: 5 – 40°C
- Minimum battery duration: 2 years
- Radio frequency: 868.35 MHz
- Range: 100 metres free field
                               (metal, concrete walls and metal plates reduce coverage)
- Modulation: FSK

Dimensional data

Front view

Legend

1 - LED: when pressing one key:
   • it flashes twice if the battery is charged;
   • it flashes once if the battery is exhausted;
2 - Generates an alarm;
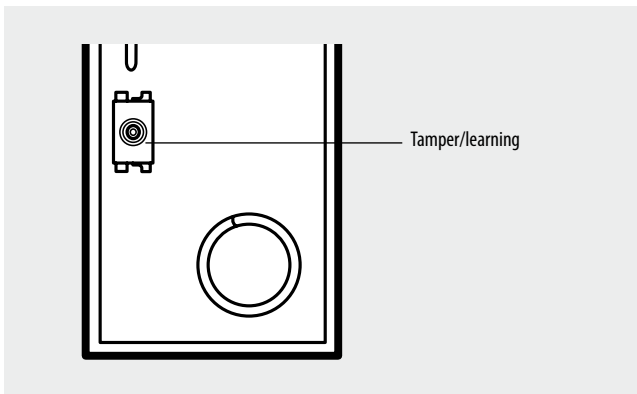**3 -** Alarm reset (press for 5 seconds for learning to be performed on the receiver).

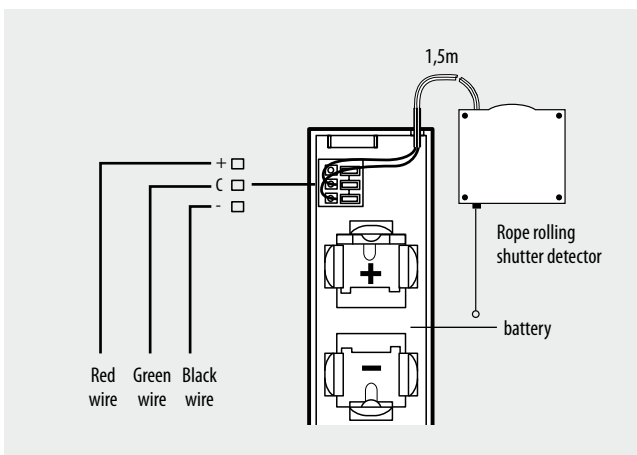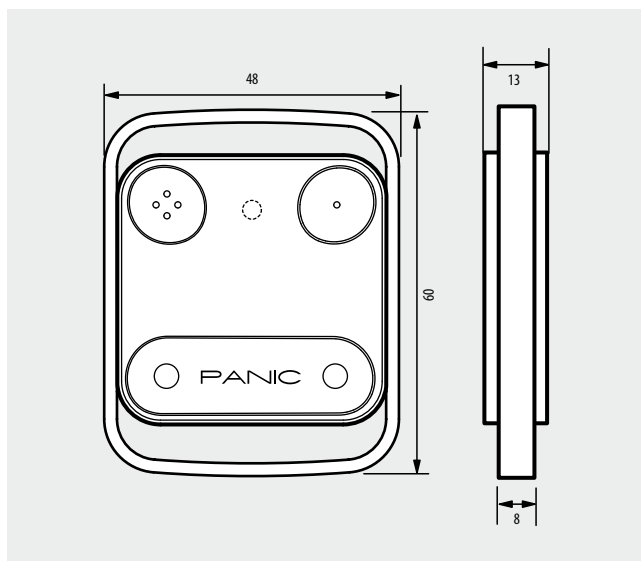## Configuration

Pairing remote controls
1. Switch the system to "maintenance" mode.
2. Press the programming pushbutton of the radio receiver for five seconds, until the red LED comes on.
3. Press one of the round pushbuttons for 5 seconds.
4. If the pairing of the device has been performed correctly, the red LED of the radio receiver will go off.
   If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.
5. To pair other devices, repeat from step 2.
6. Perform self learning of the system from the central unit.
7. Program the remote controls on the central unit.
8. Exit "maintenance" mode.

Cancelling remote controls
1. Switch the system to maintenance mode.
2. Remove the power supply from the receiver.
3. Press and hold the programming pushbutton while reconnecting the power supply to the radio receiver.
4. After 5 seconds the LED flashes orange. If the pushbutton is released at this time, only the remote controls are cancelled.
5. After releasing the pushbutton, the LED becomes fixed orange. When the LED goes off, cancellation has been completed.
6. Perform self-learning of the system from the central unit and exit "maintenance" mode.

Radio remote control for teleassistance

Battery replacement

Relay actuator

Description

This device allows to repeat various types of alarms by means of a relay voltage-free contacts, depending on its configuration.

It can be activated by a technical alarm interface, or by another signal through the auxiliary channel (AUX).

Normally used for the control of gas/water safety solenoid valves, or third party devices (telephone diallers, optical notifications, etc.).

The internal relay is in positive safety; this means that, in case of tampering, it switches over the contacts. By modifying the configuration, it is possible to change the safety mode of the internal relay.

Related items

Technical alarm interfaces: 3841 and F483

Technical data

Power supply from SCS BUS:	27 Vdc
Max. absorption:	20 mA
Contact output:	24 V 1 A cosφ 0.4
Operating temperature:	5 – 40 °C

Legend

1. Clamp for burglar alarm BUS
2. Configurator socket
3. LED indicating activated relay.
4. Relay contact
5. Tamper line

Configuration

The relay actuator requires the allocation of the progressive number within the group of auxiliary devices (relay actuator and auxiliary channels interface) installed within the system, of the auxiliary channel number, and the operating modes.

N°

This configurator assigns the progressive number inside the auxiliary unit.
Configurator 1 identifies the first auxiliary, configurator 2 identifies the second and so on for a maximum of 9 auxiliaries.

AUX and MOD

In combination the configurators in the AUX and MOD sockets assign the operating mode on the basis of the following table.

Opertating mode

Configurators		Description	It activates by...	It resets by...
AUX	**MOD**			
none	none	Repetition of the siren alarm	Siren activation	Silencing
none	1	System fault notification	Activators red LED notification	
none	2	System status notification	Activation	Deactivation

Relay actuator

"Auxiliary" operating mode

Configurators		Description	It activates by...	It resets by...
AUX	**MOD**			
none	3	Signalling with memory of the activation of any auxiliary channel of the system. Typical example: signalling with memory of any technical alarm.	Any AUX device of the system	Pressure of the needle key on any technical alarm interface with AUX configurator from 1 to 9
1-9	3	Signalling with memory of the activation of the corresponding auxiliary channel. Typical example: signalling with memory of a specific technical alarm.	Technical alarm interface with corresponding AUX channel	pressure of the needle key on the interface of the active technical alarm
none	4	Signalling without memory of the activation of any auxiliary channel of the system. Typical example: signalling without memory of any technical alarm.	Any AUX device of the system	Pressure of the needle key on any technical alarm interface with AUX configurator from 1 to 9
1-9	4	Signalling with memory of the activation of the corresponding auxiliary channel. Typical example: signalling without memory of a specific technical alarm.	Technical alarm interface with corresponding AUX channel	pressure of the needle key on the interface of the active technical alarm
	5	As mode 3 but with relay normally not excited.		
	6	As mode 4 but with relay normally not excited.		

NOTES

- Modes 5 and 6 give the same operating results of modes 3 and 4. Their difference is that the relay is normally not excited. This enables an opposite behaviour in case of tampering (cutting of the wire or BUS short circuit). In fact in mode 3 and 4 a tampering excites the device (modes indicated in the case of actuation of alarms such as the siren, the telephone communicator, etc.); however, in mode 5 and 6 the same tampering does not cause any actuation (modes indicated in case of safety actuations such as electrical door locks etc.). The selection of the appropriate mode ensures total system safety.

- The "S" key of the 3 module flush-mounted central unit or the disabling of the central unit with display, which main function is that of silencing the sirens during a technical alarm, disables the relay if this has been activated by the technical alarm interface configured in mode "0" or "4" (technical alarm).

- In all modes there is an auxiliary activation also in case of pre-alarm (IR detector and contact interface with AUX configurators). Attention must therefore be paid when using the relay actuator (in modes with memory or with sensitivity to any auxiliary channel) to avoid unwanted activations.

EXAMPLE: Activation of the solenoid valve in case of gas leak

Relay actuator configuation:

Configurator position	Value
N°	1
AUX	1
MOD	6

Technical alarm interface configuration

Configurator position	Value
N°	2
AUX	1
MOD	4

Wiring diagram

Contact interface

Description

This interface is used to connect 2 independent contact lines that can be balanced by means of a resistance, and which tripping can be delayed, as well as one tampering protection line. It can be used to achieve centralisation of all interfaces inside junction boxes. A LED on the interface confirms appropriate operation of the device during the system test procedure, and the tripping of the burglar-alarm system, when the system is armed. This interface gives the possibility of connecting the alarm system to a sensor line (that can be balanced with resistance, and/or which intervention can be delayed) requiring 12V V power supply.

Front view

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 5 mA
- Operating temperature: 5 – 40℃

Dimensional data

- Size: 2 Basic modules

Legend

1. BUS;
2. Configurator socket;
3. Line activated LED;
4. Contact line 2;
5. Contact line 1;
6. Tamper line;
7. Anti-tamper device.

Configuration

This interface module requires - for each of the two contact lines separate from each other - the allocation of the assigned zone Z, the progressive number N of the detectors situated in the same zone, the setup of the MOD protection mode of the contact line.

Z1

This configurator assigns the number of the assigned zone of the NC/NO magnetic contact connected to line 1.
Configurator 1 gives the contact the assignment to zone 1, configurator 2 gives the assignment to zone 2 and so forth, up to a maximum of 8 zones.

Z2

As above, for contacts connected to line 2.

N1

This configurator assigns the progressive number of the NC magnetic contact within the zone determined in position Z1.
Configurator 1 identifies the first detector, configurator 2 identifies the second, and so forth, up to a maximum of 9 contacts for each of the 8 zones.

N2

As above, for contacts connected to line 2 (zone Z2).

MOD1 and MOD2

In this position a configurator is inserted for selecting the operating mode of the interface according to the type of contact or detector connected to the two lines.
The interface can operate in two modes:
- as **interface for the management of alarm contacts**, system connection pushbutton, and auxiliary channel generation;
- as **interface for the management of technical alarms.**

Configuration

Managing alarms/system arming/auxiliary channel generation management
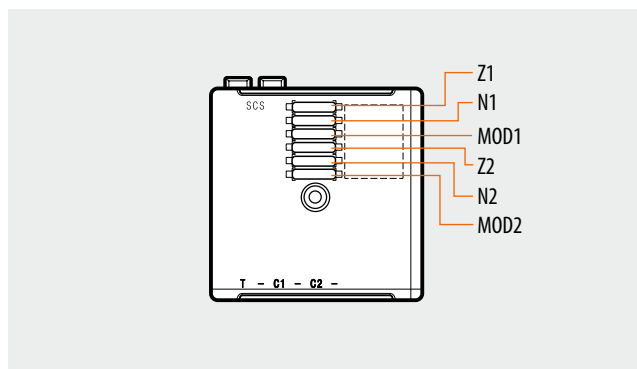In this mode, two independent contact lines can be connected to the interface. The corresponding addresses must be specified in positions Z1, N1, and Z2, N2.
The configurator in position MOD1 and MOD2 specifies the type of contact for the generation of the alarm, as per the following table:

Configurator	Sensor connected
none	NC contact
1	NC contact - balanced
2	NC contact - delayed (1)
3	NC contact – delayed and balanced (1)
4	Contact NC and contact status forwarding
5	Contact NC balanced and contact status forwarding
6	Contact NC delayed and contact status forwarding
7	Contact NC delayed balanced and contact status forwarding
8	NO contact
9	NO contact for system arming from remote N.O. pushbutton (2)
AUX	NC contact – forwarding of contact status (3)

Notes:
(1) Follows the delay set on the central unit:
this function is only available with central units item 3486, 3485/B, item HC/HD/HS/L/N/NT4601, 067520 and 573934/35. With central units item L/N/NT4600/4 the interface must be allocated to ZONE 1, with a time delay set (see the central unit configuration).
(2) The system is activated when the pushbutton is pressed for a minimum period of 3 seconds.
(3) This operating mode does not generate an alarm signal, but a contact status signal, useful for Automation and Temperature control applications (automatic switching off of the heating system when a window is open).

Alarm contacts mode: management of a balanced NC contact line with N.O. system arming pushbutton

Technical alarms management

In this mode, the interface can only manage one contact line connected to the C1 and clamp, to which the NC or NO contact for the generation of the technical alarm is connected. A NO pushbutton for resetting the generated technical alarm, can be connected to the - and C2 clamps of the second line. The Z and N address of the interface must only be specified in the positions Z1 and N1.

Selection of the alarm contact:

Configurator in MOD1 position	Type of contact
none	NC contact
8	NO contact

When a technical alarm with intermittent sound of the indoor siren is generated, it will also be possible to generate an Auxiliary signal. The channel of the Auxiliary signal is defined by the numeric value of configurator 1 to 9 entered in the position MOD2. If the OFF configurator is entered in this position, no auxiliary channel is generated (only the technical alarm with intermittent sound of the siren).

Technical alarms mode: management of a water detection probe. If flooding occurs, a sound alarm will be generated by an internal siren, and a signal will be sent to auxiliary channel no. 3. To reset the alarm press the P pushbutton.

Contact interface

Energy saving management with Temperature control

If the contact interface is used in conjunction with the temperature control system to optimise energy saving, two different types of configurations will be possible:

- **Use in the temperature control system only:** The contact interface is directly connected to the temperature control BUS. It autonomously and independently manages the two C1 and C2 lines. Only the line used must be configured, and not both of them. Follow by connecting the AUX configurator to the MOD1 and/or MOD2 sockets. Then configure the [Z1/2] and [N1/2] sockets, in order to assign the address from 1 to 99 to the device within the system.

  The coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application. For more information refer to the MY HOME Temperature control guide.

- **Use of a burglar-alarm system integrated with the Temperature control system:** in this case, the contact interface is connected to the burglar-alarm system BUS only, and communicates with the temperature control system BUS through the F422 interface.

  The interface must be configured in Z1/2 and N1/2 following the requirements and features of the burglar-alarm system; only configurators with values 4 to 7 must be connected to the MOD1/2 position, corresponding to the management of NC contacts with generation of AUX event (see tables above). Also in this case, the actual coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application. For more information refer to the MY HOME Temperature control guide.

Wiring diagram

WARNING: use a 30 m max twisted, unshielded cable.

NOTE: It is recommended to install the 68 kΩ ±5% 1/4 W balancing resistance in correspondence with the last line contact.

Used for managing a technical alarm

(∗) The N.C. pushbutton can be replaced by a NO pushbutton. The type of pushbutton activating the alarm is defined through the configuration of the MOD1 position of the device.

It is possible to also connect a water detection probe, as well as NC/NO contacts for smoke or gas detectors. For the water detection probe use item 3482.

Flooding alarm management

BUS

SCS

Z1
N1
MOD1
Z2
N2
MOD2

T — C1 — C2 —

Tamper line

N. O. pushbutton

Alarm Reset

Probe item 3482

12 v contact interface

Description

This interface gives the possibility of connecting the alarm system to a sensor line (that can be balanced with resistance, and/or which intervention can be delayed) requiring 12 V power supply.

Produced in the basic modular version, the device can be used when centralizing all the interfaces in junction boxes. A LED on the device confirms the appropriate operation of the same during the system test procedure, and the tripping of the burglar-alarm system, when the system is armed.

Technical data

Power supply from SCS BUS:	27 Vdc
Max. absorption:	5 mA to which the absorption of the sensor connected must be added
Operating temperature:	5 – 40 ℃
Output:	12 V Max 50 mA

Dimensional data

Size: 2 Basic modules

Configuration

The interface requires the allocation of the zone Z it belongs to, of the N progressive number of the sensors within the same zone, and the setting of the MOD contact line protection mode.

Z1

This configurator assigns the number of the assigned zone of the NC magnetic contact connected to line 1.

N1

This configurator assigns the progressive number of the NC magnetic contact within the zone determined in position Z1.

MOD

In this position a configurator is inserted for selecting the operating mode of the interface according to the type of contact or detector connected to the line. It is possible to create a balanced and unbalanced protection line, with the possibility of generating the alarm with a delay, as for zone 1. For the details of the various operating modes, refer to the table below.
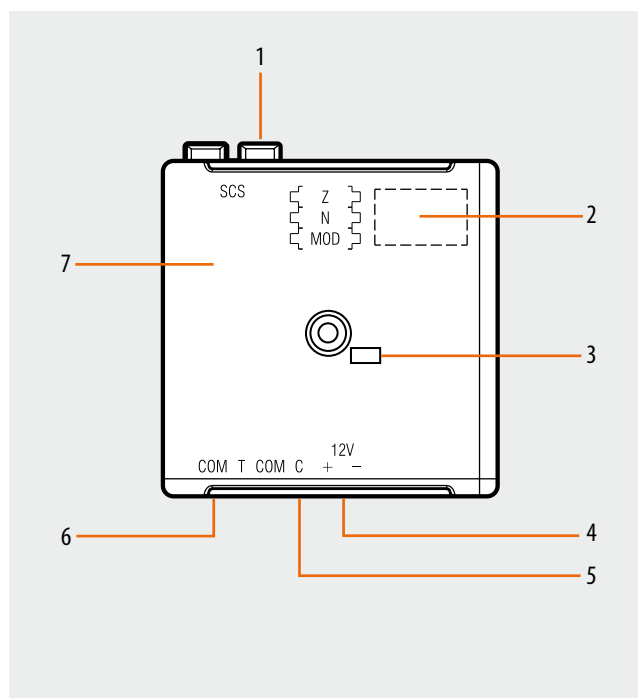
Legend

1. BUS;
2. Configurator socket;
3. Line activated LED;
4. 12 V power line;
5. C contact line;
6. Tamper line;
7. Device tamper protection against opening

12 v contact interface

Configuration

Configurator	Sensor connected
none	NC contact
1	NC contact - balanced
2	NC contact - delayed *
3	NC contact - delayed * - balanced
4	NC contact and AUX event generation
5	Balanced NC contact and AUX event generation
6	Delayed NC contact and AUX event generation
7	Balanced delayed NC contact and AUX event generation

Specific mode for connection to wired rolling shutter sensors

Configurator	Sensor connected	Pulses (*)
8	Rolling shutter rope sensor - delayed*	12 (approx 20 cm)
9	Rolling shutter rope sensor - delayed*	25 (approx 45 cm)

Note (*): Follows the delay set on the central unit:
this function is operative only with central units with display. With flush mounted 3 module central units, the interface must be allocated to ZONE 1, with a time delay set (see central unit configuration).
Note (**): pulses generated by the sensor depending on the degree of opening of the window, in cm, before the alarm is generated.

Energy saving management with Temperature control

If the contact interface is used in conjunction with the temperature control system to optimise energy saving, two different types of configurations will be possible:

- Use in the temperature control system only: The contact interface is directly connected to the temperature control BUS It autonomously and independently manages the contact line. Follow by connecting the AUX configurator to the MOD sockets. Then configure the Z and N sockets, in order to assign the address from 1 to 99 to the device within the system. The coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application. For more information refer to the MY HOME Temperature control guide.
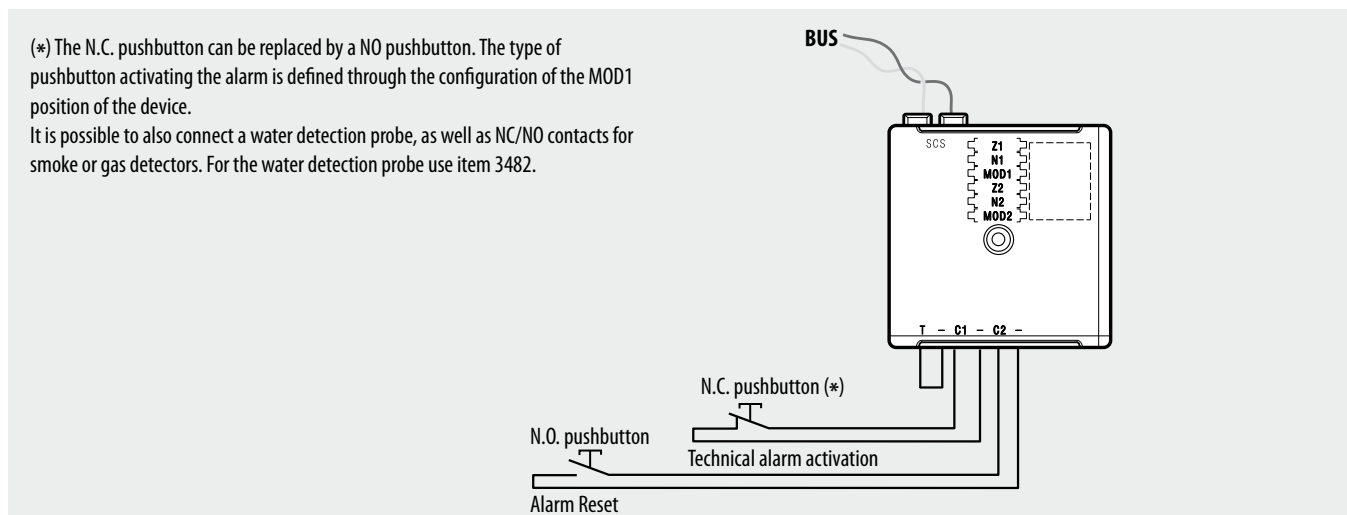
- Use of a burglar-alarm system integrated with the Temperature control system: in this case, the contact interface is connected to the burglar-alarm system BUS only, and communicates with the temperature control system BUS through the F422 interface.
The interface must be configured in Z and N following the requirements and features of the burglar-alarm system; only configurators with values 4 to 7 must be connected to the MOD position, corresponding to the management of NC contacts with generation of AUX event (see tables above). Also in this case, the actual coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application. For more information refer to the MY HOME Temperature control guide.
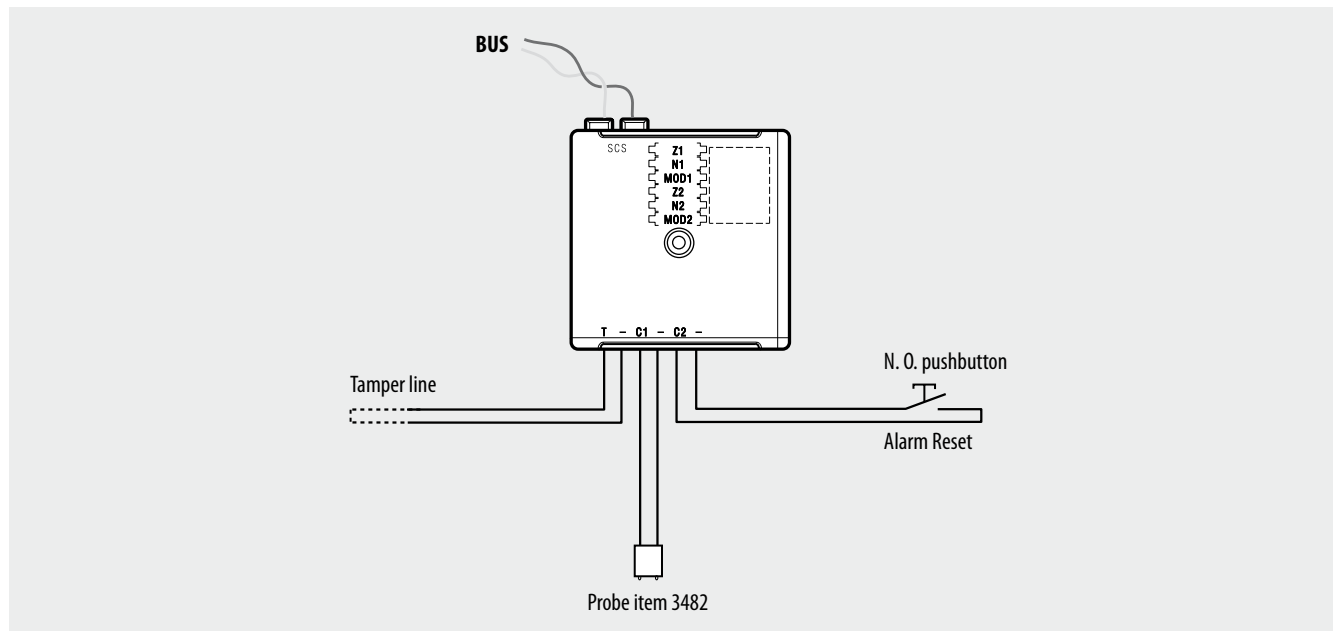
Wiring diagram

Twisted, unshielded cable, with 30 metre maximum length.

Sensor tamper — N.C. N.C. N.C.

Balance resistance
$100\ k\Omega \pm 5\%\ 1/4\ W$ * — N.C. N.C. N.C.

* Do not install more than 3 rope sensors on each line

12 v contact interface
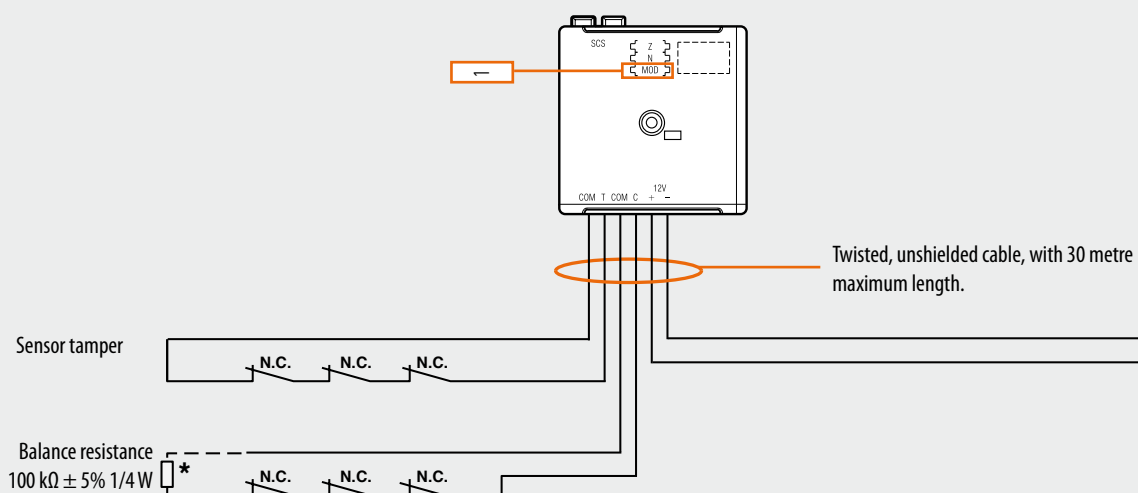
Connection with IR 3518 - 3518/50 - 3518/150 - 3519 barriers

If the max absorption of the system allows it, it will be possible to directly connect the barrier to one interface only.

WARNING: use a 30 m max twisted, unshielded cable.

12 v contact interface

3480V12

Installation

The maximum length of the interface connection line depends on the absorption of the connected loads, as for the following table
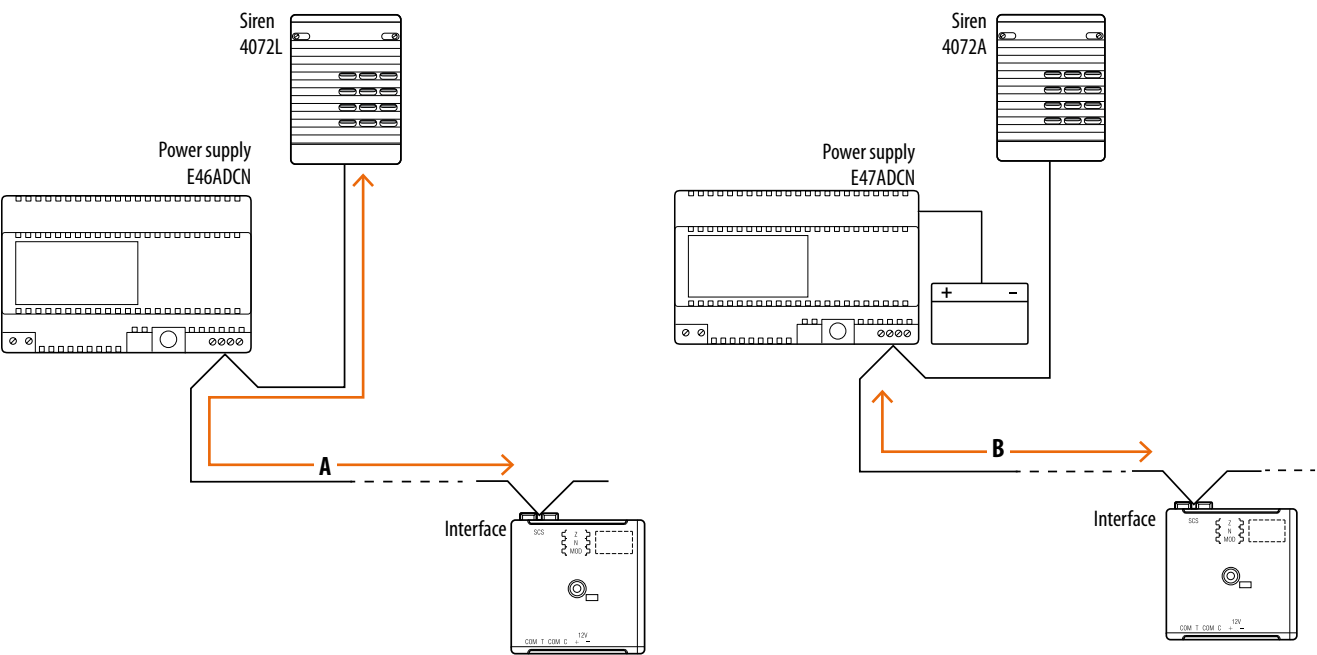
Absorption of the loads connected to the interfaces	Maximum distance	
	A	**B**
50 mA		
100 mA (2 interfaces with maximum load on the same line)	175 (*)	
150 mA (3 interfaces with maximum load on the same line)		175
200 mA (4 interfaces with maximum load on the same line)	150 (*)	

Note (*): this configuration requires the use of 2 sirens, item 4072L.

In case of extension of an existing system (for which it is not possible to know the exact distances, and how many devices are connected to the BUS line the interface must be connected to), it is necessary to perform the following test, to check that it is suitable to install the interface:

1. Switch the system to maintenance mode
2. Connect the interface to the load to power
3. Measure the BUS voltage at the extremities of the interface
4. If the voltage exceeds 25 V, installation is possible
5. If the voltage is below 25 V, a dedicated cable must be connected to the interface.

Technical alarm interface

Description

The technical alarm interface is used to receive signals from the outside (normally analogue signals, like the closing/opening of a contact), converting them into digital information for the BUS.

This information gives the possibility of differentiating between alarm notifications, like the activation of the siren, or the telephone dialler, or the closure of the gas/water solenoid valve.

The functions described can be obtained using a dedicated communication line between the devices of the burglar alarm system, called auxiliary channel.

Up to 9 auxiliary channels are available for each system.

They are assigned by configuration of the device(s).

Related items

Relay actuator: F481 and 3479

Technical data

Power supply from SCS BUS: 27 Vdc
Max. absorption: 6 mA
Operating temperature: 5 – 40 °C

Dimensional data

Size: 2 Basic modules

Configuration

The technical alarm interface module requires the allocation of the progressive number within the group of auxiliary devices (relay actuator and auxiliary channels interface), the auxiliary channel number, and the operating modes.

N°

This configurator assigns the progressive number inside the auxiliary unit.

Configurator 1 identifies the first auxiliary, configurator 2 identifies the second and so on for a maximum of 9 auxiliaries.

AUX and MOD

In combination the configurators in the AUX and MOD sockets assign the operating mode on the basis of the following table.

Legend

1. Clamp for burglar alarm BUS
2. Configurator socket
3. Line activated LED
4. External sensor connection clamp
5. Traditional external sensor connection clamp
6. Reset pushbutton connection

Activation from the technical alarm interface

Configurators		Description
AUX	MOD	
none	none	**Technical alarm with normally closed (NC) contact** Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm; b) the alarm is reset using the menu of central units with display (with central unit L/N/NT4600/4 press "S"); c) the reset pushbutton connected to the interface is pressed.
none	2	**Anti-panic alarm with normally closed (NC) contact** Generates a burglar-alarm even with the system switched off and in any division condition. Is silenced with the remote control.
none	4	**Technical alarm with normally open (NO) contact** Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm; b) the alarm is reset using the menu of central units with display (with central unit L/N/NT4600/4 press "S"); c) the reset pushbutton connected to the interface is pressed.

Technical alarm interface

Activation from the technical alarm interface

Configurators		Relay operating mode (description)
AUX	MOD	
1-9	none	**Technical alarm with NC contact and activation of the auxiliary channel** Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm; b) the alarm is reset using the menu of central units with display (with central unit L/N/NT4600/4 press "S"); c) the reset pushbutton connected to the interface is pressed. It activates the corresponding auxiliary channel.
1-9	1	**Anti-burglary automation with NC contact** It activates the corresponding auxiliary channel without interfering with the status of the burglar-alarm system, therefore without generating signals or alarms.
1-9	2	**Anti-panic alarm with NC contact and activation of the auxiliary channel** Generates a burglar-alarm even with the system switched off and in any division condition. Is silenced with the remote control. It activates the corresponding auxiliary channel.
1-9	3	**Connection between burglar-alarm and auxiliary channels (LINK)** It generates and activation of the corresponding auxiliary channel following a burglary/tampering alarm.
1-9	4	**Technical alarm with NO contact and activation of the auxiliary channel** Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm; b) the alarm is reset using the menu of central units with display (with central unit L/N/NT4600/4 press "S"); c) the reset pushbutton connected to the interface is pressed. It activates the corresponding auxiliary channel.

EXAMPLE: Activation of the solenoid valve in case of gas leak

Relay actuator configuration:

Configurator position	Value
N°	1
AUX	1
MOD	6

Technical alarm interface configuration

Configurator position	Value
N°	2
AUX	1
MOD	4

Wiring diagram

Note: It is recommended that the GAS sensor and the interface are checked for correct installation and wiring, following the instructions supplied with the sensor itself;
the interface sends the alarm notification within the timescales set for the activation of the alarm repeater.
If a technical alarm is generated upon powering the sensor while the interface is already powered, there is a wiring error in lines + A

L-legrand   MQ00485-b-EN   22/04/2014   **bticino**

Alarm radio remote control

Description

Radio wave control device recommended for all those installations where an exposed control device is not desired.
It can also used with the video door entry system, to control accesses.
The remote control must be used with the radio receiver item HC/HD/HS/L/N/NT4618.

Technical data

- Power supply: 3 V lithium battery - type CR2032
- Operating temperature: 5 – 40°C
- Minimum battery duration: 2 years
- Radio frequency: 868.35 MHz
- Range: 100 metres free field
                               (metal, concrete walls and metal plates reduce coverage)
- Modulation: FSK

Dimensional data

Legend

1 - Arming pushbutton;
2 - Disarming pushbutton;
3 - Key-ring;
4 - Control forwarding notification LED.

Front view
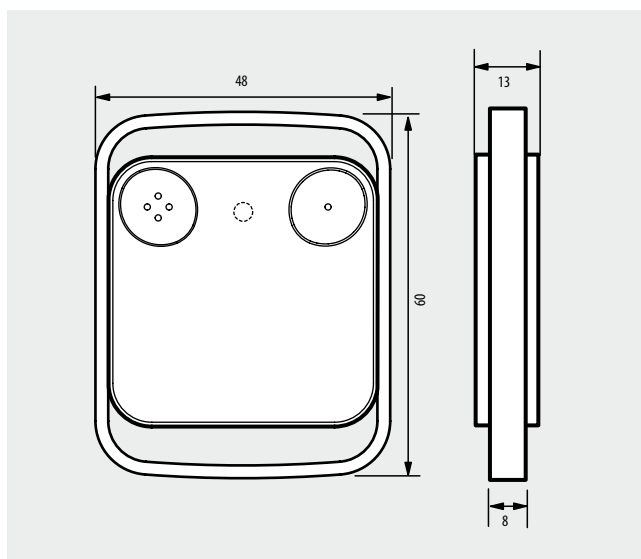
Configuration

Pairing remote controls

1. Switch the system to "maintenance" mode.
2. Press the programming pushbutton of the radio receiver for five seconds, until the red LED comes on.
3. Press the arming pushbutton for 5 seconds.
4. If the pairing of the device has been performed correctly, the red LED of the radio receiver will go off.
   If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.
5. To pair other devices, repeat from step 2.
6. Perform self learning of the system from the central unit.
7. Program the remote controls on the central unit.
8. Exit "maintenance" mode.

Cancelling remote controls

1. Switch the system to maintenance mode.
2. Remove the power supply from the receiver.
3. Press and hold the programming pushbutton while reconnecting the power supply to the radio receiver.
4. After 5 seconds the LED flashes orange. If the pushbutton is released at this time, only the remote controls are cancelled.
5. After releasing the pushbutton, the LED becomes fixed orange. When the LED goes off, cancellation has been completed.
6. Perform self-learning of the system from the central unit and exit "maintenance" mode.

Alarm radio remote control

Battery replacement

Advanced central unit
with telephone communicator

573935 (White)	**067520**
573934 (Magnesium)	**3485**

Description

The central unit has the function of supervising the burglar-alarm system, enabling the management of the zone sensors independent from one another.

It is possible to save up to 16 activation scenarios and use them based on actual the needs.

It's fitted with built-in telephone communicator for sending a telephone message in case of alarm, or to check the status of the system using a fixed or mobile phone, when away from home. Thanks to the integration with rolling shutter and light switching on movement devices, it is possible to program automations that activate in case of alarm, to confuse the intruder.

The central unit is also capable of communicating with vigilance bodies through an appropriate protocol, further increasing the level of protection of the property (for this service consult the installer).

Main functions

- Burglar-alarm central unit with combined telephone communicator;
- system self-learning and configuration on-screen display;
- can be controlled by transponder and keypad;
- independent management of each sensor;
- can be programmed by PC;
- detailed event memory and alarm only memory;
- customisation of alarm messages;
- phone book for sending alarms;
- connection with surveillance central unit using the "Ademco Contact ID" protocol, with the possibility of remote setting of Ademco parameters;
- blocking for 1 minute the possibility of arming or disarming, or access to the navigation menu, if the wrong key is entered for three consecutive times (from keypad or transponder);
- association of a set user name to scenarios, sensors and zones;
- each individual sensor can be deactivated by sending a command from the central unit keypad;
- possibility of sending a test call, with programmable delay, to the MY HOME Portal, or to the surveillance central unit;
- signalling of failed connection with: sensors, with the system disarmed, a signalling icon is displayed, with the system armed, an alarm is generated;
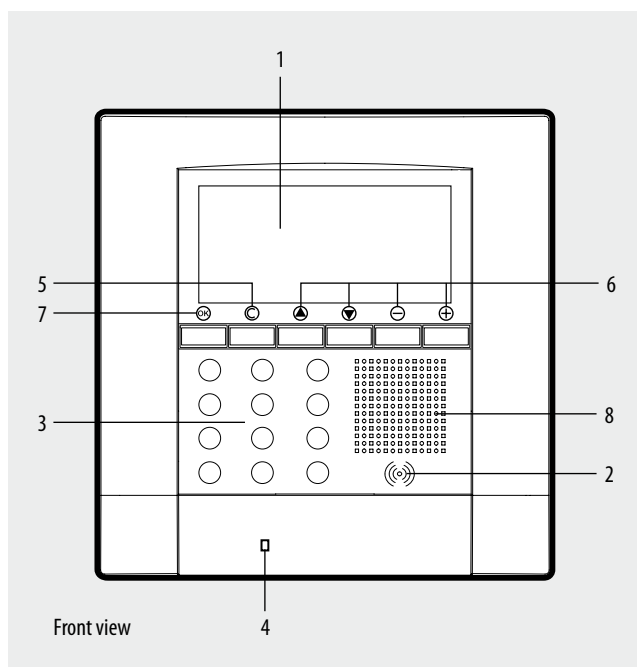- division of the zones directly from the Central unit keypad.

Management of burglar-alarm functions

The central unit manages a total of 10 zones:
- zone 0 is reserved for the activators (max. 9);
- zones from 1 to 8 are reserved for the sensors;
- zone 9 is reserved for the technical alarms/ auxiliaries (gas detector etc.).

It performs the following functions:
- manages the events communicated by the sensors and can determine if and when to give the alarm;
- zones from 1 to 8 can be separated as the user requires;
- up to 16 division scenarios can be created and activated depending on needs;
- a specific division can be coupled to each key (max. 50). It is also possible to limit the use of the key to certain days of the week, and to a specific time band;
- automatic devices can be operated as the user requires, if the burglar-alarm system has recorded an event (e.g. switch on the lights in the zone where there is an intrusion alarm);
- all the customising phases are guided and shown by means of the display.

Front view

Legend

1 - Graphic display: displays the messages which guide the programming operations and the events which have occurred (more information on the following page).

2 - Transponder reader: receives the burglar-alarm system switching on and off commands directly from the transponder keys.

3 - Alphanumeric keypad: allows the manual switching on of all those programming operations which require the use of numbers and/or symbols.

4 - Microphone: used to record the messages and listen to the room remotely by means of telephone.

5 - C key: exit the current menu and the programming.

6 - Navigation keypad: navigate inside the menu, confirms or cancels the programming operations.

7 - OK key: to confirm the programming operations.

8 - Loudspeaker: can listen to the recorded messages.

Telephone communicator

- Allows two-way communication between the user and the My Home home automation system;
- if the burglar-alarm system has detected an alarm, it automatically dials the telephone numbers previously programmed by the user and gives a voice message to say what type of event has happened;
- it can be called by the user who, by means of predefined codes, can send commands to the automation system and to the burglar-alarm system;
- the user can find out the state of the burglar-alarm and automation system by telephone;
- it lets you connect to the My Home portal and makes the My Home web service available, for example the remote assistance service as well as the possibility to download the history of events;
- it enables automatic forwarding of alarm and event signallings to surveillance units, using the Contact ID protocol, as well as the request and setting of its parameters.

Advanced central unit
with telephone communicator

573935 (White)   067520
573934 (Magnesium)   3485

Rear view

Articoli correlati:
681 82 (White Cover)
684 82 (Titanium Cover)
801 24 (Flush-mounting box)

Legend

1 - Battery housing;
2 - Tamper line (see note);
3 - T1 local tamper;
4 - Reset key;
5 - Serial connector for PC programming;
6 - Burglar alarm BUS;
7 - ON/OFF slide switch;
8 - Telephone line OUT;
9 - Telephone line IN.

NOTE: The central unit is supplied with the clamps (-/T1) of the Tamper line shorted for the use of the T1 local tamper (wall mounted installation on metal base).

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 55 (stand by) – 90 mA
- Operating temperature: 5 – 40°C
- Installation: wall mounted

Dimensional data

Size (H,L,D): 128x125x25 mm

Configuration

The central units do not need configurators. The functions can be set directly on the device itself (keypad and display), or using the appropriate software, TiSecurity POLYX. For detailed information refer to the corresponding manuals supplied with the products.

Software configuration

The program can be used to easily customise all parameters of the Central unit. It is possible to receive the current configuration from the Central unit, change it and send any changes made to the Central unit, save the configuration to a file for subsequent modification, or save it as a backup copy.
For further information refer to the software manual supplied with the central unit.

Ademco Contact ID functionality

Ademco contact ID is a particular communication protocol operating on a telephone line with DTMF touch tone. Using this protocol, it is possible to set a one-way communication between the burglar-alarm central units and the vigilance bodies. In this way, vigilance bodies can receive information concerning the type of event/alarm generated and, if available, the details of the peripheral from where it generated.

Events that can be managed using the Ademco Contact ID

The Ademco Contact ID events managed by the central unit are the following:
Relating to the burglar-alarm system:
- Anti-panic alarm
- Anti-burglary alarm
- General intrusion alarm
- Tamptest (device interconnection alarm)
- Device tampering alarm
- No power supply
- System battery faulty
- Activation / deactivation / cancellation*
- Sensor deactivation
- Periodical functionality test (routine check of the telephone line and the installation)

NOTE*: cancellation is the silencing of an alarm following the disarming of the system itself. In this case the event is sent to the vigilance body, which can therefore check if it's been caused by a tampering attempt.

Relating to the technical alarms:
- Fire alarm (AUX=8)
- Gas leak alarm (AUX=1)
- Freezer alarm (AUX=2)
- Flooding alarm (AUX=3)
- Remote assistance alarm (AUX=9)
- Auxiliary device tampering (Z=9)
For every event, where required, the origin of the alarm is also forwarded, in terms of zone and device.

Advanced central unit
with telephone communicator

573935 (White)   **067520**
573934 (Magnesium)   **3485**

Wiring diagram

It is good practice to protect the system from lightning by using surge protective devices, SPD, belonging to class II, as per the diagram shown.
In particular, to protect the burglar-alarm central unit from overvoltage from the telephone line, the use of the appropriate PLT1 device is recommended, taking care to

connect the corresponding earth clamp with the "earth" reference of the SPD discharger installed in the apartment distribution board (see diagram). The connection shall have as low an impedance as possible, and will be performed using a conductor with minimum section of 2.5 mm², and maximum length of 30 metres.

Advanced central unit with telephone communicator

Base central unit

Description

The central unit has the function of supervising the burglar-alarm system, enabling the management of the zone sensors independent from one another.

It is possible to save up to 4 activation scenarios and use them based on actual needs.

The device can manage up to 10 automations split as follows:
- 1 actuated using an internal relay and coupled with intrusion events, technical alarms, or system status;
- 9 coupled with arming, disarming, date and time events, to generate separation scenarios.

Main functions

- System self-learning and configuration on-screen display;
- can be controlled by transponder and keypad (20 keys maximum);
- independent management of each sensor;
- local contact in addition to those already present on the system (configurable);
- possibility of updating the firmware using the PC;
- detailed event memory and alarm only memory;
- blocking for 1 minute the possibility of arming or disarming, or access to the navigation menu, if the wrong key is entered for three consecutive times;
- association of a user set name to scenarios (max. 4), sensors and zones;
- each individual sensor can be deactivated by sending a command from the central unit keypad;
- signalling of failed connection with: sensors, with the system disarmed, a signalling icon is displayed, with the system armed, an alarm is generated;
- division of the zones directly from the central unit keypad;
- presence of a local automation and signalling relay.

Management of burglar-alarm functions

The central unit manages a total of 6 zones;
- zone 0 is reserved for the activators (max. 9);
- zones from 1 to 4 are reserved for the sensors;
- zone 9 is reserved for the technical alarms/ auxiliaries (gas detector etc.).

Performs the following functions:
- manages the events communicated by the sensors and can determine if and when to give the alarm;
- zones from 1 to 4 can be separated as the user requires;
- up to 4 division scenarios can be created and activated depending on needs;
- all the customising phases are guided and shown by means of the display;
- an automation can be coupled to the detection of a certain alarm, using the local relay: for example, the switching on of a light, to confuse the intruder.

Front view

Legend

1 - Graphic display: displays the messages which guide the programming operations and the events which have occurred (more information on the following page).

2 - Transponder reader: receives the burglar-alarm system switching on and off commands directly from the transponder keys.

3 - Alphanumeric keypad: allows the manual switching on of all those programming operations which require the use of numbers and/or symbols.

4 - C key: exit the current menu and the programming.

5 - OK key: to confirm the programming operations.

6 - Navigation keypad: navigate the menu.

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 50 mA
- Operating temperature: 5 – 40℃
- Load of local relay contacts: 12/24 V – 1 A
- Installation: wall mounted

Dimensional data

Size (H,L,D): 128x125x25 mm

Base central unit

Rear view
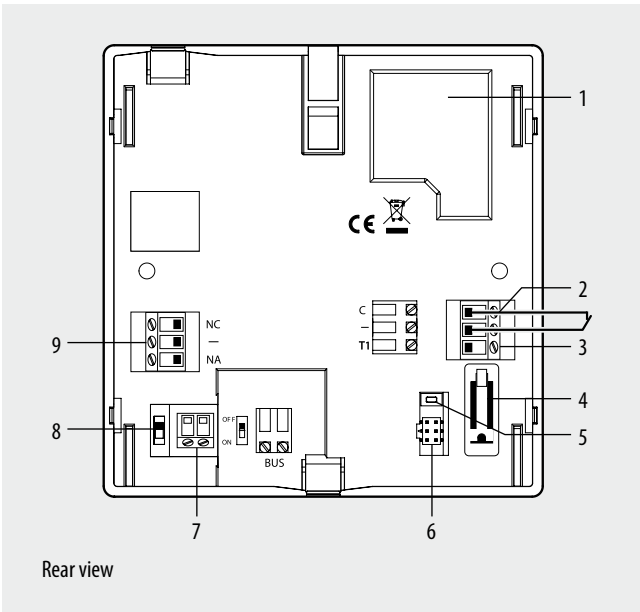
Legend

1 - Battery housing;
2 - Local contact;
3 - Tamper line (see note);
4 - T1 local tamper;
5 - Reset key;
6 - Firmware update serial connector;
7 - Burglar alarm BUS;
8 - ON/OFF slide switch;
9 - Relay for automation in case of alarm.

NOTE: The central unit is supplied with the clamps (-/T1) of the Tamper line shorted for the use of the T1 local tamper (wall mounted installation on metal base).

Configuration

The central units do not need configurators. The functions can be set directly on the device itself (keypad and display), or using the appropriate software, either TiSecurity Basic.
For detailed information refer to the corresponding manuals supplied with the products.

Software configuration
The program enables acquiring the configuration on the central unit, saving it in a file to be used to reinstate the configuration of the same, or to configure other central units. It is also possible to update the permanent software of the central unit using new versions published by BTicino.

Example
Example of configuration performed on the central unit.
- Detection of devices

```
    MAINTENANCE
Language
Key program
System test
Learning
```

Select
Learning

```
    MAINTENANCE
Language
Key program
System test
Learning
```

Press **OK** to confirm

```
    LEARNING
zone: 0   num.: 1
type: not exist
tamper: OFF
◄    automatic    ►
```

After pressing **OK**, the following screen appears

Press **OK** to start learning

```
   Learning
    ended

  no problem
```

NEXT
(See the manual of the central unit)

Standard burglar-alarm central unit
with telephone communicator

3485STD

Description

The central unit has the function of supervising the burglar-alarm system, enabling the management of the zone sensors independent from one another. The device has two rear terminals for connecting 2 separate contact lines.

It is possible to save up to 16 activation scenarios and use them based on actual the needs. It's fitted with built-in telephone communicator for sending a telephone message in case of alarm, or to check the status of the system using a fixed or mobile phone, when away from home. Thanks to the integration with rolling shutter and light switching on movement devices, it is possible to program automations that activate in case of alarm, to confuse the intruder.

The central unit is also capable of communicating with vigilance bodies through an appropriate protocol, further increasing the level of protection.

Main functions

- Burglar-alarm central unit with combined telephone communicator;
- system self-learning and configuration on-screen display;
- local contact programming via menu;
- can be controlled by transponder and keypad;
- independent management of each sensor;
- can be programmed by PC;
- detailed event memory and alarm only memory;
- customisation of alarm messages;
- phone book for sending alarms;
- connection with surveillance central unit using the "Ademco Contact ID" protocol, with the possibility of remote setting of Ademco parameters;
- blocking for 1 minute the possibility of arming or disarming, or access to the navigation menu, if the wrong key is entered for three consecutive times (from keypad or transponder);
- association of a set user name to scenarios, sensors and zones;
- each individual sensor can be deactivated by sending a command from the central unit keypad;
- possibility of sending a test call, with programmable delay, to the MY HOME Portal, or to the surveillance central unit;
- signalling of failed connection with: sensors, with the system disarmed, a signalling icon is displayed, with the system armed, an alarm is generated;
- division of the zones directly from the Central unit keypad.

Management of burglar-alarm functions

The central unit manages a total of 10 zones:
- zone 0 is reserved for the activators (max. 9);
- zones from 1 to 8 are reserved for the sensors;
- zone 9 is reserved for the technical alarms/ auxiliaries (gas detector etc.).

It performs the following functions:
- manages the events communicated by the sensors and can determine if and when to give the alarm;
- zones from 1 to 8 can be separated as the user requires;
- up to 16 division scenarios can be created and activated depending on needs;
- a specific division can be coupled to each key (max. 50). It is also possible to limit the use of the key to certain days of the week, and to a specific time band;
- automatic devices can be operated as the user requires, if the burglar-alarm system has recorded an event (e.g. switch on the lights in the zone where there is an intrusion alarm);
- all the customising phases are guided and shown by means of the display.

Front view

Legend

1 - Graphic display: displays the messages which guide the programming operations and the events which have occurred (more information on the following page).

2 - Transponder reader: receives the burglar-alarm system switching on and off commands directly from the transponder keys.

3 - Alphanumeric keypad: allows the manual switching on of all those programming operations which require the use of numbers and/or symbols.

4 - Microphone: used to record the messages and listen to the room remotely by means of telephone.

5 - C key: exit the current menu and the programming.

6 - Navigation keypad: navigate inside the menu, confirms or cancels the programming operations.

7 - OK key: to confirm the programming operations.

8 - Loudspeaker: can listen to the recorded messages.

Telephone communicator PSTN

- Allows two-way communication between the user and the My Home home automation system;
- if the burglar-alarm system has detected an alarm, it automatically dials the telephone numbers previously programmed by the user and gives a voice message to say what type of event has happened;
- it can be called by the user who, by means of predefined codes, can send commands to the automation system and to the burglar-alarm system;
- the user can find out the state of the burglar-alarm and automation system by telephone;
- it lets you connect to the My Home portal and makes the My Home web service available, for example the remote assistance service as well as the possibility to download the history of events;
- it enables automatic forwarding of alarm and event signallings to surveillance units, using the Contact ID protocol, as well as the request and setting of its parameters.

The central unit can be paired with the GSM/PSTN gateway (Art. 3489GSM) if you want to use the telephone communicator via a GSM network, as an alternative to a traditional phone line connection.

Standard burglar-alarm central unit
with telephone communicator

3485STD

Rear view

Configuration

The central units do not need configurators. The functions can be set directly on the device itself (keypad and display), or using the appropriate software, TiSecurity Standard.
For detailed information refer to the corresponding manuals supplied with the products.
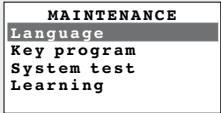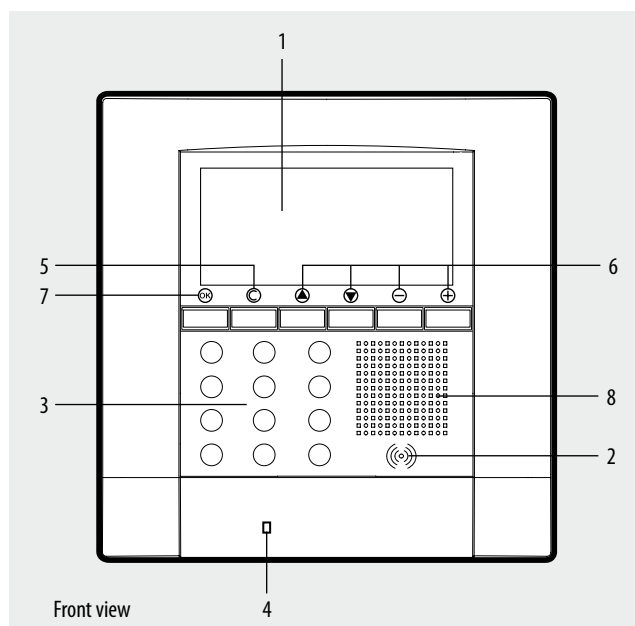
Software configuration

The program can be used to easily customise all parameters of the Central unit. It is possible to receive the current configuration from the Central unit, change it and send any changes made to the Central unit, save the configuration to a file for subsequent modification, or save it as a backup copy.
For further information refer to the software manual supplied with the central unit.

Ademco Contact ID functionality

Ademco contact ID is a particular communication protocol operating on a telephone line with DTMF touch tone. Using this protocol, it is possible to set a one-way communication between the burglar-alarm central units and the vigilance bodies. In this way, vigilance bodies can receive information concerning the type of event/alarm generated and, if available, the details of the peripheral from where it generated.

Events that can be managed using the Ademco Contact ID

The Ademco Contact ID events managed by the central unit are the following:
Relating to the burglar-alarm system:
- Anti-panic alarm
- Anti-burglary alarm
- General intrusion alarm
- Tamptest (device interconnection alarm)
- Device tampering alarm
- No power supply
- System battery faulty
- Activation / deactivation / cancellation*
- Sensor deactivation
- Periodical functionality test (routine check of the telephone line and the installation)

NOTE*: cancellation is the silencing of an alarm following the disarming of the system itself. In this case the event is sent to the vigilance body, which can therefore check if it's been caused by a tampering attempt.

Relating to the technical alarms:
- Fire alarm (AUX=8)
- Gas leak alarm (AUX=1)
- Freezer alarm (AUX=2)
- Flooding alarm (AUX=3)
- Remote assistance alarm (AUX=9)
- Auxiliary device tampering (Z=9)
For every event, where required, the origin of the alarm is also forwarded, in terms of zone and device.

Standard burglar-alarm central unit
with telephone communicator

3485STD

Wiring diagram

It is good practice to protect the system from lightning by using surge protective devices, SPD, belonging to class II, as per the diagram shown.
In particular, to protect the burglar-alarm central unit from overvoltage from the telephone line, the use of the appropriate PLT1 device is recommended, taking care to connect the corresponding earth clamp with the "earth" reference of the SPD discharger installed in the apartment distribution board (see diagram). The connection shall have as low an impedance as possible, and will be performed using a conductor with minimum section of 2.5 mm^2, and maximum length of 30 metres.

Standard central unit with telephone communicator

Advanced central unit
with telephone communicator

Description

The central unit has the function of supervising the burglar-alarm system, enabling the management of the zone sensors independent from one another. It is possible to save up to 16 activation scenarios and use them based on actual the needs. It's fitted with built-in telephone communicator for sending a telephone message in case of alarm, or to check the status of the system when away from home, using a fixed or mobile phone.

Thanks to the integration with rolling shutter and light switching on movement devices, it is possible to program automations that activate in case of alarm, to confuse the intruder.

The central unit is also capable of communicating with vigilance bodies through an appropriate protocol, further increasing the level of protection of the property (for this service consult the installer).

Main functions

- Burglar-alarm central unit with combined telephone communicator (on GSM and PSTN line);
- system self-learning and configuration on-screen display;
- can be controlled by IR remote control, transponder and keypad;
- independent management of each sensor;
- can be programmed by PC;
- detailed event memory and alarm only memory;
- customisation of alarm messages;
- phone book for sending alarms;
- connection with surveillance central unit using the "**Ademco Contact ID**" protocol, with the possibility of remote setting of Ademco parameters;
- blocking for 1 minute the possibility of arming or disarming, or access to the navigation menu, if the wrong key is entered for three consecutive times (from keypad or transponder);
- association of a set user name to scenarios, sensors and zones;
- each individual sensor can be deactivated by sending a command from the central unit keypad;
- possibility of sending a test call, with programmable delay, to the MY HOME Portal, or to the surveillance central unit;
- signalling of failed connection with: sensors, with the system disarmed, a signalling icon is displayed, with the system armed, an alarm is generated;
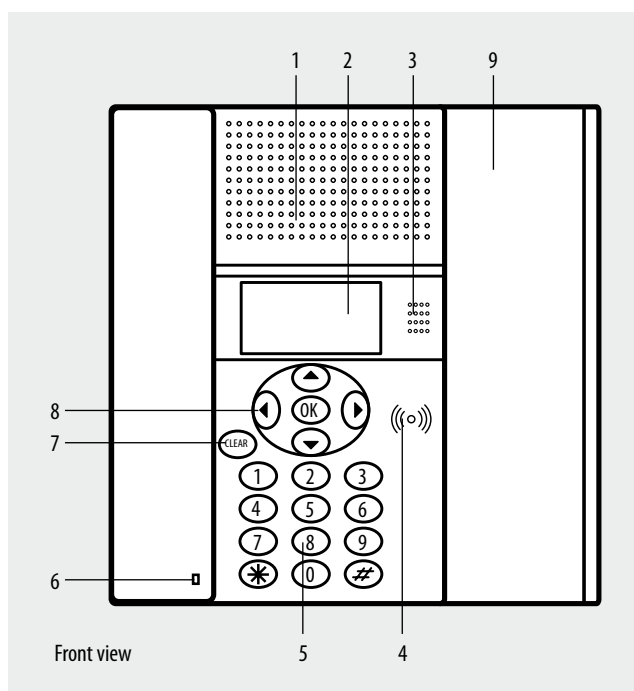- division of the zones directly from the Central unit keypad.

Management of burglar-alarm functions

The central unit manages a total of 10 zones:
- Zone 0 is reserved for the acivators (max. 9);
- zones from 1 to 8 are reserved for the sensors;
- zone 9 is reserved for the technical alarms/auxiliaries (gas detector etc.);

Performs the following functions:
- manages the events communicated by the sensors and can determine if and when to give the alarm;
- zones from 1 to 8 can be separated as the user requires;
- up to 16 division scenarios can be created and activated depending on needs;
- a specific division can be coupled to each key (max. 50). It is also possible to limit the use of the key to certain days of the week, and to a specific time band;
- automatic devices can be operated as the user requires, if the burglar-alarm system has recorded an event (e.g. switch on the lights in the zone where there is an intrusion alarm);
- all the customising phases are guided and shown by means of the display.

Front view

Legend

1 - Loudspeaker: can listen to the recorded messages and play voice messages in the room by means of the telephone;

2 - Graphic display: displays the messages which guide the programming operations and the events which have occurred;

3 - IR receiver: receives the switching on and off commands sent by the burglar-alarm system remote control;

4 - Transponder reader: receives the burglar-alarm system switching on and off commands directly from the transponder keys;

5 - Alphanumeric keypad: allows the manual switching on of all those programming operations which require the use of numbers and/or symbols;

6 - Microphone: used to record the messages and listen to the room remotely by means of telephone;

7 - CLEAR key: exit the current menu and the programming;

8 - Navigation keypad: navigate inside the menu, confirms or cancels the programming operations;

9 - GSM antenna with cable L = 1.5 metres: to be positioned upon verification of GSM signal reception.

Telephone communicator

- Allows two-way communication between the user and the My Home home automation system:
- if the burglar-alarm system has detected an alarm, it automatically dials the telephone numbers previously programmed by the user and gives a voice message to say what type of event has happened;
- it can be called by the user who, by means of predefined codes, can send commands to the automation system and to the burglar-alarm system;
- the user can find out the state of the burglar-alarm and automation system by telephone;
- it lets you connect to the My Home portal and makes the My Home web service available, for example the remote assistance service as well as the possibility to download the history of events;
- it enables automatic forwarding of alarm and event signallings to surveillance units, using the Contact ID protocol, as well as the request and setting of its parameters.

Advanced central unit
with telephone communicator

3486

Rear view

Configuration

The central units do not need configurators. The functions can be set directly on the device itself (keypad and display), or using the appropriate software, either TiSecurity GSM. For detailed information refer to the corresponding manuals supplied with the products.

Software configuration

The program can be used to easily customise all parameters of the Central unit. It is possible to receive the current configuration from the Central unit, change it and send any changes made to the Central unit, save the configuration to a file for subsequent modification, or save it as a backup copy.

For further information refer to the software manual supplied with the central unit.

Ademco Contact ID functionality

Ademco contact ID is a particular communication protocol operating on a telephone line with DTMF touch tone. Using this protocol, it is possible to set a one-way communication between the burglar-alarm central units and the vigilance bodies. In this way, vigilance bodies can receive information concerning the type of event/alarm generated and, if available, the details of the peripheral from where it generated.

Events that can be managed using the Ademco Contact ID

The Ademco Contact ID events managed by the central unit are the following:
Relating to the burglar-alarm system:
- Anti-panic alarm
- Anti-burglary alarm
- General intrusion alarm
- Tamptest (device interconnection alarm)
- Device tampering alarm
- No power supply
- System battery faulty
- Activation / deactivation / cancellation*
- Sensor deactivation
- Periodical functionality test (routine check of the telephone line and the installation)

NOTE*: cancellation is the silencing of an alarm following the disarming of the system itself. In this case the event is sent to the vigilance body, which can therefore check if it's been caused by a tampering attempt.

Relating to the technical alarms:
- Fire alarm (AUX=8)
- Gas leak alarm (AUX=1)
- Freezer alarm (AUX=2)
- Flooding alarm (AUX=3)
- Remote assistance alarm (AUX=9)
- Auxiliary device tampering (Z=9)
For every event, where required, the origin of the alarm is also forwarded, in terms of zone and device.

Wiring diagram

It is good practice to protect the system from lightning by using surge protective devices, SPD, belonging to class II, as per the diagram shown.

In particular, to protect the burglar-alarm central unit from overvoltage from the telephone line, the use of the appropriate PLT1 device is recommended, taking care to connect the corresponding earth clamp with the "earth" reference of the SPD discharger installed in the apartment distribution board (see diagram). The connection shall have as low an impedance as possible, and will be performed using a conductor with minimum section of 2.5 mm^2, and maximum length of 30 metres.

Riser distribution board

Power meter

Apartment distribution board

SPD coordination
(if necessary)

S type earth
leakage

SPD1

SPD2

to the electric
system

max. 30 m

Local line

PLT1

a b
IN

OUT
a b

LU

T1

T1
T2

Advanced central unit with telephone
communicator

GSM/PSTN gateway

Description

This device, thanks to the GSM telephone network, enables using the functions of the PSTN telephone communicator, which equips the burglar-alarm central units, even in places where the analog telephone network is not available or it is not cost-effective to activate it.
The gateway is connected to the "Phone Line OUT" terminal of the burglar-alarm central unit and simulates a PSTN analog telephone line, forwarding alarm calls via the GSM network to the numbers stored in the central unit.

3 LEDs indicate the operating status of the gateway after powering up:

LED	Correct state	PIN prompt	Roaming / Virtual Operator
Activity	On	On	Flashing
GSM	Flashing / On [1]	Off	Flashing
Status	Flashing	On	Flashing

[1] Indicates the quality of the GSM signal.

The device, regardless of whether there is an alarm central unit, can also be used for telephone or fax devices if there is no analog telephone line.

Main functions:
- conversion of the quad-band GSM telephone line into PSTN;
- back-up battery for operation in the event of the main power supply failing;
- configuration of SMS warning messages;
- battery status notices via SMS (charge, low battery warning, main power failure warning).

Technical data

Power supply:	12VDC / 1A via power supply unit provided
Operating temperature:	from 0°C to +45°C
Back-up battery life:	3 hours (standby)
	1.5 hours (talk time)

Dimensions

Height:	115 mm
Width:	80 mm
Depth:	45 mm

front view

side view
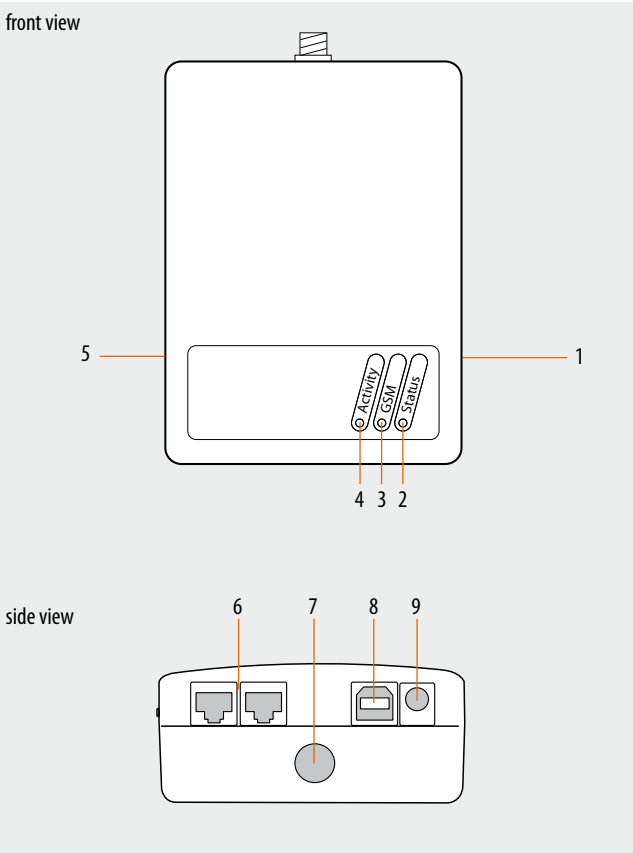
Legend

1. side socket for SIM
2. Status LED: indicates the operating status of the device.
3. GSM LED: gives information on the quality of the GSM signal.
4. Activity LED: indicates the back-up battery status.
5. side ON/OFF switch
6. RJ11 connectors for burglar-alarm central unit connection
7. SMA/f connector for GSM antenna
8. USB connector for updates
9. Power supply connector

Wiring diagram

GSM antenna

RJ11

3489GSM
gateway

SIM

3485STD burglar-alarm central unit

PSTN line

telephone
devices

Magnetic contacts line
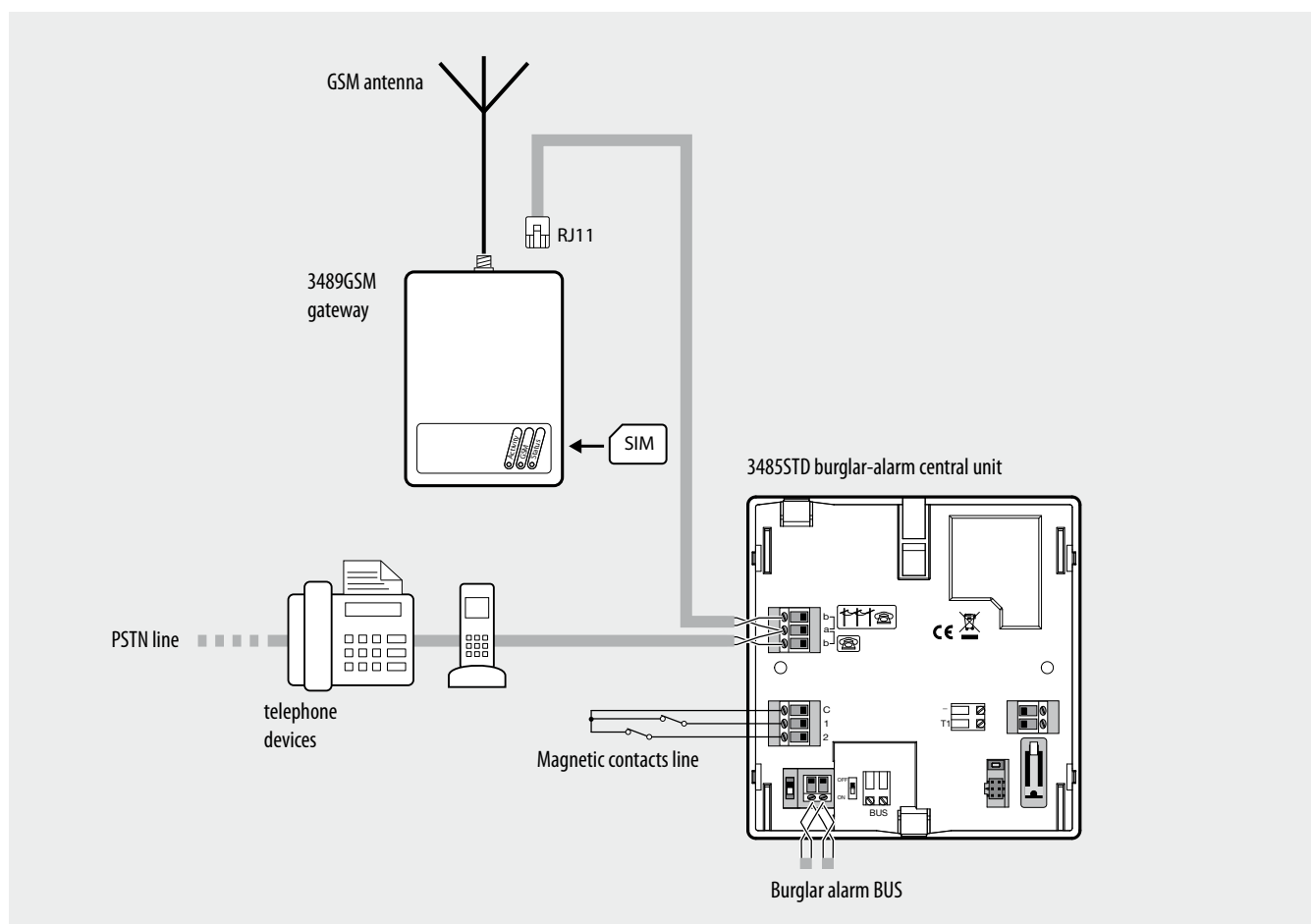
Burglar alarm BUS

Warning: It is recommended to use only one RJ11 jack for the 3489GSM gateway to
ensure calling in the event of an alarm.
The telephone devices, such as telephones or fax units must be connected "down-
stream" of the burglar-alarm central unit (see wiring diagram).

Magnetic contacts

Description

Magnetic sensors are normally installed on the top side of windows or doors, opposite to the hinges, so that even with small forced openings, the distance created between the two components (magnet and reed contact) will be enough to cause an alarm. The electromagnetic sensors included in the offer are of the NC contact and protection line type.

Flush mounted installation sensor, item 3510 and item 3510M
These cylindrical sensors have been purposely designed for Flush mounted installation, as shown in the figure, for doors and windows with small sections. Sensor item 3510 is suitable for wooden doors and windows; sensor item 3510M is made of brass, has high mechanical resistance, and is suitable of all types of non ferromagnetic doors and windows (wood, PVC, aluminium).

Flush mounted installation sensor, item 3510PB
These cylindrical sensors of large diameter (20 mm) have an enhanced magnet, and have been purposely designed for Flush mounted installation in reinforced doors, doors, and large entrance doors, of any material.

Sensor for exposed installation, item 3511
When Flush mounted installation is not possible, this type of sensor may be used. White in colour, and very small in size, it is designed for exposed installation. It can be used both on wood and plastic, but also on non ferrous metal doors and windows, such as aluminium ones. This magnetic sensor has a NC contact and protection line.

Sensors for doors made of ferrous metal, item 3512 and 3513
Made of metal, and intended for installation on ferrous metal doors and windows. The item 3512 sensor is suitable for the protection of sliding or tilting garage doors. thanks to its die-cast aluminium structure capable of withstanding the passage of vehicles, it can be set on the floor. The connection cables are protected by steel sheathing.
item 3513 sensor can be used on sheet steel doors, such as those of cellars and warehouses, and on ferrous metal doors and windows.

Configuration

Sensors do not require configuration.
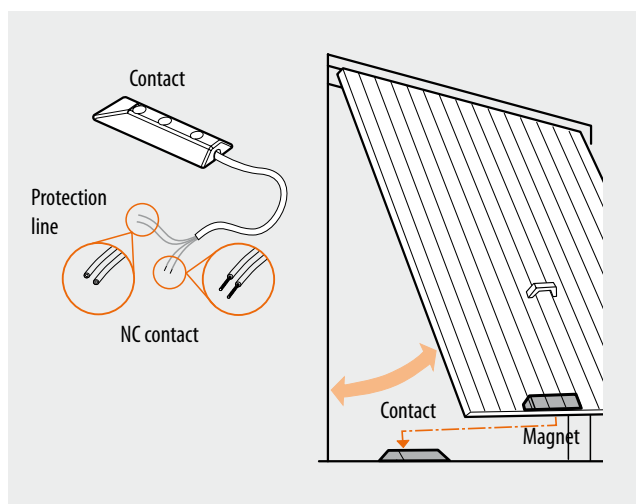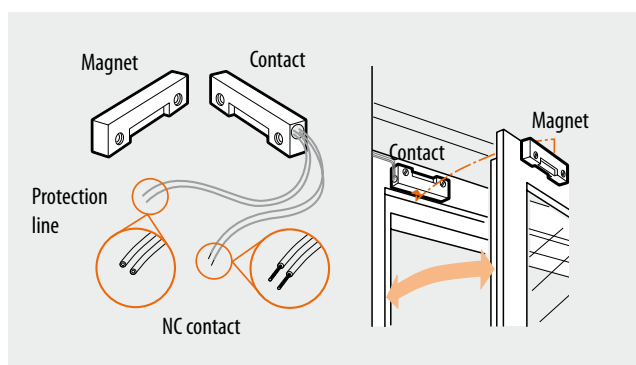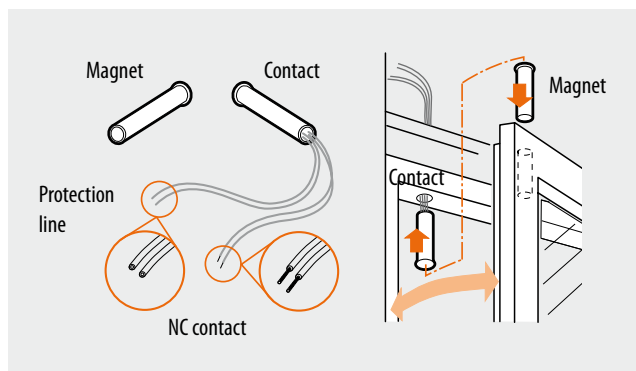
Magnetic contacts

Dimensional data

78

17

18

67

Magnet

59

Reed contact enclosure

3513

40

7

14

30

3511

35

ø8

ø10

3510

≤12

26

18

ø10

ø8

0,8

3510M

≤12

ø24

ø20

ø10

3510PB

17,5

25,5

26,5

86

72

15

25

32

65

25

72

140

42

15,5

3512

B

A
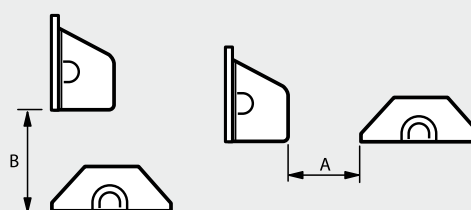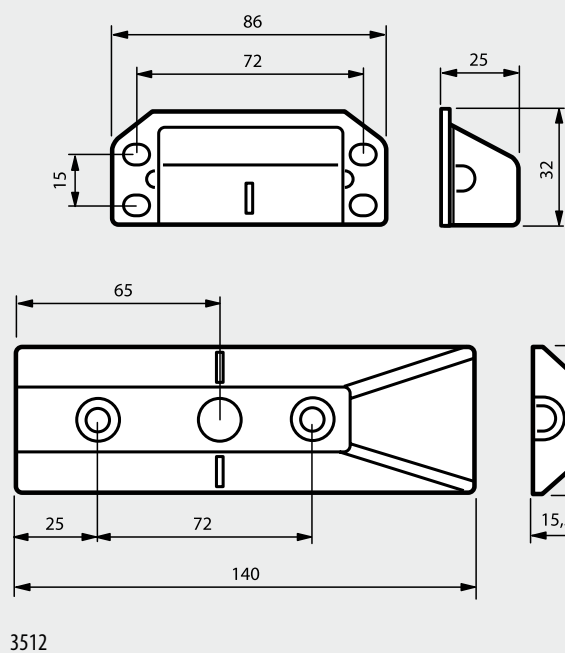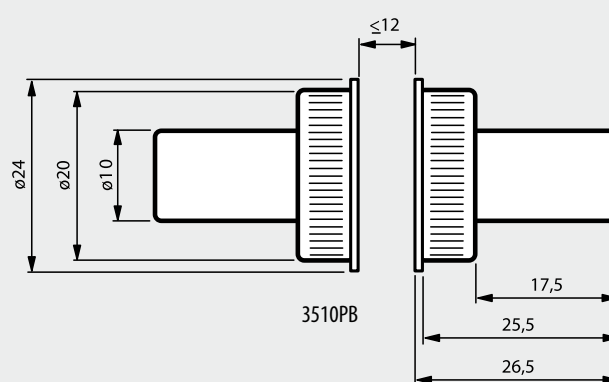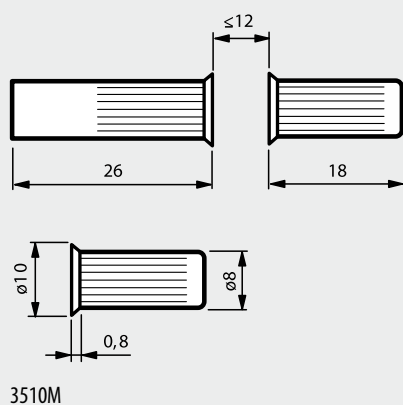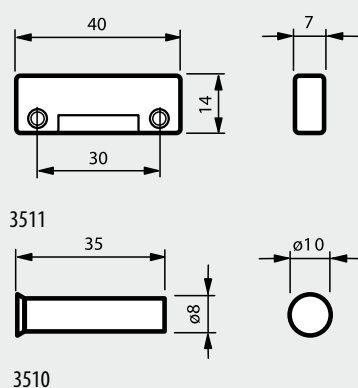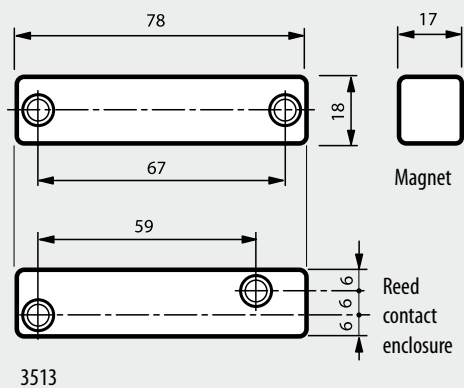
Maximum distances from the magnet and the contact

	Steel door	Other doors
A	40	40
B	35	50

Rolling shutter detector

Description

This device can protect rolling shutters, or similar winding devices, and is made up of a reel-type cable detector to be positioned in the shutter box.

The end of the cable, which can be extended up to 3.1 metres, is fastened to the base of the rolling shutter. The device features a "movement/time excursion" cycle designed to avoid false alarms due to accidental movements of the rolling shutter due to vibrations, slow sliding and blasts of wind.

This detector is recommended to provide perimeter protection because it offers the advantage of giving the alarm when the thief tries to lift the rolling shutter and thus before he enters the home.

In order to use the detector, use the contact interface item HC/HS/HD/L/N/NT4612/12 or item F482, which can control the impulses generated by the detector itself in case the rolling shutter is forced open.

Configuration

The sensor does not require configuration.

Dimensional data
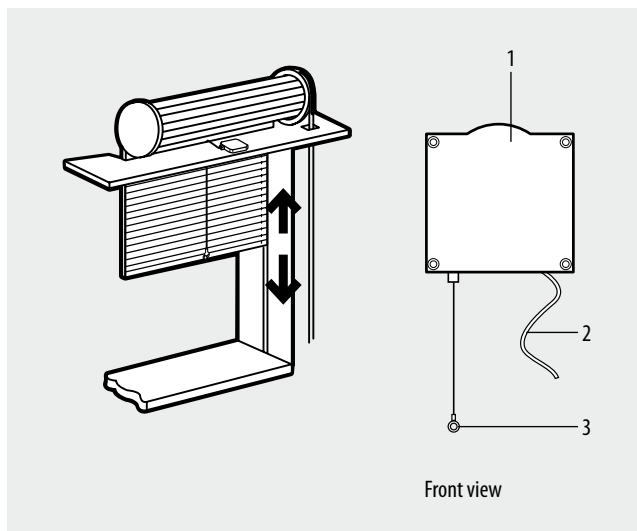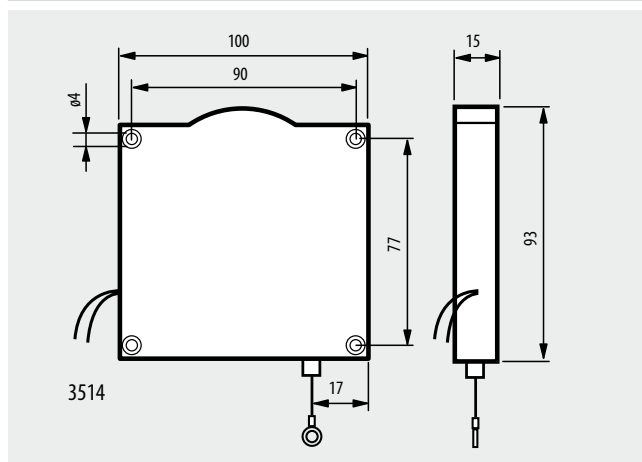
Legend

1 - Cable detector;

2 - BUS;

3 - Cable to be fastened to the rolling shutter.

Front view

Wiring diagram
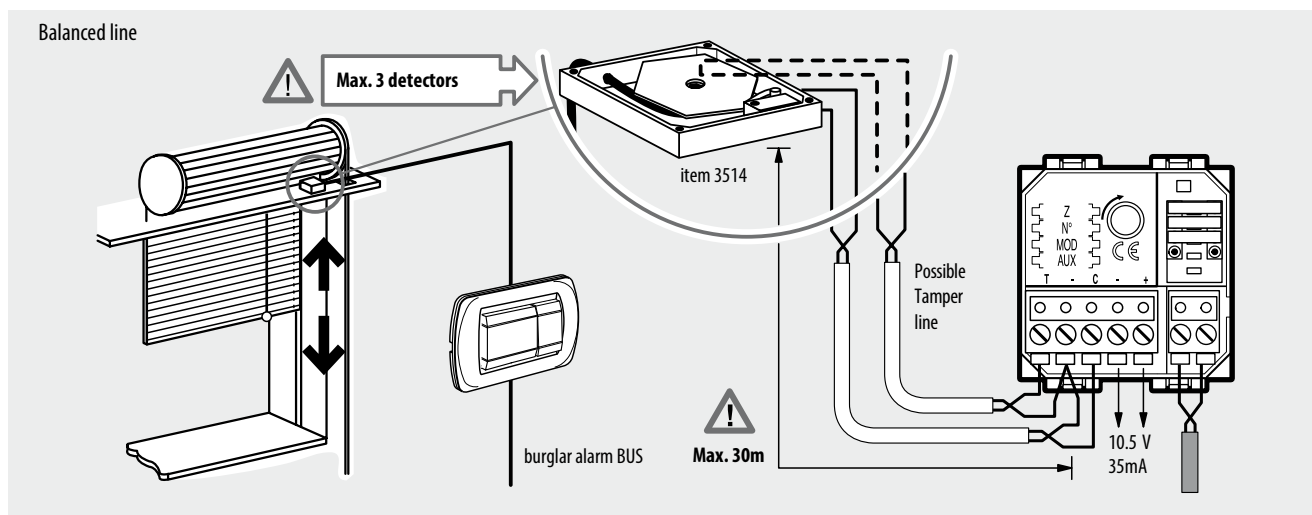
Glass-breaking detector

Description

This glass breaking detector is positioned on the window to be protected using the double-sided adhesive tape supplied. The break, or even a strong shock against the glass, causes the emission of a noise with characteristic frequency which the piezoelectric detector captures. A specific electronic circuit generates the alarm signal which is interpreted by the contact interface (any for flush mounted installation or 3480 or F482) to which the detector must be connected.

For proper operation, do not connect more than three detectors in series to the clamps of the interface.

Technical data

- Resistance: typical (normally closed): 14 Ω (max. 24)
  in alarm (open): min. 1 MΩ
- Opening in alarm: 1-10 sec.
- Max. circuit voltage: 15 Vcc
- Max. circuit current: 15 mA
- Lightning suppression: 400 W per 1 m/sec.
- Operating temperature: (-18) – (50)°C
- Sensitivity: factory-set
- Fastening method: High adherence acrylic tape

Configuration

The sensor does not require configuration.
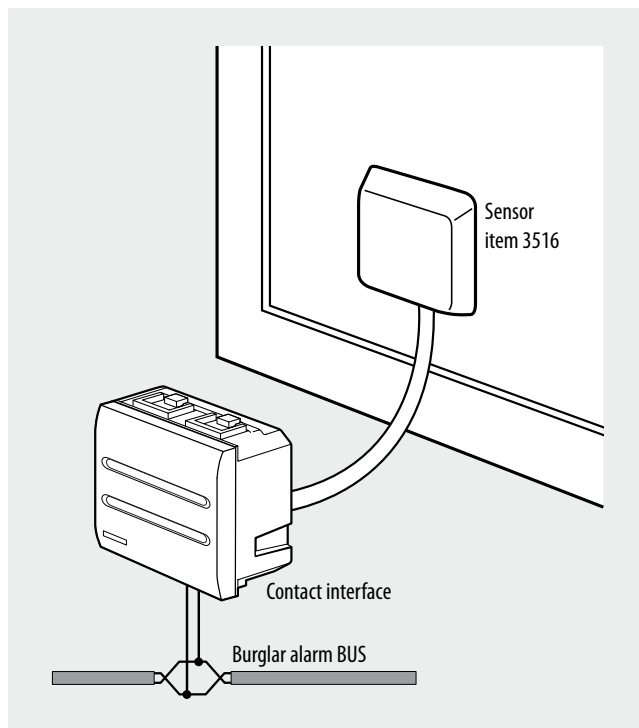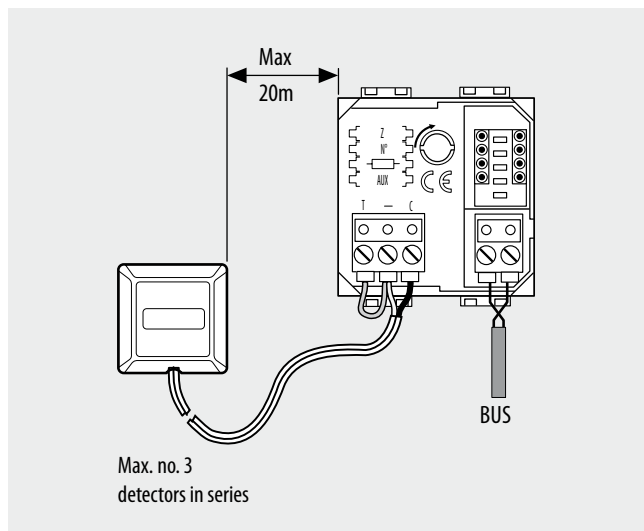
Sensor item 3516

Contact interface

Burglar alarm BUS

Wiring diagram

Max 20m

BUS

Max. no. 3 detectors in series

Dimensional data

32

32

9
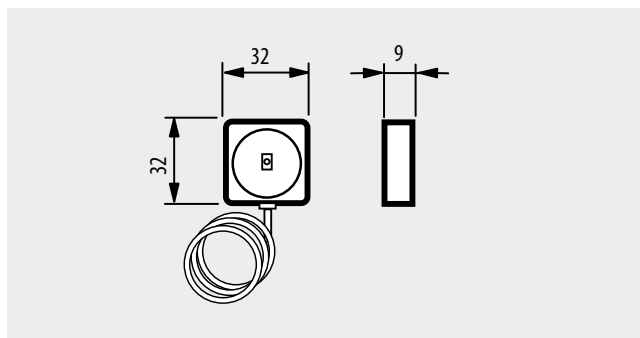
IR barriers for windows

Description

The device consists of 2 columns, one operating as a TRANSMITTER (TX), and the other as a RECEIVER (RX). Both have a microprocessor for the management of the alarm and the synchronisation of the infrared beams. The table that follows shows the alarm tripping times based on the rays broken:

OR: alarm with at least one ray broken (maximum sensitivity) AND: alarm with at least two rays broken (minimum sensitivity).

Rays broken	Tripping time	Microswitch setting			
		OR		AND	
		100	200	100	200
only 1		2 sec.	2 sec.	-	-
2 not adjoining		1 sec.	1 sec.	1 sec.	1 sec.
2 adjoining or all		100 ms	200 ms	100 ms	200 ms

Anti insects

For installations with distance between the RX and the TX greater than 1 m, the interruption of a single beam, if it takes place directly on one of the barriers (for example due to the presence of an insect), does not cause alarm. The alarm, however, is immediate if other beams are interrupted.

Range and connection

The barriers have a maximum range of 12 m indoors outdoors and 6 m outdoors. They connect to the rest of the burglar-alarm system through contact interfaces. If
the maximum absorption of the burglar-alarm system allows it, it is possible to connect one or more barriers through interface 3480V12 or F482V12. Alternatively, to limit the total absorption of the system or due to the limit of current supplied from the interfaces 3480V12 and F482V12 (50 and 100mA), it is necessary to use the contact interfaces 3480 or F482 for connection to the burglar-alarm system and a power supply E47/12 the for the barriers power supply.

WARNING: To improve the false alarms immunity, it is recommended to install also the barriers microwave accessory item 3518MW (see wiring diagram). In this way, a dual technology (IR + MW) "AND" mode protection is created.

Technical data

- Range: 12 m high power indoors and 6 m outdoors, 3 m low power both indoors and outdoors.
- Power supply: 12 Vdc +/- 2 Vdc
- Max. absorption: 35mA (art.3518/50)
                                 40mA (art.3518)
                                 45mA(art.3518/150)
                                 50mA (art.3519)
- Operating temperature: (-25) – (+55)℃
- Protection index: IP44

Legend

1 - Receiver;

2 - Transmitter;

3 - IR emission zone.

Dimensional data

Item	Lenght A (mm)
3518	1080
3518/50	580
3518/150	1580
3519	2080

IR barriers for windows

Configuration

The barriers are sold configured for operation in "AND" mode, with tripping time: 200ms.
To change the mode use the internal microswitch as shown in the following table:

OR 100ms	OR 200ms
1 2 3 4	1 2 3 4
AND 100ms	**AND 200ms** *
1 2 3 4	1 2 3 4
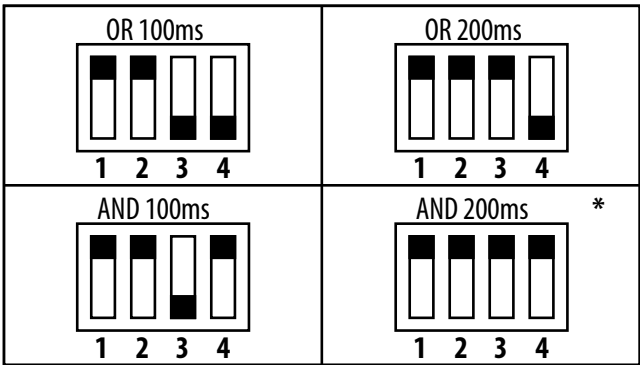
* default

Wiring diagram

Connection of the barrier to the item 3480V12 or F482V12

**3480V12
(or DIN F482V12 version)**

RX

S1

13,8
GND
PT0
PT1
ALL0
ALL1

LED

TX

13,8
GND
PT0
PT1

JP10

SCS

Z
N
MOD

COM T COM C   + –   12V

COM T COM C   + –
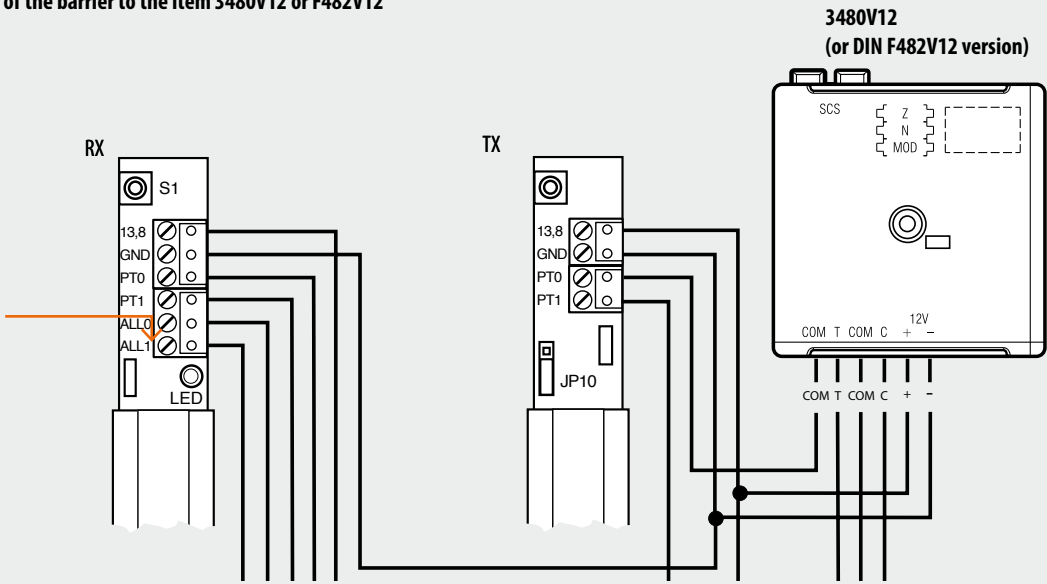
If the max. consumption of the system allows it, it is possible to connect the 3518 or 3518/50 barrier directly to only one interface item 3480V12 or F482V12.

WARNING: use a 30 m max twisted, unshielded cable.

Connection table

MS1	Receiver (RX)		MS1	Transmitter (TX)
1	+13.8V		1	+13.8V
2	GND		2	GND
3	PT0 Tamper C		3	PT0 Tamper C
4	PT1 Tamper N.C.		4	PT1 Tamper N.C.
5	All0 Alarm C			
6	All1 Alarm N.C.			

IR barriers for windows

Wiring diagram

Use of barriers with gateway 3480 or F482

⚠️ Power supply unit in addition to the one already in the burglar-alarm system. Used to power the barriers. TO BE CONNECTED TO THE BUS only to have the EXHAUSTED BATTERY indication for the central unit with a display.

E47/12

230V ~

Battery

RX S1

13,8
GND
PT0
PT1
ALL0
ALL1

Reset

LED

TX

13,8
GND
PT 0
PT 1

JP10

3480 (or DIN F482 version)

SCS Z1 N1 MOD1 Z2 N2 MOD2

T — C1 — C2 —
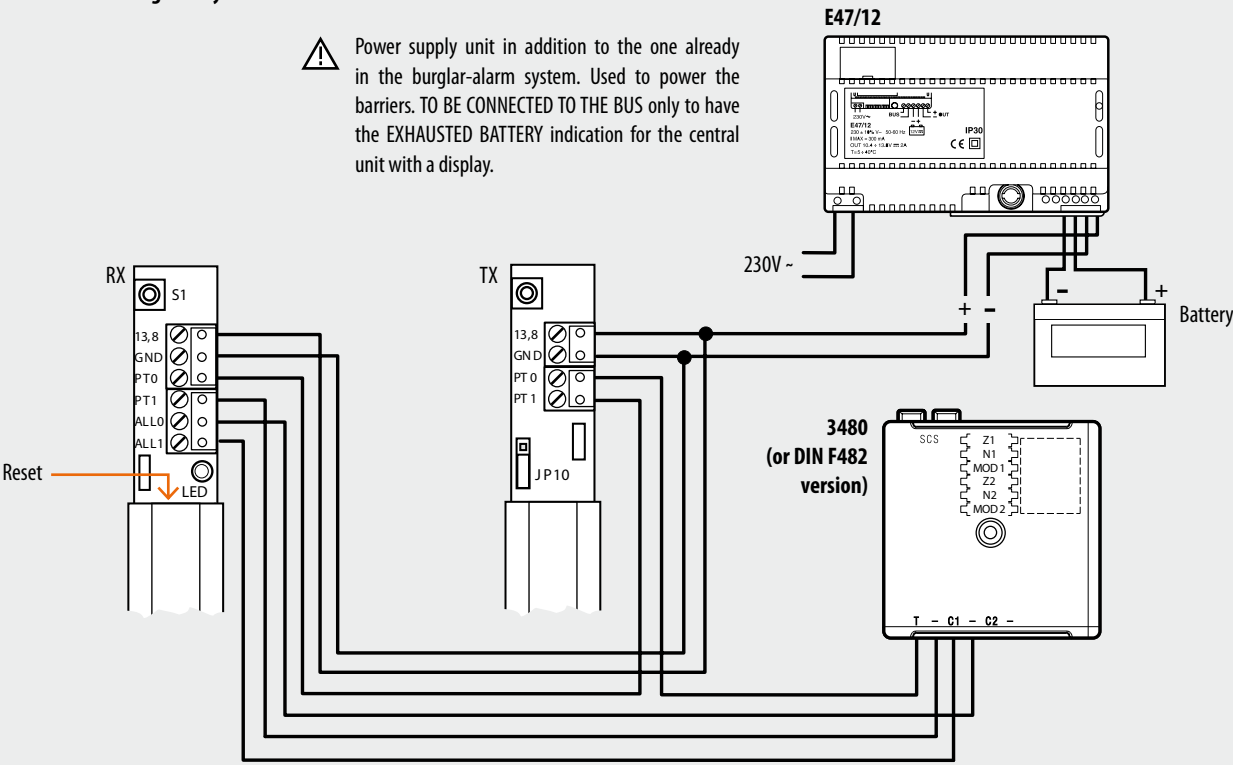
For multiple barriers connect the alarm line and tamper line in series and the power supply in parallel. Connect no more than 3 pairs of barriers for each gateway

WARNING: Use a 30 m max twisted, unshielded cable.

Use of barriers with sensor item 3518MW
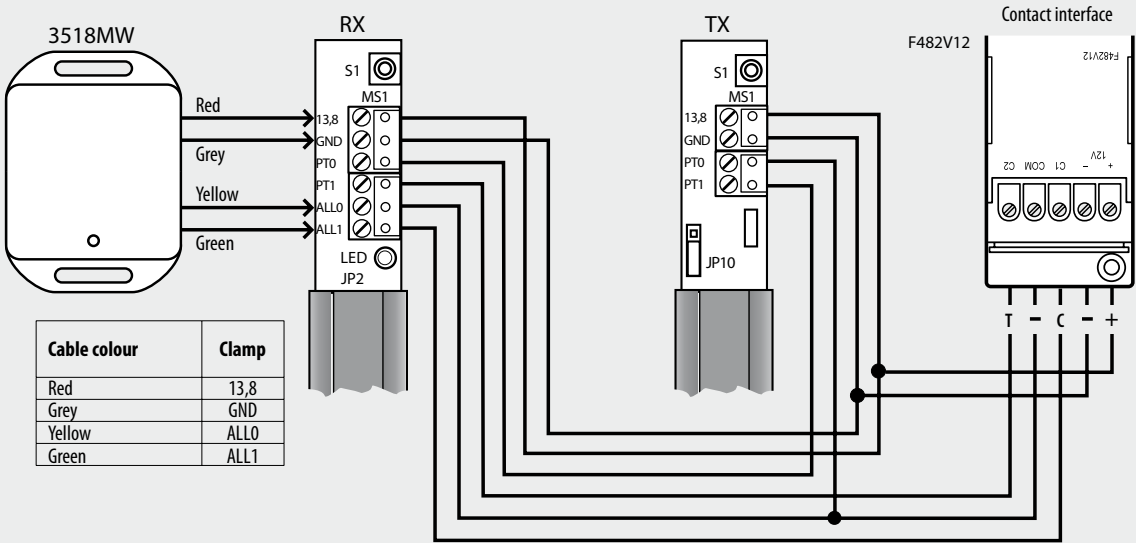
3518MW

Red
Grey
Yellow
Green

RX S1
MS1

13,8
GND
PT0
PT1
ALL0
ALL1

LED
JP2

TX S1
MS1

13,8
GND
PT0
PT1

JP10

Contact interface

F482V12

12V + — C1 COM C2

T — C — +

Cable colour	Clamp
Red	13,8
Grey	GND
Yellow	ALL0
Green	ALL1

If the max absorption of the system allows it, it will be possible to directly connect the barrier to the interface only

NOTE: If Z1 and N1 are configured, while leaving sockets Z2 and N2 empty, contact C2 will operate as a tamper line.

WARNING: use a 30 m max twisted, unshielded cable.

Alarm IR remote control

Description

This easy to use IR remote control enables performing all the system arming and disarming operations, and to confirm the settings. It's coded automatically by the control unit and has 4,000,000 code combinations. The specific programming procedure makes it impossible to detect the code, thus assuring full safety. In any case, the user can easily modify this code. Every system can recognise up to 30 remote controls when item L/N/NT4600/4 control unit is installed, or up to 50 remote controls with control unit item 3486. The remote controls can be programmed to work with several installations, thus permitting, for instance, to control both the home and the office systems with a single remote control.

With systems with control units item 3485/B and item HC/HD/HS/L/N/NT4601, the remote control does not operate.

Front view

Technical data

- Power supply: 3 Vdc (2 CR1616 battery)
- Max. no. of manoeuvres: 50.000

Legend

1 - IR transmission zone;
2 - LED for transmission confirmation;
3 - Control pushbutton;
4 - Key-ring.

Battery replacement

To replace the 2 remote control batteries proceed as shown in the following figures.
Note: dispose of exhausted batteries following current regulations. Do not insert a fully charged battery and a partly charged battery inside the same remote control.
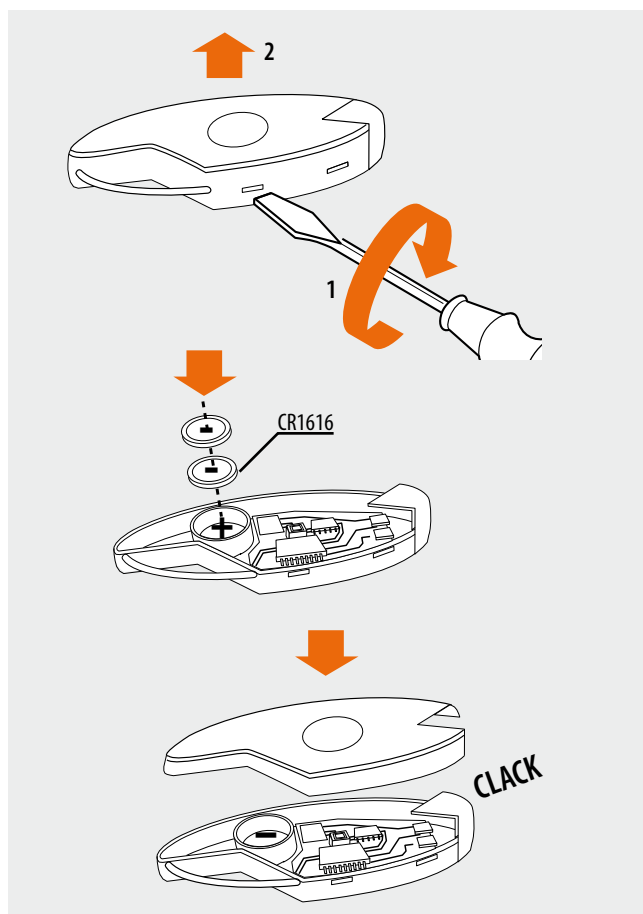
Outdoor siren

Description

These sirens have been designed so that they can be installed easily, are tamper resistant and withstand atmospheric agents.

A tamper screw protects the sirens against pulling off/opening; when installing make sure that the tamper screw is correctly positioned.

Outdoor siren item 4072L

If there is a power cut the battery inside the siren gives the whole system a minimum life of 24 hours (as required by standard CEI 79-2).

This solution means that only one battery need to be used instead of the two of traditional systems, thus reducing maintenance and increasing system reliability. The central unit can be miniaturised with no effect on safety.

Outdoor siren item 4072A

This siren is a system optional and can only be installed in combination with power supply item E47ADC.

It is useful for identifying which room the alarm is coming from but is not obligatory because the system back-up battery will be connected to the power supply. The housing inside the siren holds the self-power supply 12V 7Ah battery.

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 5 mA (item 4072A)
- Operating temperature: (-25) – (+55)°C
- Level of the signal emitted: 105 dB(A) at 3 metres
- Frequency: 1500 Hz.
- Alarm autonomy: 15 min.
- Flashes per minute: 30 - 60
- Weight (without battery):   2.5 kg
- Protection index: IP34
- Self-protected from removal and opening
- Battery protection fuse: F1: F5AL

Front view

Front view of the siren without external cover
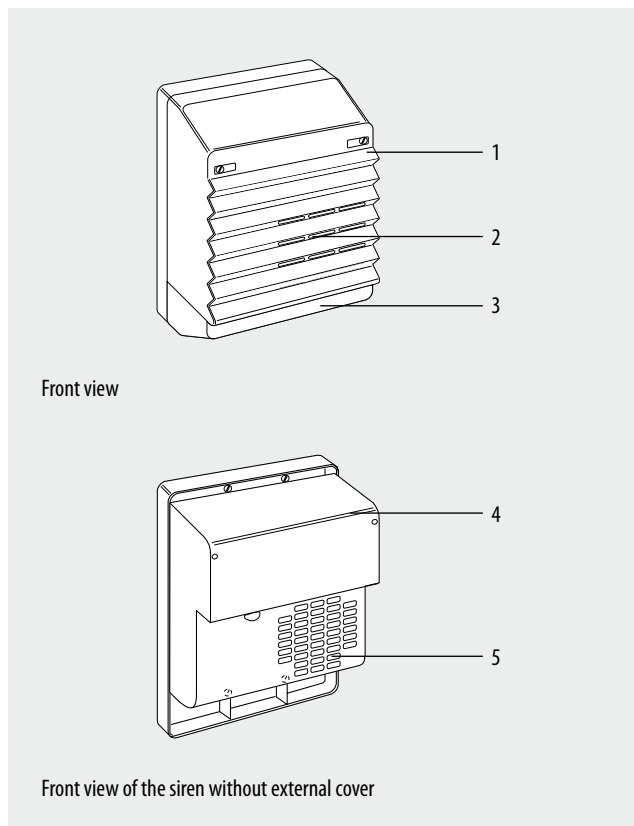
Legend

1 - Plastic external cover;
2 - Sound signaller;
3 - Sight signaller;
4 - Internal metal protection;
5 - Anti-foam grid to prevent penetration inside the casing.

Dimensional data
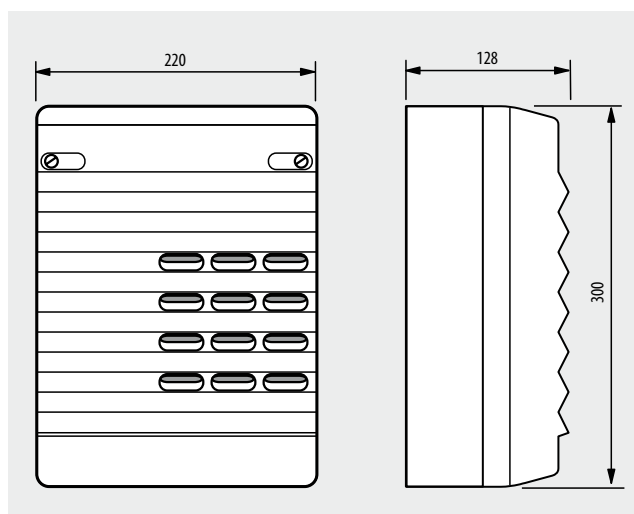
Outdoor siren

Configuration

The external siren requires configuration of the progressive number. This is done by means of the jumper (1) of the internal control card.
If the system has 2 external sirens the jumper (1) of the second siren must be cut.

Internal siren card - connections

A	Power supply-BUS twisted pair- (WHITE CABLE)
B	battery: battery positive (RED cable) battery negative (BLACK cable)
C	loudspeaker (GREY cable)

Control card internal view

Yellow LED: if on check the Tamper protection

Red LED: if on invert the BUS polarity.
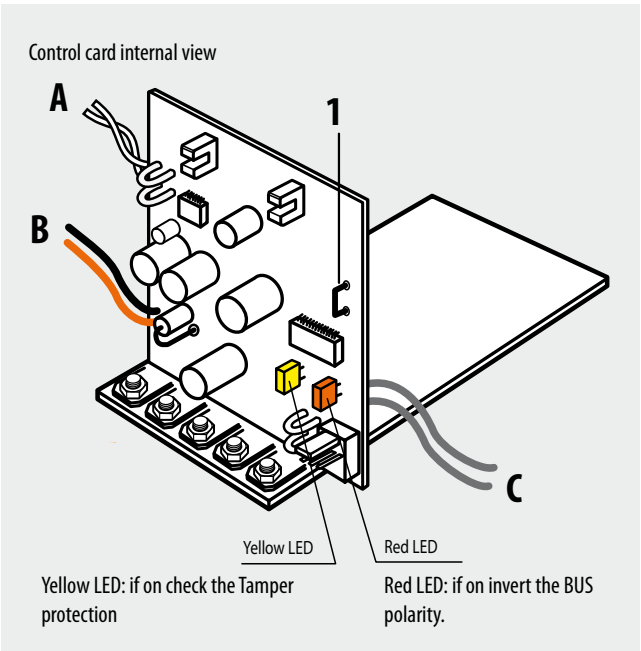
Installation procedure

1 - Remove the two screws (1) and take off the external cover (2).
2 - Remove the four screws (3) and pull out the internal protection cover (4).
3 - By using the drilling template (5), position the hole (6) near the wire-outlet pipe and mark the position of the 5 holes.
NOTE: use a Ø 6 mm bit for drilling the holes.
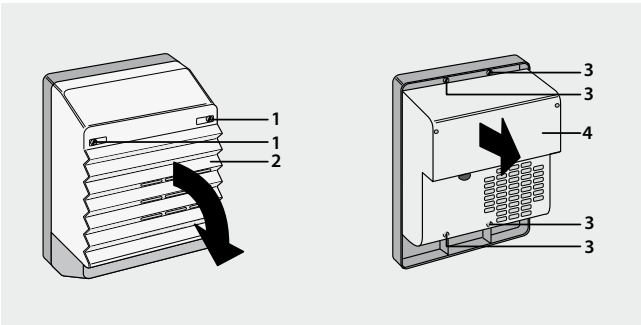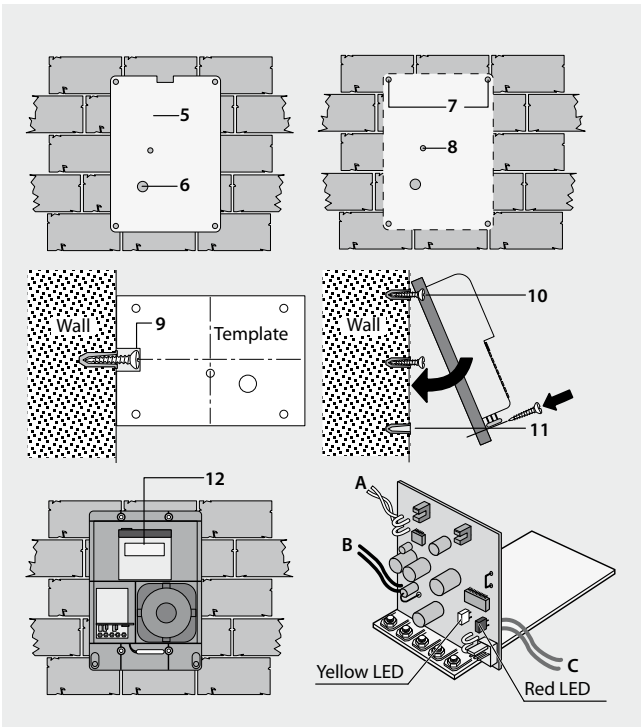
4 - Insert the screw plastic plugs into the holes and partly tighten the top screws (7) and the "tamper" screw (8).

5 - Adjust the "tamper" screw by using the notch (9) on the drilling template, as shown in the picture.

⚠ If the installation or the adjustment of the tamper screw is carried out incorrectly, the system will not work.

6 - Attach the siren to the two top screws (10).
Tighten the two bottom screws (11). Tighten the four screws completely.
7 - Place the battery (12) 12V - 6.5-7.2 Ah (for item 4072A and 77673) or 12V - 12 Ah (for item 4072L) into the special housing without connecting the Faston clamps.

8 - On the siren internal board, connect the power supply pair (BUS) to the white wires (A), the battery to the Red and Black wires (B) and the siren to the Grey wires (C).

⚠ **If the red LED lights up, reverse the polarity of the BUS**

⚠ **Before performing any operations on the siren, switch the system to maintenance mode.**

⚠ **High voltage present near the flasher lamp.**

Connections to the wires of the electronic card

Colour	Connection
White	Telephone pair (BUS)
White	Telephone pair (BUS)
Red	+ Battery positive
Black	+ Battery negative
Grey	Sound signaller
Grey	Sound signaller

Alarm power supply 230 V

E47ADCN

Description

The power supply must be used to power the burglar-alarm system.

It supplies continuous 27 Vdc low voltage with a maximum current of 1 A, and is electronically protected (without fuse) against short circuit and overload.

It's a double insulation safety device in accordance with CEI EN 60065, which provides power supply to all the system devices connected to the system using the twisted 2-wire SCS/BUS cable, creating a SELV system (Safety Extra - Low Voltage) as described in the CEI 64-8 standards (ref CEI 64-8-4 par 411.1.2.5).

The power supply must be connected to the 12 Vdc 7.2 to 24 Ah battery to ensure the operation of the system in case of power cut, to be installed inside an item F115/8B enclosure, protected against unwanted opening.

To guarantee physical protection, the power supply unit must be installed in appropriate electric switchboards, with opening protected using the appropriate Tamper device, item L4630.

The device is enclosed in an 8 module DIN rail container, and its installation must be in accordance with the regulations of the country of use.

In general, the following requirements must be met:

- The power supply must always be installed in appropriate enclosures, item F115/8A;
- The device must be kept away from water drips and sprays;
- Care must be taken not to obstruct the air vents;
- A double-pole thermal magnetic circuit breaker with contact separation of at least 3 mm must be used, positioned near the power supply. The circuit breaker is used to disconnect the power supply from the mains, and to protect it.

Front view

Legend

1 - Back-up battery connection clamps;
2 - Clamps for the connection of the SCS BUS;
3 - Tamper protection device socket;
4 - Network voltage connection clamps.

Technical data

- SELV double insulation safety device in accordance with CEI EN 60065 standard
- Power supply: 230 Vac +/- 10% 50/60 Hz
- Max. absorption: 300 mA
- Maximum current supplied: 1A
- Battery charging current: 400 mA
- Dissipated power: 15 W
- Operating temperature: 5 – 40℃
- Protection index: IP30

Dimensional data

Size: 8 DIN modules

Maximum current delivered by the devices

		type of battery installed		
		7.2 Ah	**12 Ah**	**24 Ah**
Duration in case of power line failure	**24 h**	110 mA(*)	190 mA(*)	380 mA
	15 h	180 mA	300 mA	600 mA
	8 h	340 mA	560 mA	700 mA

(*) In these cases the system complies with level 2 of CEI 79-2 standard.

12 V output power supply

Description

Device for the power supply of 12 V devices (e.g. IR barriers), designed for connection to a 12 V - 6.5 - 24 Ah back-up battery.

The power supply can be installed in flush mounted switchboards item F115/8A, or in suitable electric switchboards, with opening protected using the appropriate anti-tampering device L4630.

For the 7.2 Ah battery it is recommended that the item F115/8B container is used, preset for opening protection.

The twisted pair of the burglar-alarm system can be connected to the BUS clamps, enabling the status of the battery to be read from the control unit display.

The power supply is a double insulation safety device in accordance with CEI EN 60065, which creates a SELV system (Safety Extra – Low Voltage) as described in the CEI 64-8 standard (ref. CEI 64-8-4 part 411.1.2.5).

The installation must be performed in accordance with current local regulations.

In general, the following rules must be followed:

- The power supply must always be installed in appropriate enclosures;
- The device must be kept away from water drips and sprays;
- Care must be taken not to obstruct the air vents;
- A double-pole thermal magnetic circuit breaker with contact separation of at least 3 mm must be used, positioned near the power supply. The circuit breaker is used to disconnect the power supply from the mains, and to protect it.

Technical data

- Power supply: 230 Vac +/- 10% 50/60 Hz
- Max. absorption: 300 mA
- Output voltage: 10.4-13.8 Vdc
- Maximum current supplied: 2 A
- Battery charging current: 400 mA
- Operating temperature: 5 – 40℃
- Protection index: IP30

Dimensional data

Size: 8 DIN modules

Front view
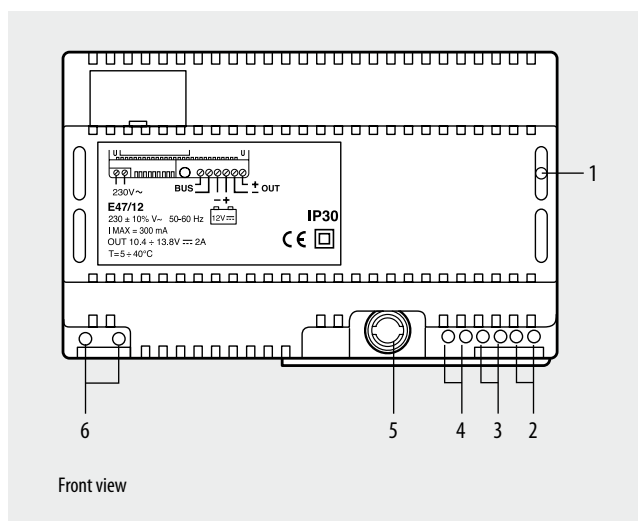
Legend

1 - Battery status LED;
2 - 12 V device power supply connection clamps;
3 - Back-up battery connection clamps;
4 - SCS BUS connection clamps (optional);
5 - Tamper protection device socket;
6 - Network voltage connection clamps.

Maximum current delivered by the devices

		type of battery installed		
		7.2 Ah	**12 Ah**	**24 Ah**
duration in case of power line failure	**24 h**	300 mA(*)	500 mA(*)	1 A
	15 h	480 mA	800 mA	1.6 A
	8 h	900 mA	1.5 A	2 A

(*) In these cases the system complies with level 1 of CEI 79-2 standard.

Relay actuator

Description

This device allows to repeat various types of alarms by means of a relay voltage-free contacts, depending on its configuration.

It can be activated by a technical alarm interface, or by another signal through the auxiliary channel (AUX).

Normally used for the control of gas/water safety solenoid valves, or third party devices (telephone diallers, optical notifications, etc.).

The internal relay is in positive safety; this means that, in case of tampering, it switches over the contacts.

By modifying the configuration, it is possible to change the safety mode of the internal relay.

Related items

Technical alarm interfaces: 3841 and F483

Technical data

Power supply from SCS BUS:	27 Vdc
Max. absorption:	20 mA
Contact output:	24 V 1 A cosφ 0.4
Operating temperature:	5 – 40 °C

Legend

1. Clamp for burglar alarm BUS
2. Relay active notification LED
3. Clamp for the connection of alarm devices

Configuration

The relay actuator requires the allocation of the progressive number within the group of auxiliary devices (relay actuator and auxiliary channels interface) installed within the system, of the auxiliary channel number, and the operating modes.

N°

This configurator assigns the progressive number inside the auxiliary unit.

Configurator 1 identifies the first auxiliary, configurator 2 identifies the second and so on for a maximum of 9 auxiliaries.

AUX and MOD

In combination the configurators in the AUX and MOD sockets assign the operating mode on the basis of the following table.

Operating mode

Configurators		Description	It activates by...	It resets by...
AUX	**MOD**			
none	none	Repetition of the siren alarm	Siren activation	Silencing
none	1	System fault notification	Activators flashing red LED notification	
none	2	System status notification	Activation	Deactivation

Relay actuator

"Auxiliary" operating mode

Configurators		Description	It activates by...	It resets by...
AUX	MOD			
none	3	Signalling with memory of the activation of any auxiliary channel of the system. Typical example: signalling with memory of any technical alarm.	Any AUX device of the system	Pressure of the needle key on any technical alarm interface with AUX configurator from 1 to 9
1-9	3	Signalling with memory of the activation of the corresponding auxiliary channel. Typical example: signalling with memory of a specific technical alarm.	Technical alarm interface with corresponding AUX channel	pressure of the needle key on the interface of the active technical alarm
none	4	Signalling without memory of the activation of any auxiliary channel of the system. Typical example: signalling without memory of any technical alarm.	Any AUX device of the system	Pressure of the needle key on any technical alarm interface with AUX configurator from 1 to 9
1-9	4	Signalling with memory of the activation of the corresponding auxiliary channel. Typical example: signalling without memory of a specific technical alarm.	Technical alarm interface with corresponding AUX channel	pressure of the needle key on the interface of the active technical alarm
	5	As mode 3 but with relay normally not excited.		
	6	Come modo 4 con relé normalmente non eccitato		

NOTES
- Modes 5 and 6 give the same operating results of modes 3 and 4. Their difference is that the relay is normally not excited. This enables an opposite behaviour in case of tampering (cutting of the wire or BUS short circuit). In fact in mode 3 and 4 a tampering excites the device (modes indicated in the case of actuation of alarms such as the siren, the telephone communicator, etc.); however, in mode 5 and 6 the same tampering does not cause any actuation (modes indicated in case of safety actuations such as electrical door locks etc.). The selection of the appropriate mode ensures total system safety.

- The "S" key of the 3 module flush-mounted central unit or the disabling of the central unit with display, which main function is that of silencing the sirens during a technical alarm, disables the relay if this has been activated by the technical alarm interface configured in mode "0" or "4" (technical alarm).

- In all modes there is an auxiliary activation also in case of pre-alarm (IR detector and contact interface with AUX configurators). Attention must therefore be paid when using the relay actuator (in modes with memory or with sensitivity to any auxiliary channel) to avoid unwanted activations.

EXAMPLE: Activation of the solenoid valve in case of gas leak

Relay actuator configuration:

Configurator position	Value
N°	1
AUX	1
MOD	6

Technical alarm interface configuration

Configurator position	Value
N°	2
AUX	1
MOD	4

Wiring diagram

Contact interface

Description

These interfaces are used for connecting 2 independent contact lines - which can be balanced with a resistance, delayed on operation - and a protection Tamper line.
Made in the modular version with 2 DIN modules these devices can be used in case it is necessary to centralise all interfaces in a board or in junction boxes.
LED indicators inside the devices indicate proper operation of the interface when testing the system and when the burglar-alarm starts operating while the system is on.
In order to install the interface item F482 safely, it is recommended to use protected DIN switchboards on the opening of a tamper contact to be connected to the appropriate clamps on the interface.
For level 2 systems (CEI 79-2) the central unit must also be protected from removal (tearing protection).

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 6 mA
- Operating temperature: 5 – 40°C

Dimensional data

- Size: 2 DIN modules

Front view

Legend

1. Contact line 2;
2. Contact line 1;
3. Line 2 activated LED;
4. Line 1 activated LED;
5. Configurator socket;
6. Clamp for burglar alarm BUS;
7. Tamper active LED;
8. Tamper line.

Configuration

This interface module requires - for each of the two contact lines separate from each other - the allocation of the assigned zone Z, the progressive number N of the detectors situated in the same zone, the setup of the MOD protection mode of the contact line.
You will not need to configure both lines if one is not used.

Z1

This configurator assigns the number of the assigned zone of the NC/NO magnetic contact connected to line 1.
Configurator 1 gives the contact the assignment to zone 1, configurator 2 gives the assignment to zone 2 and so forth, up to a maximum of 8 zones.

Z2

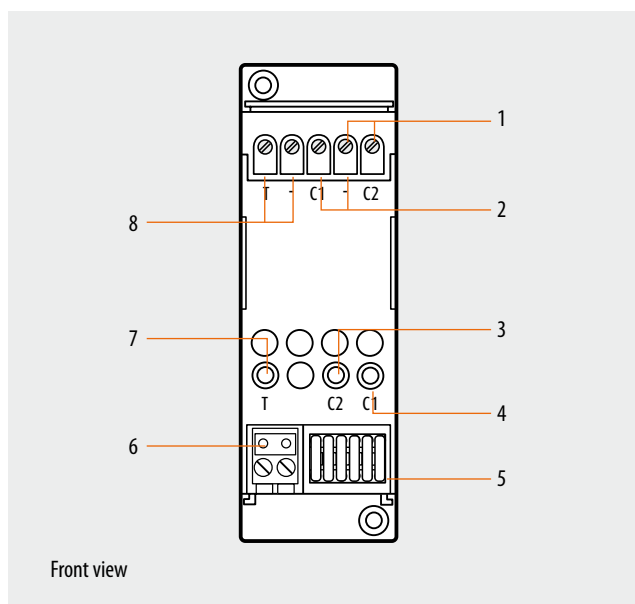As above, for contacts connected to line 2.

N1

This configurator assigns the progressive number of the NC magnetic contact within the zone determined in position Z1.
Configurator 1 identifies the first detector, configurator 2 identifies the second, and so forth, up to a maximum of 9 contacts for each of the 8 zones.
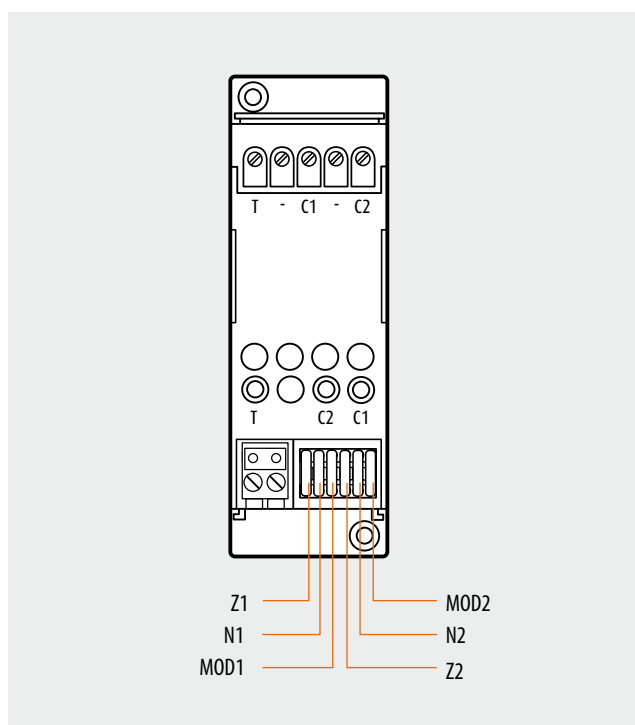
N2

As above, for contacts connected to line 2 (zone Z2).

Contact interface

Configuration

MOD1 and MOD2

A configurator is connected to this position for selecting the operating mode of the interface according to the type of contact or detector connected to the two lines. It is possible to have balanced and unbalanced protection lines with the possibility to produce the alarm with a delay as with zone 1. For details concerning the different operating modes, please refer to the table below.

Configurator	Sensor connected
none	NC contacts
1	NC contacts - balanced
2	NC contacts - delayed *
3	NC contacts - delayed * - balanced
4	NC contact and AUX event generation
5	NC contacts - balanced and AUX event generation
6	NC contacts - delayed and AUX event generation
7	NC contacts - balanced delayed and AUX event generation

* Follows the delay set up in the central unit:
this function operates only on central units item 3486, 3485/B, item HC/HD/HS/L/N/NT4601, 067520 and 573934/35. With central unit item L/N/NT4600/4 the interface must be allocated to ZONE 1 with a time delay set (see central configuration).

Energy saving management with Temperature control

If the contact interface is used in conjunction with the temperature control system to optimise energy saving, two different types of configurations will be possible:

- **Use in the temperature control system only:** The contact interface is directly connected to the temperature control BUS. It autonomously and independently manages the two C1 and C2 lines. Only the line used must be configured, and not both of them. Follow by connecting the AUX configurator to the MOD1 and/or MOD2 sockets. Then configure the [Z1/2] and [N1/2] sockets, in order to assign the address from 1 to 99 to the device within the system. The coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application.
For more information refer to the MY HOME Temperature control guide.

Specific mode for connection to wired rolling shutter sensors

Configurator	Sensor connected	Pulses (*)
8	Flush detector for rolling shutters - delayed**	12 (about 20 cm)
9	Flush detector for rolling shutters - delayed**	25 (about 45 cm)

Note (*): impulses generated by the detector according to the opening range, in cm, of the window before producing the alarm.

** Follows the delay set up in the central unit:
this function operates only on central units item 3486, 3485/B, item HC/HD/HS/L/N/NT4601, 067520 and 573934/35. With central unit item L/N/NT4600/4 the interface must be allocated to ZONE 1 with a time delay set (see central configuration).

- **Use of a burglar-alarm system integrated with the Temperature control system:** in this case, the contact interface is connected to the burglar-alarm system BUS only, and communicates with the temperature control system BUS through the F422 interface.
The interface must be configured in Z1/2 and N1/2 following the requirements and features of the burglar alarm system; only configurators with values 4 to 7 must be connected to the MOD1/2 position, corresponding to the management of NC contacts with generation of AUX event (see tables above). Also in this case, the actual coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application.
For more information refer to the MY HOME Temperature control guide.

Wiring diagram

Note: It is recommended to install the 10 kΩ ±5% 1/4W balancing resistance in correspondence with the last line contact.

* Balance resistance 10 kΩ ± 5% 1/4 W

N.C. N.C. N.C.

* Balance resistance 10 kΩ ± 5% 1/4 W

N.C. N.C. N.C.

Tamper line

Twisted, unshielded cable with maximum length 30 metres

* It is recommended that no more than 3 rope sensors are installed on each line

12 V contact interface

F482V12

Description

This interface gives the possibility of connecting the alarm system to two sensor lines (that can be balanced with resistance, and/or which intervention can be delayed) requiring 12 V power supply.

Produced in the DIN modular version, the device can be used for centralizing all the interfaces inside a cabinet. Two LEDs confirm the correct operation of the interface during system testing, and the tripping of the burglar-alarm system, when the system is armed. To ensure that the interface is installed safely the use of DIN switchboards is recommended, with their opening protected by a tamper contact connected to another interface.

Technical data

Power supply:	27 Vdc from the BUS
Max. absorption:	6 mA to which the absorption of the sensor connected must be added
Operating temperature:	5 – 40 °C
Output:	12 V Max 100 mA

Dimensional data

Size: 2 Basic modules
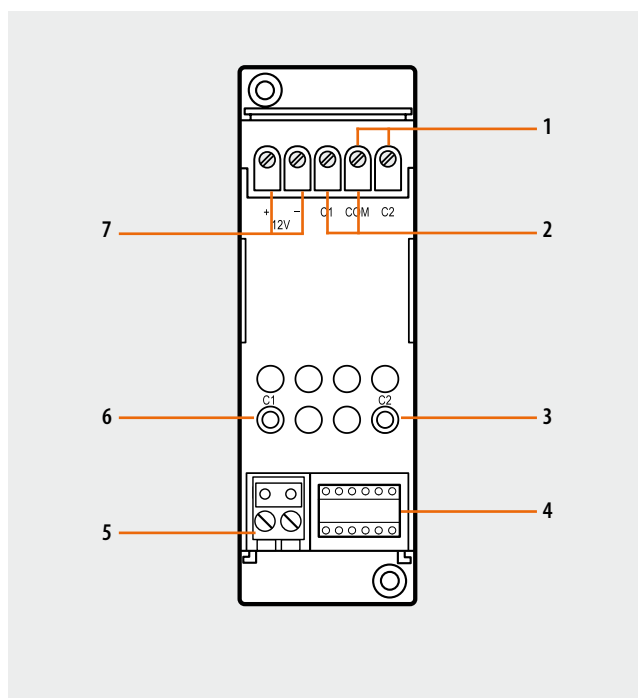
Legend

1. Contact line 2 or tamper;
2. Contact line 1;
3. Line 2 activated LED;
4. Configurator socket;
5. Clamp for burglar alarm BUS;
6. Line 1 activated LED;
7. Output 12 V

Configuration

For each of the two contact lines, independent from each other, the interface requires the assigning of the Z zone it belong to, the N progressive number of the sensors present within the same zone, and the setting of the MOD protection mode of the contact line.

- If the address of contact 2 is not configured, a Tamper line can be connected to clamps C2 and COM; If not required, the C2 clamp must be shorted at the COM contact.

Z1
This configurator assigns the number of the assigned zone of the NC magnetic contact connected to line 1.

Z2
As above, for contacts connected to line 2.

N1
This configurator assigns the progressive number of the NC magnetic contact within the zone determined in position Z1.
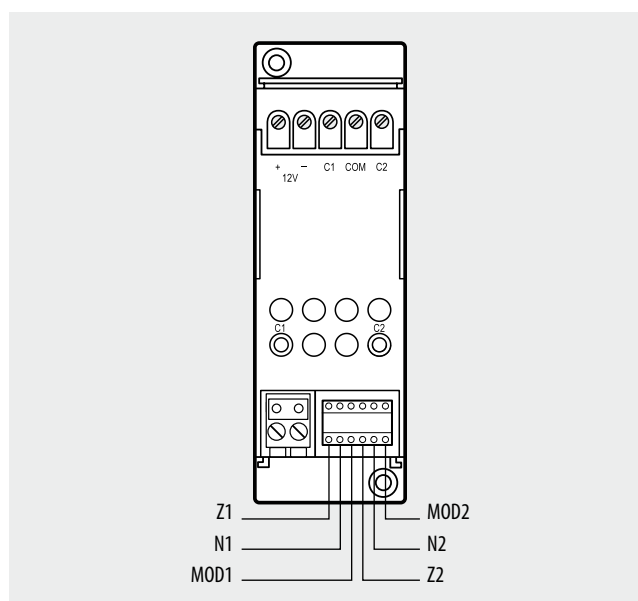
N2
As above, for contacts connected to line 2 (zone Z2).

Configuration

MOD1 and MOD2

In this position a configurator is inserted for selecting the operating mode of the interface according to the type of contact or detector connected to the two lines.

It will be possible to create both balanced and non balanced protection lines, with the possibility of generating a delayed alarm as for zone 1. For the details of the various operating modes, refer to the table below.

Configurator	Sensor connected
none	NC contact
1	NC contact - balanced
2	NC contact - delayed *
3	NC contact - delayed * - balanced
4	NC contact and AUX event generation
5	Balanced NC contact and AUX event generation
6	Delayed NC contact and AUX event generation
7	Balanced delayed NC contact and AUX event generation

Specific mode for connection to wired rolling shutter sensors

Configurator	Sensor connected	Pulses (**)
8	Rolling shutter rope sensor - delayed*	12 (approx 20 cm)
9	Rolling shutter rope sensor - delayed*	25 (approx 45 cm)

Note (*): Follows the delay set on the central unit:
this function is operative only with central units with display. With flush mounted 3 module central units, the interface must be allocated to ZONE 1, with a time delay set (see central unit configuration).

Note (**): pulses generated by the sensor depending on the degree of opening of the window, in cm, before the alarm is generated.

Energy saving management with Temperature control

If the contact interface is used in conjunction with the temperature control system to optimise energy saving, two different types of configurations will be possible:

- Use in the temperature control system only: The contact interface is directly connected to the temperature control BUS e gestisce in modo autonomo ed indipendente le due linee C1 e C2. Non è obbligatorio configurare entrambe le linee ma solo quella utilizzata. Inserire poi nella sede MOD1 e/o MOD2 il configuratore AUX. Then configure sockets [Z1/2] and [N1/2] to assign the address 1 to 99 of the device within the system. The coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application. For more information refer to the MY HOME Temperature control guide.

- Use of a burglar-alarm system integrated with the Temperature control system: in this case, the contact interface is connected to the burglar-alarm system BUS only, and communicates with the temperature control system BUS through the F422 interface.

The interface must be configured in Z1/2 and N1/2 following the requirements and features of the burglar-alarm system; only configurators with values 4 to 7 must be connected to the MOD1/2 position, corresponding to the management of NC contacts with generation of AUX event (see tables above). Also in this case, the actual coupling between the interface contact line and the temperature control zone must be performed using the TiThermo application. For more information refer to the MY HOME Temperature control guide.

Wiring diagram

Twisted, unshielded cable, with 30 metre maximum length.

N.C.   N.C.   N.C.   *
Balance resistance
100 k ± 5% 1/4 W

N.C.   N.C.   N.C.   *
Balance resistance
100 k ± 5% 1/4 W

NOTE: it is recommended that the 100 k ± 5% 1/4 W balancing resistance is installed by the last line contact.

* Do not install more than 3 rope sensors on each line

Connection with IR 3518 - 3518/50 - 3518/150 - 3519 barriers

If the max absorption of the system allows it, it will be possible to directly connect the barrier to the interface only.

NOTE: If Z1 and N1 are configured, while leaving sockets Z2 and N2 empty, contact C2 will operate as a tamper line.

WARNING: use a 30 m max twisted, unshielded cable.

Technical alarm interface

Description

The technical alarm interface is used to receive signals from the outside (normally analogue signals, like the closing/opening of a contact), converting them into digital information for the BUS.

This information gives the possibility of differentiating between alarm notifications, like the activation of the siren, or the telephone dialler, or the closure of the gas/water solenoid valve.

The functions described can be obtained using a dedicated communication line between the devices of the burglar alarm system, called auxiliary channel.

Up to 9 auxiliary channels are available for each system. They are assigned by configuration of the device(s).

Related items

Relay actuator: F481 and 3479

Technical data

Power supply from SCS BUS:	27 Vdc
Max. absorption:	6 mA
Operating temperature:	5 – 40 ℃

Dimensional data

Size: 2 DIN modules

Configuration

The technical alarm interface module requires the allocation of the progressive number within the group of auxiliary devices (relay actuator and auxiliary channels interface), the auxiliary channel number, and the operating modes.

N°
This configurator assigns the progressive number inside the auxiliary unit.
Configurator 1 identifies the first auxiliary, configurator 2 identifies the second and so on for a maximum of 9 auxiliaries.

AUX and MOD
In combination the configurators in the AUX and MOD sockets assign the operating mode on the basis of the following table.

Legend

1. Configurator socket
2. Clamp for burglar alarm BUS
3. Operation indication LED
4. Reset key
5. Clamp for the connection of external devices

Activation from the technical alarm interface

Configurators		Description
AUX	MOD	
none	none	**Technical alarm with normally closed (NC) contact** Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm; b) the alarm is reset using the menu of central units with display (with central unit L/N/NT4600/4 press "S"); c) the reset pushbutton connected to the interface is pressed.
none	2	**Anti-panic alarm with normally closed (NC) contact** Generates a burglar-alarm even with the system switched off and in any division condition. Is silenced with the remote control.
none	4	**Technical alarm with normally open (NO) contact** Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm; b) the alarm is reset using the menu of central units with display (with central unit L/N/NT4600/4 press "S"); c) the reset pushbutton connected to the interface is pressed.

Technical alarm interface

Activation from the technical alarm interface

Configurators		Relay operating mode (description)
AUX	**MOD**	
1-9	none	**Technical alarm with NC contact and activation of the auxiliary channel** Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm; b) the alarm is reset using the menu of central units with display (with central unit L/N/NT4600/4 press "S"); c) the reset pushbutton connected to the interface is pressed. It activates the corresponding auxiliary channel.
1-9	1	**Anti-burglary automation with NC contact** It activates the corresponding auxiliary channel without interfering with the status of the burglar-alarm system, therefore without generating signals or alarms.
1-9	2	**Anti-panic alarm with NC contact and activation of the auxiliary channel** Generates a burglar-alarm even with the system switched off and in any division condition. Is silenced with the remote control. It activates the corresponding auxiliary channel.
1-9	3	**Connection between burglar-alarm and auxiliary channels (LINK)** It generates and activation of the corresponding auxiliary channel following a burglary/tampering alarm.
1-9	4	**Technical alarm with NO contact and activation of the auxiliary channel** Internal siren (MOD 0 or 2) sounds intermittently until one of the following events occurs: a) there is no longer an alarm; b) the alarm is reset using the menu of central units with display (with central unit L/N/NT4600/4 press "S"); c) the reset pushbutton connected to the interface is pressed. It activates the corresponding auxiliary channel.

EXAMPLE: Activation of the solenoid valve in case of gas leak

Relay actuator configuration:

Configurator position	Value
N°	1
AUX	1
MOD	6

Technical alarm interface configuration

Configurator position	Value
N°	2
AUX	1
MOD	4

Wiring diagram

Note: It is recommended that the GAS sensor and the interface are checked for correct installation and wiring, following the instructions supplied with the sensor itself; the interface sends the alarm notification within the timescales set for the activation of the alarm repeater.

If a technical alarm is generated upon powering the sensor while the interface is already powered, there is a wiring error in lines + A

Signalling interface

Description

Item F80CMD is a signalling and control interface for the associated device, for example the Stop&Go device item F80/SG.
It consists of two signalling relays, two contacts for the connection of two pushbuttons, and one mode selector.

Technical data

- Power supply: from the associated device
- Operating temperature: 5 – 40°C

Dimensional data

Size: 2 Basic modules

Configuration

Warning: All the configuration operations must be performed with item F80CMD disconnected.

1 - Open item F80CMD.
2 - Select the desired mode using a flat screwdriver.

Relay status depending on the signalled event
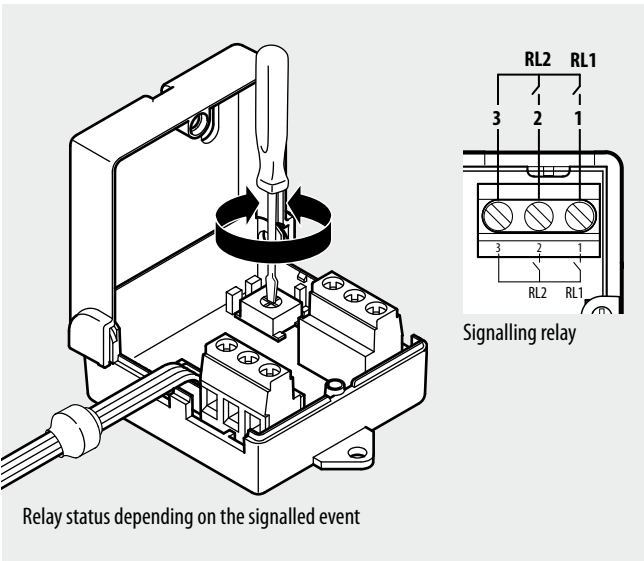
Mode	Relay 1	Relay 2
0	Faulty	Blocked
1	Faulty	Not faulty
2	Blocked	Not blocked
3	Open	Closed

NOTE: if the set configuration mode is different from the expected ones, Stop&Go enters mode =0

3 - Close item F80CMD.
4 - Wire the relays and the pushbuttons.
5 - Connect item F80CMD to the associated device.

Front view
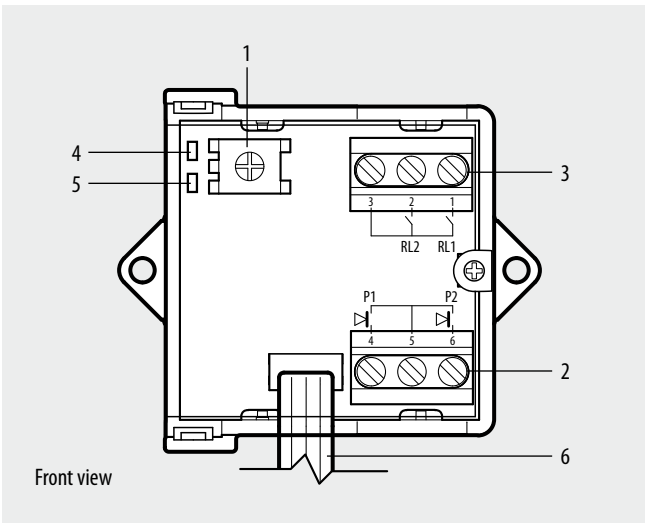
Configuration

1 - Mode selector, from 0 to 9;
2 - Contacts of pushbuttons P1 and P2;
3 - Contacts of signalling relays RL1 and RL2
(A1 load; maximum voltage 230 Vac);
4 - Signalling LED flashing red: data transfer;
5 - Signalling LED green: interface ON.
6 - Stop&Go connector.

Signalling relay

Wiring diagram

1 - Connection for use with Stop&Go device, item F80/SG;
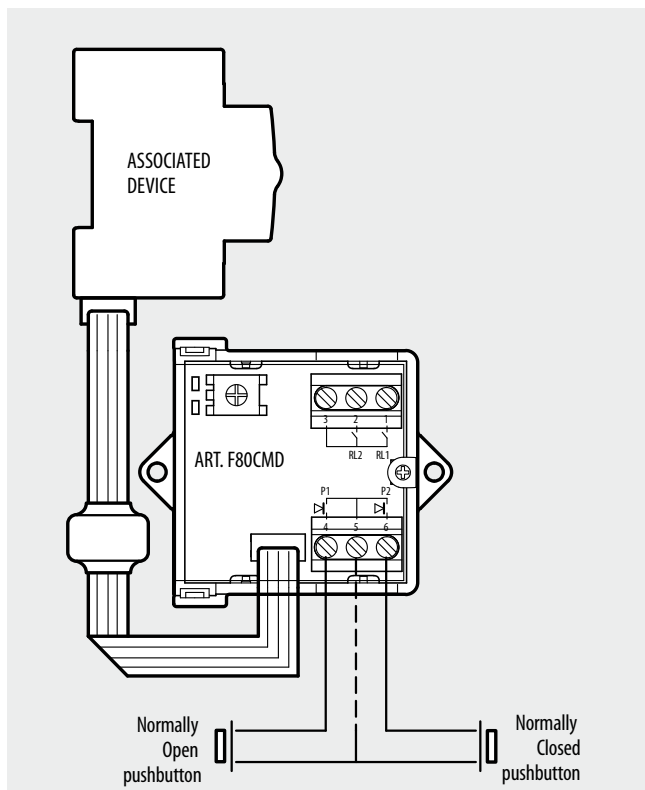
2 - Connection for use with Stop&Go device, item F80/SG and alarm event signalling through the burglar-alarm system.

ASSOCIATED DEVICE

ART. F80CMD

RL2 RL1

P1 P2

Normally Open pushbutton

Normally Closed pushbutton

ASSOCIATED DEVICE

Control interface **item F80CMD**

ART. F80CMD

Burglar alarm BUS

Aux channel interface **item HC/HD/HS/L/N/NT4615**
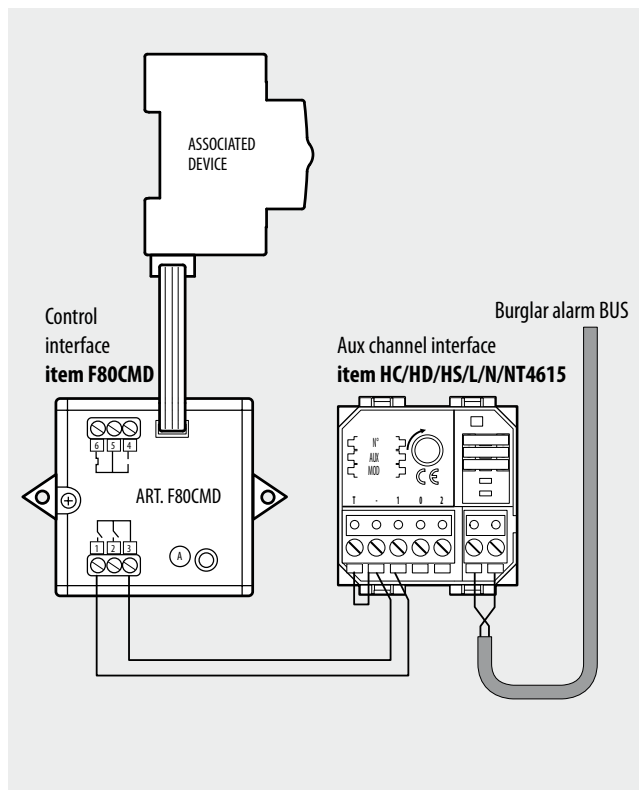
Indoor siren

Description

This siren is fitted with battery (item 3507/6); up to a maximum of 3 indoor sirens can be installed inside the protected area.

It can be installed in flush mounted boxes. The indoor siren can be programmed for signalling intrusion alarms through a continuous sound (frequency 1880Hz) and/or auxiliary alarms through a modulated sound.

This siren is self-protected against opening and rip-off by means of a self-adjusting tampering device. Do not use batteries different from the ones indicated.

Related articles:
681 89 (White Cover)
684 89 (Titanium Cover)
801 24 (Flush-mounting box)
89379 (Flush-mounting box)
89130 (Flush-mounting box)

Front view

Technical data

- Power supply from SCS BUS: 27 Vdc
- Self powering battery: item 3507/6
- Max. absorption: 8 mA
- Operating temperature: 5 – 40°C
- Level of the signal emitted: 105 dB(A) at 3 metres
- Frequency: 1880 Hz.

Dimensional data

128 (item 067515-573984)
115

56 (item 573984)
44

115

128 (item 067515-573984)

Configuration

The indoor siren requires assignment of the progressive number and the operating mode. It gives an intermittent sound to signal the activation of any one of the auxiliary channels generated by an auxiliary channel interface in mode 0 and 4 (technical alarm).

N°
This configurator assigns the progressive number in the internal siren unit.
No configurator or configurator 1 identifies the first siren, configurator 2 the second and configurator 3 the third.

NOTE: Systems with external siren 4072A and 084424:
If the system has an external siren, it must be considered as siren No. 1; if there are two, they must be considered as No. 1 and No. 2.
The internal sirens will be counted in sequence. There must be a maximum of 3 sirens (internal and external).

MOD
This configurator assigns the signalling mode based on the type of alarm received.
No configurator: anti-intrusion alarm and technical alarm enabled.
Configuratore 1: anti-intrusion alarm enabled and technical alarm disabled.
Configurator 2: anti-intrusion alarm disabled and technical alarm enabled.
Configurator 4: anti-intrusion alarm and technical alarm enabled. System ON/OFF sound signal.

N°
MOD

Rear view
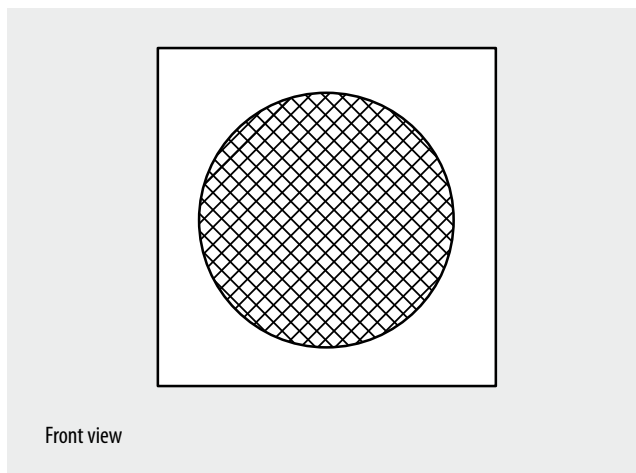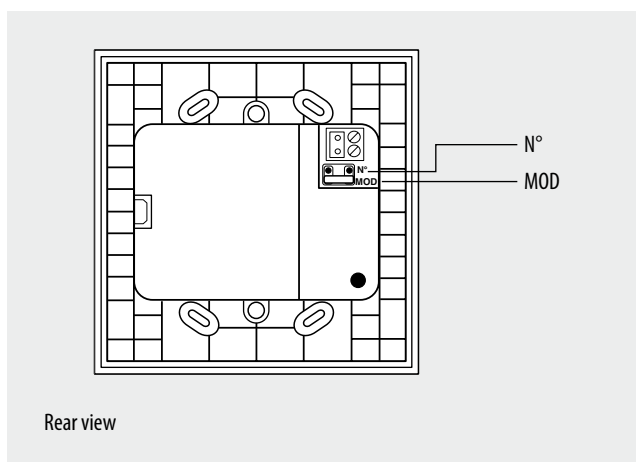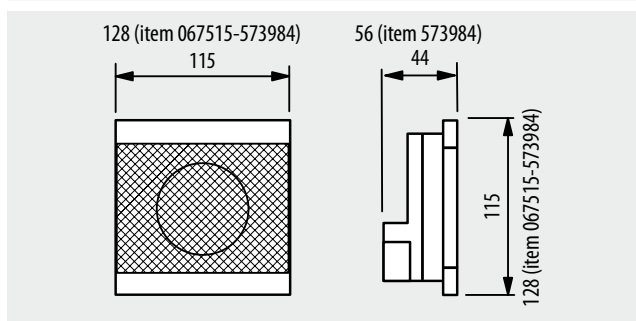
Configurator 5: anti-intrusion alarm enabled and technical alarm disabled.System ON/OFF sound signal.
Configurator 6: anti-intrusion alarm disabled and technical alarm enabled. System ON/OFF sound signal.

Base central unit

Description

The central unit has the function of supervising the burglar-alarm system, enabling the management of the zone sensors independent from one another.

It is possible to save up to 16 activation scenarios and use them based on actual the needs.

The device can manage up to 10 automations split as follows:
- 1 actuated using an internal relay and coupled with intrusion events, technical alarms, or system status;
- 9 coupled with arming, disarming, date and time events to generate separation scenarios.

Main functions

- System self-learning and configuration on-screen display;
- can be controlled by transponder and keypad (20 keys maximum);
- independent management of each sensor;
- local contact in addition to those already present on the system (configurable);
- possibility of updating the firmware using the PC;
- detailed event memory and alarm only memory;
- blocking for 1 minute the possibility of arming or disarming, or access to the navigation menu, if the wrong key is entered for three consecutive times;
- association of a set user name to scenarios (max. 4), sensors and zones;
- each individual sensor can be deactivated by sending a command from the central unit keypad;
- signalling of failed connection with: sensors, with the system disarmed, a signalling icon is displayed, with the system armed, an alarm is generated;
- division of the zones directly from the central unit keypad;
- presence of a local automation and signalling relay.

Management of burglar-alarm functions

The central unit manages a total of 6 zones:
- zone 0 is reserved for the activators (max. 9);
- zones from 1 to 4 are reserved for the sensors;
- zone 9 is reserved for the technical alarms/ auxiliaries (gas detector etc.).

Performs the following functions:
- manages the events communicated by the sensors and can determine if and when to give the alarm;
- zones from 1 to 4 can be separated as the user requires;
- up to 4 division scenarios can be created and activated depending on needs;
- all the customising phases are guided and shown by means of the display;
- an automation can be coupled to the detection of a certain alarm, using the local relay: for example, the switching on of a light, to confuse the intruder.

Front view

Legend

1 - Graphic display: displays the messages which guide the programming operations and the events which have occurred (more information on the following page).

2 - Transponder reader: receives the burglar-alarm system switching on and off commands directly from the transponder keys.

3 - Alphanumeric keypad: allows the manual switching on of all those programming operations which require the use of numbers and/or symbols.

4 - C key: exit the current menu and the programming.

5 - OK key: to confirm the programming operations.

6 - Navigation keypad: navigate the menu.

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 50 mA
- Operating teamperature: 5 – 40°C
- Installation: wall mounted

Dimensional data

Size: 3+3 modules

Base central unit

Rear view
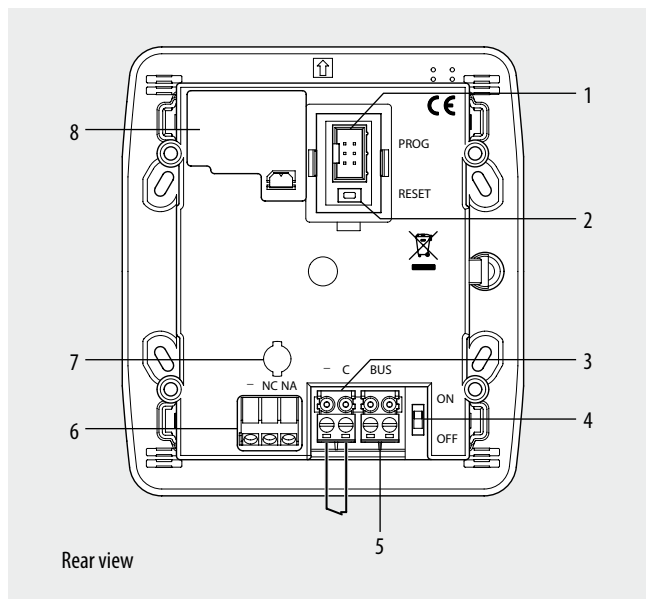
Legend

1 - Serial connector for the update of the firmware using a PC;
2 - Reset key;
3 - Local contact;
4 - ON/OFF slide switch;
5 - Burglar alarm BUS;
6 - Relay for automation in case of alarm;
7 - Socket for tamper device item L4630;
8 - Battery housing.

Configuration

The central units do not need configurators. The functions can be set directly on the device itself (keypad and display), or using the appropriate software TiSecurity Basic.
For detailed information refer to the corresponding manuals supplied with the products.

Software configuration

The program enables acquiring the configuration on the central unit, saving it in a file to be used to reinstate the configuration of the same, or to configure other central units. It is also possible to update the permanent software of the central unit using new versions published by BTicino.

Example

Example of configuration performed on the central unit.
- Detection of devices

Select **Learning**
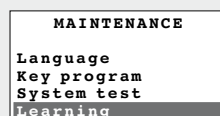
Press **OK** to confirm
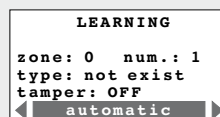
After pressing **OK**, the following screen appears

Press **OK** to start learning
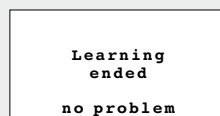
NEXT
(See the manual of the central unit)

Keypad activator

5739 44 (White)	67506	HD4606	L4606	NT4606
5739 45 (Magnesium)	HC4606	HS4606	N4606	AM5786

Description

This device arms or disarms the system by keying a secret code previously stored in burglar-alarm systems central units with display, or in three module flush mounted central units. By pressing two pushbuttons ("o¬" and "P") and entering the secret code, the system can be disarmed, while at the same time sending a silent alarm (robbery function).

Related articles:
681 86 (White Cover)
684 86 (Titanium Cover)

Indications supplied by the LED and the Buzzer (sound signalling device)

| Event	Green LED	Red LED	Buzzer
Keying-in	Flashing	-	Active
Code entering	-	-	Active
System armed	OFF	OFF	-
System disarmed	ON	OFF	-
Wrong code entered	Flashing (5s)	ON	-
Intrusion alarm	OFF	ON	-
24 hour alarm	ON/OFF	ON	-

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 5.5 mA
- Operating temperature: 5 – 40°C

Dimensional data

Size: 2 modules

Configuration

Z
This configurator assigns the number of the appropriate zone (from 1 to 8) in the "group" of devices (any free zone in the system).
To configure it as belonging to the activator group, no configurator must be connected. Configurator 9 assigns the device to the "group" of auxiliary devices (Aux channel interface or Relay actuator).

N°
This configurator assigns the progressive number to the activator within the group. Configurator 1 identifies the first device, configurator 2 identifies the second, and so forth, up to a maximum of 9 activators (dividers, expanders or activators).

MOD
The configurator of this location specifies the type of control unit installed in the system.

Central unit used	Configurator value
3486 - 3485/B - LG-573934 - 573935 HC/HD/HS/L/N/NT4601 - 067520	0
L/N/NT4600/4	1

**NOTE:** When used with central units with display, the secret code is the one saved in the central units themselves (maximum 25 or 50 codes depending on the type of central unit). If used with the flush mounted central unit, item L/N/NT4600/4, the code must be programmed in the central unit itself. In this case, up to 29 codes must be saved.

Front view
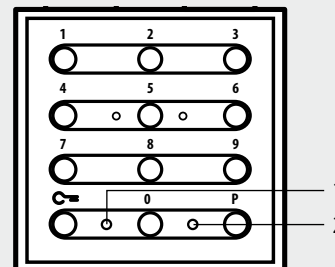
Rear view
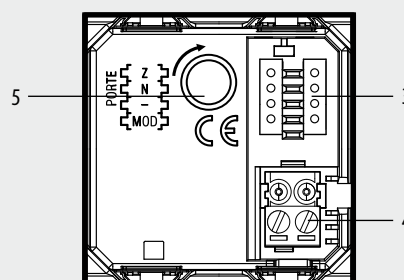
Legend

1 - Red LED: alarm status;
2 - Green LED: system status
   OFF: ON, ON: OFF;
3 - Configurator socket;
4 - BUS;
5 - Anti-tamper device socket.

Configuration for use with central unit item L/N/NT4600/4

In order for the keypad to operate as activator of the system with three-module central unit, it will be necessary to first program the code in the central unit itself following the procedure below:
1. Place the central unit in maintenance mode by moving the back slide switch to the OFF position;
2. Press P and check that the yellow LED comes on (PROG);
3. Program the remote controls first (see chapter STARTING AND TESTING);
4. Enter "o¬" + the desired 5 digit code;
5. Ensure that a long beep is emitted by the keypad, and that the central unit responds with a short beep;
6. To memorize further codes, or several keypads with different codes, repeat 4 and 5;
7. Once the last code has been set, press S on the central unit (the yellow PROG LED goes off) and move the central unit slide switch back to the ON position;
8. Send a pulse signal using the IR remote control;
9. Perform some arming/disarming tests.

Disabling the keypad BUZZER when keys are pressed

Irrespective of the type of central unit installed, the keypad sound can be enabled/disabled. To do this press key 1 for 5 seconds, until the activator beeps and flashes quickly twice.
To switch the sound back on repeat the same procedure.

Transponder reader

067508   HC4607   HD4607   L4607   NT4607
573948   573949   HS4607   N4607   AM5787

Description

The transponder reader is a device which activates when the Transponder badge (3530S or 3540) is in its immediate vicinity (1-2 cm). The signal generated by the approach of the badge is then transferred to the bus (BUS cable item L4669S). The transponder reader is fitted in the wire burglar-alarm system and works like a traditional activator; it is thus connected to the BUS cable like any other burglar-alarm device.

The transponder does not need a power supply battery. When compared with the traditional remote control, the "transponder reader/transponder system offers better safety due to the code encryption system. Also, the possibility of saving up to 50 badges (depending on the central unit used) offers better flexibility in the management of the system, particularly in those environments (companies, offices, shops), where the number of people enabled to use the system is high and changes regularly.

Related articles:
681 84 (White Cover)
684 84 (Titanium Cover)

Front view

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 12 mA
- Operating temperature: 5 – 40°C

Dimensional data

Size: 2 modules

Legend

1 - Three-colour LED for operation indications;
2 - Reset pushbutton (NOT ACTIVE).

Rear view

Z
No.
MOD
Clamp for burglar alarm BUS

Configuration

BURGLAR-ALARM mode:
The transponder reader used as burglar-alarm system activator/disconnector must be assigned to the group of activator; it thus requests the assignment of the "group" number attributed (see below) and the progressive number of the devices in the "group".

Z
This configurator assigns the number of the appropriate zone in the "group" of devices (any free zone in the system). To configure it as belonging to the group of activators, no configurator must be inserted.
- Configurators 1, 8 instead would assign the transponder reader to the sensor (IR detectors or contact interface) "group" while configurator 9 would assign it to the "group" of auxiliary devices (auxiliary channel interface or relay actuator).

N°
This configurator assigns the progressive number of the transponder reader inside the zone attributed. Configurator 1 identifies the first reader-transponder, configurator 2 the second and so on until a maximum of 9 receiver devices for each of the zones.

MOD
Assigns the operating mode. It assigns the operating mode. In order for it to operate as activator, use configurator **1** with flush mounted central units item 4600/4, and configurator **0** for other central units.
The transponder is saved in the burglar-alarm central unit. The maximum number that can be managed is:
- 29 with flush mounted central unit, item L/N/NT4600/4.
- 50 with central unit with display, item 3486 or 3485, 573935, 573934, 067520.
- 20 with central unit with display, item 3485B or HC/HD/HS/L/N/NT4601.

NOTE: when all the 9 devices allowed have already been inserted in the group of activators, a value between 1 and 9 could be assigned to configurator Z (appropriate zone) taking account of the progressive No.

Transponder reader

Configuration

Night function: when the system is disconnected, it is possible to activate the zones up to the numeric value of the configurator in AUX position. This function can be enabled with configurator 7 in MOD position if central units with a display are used or with configurator 8 if flush mounted central units item L/N/NT4600/4 are used.

Example: MOD = 7, AUX = 3
In this case, when the burglar-alarm with the central unit and communicator are activated, only the first three zones will be enabled.

AUX

This configurator activates the activator auxiliary modes of operation, assigning an auxiliary channel.
To use the activator as auxiliary device, refer to the My Home application guide.

Example

configured in this way the transponder reader works as 4th device of the activator group.

Configurator position	Value
Z	none
N	4
MOD	1
AUX	none

AUX

Example

Use with central unit item L/N/NT4600/4

The transponder (badge) programming operation is necessary in order for it to work as a normal infrared remote control, item 4050.
The initial programming - which is carried out when installing the Transponder reader – shall be carried out with the central unit in MAINTENANCE mode (selector switch located on the back in OFF position).
Proceed as indicated below:
1) With central unit in maintenance mode, press the P key and check if the yellow LED PROG lights up.;

AUTOMATION mode – ON/OFF TIMED:
It can be used for the actuation of an ON/OFF control lasting 1 second.

Z

This configurator coincides with A (room) of the automation system; (it assigns the homogeneous room where the actuation is performed – from 1 to 9 -).

N°

It coincides with the PL of the automation system (it assigns the point where the actuation must be performed – from 1 to 9 -).

MOD

Assigns the operating mode. For the automation functions connect configurator **2**.

AUX

No configurator.

Example: If Z=3, N=2 and MOD=2 the device sends an ON/OFF control lasting 1 second (e.g. electrical door lock release) to an actuator with address A=3 and PL=2.
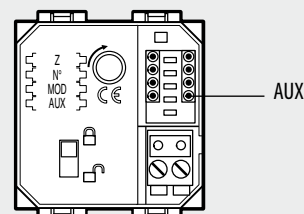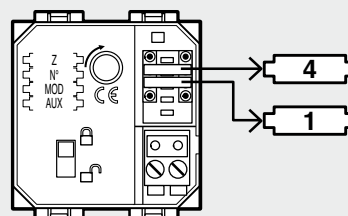
2) Program the IR remote controls first;
3) Now, move the badges towards the transponder reader;
4) Make sure that two short tones are emitted: the first is emitted from the transponder reader, the second is emitted from the central unit.;
5) Repeat points 3 and 4 for all available badges;
6) When you have finished programming the last badge, press the S pushbutton on the central unit (the yellow PROG LED turns off) and flip the back selector switch to ON.
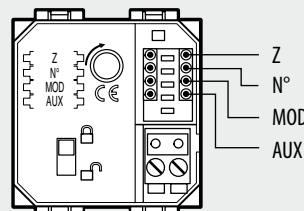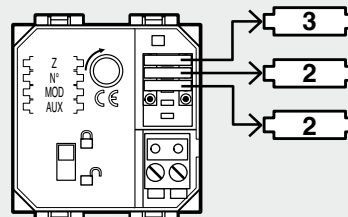
Z
N°
MOD
AUX

Example

Configuration

AUTOMATION mode – SCENARIO MANAGEMENT:

Z

It coincides with the room of the scenario module item F420 where the actuation is performed – from 0 to 9 – (reference socket A on the scenario module).

N°

It coincides with the PL position (configurator from 1 to 9) of the scenario module.

MOD

Assigns the operating mode. For the automation functions connect configurator **2**.

AUX

It assigns the correspondence between the required scenario and the scenario module. The configurators that can be used are those between 1 and 9 and coincide with the corresponding scenario of the scenario module, item F420.

AUTOMATION mode – TIMED CONTROL:

It enables the actuation of an ON timed control

Z

This configurator coincides with A (room) of the automation system (it assigns the homogeneous room where the actuation is performed – from 1 to 9).

N°

It coincides with the PL of the automation system (it assigns the point where the actuation must be performed – from 1 to 9).

MOD

It assigns the operating mode. To obtain an ON timed control connect configurator 6.

AUX

It assigns the duration of the time delay based on the value of the configurator used, as shown in the following table.

Aux	Time
0	
1	1 min.
2	2 min.
3	3 min.
4	4 min.
5	5 min.
6	15 min.
7	30 sec.
8	0.5 sec.
9 (not used)	- - -

F420

Transponder reader   Scenario module
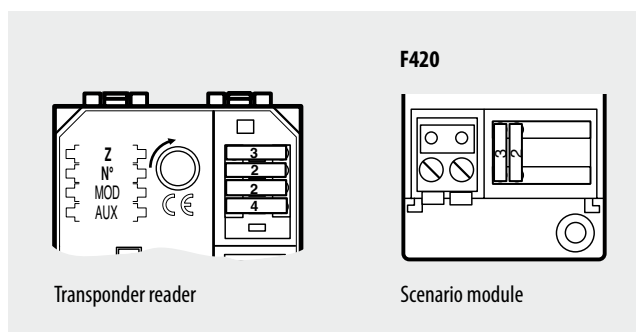
Example: configured in this way the control activates scenario no. 4 of the scenario module item F420 with address A=3, PL=2.

Transponder reader
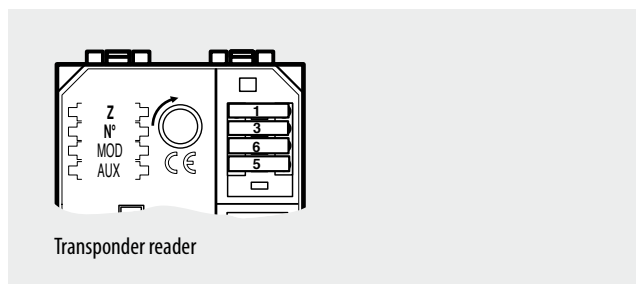
Example: configured in this way, the transponder reader sends to an actuator with address A = 1 and PL = 3 an ON control with a delay of 5 minutes (e.g. switching on a service light).

SLAVE control

It enables reproducing an enabled control on a "Master" transponder reader. The transponder keys used must only be saved in the "Master" device.

Z

It coincides with the Z configurator of the master device.

N°

It coincides with the N° configurator of the master device.

MOD

Assigns the operating mode. To obtain SLAVE devices connect the SLA configurator.

AUX

It coincides with the AUX configurator of the master device.

Transponder reader

Configuration

AUTOMATION mode – AUXILIARY CONTROL:
This mode can be obtained by connecting the AUX configurator to MOD. This will generate a 1 sec. ON/OFF control on the assigned auxiliary channel. The difference when compared with the auxiliary function generated with the reader connected to the burglar-alarm system (MOD=1) is that in this case the codes of the transponders are saved in the reader itself, with the possibility of managing 120 badges at the same time.

Z
It assigns the no. of the zone it belongs to, form 0 to 9.

N°
It assigns the progressive no. inside the zone.

MOD
It assigns the operating mode. For the auxiliary functions connect the AUX configurator.

AUX
It assigns the auxiliary channel.

3479/F481

Transponder reader
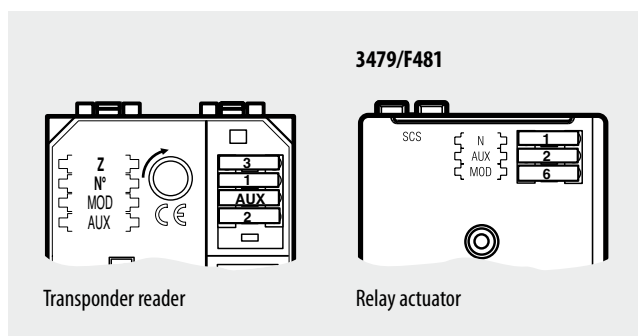
Relay actuator

Example: when configured in this way, as auxiliary device no. 1 (N=1) in zone 3 (Z=3), the control sends an ON/OFF command on auxiliary channel 2 (AUX=2) intended for the relay actuator item HC/HD/HS/L/N/NT4614 configured with AUX = 2.

1-4 zone transponder divider

HD4607/4   N4607/4   NT4607/4
HS4607/4   HC4607/4   L4607/4   AM5787/4

Description

This device is used to arm, disarm, and separate the zones of the system by placing a transponder badge (item 3530S and item 3540 previously stored in the central unit) in front of the zone transponder badge receiver.

When used in an automation system it performs the control function for the management of scenarios.

By pressing one of the pushbuttons, the corresponding zone is armed/disarmed.

Within four seconds from the last pressure, the separation performed must be confirmed by moving a transponder saved in the central unit close to the device.

Should this not take place, then the previous condition is automatically restored. Red LEDs on indicate that the zones are active, whereas red LEDs off show that they are disarmed.

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 15 mA
- Operating temperature: 5 – 40°C

Dimensional data

Size: 2 modules

Configuration

BURGLAR-ALARM mode:

Since this item belongs to the activator group, it needs to be set up with the number of the "group" assigned and the progressive number of the devices in the "group". It can also be programmed to perform Automation functions (scenario management).
See Automation "MY HOME" guide for details.

Z

This configurator assigns the number of the appropriate zone (from 1 to 8) in the "group" of devices (any free zone in the system). To configure it as belonging to the activator group, no configurator must be inserted.

N°

This configurator assigns the progressive number within the group of activators. Configurator 1 identifies the first device, configurator 2 identifies the second, and so forth, up to a maximum of 9 activators (dividers, expanders or activators).
NOTE: If all 9 permitted devices have already been assigned to the activator group, it could be possible to assign to configurator Z (zone it belongs to) a value between 1 and 9, taking into account the progressive number.

MOD

It assigns the modes of the audible signals (BEEP) and luminous signals (LED ON) provided by the divider when controlled by the transponder; it is used as a activators/disconnector of the "Burglar-alarm" system.

Front view
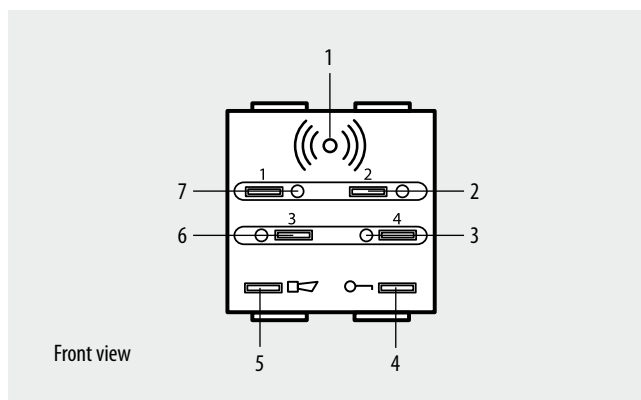
Legend

1 - Transponder badge receiver zone;
2 - LED and pushbutton for controlling of zone 2;
3 - LED and pushbutton for controlling of zone 4;
4 - Indication "System ON/OFF";
5 - Alarm warning;
6 - LED and pushbutton for controlling of zone 3;
7 - LED and pushbutton for controlling of zone 1.

Rear view
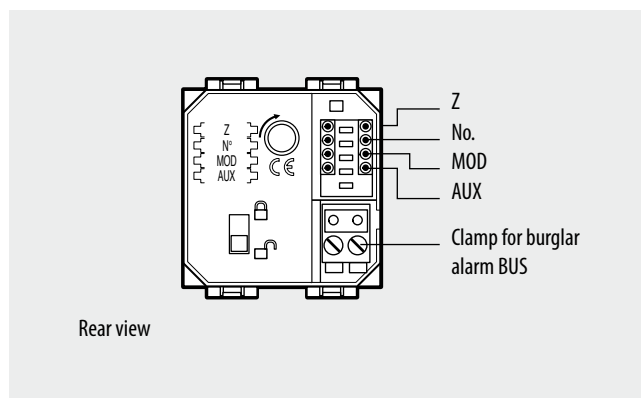
Central unit used	Configurator value	LED ON	Enabling BEEP
3486 **3485/B** **HD/HC/HS/L/N/ NT4601**	none	YES	YES
	1	NO	YES
	2	YES	NO
	3	NO	NO
L/N/NT4600/1 A/AM5780/1	4	YES	YES
	5	NO	YES
	6	YES	NO
	7	NO	NO

AUX

Position not configurable for the "Burglar-alarm" function; configure only if it is necessary to enable the device for Automation functions (management of the scenarios stored in the unit or scenario module).

1-4 zone transponder divider

HD4607/4   **N4607/4**   **NT4607/4**
HS4607/4   **HC4607/4**   **L4607/4**   **AM5787/4**

Configuration

AUTOMATION mode – SCENARIO MANAGEMENT:

Z
This configurator with value 0-9 coincides with the A position of the scenario module.

N°
This configurator with value 1-9 coincides with the PL position of the scenario module.

MOD
Assigns the operating mode. Connect configurator 9.

AUX
It assigns one of the scenarios programmed on the scenario module to the four pushbuttons (SCE = 1-9) as per the table.

Pushbutton no.	Associated scenario no.
pushbutton 1	SCE
pushbutton 2	SCE + 1
pushbutton 3	SCE + 2
pushbutton 4	SCE + 3

Example
If configurator 3 is connected to AUX, use pushbutton 1 to recall scenario no. 3, pushbutton 2 to recall scenario no. 4, pushbutton 3 to recall scenario no. 5, and pushbutton 4 to recall scenario no. 6

Pairing transponders

1. Move the "programming block" switch to the open padlock and then:

2. Press pushbuttons 1 and 4 at the same time for more than 5 seconds until the alarm LED status comes on for 0.5 second and an audible signal is heard.

3. Release pushbuttons 1 and 4.

4. Move the transponder being programmed close to the device:
  - if the transponder has been correctly saved the alarm status LED will slowly flash twice and an audible signal will be heard. Go to step **6**.
  - if the code is already in the memory there will be 2 audible signals and the led will flash quickly twice.
  - if the memory is full there will be 5 audible signals and the LED will flash quickly 5 times.

5. To store other transponders repeat the procedure in step **4**, otherwise go to step **6**.

6. Move the "programming block" switch back on the closed padlock to exit programming. Otherwise the device will exit programming mode after 1 minute of inactivity.
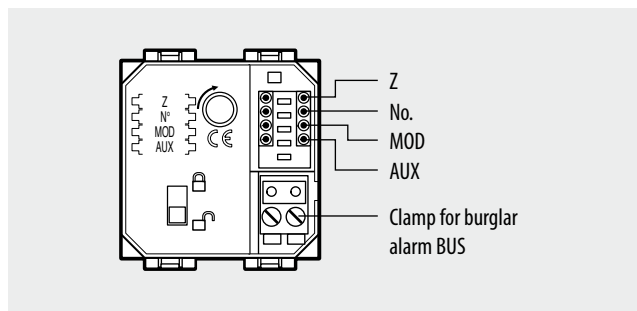
Erasing the memory

1. Move the "programming block" to the open padlock.

2. Press pushbuttons 1 and 4 at the same time for more than 10 seconds and check that the LED flashes slowly 4 times, and that there is an audible signal.

3. Release pushbuttons 1 and 4.

4. The transponder zones activator will remain in programming mode, ready for a new programming sequence.

5. Move the switch back to the closed padlock position to exit the erasing procedure.
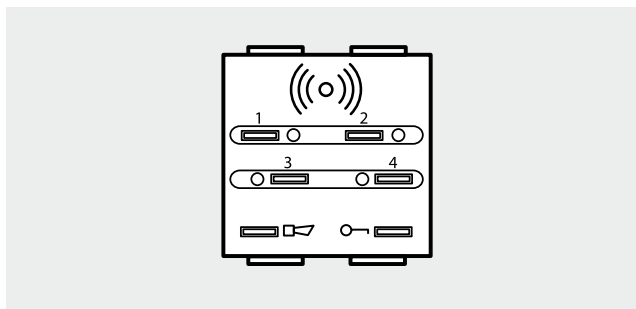
L'legrand

bticino

Display keypad

Description

Using the transponder key, or a secret code set on the central unit, this device with display and digital keypad can be used to arm/disarm the system and separate the zones with the same flexibility and using the same procedure as for burglar-alarm central unit with display, or three module flush mounted central units.
In this way the central units can be installed in an appropriate equipment room, out of sight.
All system status details are shown of the large backlit display.

Related articles:
681 82 (White Cover)
684 82 (Titanium Cover)
801 24 (Flush-mounting box)

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 28 mA
- Operating temperature: 5 – 40℃
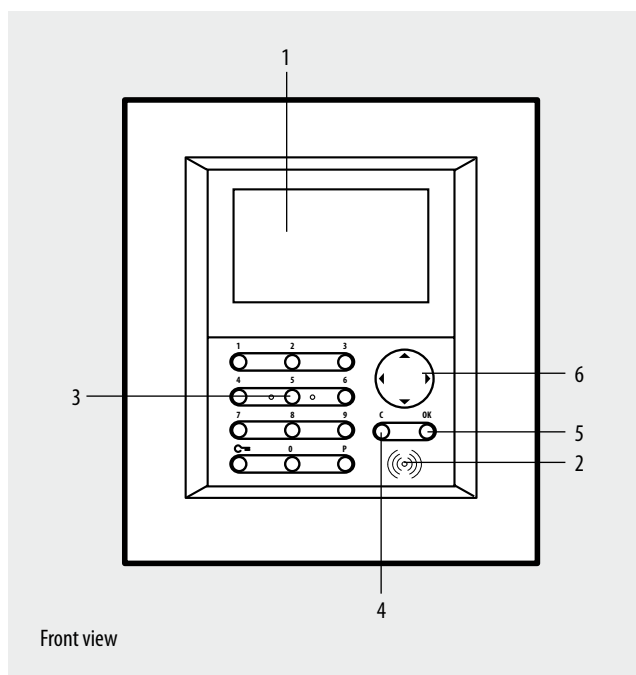
Dimensional data

Size: 3+3 modules

Front view

Legend

1 - Graphic display: displays the messages which guide the programming operations and the events which have occurred.

2 - Transponder reader: receives the burglar-alarm system switching on and off commands directly from the transponder keys.

3 - Alphanumeric keypad: allows the manual switching on of all those programming operations which require the use of numbers and/or symbols.

4 - C key: exit the current menu and the programming.

5 - OK key: to confirm the programming operations.

6 - Navigation keypad: navigate the menu.

Configuration

The activator with display must be configured by assigning a zone address (Z), indicating the activator group it belongs to, and a progressive number (N) within the group. To configure it as belonging to the activators group, no value must be entered in Z.
The configuration is performed using a specific menu shown on the display, following the procedure below:

1. Ensure that the system is in "maintenance" mode.

2. Upon switching on the activator, the "SETTING" screen appears in Italian language.

3. Select "Address" (address).

4. Enter the Z and N address to assign to the activato and press OK to confirm.

5. Enter the other settings or return to the main page, and start the learning procedure on the central unit.

Selecting the central unit installed in the system

1. Select "type of central unit".

2. Select the type of burglar-alarm central unit installed:
   - "Display" for central unit item 3486, item 3485/B, 573935, 573934, 067520 and item HC/HD/HS/L/N/NT4601 -
   "No display" for central unit item L/N/NT4600/4 and AM5780/4.

3. Press OK to confirm.

4. Enter the other settings or return to the main page, and start the learning procedure on the central unit.

For further device customisation procedures refer to the information on the CD supplied with the product.
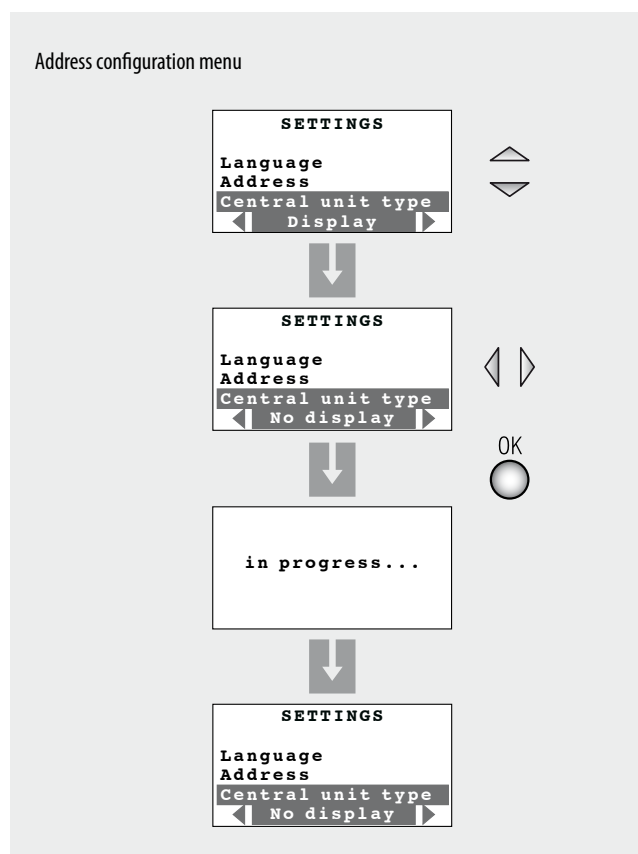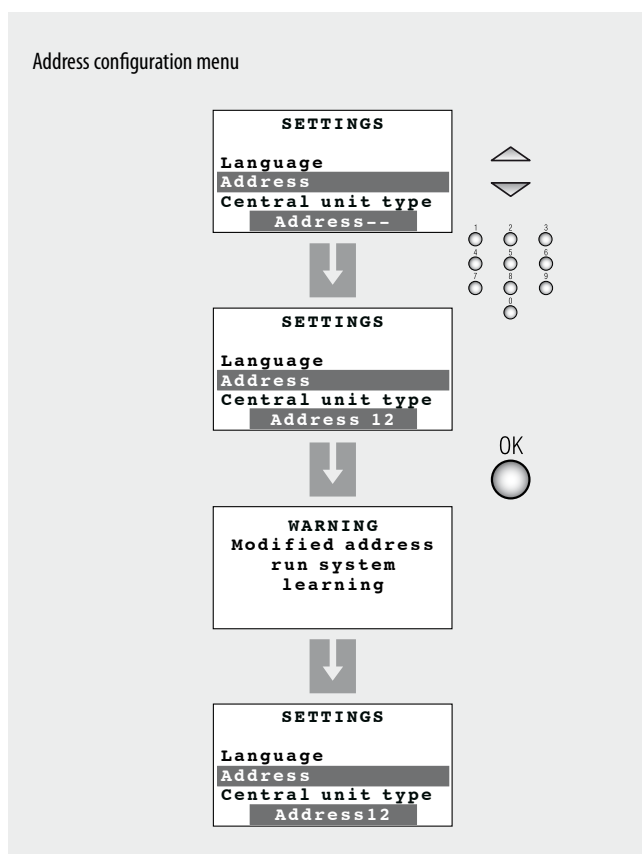
Address configuration menu

```
      SETTINGS
Language
Address
Central unit type
     Address--
```

```
      SETTINGS
Language
Address
Central unit type
    Address 12
```

```
      WARNING
Modified address
   run system
    learning
```

```
      SETTINGS
Language
Address
Central unit type
     Address12
```

OK

Address configuration menu

```
      SETTINGS
Language
Address
Central unit type
    Display
```

```
      SETTINGS
Language
Address
Central unit type
    No display
```

```

   in progress...

```

```
      SETTINGS
Language
Address
Central unit type
    No display
```

OK

L-legrand

bticino

Passive IR detector

Description

The passive infrared detector is a volumetric detector with fixed lens, sensitive to the movement of warm bodies. The volume of the protected zone is divided into 14 beams distributed on 3 levels. The detector works in two different ways: instantaneous or with impulse calculation, in order to reduce the possibility of false alarms.
It can also be used in the automation system for timed ON/OFF functions, or to activate auxiliary controls.

Related articles:
682 66 (White Cover)
685 66 (Titanium Cover)

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 4.5 mA
- Operating temperature: 5 – 40°C

Covering range

Front view

Legend

1 - Fresnel lens;
2 - Alarm warning LED.

Dimensional data

Size: 2 modules

Passive IR detector

Configuration

Infrared ray detectors require assignment of the appropriate zones and the progressive number of the sensors in the zone, setting of the detection mode and possibly assignment of an auxiliary channel.

Rear view

Z

This configurator assigns the number of the appropriate zone to the detector.
Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

N°

This configurator assigns the progressive number of the detector inside the appropriate zone.
Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

MOD

This configurator sets the sensor detection mode.
It can be used, for EXAMPLE, when the device is directed towards a possible source of disturbance (window or radiator), and its position cannot be changed.

Configurator	Mode
0	1st level of sensitivity (1 high sensitivity impulse)
1	1st level of sensitivity (2 high sensitivity impulses)
2	2nd level of sensitivity (1 medium sensitivity impulse)
3	3rd level of sensitivity (1 low sensitivity impulse)
4	1st level of sensitivity (1 high sensitivity impulse), but with delay.
5	1st level of sensitivity (2 high sensitivity impulses), but with delay.
6	2nd level of sensitivity (1 medium sensitivity impulse), but with delay.
7	3rd level of sensitivity (1 low sensitivity impulse), but with delay.
AUX	auxiliary function activation. The device, in any system status (enabled or disabled), sends an auxiliary alarm to the channel specified in the AUX position. If the assigned zone is divided, the auxiliary command will be disabled.

High sensitivity = maximum coverage 9 metres
Medium sensitivity = maximum coverage 6 metres
Low sensitivity = maximum coverage 3 metres

AUX

If the AUX configurator has been connected to the MOD position, the 1 to 9 value of the configurator in this position activates the auxiliary function assigned to the 1 to 9 number of the auxiliary channel.

If no configurator, or one of the 1 to 7 configurators, is connected to the MOD position, the device only activates the auxiliary function when the system is disarmed.

For further information and advanced functions contact Technical Support Centre.

Passive IR detector

Configuration

AUTOMATION mode – TIMED CONTROL:

Passive IR detectors can generate and send an ON timed control directly to one or more actuators.

For this mode, configure in the Z and N positions of the detector the addresses A and PL of the actuator to control respectively.

To the MOD position connect the ON configurator to enable the time delay function.

The switching ON period is set by connecting numerical configurators 1 to 9 to the AUX position as shown in the following table:

AUX	1	2	3	4	5	6	7	8	9
Time	1 min.	2 min.	3 min.	4 min.	5 min.	15 min.	30 sec.	0.5 sec.	2 sec.

Example of configuration

IR detector   Actuator

AUTOMATION mode – GENERIC CONTROL USING AUXILIARY CHANNELS:

In this case, the actuator is managed by a control device, item H/L4651M2, 067553 or AM5831M2, which, based on its own operating mode, set in its own M position, activates the actuator with address set in A and PL.

The communication between the detector and the associated control device is established by defining an auxiliary channel that has been configured in the IR detector by connecting the AUX configurator to the MOD position, and specifying, with numeric configurators 1-9 in the AUX position, the number of the auxiliary channel. Obviously, in order to univocally establish the auxiliary channel, also the AUX position of the control must have the same configurator as the IR detector.

Passive IR detector

573938 (White)   067502   HD4611   N4611   NT4611
573939 (Magnesium)   HC4611   HS4611   L4611   AM5791

Description

The passive infrared detector is a volumetric detector with tilting lens, sensitive to the movement of warm bodies. The volume of the protected zone is divided into 14 beams distributed on 3 levels. The detector works in two different ways: instantaneous or with impulse calculation, in order to reduce the possibility of false alarms. It is available for installation in the high sections of rooms, at heights between 1.2 and 2 metres. The position of the lens should then be adjusted based on the characteristics of the room to protect.

It is also possible to change the sensitivity threshold, and to generate auxiliary functions when the system is disarmed.

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 4.5 mA
- Operating temperature: 5 – 40℃

Covering range

Horizontal adjustment

Dimensional data

Size: 2 modules

Horizontal adjustment

Front view
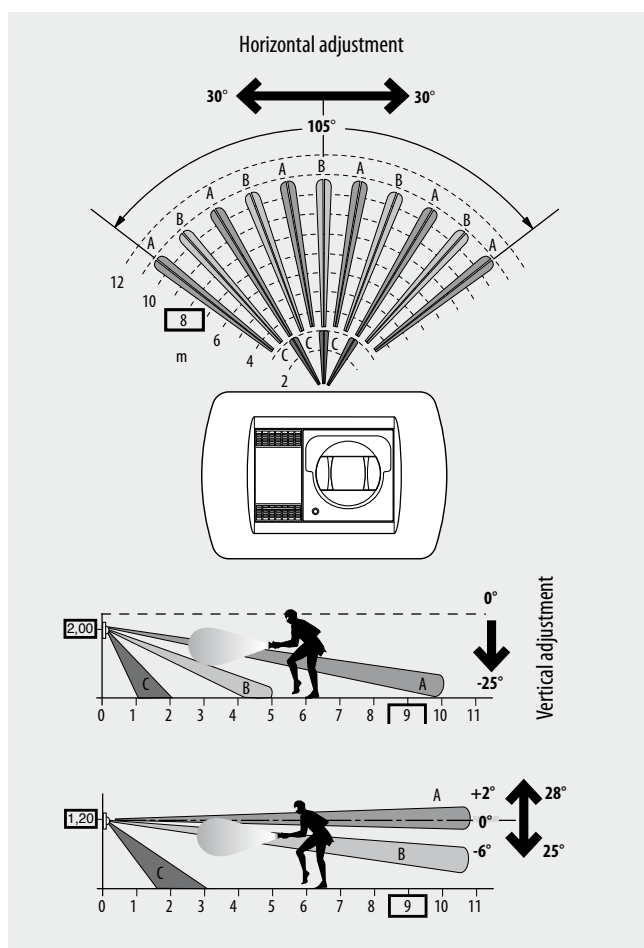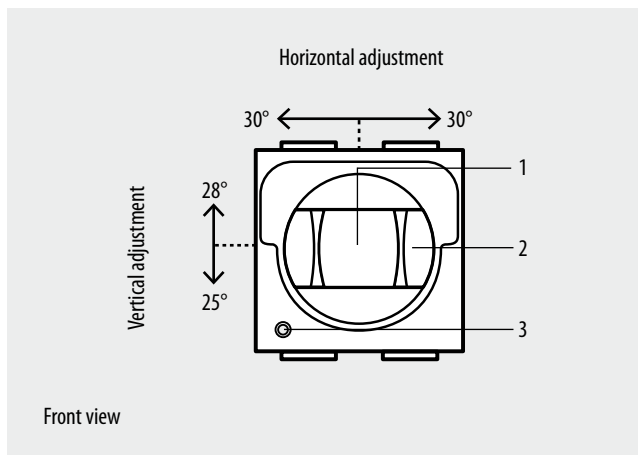
Legend

1 - Fresnel lens;
2 - Covering reducing lid;
3 - Alarm warning LED.

Passive IR detector

Configuration

Infrared ray detectors require assignment of the appropriate zones and the progressive number of the sensors in the zone, setting of the detection mode and possibly assignment of an auxiliary prealarm channel.

Z — No. — MOD — AUX — Clamp for burglar alarm BUS

Rear view

Z

This configurator assigns the number of the appropriate zone to the detector.
Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

N°

This configurator assigns the progressive number of the detector inside the appropriate zone.
Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

MOD

This configurator sets the sensor detection mode.
It can be used, for EXAMPLE, when the device is directed towards a possible source of disturbance (window or radiator), and its position cannot be changed.

Configurator	Mode
0	1st level of sensitivity (1 high sensitivity impulse)
1	1st level of sensitivity (2 high sensitivity impulses)
2	2nd level of sensitivity (1 medium sensitivity impulse)
3	3rd level of sensitivity (1 low sensitivity impulse)
4	1st level of sensitivity (1 high sensitivity impulse), but with delay.
5	1st level of sensitivity (2 high sensitivity impulses), but with delay.
6	2nd level of sensitivity (1 medium sensitivity impulse), but with delay.
7	3rd level of sensitivity (1 low sensitivity impulse), but with delay.
AUX	pre-alarm function activation. The device, in any system status (enabled or disabled), sends an auxiliary alarm to the channel specified in the AUX position. If the assigned zone is divided, the auxiliary command will be disabled

High sensitivity = maximum coverage 9 metres
Medium sensitivity = maximum coverage 6 metres
Low sensitivity = maximum coverage 3 metres

AUX

If the AUX configurator has been connected to the MOD position, the 1 to 9 value of the configurator in this position activates the auxiliary function assigned to the 1 to 9 number of the auxiliary channel.

If no configurator, or one of the 1 to 7 configurators, is connected to the MOD position, the device only activates the auxiliary function when the system is disarmed.

For further information and advanced functions contact Technical Support Centre.

Passive IR detector
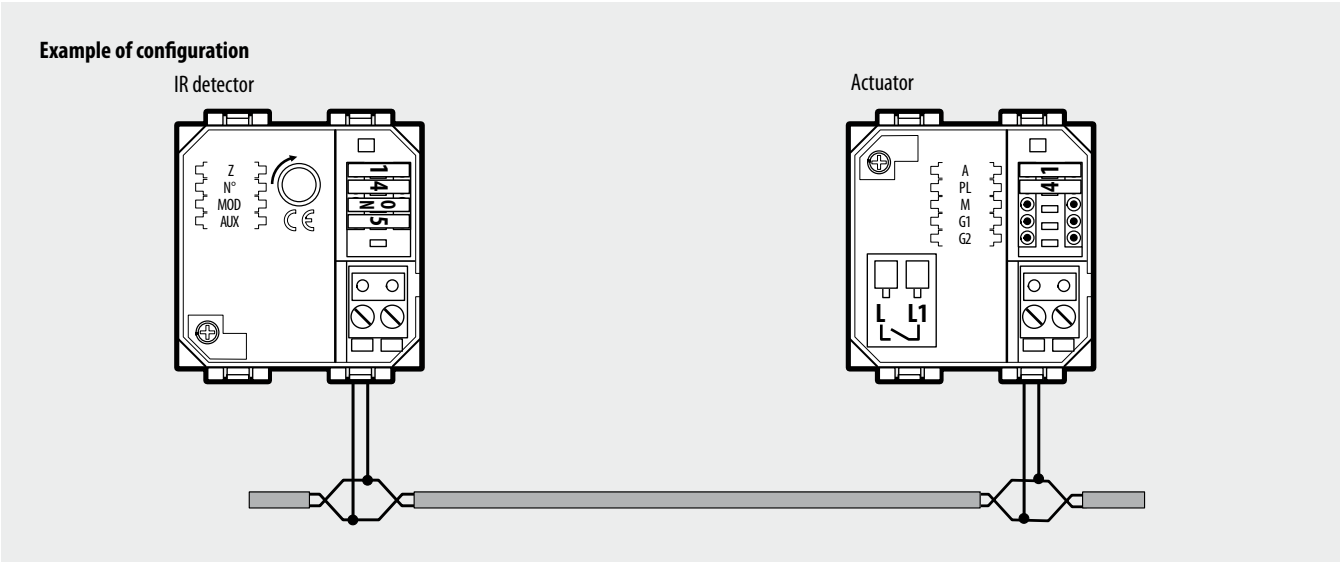
Configuration

AUTOMATION mode – TIMED CONTROL:

Passive IR detectors can generate and send an ON timed control directly to one or more actuators.

For this mode, configure in the Z and N positions of the detector the addresses A and PL of the actuator to control respectively.

To the MOD position connect the ON configurator to enable the time delay function.

The switching ON period is set by connecting numerical configurators 1 to 9 to the AUX position as shown in the following table:

AUX	1	2	3	4	5	6	7	8	9
Time	1 min.	2 min.	3 min.	4 min.	5 min.	15 min.	30 sec.	0.5 sec	2 sec.

Example of configuration

IR detector

Actuator

AUTOMATION mode – GENERIC CONTROL USING AUXILIARY CHANNELS:

In this case, the actuator is managed by a control device, item H/L4651M2, 067553 or AM5831M2, which, based on its own operating mode, set in its own M position, activates the actuator with address set in A and PL.

The communication between the detector and the associated control device is established by defining an auxiliary channel that has been configured in the IR detector by connecting the AUX configurator to the MOD position, and specifying, with numeric configurators 1-9 in the AUX position, the number of the auxiliary channel. Obviously, in order to univocally establish the auxiliary channel, also the AUX position of the control must have the same configurator as the IR detector.

Passive IR detector

Description

These devices are the simplified version of sensors item L/N/NT4611, item 675 02 and item AM5791. They have a fixed level of sensitivity (6 metres).

Also in this case, the passive infrared detector is a volumetric detector with tilting lens, sensitive to the movement of warm bodies.

The volume of the protected zone is divided into 14 beams distributed on 3 levels.

The detector works in two different ways: instantaneous or with impulse calculation, in order to reduce the possibility of false alarms. It is available for installation in the high sections of rooms, at heights between 1.2 and 2 metres.

The position of the lens should then be adjusted based on the characteristics of the room to protect.

Related articles:
681 83 (White Cover)
684 83 (Titanium Cover)

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 4.5 mA
- Operating temperature: 5 – 40℃

Covering range

Horizontal adjustment

Vertical adjustment

Dimensional data

Size: 2 modules

Horizontal adjustment

Front view
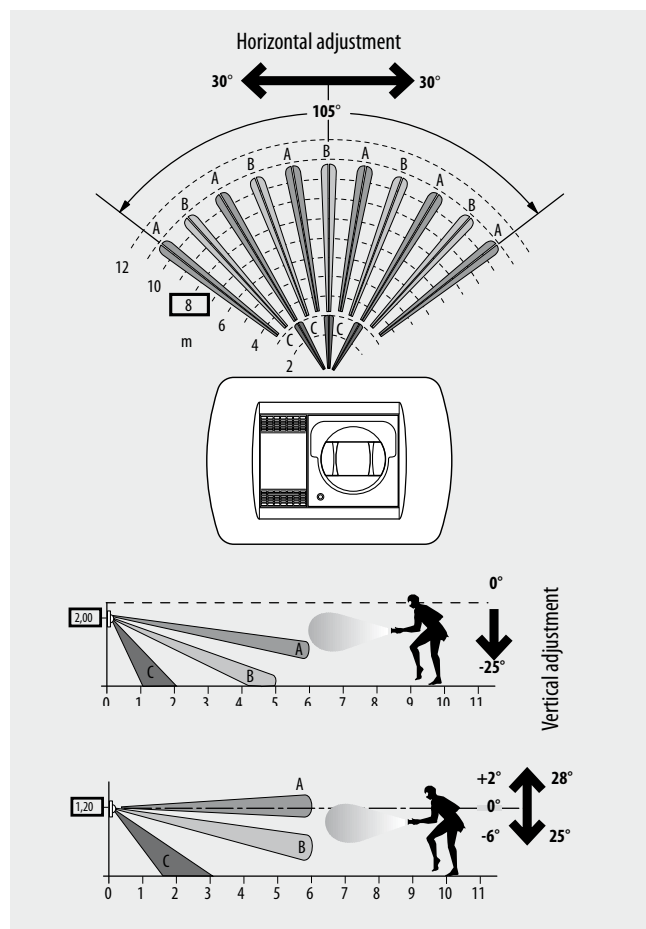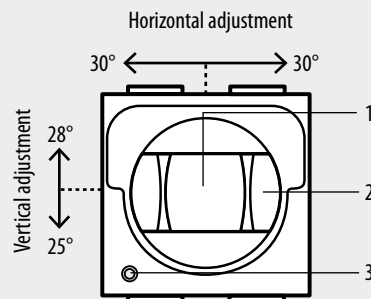
Legend

1 - Fresnel lens;
2 - Covering reducing lid;
3 - Alarm warning LED.

Configuration

They require that the zone they belong to and the progressive sensor number within the zone are assigned. They also require setting of the detection mode.

Z
This configurator assigns the number of the appropriate zone to the detector.
Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

N°
This configurator assigns the progressive number of the detector inside the appropriate zone.
Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

MOD
This configurator sets the sensor detection mode.
It can be used, for EXAMPLE, when the device is directed towards a possible source of disturbance (window or radiator), and its position cannot be changed.

Configurator	Mode
0	1 pulse
1	pulse counter (*)
2	1 pulse with delay
3	pulse counter with delay

(*) The sensor generates an alarm signal based on the detection performed during a period of 30 seconds.

NOTE: Use the pulse counter function to avoid false alarms caused by thermal variations (radiators etc.).

Z
No.
MOD
Clamp for burglar alarm BUS

Rear view
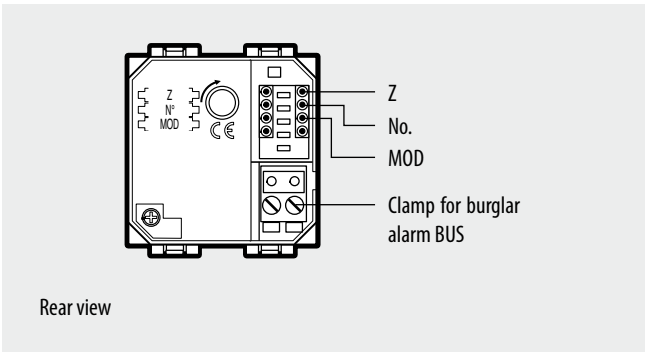
Double technology
IR+MW detector

5739 40 (White)   **067504**   **HS4613**   **HC4613**   **N4613**
5739 41 (Magnesium)   **067503**   **HD4613**   **L4613**   **NT4613**

Description

This device consists of two sensors: one infrared sensor (IR) to detect the presence of warm bodies, and one microwave (MW) sensor to detect moving bodies.

The combination of these technologies guarantees greater immunity against false alarms. In fact the device is programmed to give the alarm only if both the detection technologies are activated, and this guarantees a high standard of safety.

The volume of the protected zone is split into 14 bands on 3 floors.

Due to the fact that the sensors do not operate correctly if their covering ranges overlap those of double technology sensors, the installation of several sensors in the same room is not recommended.

The detectors, configured in the AUX socket, activate the auxiliary operating modes, assigning an auxiliary channel. The device performs all its burglar-alarm functions, but when the system is disarmed it activates the corresponding auxiliary channel (unless separated). The auxiliary function can therefore be excluded by separation of the zone it belongs to. It also enables activating any auxiliary actuator devices, provided that they have been configured using the same auxiliary channel.

Note: do not mount in places where there are moving metal parts (e.g. thermoconvectors or air-moving blades).

Technical data

Power supply from SCS BUS:	27 Vdc
Max. absorption:	35 mA for the first detector installed, 7 mA for all the others
Operating temperature:	5 – 40℃

Covering range
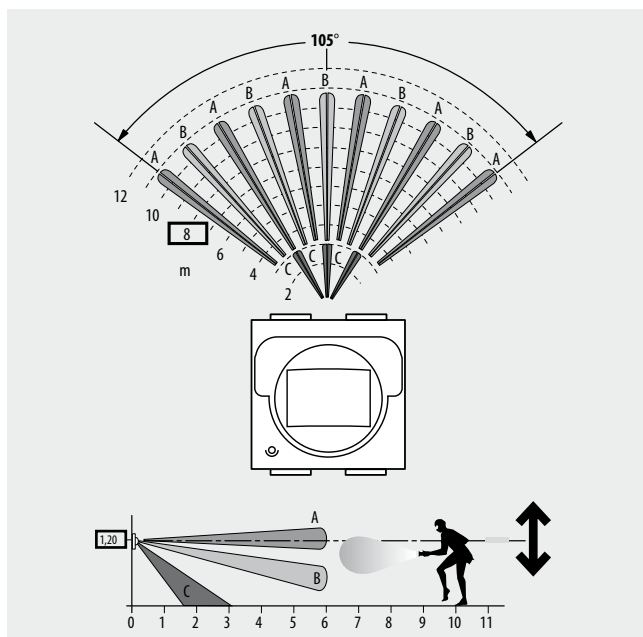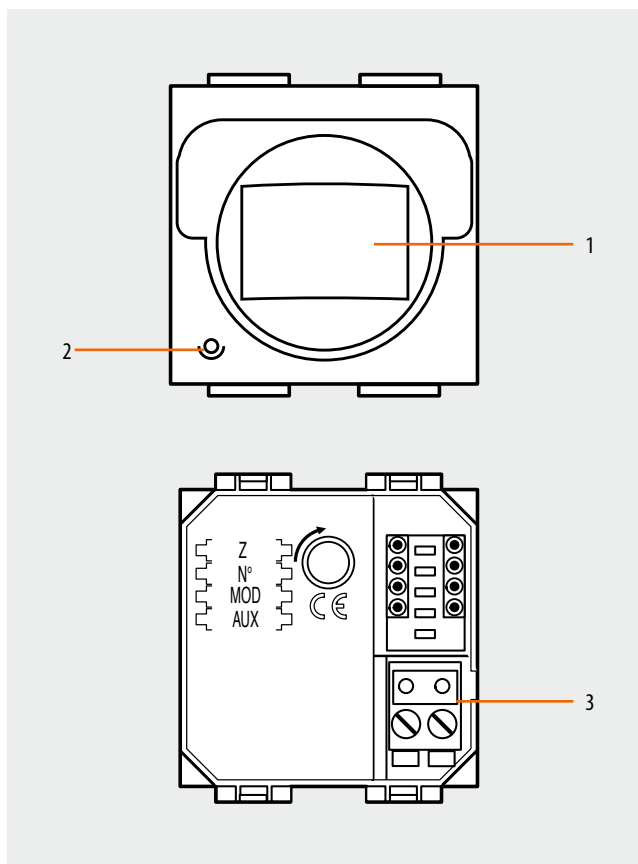
Legend

1. Fresnel lens;
2. Alarm warning LED;
3. Clamp for burglar alarm BUS.

Dimensional data

Size: 2 modules

Double technology
IR+MW detector

5739 40 (White)	067504	HS4613	HC4613	N4613
5739 41 (Magnesium)	067503	HD4613	L4613	NT4613

Configuration

Double-technology detectors require assignment of the appropriate zones and the progressive number of the sensors in the zone, setting of the detection mode and possibly assignment of an auxiliary prealarm channel.

Z
This configurator assigns the number of the appropriate zone to the detector.
Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

N°
This configurator assigns the progressive number of the detector inside the appropriate zone. Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

MOD
This configurator sets the sensor detection mode.
It can be used, for example, when the device is directed towards a possible source of disturbance (window or radiator), and its position cannot be changed.

Configurator	Mode
0	1st sensitivity level
2	2nd sensitivity level
3	3rd sensitivity level
4	1st sensitivity level with delay.
6	2nd sensitivity level with delay.
7	3rd sensitivity level with delay.
AUX	Activation of the pre-alarm function, irrespective of the system status (armed or disarmed). The device sends an auxiliary type alarm through the specified channel in the AUX position. If the zone it belongs to is separated, the auxiliary command is disabled.

AUX
If the AUX configurator has been installed in the MOD position, the 1 to 9 value of the configurator in this position activates the pre-alarm function, assigning the 1 to 9 number of the auxiliary channel.

If no configurator, or one of the 2 to 7 configurators, are present in the MOD position, the device only activates the pre-alarm function when the system is disarmed.

Note: to complete the activations using the relay actuator type F or 3479, see the appropriate technical sheet.

### EXAMPLE
First sensor belonging to zone 2.

Configurator position	Value
Z	2
N°	1
MOD	none
AUX	none

Example
Example of IR detector with auxiliary configuration. First sensor belonging to zone 2, and with high sensitivity, and pre-alarm on auxiliary channel no. 3 with the system disarmed (e.g. activation of bell when someone goes through the area).
With the system armed, the device only operates as burglar-alarm sensor.

Configurator position	Value
Z	2
N°	1
MOD	none
AUX	3

High sensitivity (1st level) = maximum coverage 8 metres
Medium sensitivity (2nd level) = maximum coverage 6 metres
Low sensitivity (3rd level) = maximum coverage 3 metres

Alarm radio receiver

Description

The radio receiver, fitted in the MY HOME burglar-alarm sYStem, allows the use of devices which transmit radio wave signals (volumetric sensors, perimeter sensors, technical alarm sensors, radio system remote control, radio remote control for remote assistance) inside the burglar-alarm system, transferring the radio signal on SCS cable (item L4669S). The radio receiver will thus be connected to the SCS cable like any burglar-alarm device and must be configured depending on whether it is used with radio sensors or remote control.

The connection between receiver and radio sensors or remote control does not need conductors because each device is supplied by batteries and the information is transmitted via radio.

NOTE: for more information consult the manual supplied with the product.

Front view

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 15 mA
- Operating temperature: 5 – 40°C

Legend

1 - Operation indication LED;
2 - Reset or programming key.

Dimensional data

Size: 2 modules

Configuration

Z - This configurator assigns the number of the zone it belongs to within the device group(any free zone in the system).

Configurators 1 - 8 assign the receiver zone within the group of sensors (IR detectors or interface contacts);

configurator 9 assigns the receiver zone within the group of auxiliary devices (auxiliary channel interface or relay actuator);

no configurator assigns the receiver zone within the group of activators (activator, divider, zone expander).

N° - This configurator assigns the progressive receiver number inside the zone attributed. Configurator 1 identifies the first device, configurator 2 the second and so on up to a maximum of 9 expander devices for each of the zones.

AUX - This configurator activates the prealarm (with volumetric and/or perimeter sensors) or technical alarm function (with technical alarm sensors) and assigns an auxiliary channel (AUX).

NOTE: if the system is configured to have technical alarms, prealarms CANNOT be generated with the system switched off.

Z
No.
AUX

Clamp for burglar alarm BUS

Rear view

Radio flooding detector

Description

This device generates an alarm signal when the contacts of the corresponding sensor make contact with water.

The signal is then processed by the alarm central unit, which activates the siren and the Telephone communicator (if installed), for sending a telephone message.

Better protection can be ensured by installing a relay actuator within the Burglar-Alarm system, which will order an electrovalve to shut off the main water supply in case of flooding.

Two front pushbuttons can be used to interrupt the alarm signalling and to test the operation of the sensor.

Technical data

- Power supply: Battery 3 V type CR2032
- Operating temperature: 5 – 40°C
- Minimum battery duration: 2 years
- Radio frequency: 868 MHz
- Range: 100 metres free field
       (metal, concrete walls and metal plates reduce coverage)
- Modulation: FSK

CONFORMITY DECLARATION

Items HA/HB4619 and L4619 comply with the essential requirement of directive 1999/5/CE as they meet the following standards:
- ETSI EN301 489-3
- ETSI EN300 220-3

Year of approval of the CE mark in accordance with the above directive: 2007

Flooding detector item HA4619 with front cover plate
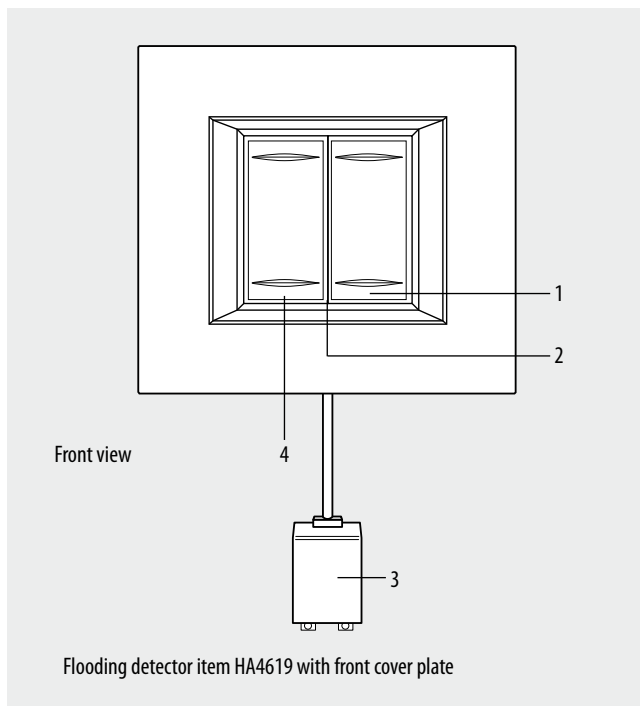
Legend

1 - Reset key;

2 - LED: If the TEST or RESET pushbutton is press for 1 second, the LED will normally flash twice; if the battery is exhausted the LED will only flash once;

3 - Flooding probe;

4 - TEST pushbutton.

Dimensional data
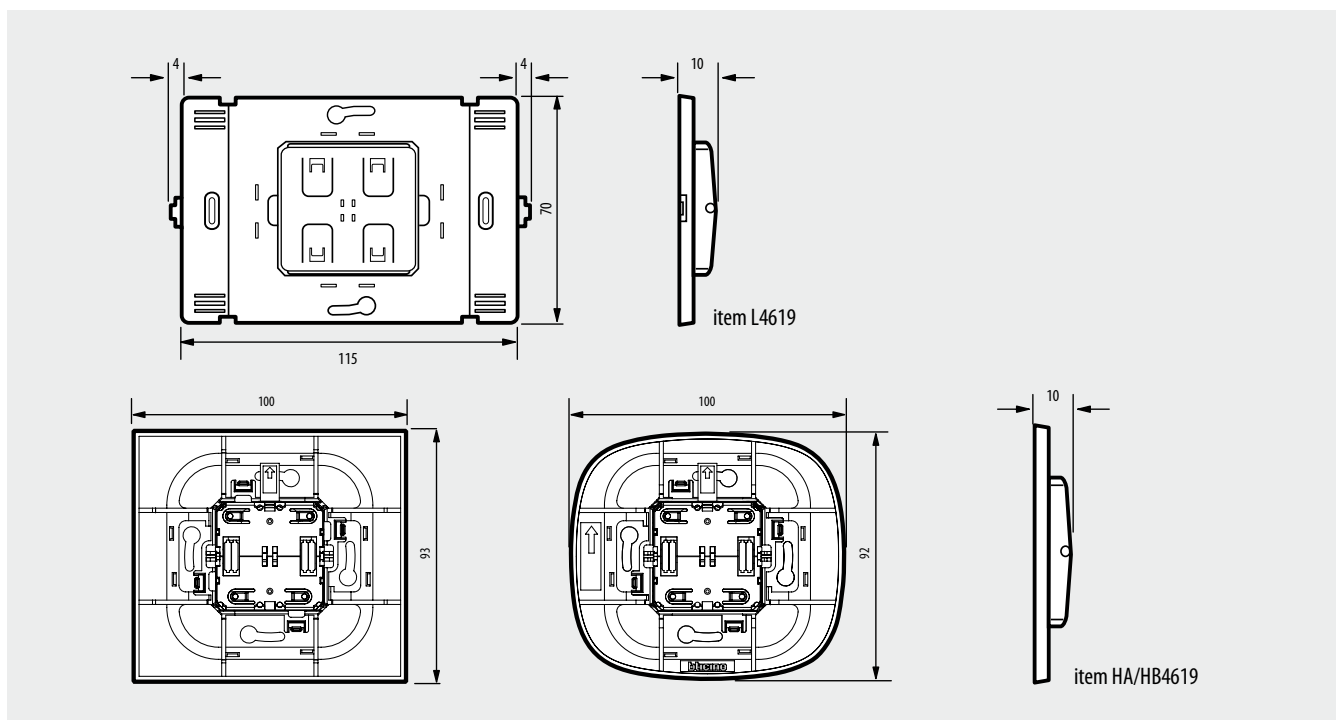
item L4619

item HA/HB4619

Radio flooding detector

Configuration

The device requires allocation of the zone it belongs to, the progressive number of the sensors within the same zone, and the setting of the detection mode, as well as the possible allocation of an auxiliary prealarm channel.
WARNING: The configuration operations must be performed with the battery disconnected

Z
This configurator assigns the number of the appropriate zone to the detector.
Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones Configurator 9 assigns the device to the group of auxiliary devices.

N
This configurator assigns the progressive number of the detector inside the appropriate zone.
Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

Note: to complete the activations using the relay actuator type HD/HC/ HS/L/N/NT4614 and AM5794 see the appropriate technical sheet.

MOD
Do not configure.

AUX
The configurator in the AUX socket activates the auxiliary function of the corresponding auxiliary channel. It therefore enables controlling auxiliary actuator devices, provided that they have been configured using the same auxiliary channel.

Note: to complete the activations using the relay actuator type HD/HC/ HS/L/N/NT4614 and AM5794 see the appropriate technical sheet.

Pairing remote receivers
1. Switch the system to "maintenance" mode.
2. Press the programming pushbutton of the radio receiver for five seconds, until the red LED comes on.
3. Press the RESET key for 5 seconds of the receiver.
4. If the pairing of the device has been performed correctly, the red LED of the radio receiver will go off.
   If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.
5. To pair other devices, repeat from step 2.
6. Perform self learning of the system from the central unit.
7. Exit "maintenance" mode.

Cancelling remote receivers
1. Switch the system to maintenance mode.
2. Remove the power supply from the receiver.
3. Press and hold the programming pushbutton while reconnecting the power supply to the radio receiver.
4. After 5 seconds the LED flashes orange. If the pushbutton is released at this time, only the remote controls are cancelled.
5. After releasing the pushbutton, the LED becomes fixed orange. When the LED goes off, cancellation has been completed.
6. Perform self-learning of the system from the central unit and exit "maintenance" mode.

Internal view   Z N°   MOD AUX

Passive IR detector
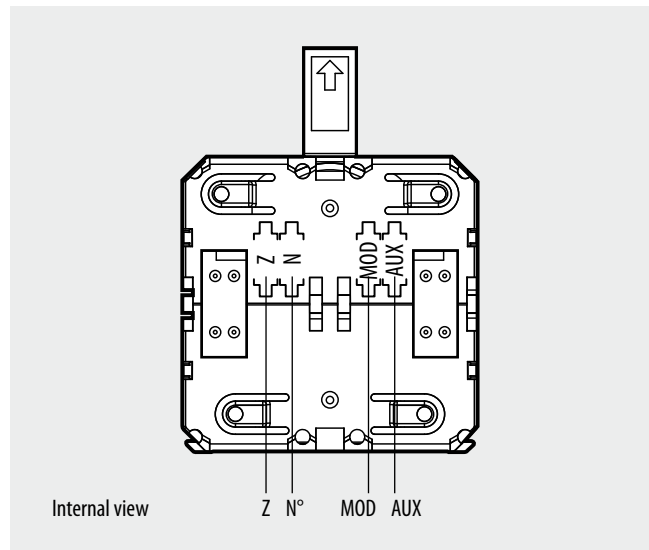
Description

The passive IR detector is of volumetric type and sensible to movement of warm bodies. The volume of the protected zone is divided into 14 beams distributed on 3 levels. The detector works in two different ways: instantaneous or with impulse calculation, in order to reduce the possibility of false alarms.

It's available in the version with reduced sizes and is suitable for wall mounted installation in systems preset or not preset for traditional sensors. For the sensor item N4640 the covering range can be adjusted on three levels (3, 6, or 9 metres), while the sensor item N4640B has a fixed sensitivity level (6 metres).

Technical data

- Power supply from SCS BUS: 27 Vdc
- Max. absorption: 4.5 mA
- Operating temperature: 5 – 40°C

Covering range
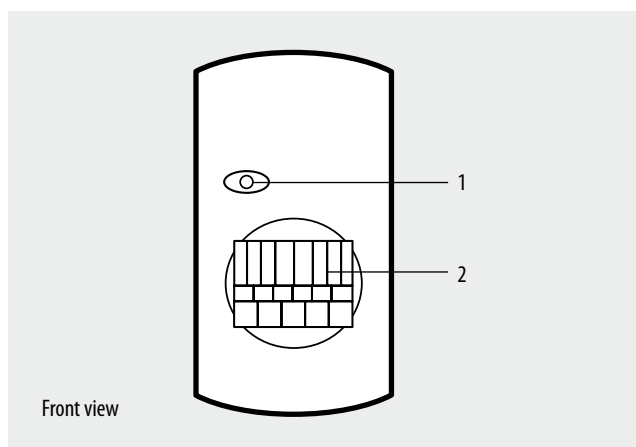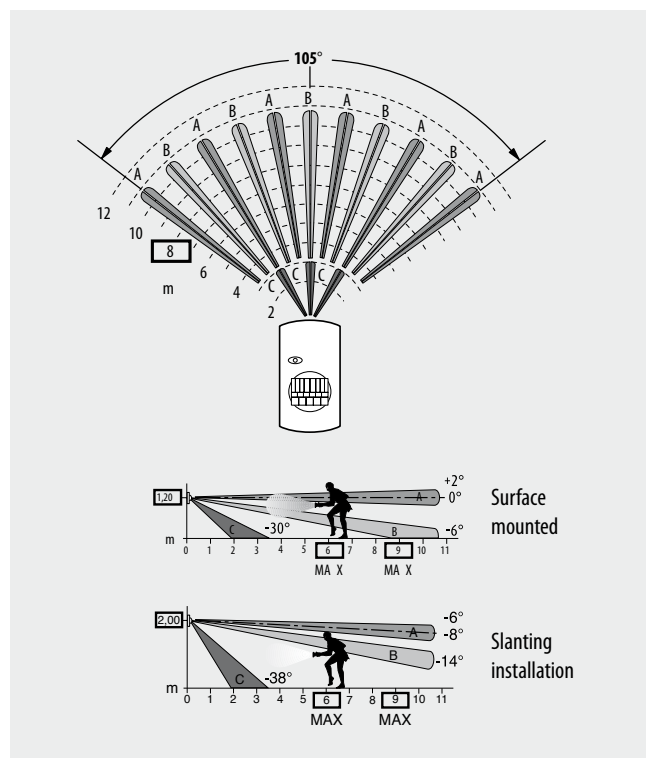
Legend

1 - Alarm warning LED;
2 - Fresnel lens.

Dimensional data

Front view

Passive IR detector
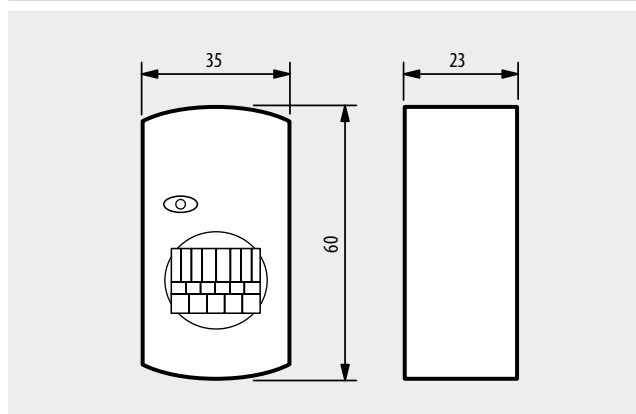
Configuration N4640

Infrared ray detectors require assignment of the appropriate zones and the progressive number of the sensors in the zone, setting of the detection mode and possibly assignment of an auxiliary prealarm channel.

Z
This configurator assigns the number of the appropriate zone to the detector.
Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

N°
This configurator assigns the progressive number of the detector inside the appropriate zone.
Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

⊓⊓
This configurator sets the sensor detection mode.
It can be used, for EXAMPLE, when the device is directed towards a possible source of disturbance (window or radiator), and its position cannot be changed.

Internal view

Configurator	Mode
0	1st level of sensitivity (1 high sensitivity impulse)
1	1st level of sensitivity (2 high sensitivity impulses)
2	2nd level of sensitivity (1 medium sensitivity impulse)
3	3rd level of sensitivity (1 low sensitivity impulse)
4	1st level of sensitivity (1 high sensitivity impulse), but with delay.
5	1st level of sensitivity (2 high sensitivity impulses), but with delay.
6	2nd level of sensitivity (1 medium sensitivity impulse), but with delay.
7	3rd level of sensitivity (1 low sensitivity impulse), but with delay.
AUX	Auxiliary function activation. The device, in any system status (enabled or disabled), sends an auxiliary alarm to the channel specified in the AUX position. If the assigned zone is divided, the auxiliary command will be disabled.

High sensitivity = maximum coverage 9 metres
Medium sensitivity = maximum coverage 6 metres
Low sensitivity = maximum coverage 3 metres

AUX
If the AUX configurator has been connected to the ⊓⊓ position, the 1 to 9 value of the configurator in this position activates the auxiliary function assigned to the 1 to 9 number of the auxiliary channel.

If no configurator, or one of the configurators from 1 to 7 is connected to the ⊓⊓ position, the device only activates the auxiliary function when the system is disarmed.
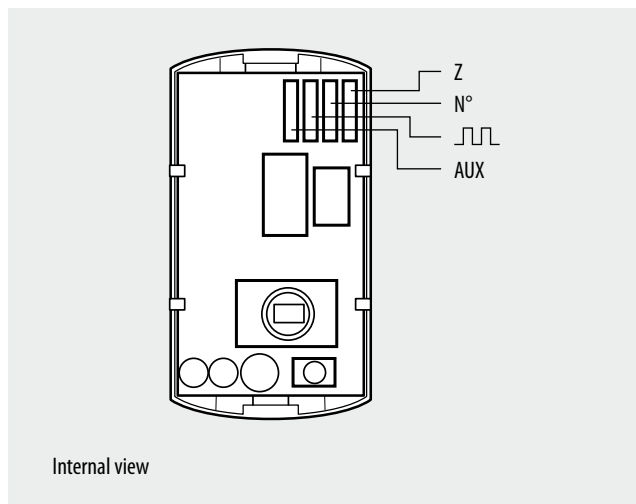
Configuration N4640

AUTOMATION mode – TIMED CONTROL:
Passive IR detectors can generate and send an ON timed control directly to one or more actuators.

For this mode, configure in the Z and N positions of the detector the addresses A and PL of the actuator to control respectively.
To the ⎍⎍ position connect the ON configurator to enable the time delay function.
The switching ON period is set by connecting numerical configurators 1 to 9 to the AUX position as shown in the following table:

AUX	1	2	3	4	5	6	7	8	9
Time	1 min.	2 min.	3 min.	4 min.	5 min.	15 min.	30 sec.	0.5 sec	2 sec.

Example of configuration

IR detector

Actuator

item L4671/1

AUTOMATION mode – GENERIC CONTROL USING AUXILIARY CHANNELS:
In this case, the actuator is managed by a control device, item H/L4651M2 or AM5831M2, which, based on its own operating mode, set in its own M position, activates the actuator with address set in A and PL.
The communication between the detector and the associated control device item H/L4651M2 or AM5831M2 is established by defining an auxiliary channel that has been configured in the IR detector by connecting the AUX configurator to the ⎍⎍ position, and specifying, with numeric configurators 1-9 in the AUX position, the number of the auxiliary channel. Obviously, in order to univocally establish the auxiliary channel, also the AUX position of the control must have the same configurator as the IR detector.

Passive IR detector

Configuration item N4640B

This device is the model with preset sensor sensitivity level, item N4640 and **it only performs burglar-alarm** system functions as it does not manage auxiliary channels or **AUTOMATION** modes; it requires allocation of the zone it belongs to, the progressive number of the sensors within the zone, and the setting of the detection mode.

Z

This configurator assigns the number of the appropriate zone to the detector.
Configurator 1 assigns zone 1 to the detector, configurator 2 assigns zone 2 and so on to a maximum of 8 zones.

N°

This configurator assigns the progressive number of the detector inside the appropriate zone.
Configurator 1 identifies the first detector, configurator 2 identifies the second and so on to a maximum of 9 sensors (IR detectors and contact interface) for each of the 8 zones.

ЛЛ

This configurator sets the sensor detection mode.
It can be used, for EXAMPLE, when the device is directed towards a possible source of disturbance (window or radiator), and its position cannot be changed.

Configurator	Mode
0	1 pulse
1	pulse counter[1]
2	1 pulse with delay
3	pulse counter with delay

[1] The sensor generates an alarm signal based on the detection performed during a period of 30 seconds.

BUS cable

Description

The red SCS-BUS cable has been purposely designed and produced for the installation of burglar-alarm systems This cable is used for the distribution of the power supplies and the operating signals to all system devices.

The cable consists of a red external sheath and two twisted flexible conductors, with a section of 0.35 mm², one yellow and one red.

The cable has 300/500 V insulation. Using the clear clamp protections included in all the devices, the systems can also be installed in the same boxes and conduits as the power lines (110 Vac, 127 Vac and 230 Vac).

WARNING

Although the construction of the cable ensures 300/500 V category electric insulation, correct system operation is not guaranteed in the following cases, when installed together with the power cables:
• in industrial environments;
• in residential/service sector environments, when the power cables provide power supply to one of the following:
• lifts
• inverter
• pumps
• motors and controlled motors
• metal iodines lamps.

The SCS-BUS cable is not suitable for underground installation.

Technical data

- Insulation voltage: 300/500 V
- Can be buried: NO;
- Reference standards: it complies with the tests required by the following regulations: EN60811, EN50289, EN50290, EN60228, 50265-2-1, EN50395, EN50396 as described in the document IMQ CPT 062;
- External sheath colour: red;
- External sheath diameter: 5.5 +/- 0.1 mm;
- External sheath thickness: 0.8 mm;
- External sheath material: PVC (RZ);
- Number of internal conductors: 2 unshielded twisted flexible conductors with sheath;
- Colour of internal conductors: white and blue;
- Sheath thickness of internal conductors: 0.60 mm;
- Sheath diameter of internal conductors: PVC (R2);
- Conductor materials: red electrolytic copper;
- Conductor section: 0.35 mm² (12 x 0.20 mm²);
- Operating temperature: 15 - 70℃;
- Maximum short circuit temperature: 150℃;
- Coil length: 100 m.

Technical sheets - Temperature control

Radio outdoor
temperature probe

3455

Description

The outside temperature can be measured by means of this radio probe. The data is then sent through radio waves to the receiving interface, and to the temperature control system. 99-zone or 4-zone central units can simply display this data. The automations are reserved just to the 99-zone central unit and can activate controls on the basis of exceeding particular temperature thresholds set by means of the TiThermo software.

These automations also allow the management of enhanced systems with combination boiler. Up to nine temperature probes can be installed in a system.

The radio probe is practically maintenance-free and is supplied by a small solar cell installed on the device. Special care should be taken to install the solar cell in positions which can guarantee sufficient irradiation.

For applications in badly lit or dark places, where the solar cell cannot supply the device, power can be supplied by means of a Lithium battery (type LS14250/1/2AA), to be inserted in the battery compartment. To guarantee the operation of the battery-supplied probe the battery should be replaced at least every 5 years.

The effective battery lifetime depends on the "data updating time" setting (see configuration section).

On the probe printed circuit there is a small key to be used during programming and when the receiving interface is acquiring the radio probe details.

Legend

1. Temperature sensor: to measure the temperature
2. Transmission key: allows the association between radio probe and receiving interface
3. Compartment: for lithium battery
4. Solar cell: supplies the entire device
5. Jumpers: to set the temperature update interval
6. IP65 enclosure

Technical data

- Power supply: - solar cell
  - 3.6 V / 1.1Ah type LS14250/1/2AA lithium battery
- Operating temperature: (-25) – (+40) °C
- Measurement field: (-20) – (+60) °C
- Radio frequency: 868 MHz
- Transmission power: < 10 mW
- Range: 70 m in free field (metal and reinforced concrete walls reduce the range);
- Protection index: IP65

CE CONFORMITY

89/336/EWG – Electromagnetic compatibility
R&TTE 1999/5/EC – Directive on radio and telecommunication devices

CONFORMITY TO REGULATIONS

ETSI EN 301 489-3
ETSI EN 300 220-3
EN 60669-2-1
EN 60950
EN 60065
EN 60529

Front view

Side view

Probe installation

NOTE: the probe must be installed in a position away from direct sunlight, as this may cause a false temperature reading. Avoid both excessively shady and excessively bright areas.

Temperature display

4-ZONE CENTRAL UNIT for outdoor
temperature display

PROBE for temperature
detection and transmission

INTERFACE for
data reception

99-ZONE CENTRAL UNIT for outdoor
temperature display

Automation - threshold exceeded LED

Probe for temperature
detection and transmission

Interface
for data reception

99-zone central unit

Control implementation
actuator

t < 3° C

LED

t > 3° C

TITHERMO for threshold setting
and automation

Radio outdoor
temperature probe
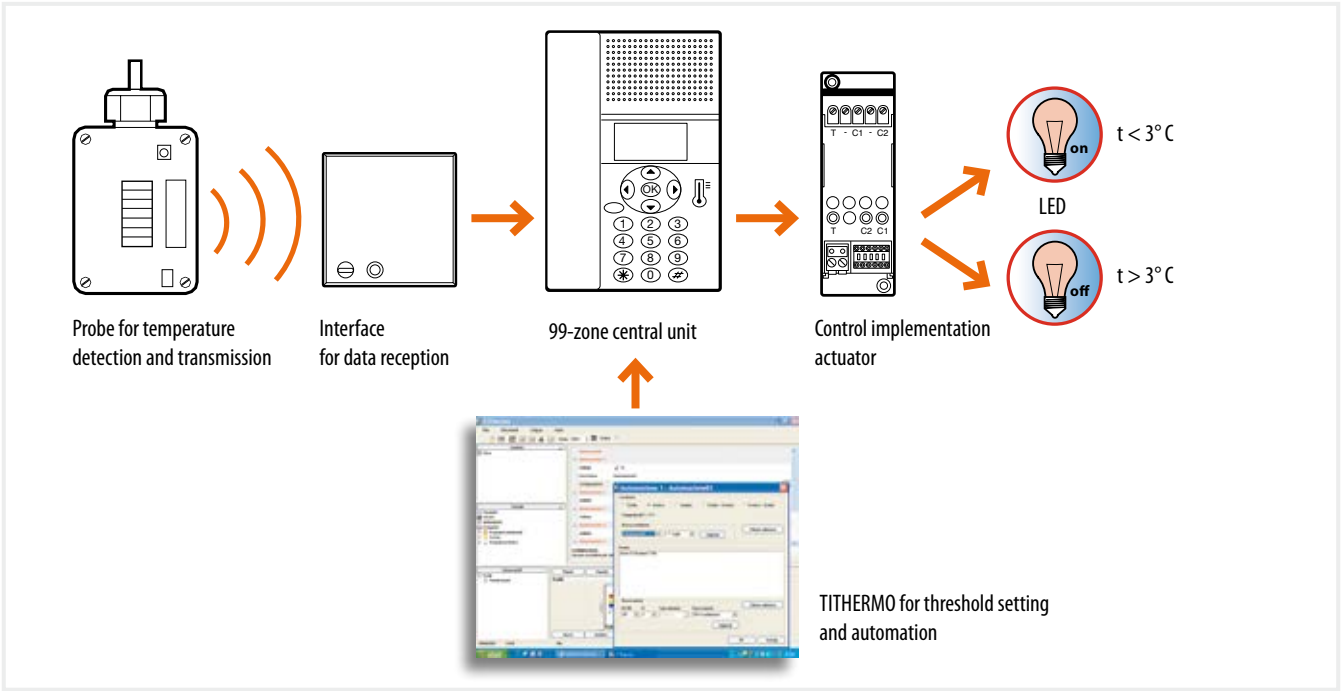
Automations - system with integration boiler

integration boiler

chiller

switching valve

probe

interface

actuator

99-zone central unit

BUS
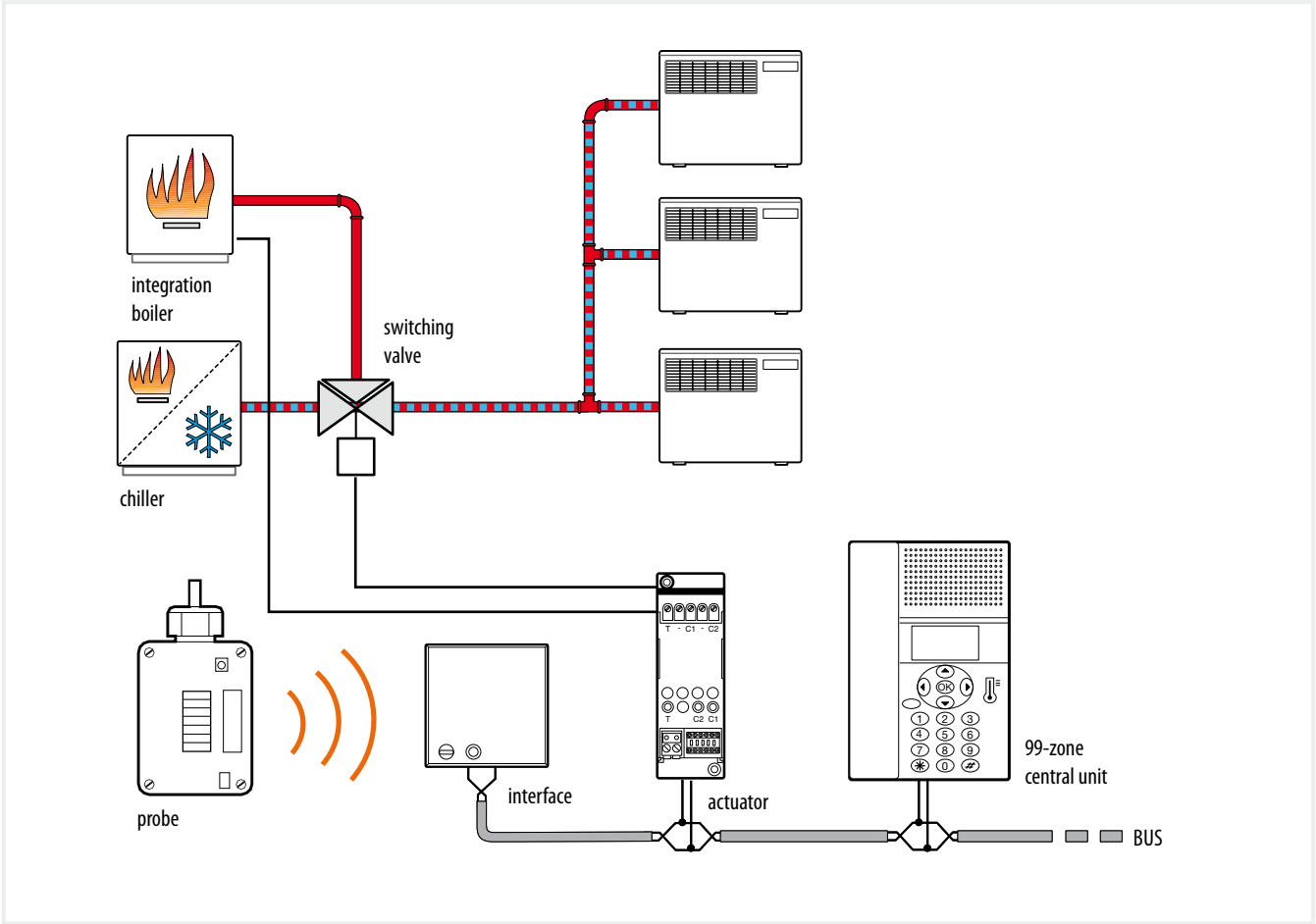
Setting the temperature update interval

The radio probe sends the "temperature" reading to the receiving interface at regular intervals that can be manually set using the jumpers, which must be connected to the T1 and T2 sockets. The update time is calculated following the formula below: $T = T1 \times T2$. The correspondence between the settable times and the jumpers is shown on the table. When the factory settings are used, the temperature will be updated every 1000 seconds. A change in the factory settings will also entail a variation on the solar cell recharging time, or the duration of the battery (if applicable).

Jumper/time table

Jumpers	T1/T2
	1 sec.
	10 sec.
	100 sec.

Jumper sockets

T1

T2
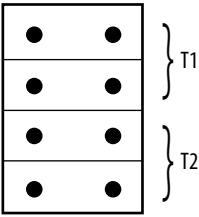
Factory settings

$T = 10 \times 100 = 1000$ sec
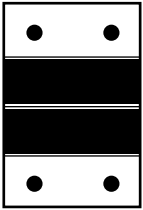
HC/HS 4577 and L/N/NT4577 receiving interface configuration

In order to use a receiving interface and radio probe, configuration must first be performed, followed by the programming procedure. Only the interface needs configuring. Up to 2 probes may be combined with each interface, therefore providing the system with two detection points for each interface. Up to a maximum of 9 temperature probes may be installed in one system.

The configuration sockets on the interface identify the radio probes addresses. They are: A1/-, PL1/N1, M1 for the first address, and A2/-, PL2/N2, M2 for the second address. The two addresses must always be different from each other, PL1/N1 ≠ PL2/N2. Only one radio probe may be associated to each address. Only used addresses must be configured. **The interface must be configured in temperature control mode by connecting configurator 1 to M1 and M2. With this mode the A1/- and A2/- sockets are not used, therefore no configurator needs to be connected.**

Configurator socket

Interface back view

Programming of devices:

After performing the configuration, it will be necessary to associate the radio probe to the interface following the programming procedure:

1) Press the pin pushbutton of the interface for 5 seconds. The red LED turns on. Release the pushbutton. The interface LED will flash every two seconds to confirm that programming mode is active on the first address (group of configurators **PL1/N1, M1**). If the second address of the interface is not configured (no configurator is connected to the **PL2/N2, M2** positions), go to step 2 of the procedure.

However, if also the second address must be configured (group of configurators **PL2/N2, M2**), simply press the pin pushbutton of the interface again.

The LED will flash twice in succession every two seconds.

Every time the pin pushbutton is pressed, the system will switch from the first to the second address and vice versa.

2) After choosing the address, The radio probe should be associated to, within 20 seconds press the transmission key of the probe itself. Pressing the trans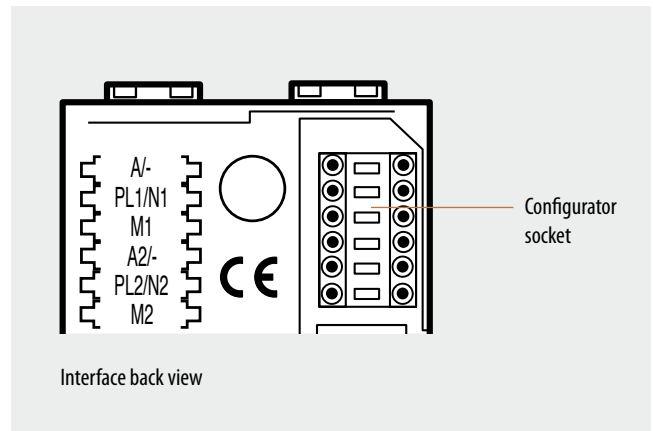mission key will send the probe serial code. After receiving the code through the radio signal, the red LED of the interface will quickly flash for 2 seconds, confirming that programming is complete, and the procedure has been terminated.

If necessary repeat the operation to save the code of another probe. If on the other hand an address has already been associated and the procedure is repeated with another probe, the interface performs an overwriting action, only keeping the last probe in memory. During normal operation, the sending of information from the probe is confirmed by the flashing of the red LED of the interface. A single flashing indicates that the radio message has been received, and the "temperature" data has been sent through the BUS by a probe associated to the **PL1/N1, M1** address. A double flashing indicates that the radio message has been received, and the "temperature" data has been sent through the BUS by a probe associated to the **PL2/N2, M2** address. To delete all codes from the interface press the pin pushbutton for 12 seconds. After 5 seconds from pressing the key, the LED will turn on steadily, and after a further 7 seconds, it will start flashing quickly, confirming that all programs have been deleted.

NOTES:
- If the interface configuration is wrong, the red LED will flash. Correct the configuration.
- If the second interface address has not been configured (no configurator connected to the **PL2/N2, M2** sockets), during the programming procedure it will not be possible to switch to this address, which therefore cannot be programmed.

Air conditioning units control IR emitter

Description

The air conditioning units control IR emitter is a device capable of controlling the air conditioning units of the air conditioning system by sending infrared controls. All the controls are sent to the splitter using the Touch Screen, or Multimedia Touch Screen, of the MY HOME system.

The device may be installed inside flush mounted boxes, behind traditional devices, in distribution boards, without using a DIN rail space, or inside the splitter. It is fitted with an IR transmitter with a two metre wire, for connection to the splitter receiver.

The IR transmitter has sockets for 4 configurators: ZA/A, ZB/PL, N, M.

Note (*): The device might not be compatible with some HVAC brands and models.

Bottom view

Technical data

Operating power supply with SCS BUS:	18 – 27 Vdc
Absorption:	15 mA in stand-by
	25 mA during transmission peak
Operating temperature:	5 – 40 °C

Dimensional data

Basic module

Legend

1. BUS connection
2. Configurator socket
3. Remote control IR receiver
4. IR transmitter connector
5. Software programming USB connector
6. Virtual configuration pushbutton (future use)

Configuration

The device can be configured in two separate ways:
1. Physical configuration: by connecting the physical configurators to their sockets.
2. Virtual configuration: the device is configured remotely, when no physical configurators are connected (future use).

1) Basic mode M = 1

In this mode the device can learn up to 20 controls from the air conditioning unit remote control. These can be recalled by all the devices controlling the scenarios (scenario control, Local Display, Touch Screen, Multimedia Touch Screen, MH200, MHVisual, Web server).

In this mode, the device fully becomes part of the automation system, with A/PL address (the N configurator must be equal to 0). Acquisition of the control is ensured by connecting the device to the PC with the dedicated software.

Using the IR emitter it is possible to acquire the IR controls from the remote control, which can then be saved in a personal database.

Using the software, each control can be associated to a number from 1 to 20, and then downloaded on the IR emitter.

2) Advanced mode M = 0

In this mode the IR emitter provides control of the main functions of the air conditioning units (temperature, mode, speed and swing) from the Touch Screen and the Multimedia Touch Screen.

This mode is available for the air conditioning units listed in the database supplied with the product.

If used with the right air conditioning unit model, the following controls are possible:
- temperature: adjustment 16 – 30 °C
- mode: auto, heating, cooling, dry and fan
- speed: auto, minimum, medium, maximum
- fins oscillation (swing): on - off

Wiring diagrams

IR transmitter connected to the PC for the acquisition of the remote control using the dedicated software
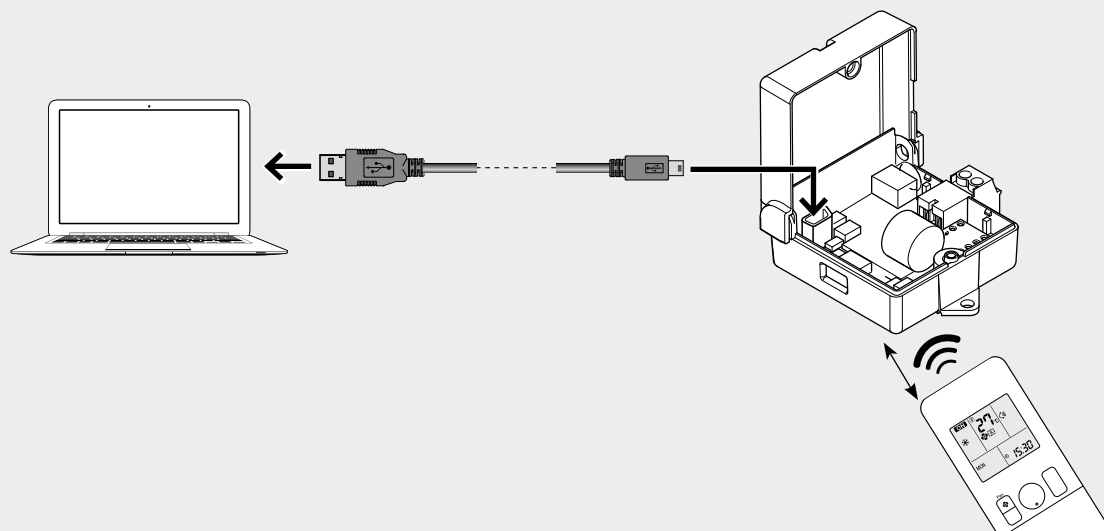
IR transmitter connected to the splitter and the BUS
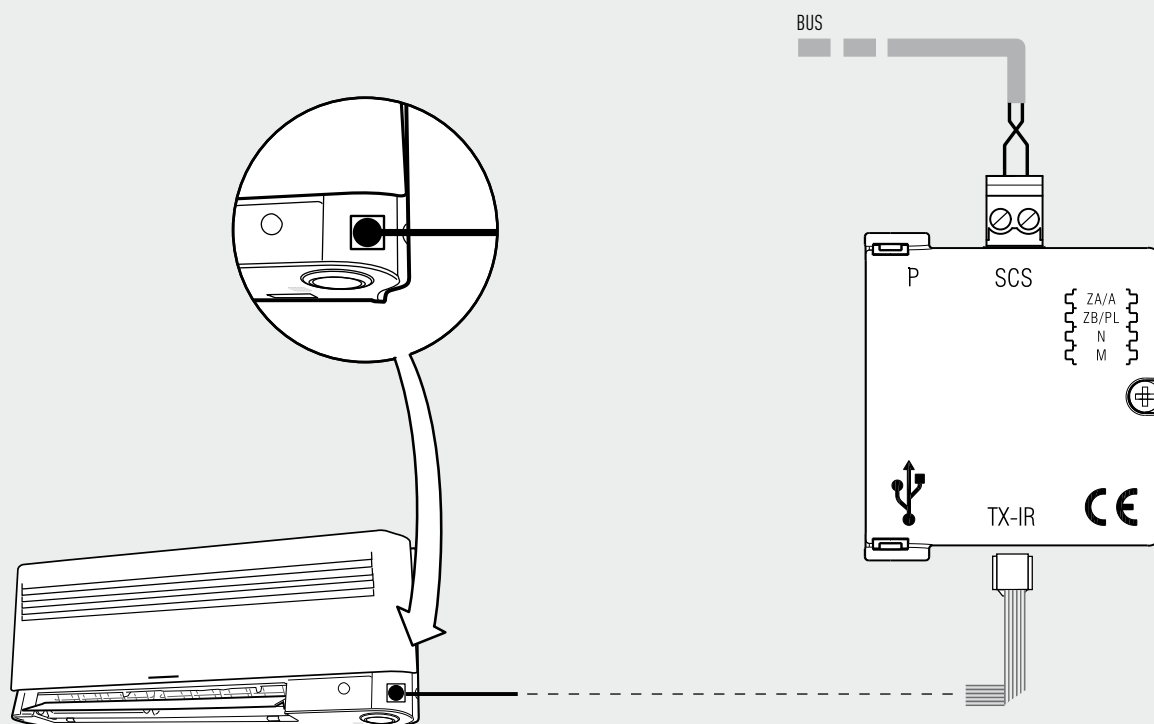
99-zone central unit

Description

This central unit can manage temperature control systems up to 99 zones, set the system and modify the system operating mode. It is more complete than the 4-zone flush mounted version; in fact just with this central unit it can manage the magnetic contacts installed on the window frames to activate the energy-saving function (switching OFF the zones affected by any changes of air).

Equipped with management software with guided menus shown on the display, it allows the user to chose the operating mode, display the temperatures of the various zones and display and modify the daily temperature profiles and the weekly programs, while the maintenance menu, reserved for the installer (password protected), allows access to the system settings (zone configuration, system test, total reset, etc.).

The Central unit can provide both heating and cooling and can manage up to 99 different zones (with one Master probe for each zone plus possible Slave sensors) and up to 9 circulation pumps.

A contact can be connected in input for remote control by means of a telephone actuator to switch from the anti-freeze mode to the automatic mode and vice versa.

By using the serial connector and the TiThermo software, it is possible to program the unit from a PC.

Related articles:
801 24 (Flush mounting box)
682 44 (Cover White)
685 44 (Cover Titanium)

Legend

1. Graphic display: shows the messages which guide the programming operations and the system state.
2. Navigation keypad: allows navigation within the menus and confirms or deletes programming operations.
3. Alphanumeric keypad: allows manual entry of all those programming operations which require the use of numbers and/or symbols.
4. Battery compartment: housing for battery item 3507/6.
5. Reset pushbutton: pushbutton to reset the hardware.
6. Serial connector: connects to a PC via cable item 335919 (for RS232) or item 3559 and 049234 (for USB).
7. Remote control: connection clamp.
8. BUS: BUS connection clamp.
9. Switch ON/OFF

Technical data

- Power supply from SCS BUS: 27 Vdc
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Max. absorption: 75 mA
- Operating temperature: 0 – 40 ℃
- Temperature adjustment range: 3 - 40 ℃ +/− 0.5 ℃
- Size: L=140 mm, H=210 mm, D=35 mm

Front view

Rear view

MQ00187-c-EN   29/04/2014
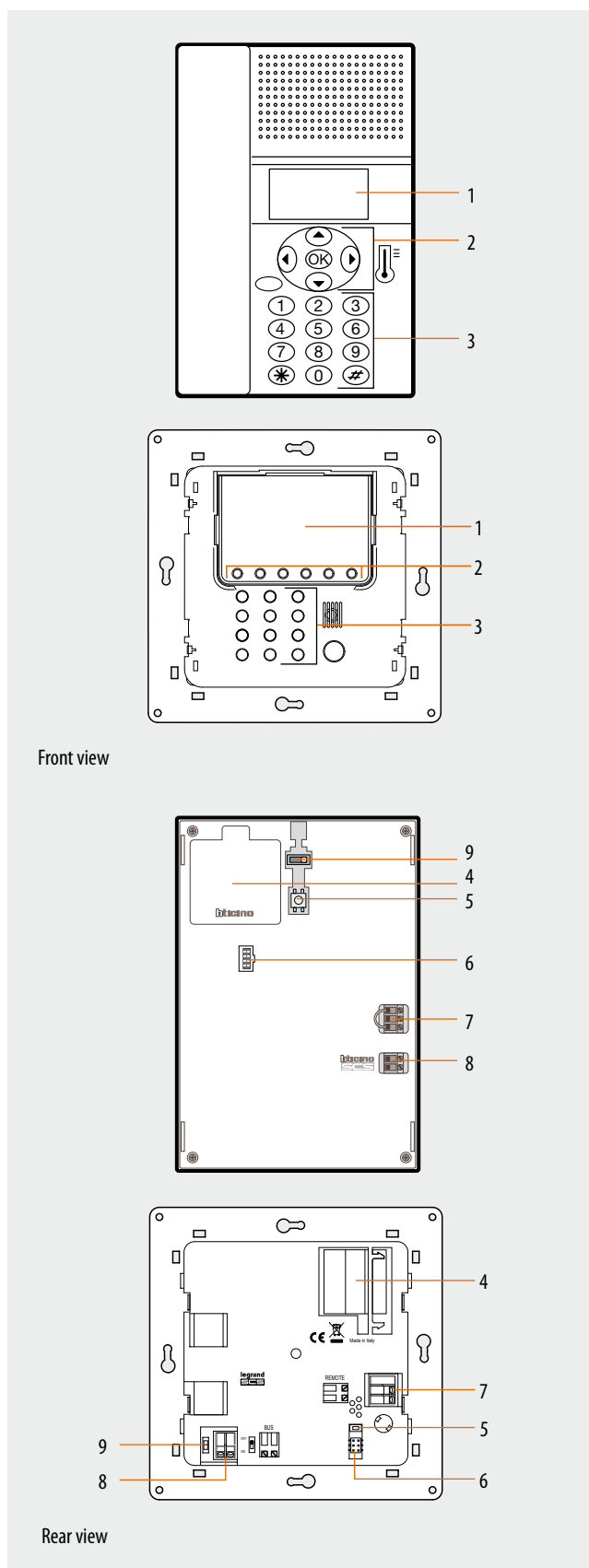
Graphic display

In normal working conditions the Central unit display shows the following information on the initial page:

```
                                          Operating mode

     Weekly                               Name of the program
     Example                              being run
     Winter
 Wed. 01 Oct   00:01
                                          State:
                                          Winter (heating)
                                          Summer (Cooling)

     Date        Hour
```

Programming

To complete the learning procedure of all zones within the system, use the item "Configure Zone" of the "Maintenance" menu. It will be necessary to define if the zone should manage a heating system, a cooling system, or a combined one. Using the same menu item, also select the type of load to control, choosing between: ON/OFF, OPEN/CLOSE, 3SP FAN-COIL, and GATEWAY, and indicate which pumps the zone must control, and the delay. When performing programming operations from the central unit, refer to the installation manual supplied with the central unit itself.

Circulation pump

In addition to controlling the zone valves, for some types of systems it will also be necessary to control one or more water circulation pumps.

When programming the operating mode of the circulation pumps is not necessary to connect any special configurators: it will be sufficient to use the central unit through the "Pump" item; inside the "Maintenance" menu, select the zones that must be served by a circulation pump.

Using the programming procedure, set a logic link between the zones, and the pump that hydraulically supply them.

To complete the programming procedure, the pump management mode must also be selected, thus defining if the pump supplies a heating, a cooling, or a combined system. Depending on the needs of the hydraulic system, one "circulation pump" or "several circulation pumps" may be installed, to supply one or more zone groups.

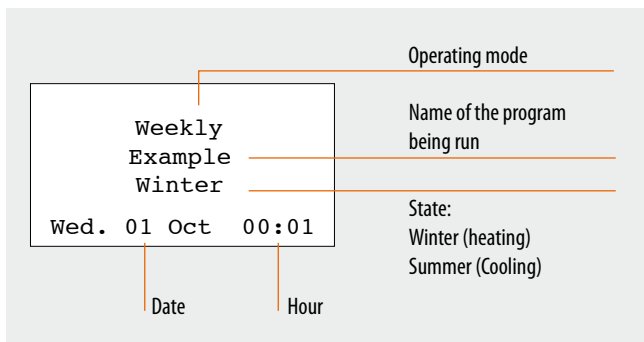If necessary, it is also possible to set a "pump switch-on delay", in relation to the opening of the zone valves. In the following cases, pump control is not necessary, or needed:

- in systems where the pump is always in operation (thanks to water recirculation hydraulic systems, or the presence of three-way valves);
- in systems where the pump is managed automatically (it comes on by itself when water is required, and turns off again when all valves are closed);
- in system where the pump has simply not been installed (for example for air conditioning units or electric heating control).

NOTE: for details of the programming operations to be performed from the central unit refer to the installation manual supplied with the central unit itself.

System with one circulation pump

The system shown only has one circulation pump, that only supplies two zones, controlled by two solenoid valves. The pump is managed by a dedicated actuator configured in zone 00. In the same way as the pump, also the two valves are controlled by two different actuators. The circulation pump will remain active until at least one of the two valves remains open and will stop when both valves are closed.

Legend
1. circulation pump
2. pump actuator
3. zone 1 solenoid valve
4. zone 1 actuator
5. zone 2 solenoid valve
6. zone 2 actuator

99-zone central unit

System with two circulation pumps

The system shown requires two circulation pumps that serve two different zone groups controlled by their own solenoid valves. The first group pump is managed by a dedicated actuator configured in zone 00 with progressive number equal to 1 (N=1). Also the two valves that control ZONE1 and ZONE2 are managed by their own actuators.

The circulation pump will remain active until at least one of the two valves remains open and will stop when both valves are closed. The second group is similar to the first one, but the actuator controlling the pump of zones 3 and 4 is configured in zone 00 with progressive number equal to 2 (N=2). Although belonging to the same system, the two pump/solenoid valve groups are totally independent from each other (see also actuator configuration).

Legend

1. zone 1 and 2 circulation pump
2. pump actuator
3. zone 3 and 4 circulation pump
4. pump actuator
5. zone 1 solenoid valve
6. zone 1 actuator
7. zone 2 solenoid valve
8. zone 2 actuator
9. zone 3 solenoid valve
10. actuator zone 3
11. zone 4 solenoid valve
12. actuator zone 4

99-zone central unit

TiThermo software

TiThermo is the tool used for creating or changing, through a simple and logic graphic interface, the configuration to be sent to the temperature control system central unit, defining and customising the parameters of the temperature control system and the profiles of the various operating programs.

Thanks to a dedicated function, the software may also be used to update the central unit firmware.

The software can be used to:

- customize the zones
- manage the actuators, selecting the type of function to be assigned (heating, cooling, heating+cooling, no function) and the type of load for the selected function (ON/OFF, Open/ Close, Fan-Coil, Gateway)
- manage the circulation pumps, selecting the type of function to be assigned (heating, cooling, heating+cooling, no function) and the tripping delays

- customise the configuration parameters and the operating programs of the central unit (e.g. weekly programs, holiday programs)
- create up to 16 scenarios for each operating mode of the system (Heating and Cooling). In each scenario also set different temperatures for each area
- export and/or import profiles and collections (as XML files).

NOTE: for more information on the operation of the application see the manual supplied with the products.

The central unit is connected to the PC using cable item 335919 or with item 3559 or 049234 (see figure). This accessory is not included with the central unit, and must therefore be purchased separately.
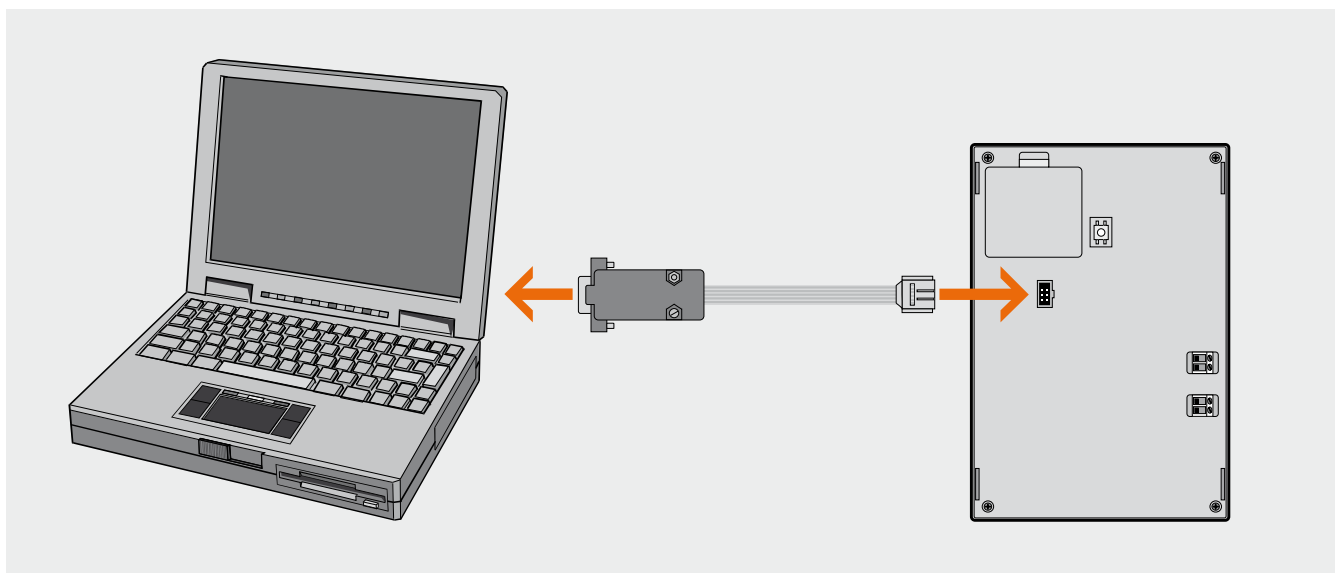
TiThermo screenshots
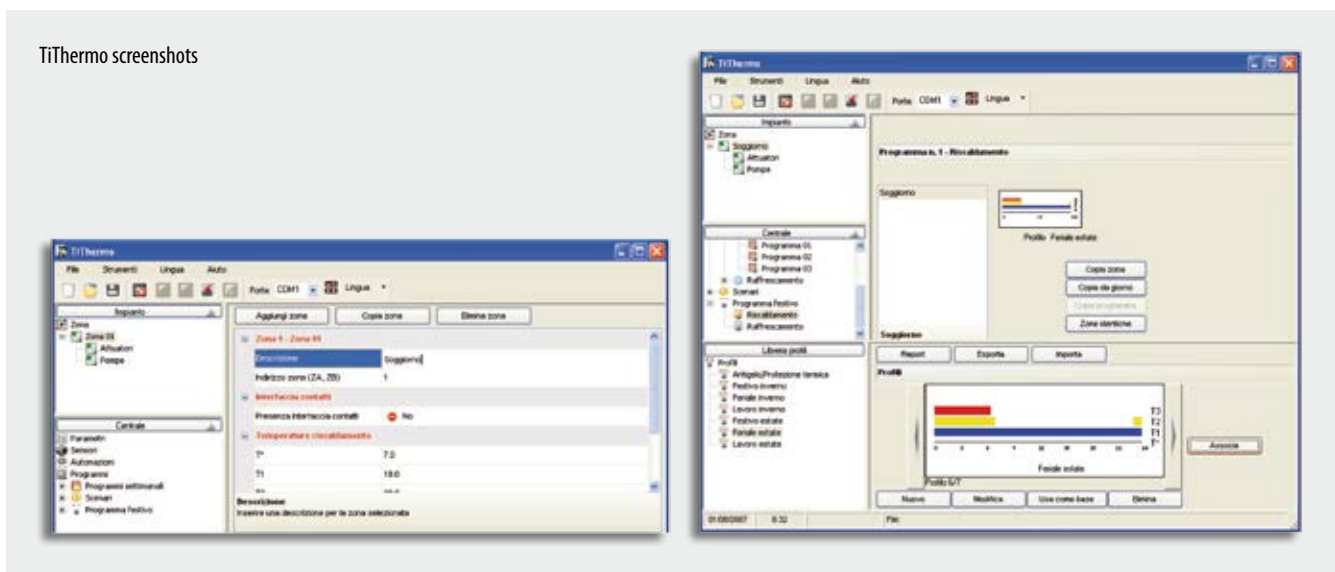
Actuator 2 relays

Description

By means of internal relays, this device executes the controls received from the central unit or the probe. It is needed to control loads such as motorised valves, pumps and electric radiators.

It has two independent relays which can be used to control two distinct loads with ON/OFF function and to control a single load with open/close function.

To manage open/close loads the actuator must be configured with the logical interlock of the two relays and contact C1 must be considered for the opening control and contact C2 for the closing control.
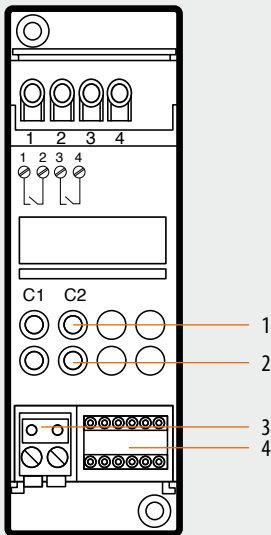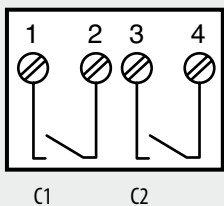
Front view

Technical data

- Power supply from SCS BUS: 27 Vdc
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Maximum absorption relays activated individually): 25.5 mA
- Absorption (relays activated with interlock): 14 mA
- Absorption in stand-by: 9 mA
- Current load of individual relays: 6 A (resistive) e.g. electric radiators
  2 A (inductive) e.g. solenoid valves, pumps
- Maximum power consumption: 1.7 W
- Operating temperature: 5 – 40 ℃
- Size: 2 DIN modules

Legend

1. C1 clamps 1 - 2 relay forcing pushbutton
   C2 clamps 3 - 4 relay forcing pushbutton
   The forcing pushbuttons do not operate if the OFF configurator is connected to the ZB1 or the ZB2 configurator sockets.
2. Yellow LEDs for notification of activation of the corresponding relays.
3. Configurator socket.
4. Removable clamp for BUS connection SCS.

Configuration

The item must be configured by connecting the two configurators identifying the actuator address and the number of the zone they belong to the **ZA** and **ZB** sockets. In practical terms, the operation is the same as the one performed for the probe, during the definition of the zone.

A probe and an actuator belonging to the same zone will require the same numeric configurators in the **ZA** and **ZB** sockets. On the front of the two-relay actuator are five sockets dedicated to the configurators:

ZA, **ZB1**, **N1**, **ZB2**, **N2**. The configuration sockets are distributed on the two relays in the following way:

ZA ZB1 Relay 1 zone address
N1 Relay 1 progressive zone address
ZA ZB2 Relay 2 zone address
N2 Relay 2 progressive zone address
The two relays on the device are independent, and may be used to activate two separate loads with ON/OFF function, such as: pumps, on/off type motorized valves, and electric radiators. The diagram shows the correspondence between the configurator sockets and the relay contacts.

configurator	ZA		1	C1 contact
socket	ZB1			RL1
RL1	N1		2	
configurator	ZA		3	C2 contact
socket	ZB2			RL2
RL2	N2		4	

The operation of one of the two relays may be excluded. To do this, connect the OFF configurator to the socket corresponding to **ZB1** or **ZB2**. The two relays may also be used to control a single load with OPEN/CLOSE function, such as, for example, solenoid valves with opening and closing control. For the management of these loads, it will be necessary to configure the actuator with logic relay interlocking, connecting the same numeric configurator both to **ZB** and **N**, therefore **ZB1=ZB2** and **N1=N2**. In using the contacts, consider contact C1 for the opening control and C2 for the closing control. A relay configured in zone **00** operates as a circulation pump actuator; for this function, the two relays cannot be configured as interlocked.

Actuator 2 relays

Configurator summary table:

Socket	Function	Configurator
ZA	zone address	0 – 9
ZB1	Zone address - ON/OFF contact management - Open/Close contact management - circulation pump mode - OFF zone	0 – 9 – OFF
N1	progressive zone number - Open/Close contact management - circulation pump progressive number	1 – 9
ZB2	Zone address - ON/OFF contact management - Open/Close contact management - circulation pump mode - OFF zone	0 – 9 – OFF
N2	progressive zone number - Open/Close contact management - circulation pump progressive number	1 – 9

Example 1
Configuration and connection of the 2-relay actuator, for the control of the solenoid valves (ON/OFF type) in two different zones (zone 1 and zone 2). The progressive zone number is 1.

Legend
1. actuator
2. zone 1 solenoid valve
3. zone 2 solenoid valve
4. zone 1 radiator
5. zone 2 radiator

Actuator configuration

ZA	ZB1	N1	ZB2	N2	RL1/C1	RL2/C2
0	1	1	2	1	ON/OFF	ON/OFF
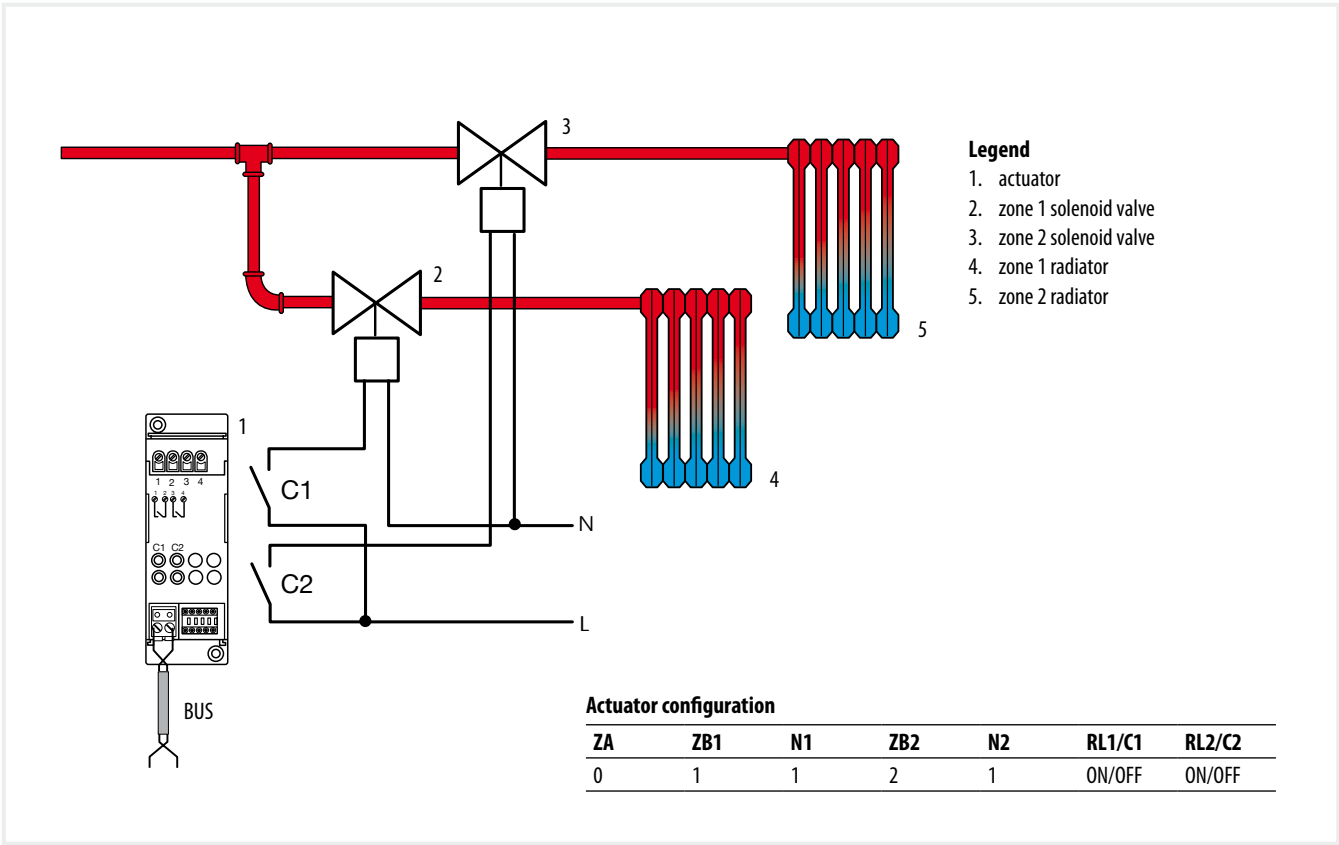
Example 2

Configuration and connection of the 2-relay actuator, for the control of two electric radiators within the same zone (zone 4). The progressive zone numbers are 1 and 2.

C1

C2

N

L

2

2

BUS

Legend
1. actuator
2. electric radiators, zone 4

Actuator configuration

ZA	ZB1	N1	ZB2	N2	RL1/C1	RL2/C2
0	4	1	4	2	ON/OFF	ON/OFF
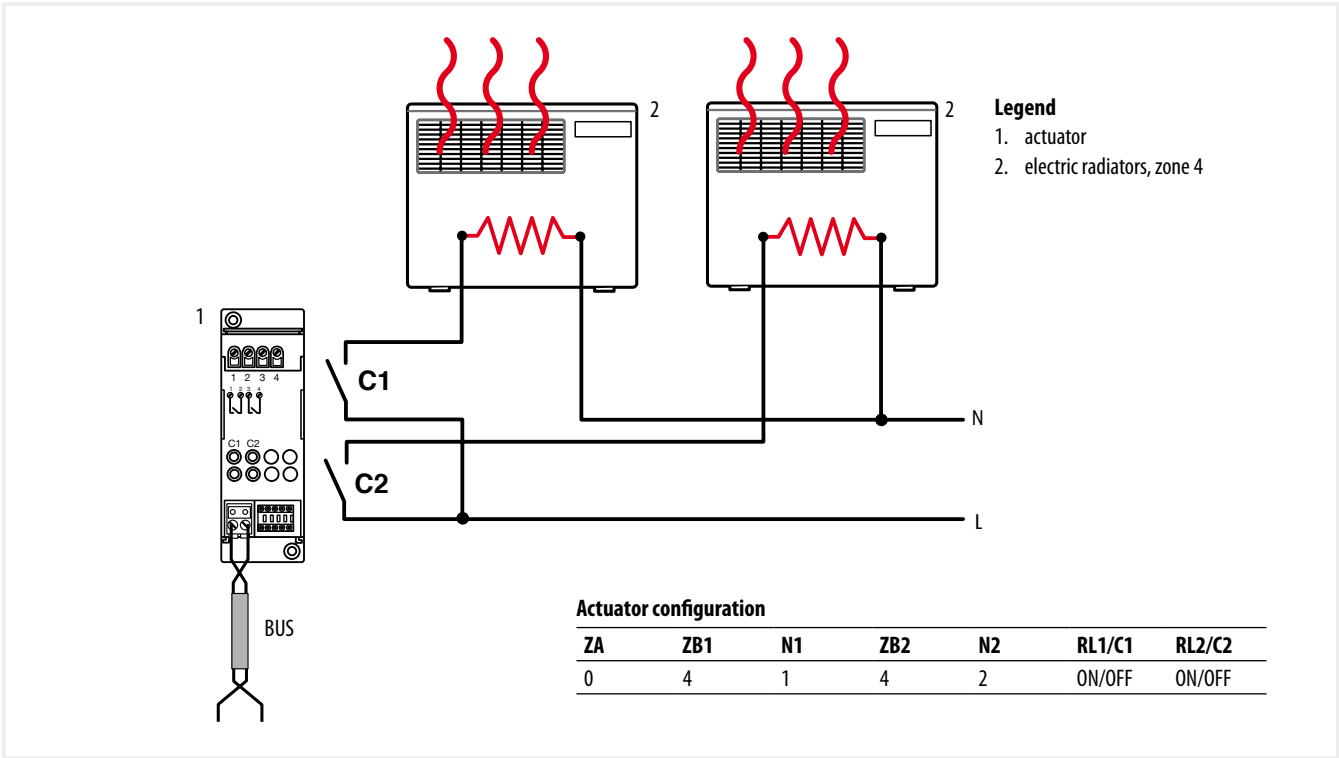
Example 3

Configuration and connection of the 2-relay actuator, for the control of a zone pump (in zone 7). The progressive zone numbers is 1. As relay RL2 is not used, it is excluded.

2

3

4

N

C1

L

C2 DISCONNECTED

BUS

Legend
1. actuator
2. check valve
3. zone 7 pump
4. radiant panels

Actuator configuration

ZA	ZB1	N1	ZB2	N2	RL1/C1	RL2/C2
0	7	1	OFF	-	ON/OFF	Excluded
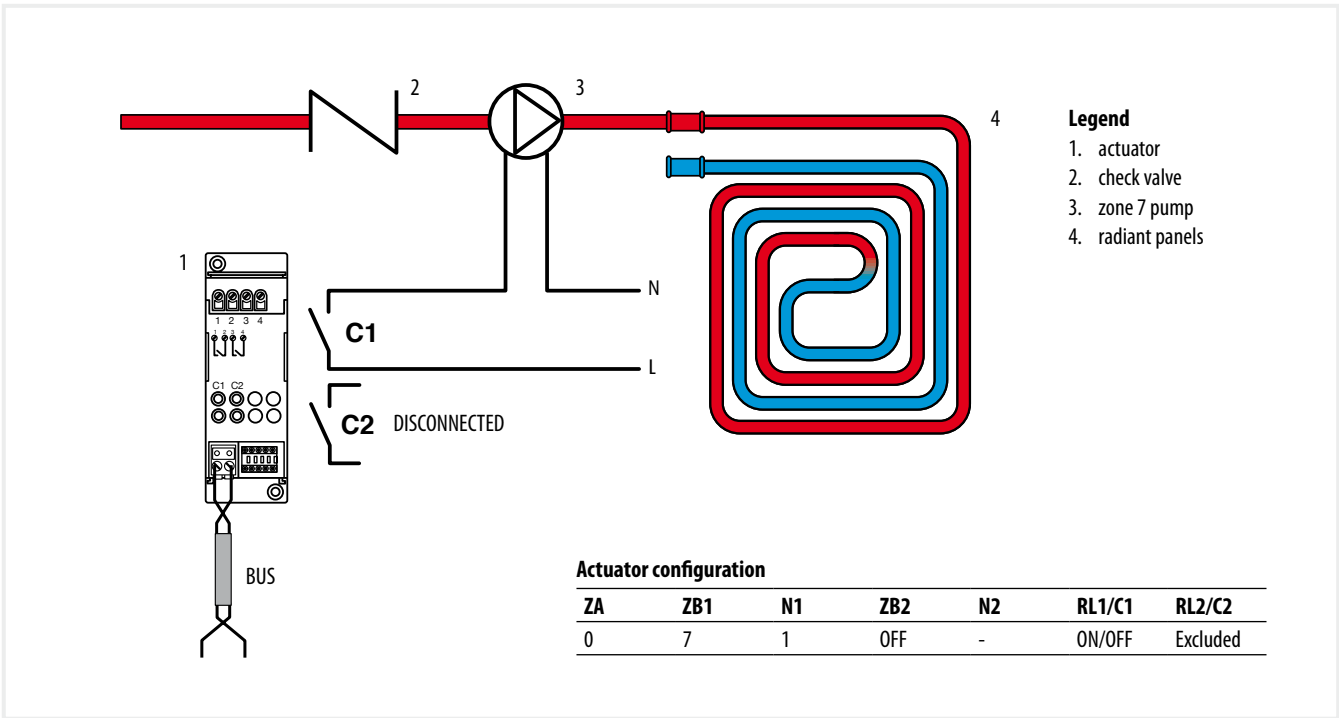
Example 4

Configuration and connection of the 2-relay actuator, for the control of two circulation pumps (zone 00). The progressive zone numbers are 1 and 2.

Legend
1. actuator
2. boiler
3. refrigerator (chiller)
4. heating circulation pump
5. cooling circulation pump
6. radiator
7. fan-coil

Actuator configuration

ZA	ZB1	N1	ZB2	N2	RL1/C1	RL2/C2
0	0	1	0	2	Pump 1	Pump 2
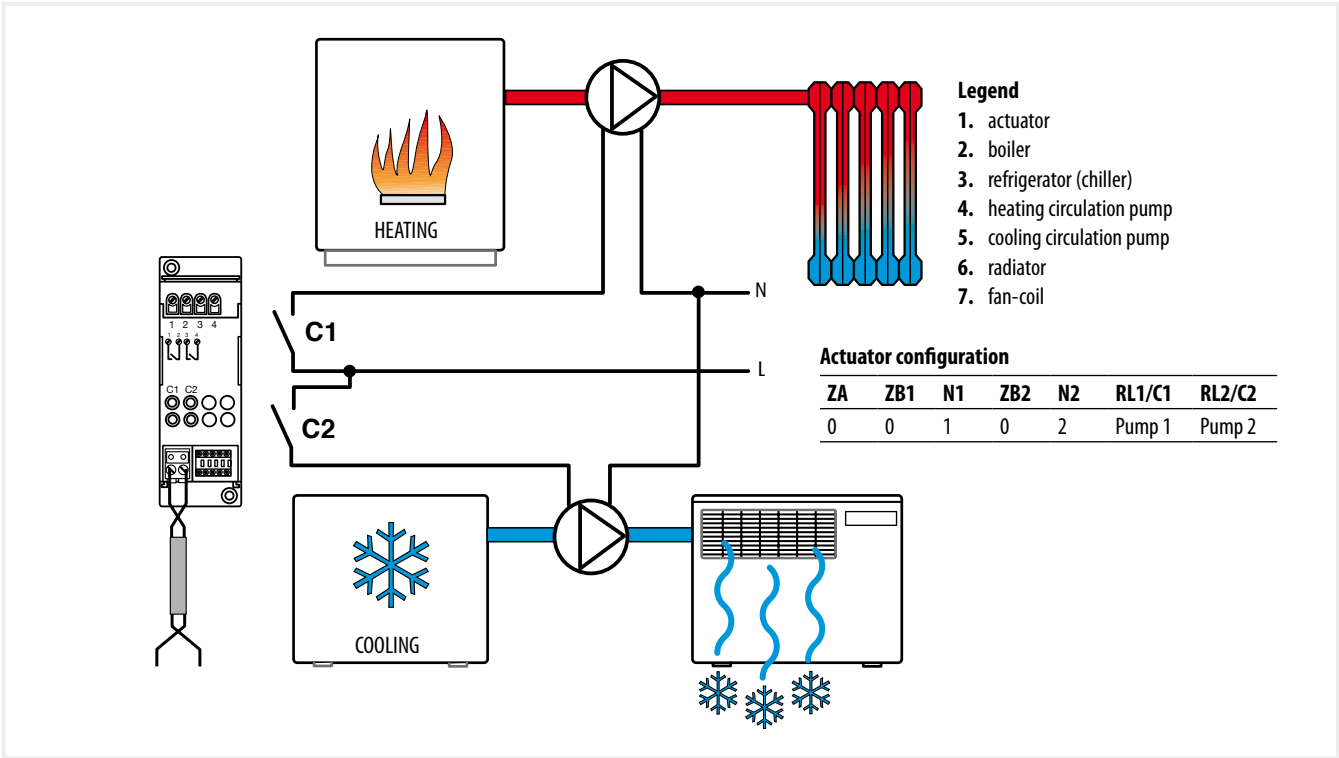
Example 5

Configuration and connection of the 2 interlocking relays actuator, for the control of a solenoid valve with opening and closing control in zone 16.
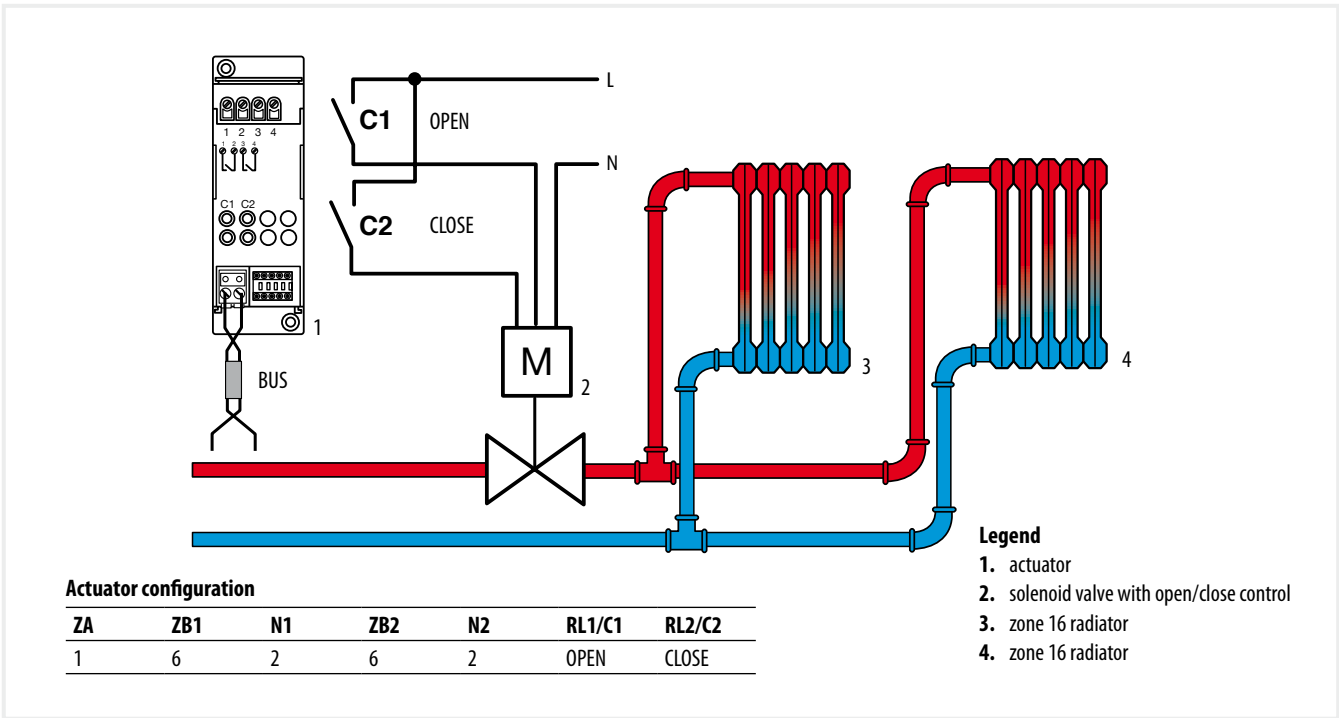
Legend
1. actuator
2. solenoid valve with open/close control
3. zone 16 radiator
4. zone 16 radiator

Actuator configuration

ZA	ZB1	N1	ZB2	N2	RL1/C1	RL2/C2
1	6	2	6	2	OPEN	CLOSE

Actuator 4 relays

Description

By means of internal relays, this device executes the controls received from the central unit or the probe. It is needed to control loads such as 3-speed fan-coils, motorised valves, pumps and electric radiators.

It has four relays, with independent control but common contacts, which can be used to control two distinct loads with ON/OFF function and to control a single load with open/close function.

To manage open/close loads the actuator must be configured with the logical interlock of the two relays and contacts C1/C2 respectively must be considered to open and close the first valve and contacts C3/C4 to open and close the second valve.

The contacts assume different functions when the actuator is used to control fan-coils. Contact C1 is an ON/OFF contact and controls the valve. Contacts C2, C3 and C4 control the ventilation minimum, average and maximum speed respectively. The fan speed is selected automatically depending on the difference between the temperature set by the user and the room temperature.
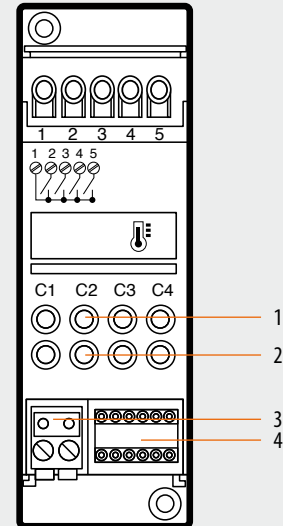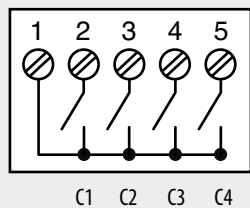
Front view

Technical data

- Power supply from SCS BUS: 27 Vdc
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Maximum absorption relays activated individually): 37.5 mA
- Absorption (relays activated with interlock or Fan Coil control): 20.5 mA
- Absorption in stand-by: 9 mA
- Current load of individual relays: 4 A (resistive) e.g. electric radiators
  1 A (inductive) e.g. solenoid valves, pumps
- Maximum power consumption: 3.2 W
- Operating temperature: 5 – 40 °C
- Size: 2 DIN modules

Legend

1. C1 clamps 1 - 2 relay forcing pushbutton
   C2 clamps 1 - 3 relay forcing pushbutton
   C3 clamps 1 - 4 relay forcing pushbutton
   C4 clamps 1 - 5 relay forcing pushbutton
   The forcing pushbuttons do not operate if the OFF configurator is connected to the ZB1, ZB2, ZB3 or the ZB4 configurator sockets.
2. Yellow LEDs for notification of activation of the corresponding relays.
3. Configurator socket.
4. Removable clamp for BUS connection SCS.

Configuration

In the same way as for the 2-relay actuator, it is necessary to connect the two configurators that identify the item address, and the number of the zone the item belongs to, to the **ZA** and **ZB** sockets. A probe and an actuator belonging to the same zone will require the same numeric configurators in the **ZA** and **ZB** sockets.

On the front of the 4-relay actuator are six sockets dedicated to the configurators: **ZA**, **ZB1**, **ZB2**, **ZB3**, **ZB4**, **N**. The configuration sockets are distributed on the four relays in the following way:

ZA ZB1 Relay 1 zone address
ZA ZB2 Relay 2 zone address
ZA ZB3 Relay 3 zone address
ZA ZB4 Relay 4 zone address
N progressive zone number

The relays on the device are independent and may be used to activate four separate loads with ON/OFF function. Therefore, if all **ZB** configurators are different from each other, the four relays are configured to control four loads in four different zones. The diagram shows the correspondence between the configurator sockets and the contacts of the relays. The operation of one or more relays may be excluded. To do this, connect

the OFF configurator to the **ZB** socket corresponding to the relay not being used. However, RL1 cannot be excluded.

The actuator may also be used to control two single loads with Open/Close function, such as, for example, solenoid valves with opening and closing control. For the management of these load it will be necessary to configure the actuator with logic relay interlocking, connecting two consecutive identical configurators in the **ZB** socket, therefore **ZB1=ZB2** and **ZB3=ZB4**. For the use of the contacts consider C1 and C2 for the opening and the closing of the first valve respectively, and contacts C3 and C4 for the opening and the closing of the second valve.

The contacts of the relays perform different functions if the actuator is used to control fan-coils. To activate this function, connect 4 identical configurators to the ZB position, therefore **ZB1=ZB2=ZB3=ZB4**.

The C1 contact is an ON/OFF type contact and controls the valve, controls C2, C3 and C4 control the minimum, medium and maximum ventilation speeds respectively.

Actuator 4 relays

The ventilation speed is selected automatically by the temperature control function based on the difference between the user set temperature and the room temperature. This actuator cannot be used to control the system circulation pump (configurator in zone **00**), and to control separate loads belonging to the same zone.

configurator socket RL1	**ZA** **ZB1**	1	common
configurator socket RL2	**ZA** **ZB2**	2	C1 contact RL1
configurator socekt RL3	**ZA** **ZB3**	3	C2 contact RL2
configurator socket RL4	**ZA** **ZB4**	4	C3 contact RL3
		5	C4 contact RL4

Configurator summary table:

Socket	Function	Configurator
ZA	zone address	0 – 9
ZB1	zone address - ON/OFF contact management - Open/Close contact management - Fan-Coil management - OFF zone	0 – 9 – OFF
ZB2	zone address - ON/OFF contact management - Open/Close contact management - Fan-Coil management - OFF zone	0 – 9 – OFF
ZB3	zone address - ON/OFF contact management - Open/Close contact management - Fan-Coil management - OFF zone	0 – 9 – OFF
ZB4	zone address - ON/OFF contact management - Open/Close contact management - Fan-Coil management - OFF zone	0 – 9 – OFF
N	progressive zone number	1 – 9

Example 1

Configuration and connection of the 4-relay actuator, for the control of four solenoid valves (ON/OFF type) in four different zones (zone 11, zone 12, zone 15 and zone 18). The progressive zone number is 1.

Legend
1. actuator
2. zone 11 solenoid valve
3. zone 12 solenoid valve
4. zone 15 solenoid valve
5. zone 18 solenoid valve
6. zone 11 radiator
7. zone 12 radiator
8. zone 15 radiator
9. zone 18 radiator

Actuator configuration

ZA	ZB1	ZB2	ZB3	ZB4	N	RL1/C1	RL2/C2	RL3/C3	RL4/C4
1	1	2	5	8	1	ON/OFF	ON/OFF	ON/OFF	ON/OFF
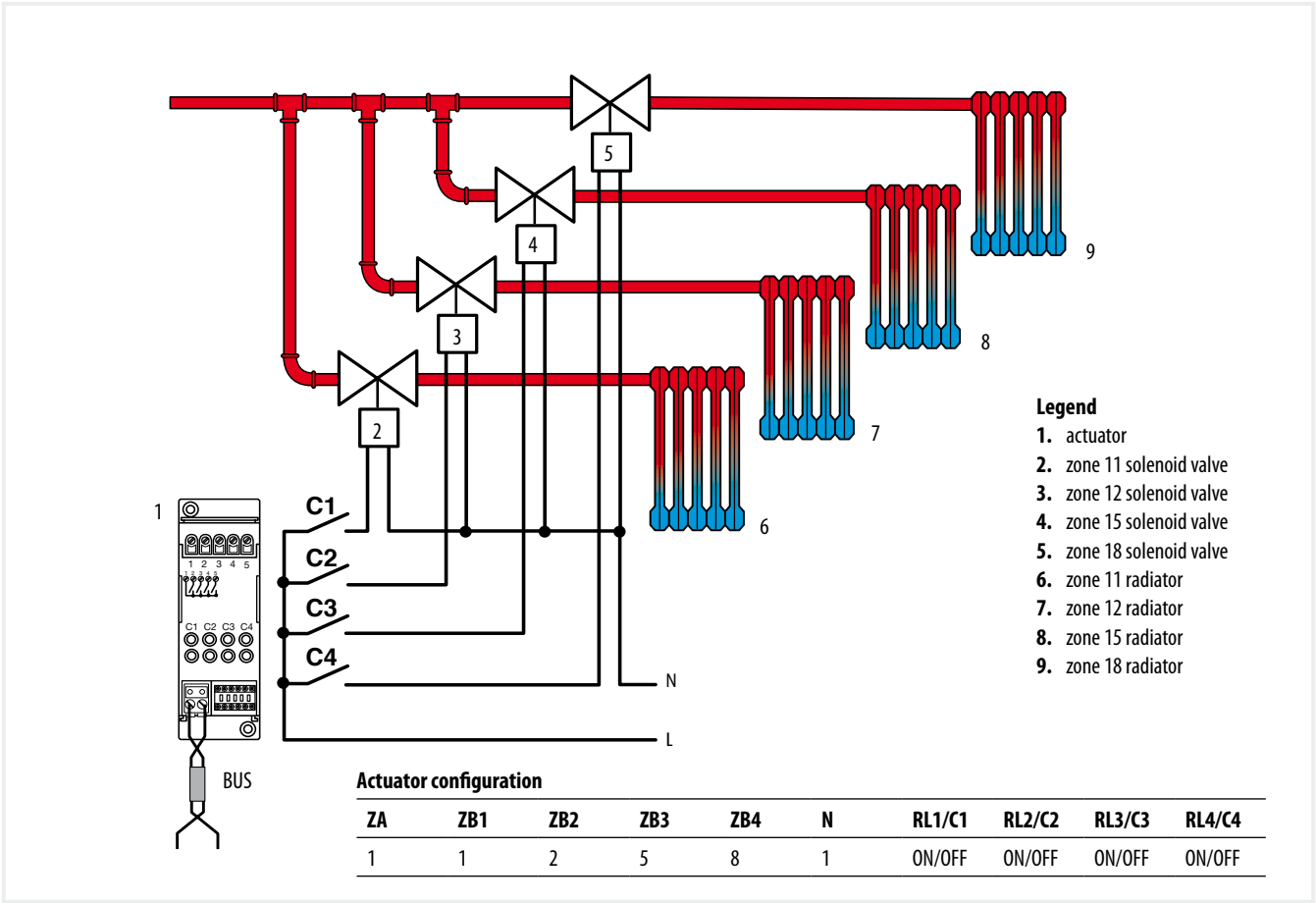
Example 2

Configuration and connection of the 4 interlocking relays actuator for the control of two solenoid valves, with opening and closing control in zones 2 and 3.
The progressive zone number is 2.

Legend
1. actuator
2. zone 2 solenoid valve
3. zone 3 solenoid valve
4. zone 2 radiator
5. zone 3 radiator

Actuator configuration

ZA	ZB1	ZB2	ZB3	ZB4	N	RL1/C1	RL2/C2	RL3/C3	RL4/C4
0	2	2	3	3	2	OPEN	CLOSE	OPEN	CLOSE
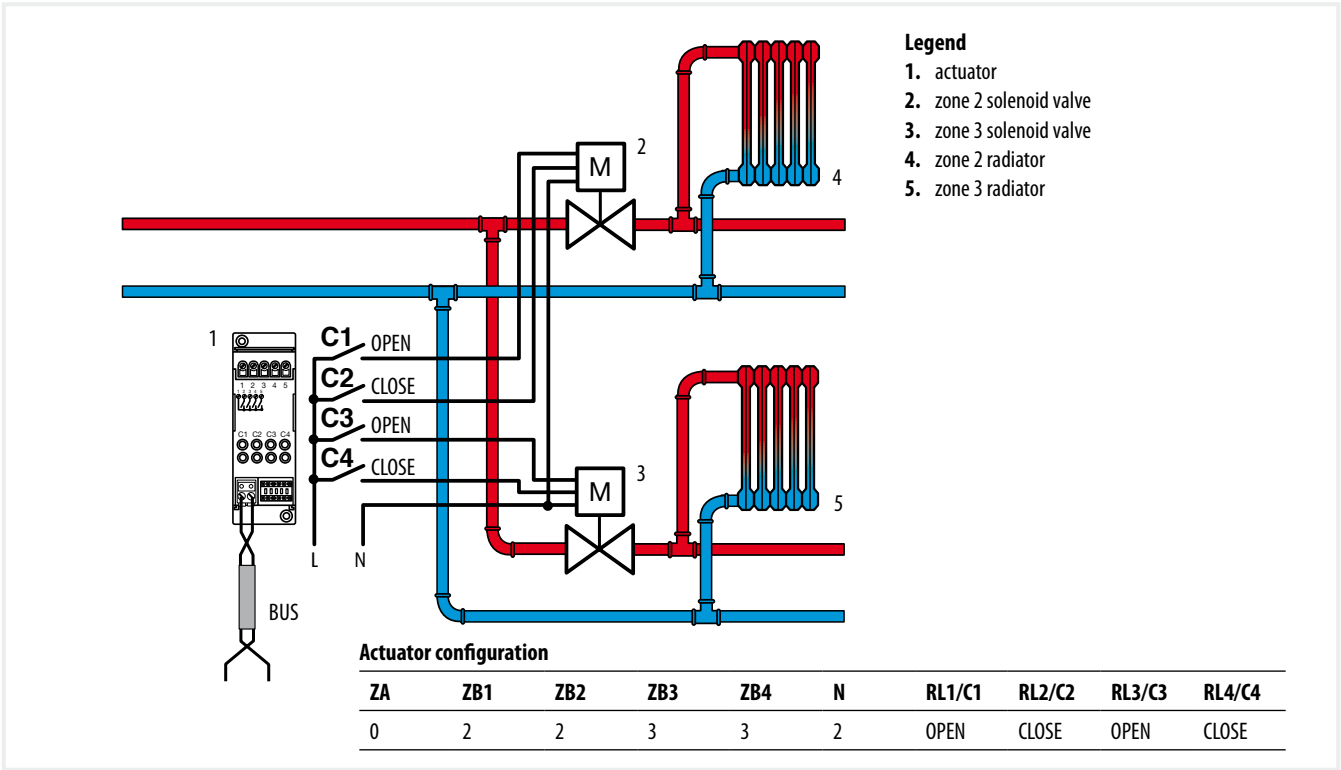
Example 3

Configuration and connection of the 4-relay actuator, for the control of a 3 speed fan-coil in zone 69. The progressive zone numbers is 4.

Legend
1. actuator
2. 2-pipe 3-speed fan-coil

Note

If a fan-coil is used in a heating system, it should be ensured that the fan does not operate when the water is cold, to avoid cooling the room rather than heating it. Some fan-coils are fitted with a water temperature probe for this function. If a fan-coil without fitted sensor is used, an effective solution is to install an immersion thermostat on the water return pipe. The contact of the thermostat controls a remote switch, to which the fan-coil power supplies are connected.

Actuator configuration

ZA	ZB1	ZB2	ZB3	ZB4	N	RL1/C1	RL2/C2	RL3/C3	RL4/C4
6	9	9	9	9	4	Valve	Minimum speed fan	Medium speed fan	Maximum speed fan

Actuator 4 relays

Example 4

Configuration and connection of two 4-relay actuators (one for the cooling, and one for the heating system), for the control of a 4-pipe, 3 speed fan-coil. For both actuators the corresponding zone is 28. The progressive number for the cooling actuator is 5, while for the heating actuator is 6.

The C1 contact of each actuator controls the corresponding solenoid valve, selected by the temperature control function based on the system setting (summer or winter). The C2, C3 and C4 contacts of the two actuators must be connected in parallel, to control the switching on and the speed of the ventilation system electric motor.

Legend
1. refrigerator (chiller)
2. boiler
3. cooling actuator
4. heating actuator
5. 4-pipe fan-coil

Note

If a fan-coil is used in a heating system, it should be ensured that the fan does not operate when the water is cold, to avoid cooling the room rather than heating it. Some fan-coils are fitted with a water temperature sensor for this function. If a fan-coil without fitted sensor is used, an effective solution is to install an immersion thermostat on the water return pipe.
The contact of the thermostat controls a remote switch, to which the fan-coil power supplies are connected.

Cooling actuator configuration

ZA	ZB1	ZB2	ZB3	ZB4	N	RL1/C1	RL2/C2	RL3/C3	RL4/C4
2	8	8	8	8	5	Valve	Minimum speed fan	Medium speed fan	Maximum speed fan

Heating actuator configuration

ZA	ZB1	ZB2	ZB3	ZB4	N	RL1/C1	RL2/C2	RL3/C3	RL4/C4
2	8	8	8	8	6	Valve	Minimum speed fan	Medium speed fan	Maximum speed fan

Description

This actuator can be used in temperature control systems to control different types of loads based on requirements.

Thanks to the 8 relays it is fitted with, the actuator can control:

- up to 8 On/off valves
- up to 4 Open/Close or 3-point valves
- up to 2 x 2-tube fan-coils with On/Off valves (4+4 relays)
- 1 x 2-tube fan-coil with 3-point valves (5 relays)
- 1 x 4-tube fan-coil with 2 On/Off valves (relays)
- 1 x 4-tube fan-coil with 2 x 3-point valves (7 relays).

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption:	15 mA
Max. absorption:	100 mA
Operating temperature:	(+5) – (+40) °C
Maximum driven power:	4 A (resistive); 1 A (inductive)

Dimensional data

4 DIN modules

Configuration

◎	**ZA**	◎
◎	**ZB**	◎
◎	**N**	◎
◎	**LOAD**	◎

ZA, ZB = Actuator address
N = Progressive zone number
LOAD = Type of load

LOAD = 0   Control of one 4-tube fan-coil with 2 On/Off valves

OUT1	Fan speed 1
OUT2	Fan speed 2
OUT3	Fan speed 3
OUT4	Heating valve
OUT5	Cooling valve
OUT6	Not used
OUT7	Not used
OUT8	Not used

LOAD = 1   Control of one 2-tube fan-coil with 3-point valves

OUT1	Fan speed 1
OUT2	Fan speed 2
OUT3	Fan speed 3
OUT4	Valve opening
OUT5	Valve closure
OUT6	Not used
OUT7	Not used
OUT8	Not used

LOAD = 2   Control of one 4-tube fan-coil with 3-point valves

OUT1	Fan speed 1
OUT2	Fan speed 2
OUT3	Fan speed 3
OUT4	Heating valve opening
OUT5	Heating valve closure
OUT6	Cooling valve opening
OUT7	Cooling valve closure
OUT8	Not used

Note: better configuration possibilities, including the management of other types of loads, or the configuration of the free outputs, are available using MyHOME_Suite (in this case the described applications must be fully configured using a PC), starting from verion 1.3, which can be downloaded from the website www.homesystems-legrandgroup.com
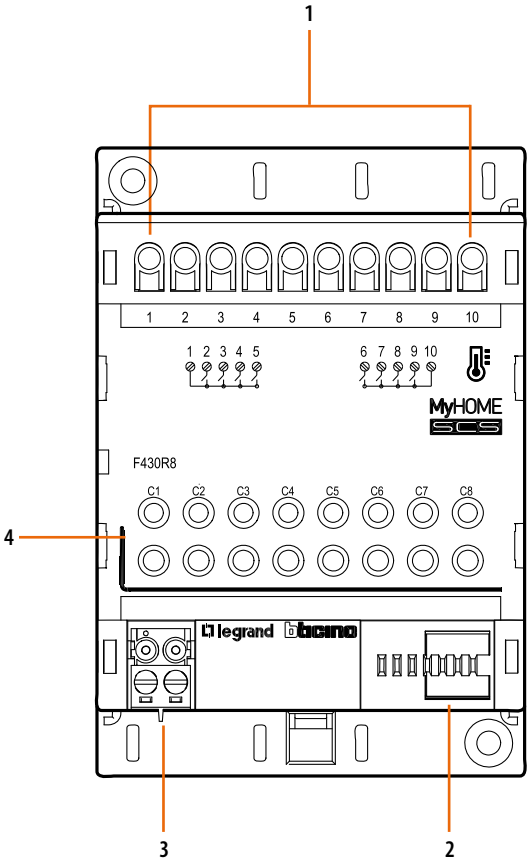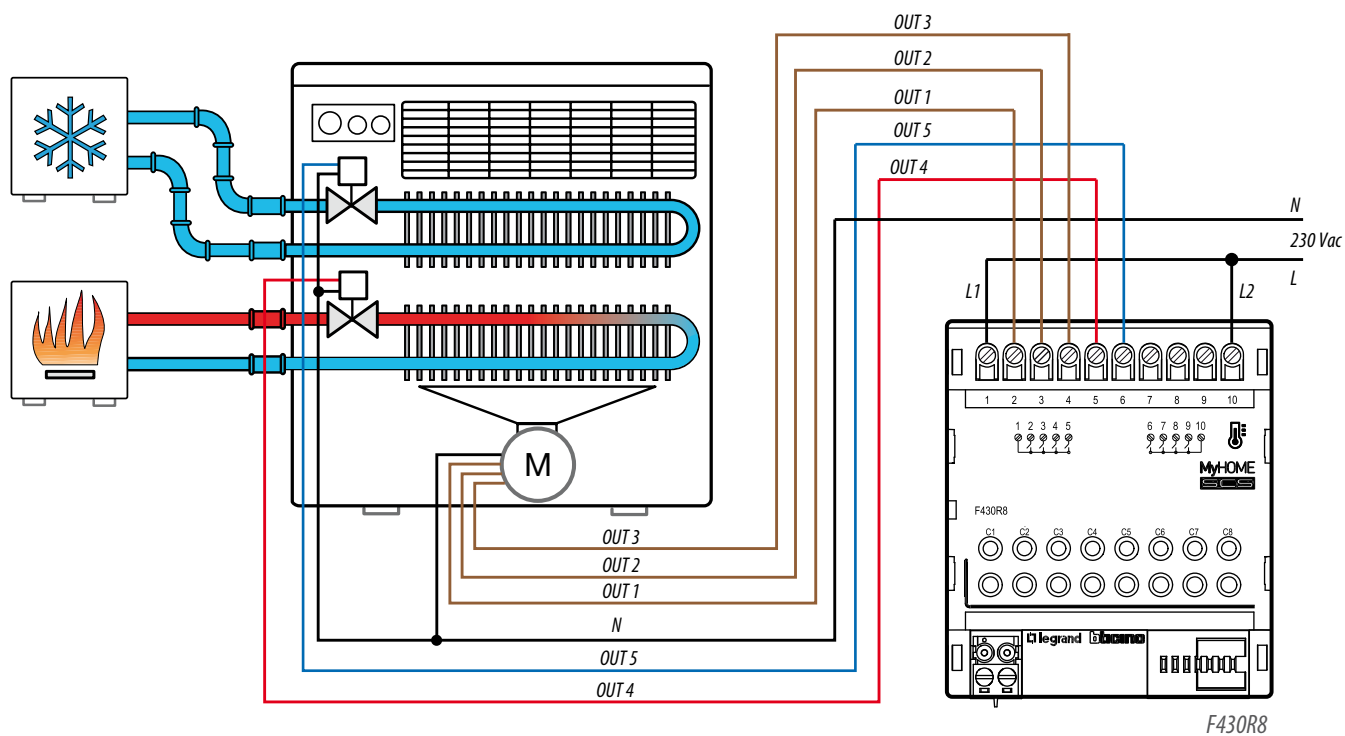

Legend

1. Outputs 1–8 + 2 common contacts
2. Configurator socket
3. BUS
4. Pushbuttons

Wiring diagrams

Example of connection of a 4-tube fan-coil with On/Off valves.

F430R8

Fan-coil actuator with 0-10 V valves

F430R3V10

Description

DIN modularity actuator to be used in temperature control systems for the control of 2-tube or 4-tube fan coils with 0-10 V valves

It has with 3 relays for the managementof the fan-coil fan, and 2 x 0-10 V outputs for the control of the valves.

In systems with 2-tube fan-coils the H output is used both for heating and cooling.

In systems with 4-tube fan-coils the H output must be used to control the heating valve, while the C output for the cooling valve.

The LEDs indicate respectively the status of the valves and the active speed of the fan-coil fan.

Technical data

|	
Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption:	20 mA
Max. absorption:	60 mA
Operating temperature:	$(+5) - (+40)$ °C
Maximum current supplied by each 0-10 V output:	1 mA
Maximum driven power for the relays:	4A (resistive); 1A (inductive)

Dimensional data

4 DIN modules

Configuration

◎	ZA	◎
◎	ZB	◎
◎	N	◎
◎	LOAD	◎

ZA, ZB = Actuator address
N = Progressive zone number
LOAD = Type of load
    LOAD = 0; control of one 4-tube fan-coil with 0-10 V valves
    LOAD = 1; Control of one 2-tube fan-coil with 0-10 V valves

Virtual configuration using the MyHOME_Suite software:

The device can be configured remotely only if not already physically configured. The configuration is completed using version 1.3 or higher of the MyHOME_Suite software, which can be downloaded from the website www.homesystems-legrandgroup.com.
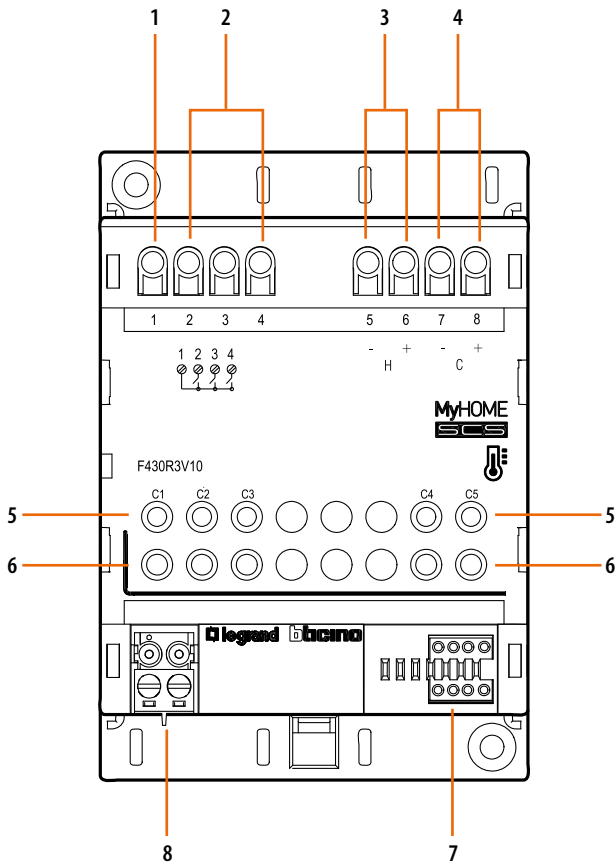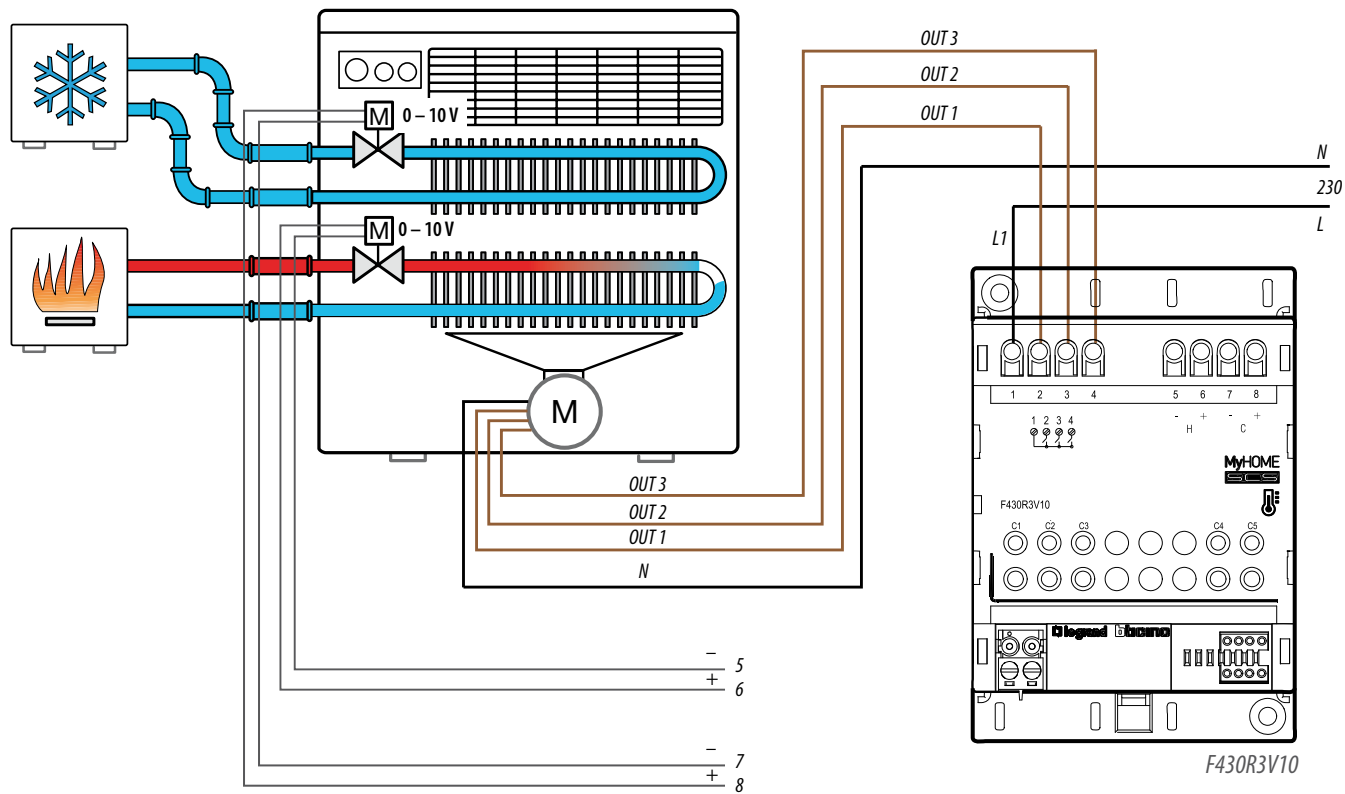

Legend

1. Common contact
2. Fan-coil fan speed
3. Output H 0-10 V heating
4. Output C 0-10 V cooling
5. Pushbuttons for the complete opening/closure of the valves, and for changing the fan speed
6. LED
7. Configurator socket
8. BUS

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Wiring diagrams

Example of connection of a 4-tube fan-coil with 0-10 V valves.

F430R3V10

Actuator for 0-10 V valves

F430V10

Description

DIN module actuator for the control of 0-10 V valves in temperature control systems
It has two 0-10 V outputs, two control pushbuttons for manual opening/closing of each valve and the corresponding status LEDs.

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption:	19 mA
Max. absorption:	25 mA
Operating temperature:	(+5) – (+40) ℃
Outputs:	2 x 0 – 10 V
Maximum current on each output:	1 mA

Configuration

Physical configuration.

◎	**ZA1**	◎
◎	**ZB1**	◎
◎	**N1**	◎
◎	**ZA2**	◎
◎	**ZB2**	◎
◎	**N2**	◎

ZA1, ZB1 = Zone address 1
N1   = Progressive zone number for output 1
ZA2, ZB2 = Zone address 2
N2   = Progressive zone number for output 2

Virtual configuration using the MyHOME_Suite software:

The device can be configured remotely only if not already physically configured. The configuration is completed using version 1.3 or higher of the MyHOME_Suite software, which can be downloaded from the website www.homesystems-legrandgroup.com.
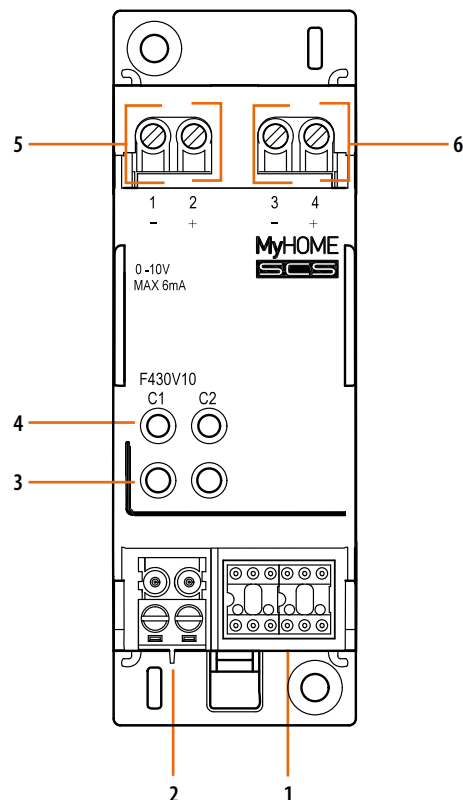
Legend

1. Configurator socket
2. BUS
3. LED
4. Pushbuttons
5. Valve 1 output
6. Valve 2 output

Radio interface
for outdoor temperature probes

<div align="right">

HD4577   HS4577   N4577
HC4577   L4577   NT4577

</div>

Description

The radio interface is indispensable to receive the temperature data transmitted by the radio probe. Up to two probes can be associated with each interface thus giving the system two measuring points for each interface. Up to nine temperature probes can be installed in a system.

Both the interface and the communication probe use radio waves with a frequency of 868 MHz. The maximum distance of communication between the receiving interface and the temperature sensor is 70 m in free air. This distance is less if there are walls in cement, metal or other material between the devices.

Technical data

- Power supply from SCS BUS: 27 Vdc
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Max. absorption: 33 mA
- Operating temperature: 0 – 40 °C
- Radio frequency: 868 MHz
- Range: 70 m in free field (metal walls and surround plates and reinforced concrete walls reduce the range);
- Size: 2 flush mounted modules

Configuration

In order to use a receiving interface and radio probe, configuration must first be performed, followed by the programming procedure. Only the interface needs configuring. Up to 2 probes may be combined with each interface, therefore providing the system with two detection points for each interface. Up to a maximum of 9 temperature sensors may be installed in one system.

The configuration sockets on the interface identify the radio probes address.
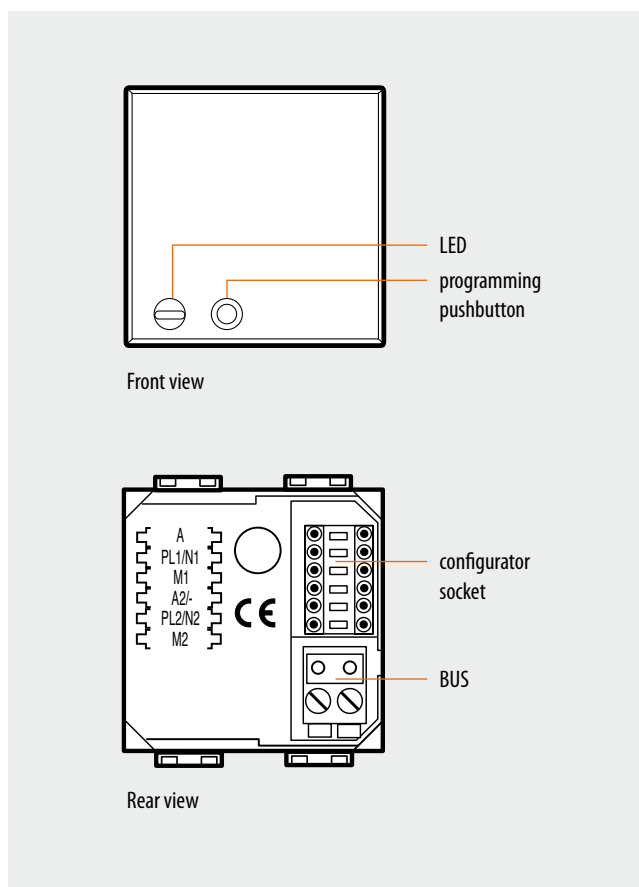
They are: A1/-, PL1/N1, M1 for the first address, and A2/-, PL2/N2, M2 for the second address. The two addresses must always be different from each other, PL1/N1 ≠ PL2/N2. Only one radio probe may be associated to each address. Only used addresses must be configured.

The interface must be configured in temperature control mode by connecting configurator 1 to M1 and M2. With this mode the A1/- and A2/- sockets are not used, therefore no configurator needs to be connected.

Programming of devices:

After performing the configuration, it will be necessary to associate The radio probe to the interface following the programming procedure below:

1) Press the pin pushbutton of the interface for 5 seconds. The red LED turns on. Release the pushbutton. The interface LED will flash every two seconds to confirm that programming mode is active on the first address (group of configurators PL1/N1, M1). If the second address of the interface is not configured (no configurator is connected to the PL2/N2, M2 positions), go to step 2 of the procedure.
However, if also the second address must be configured (group of configurators PL2/N2, M2), simply press the pin pushbutton of the interface again.
The LED will flash twice in succession every two seconds.
Every time the pin pushbutton is pressed, the system will switch from the first to the second address and vice versa.

2) After choosing the address the radio probe should be associated to, within 20 seconds press the transmission key of the probe itself. Pressing the transmission key will send the probe serial code. After receiving the code through the radio signal, the red LED of the interface will quickly flash for 2 seconds, confirming that programming is complete, and the procedure has been terminated.

Front view

Rear view

If necessary repeat the operation, to save the code of another probe. If on the other hand an address has already been associated and the procedure is repeated with another probe, the interface performs an overwriting action, only keeping the last probe in the memory. During normal operation, the sending of information from the probe is confirmed by the flashing of the red LED of the interface. A single flashing indicates that the radio message has been received, and the "temperature" data has been sent through the BUS by a probe associated to the **PL1/N1, M1** address. A double flashing indicates that the radio message has been received, and the "temperature" data has been sent through the BUS by a probe associated to the **PL2/N2, M2** address. To delete all codes from the interface press the pin pushbutton for 12 seconds. After 5 seconds from pressing the key, the LED will turn on steadily, and after a further 7 seconds, it will start flashing quickly, confirming that all programs have been deleted.

NOTES:
- If the interface configuration is wrong, the red LED will flash. Correct the configuration.
- If the second interface address has not been configured (no configurator connected to the **PL2/N2, M2** sockets), during the programming procedure it will not be possible to switch to this address, which therefore cannot be programmed.

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Thermostat with display

Thermostat with display for the control of the room temperature in temperature control systems.

This device can be used both if a temperature control central unit is present or not present; when appropriately configured it can be used as:
- MyHOME temperature control system probe;
- Hotel room thermostat;
- Residential system thermostat.

It has 4 keys that can be used to select the desired temperature and the various operating modes; when used with fan-coils it can manage the fan speed.

The thermostat can manage different operating modes: both automatic and manual, in addition to the Eco, Comfort, Antifreeze/Thermal protection, and OFF.

It can also be used in mixed heating/cooling systems, if the two functions are available at the same time on the same system.

A contact is also available on the back of the device, to change the operating mode of the thermostat (e.g. window contact, summer/winter switching, etc.).

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Absorption:	14 mA with display off
	16 mA with low brightness display
	30 mA with high brightness display
Operating temperature:	0 – 40 ℃
Size:	2 module flush mounted
Recommended installation height:	150 cm from the ground
Controllable loads:	On/Off, Open/Close, 3-point or 0-10V valves.
	2-tube and 4-tube fan-coils with On/Off, 3-point, or 0-10V valves.
	Gateway Climaveneta.
	Fil Pilote.

Correlated devices

The thermostat must be used with the following actuator devices:
- F430/2: ON/OFF relay actuator;
- F430/4: ON/OFF 4-relay actuator;
- F430R8: ON/OFF 8-relay actuator;
- F430R3V10: ON/OFF 3-relay actuator with 2 x 0-10V outputs;
- F430V10: actuator with 2 x 0-10V outputs;
- F430FP: actuator for Fil Pilote devices
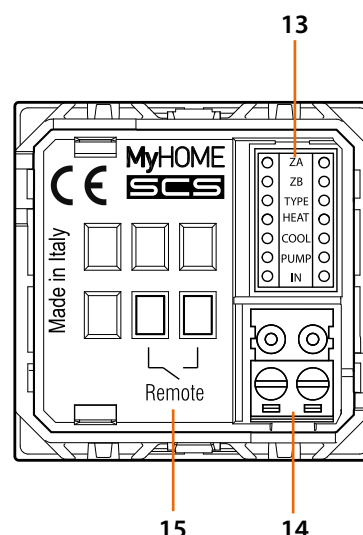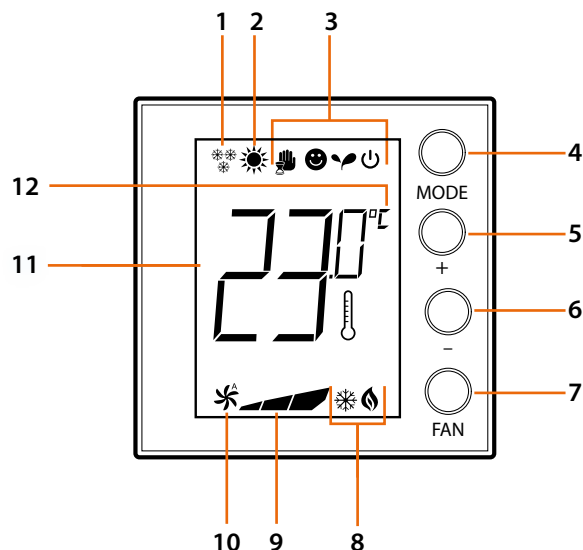
Legend

1. Heating function
2. Cooling function
3. Operating mode icons
4. MODE key: a short pressure changes the mode of operation of the device; an extended pressure (unless used as MyHOME probe) changes the function
5. + key: increase the set value
6. – key: decrease the set value
7. FAN key: set the fan coil speed on 3 levels + automatic
8. Heating/cooling on indicator
9. Fan coil speed indicator, 3 levels
10. Fan coil in automatic mode indicator
11. Measured (thermometer symbol on) / set (thermometer symbol off) temperature indicator
12. Unit of measure: ℃ or °F
13. Configurator socket
14. BUS connection
15. Local contact

Configuration

The thermostat can be configured:

- Through physical configuration, by connecting the configurators to the appropriate housings on the back of the device. This quick mode is ideal for basic functions, and gives the possibility of setting, in addition to the zone address, also a heating load, a cooling load, up to 2 system pumps, and a quick function for the remote contact.
- Using MyHOME_Suite (*), where a dedicated wizard will guide the user through the procedure for correctly configuring the device. The MyHOME_Suite software gives the possibility of customising the device and provides a higher degree of functionality, such as:
- The possibility of changing some default parameters (select the unit of measure for the temperature, change the permitted operating temperature, manage the backlighting level, disable some device pushbuttons, etc.).
- Configure a higher number of loads (up to 9 heating and/or cooling actuators and 9 pumps), and assign slave probes (max. 9).
- Enable advanced functions, like automatic switching between heating and cooling.
- Manage dedicated fan-coil settings (e.g. fan speed change threshold settings, or fan activation delay, etc.).
- Set a delay or a timeout for the actions generated by the status change of the remote contact (in addition to allowing a higher number of combinations than through the physical configuration).

1.1 ADDRESSING

By connecting two configurators with value 0-9 in the ZA and ZB sockets, it is possible to set the device address. The controlled actuators will have to be configured with the same address.

Socket	Function	Physical configuration
ZA/ZB	Zone address	from 01 to 99

1.2 OPERATING MODE

By configuring the positions **TYPE, HEAT, COOL, PUMP and IN**, it is possible to set the desired operating modes and the types of loads to manage.

TYPE=Type of operation

Parameter/setting	Physical configuration
MyHOME temperature control system probe [(1)]	0
Hotel room thermostat	1
Residential system thermostat	2

(1) If the device is used as a MyHOME system probe with temperature control central unit, the subsequent positions HEAT, COOL, and PUMP must not be configured. The settings for actuators and pumps will be defined directly from the central unit menu.

HEAT= Heating load. Configure the corresponding actuator with N=1.

Parameter/setting	Physical configuration
No device	0
ON/OFF valve	1
Open/Close valve	2
2-tube fan-coil with ON/OFF valve	3
Gateway	4
Fil Pilote	5
2-tube fan-coil with 3-point or 0-10V valve	6
4-tube fan-coil with ON/OFF valves	7
4-tube fan-coil with 3-point or 0-10V valves	8
3-point or 0-10V valve	9

COOL= Cooling load. For the configurations from 1 to 9 configure the corresponding actuator with N=2. In case of CEN configurator the actuator will be N=1.

Parameter/setting	Physical configuration
No device	0
ON/OFF valve	1
Open/Close valve	2
2-tube fan-coil with ON/OFF valve	3
Gateway	4
2-tube fan-coil with 3-point or 0-10V valve	6
4-tube fan-coil with ON/OFF valves	7
4-tube fan-coil with 3-point or 0-10V valves	8
3-point or 0-10V valve	9
Same load managed for heating and cooling [(2)]	CEN

(2) in case of common heating/cooling load, the configurator set in the HEAT position will have to be different from 0 (no device) or 5 (Fil Pilote).

PUMP= Number and types of pumps to control

Parameter/setting	Physical configuration
No device	0
Pump with N= 1 For heating [(3)]	1
Pump with N= 2 For cooling	2
Pump with N= 1 For heating + pump with N= 2 For cooling [(3)]	3
Pump with N= 1 For both heating and cooling [(3)]	4

(3) With this mode it is not possible to define the Fil Pilote device in the HEAT position (configurator 5)

IN= Function activated by the change of status of the contact on the back of the device

Contact status/function		Physical configuration
OPEN	**CLOSED**	
Contact disabled	Contact disabled	0
Thermal protection	Return to the previous status	1
OFF	Return to the previous status	2
ECO	Return to the previous status	3
COMFORT	Return to the previous status	4
Switch to heating [(4)]	Switch to cooling	5

(4) This function cannot be selected when the device is used as probe in MyHOME systems with temperature control central unit.

Note (*):   -   software downloadable from the website www.homesystems-legrandgroup.com;
-   the functions are available from version 1.3.

Probe with selector

Description

The device can adjust the room temperature in both winter and summer, varying the settings locally with respect to those received from the central unit.

The item has a knob for the local temperature selection (limited to ± 3°C with respect to the value set by the central unit), the antifrost mode and the OFF mode. There are two LED, one green and one yellow, on the front of the item. The green LED indicates that the device is working correctly and the activation of the antifrost mode and OFF of the corresponding area. The yellow LED indicates the actuator state and any faults.

OFF mode

This mode has the maximum priority, whether selected by the probe or set by the central unit; to quit the OFF mode use the device which set it.

Antifrost/thermal protection mode

In this position if the Temperature control system is set as heating the probe works in antifrost mode; if it is set as cooling it works as thermal protection. The probe can also work in collaboration with other probes in "master" configuration to allow the Central unit to calculate an average of the temperature over several measuring points. This function is useful for managing very large rooms, inside which the temperature can vary appreciably.

If there is a fault on the central unit, the probe works with the last settings received, thus continuously maintaining the last temperature determined with summer or winter setting.

If the probe selects the OFF mode this has priority even if the central unit is faulty, thus the zone controlled by the probe will remain OFF.

The probe can be used to control a zone with up to 9 actuators of the same type, and 8 slave probes (4693, 573921, 573920 and 067458).

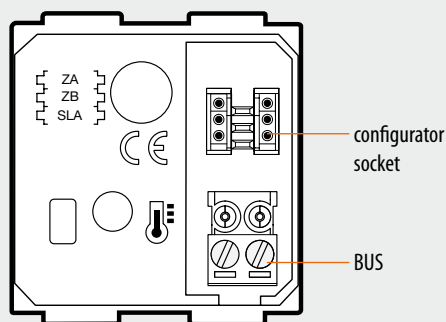Related articles:
682 46 (Cover White)
685 46 (Cover Titanium)

Front view

Rear view

configurator socket

BUS

NOTE: compared with the previous version, the P, MOD and DEL configurator sockets have been removed.

Legend

1. Key in the low position to enable virtual configuration
2. Knob: for manual temperature setting (± 3°C), to select the antifrost/thermal protection (❄) mode and the OFF state (forced zone off).
3. Yellow LED: when it shines steadily or it is OFF it signals the state of the devices in the corresponding zone, when it flashes it signals a fault.
4. Green LED: when it shines steadily it indicates that the device is active, when it flashes it indicates that the OFF or antifrost modes are set locally.

Technical data

- Power supply from SCS BUS: 27 Vdc
- Operating power supply with SCS BUS cable: 18 – 27 Vdc
- Absorption: 6 mA
- Operating temperature: 0 – 40°C
- Size: 2 modules
- Installation height: 1500 m from the floor

Probe with selector

Configuration

The probe must always be configured by connecting two configurators to the ZA and ZB sockets, which identify the device address, and the number of the zone controlled by the probe itself. The actuators controlled by the probes must be configured with the same zone address.

Socket	Function	Configurators
ZA	zone address	0 – 9
ZB	zone address	0 – 9
SLA	Master/Slave mode	0 – 8

The probe can be configured remotely with "Virtual Configuration". When no physical configurators are available, a PC with Virtual Configurator software version 2.1 must be used.

Programming

Using the "Configure zones" item of the "Maintenance" menu of the temperature control system central unit, it will be possible to define if the zone should manage a heating system, a cooling system, or a combined one.Using the same menu item, also select the type of load to control, among the following: ON/OFF, OPEN/CLOSE, 3SP FAN-COIL. When performing programming operations from the central unit, refer to the installation manual supplied with the central unit itself.

Master and Slave probe

A probe can operate in conjunction with other probes so that an average temperature calculation can be performed, based on measurements taken from several points within the same zone. This function is useful for the management of very large areas, throughout which the temperature may change consistently. To activate this function, one probe must be configured as "Master", and one or more probes must be configured as "Slave" (max 8). The Master probe calculates the average between its own temperature, and the temperatures measured by the Slave probes, and then performs the appropriate operations. Configure the Master probe by connecting to the SLA socket a numeric configurator indicating the number of Slave probes within the zone (8 max). To configure a Slave probe, connect the configurator marked as SLA to the MOD socket. Use the SLA socket to progressively assign a number to all Slave probes of the zone. During this numbering procedure, it is essential to start from no. 1, and that the sequence is respected, without missing any numbers. **The HC/HS/L/N/NT4692 and AM5872 probe can only operate as "MASTER" probes. Therefore only the probe without knob, item 4693, may be used as a "SLAVE" probe.**

Example of configuration of a zone (address 47), with one Master, and three Slave probes.

To define the probes as belonging to ZONE 47, connect configurators 4 and 7 to the ZA and ZB sockets of the 4 devices. The SLA configurator must be connected to the MOD sockets of the three Slave probes (definition of Slave probes).

Connect configurator no. 3 to the SLA socket of the Master probe (there are three Slave probes inside the zone); Connect configurators no. 1, 2, and 3 to the SLA sockets of the three Slave probes respectively (progressive number of the probe within the zone).

MASTER PROBE — t ROOM = 20℃
SLAVE 1 PROBE — t ROOM = 18℃
SLAVE 2 PROBE — t ROOM = 19℃
SLAVE 3 PROBE — t ROOM = 21℃
AVERAGE t = 19.5℃
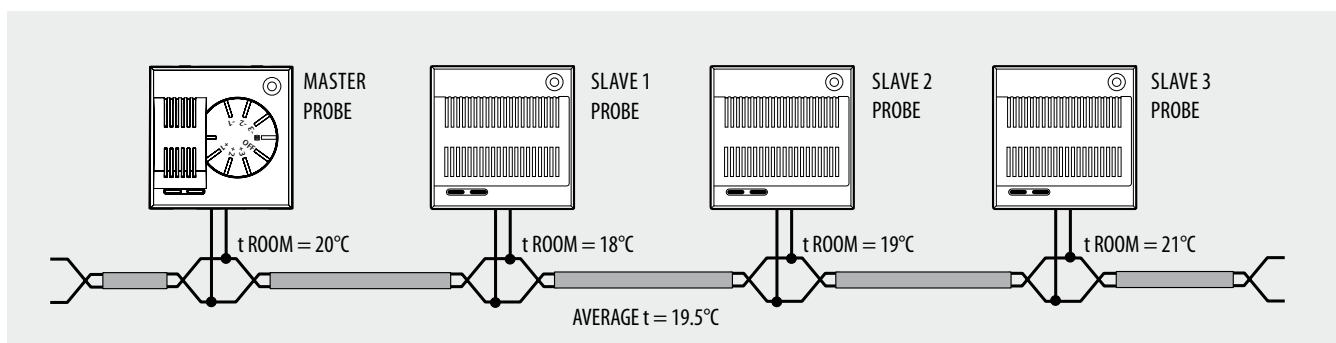
Master probe (HC/HS/L/N/NT4692, AM5872, 573923, 573922 and 067457)		Slave 1 probe (HC/HS/L/N/NT4693, 573921, 573920 and 067458)		Slave 2 probe (HC/HS/L/N/NT4693, 573921, 573920 and 067458)		Slave 3 probe (HC/HS/L/N/NT4693, 573921, 573920 and 067458)	
Socket	Configurators	Socket	Configurators	Socket	Configurators	Socket	Configurators
ZA	4	**ZA**	4	**ZA**	4	**ZA**	4
ZB	7	**ZB**	7	**ZB**	7	**ZB**	7
SLA	3	**SLA**	1	**SLA**	2	**SLA**	3
		MOD	SLA	**MOD**	SLA	**MOD**	SLA

Probe with selector

5739 22 (White)	**067457**	**HC4692**	**L4692**	**NT4692**
5739 23 (Magnesium)	**HD4692**	**HS4692**	**N4692**	**AM5872**

Circulation pump

In addition to controlling the zone valves, for some types of systems it will also be necessary to control one or more water circulation pumps. When programming the operating mode of the circulation pumps is not necessary to connect any special configurators: it will be sufficient to use the central unit through the "Pump" item; inside the "Maintenance" menu, select the zones that must be served by a circulation pump. Using the programming procedure, set a logic link between the zones, and the pump that hydraulically supplies them. To complete the programming procedure, the pump management mode must also be selected, thus defining if the pump supplies a heating, a cooling, or a combined system. Depending on the needs of the hydraulic system, one "circulation pump" or "several circulation pumps" may be installed, to supply one or more zone groups. If necessary, it is also possible to set a "pump switch-on delay", in relation to the opening of the zone valves. In the following cases, pump control is not necessary:

- in systems where the pump is always in operation (thanks to water recirculation hydraulic systems, or the presence of three-way valves);
- in systems where the pump is managed automatically (it comes on by itself when water is required, and turns off again when all valves are closed);
- in systems where the pump has simply not been installed (for example for air conditioning units or electric heating control).

Pump switch-on delay

If necessary, it is also possible to set the circulation pump to activate after a certain time delay, in relation to the opening of the zone valves. This selection depends on the type of valve installed, and enables the pump to only activate once the valve is fully open. If a time delay of 4 minutes is set, after closing the relay controlling the opening of the zone valve, the probe will wait 4 minutes before switching the pump on. A maximum delay of 9 minutes can be set, depending on the time needed for the valve to open. For the opening times refer to the official technical specifications issued by the solenoid valve manufacturer.

Probe calibration

Probes don't normally require calibration; however, in particular installation situations (perimeter walls, north or south facing walls, when close to heat sources, etc.), the temperature value measured may be corrected using the appropriate calibration function, which can be found in the central unit menu.

Before performing the calibration operation, ensure the following:

- leave the probes connected and powered with the hydraulic system off for at least 2 hours. During this time, avoid any changes in the room temperature (e.g. by opening or closing windows, doors, etc.), and avoid standing near them;
- for the calibration use a calibrated sample thermometer, correctly positioned inside the room.

Note: For more details on the calibration procedure and the programming operations using the central unit, refer to the installation manual of the central unit.

Fan-coil probe with selector

067455	**HD4692FAN**	**HS4692FAN**	**N4692FAN**
5739 25 (Magnesium)	**5739 24 (White)**	**HC4692FAN**	**L4692FAN**	**NT4692FAN**

Description

The device can adjust the room temperature in both winter and summer, varying the settings locally with respect to those received from the central unit.

The item has a knob for the local temperature selection (limited to ± 3°C with respect to the value set by the central unit), the antifrost mode and the OFF mode. There are two LED, one green and one yellow, on the front of the item. The green LED indicates that the device is working correctly and the activation of the antifrost mode and OFF of the corresponding area. The yellow LED indicates the actuator state and any faults.

OFF mode

This mode has the maximum priority, whether selected by the probe or set by the central unit; to quit the OFF mode use the device which set it.

Antifrost/thermal protection mode

In this position if the Temperature control system is set as heating the probe works in antifrost mode; if it is set as cooling it works as thermal protection. The probe can also work in collaboration with other probes in "master" configuration to allow the Central unit to calculate an average of the temperature over several measuring points.

This function is useful for managing very large rooms, inside which the temperature can vary appreciably.

If there is a fault on the central unit, the probe works with the last settings received, thus continuously maintaining the last temperature determined with summer or winter setting.

If the probe selects the OFF mode this has priority even if the central unit is faulty, thus the zone controlled by the probe will remain OFF.

The probe can be used to control a zone with up to 9 actuators of the same type, and 8 slave probes (4693, 573921, 573920 and 067458).

Related articles
682 41 (White cover)
685 41 (Titanium cover)

Front view

configurator socket

BUS

Rear view

Legend

1. Knob: for manual temperature setting (± 3 °C), to select the antifrost/thermal protection (❄) mode and the OFF state (forced zone off).
2. Green LED: when it shines steadily it indicates that the device is active, when it flashes it indicates that the OFF or antifrost modes are set locally.
3. Yellow LED: when it shines steadily or it is OFF it signals the state of the devices in the corresponding zone, when it flashes it signals a fault.
4. Key used to enable virtual configuration, and for the switching of the mode and speed of the fan-coil. Use this key to select between "Automatic" (fan speed managed by the probe) and "Manual" (fan speed selected among minimum, medium, and maximum) mode.
5. Red LED: when on, it indicates that "Automatic" mode is active, when off, it indicates that "Manual" mode is active.
6. Red LEDs: they indicate the fan speed settings: from left to right, the speeds are: minimum, medium, maximum.
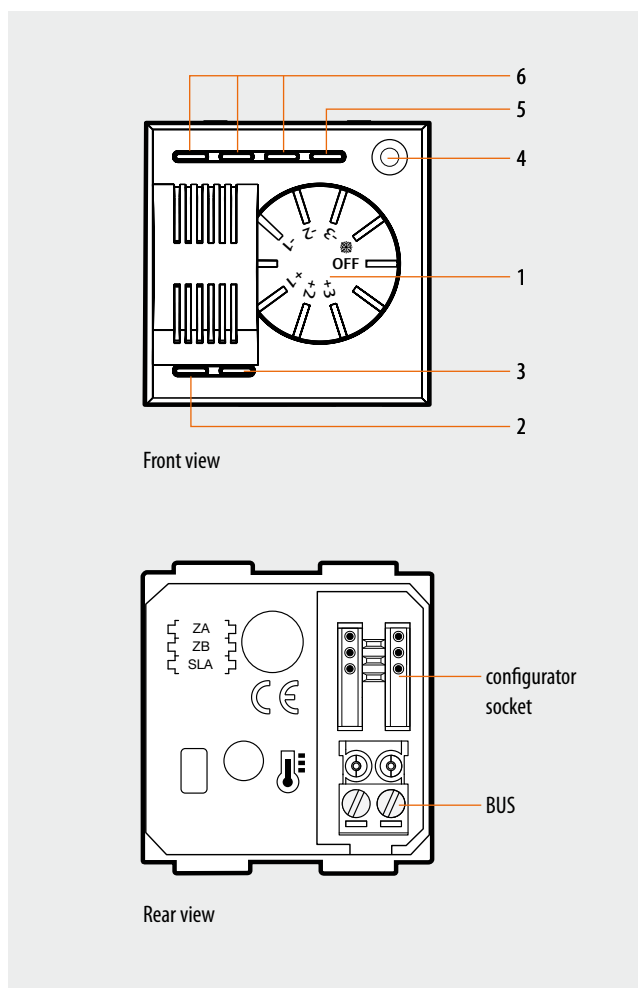
Fan-coil probe with selector

	067455	**HD4692FAN**	**HS4692FAN**	**N4692FAN**
5739 25 (Magnesium)	**5739 24 (White)**	**HC4692FAN**	**L4692FAN**	**NT4692FAN**

Configuration

This probe has been specifically designed to manage 3-speed fan-coils and Climaveneta fan-coils. The probe only has 3 configurator sockets: ZA, ZB, SLA. The ZA and ZB sockets must always be used for the configuration operations, connecting two configurators, identifying the address of the device, and the number of the zone controlled by the probe itself.

The actuators controlled by the probes must be configured with the same zone address.

Socket	Function	Configurators
ZA	zone address	0 – 9
ZB	zone address	0 – 9
SLA	Master mode	0 – 8

The probe can be configured remotely with "Virtual Configuration".
When no physical configurators are available, a PC with Virtual Configurator software version 2.1 must be used.

Programming

Using the "Configure zones" item of the "Maintenance" menu of the temperature control system central unit, it will be possible to define if the zone should manage a heating system, a cooling system, or a combined one.

Using the same menu item, also select the type of load to control, among the following: ON/OFF, OPEN/CLOSE, 3SP FAN-COIL and GATEWAY. When performing programming operations from the central unit, refer to the installation manual supplied with the central unit itself.

Master and Slave probe

A probe can operate in conjunction with other probes so that an average temperature calculation can be performed, based on measurements taken from several points within the same zone. This function is useful for the management of very large areas, throughout which the temperature may change consistently. To activate this function, one probe must be configured as "Master", and one or more probes must be configured as "Slave" (max 8). The Master probe calculates the average between its own temperature, and the temperatures measured by the Slave probes, and then performs the appropriate operations. The 4692FAN probe can only operate as Master. Therefore only probe 4693 may be used as Slave. To configure the Master probe, in addition to the zone address, it will be sufficient to connect to the SLA socket a numeric configurator indicating the number of Slave probes installed within the zone (max 8). To configure a Slave probe, connect the configurator marked as SLA to the MOD socket. Use the SLA socket to progressively assign a number to all Slave probes of the zone. During this numbering procedure, it is essential to start from no. 1, and that the sequence is respected, without missing any numbers.

Example of configuration of a zone (address 59), with one Master, and three Slave probes.

To define the probes as belonging to zone 59, connect configurators 5 and 9 to the ZA and ZB sockets of the 4 devices. Connect configurator no. 3 to the SLA socket of the Master probe (there are three Slave probes inside the zone). The SLA configurator must be connected to the MOD sockets of the three Slave probes (definition of Slave probes). Connect configurators no. 1, 2, and 3 respectively to the SLA socket of the three Slave probes (progressive number of the probe within the zone).
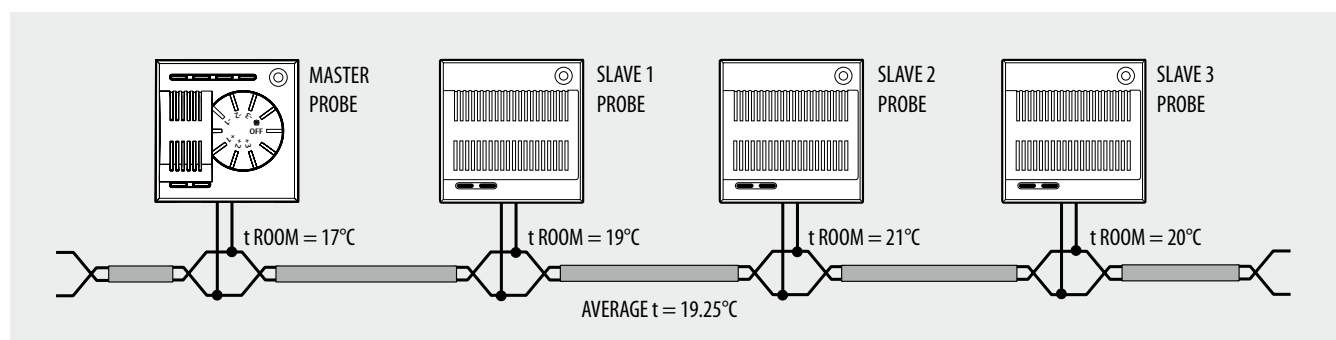
Master Probe (HC/HS/L/N/NT4692FAN, 573924, 573925 and 067455)		Slave 1 probe (HC/HS/L/N/NT4693, 573921, 573920 and 067458)		Slave 2 probe (HC/HS/L/N/NT4693, 573921, 573920 and 067458)		Slave 3 probe (HC/HS/L/N/NT4693, 573921, 573920 and 067458)	
Socket	Configurators	Socket	Configurators	Socket	Configurators	Socket	Configurators
ZA	5	**ZA**	5	**ZA**	5	**ZA**	5
ZB	9	**ZB**	9	**ZB**	9	**ZB**	9
SLA	3	**MOD**	SLA	**MOD**	SLA	**MOD**	SLA
		SLA	1	**SLA**	2	**SLA**	3

Fan-coil probe with selector

Circulation pump

When programming the operating mode of the circulation pumps is not necessary to connect any special configurators: it will be sufficient to use the temperature central unit. Through the "Pump" item, inside the "Maintenance" menu, select the zones that must be served by a circulation pump. Using the programming procedure, set a logic link between the zones, and the pump that hydraulically supplies them. To complete the programming procedure, the pump management mode must also be selected, thus defining if the pump supplies a heating, a cooling, or a combined system. Depending on the needs of the hydraulic system, one "circulation pump" or "several circulation pumps" may be installed, to supply one or more zone groups. If necessary, it is also possible to set a "pump switch-on delay", in relation to the opening of the zone valves.

Probe calibration

Probes don't normally require calibration; however, in particular installation situations (perimeter walls, north or south facing walls, when close to heat sources, etc.), the temperature value measured may be corrected using the appropriate calibration function, which can be found in the central unit menu.

Before performing the calibration operation, ensure the following:

- leave the probes connected and powered with the hydraulic system off for at least 2 hours. During this time, avoid any changes in the room temperature (e.g. by opening or closing windows, doors, etc.), and avoid standing near them;
- for the calibration use a calibrated sample thermometer, correctly positioned inside the room.

Note: For more details on the calibration procedure and the programming operations using the central unit, refer to the installation manual of the central unit.

In the following cases, pump control is not necessary:

- in systems where the pump is always in operation (thanks to water recirculation hydraulic systems, or the presence of three-way valves);
- in systems where the pump is managed automatically (it comes on by itself when water is required, and turns off again when all valves are closed);
- in systems where the pump has simply not been installed (for example for air conditioning units or electric heating control).

Probe without selector

Description

The device can be used to control the room temperature, based on daily rhythms, both in winter and in summer. On the front of the device are a green and a yellow LED. The green led indicates that the device is working correctly.

The yellow LED indicates the status of the actuators, and any possible fault on the same. The front of the item does not have any controls. This makes the device ideal for installation in public places, so that any improper intervention may be prevented. The anti-freeze/thermal protection and OFF modes can only be selected from the central unit.

OFF mode

Set this mode to turn the corresponding zone off.

Antifrost/thermal protection mode

By selecting this mode, if the temperature control system is set for heating, the probe operates in anti-freeze mode. If the system is set for cooling, the probe operates in thermal protection mode. The probe can also operate together with other probes of the same type in "slave" or "master" configuration, to enable the central unit to calculate an average of the temperatures taken from several detection points. This function is useful for the management of very large areas, throughout which the temperature may change consistently. In case of central unit fault, the probe will continue to work implementing the last settings received, and therefore the last temperature set in the summer or winter programs. However, the OFF mode also has priority in case of central unit fault. Therefore, in this case the zone controlled by the probe will stay off. The probe can be used to control a zone with up to 9 actuators and 8 slave probes of the same type.

Related articles
682 48 (Cover White)
685 48 (Cover Titanium)

Front view

Rear view

NOTE: compared with the previous version, the P and DEL configurator sockets have been removed.

Legend

1. Key in the low position to enable virtual configuration
2. Yellow LED: when it shines steadily or it is OFF it signals the state of the actuators in the corresponding zone, when it flashes it signals a fault.
3. Green LED: when it shines steadily it indicates that the device is active.

Technical data

- Power supply from SCS BUS: 27 Vdc
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Absorption: 6 mA
- Operating temperature: 0 – 40 ℃
- Size: 2 modules
- Installation height: 1500 m from the floor

Probe without selector

Configuration

The probe must always be configured by connecting two configurators to the ZA and ZB sockets, which identify the device address, and the number of the zone controlled by the probe itself. The actuators controlled by the probes must be configured with the same zone address.

Socket	Function	Configurators
ZA	zone address	0 – 9
ZB	zone address	0 – 9
MOD	Master/Slave mode	0 - SLA
SLA	Master/Slave mode	0 – 8

The probe can be configured remotely with "Virtual Configuration". When no physical configurators are available, a PC with Virtual Configurator software version 2.1 must be used.

Programming

Using the "Configure zones" item of the "Maintenance menu" of the temperature control system central unit, it will be possible to define if the zone should manage a heating system, a cooling system, or a combined one.

Using the same menu item, also select the type of load to control, among the following: ON/OFF, OPEN/CLOSE, 3SP FAN-COIL. When performing programming operations from the central unit, refer to the installation manual supplied with the central unit itself.

Master and Slave probe

A probe can operate in conjunction with other probes so that an average temperature calculation can be performed, based on measurements taken from several points within the same zone. This function is useful for the management of very large areas, throughout which the temperature may change consistently. To activate this function, one probe must be configured as "Master", and one or more probes must be configured as "Slave" (max 8). The Master probe calculates the average between its own temperature, and the temperatures measured by the Slave probes, and then performs the appropriate operations. The probe can operate as Master if configurator 0 is connected to the MOD socket, and a configurator indicating the number of SLAVE probes present inside the zone (max 8) is connected to the SLA socket. The same probe can operate as Slave if a configurator marked as SLA is connected to the MOD socket, and a configurator with the progressive SLAVE probe number within the ZONE is connected to the SLA socket. During this numbering procedure, it is essential to start from no. 1, and that the sequence is respected, without missing any numbers.

Example of configuration of a zone (address 47), with one Master, and three Slave probes.

To define the probes as belonging to ZONE 47, connect configurators 4 and 7 to the ZA and ZB sockets of the 4 devices. Connect configurator no. 0 to the MOD socket of the Master probe. The SLA configurator must be connected to the MOD socket of the three Slave probes (definition of Slave probes). Connect configurator no. 3 to the SLA socket of the Master probe (there are three Slave probes inside the zone); connect configurators no. 1, 2, and 3 to the SLA socket of the three Slave probes respectively (progressive number of the probe within the zone).
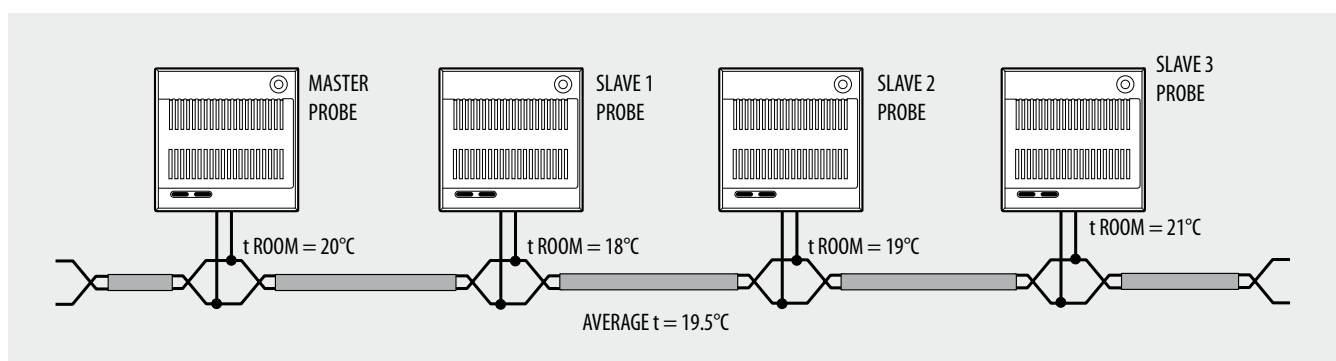
Master Probe (HC/HS/L/N/NT4693, 573920, 573921 and 067458)		Slave 1 probe (HC/HS/L/N/NT4693, 573920, 573921 and 067458)		Slave 2 probe (HC/HS/L/N/NT4693, 573920, 573921 and 067458)		Slave 3 probe (HC/HS/L/N/NT4693, 573920, 573921 and 067458)	
Socket	Configurators	Socket	Configurators	Socket	Configurators	Socket	Configurators
ZA	4	ZA	4	ZA	4	ZA	4
ZB	7	ZB	7	ZB	7	ZB	7
MOD	0	MOD	SLA	MOD	SLA	MOD	SLA
SLA	3	SLA	1	SLA	2	SLA	3

Probe without selector

	067458	**HD4693**	**HS4693**	**N4693**
5739 21 (Magnesium)	**5739 20 (White)**	**HC4693**	**L4693**	**NT4693**

Circulation pump

In addition to controlling the zone valves, for some types of systems it will also be necessary to control one or more water circulation pumps. When programming the operating mode of the circulation pumps is not necessary to connect any special configurators: it will be sufficient to use the central unit through the "Pump" item; inside the "Maintenance" menu, select the zones that must be served by a circulation pump. Using the programming procedure, set a logic link between the zones, and the pump that hydraulically supplies them. To complete the programming procedure, the pump management mode must also be selected, thus defining if the pump supplies a heating, a cooling, or a combined system. Depending on the needs of the hydraulic system, one "circulation pump" or "several circulation pumps" may be installed, to supply one or more zone groups. If necessary, it is also possible to set a "pump switch-on delay", in relation to the opening of the zone valves. In the following cases, pump control is not necessary:

- in systems where the pump is always in operation (thanks to water recirculation hydraulic systems, or the presence of three-way valves);
- in systems where the pump is managed automatically (it comes on by itself when water is required, and turns off again when all valves are closed);
- in systems where the pump has simply not been installed (for example for air conditioning units or electric heating control).

Probe calibration

Probes don't normally require calibration; however, in particular installation situations (perimeter walls, north or south facing walls, when close to heat sources, etc.), the temperature value measured may be corrected using the appropriate calibration function, which can be found in the central unit menu.
Before performing the calibration operation, ensure the following:

- leave the probes connected and powered with the hydraulic system off for at least 2 hours. During this time, avoid any changes in the room temperature (e.g. by opening or closing windows, doors, etc.), and avoid standing near them;
- for the calibration use a calibrated sample thermometer, correctly positioned inside the room.

Note: For more details on the calibration procedure and the programming operations using the central unit, refer to the installation manual of the central unit.

Pump switch-on delay

If necessary, it is also possible set the circulation pump to activate after a certain time delay, in relation to the opening of the zone valves. This selection depends on the type of valve installed, and enables the pump to only activate once the valve is fully open. If a time delay of 4 minutes is set, after closing the relay controlling the opening of the zone valve, the probe will wait 4 minutes before switching the pump on. A maximum delay of 9 minutes can be set, depending on the time needed for the valve to open. For the opening times refer to the official technical specifications issued by the solenoid valve manufacturer.

NOTE: for details of the programming operations to be performed from the central unit refer to the installation manual supplied with the central unit itself.

4-zone central unit

HC4695   L4695   NT4695
HD4695   HS4695   N4695   AM5875

Description

This central unit can manage MY HOME temperature control systems with up to 4 zones, with a maximum of 9 circulation pumps. It can control heating or cooling systems and can set the system and modify the system operating mode.

The central unit is made up mechanically of two parts: a base to fasten on the supporting frame for wall mounted boxes to which the bus is connected and a removable front cover for easy programming with the settings required. The device communicates with and is supplied by the bus, while the two AA batteries supply power when the removable part is not inserted in the supporting frame. The central unit has a probe which already represents a system zone and the configuration sockets are in fact on the back part. Another three probes can be connected to reach the absolute number of zones which the system can manage in this case (a maximum of 4 zones in total). Coming with management software with guided menu shown on the display, it lets the user select the operating mode, display the temperatures of the various zones and display and modify the daily temperature profiles and the weekly programs; the maintenance menu, reserved to the installer and code protected, allows access to the system settings (zone configuration, system test, total reset, etc.).

The temperature central unit has a graphic display with blue back-lighting in the AXOLUTE series and green back-lighting in the LIVING, LIGHT, LIGHT TECH and Màtix series. By means of the six keys on the device front cover all the functions can be used interacting with the various menu items. The complete programming of the central unit by PC can be activated through the serial connector and the TiThermo BASIC software.

Plug-in section
front view

Plug-in section
back view

Fixed section
back view

Legend

1. Graphic display: displays the system state and guides the programming operations.
2. Selection keys: can set the operating mode and select the functions.
3. OK key: to access the main menu or confirm the selection displayed.
4. Sensor: to measure the room temperature.
5. C key: to cancel the selection.
6. Scroll keys: to modify the temperature using the main screen; to scroll the menu items.
7. Connector: connection to the electronics in the back base.
8. Serial connector: for connection to the PC and use of TiThermo BASIC.
9. Battery compartment: socket for 2 AA 1.5V batteries.
10. Screw: to block central unit extraction.
11. Configurator socket: socket of the configurators for the combined probe.
12. BUS: connection for cable bus.

Technical data

- Power supply from SCS BUS: 27 Vdc and 3 Vdc (2 AAA type, 1.5 V batteries)
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Absorption: 30 mA with the light on
- Absorption: 8.5 mA with the light off
- Operating temperature: 0 – 35 ℃
- Size: 2 modules
- Installation height: 1500 m from the floor

Graphic display

During normal operation the central unit graphic display shows the system basic information, while the screen light stays off. When a key is pressed, the display illuminates and the central unit is ready to implement any instructions entered by the user.

Summer/Winter system state

weekly program

hour

measured temperature

daily profile

date
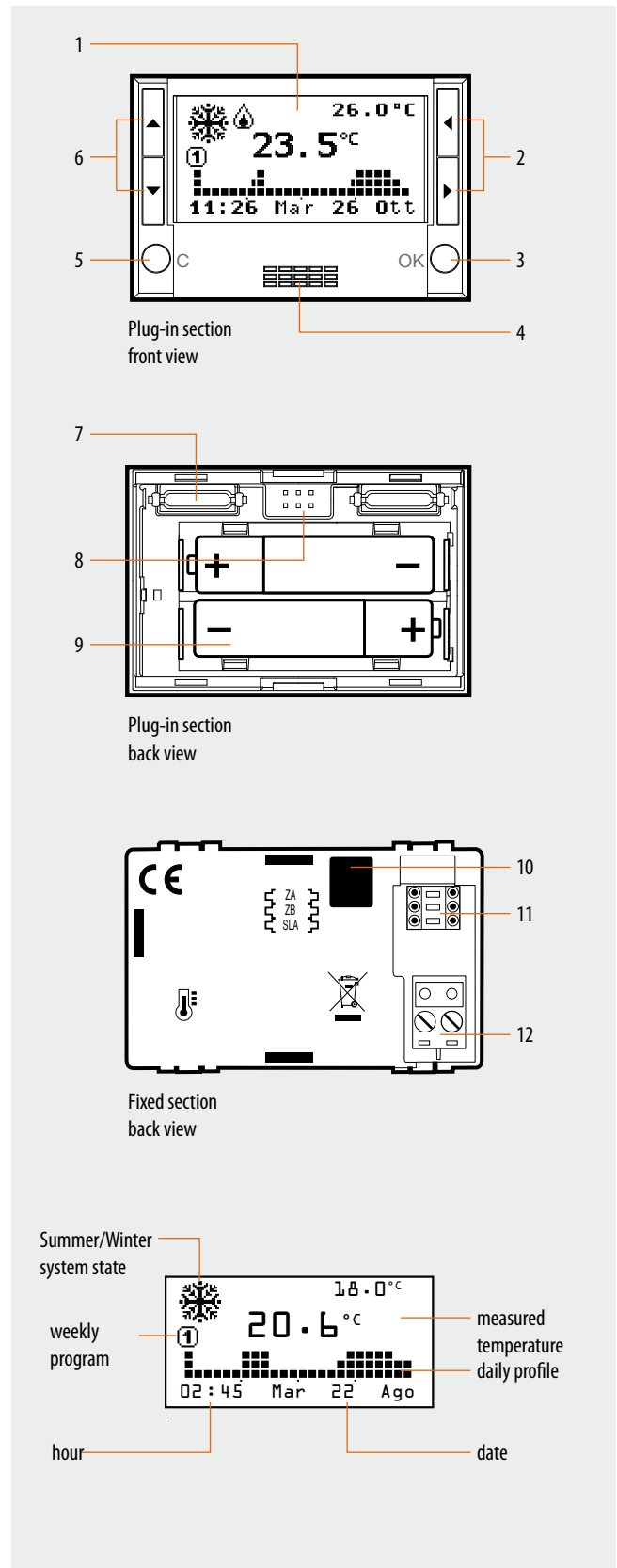
4-zone central unit

Removable system

The central unit is made up of a base for the connection to the system bus cable and a removable front cover with batteries. The system so formed lets the user perform the programming operations and replace the batteries easily.

Configuration

Differently from the 99 zone version, the 4 zone flush mounted central unit must be configured. This central unit is fitted with an integrated temperature probe, and therefore it must be configured. The configuration sockets on the back of the central unit are in fact intended and reserved for the integrated probe. They are: ZA, ZB and SLA. The ZA and ZB sockets must always be used for the configuration operations, connecting two configurators that identify the address, and the number of the zone controlled by the probe itself. It is not necessary to start with zone 01, although it is fundamental that the values of the subsequent zones are immediately after those of the central unit itself. The configuration procedure requires the completing of the operations using the "Configuration" menu of the central unit, and the activation of the "Learning" function. In fact, the search within the system is performed on 3 zone addresses that follow the one assigned to the central unit itself. The actuators controlled by the probes must be configured with the same zone address.

Base

Removable front cover
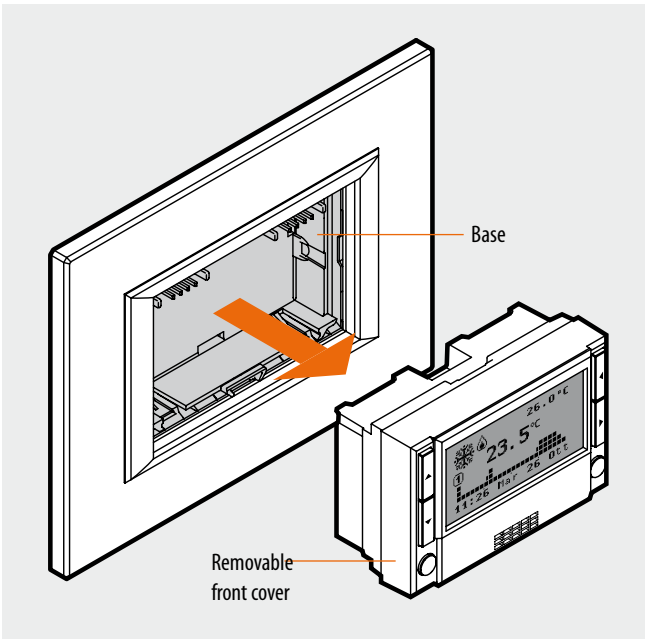
Socket	Function	Configurators
ZA	zone address	0 – 9
ZB	zone address	0 – 9
SLA	Master mode	0 – 8
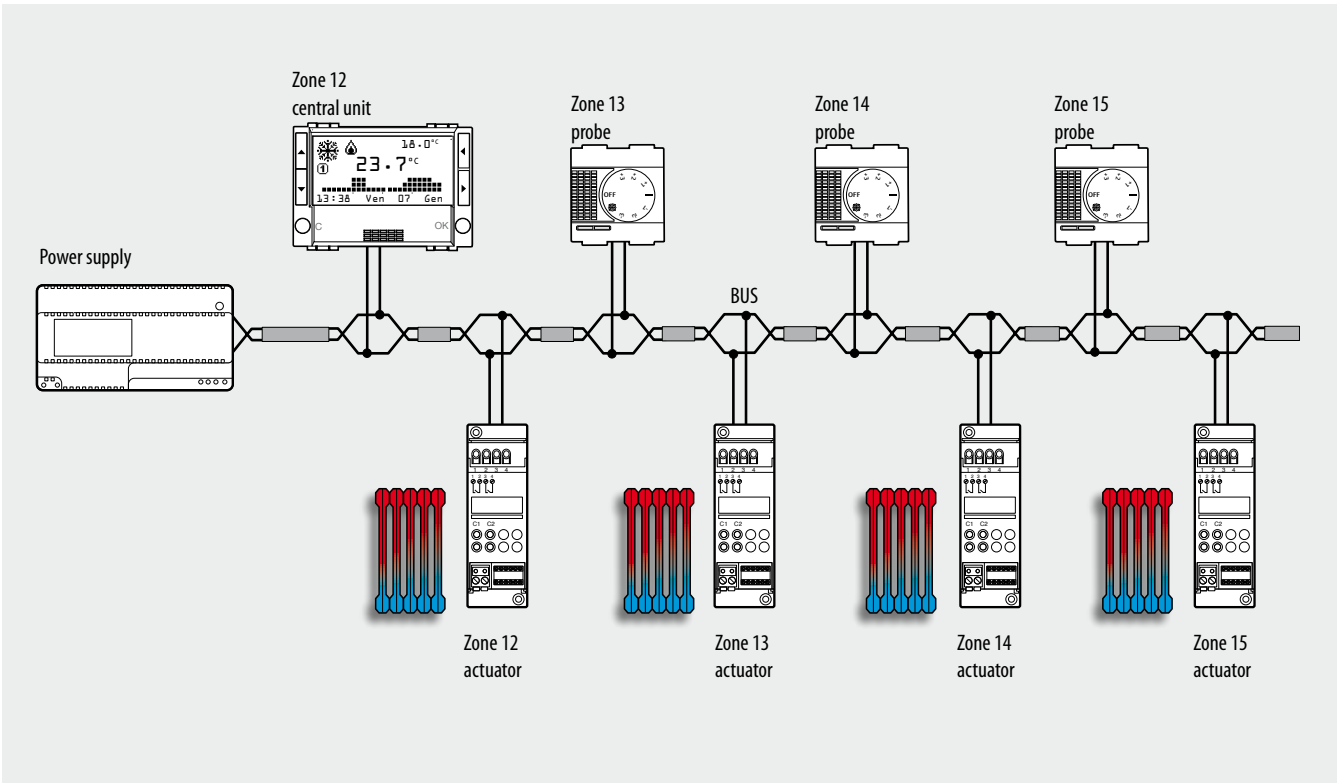
4-zone central unit

Programming

The central unit must be used to set the operating mode of the integrated probe fitted inside. Using the "Configuration" item of the "Maintenance" menu, define if the zone should manage a heating system, a cooling system, or a combined one.

Using the same menu item, also select the type of load to control, choosing between: ON/OFF, OPEN/CLOSE, 3SP FAN-COIL and GATEWAY. When performing programming operations from the central unit, refer to the installation manual supplied with the central unit itself.

Master and Slave probe

A probe can operate in conjunction with other probes so that an average temperature calculation can be performed, based on measurements taken from several points within the same zone. This function is useful for the management of very large areas, throughout which the temperature may change consistently

To activate this function, one probe must be configured as "Master", and one or more probes must be configured as "Slave" (max 8). The Master probe calculates the average between its own temperature, and the temperatures measured by the Slave probes, and then performs the appropriate operations. The integrated probe fitted inside the central unit can only operate as Master. Therefore, for the slave function, only probe item 4693 may be used. In addition to the zone address, in order to configure the integrated probe as Master it will be sufficient to connect a numeric configurator to the SLA socket, which should indicate the number of Slave probes within the zone, up to 8 maximum.

To configure a Slave probe, connect the configurator marked as SLA to the MOD socket. Use the SLA socket to progressively assign a number to all Slave probes of the zone. During this numbering procedure, it is essential to start from no. 1, and that the sequence is respected, without missing any numbers.
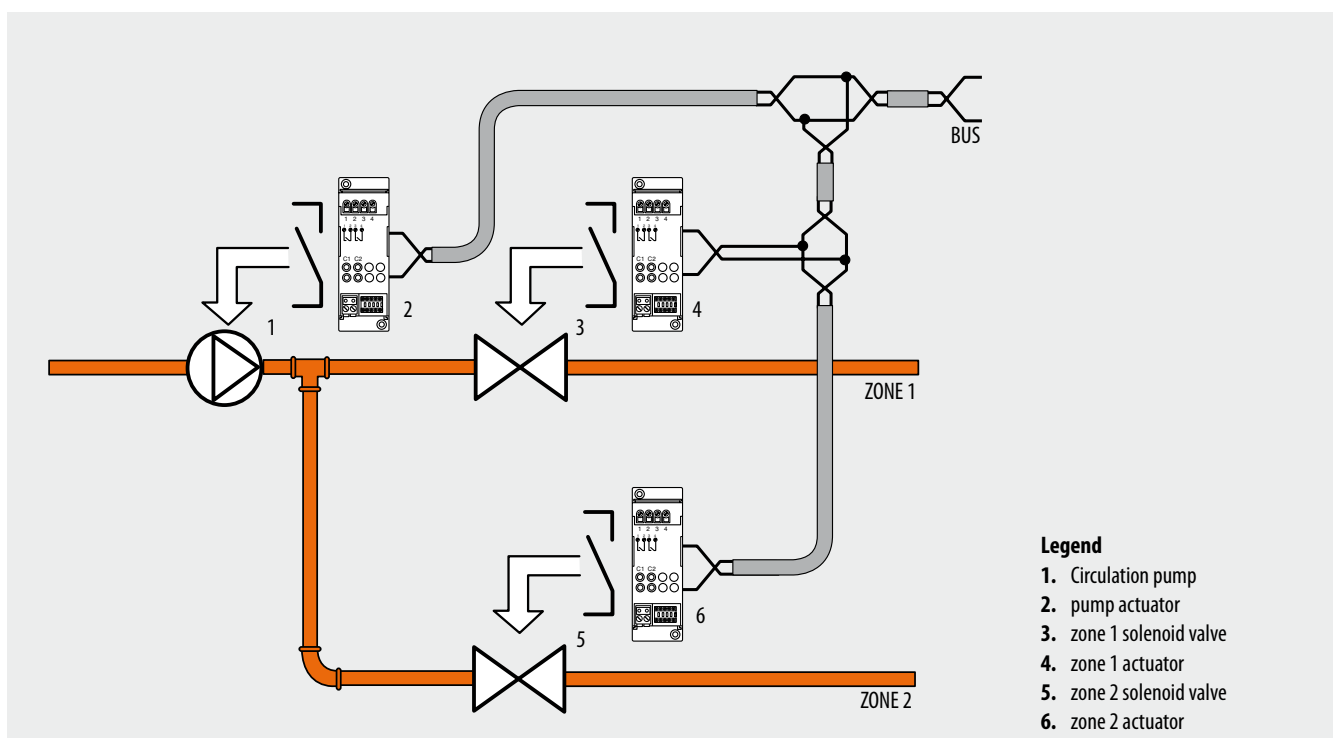
4 zone central unit calibration

The 4 zone central unit does not normally require calibration: however, in particular installation situations (perimeter walls, north or south facing walls, when close to heat sources, etc.), the temperature value measured may be corrected using the appropriate calibration function, which can be found in the central unit menu.

Before performing the calibration operation, ensure the following:

- leave the 4 zone central unit connected and powered with the hydraulic system off for at least 2 hours. During this time, avoid any changes in the room temperature (e.g. by opening or closing windows, doors, etc.), and avoid standing near it;
- for the calibration use a calibrated sample thermometer, correctly positioned inside the room.

Note: For more details on the calibration procedure and the programming operations using the central unit, refer to the installation manual of the central unit.
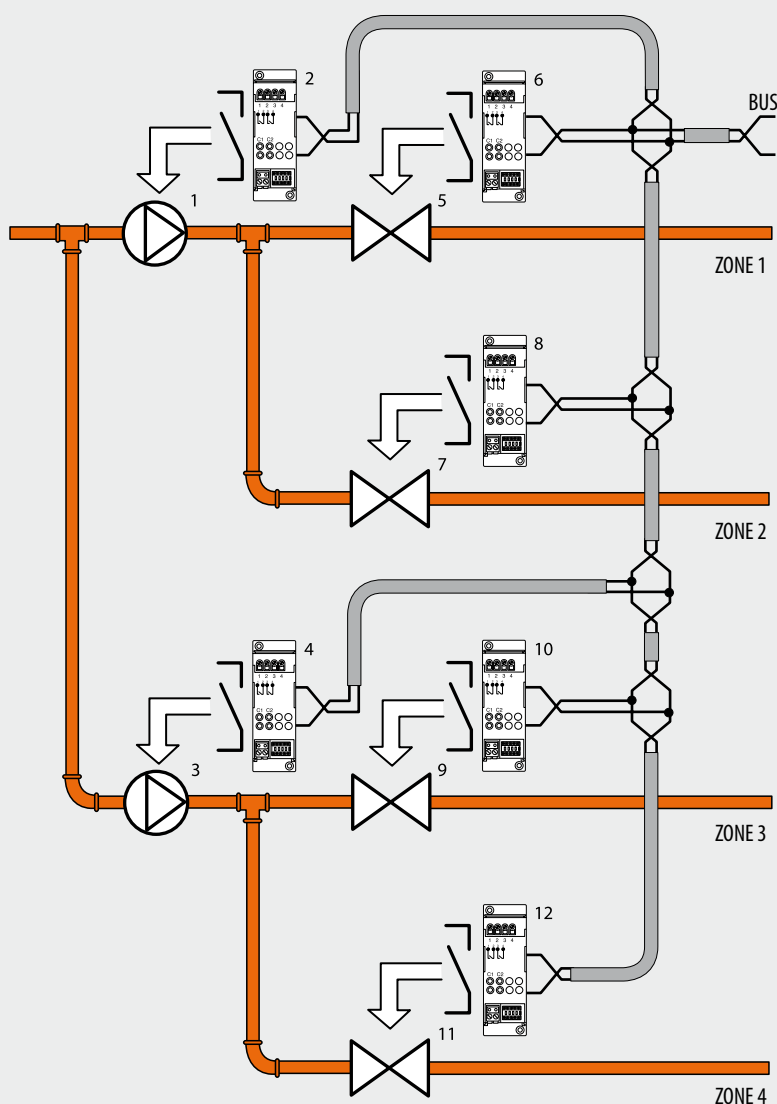

Central unit/Master Probe (HC/HS/L/N/NT4695, AM5875)		Slave 1 probe (HC/HS/L/N/NT4693)		Slave 2 probe (HC/HS/L/N/NT4693)		Slave 3 probe (HC/HS/L/N/NT4693)	
Socket	Configurators	Socket	Configurators	Socket	Configurators	Socket	Configurators
ZA	4	**ZA**	4	**ZA**	4	**ZA**	4
ZB	7	**ZB**	7	**ZB**	7	**ZB**	7
SLA	3	**MOD**	SLA	**MOD**	SLA	**MOD**	SLA
		SLA	1	**SLA**	2	**SLA**	3

4-zone central unit

Circulation pump

In addition to controlling the zone valves, for some types of systems it will also be necessary to control one or more water circulation pumps. When programming the operating mode of the circulation pumps is not necessary to connect any special configurators: it will be sufficient to use the central unit through the "Pump" item; inside the "Maintenance" menu, select the zones that must be served by a circulation pump. Using the programming procedure, set a logic link between the zones, and the pump that hydraulically supplies them. To complete the programming procedure, the pump management mode must also be selected, thus defining if the pump supplies a heating, a cooling, or a combined system. Depending on the needs of the hydraulic system, one "circulation pump" or "several circulation pumps" may be installed, to supply one or more zone groups. If necessary, it is also possible to set a "pump switch-on delay", in relation to the opening of the zone valves. In the following cases, pump control is not necessary, or needed:

- in systems where the pump is always in operation (thanks to water recirculation hydraulic systems, or the presence of three-way valves);
- in systems where the pump is managed automatically (it comes on by itself when water is required, and turns off again when all valves are closed);
- in systems where the pump has simply not been installed (for example for air conditioning units or electric heating control).

System with a circulation pump

The system shown only has one circulation pump, that only supplies two zones, controlled by two solenoid valves. The pump is managed by a dedicated actuator configured in zone 00. In the same way as the pump, also the two valves are controlled by two different actuators. The circulation pump will remain active until at least one of the two valves remains open and will stop when both valves are closed.

4 zone central unit calibration

The 4 zone central unit does not normally require calibration: however, in particular installation situations (perimeter walls, north or south facing walls, when close to heat sources, etc.), the temperature value measured may be corrected using the appropriate calibration function, which can be found in the central unit menu.
Before performing the calibration operation, ensure the following:

- leave the 4 zone central unit connected and powered with the hydraulic system off for at least 2 hours. During this time, avoid any changes in the room temperature (e.g. by opening or closing windows, doors, etc.), and avoid standing near it;
- for the calibration use a calibrated sample thermometer, correctly positioned inside the room.

Note: For more details on the calibration procedure and the programming operations using the central unit, refer to the installation manual of the central unit.

Legend
1. Circulation pump
2. pump actuator
3. zone 1 solenoid valve
4. zone 1 actuator
5. zone 2 solenoid valve
6. zone 2 actuator

MQ00178-c-EN   29/04/2014

System with two circulation pumps

The system shown requires two circulation pumps that serve two different zone groups controlled by their own solenoid valves. The first group pump is managed by a dedicated actuator configured in zone 00 with progressive number equal to 1 (N=1). Also the two valves that control ZONE1 and ZONE2 are managed by their own actuators. The circulation pump will remain active until at least one of the two valves remains open and will stop when both valves are closed.

The second group is similar to the first one, but the actuator controlling the pump of zones 3 and 4 is configured in zone 00 with progressive number equal to 2 (N=2). Although belonging to the same system, the two pump/solenoid valve groups are totally independent from each other (see also actuator configuration).

Legend

1. zone 1 and 2 circulation pump
2. pump actuator
3. zone 3 and 4 circulation pump
4. pump actuator
5. zone 1 solenoid valve
6. zone 1 actuator
7. zone 2 solenoid valve
8. zone 2 actuator
9. zone 3 solenoid valve
10. actuator zone 3
11. zone 4 solenoid valve
12. actuator zone 4

4-zone central unit

TiThermo Basic software

TiThermo Basic is the tool used for creating or changing, through a simple and logic graphic interface, the configuration to be sent to the temperature control system central unit, defining and customising the parameters of the temperature control system and the profiles of the various operating programs.

Thanks to a dedicated function, the software may also be used to update the central unit firmware.

The software can be used to:

- customize the zones
- manage the actuators, selecting the type of function to be assigned (heating, cooling, heating+cooling, no function) and the type of load for the selected function (ON/OFF, Open/ Close, Fan-Coil, Gateway)

- manage the circulation pumps, selecting the type of function to be assigned (heating, cooling, heating+cooling, no function) and the tripping delays
- customise the configuration parameters and the operating programs of the central unit (e.g. weekly programs, holiday programs)
- export and/or import profiles and collections (as XML files).

NOTE: for more information on the operation of the application see the manual supplied with the products.

The central unit is connected to the PC using cable item 335919 or with item 3559 (see figure). This accessory is not included with the central unit, and must therefore be purchased separately.

item 3559

ART. 3559
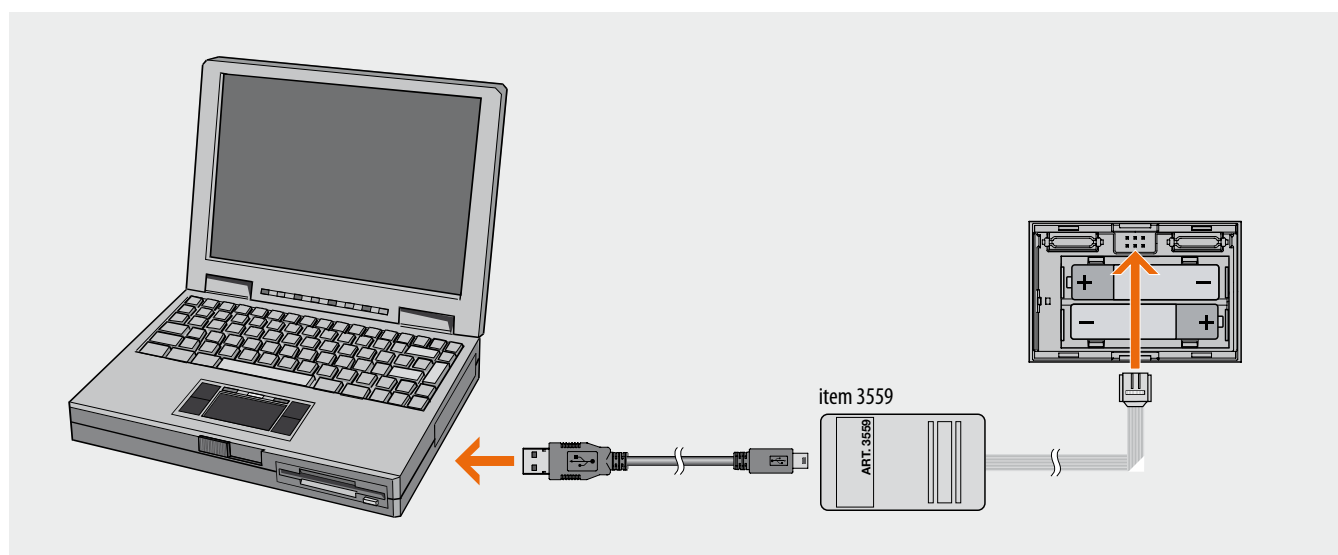
TiThermo Basic screenshots
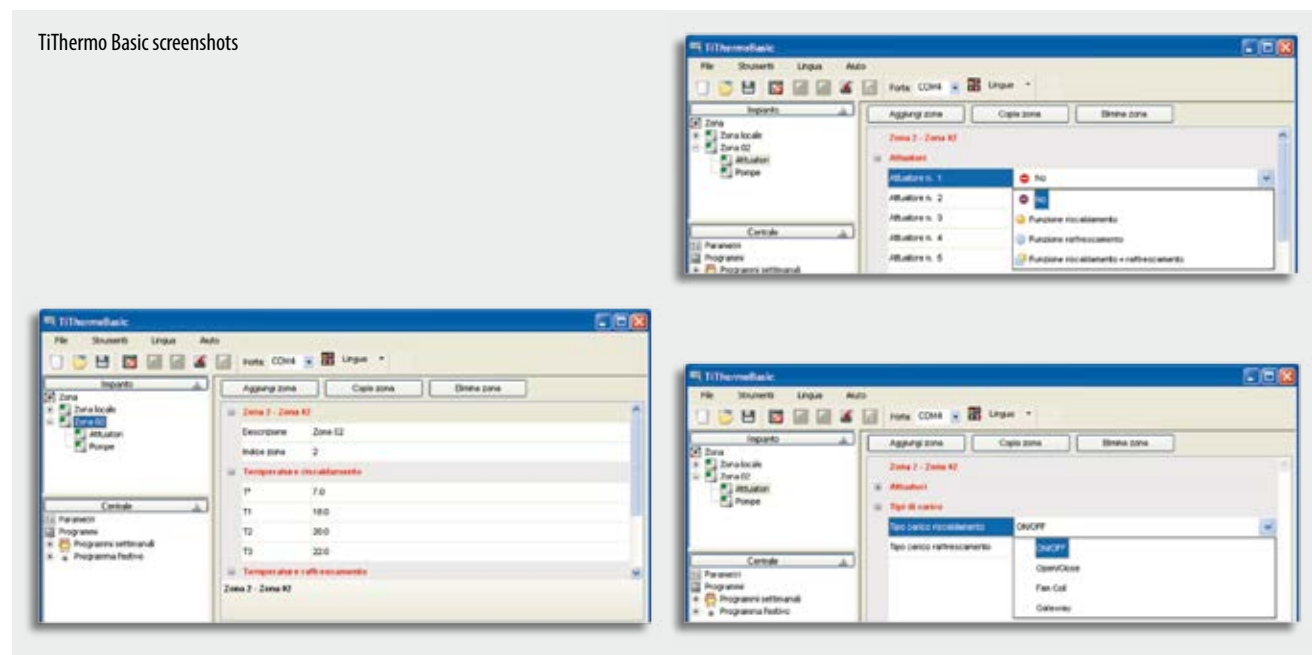
Pulse counter interface

Description

The device detects, counts and processes the information (water, gas, etc.) received from meters with pulse outputs, and makes it available to the SCS BUS.

The processing and accounting functions are:

- calculation of the instantaneous value (flow rate - unit/h): the distance between two consecutive pulses. If the distance between two pulses exceeds 30 seconds, the value of the flow rate will be 0. The formula to calculate the flow rate is as follows: Flow rate = (3600 / distance between two pulses) * (multiplication factor/divisor). For the details, please see the "Configuration" chapter.

- saving the following data to the internal memory:
  - Number of pulses accumulated on an hourly basis for the last 12 months
  - Number of pulses accumulated on a daily basis for the past 2 years
  - Number of pulses accumulated on a monthly basis for the past 12 years.

The interface can be installed inside flush mounted boxes, behind traditional devices or even in distribution boards, without using a DIN rail space.

In order to allow the device to archive consumption information, the system must be fitted with a device capable of supplying current date and time information (e.g. Touch Screen). If this information is not available, the pulse counter interface will be unable to archive the data, but will continue calculating the instantaneous values (flow rate). The pulse counter interface has a bay for 5 configurators: A1, A2, A3, MUL and DIV.

NOTE: The counter cannot detect any pulses shorter than 60ms (30 ms pulse length, 30 ms pause).

Front view
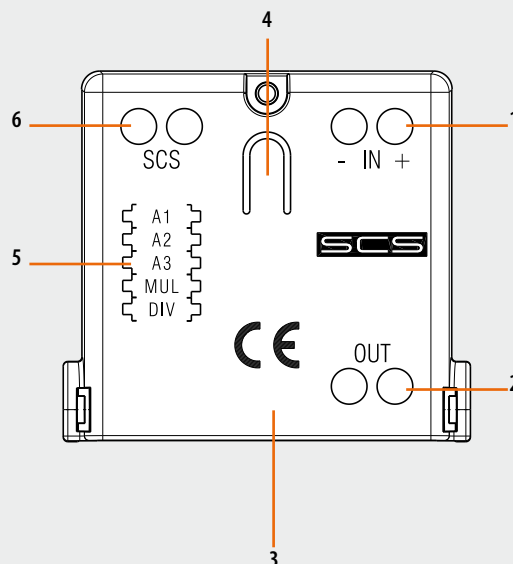
Technical data

Operating power supply with SCS BUS:	21 – 27 Vdc
Power consumption on standby:	17 mA max
Operating temperature:	0 – 40℃

Dimensions

Basic module:	- Length:	40 mm
	- Width:	40 mm
	- Height:	23 mm

Legend

1. Pulse input
   The stated polarity must be observed with Open drain and Open collector counters.
2. Opto-isolated pulse input repetition
3. LED
   steady green: device ON
   red ON steady/OFF steady: pulse detection (each time a pulse is received the status passes from ON steady to OFF steady and vice versa).
   flashing green 500ms/500ms: problem on the bus (low BUS voltage or voltage drop detected).
   red and green flashing irregularly: configuration error.
   flashing red and green 128ms/128ms: not configured.
4. Button
5. Configurator socket
6. SCS BUS connection

Configuration

The device can be configured in two ways:
- Physical configuration, inserting the configurators in the sockets:
  A1/A2/A3 device address (A1 for hundreds, A2 for tens, A3 for units). The maximum number of configurable addresses is 127.
  MUL (multiplication factor to be applied to each pulse received), DIV (indicates the number of pulses emitted by the meter before the pulse counter interface saves a pulse).
- Virtual configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.
For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

Pulse counter interface

3522N

Physical configuration

1.1 MUL position

The configurator in the MUL position specifies the multiplication factor to be applied to the single pulse, as specified in the following table:

Configurator on MUL	Multiplication factor
0	x1
1	x2
2	x5
3	x10
4	x20
5	x50
6	x100

EXAMPLE: The water volume meter provides 1 pulse every ten litres. We want to save the litres to the pulse counter interface and make them available on the SCS BUS. We put configurator 3 into position MUL. The pulses measured by the counter are multiplied by 10 and saved in the pulse counter interface.

The MUL and DIV configurator can be used simultaneously to meet every specific need.

WARNING: The maximum number of pulses the interface can save in 1 h is equal to 65536 * (divisor / multiplication factor).
FOR EXAMPLE: The counter provides 1 pulse per hundred litres and we want to save the litres

1.2 DIV position

The configurator in the DIV position specifies how many pulses must be measured by the interface to produce a valid effective pulse for energy accounting, as specified in the following table:

Configurator on DIV	Divisor
0	/1
1	/10
2	/100
3	/1000
4	/2
5	/20
6	/200
7	/2000

EXAMPLE: The water volume meter provides 1 pulse every half litre. We want to save the litres to the pulse counter interface and make them available on the SCS BUS. We put configurator 4 into position DIV. For every two pulses the meter emits, the pulse counter interface saves one pulse.

to the memory of the pulse counter interface. We configure MUL=6 and DIV=0. The maximum number of pulses the meter emits must be 65536 * (1/100) = 655 pulses/h. Should this value be exceeded, the pulse counter interface would in any case make 655 pulses/h available on the BUS.

Virtual configuration

For the configuration mode, please refer to the MYHOME_Suite software package and to the "Function Descriptions" help section within the application itself.

Procedure for deleting measured data

At any time you can reset the cumulative value of the number of pulses measured by the interface. The procedure is as follows:

1. Press the button on the interface for at least 20 seconds and release it when the two green and red LEDs flash.
2. The data of the readings saved by the interface are deleted.

Wiring diagrams

NOTE: Observe the polarity with Open drain and Open collector counters.
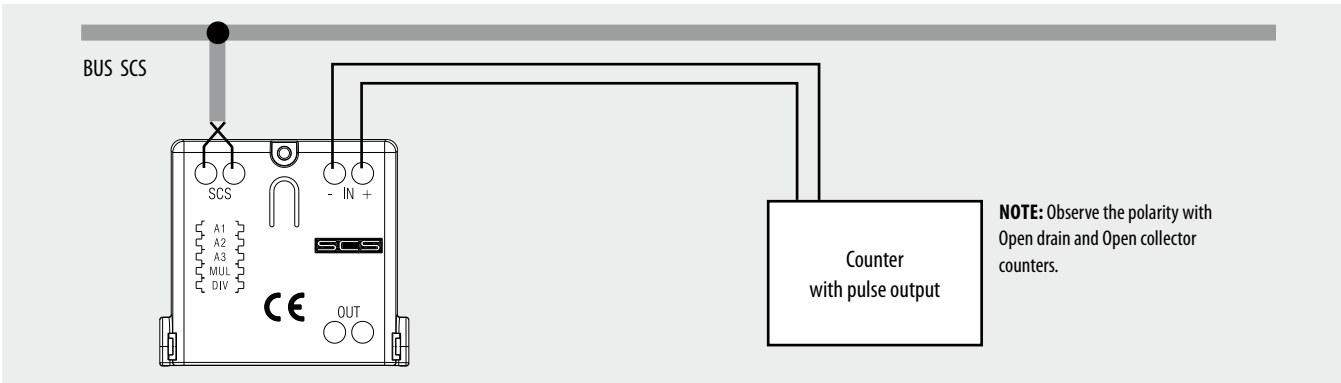
WARNING: The pulse counter interface must be installed as close as possible to the power supply unit, to ensure a high BUS voltage and enable correct management of memory savings in case of power failure. If the supply voltage is insufficient (below 21 Vdc), the pulse counter interface will cause the green LED to flash to signal the installation error. The device will work properly, but will not guarantee correct saving and recovery of data in case of BUS failure.

Electricity meter
with three inputs

F520

Description

The SCS device measures currents and voltages of separate lines (up to 3), connecting at most three toroids to the appropriate inputs (one toroid, item 3523, supplied as standard).

The meter processes and saves the following variables:
- instantaneous power in W;
- total accumulated energy in Wh;

The device has an internal memory that can store:
- cumulative energy on an hourly basis for the last 12 months;
- cumulative energy on a daily basis for the past 2 years;
- cumulative energy on a monthly basis for the last 12 years.

In order to allow the device to archive consumption information, the system must be fitted with a device capable of supplying current date and time information (e.g. Touch Screen). If this information is not available, the meter will be unable to archive the data, and will continue calculating the values of the instantaneous variables (power).

The device has a footprint of 1 DIN module and has a housing for 5 configurators: A1, A2, A3-Ta, A3-Tb, A3-Tc.

Technical data

Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	35 mA max
Rated current:	16 A
Maximum current:	90 A
Operating temperature:	5 – 40°C

Dimensions

1 DIN module

Front view

View from above
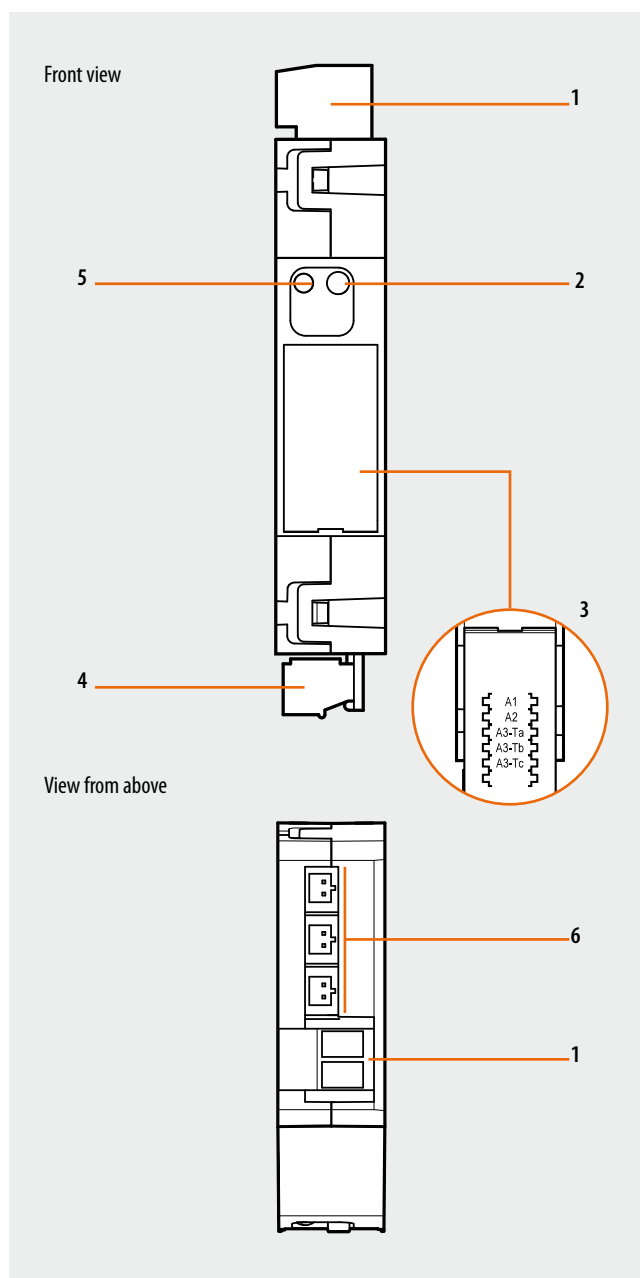
Legend

1. 230 Vac connection
2. Pushbutton for the deletion of cumulative energy data
3. Configurator socket door
4. SCS BUS connection
5. User interface LED, SEE TABLE
6. Ta, Tb, Tc connectors for toroids, item 3523

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Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.
For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

The physical configuration of the device is done by connecting the physical configurators to their sockets.
The meter has a housing for five configurators:
- A1 for hundreds
- A2 for tens
- A3 Ta for units
- A3 Tb for units
- A3 Tc for units

The combination of the configurators defines:
- A1/A2/A3-Ta address of meter A
- A1/A2/A3-Tb address of meter B
- A1/A2/A3-Tc address of meter C

The maximum number of addresses is 127.

WARNING: The A3-Ta configurator cannot be zero, unlike configurators A3-Tb and A3-Tc, which can have a zero value (if the corresponding input is not managed). The meter must be installed as close as possible to the power supply unit, to ensure a high BUS voltage and enable correct management of memory savings in case of power failure. If the supply voltage is insufficient (below 21 Vdc), the meter will cause the green LED to flash to signal the installation error. The device will work properly, but will not guarantee correct saving and recovery of data in case of BUS failure.

Procedure for the deletion of the cumulative energy data:
1 Press and hold down the button; after about 20 seconds, the orange LED will flash quickly; release the button.
2 All the cumulative energy data are reset.

1.1 Addressing

	Virtual configuration (MYHOME_Suite)	Physical configuration
Address	0 - 255	A1, A2, A3Ta = 1-127 A1, A2, A3Tb = 1-127 A1, A2, A3Tc = 1-127

LED signals according to the status of the electricity meter:

Device status	LED
Normal operation	GREEN
BUS problem (BUS voltage insufficient, or voltage drop detected)	Flashing GREEN 500 ms/500 ms
Installation error (230 Vac not detected)	Flashing RED 100 ms/900 ms
Configuration error	ORANGE flashing irregularly on GREEN
Not configured	ORANGE flashing 128 ms/128 ms on GREEN

Wiring diagrams

Connection of the meter to the bus, the line, and the toroid

230 Vac

C16

N   L

N   L

Tc Tb Ta

SCS

BUS

N   L

Load control central unit
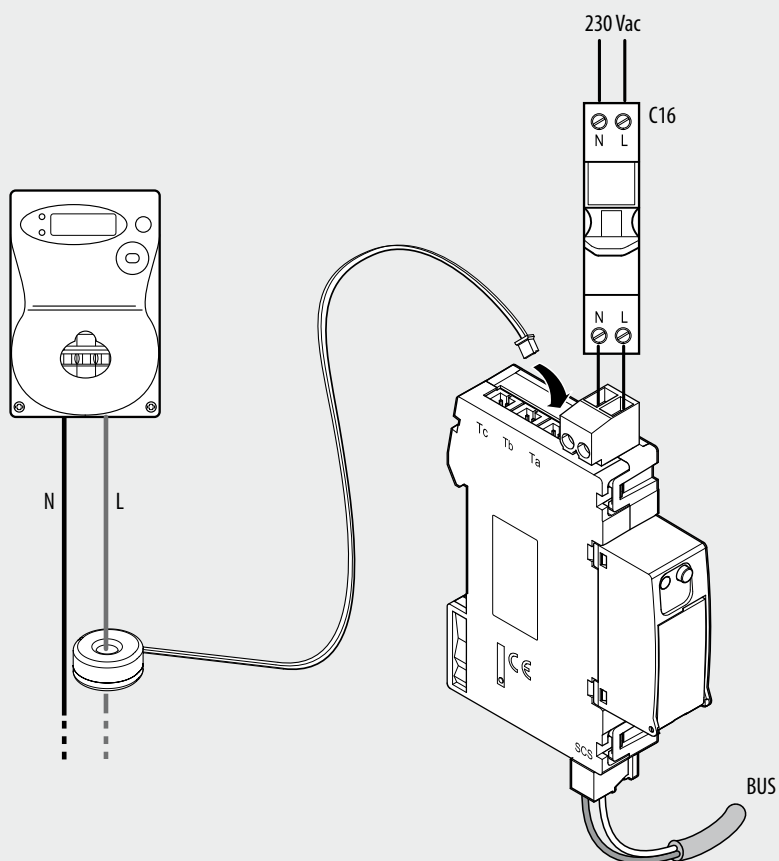
Description

The central unit for load management is an SCS device that measures the power consumed by the electric system and controls the state of the Load Management system actuators, to prevent the risk of the electric meter tripping.
The device can manage up to 63 actuators (electric loads) per phase.

The central unit is also capable of processing and saving currents and voltages, to provide information on energy and power:
- instantaneous power in W;
- total accumulated energy in Wh;

The device has an internal memory that can store:
- cumulative energy on an hourly basis for the last 12 months;
- cumulative energy on a daily basis for the past 2 years;
- cumulative energy on a monthly basis for the last 12 years.

This information is then made available on the user interfaces, and is displayed through instantaneous values, totalizers and graphs.
In order to allow the central unit to archive consumption information, the system must be fitted with a device capable of supplying current date and time information (e.g. Touch Screen). If this information is not available, the meter will be unable to archive the data, and will continue calculating the values of the instantaneous variables (power).

Technical data

Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	28 mA max
Rated current:	16 A
Maximum current:	90 A
Operating temperature:	0 – 40℃

Dimensions

1 DIN module

Front view

View from above
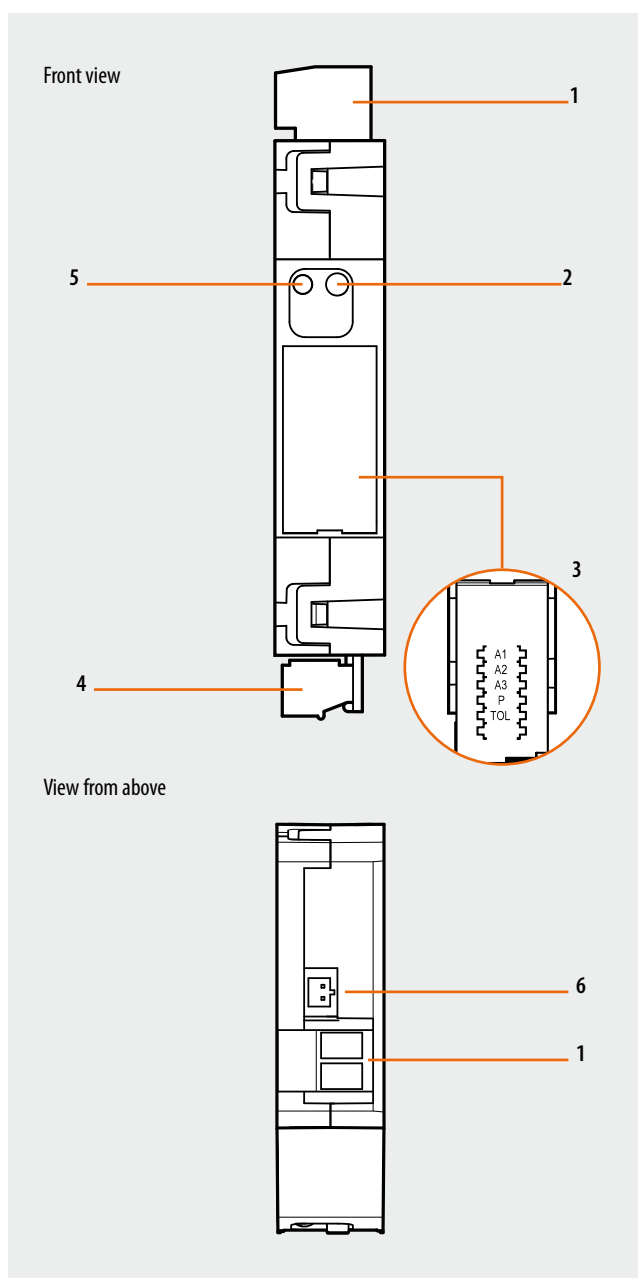
Legend

1. 230 Vac connection
2. Pushbutton for the start procedure and deletion of cumulative energy data
3. Configurator socket door
4. SCS/BUS connection
5. User interface LED, SEE TABLE
6. Toroid connection, Art.3523

Load control central unit

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

The load control central unit has a bay for five configurators, which define:
- A1/A2/A3 address of the central unit (A1 for hundreds, A2 for tens, A3 for units);
  The maximum number of addresses is 127.
- P   contractual power Pnom
- TOL   Tolerance

1.1 Addressing

Address type	Virtual configuration (MYHOME_Suite)	Physical configuration
Address	1-127	A1, A2, A3: 1-127

1.2 Contractual power

Virtual configuration (MYHOME_Suite)		Physical configuration		
Function	Parameter / setting	P	Contractual power P_{NOM}(kW)	Approximate value in Amperes at 230 Vac [*)]
Contractual power (Pnom)	100 W - 25500 W (steps of 100)	0	3	13
		1	1.5	6.5
		2	4.5	20
		3	6	26
		4	9	40
		5	10.5	46.5
		6	12	52
		7	14	61
		8	15	65
		9	18	78

To configure the measured phase, use MYHOME_Suite virtual configuration

NOTE (*): The reference value for the load control thresholds is that of the contractual power in kW. The Ampere value can be used as a general indication to help the installer in those cases when the service provider supplies the current information.

1.3 Contractual power tolerance

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	Parameter / setting	TOL	Tolerance
Contractual power tolerance	From -20% to +20% (steps of 1%)	0	0
		1	-5%
		2	-10%
		3	-15%
		4	-20%
		5	5%
		6	10%
		7	15%
		8	20%

Load control central unit

Load control actuators acquisition

Once the installation stage has been completed, the central unit must acquire the actuators on the bus; unless this operation is carried out, the device will continue signalling lack of information (steady orange LED), and no load control function will be carried out.

The procedure for the acquisition of the actuators on the BUS is as follows:

1. Press and hold down the button; after about 10 seconds, the red LED will light up; release the button.

2. The red LED flashes quickly and the central unit interrogates the system to identify the actuators installed.

3. Once the procedure has been completed, if no actuators have been found the acquisition failed notification remains active (orange LED on steady), otherwise the LED turns green, and the central unit starts operating correctly.

The procedure for the acquisition is inhibited if the central unit is not installed correctly (voltage on the bus too low, or no 230V), or if an overload is present; it is therefore only possible to complete the acquisition procedure if the LED is steady orange (installation correct but no actuator acquired), or steady green (system already configured and actuators acquired).

If the supply voltage is insufficient (below approximately 21V), the central unit will cause the green LED to flash to signal the installation error: the device will work properly, but will not guarantee correct saving and recovery of data in case of BUS failure.

Procedure for the deletion of the cumulative energy data:

1. Press and hold down the button; after about 10 seconds, the red LED will light up; keep on holding down the button.

2 After another 10 seconds, the orange LED will flash quickly; release the button.

3. All the cumulative energy data are reset.

LED signals according to the status of the load control central unit:

Device status	LED
Normal operation (below threshold with all loads enabled)	GREEN
Current threshold exceeded	RED
System not acquired	ORANGE
Current system acquisition	Flashing RED 100 ms/100 ms
BUS problem (BUS voltage insufficient, or voltage drop detected)	Flashing GREEN 500 ms/500 ms
Installation error (230 Vac not detected)	Flashing RED 100 ms/900 ms
Configuration error	ORANGE flashing irregularly on GREEN
Not configured	ORANGE flashing 128 ms/128 ms on GREEN

Wiring diagrams

Load control central unit connection

230 Vac

C16

N L

N L

N L

Ta

SCS

BUS

Actuator 16A with current sensor
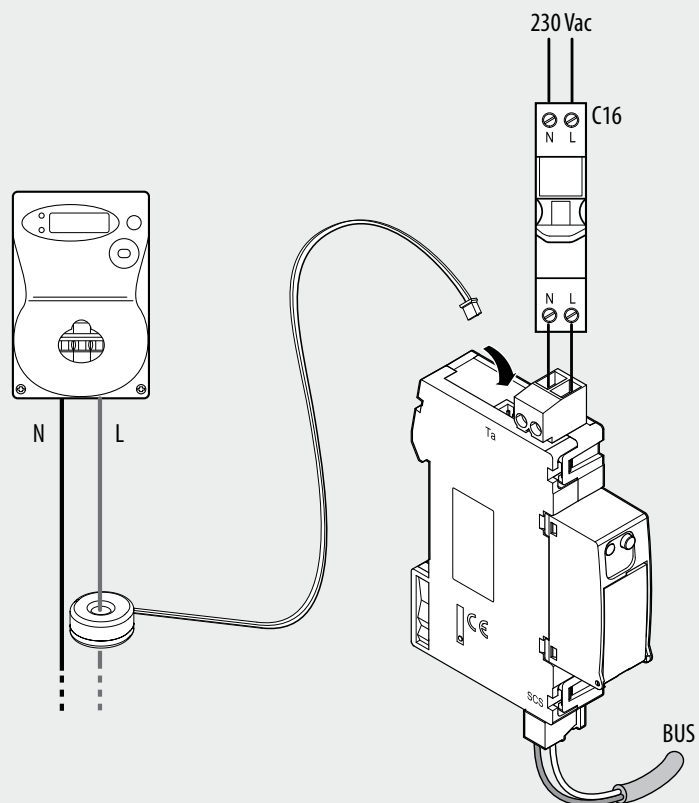
Description

The device is an actuator with 1 bistable relay sensor with zero crossing functionality, intended for the load control and/or automation functions.

In load control mode:
The actuator will be given a priority indicating the tripping order that will be followed by the F521 load control central unit (e.g. Priority 1 will be the first load disabled if the threshold is exceeded). The actuator is fitted with a current sensor for the measurement of the controlled load consumptions, as well as for the display of the instantaneous consumption, and two energy totalizers that can be reset by the user at any time.
The device also measures the residual current to allow displaying the diagnostics on the user interfaces (this feature is only available by connecting the optional external toroid 3523 to the actuator).
Using the forcing pushbutton it will be possible to re-enable the load for 4 hours after disabling by the central unit.

In automation mode, the actuator can perform the following functions:
- All operating modes that can be configured on the control devices, with the exception of those requiring the use of two interlocked relays (rolling shutters).

In mixed load control and automation mode, the following rules are followed:
The local button performs the load control management function (forcing/end of forcing)
- If the load is ENABLED or FORCED, the status of the relay follows the commands of the Automation system.
- If the load is DISABLED by the load control central unit, the status of the relay does not follow the commands of the Automation system, but can only be re-enabled by a command, ENABLING or FORCING, from load control management.
During disabling, the actuator keeps the statuses requested by the Automation commands in memory. After RE-ENABLING the relay is placed in the status required by the last automation command.
This function has been conceived for applications where the load control management function is implemented, with the need, via automation commands, of performing hourly load scheduling. If during the DISABLING stage the relay is switched OFF due to the scheduling settings, when re-enabling takes place it will stay switched OFF.
The bistable relay enables preserving the status of the load even if there is no voltage on the SCS BUS (and subsequent device reset).

Technical data

Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	30 mA max
Range of measurement:	200 mA – 16 A
Operating temperature:	0 – 40°C
Power/Consumption of driven loads:	Incandescent lamps and halogen lamps 10 A / 2300 W
	LED lamps and compact fluorescent lamps 500 W / Max 10 lamps
	Linear fluorescent lamps and electronic transformers 4 A / 920 W
	Ferromagnetic transformers 4 A cosφ 0.5 / 920 VA

Front view

View from above   View from below
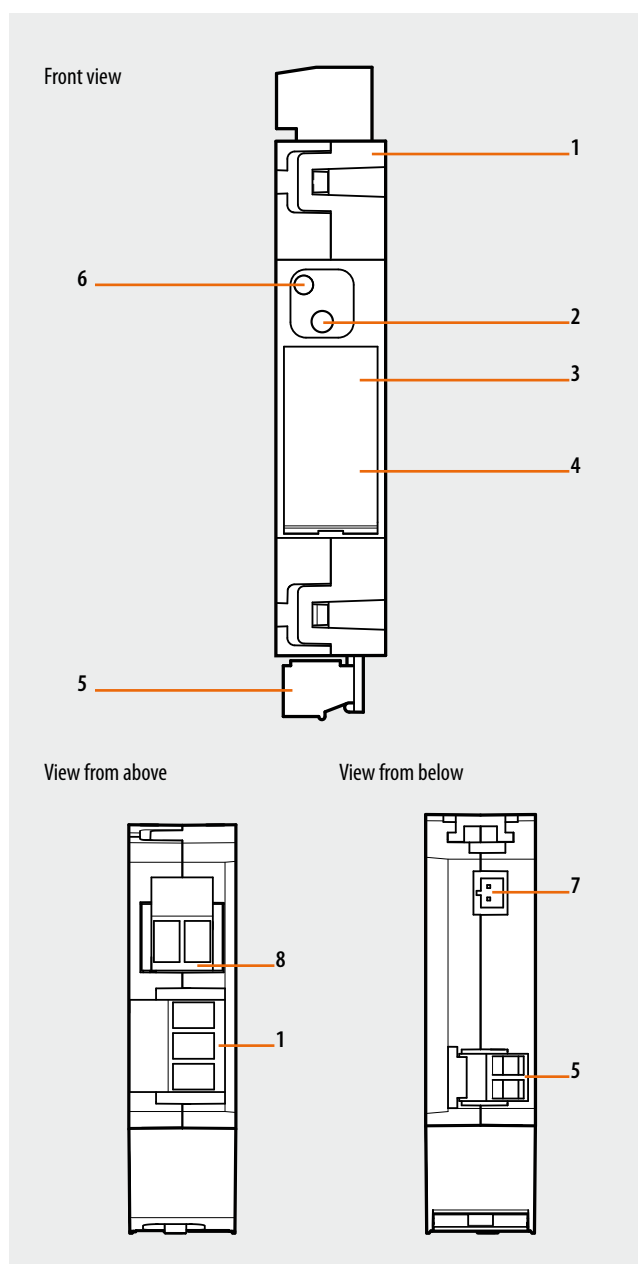
Legend

1. 230 Vac connection
2. Button for load forcing
3. Virtual configuration pushbutton (future use)
4. Configurator socket
5. BUS connection
6. User interface LED, SEE TABLE
7. Toroid connection (3523) to measure the residual current
8. Load connection

Dimensions

1 DIN module

Actuator 16A with current sensor

List of Functions

The device performs the following functions:
1. LIGHT SWITCH
2. LOAD CONTROL ACTUATOR

Configuration

The device can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

1. Lights actuator

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL = 1-9

To configure the group address 0-255, use MYHOME_Suite virtual configuration.

1.2 Mode

The actuator performs all the operating modes that can be configured on the control devices, with the exception of those requiring the use of two interlocked relays.

Moreover further operating modes with the configurator in position M of the same actuator are listed in the table below.

In the A and PL positions it will be necessary to indicate the device addresses in order for this to be reached as automation actuator. In order to display the instantaneous and cumulative consumptions of the controlled load (saved inside the actuator), it will be necessary to configure also P1 and P2. In this case P1 and P2 do not indicate the cut-off priority, but the address to be entered in the software programs in order to make it possible to display consumptions on the dedicated pages.

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL OFF Delay = 0	M=PUL	
Master Actuator with OFF control delayed on the corresponding Slave actuator. [1]	Master PUL OFF Delay = 1 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes

To use the "Actuator as a slave with PUL function", "Load status upon central unit enabling" and to select the type of load (Actuator, Lamp, Valve, Differential Reset, Fan, Irrigation, Controlled Outlet, Lock) use MYHOME_Suite virtual configuration.

NOTE 1): Only for a point-point type control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed. In the Off delayed mode, the master sends the Off command after a period of time set using the 1 - 4 configurator connected to M as shown in the table.

Actuator 16A with current sensor

LED signals according to the status of the actuator in automation mode:

Device status	LED
Load OFF	GREEN
Load ON	ORANGE

2. Load control actuator

2.1 Load control management mode:

In the P1 and P2 positions it will be necessary to indicate the priorities from 01 to 63, in PF the power factor (see table), the A, PL and M positions must be configured equal to zero.

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Priority	1-63	P1,P2: 01-63

To use "Phase" (Single, 1, 2 and 3), "Type of load", "Load status upon central unit enabling" and "AC or DC voltage" use MYHOME_Suite virtual configuration.

Power factor

Virtual configuration (MYHOME_Suite)		Physical configuration		
Function	**Parameter / setting**		**Power factor**	**Typical loads [1]**
Power factor %	0-100 %	PF=0	0.92 (default)	vacuum cleaner, microwave, TV
		PF=1	1	oven, iron, electric stoves, hair straightener, hot loads, electron. transformers, Toroid. transformers
		PF=2	0.85	CFL lamps
		PF=3	0.8	
		PF=4	0.75	Washing machines, dish-washers, desktop PCs
		PF=5	0.7	
		PF=6	0.65	
		PF=7	0.6	Other electronic devices (home theater, DVD recorder, notebook PC, etc.)
		PF=8	0.55	
		PF=9	0.5	

To use "Phase" (Single, 1, 2, 3), "Load Type" (Single Phase, Three Phase), "Load status upon central unit enabling" (Previous state, Off) to select "AC or DC voltage", the selection of the voltage to be measured (automatic or from 1 to 255V), "Upper threshold for diagnosing the residual current" and "Power threshold on standby for energy management actuators" use MYHOME_Suite virtual configuration.

NOTE 1): The parameters listed in the table are only indicative.

Actuator 16A with current sensor

LED signals according to the status of the actuator in load control management mode:

Device status	LED
Enabled	ORANGE
Enabled with consumption less than 50 W	ORANGE flashing 900 ms ON/100 ms OFF on GREEN
Forced	ORANGE flashing 1s/1s on GREEN
Disabled	RED

2.2 Lights and load control management mode:

In positions P1 and P2 priority from 01 to 63 must be indicated (see table above), in A and
PL you need to indicate the address of the device, as specified on page 2.

LED signals according to the status of the actuator in lights control and load control management mode:

Device status	LED
Enabled + ON	ORANGE
Enabled + OFF	GREEN
Enabled + ON with consumption less than 50 W	ORANGE flashing 900 ms ON/100 ms OFF on GREEN
Disabled	RED
Forced + ON	ORANGE flashing 1s/1s on GREEN
Forced + OFF	ORANGE flashing 1s/1s

Common LED notifications:

Device status	LED
Installation error (230 Vac not detected)	Flashing RED 100 ms/900 ms
Configuration error	ORANGE flashing irregularly on GREEN
Not configured	ORANGE flashing 128 ms/128 ms on GREEN

Wiring diagrams

Actuator connection:
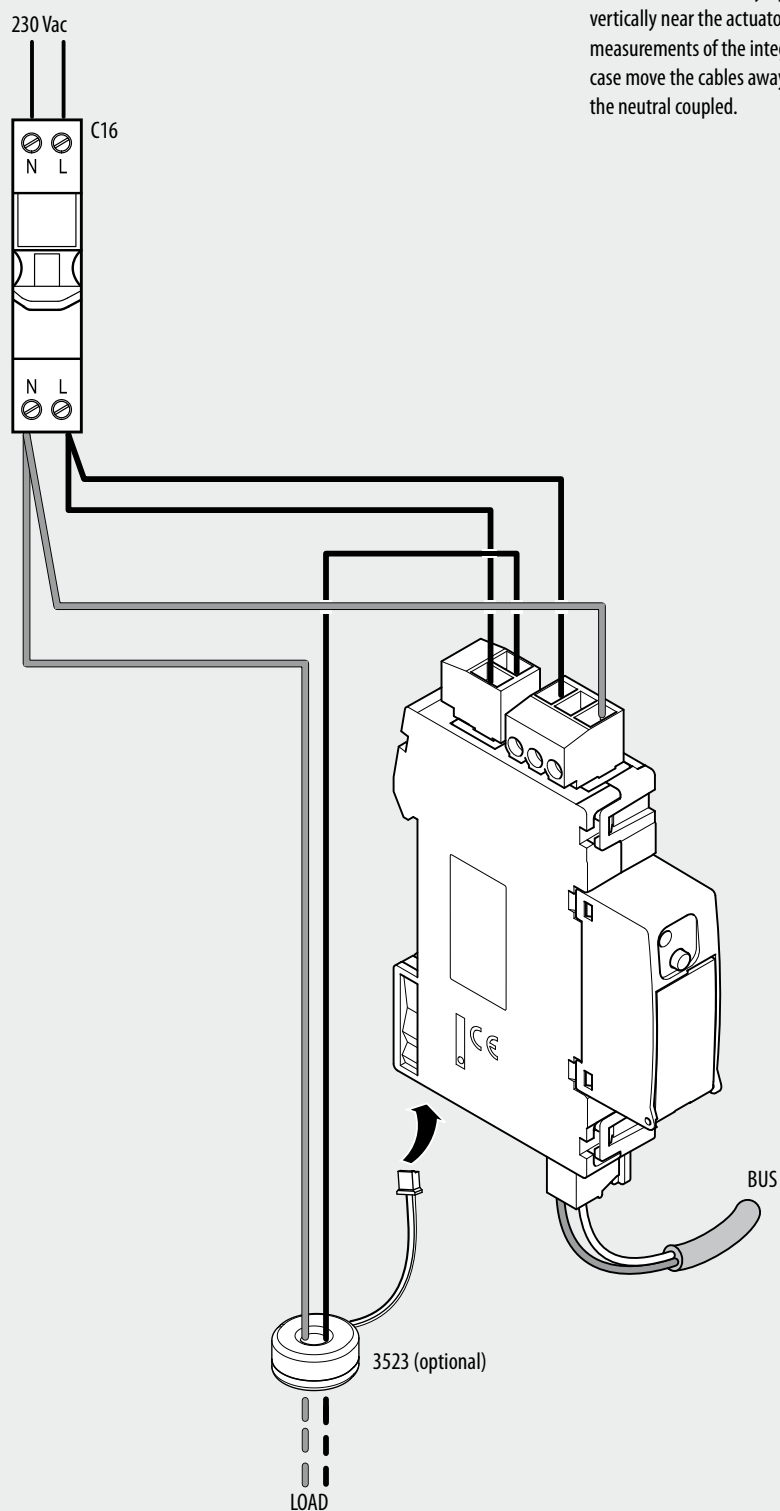
WARNING: Cables carrying high currents installed vertically near the actuator (< 5 cm) may cause false measurements of the integrated current sensor. In this case move the cables away and keep the phase and the neutral coupled.

230 Vac

C16

N L

N L

3523 (optional)

BUS

LOAD

Actuator 16A

Description

The device is an actuator with 1 bistable relay with zero crossing functionality, intended for the load control management and/or automation functions.

The actuator is capable, in an isolated manner, of assessing the frequency (50 Hz) and voltage (230 Vac)

In load control mode:

The actuator will be given a priority indicating the tripping order that will be followed by the F521 load control central unit (e.g. Priority 1 will be the first load disabled if the threshold is exceeded). This priority coincides with the address that will be used in all the configuration software programs. Using the forcing pushbutton it will be possible to re-enable the load for 4 hours after DISABLING by the central unit, or remove the load forcing previously set.

In automation mode, the actuator can perform the following functions:

- All operating modes that can be configured on the control devices, with the exception of those requiring the use of two interlocked relays;
- Possibility of group configuration (G)
- Additional modes using the M configuration socket.

In mixed load control and automation mode, the following rules are followed:

The local button performs the load control management function (forcing/end of forcing)

- If the load is ENABLED or FORCED, the status of the relay follows the commands of the Automation system.

- If the load is DISABLED by the load control central unit, the status of the relay does not follow the commands of the Automation system, but can only be re-enabled by a command, ENABLING or FORCING, from load control management.

During disabling, the actuator keeps the statuses requested by the Automation commands in memory. After RE-ENABLING the relay is placed in the status required by the last automation command.

This function has been conceived for applications where the load control management function is implemented, with the need, via automation commands, of performing hourly load scheduling. If during the DISABLING stage the relay is switched OFF due to the scheduling settings, when re-enabling takes place it will stay switched OFF.

The bistable relay enables preserving the status of the load even if there is no voltage on the SCS BUS (and subsequent device reset).

The device has a footprint of 1 DIN module and has a housing for 6 configurators: A, PL, G, M, P1, P2

Technical data

Operating power supply

with SCS BUS:	18 – 27 Vdc
Current draw:	10 mA max
Operating temperature:	0 – 40°C
Power/Consumption of driven loads:	Incandescent lamps and halogen lamps 10 A / 2300 W
	LED lamps and compact fluorescent lamps 500 W / Max 10 lamps
	Linear fluorescent lamps and electronic trans formers 4 A / 920 W
	Ferromagnetic transformers 4 A cosφ 0.5 / 920 VA

Dimensions

1 DIN module
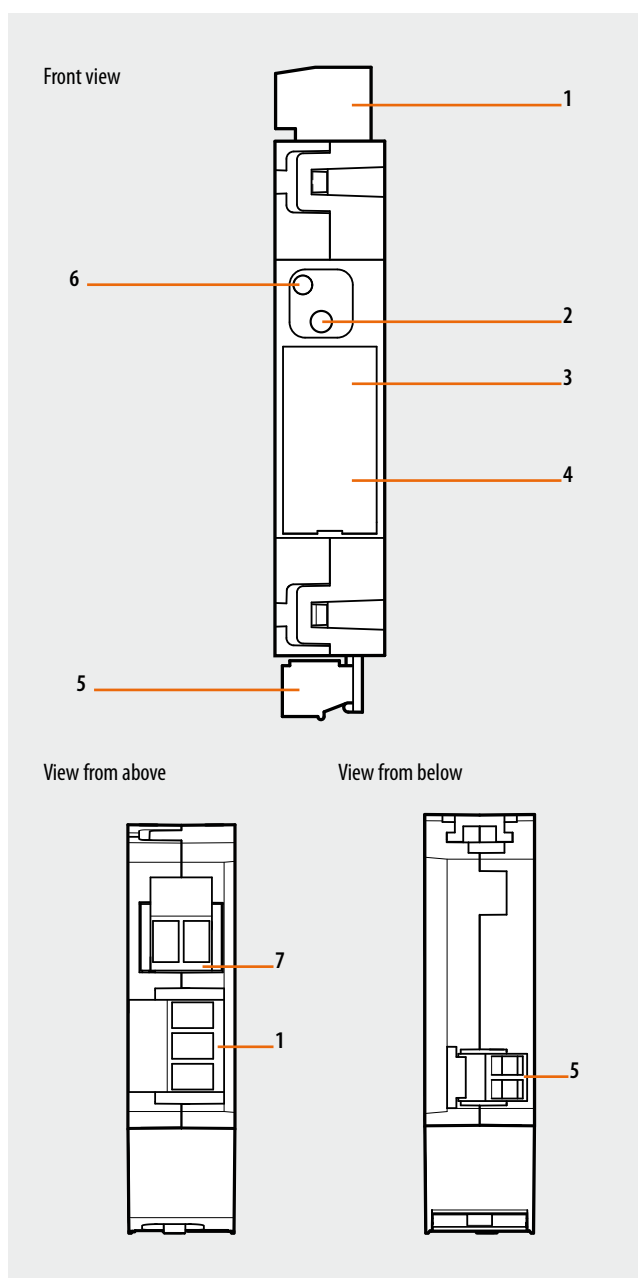
Front view

View from above   View from below

Legend

1. 230 Vac connection
2. Button for load forcing
3. Virtual configuration pushbutton (future use)
4. Configurator socket
5. BUS connection
6. User interface LED, SEE TABLE on following pages
7. Load connection

Actuator 16A

Configuration

The device can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=1-9
	Lighting point	0-15	PL = 1-9
Groups		Group 1 - Group 10=0-255	G=0-9

1.2 Mode

1.2.1 Lights control

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL	M=PUL	
OFF delay: Master actuator with OFF control delayed on the corresponding Slave actuator. [1]	0 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes

To use the "Actuator as a slave with PUL function", to define the load to be controlled and the "closed/open" state of the relay after a reset, use MYHOME_Suite virtual configuration.

NOTE 1): In the Master and Master PUL mode you can set an OFF delay of 0-255 seconds (via MYHOME_Suite) and of 1-4 minutes using the physical configuration. Only for a point-point type control. With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed.
Typical function for use in bathrooms without windows where the ON control activates the light (Master actuator) and the ventilation fan (Slave actuator) at the same time. The OFF control switches the light off immediately and leaves the fan working for the time set with configurator 1 to 4 in M of the Master actuator as indicated in the table.

1.2.2 Load control command

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Priority	1-63	P1,P2: 01-63

To use "Phase" (Single, 1, 2 and 3), "Type of load", "Load status upon central unit enabling" and "AC or DC voltage" use MYHOME_Suite virtual configuration.

Actuator 16A

LED signals according to the status of the actuator in automation mode:

Device status	LED status
Load OFF	GREEN
Load ON	ORANGE

LED signals according to the status of the actuator in load control management mode:

Device status	LED status
Enabled	ORANGE
Forced	ORANGE flashing 1s/1s on GREEN
Disabled	RED

LED signals according to the status of the actuator in automation and load control management mode:

Device status	LED status
Enabled + ON	ORANGE
Enabled + OFF	GREEN
Disabled	RED
Forced + ON	ORANGE flashing 1s/1s on GREEN
Forced + OFF	ORANGE flashing 1s/1s

Common LED notifications:

Device status	LED status
Installation error (230 Vac not detected)	Flashing RED 100 ms/900 ms
Configuration error	ORANGE flashing irregularly on GREEN
Not configured	ORANGE flashing 128 ms/128 ms on GREEN

Actuator 16A

Wiring diagrams

Actuator connection:

NOTE: For loads with current draw greater than 16 A add a supporting relay between the actuator and the load.

230 Vac

C16

N   L

N   L

LOAD

BUS
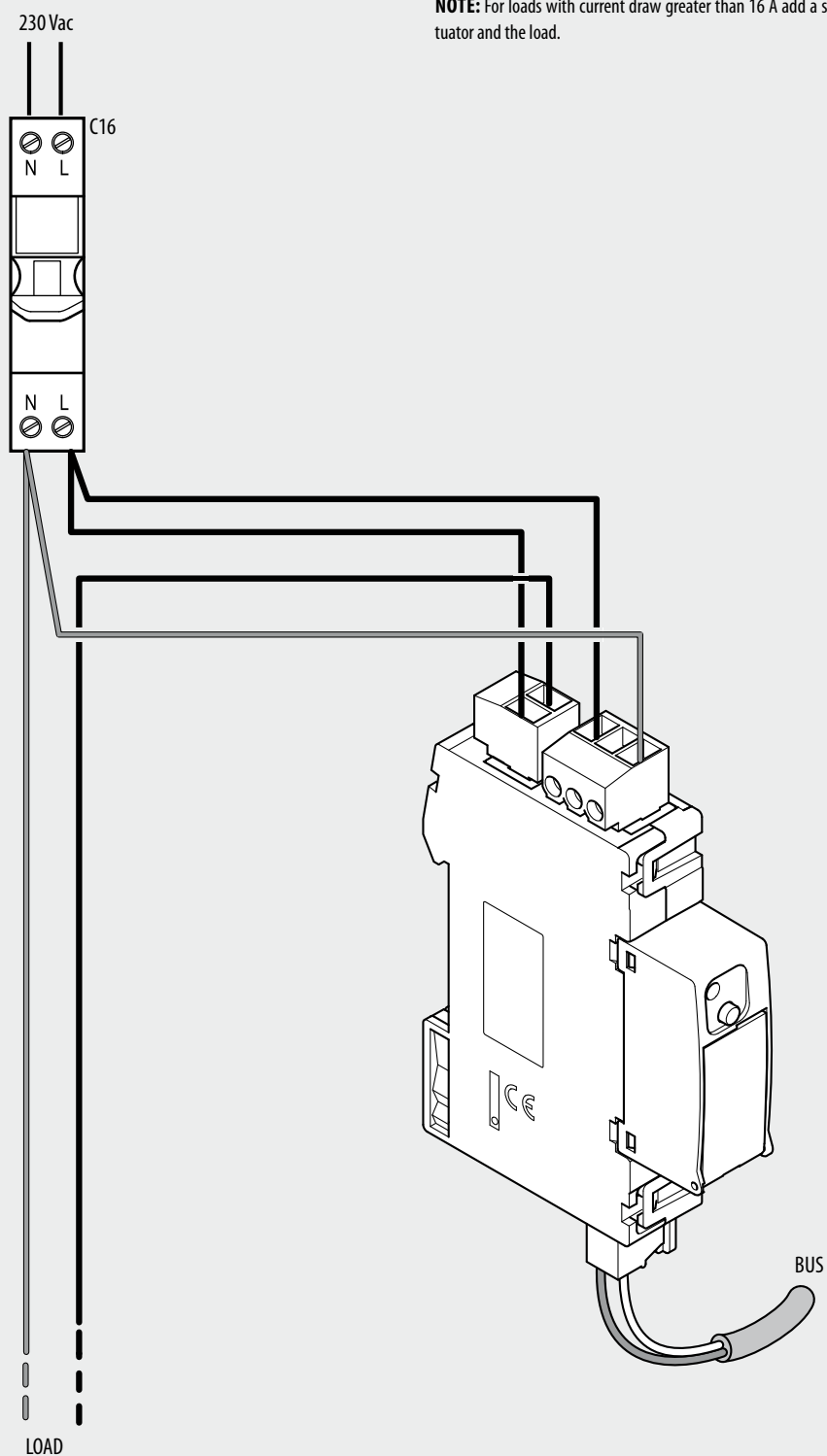
Energy Data Logger

Description

The energy data logger is a device that can be used to:
- Display on the PC or other device (e.g. Smartphone) consumption/production data, recalling the web pages using an Internet Browser:
- Concentrate and save data consisting of 10 separate energy lines maximum. The lines can be the electric power lines, by connecting F520 meters, or an F521 Central unit for load management, or lines for water, gas, or heat consumption, by connecting 3522 pulse counter interfaces.
- Have a more detailed recording of electric data (using the Web pages included in the device it is possible to download an excel file to have in hand every 15 minutes details of each single electric line).
- Set several time bands for a more detailed conversion of the electric power value into an economic value (it is in fact possible to configure up to 8 different tariffs. E.g. two-hourly tariff, three-hourly tariff). For water and gas lines there are monetary conversion values without time bands.
- Export the data to an excel file
- Have a simple data backup: The device features a housing for a micro SD memory card, on which consumption details for each individual line are saved daily.

Technical data

Operating power supply with SCS BUS:	18 - 27 Vdc
Current draw:	30 mA
Operating temperature:	5 – 40°C

Dimensions

1 DIN module

Lower view

Configuration

The device is configured using the WEB pages in the device. For the activation and the setup of the WEB pages refer to the CD supplied.
WARNING: To activate the Energy Data Logger functions, the date and time must be set (from WEB pages or other device).
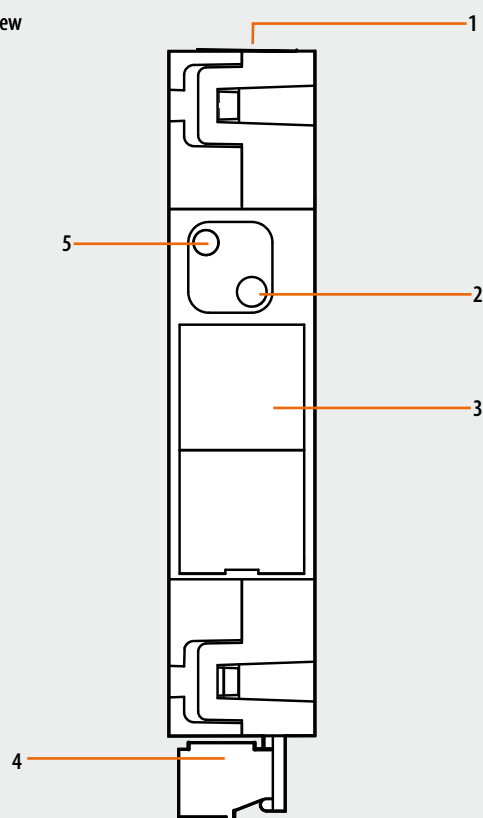
Legend

1. Ethernet cable connection
2. Button
3. Micro SD memory card socket door
4. SCS BUS connection
5. Network/device status LED

2-module flush-mounted actuator 16A

HC4672N   HS4672N   HD4672N
L4672N   N4672N   NT4672N

Description

The device is an actuator with 1 bistable relay sensor with local pushbutton for load forcing/local control for the Automation and/or Load control management functions.

In load control mode:
The actuator will be given a priority indicating the tripping order that will be followed by the F521 load control central unit (e.g. Priority 1 will be the first load disabled if the threshold is exceeded). This priority coincides with the address that will be used in all the configuration software programs. Using the forcing pushbutton it will be possible to re-enable the load for 4 hours after DISABLING by the central unit, or remove the load forcing previously set.

In automation mode, the actuator can perform the following functions:
- All operating modes that can be configured on the control devices, with the exception of those requiring the use of two interlocked relays;
- Possibility of group configuration (G)
- Additional modes using the M configuration socket.

In mixed load control and automation mode, the following rules are followed:
The local button performs the load control management function (forcing/end of forcing)
- If the load is ENABLED or FORCED, the status of the relay follows the commands of the Automation system.
- If the load is DISABLED by the load control central unit, the status of the relay does not follow the commands of the Automation system, but can only be re-enabled by a command, ENABLING or FORCING, from load control management.
During disabling, the actuator keeps the statuses requested by the Automation commands in memory. After RE-ENABLING the relay is placed in the status required by the last automation command.
This function has been conceived for applications where the load control management function is implemented, with the need, via automation commands, of performing hourly load scheduling. If during the DISABLING stage the relay is switched OFF due to the scheduling settings, when re-enabling takes place it will stay switched OFF.

The bistable relay enables preserving the status of the load even if there is no voltage on the SCS BUS (and subsequent device reset).
The device consists of 2 modules, so that it can be installed in supports of the Living, Light, Light Tech and Axolute series, and is provided with a bay for 6 configurators: A, PL, G, M, P1, P2.

Front view

Rear view

Technical data

Operating power supply
with SCS BUS: 18 – 27 Vdc
Current draw: 10 mA max
Operating temperature: 0 – 40℃
Power/Consumption of driven loads: Incandescent lamps and halogen lamps 10 A / 2300 W

LED lamps and compact fluorescent lamps 500 W / Max 10 lamps

Linear fluorescent lamps and electronic transformers 4 A / 920 W

Ferromagnetic transformers 4 A cosφ 0.5 / 920 VA

Legend

1. Local pushbutton for load forcing/local control
2. Red LED
3. Green/red two-colour LED
4. Configurator socket
5. BUS connection
6. Load connection
7. Phase connection

Dimensions

2 flush-mounted modules

2-module flush-mounted actuator 16A

<div align="right">

HC4672N   HS4672N   HD4672N
L4672N   N4672N   NT4672N

</div>

Configuration

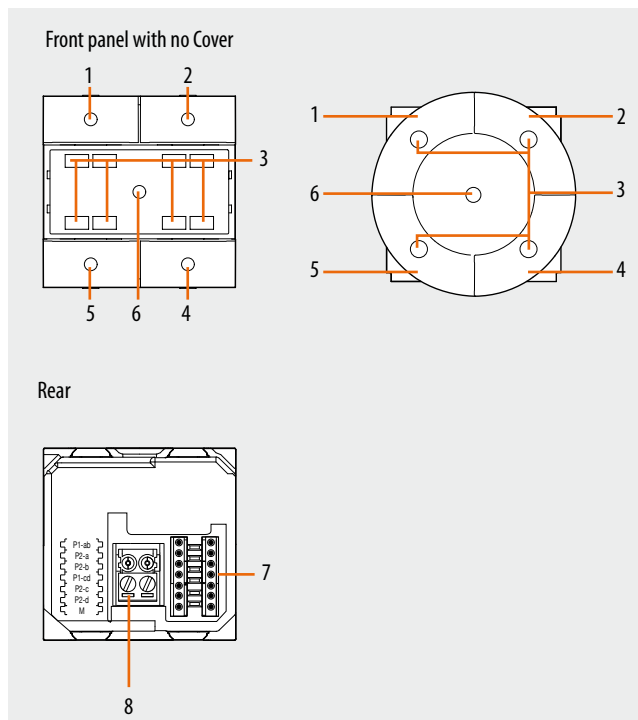The device can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-10	A=0-9
	Lighting point	0-15	PL = 1-9
Groups		Group 1 - Group 10=0-255	G=0-9

1.2 Mode

1.2.1 Automation

Virtual configuration (MYHOME_Suite)		Physical configuration	
Function	**Parameter / setting**		
Master Actuator - Cyclical ON/OFF	Master	M=0	
Actuator as Slave. Receives a control sent by a Master actuator with the same address	Slave	M=SLA	
Pushbutton (ON monostable) ignores Room and General controls	Master PUL OFF Delay = 0	M=PUL	
Master Actuator with OFF control delayed on the corresponding Slave actuator. [1]	Master PUL OFF Delay = 1 - 255	M=1	1 minute
		M=2	2 minutes
		M=3	3 minutes
		M=4	4 minutes

To use the "Actuator as a slave with PUL function", to define the load to be controlled and the "closed/open" state of the relay after resetting the actuator, use MYHOME_Suite virtual configuration.

NOTE 1): Only for a point-point type control.
With the OFF control the Master actuator deactivates; the Slave actuator deactivates after the time set with the configurators has elapsed.
In the Off delayed mode, the master sends the Off command after a period of time set using the 1 - 4 configurator connected to M.

1.2.2 Load control command

Virtual configuration (MYHOME_Suite)		Physical configuration
Function	**Parameter / setting**	
Priority	1-63	P1,P2: 01-63

To use "Phase" (Single, 1, 2, 3), to select the "Load Type" and to select the "Load status upon central unit enabling" use MYHOME_Suite virtual configuration.

2-module flush-mounted actuator 16A

LED signals according to the status of the actuator in automation mode:

Device status	Two-colour LED	Red LED
Load OFF	GREEN	OFF
Load ON	ORANGE	OFF

LED signals according to the status of the actuator in load control management mode:

Device status	Two-colour LED	Red LED
Enabled ON	ORANGE	OFF
Enabled OFF	GREEN	OFF
Forced	ORANGE flashing 1s/1s on GREEN	OFF
Disabled	GREEN	ON steady

3) Automation and load control management mode:

In positions P1 and P2 priority from 01 to 63 must be indicated, in A and PL you need to indicate the address of the device.

LED signals according to the status of the actuator in automation and load control management mode:

Device status	Two-colour LED	Red LED
Enabled + ON	ORANGE	OFF
Enabled + OFF	GREEN	OFF
Disabled	GREEN	ON steady
Forced + ON	ORANGE flashing 1s/1s on GREEN	OFF
Forced + OFF	ORANGE flashing 1s/1s	OFF

Common LED notifications:

Device status	Two-colour LED	Red LED
Not configured	ORANGE flashing 128 ms/128 ms on GREEN	OFF
Configuration error	ORANGE flashing irregularly on GREEN	OFF

2-module flush-mounted actuator 16A

Wiring diagrams

Actuator connection:
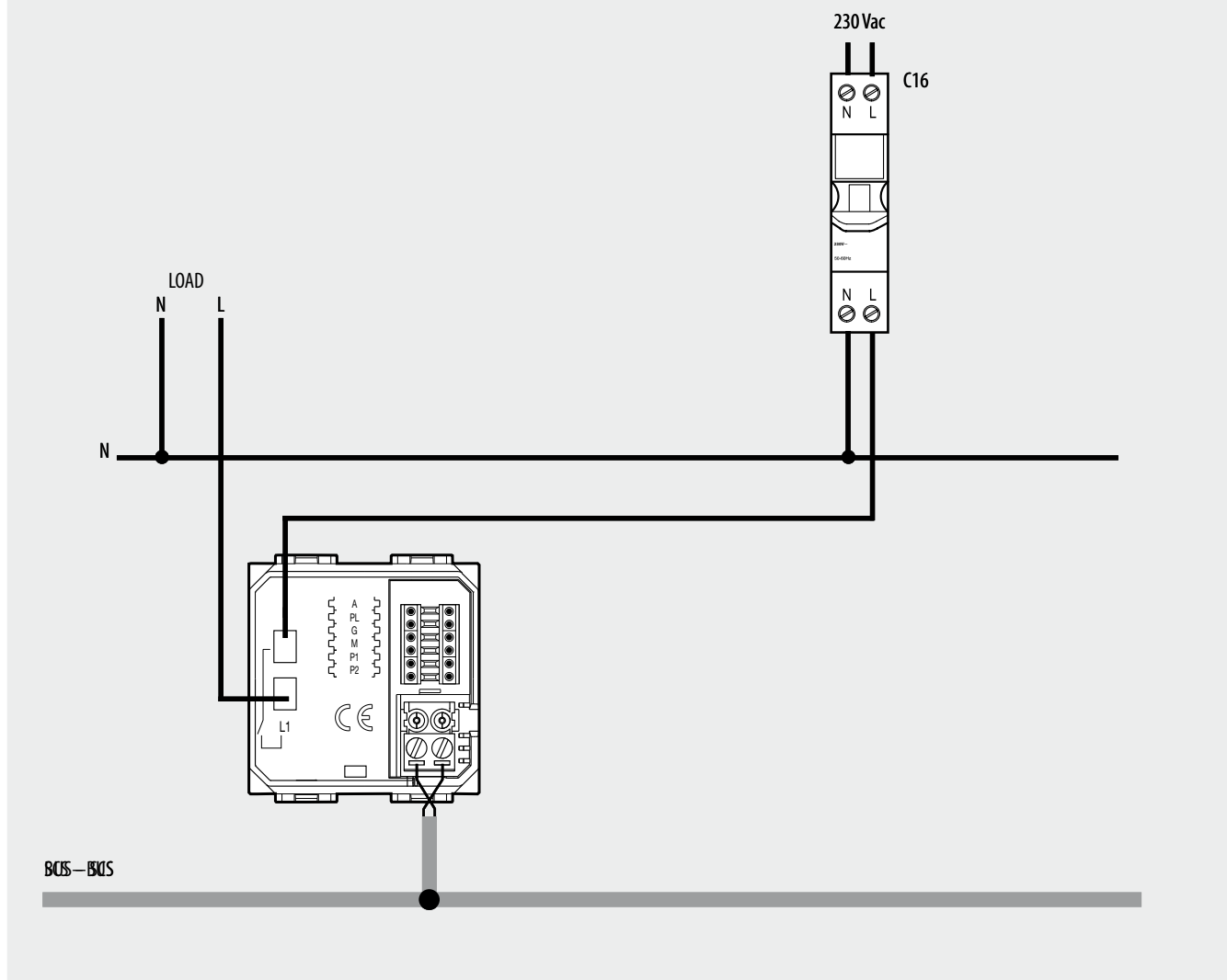
NOTE: For loads with current draw greater than 16 A add a supporting relay between the actuator and the load.

Load control panel

Description

The load control panel is a device that enables displaying the status of the loads controlled by the load control central unit, item F521, and force their operation independently from the central unit itself. It is therefore possible to:
- Force the priority of the load: in this case the central unit cannot disable the load for 4 hours.
- Re-enable a load disabled by the central unit: the duration of this operation lasts for 4 hours, unless the button is pressed manually.

The device consists of 2 modules, so that it can be installed in supports of the Livinglight and Axolute series. It has 4 buttons on the front for forcing the load and 4 red LEDs that indicate the status of the load:
- OFF with load ON
- ON steady, load disconnected due to overload.
- ON flashing (1s ON, 1s OFF), load forcing.
- ON, flashing at 1 s in programming phase and flashing at 125 ms in self-learning phase.

The load control panel is equipped, at the front, under the cover, with a programming button and, at the back, it has a bay for 7 configurators: P1-ab, P2-a, P2-b, P1-cd, P2-c, P2-d, M.

Front panel with no Cover

Rear

Technical data

Operating power supply with SCS BUS: 18 – 27 Vdc
Max. current draw: 7 mA ; Operating temperature: 0 – 40°C

Legend

1. Button a

2. Button b

3. Programming/load status indication LED

4. Button d

5. Button c

6. Programming/self-learning button

7. Configurator socket

8. BUS clamp

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.
For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

Self-learning configuration
To assign each of the buttons on the load control panel to the actuator of the load to be controlled, the procedure is as follows:
1) Press the programming/self-learning button; all the LEDs will start blinking (1s ON, 1s OFF).

2) Press the button (a, b, c, d on the panel) that you want to assign to the load, the LED assigned to it will begin to flash with a frequency of 125 ms, while the other LEDs of the device will switch off.
3) Press the button of the actuator that you want to assign to the load control panel.
4) Repeat steps 2 and 3 for all the buttons (including any button that you have already assigned in case you want to change it).
5) Briefly press the programming/self-learning button to exit programming.

WARNING: The socket of configurator M must be configured on 1 and all the other sockets P1-ab=P2-a=P2-b=P1-cd=P2-c=P2-d=0.

Load control panel

HD4673	**HS4673**	**N4673**	**067206**	**573985**
HC4673	**L4673**	**NT4673**	**067207**	**573991**

Virtual and physical configuration

Virtual configuration (MYHOME_Suite)		Physical configuration[1]
Function	**Parameter / setting**	
Priority	0-63	P1 - ab address of tens for the loads assigned to buttons "a" and "b", values from 0 to 6.
		P2 - a address of units for the load assigned to button "a", values from 0 to 9.
		P2 - b address of units for the load assigned to button "b", values from 0 to 9.
		P1 - cd address of tens for the loads assigned to buttons "c" and "d", values from 0 to 6.
		P2 - c address of units for the load assigned to button "c", values from 0 to 9.
		P2 - d address of units for the load assigned to button "d", values from 0 to 9.
		M=0,1; mode, value 0, the device can be physically configured; value 1, the device can be configured with the self-learning procedure.

To use "Phase" (Single, 1, 2, 3), use MYHOME_Suite virtual configuration.

NOTE 1): For example: if I have to control the actuators with priority 5, 6, 12, 13, the load control panel must be configured in the following way: P1-ab=0; P2-a=5; P2-b=6; P1-cd=1; P2-c=2; P2-d=3. In this case button "a" is assigned to the actuator with priority 5, button "b" the actuator with priority 6, button "c" the actuator with priority 12 and button "d" the actuator with priority 13.
In the load control system the highest priority that can be configured on the actuators is 63, so if at P1-ab the connected configurator is 6 at P2-a or P2-b the connected configurator can be at most 3.

Gateway

Description

This device represents the interface between the MY HOME Temperature control system and the Climaveneta IDRORELAX system.

The item allows the passage of the controls produced by the bus system toward the fan-coil. It is necessary to consider one for each fan-coil, thus correctly scaling the bus system as regards absorption and configuration.

As a matter of fact, the item is housed inside the fan-coil during the production phase thus it is already connected to it by means of the connector located at the top of the front side. Basically, after performing the hydraulic and electrical connection, you will only need to connect the bus using the appropriate clamp.

Legend

1. Connector: for Climaveneta fan-coil connection
2. Configurator socket: socket for the configurators
3. Removable connector clamp for SCS BUS connection
4. LED: not used.
5. Key: not used.

Technical data

- Power supply from SCS BUS: 27 Vdc
- Operating power supply with SCS BUS: 18 – 27 Vdc
- Max. absorption: 18 mA
- Operating temperature: 0 – 40 ℃
- Size: 2 DIN modules

Front view

Configuration

The item is the interface that can be found on the Climaveneta Chiller and the Fan-Coil. It is necessary for the connection to the temperature control BUS. As for the actuators, also for this device it will be necessary to connect to the **ZA** and **ZB** sockets two configurators that identify the address, and the number of the zone it belongs to.

In practical terms, the operation is the same as the one performed for the probe, during the definition of the zone. A probe and a Gateway belonging to the same zone will require the same numeric configurators in the **ZA** and **ZB** sockets.

The **TYPE** socket must be configured to indicate the type of load to be managed.

If the Gateway manages a Fan-Coil, the numeric configurator 0 must be connected to the **TYPE** socket, If it manages a Chiller, numeric configurator 1 will be required.

When the Gateway is configured for the management of the Chiller, it will be possible to read the external temperature coming from the Climaveneta Chiller.

This information may be simply displayed, or , in case the system is managed by the 99 zone central unit, item 3550, it may be used to program and activate temperature control automations.

Depending on needs, temperature control automations may activate certain actions with certain temperature conditions. For example, in case thresholds that may be manually set are exceeded, the temperature control system may automatically switch the settings from summer to winter, and vice versa. On the front of the interface are four sockets dedicated to the configurators:

ZA ZB   zone address
N   progressive zone number
TYPE   type of load to control (Fan-Coil or Chiller)

NOTE: Gateway is a Climaveneta product that can already be found on fan-coils. For further information and for the technical documentation of the Climaveneta IDRORELAX system, contact the **Customer Service Toll Free number 800.019.190** (8.30-12.30 and 14.00-18.00 Monday to Friday - calls are free of charge).

Configurator summary table:

Socket	Function	Configurator
ZA	Zone address	0 – 9
ZB	Zone address	0 – 9
N	Progressive zone number	1 – 9
TYPE	Fan-Coil management	0
	Chiller management	1

A/V SCS/BUS cable (white)

336904

Description

This cable is used for the distribution of the power supplies and the operating signals to all BUS system devices.

The cable consists of a white external sheathing and two twisted flexible conductors with a section of 0.5 mm2, one brown and one brown/white.

The cable is sold in 200 m coils.

It is thus suitable to be used:

- in the open air, inside trunkings, passage-ways and pipes
- inside walls with suitable pipes.
- laid underground by means of suitable pipes

The white SCS-BUS cable is suitable for underground installation

Technical data

Insulation voltage:	450/750 V
Can be buried:	YES (see installation notes)
External sheath colour:	white (RAL 9010)
External sheath diameter:	5.0 +/- 0.1 mm
External sheath thickness:	0.7 mm
External sheath material:	PVC (RZ)
Number of internal conductors:	2 unshielded twisted flexible conductors with sheath
Colour of internal conductors:	brown – brown/white
Sheath thickness of internal conductors:	0.40 mm
Sheath diameter of internal conductors:	1.70 mm
Sheath material of internal conductors:	XLPE polyethylene
Conductor material:	red electrolytic copper
Conductor section:	0.50 mm2 (16 x 0.20 mm^2)
Operating temperature:	(-15) – (+70) °C
Coil length:	200 m

Standards, Certifications, Marks

Reference standards: - It complies with the tests required by the following standards: EN60811, EN50289, EN50290, EN60228, EN50265-2-1, EN50395, EN50396 as described in the IMQ CPT 062 document.

Marks obtained:
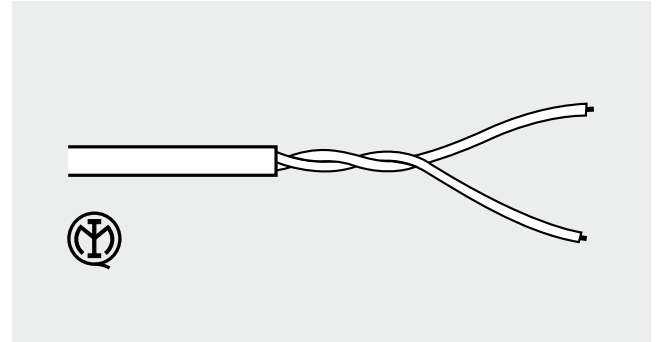
Installation notes

Underground cable installation

The 336904 BUS SCS cable can be installed underground (protected using appropriate piping), together with other signalling cables, provided the voltage is <50V.

It is however strictly forbidden to install the 336904 cable in the same conduit as power supply cables with voltages >50V. Failure to comply with the installation requirements will relieve BTicino of all responsibilities for the operation of the system installed.

Installation together with other cables

Although the construction of the white cable guarantees the necessary electrical insulation level for installation together with 450/750 V system cables, it is however not capable of guaranteeing immunity from any electromagnetic disturbances that may occur when installed in the same conduits used for the power supply cables.

It is therefore strongly recommended that the white BUS/SCS cable and the power supply cables are installed in separate conduits.

Wall mounted
LINEA 2000 METAL entrance panel

342991 - 342992

Description

Wall mounted 2-wire pushbutton panel with Zamak front cover, colour camera, and night viewing white LED light. One and two-family version available.
The camera can be swivelled by +/-15°, both horizontally and vertically.
It provides the possibility of opening an electrical door lock connected directly to clamps S+ and S- (18 V 4 A impulsive, 250 mA holding current). Blue LED backlit name plate

Related items

346250 (gate release relay module)

Technical data

Power supply from SCS BUS:	18 - 27 Vdc
Stand by absorption:	20 mA
Max. operating absorption:	240 mA
Operating temperature:	(-25) - (+70)°C
PI against mechanical impact:	IK07

Dimensional data

106 mm
185 mm
35 mm
160 ÷ 165 cm
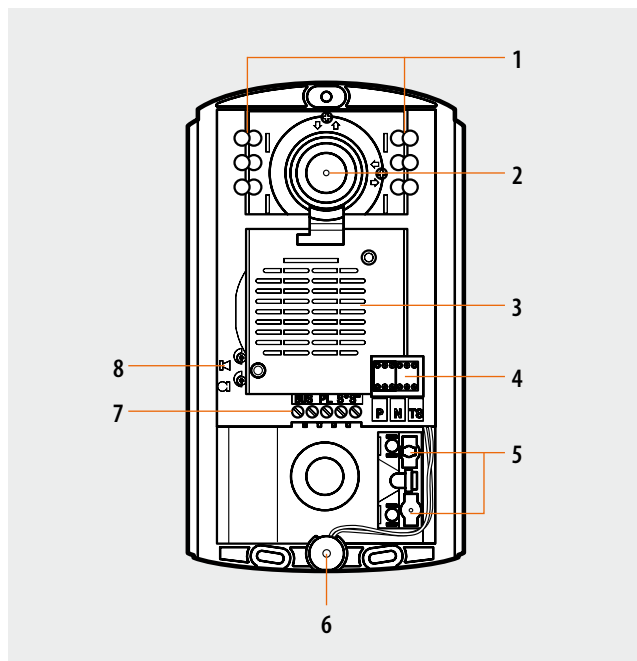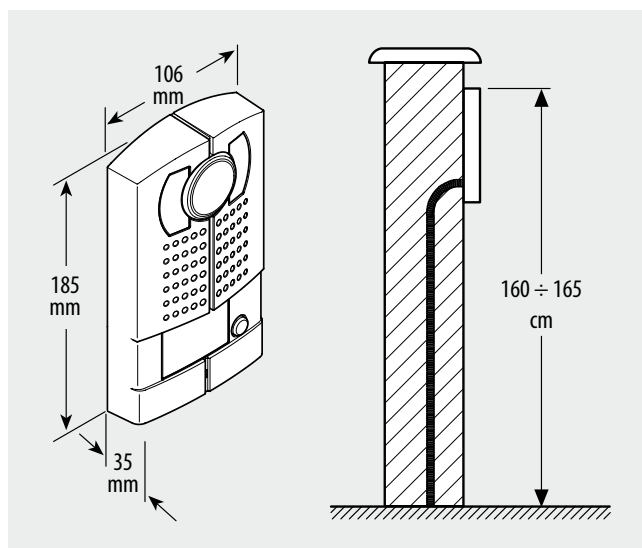
Legend

1 - White LEDs for night lighting
2 - Colour camera with camera slant adjustment horizontally and vertically by ±15°
3 - Loudspeaker
4 - Configurator socket
5 - Call keys
6 - Microphone
7 - Clamps for BUS and door lock connection: the module allows to control an electric door lock directly connected to the clamps S+ S- (18 V 4 A impulsive - 250 mA holding current 30 Ohm max)
8 - Microphone and loudspeaker volume adjustment

Configuration

The device must be configured as follows:

P - entrance panel number

The configurator in seat P of the speaker module assigns to it a recognition number inside the system. The numbering of the entrance panels must always start from P=0. The entrance panel configured with P=0 must be a common (or main) entrance panel.

N - call number

Assigns the correspondence between the entrance panel pushbuttons, and the audio or video handsets.

In common entrance panels made using pushbutton modules, 1 must be inserted in N of the speaker module. In secondary entrance panels, the number of the first riser handset must be inserted in N.

T - door lock relay timing

configurator number

0= No configurator	1	2	3	4	5	6	7
4 sec.	1 sec.	2 sec.	3 sec.	as pushbutt.	6 sec.	8 sec.	10 sec.

S - type of call signal

The configuration of S determines the call tone of the SPRINT handsets.
One can thus differentiate the calls from different entrance panels.

Table for SPRINT handset call signal

Configurator	0	1	2	3
Type of bell	2-tone	2-tone	2-tone	One-tone
	1200Hz	1200Hz	1200Hz	1200Hz
	600Hz	0 Hz	2400Hz	

For the SWING, PIVOT, POLYX and AXOLUTE handsets, the **S configurator** associates the Entrance panel to the bell programmed in the same apartment. It is possible to chose between 16 different bells. In one-family systems **S=9 configure the general call**.

bticino

Flush mounted
LINEA 2000 METAL entrance panel

343001 - 343002

Description

Flush mounted 2-wire audio and video speaker module with Zamak front cover, colour camera and night viewing white LED light. One and two-family version available.
The camera can be swivelled by +/-20°, both horizontally and vertically.
It provides the possibility of opening an electrical door lock connected directly to clamps S+ and S- (18 V 4 A impulsive, 250 mA holding current). Flush mounted box supplied as standard.

Related items

346250 (gate release relay module)

Technical data

Power supply from SCS BUS:	18 - 27 Vdc
Stand by absorption:	40 mA
Max. operating absorption:	160 mA
Operating temperature:	(-20) - (+70)°C
PI against mechanical impact	IK10
Sensor:	1/3"
Lens:	f: 4,3 mm; F: 1.5 mm
Interlace:	2:1
Resolution:	330 horizontal lines
Night lighting:	white LEDs
Brightness adjustment:	automatic

Dimensional data

Zamak front without panel

Rear view
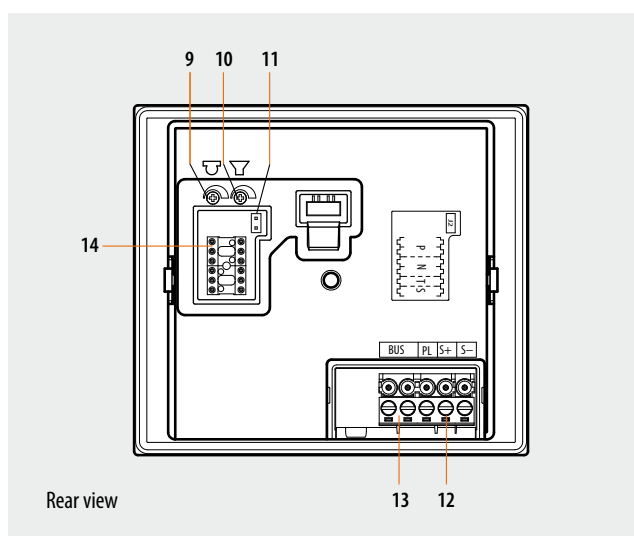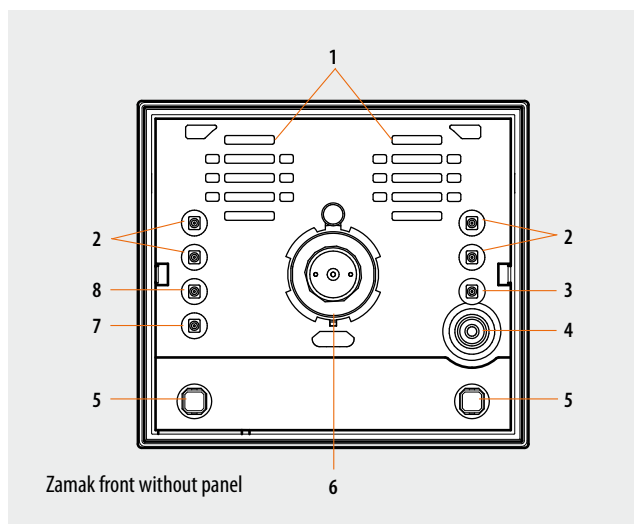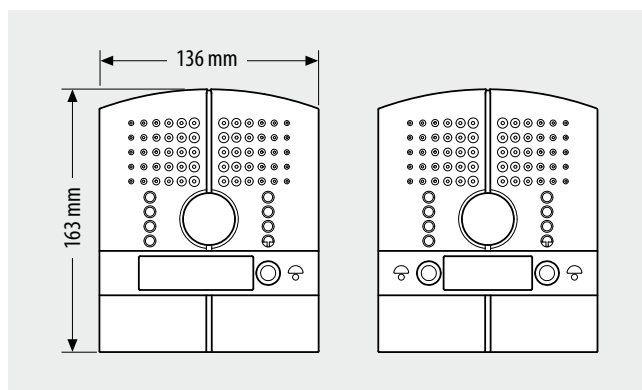
Legend

1 - Loudspeakers
2 - White LEDs for night lighting
3 - Green LED for door status notification
4 - Microphone
5 - Call keys
6 - Colour camera
7 - Green LED: put through call notification
    Red LED: busy system notification
8 - Green LED: active communication notification
9 - Microphone volume adjustment
10 - Loudspeaker volume adjustment
11 - J2: when connected, two columns of call pushbuttons are active, when disconnected only one
12 - Door lock connection and local open door pushbutton
13 - Connection to the 2-wire SCS BUS.
14 - Configurator socket

BT00614-a-EN

Configuration

The device must be configured as follows:

P - entrance panel number
The configurator in seat P of the speaker module assigns to it a recognition number inside the system. The numbering of the entrance panels must always start from P=0. The entrance panel configured with P=0 must be a common (or main) entrance panel.

N - call number
Assigns the correspondence between the entrance panel pushbuttons and the audio handsets or video handsets. In the common entrance panels made with pushbutton modules, 1 must be inserted in N of the speaker module. The number of the first riser handset must be inserted in the local entrance panels in N.

T - door lock relay timing

configurator number							
0= No configurator	1	2	3	4*	5	6	7
4 sec.	1 sec.	2 sec.	3 sec.	as pushbutt.	6 sec.	8 sec.	10 sec.

* **Operation as pushbutton for 10 sec. max, aft**er which standby mode is activated. To extend operation time over 10 seconds, use actuator item 346200 configured with MOD=5.

S-type of call signal with entrance panel door lock opening notification beep
The configuration of S determines the call tone of the SPRINT handsets.
One can thus differentiate the calls from different entrance panels.

Table for SPRINT handset call signal			
Configurator	0	1	2	3
Type of bell	2-tone	2-tone	2-tone	One-tone
	1200Hz	1200Hz	1200Hz	1200Hz
	600Hz	0 Hz	2400Hz	

For the SWING, PIVOT, POLYX and AXOLUTE handsets, the S configurator associates the Entrance panel to the bell programmed in the same apartment. It is possible to chose between 16 different bells. In one-family systems, S=9 configures the general call and the handsets ring, the same as with the S=0.

S-type of call signal without entrance panel door lock opening notification beep
The configuration of S determines the call tone of the SPRINT handsets.
One can thus differentiate the calls from different entrance panels.

Table for SPRINT handset call signal			
Configurator	4	5	6	7
Type of bell	2-tone	2-tone	2-tone	One-tone
	1200Hz	1200Hz	1200Hz	1200Hz
	600Hz	0 Hz	2400Hz	

For the SWING, PIVOT, POLYX and AXOLUTE handsets, the S configurator associates the Entrance panel to the bell programmed in the same apartment. It is possible to chose between 16 different bells. In one-family systems, S=8 configures the general call and the handsets ring, the same as with the S=0.
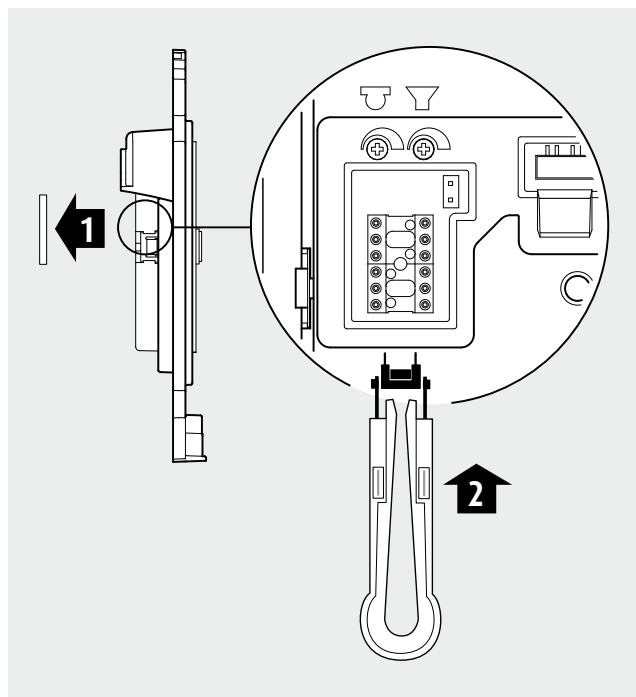
Installation

The camera must not be installed in front of intense light sources, or in locations where the subject might be backlit. To avoid these problems try to change the installation height of the camera, normally from 160-165 cm, to a height of 180 mm, and to direct the lens downwards so that the shooting quality may be improved. In low light conditions, the picture of the colour camera may be reproduced with a lower colour rendition, in order to ensure the possibility to better identify the subject. For optimum rendition, it is however recommended that an extra light sources is installed in scarcely illuminated locations.

Flush mounted box
Frame
Speaker module
Protrusion from the wall: 21 mm
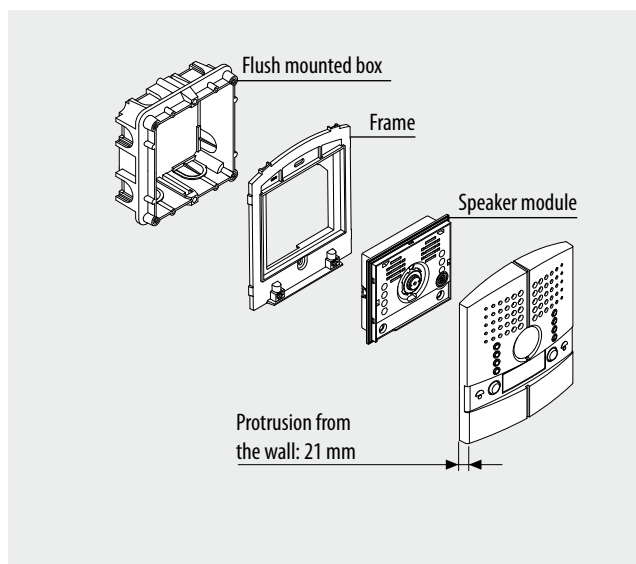
Polyx Memory Display

344163

Description

2 WIRE wall mounted speaker phone video handset with audio and video memory. With 3.5" colour LCD display with PC customisable icons OSD navigation menu for the management of the following MY HOME applications: Video door entry system, temperature control, sound system, scenarios, burglar alarm. With video door entry system answering machine with call memory function.

LED signalling for: call exclusion, door status, connection with entrance panel, and answering machine status. It can be wall mounted using the appropriate bracket (supplied).

Programming and configuration using the TiPolyxMemoryDisplay software supplied with the product.

Related items

346020 (additional 2 DIN modules power supply) - optional, for local powering of the video handset, when maximum installation distances are necessary.

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand-by absorption:	10 mA
Max. operating absorption:	330 mA
Operating temperature:	0 - 40 °C

Dimensional data
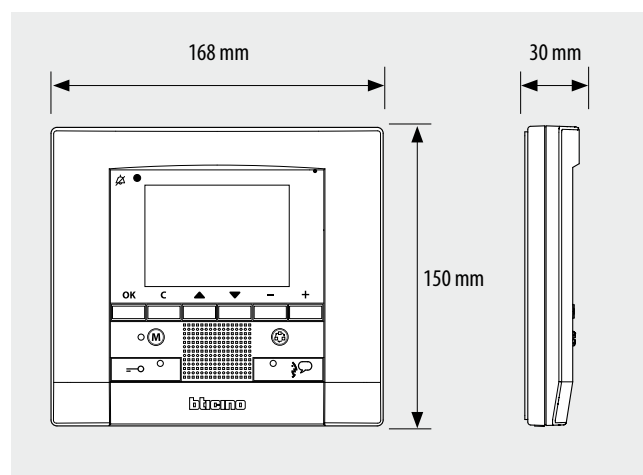
Front view
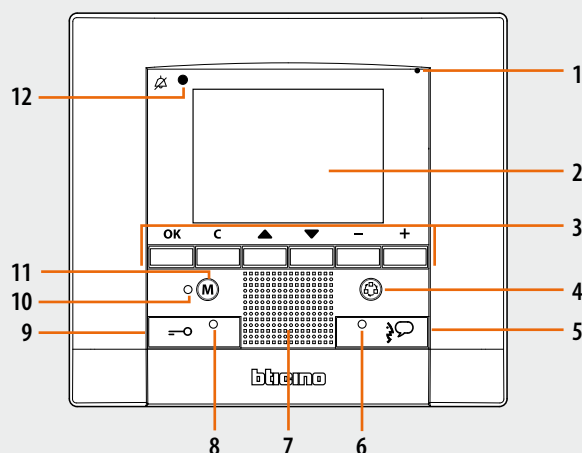
Back view
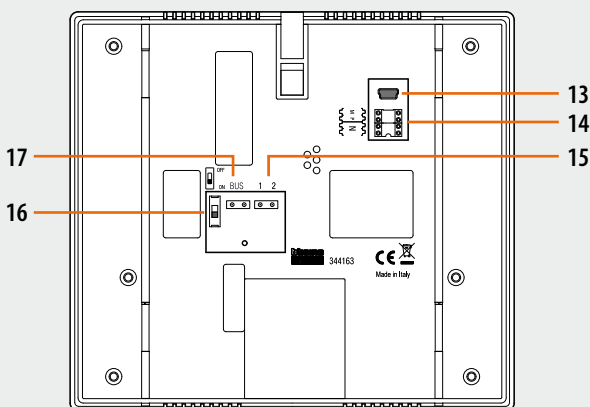
Legend

1. Microphone
2. 3.5 " LCD colour display
3. Navigation and confirmation keys in the icon menu
4. Entrance panel/camera scrolling activation key
5. Audio connection activation/deactivation key
6. Connection status LED
7. Loudspeaker
8. Door lock status LED
9. Door lock activation key
10. Audio video answering machine status LED
11. Answering machine key: enable/disable the answering machine function (if enabled by the menu)
12. Bell exclusion notification LED
13. Mini USB connector for connection to the PC
14. Configurator socket
15. Additional power supply connector (1-2)
16. Line termination ON/OFF micro-switch
17. 2 WIRE SCS/BUS connection

Configuration

Polyx Memory Display can be configured in two different modes:

- **Quick configuration** (with physical configurator connection);
- **Advanced configuration** (using the TiPolyxMemoryDisplay software supplied).

The quick configuration enables the user to access the video door entry system function menu. This is the standard configuration with configurators to be connected to their own housing on the back of the device itself.

If the apartment interface, item 346850, is installed inside the apartment, configuration of the video handset using the software supplied is recommended.

N – handset number
The N configurator assigns to each video handset an identification number within the system. The handsets must be configured in progressive order.Handsets with parallel connection (max 3 are allowed inside apartments without item 346850) must be configured using the same N configurator. In parallel with the main video handset, additional handsets, video handsets and/or bells may be installed.

P – entrance panel association
The P configurator identifies the entrance panel associated, or the first entrance panel to activate before pressing the key   and which door lock is activated when the key
 is pressed while the video handset is idle.

M – operating mode
The M configurator identifies the main menu page and therefore the preset functions that may be used (see manual supplied with the product).

The PC advanced configuration using the software (CD supplied), provides the user with the highest degree of customisation, with the possibility of:

- create customized menus;
- customize text messages;
- access all home automation functions.

Connection to the PC
To transfer the configuration performed using the TiPolyxMemoryDisplay software or to update the firmware, connect POLYX MEMORY DISPLAY to the PC using the USB-miniUSB cable.

USB-miniUSB

To ensure that the communication is successful, the POLYX MEMORY DISPLAY must be powered and not physically configured.
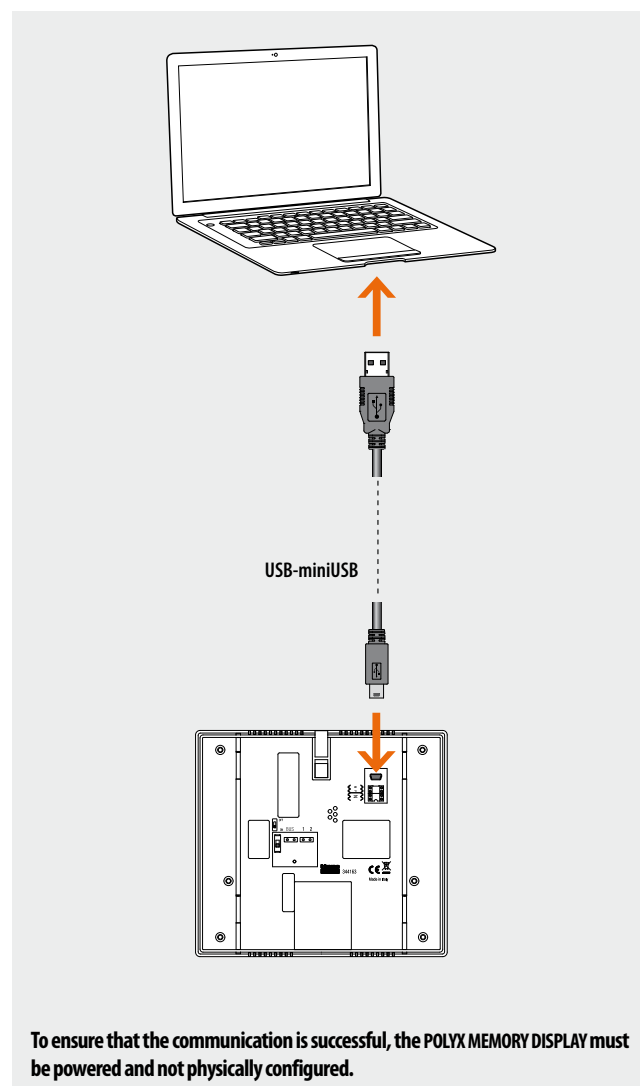
Inductive LOOP module

344165

Description

2 WIRE inductive LOOP module to be used with Polyx Memory Display 344163 video handset, to enable use by people wearing hearing aids (fitted with T selector).
The device must be configured with the same address (N) of the corresponding video handset. Wall mounted installation without the need of accessories.

WARNING: The inductive loop module must only be activated AFTER establishing the connection of the associated video handset to the entrance panel.

Technical data

Power supply dal SCS BUS:	18 – 27 Vdc
Stand by absorption:	5 mA
Max. operating absorption:	200 mA
Operating temperature:	5 - 40 °C

Dimensional data

88 mm

24,5 mm

122 mm
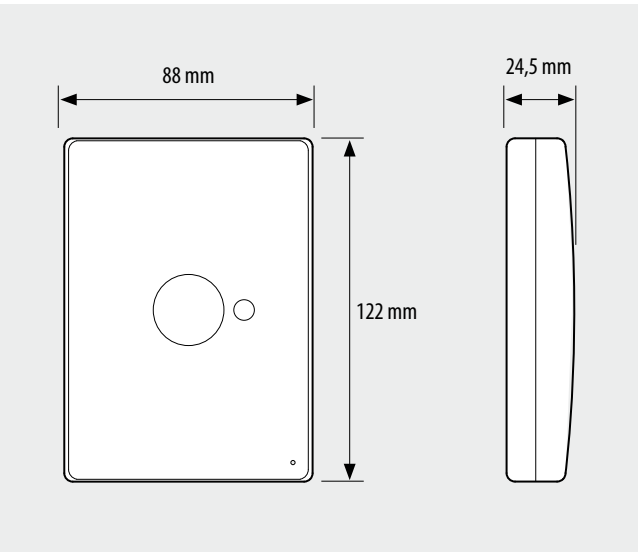
Configuration

N   *

N = associated video handset number
The N configurator assign to the device the same number of the handset of the associated video handset **(configure with the same N of the video handset).**

(*) = NOT USED
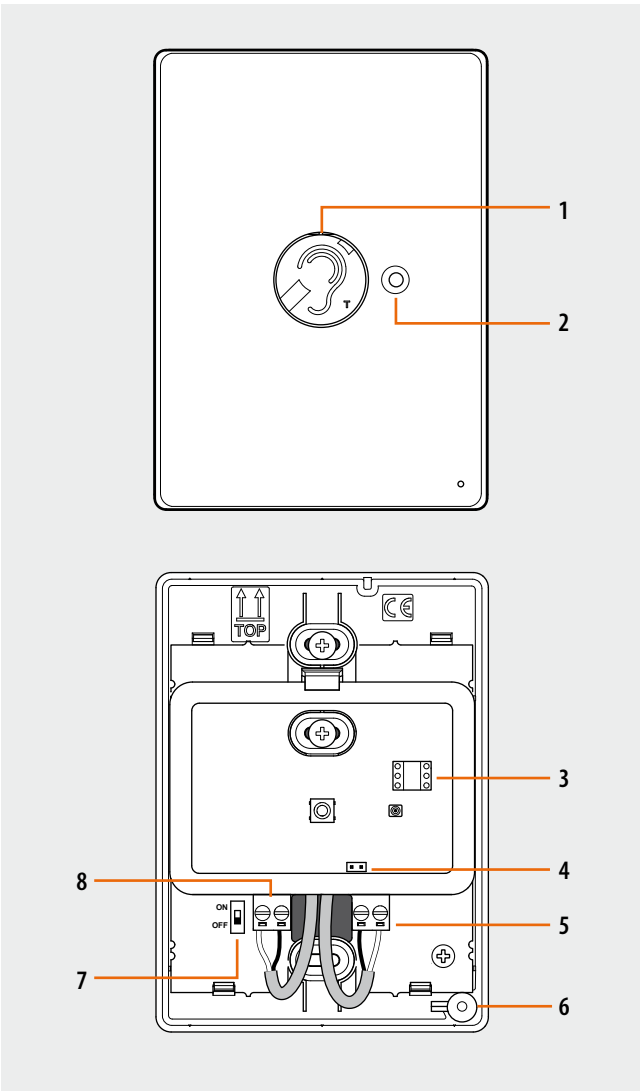
Legend

1. Activation key

2. Status signalling LED: green flashing = call notification

green steady = connection established

3. Configurator socket

4. Jumper, to be removed to enable additional power supply connection

5. Additional power supply connection clamps

6. Microphone

7. Line termination ON/OFF micro-switch

8. 2 WIRE SCS/BUS connection clamps

LIVINGLIGHT VIDEO DISPLAY

344400 - 344401

Description

2-WIRE hands free video handsets for flush mounted installation or in FLATWALL column. 2.5" colour LCD display with PC customisable OSD navigation icon menu for the management of the following applications: video door entry system, temperature control, sound system, scenarios and anti-intrusion. Signalling LEDs for: call exclusion, door status, and connection to the entrance panel. Firmware update/programming USB port. Suitable for flush mounted installation using item 506E boxes. To be completed with dedicated front covers and LIVINGLIGHT front cover plates. Programming and configuration using the TiLivingLightDisplay software supplied with the product.

Related items

506E	3+3 modules flush mounted box
344413	LIVINGLIGHT front cover - White
344411	LIVINGLIGHT front cover - Tech
344412	LIVINGLIGHT front cover - Anthracite
LNA4826...	Front cover plate, 3+3 modules, square (see LIVINGLIGHT finishes)
LNB4826...	Front cover plate, 3+3 modules, elliptical (see LIVINGLIGHT finishes)
LNC4826...	Front cover plate, 3+3 modules, AIR (see LIVINGLIGHT AIR finishes)

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption:	10 mA
Max. operating absorption:	320 mA
Operating temperature:	0 – 40 °C

Dimensional data

344400

344401
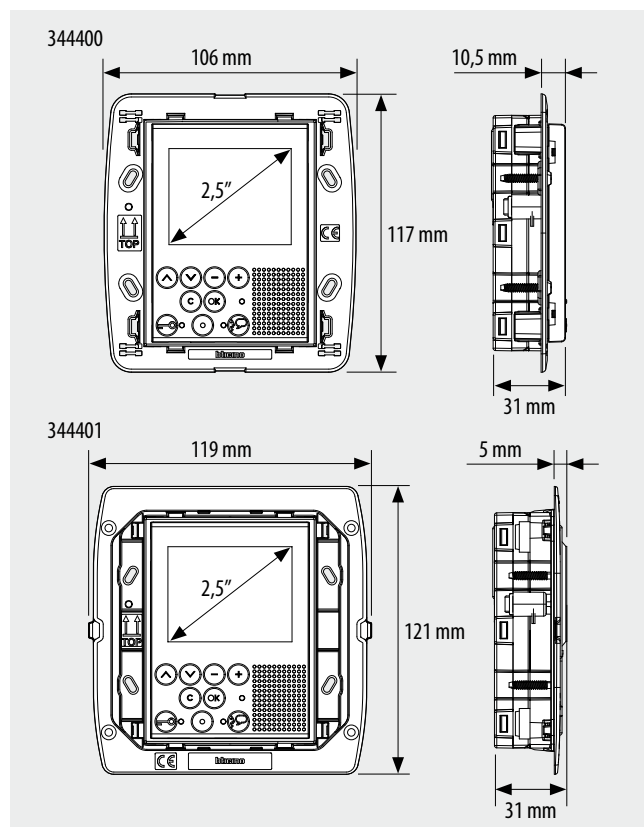
Front view
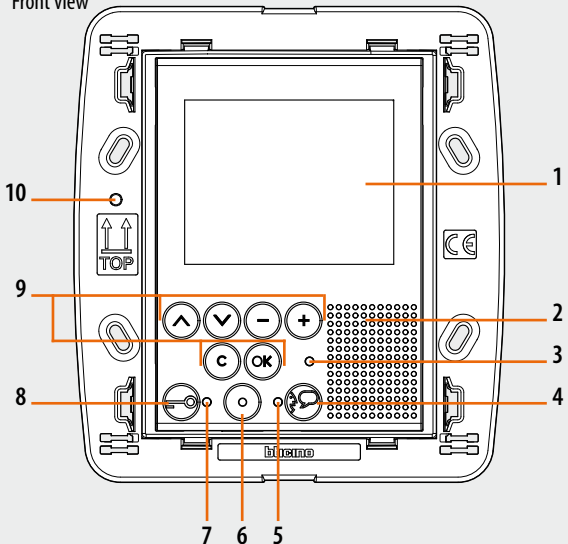
Rear view
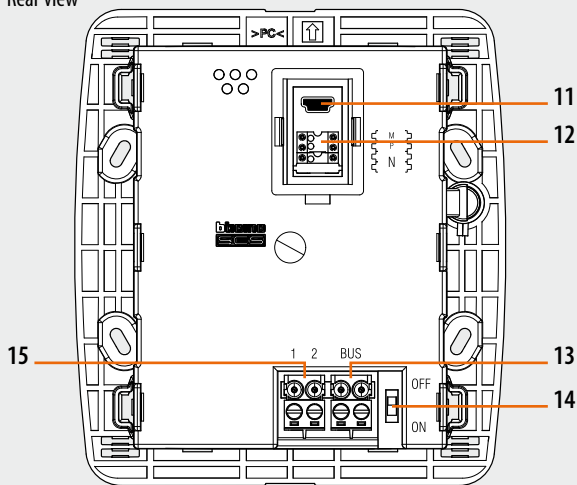
Legend

1. 2.5" colour LCD display
2. Loudspeaker
3. Bell exclusion notification LED
4. Audio connection activation / deactivation key
5. Connection status LED
6. Entrance panel / camera cycling activation key
7. Door lock status LED
8. Door lock activation key
9. Navigation keys and confirmation inside the icon menu
10. Microphone
11. Mini-USB connector for PC connection
12. Configurator socket
13. Clamps for the connection of the 2-WIRE SCS BUS
14. Line termination ON/OFF micro-switch
15. Additional power supply connection clamps (1 - 2)

Configuration

LIVINGLIGHT VIDEO DISPLAY can be configured in 2 different modes:

- **Fast configuration (through the connection of physical configurators)**
- **Advanced configuration (using the TiLivingLightDisplay software supplied with the product).**

Fast configuration enables the user to access the menu of the video door entry functions. This is the standard configuration using configurators to be connected to the appropriate socket on the back of the device itself. If the apartment interface, item 346850, is installed in the apartment, configuration of the video handset using the software supplied is recommended.

WARNING: The device configuration made using configurators CANNOT BE MODIFIED using the menu.

N - handset number
The N configurator assigns each video handset an identification number within the system. The handsets must be configured in progressive mode. Handsets with parallel connection (max 3 are allowed inside the apartment without item 346850) must be configured with the same N configurator. Additional audio handsets, video handsets and/or bells can be installed in parallel to the basic video handset.

P - entrance panel association
The P configurator identifies the associated EP, or the first entrance panel that switches itself on when the pushbutton ⊙ is pressed the first time, as well as which door lock with idle video handset is activated, when the pushbutton ⊙ is pressed.

M - operating mode
The M configurator identifies the main menu of the device and therefore all the usable preset functions (see manual supplied with the product).

The advanced PC configuration using the software (CD supplied), provides the user with a higher degree of customisation, with the possibility to:

- create flexible menus
- customize text messages
- access all home automation functions.

Connection to the PC
To transfer the configuration performed using the software, or to update the firmware, connect LIVINGLIGHT VIDEO DISPLAY to the PC using the USB-mini cable.

USB-miniUSB

BUS

To ensure that communication is successful, the video handset must be powered and NOT physically configured.
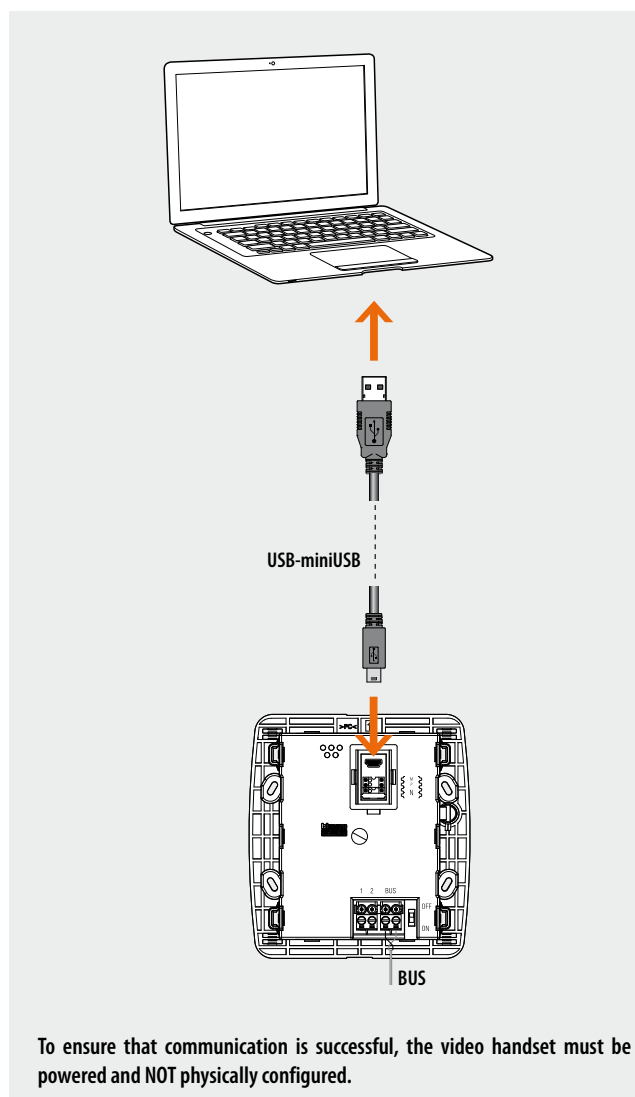
Audio
POLYX

344082

Description

2 WIRE handsfree handset for wall mounted installation.
It's fitted with keys for: EP activation/cycling, door lock release, staircase light switching on and 4 programmable keys, which operating mode is set through the configuration.
Specific audible and visual signals mean that it is also suitable for use by disabled people.
Fixing bracket supplied.

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption:	5 mA
Max. operating absorption:	55 mA
Operating temperature:	5 - 40°C

Dimensional data

Front

Rear view
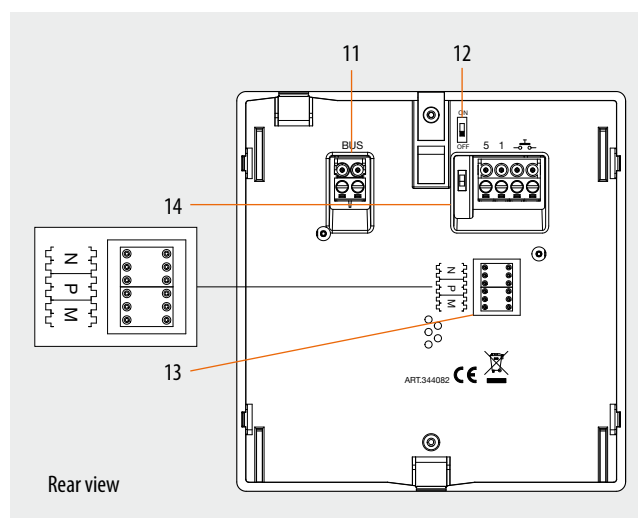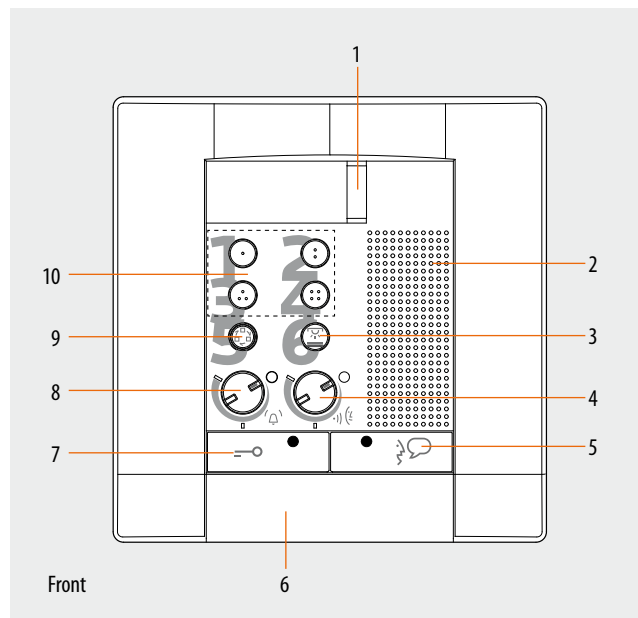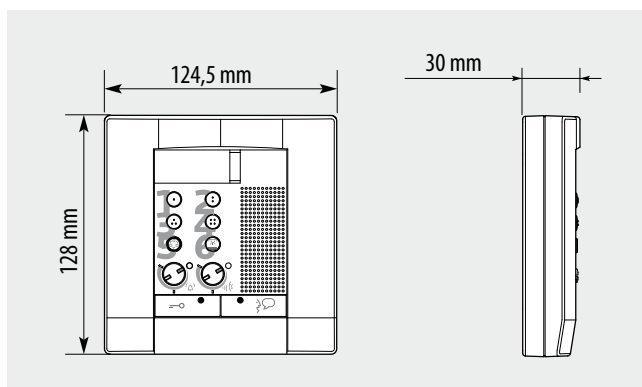
Legend

1 - Call signalling LED
2 - Loudspeaker
3 - Staircase light key
4 - Loudspeaker volume adjustment
5 - Connection key+ LED
6 - Microphone
7 - Door lock key + LED
8 - Bell volume adjustment and exclusion + LED
9 - EP Activation/cycling
10 - 4 programmable keys (through configuration)
11 - Clamps for the connection to the 2 WIRE BUS
12 - Line termination ON/OFF micro-switch
13 - Configurator socket
14 - Clamps for the connection of the Floor call auxiliary services and extra bell

Configuration

N - handset number
Assigns to each handset an identification number within the system. The handsets must be configured in progressive order. Handsets with parallel connection (max 3 are allowed inside apartments without item 346850) must be configured using the same N configurator.

P - entrance panel association
The P configurator identifies the associated EP, or the first entrance panel on which the audio is activated when the (⊚) key is pressed, as well as which door lock is activated when the key ⌷═○ • is pressed while the handset is idle.

M - Operating mode of the keys
In addition to the door lock opening key ⌷═○ • and the staircase light key (⊛), the handset also has 4 programmable keys (⊙-⊙-⊙-⊙).
These keys may be associated to different operating modes (e.g. activation of external actuators, intercom, activation of additional EPs, etc., based on the type of configurator connected to M).

Configurator in P	key (⊚) function
0-9	Entrance panel audio activation (configured with P=0-9)

Configurator in P	key ⌷═○ • function
0-9	Opening of the EP door lock (configured with P=0-9)
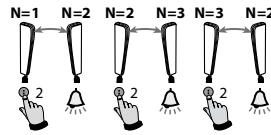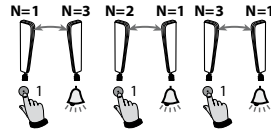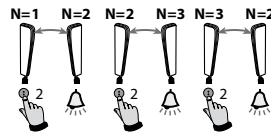
The handset offers the possibility to select among 16 types of bells with pre-programmed ringtones, which can be associated to the following type of calls:

- Calls from the entrance panel (configured with S=0 - S=4)
- Calls from the entrance panel (configured with S=0 - S=5)
- Intercom call
- Floor call
(See the bell programming table in the following pages)
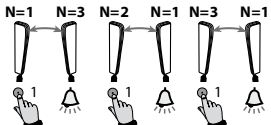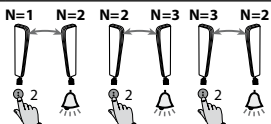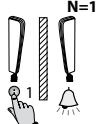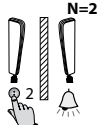
Configuration
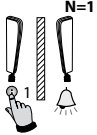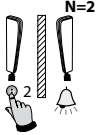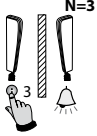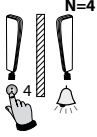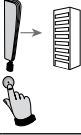
Below are the various operating modes that can be assigned to the 4 programmable keys:

MODE	KEY	FUNCTION	NOTES
MOD =	1	**Intercom** on itself, it sends the call to all handsets with the same address.	
	2	**EP activation** (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=9)	
	3	**EP door lock release** (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	
	4	**EP door lock release** (configured with P+2), directly, without call, or activation of the actuator, item 346200 (configured with P+2 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+2)	
MOD = 1	1	**Intercom** on itself, it sends the call to all handsets with the same address.	
	2	**Intercom** inside the apartment, in systems with apartment interface item 346850, or **intercom** among apartments without apartment interface.	N=1 N=2 N=2 N=3 N=3 N=2
	3	**EP activation** (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=9)	
	4	**EP door lock release** (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	
MOD = 2	1	**Intercom** inside the apartment, in systems with apartment interface item 346850, or **intercom** among apartments without apartment interface.	N=1 N=3 N=2 N=1 N=3 N=1
	2	**Intercom** inside the apartment, in systems with apartment interface item 346850, or **intercom** among apartments without apartment interface.	N=1 N=2 N=2 N=3 N=3 N=2
	3	**EP door lock release** (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	
	4	**EP door lock release** (configured with P+2), directly, without call, or activation of the actuator, item 346200 (configured with P+2 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+2)	

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MODE	KEY	FUNCTION	NOTES

MOD = 3

○ **1** — **Intercom** inside the apartment, in systems with apartment interface item 346850, or **intercom** among apartments without apartment interface.

N=1 N=5 N=2 N=1 N=3 N=1 N=4 N=1 N=5 N=1

○ **2** — **Intercom** inside the apartment, in systems with apartment interface item 346850, or **intercom** among apartments without apartment interface.

N=1 N=2 N=2 N=5 N=3 N=2 N=4 N=2 N=5 N=2

○ **3** — **Intercom** inside the apartment, in systems with apartment interface item 346850, or **intercom** among apartments without apartment interface.

N=1 N=3 N=2 N=3 N=3 N=5 N=4 N=3 N=5 N=3

○ **4** — **Intercom** inside the apartment, in systems with apartment interface item 346850, or **intercom** among apartments without apartment interface.

N=1 N=4 N=2 N=4 N=3 N=4 N=4 N=5 N=5 N=4

MOD = 4

○ **1** — **EP activation** (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=9)

○ **2** — **Intercom** inside the apartment, in systems with apartment interface item 346850, or **intercom** among apartments without apartment interface.

N=1 N=2 N=2 N=1

○ **3** — **EP door lock release** (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)

○ **4** — **EP door lock release** (configured with P+2), directly, without call, or activation of the actuator, item 346200 (configured with P+2 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+2)

MOD = 5

○ **1** — **EP door lock release** (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)

○ **2** — **EP door lock release** (configured with P+2), directly, without call, or activation of the actuator, item 346200 (configured with P+2 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+2)

○ **3** — **EP door lock release** (configured with P+3), directly, without call, or activation of the actuator, item 346200 (configured with P+3 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+3)

○ **4** — **EP door lock release** (configured with P+4), directly, without call, or activation of the actuator, item 346200 (configured with P+4 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+4)

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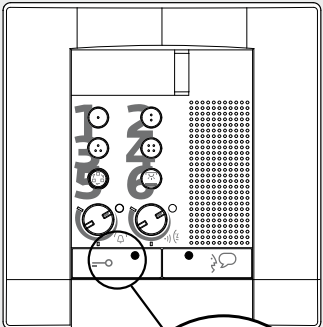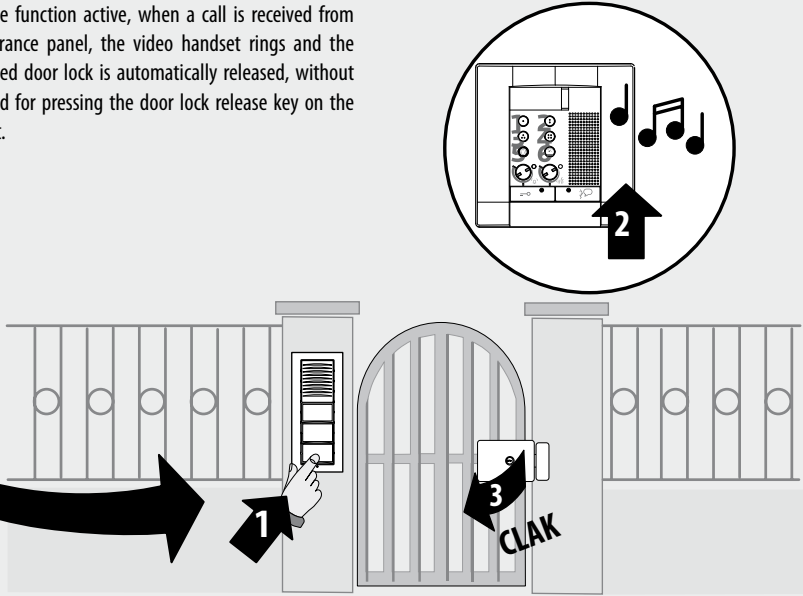| MODE	KEY	FUNCTION	NOTES
MOD = 6	1	Activation of the scenario saved in the scenario module	(SCENARIO 1)
	2	Activation of the scenario saved in the scenario module	(SCENARIO 2)
	3	**EP door lock release** (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	
	4	**EP door lock release** (configured with P+2), directly, without call, or activation of the actuator, item 346200 (configured with P+2 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+2)	
MOD = 7	1	**Intercom** inside the apartment, in systems with apartment interface item 346850, or **intercom** among apartments without apartment interface.	N=1 N=3 N=2 N=1 N=3 N=1
	2	**Intercom** inside the apartment, in systems with apartment interface item 346850, or **intercom** among apartments without apartment interface.	N=1 N=2 N=2 N=3 N=3 N=2
	3	Activation of the scenario saved in the scenario module	(SCENARIO 1)
	4	Activation of the scenario saved in the scenario module	(SCENARIO 2)
MOD = 8	1	Activation of the scenario saved in the scenario module	(SCENARIO 1)
	2	Activation of the scenario saved in the scenario module	(SCENARIO 2)
	3	Activation of the scenario saved in the scenario module	(SCENARIO 3)
	4	Activation of the scenario saved in the scenario module	(SCENARIO 4)
MOD = 1	1	**General** Intercom, sends a call to all the handsets of the system.	
	2	**EP activation** (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=9)	
	3	**EP door lock release** (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	
	4	**EP door lock release** (configured with P+2), directly, without call, or activation of the actuator, item 346200 (configured with P+2 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+2)	
MOD = 12	1	**Intercom** between apartments, in systems with apartment interface, item 346850	N=1
	2	**Intercom** between apartments, in systems with apartment interface, item 346850	N=2
	3	**EP door lock release** (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	
	4	**EP door lock release** (configured with P+2), directly, without call, or activation of the actuator, item 346200 (configured with P+2 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+2)	

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MODE	KEY	FUNCTION	NOTES
MOD = 1 3	⚫ **1**	**Intercom** between apartments, in systems with apartment interface, item 346850	N=1
	⚫ **2**	**Intercom** between apartments, in systems with apartment interface, item 346850	N=2
	⚫ **3**	**Intercom** between apartments, in systems with apartment interface, item 346850	N=3
	⚫ **4**	**Intercom** between apartments, in systems with apartment interface, item 346850	N=4
MOD = 1 6	⚫ **1**	Activation of the scenario saved in the scenario module	(SCENARIO 1)
	⚫ **2**	Activation of the scenario saved in the scenario module	(SCENARIO 2)
	⚫ **3**	**General** Intercom, sends a call to all the handsets of the system.	
	⚫ **4**	**EP door lock release** (configured with P+1), directly, without call, or activation of the actuator, item 346200 (configured with P+1 and MOD=5), or activation of door lock actuators 346230-346260 (configured with P+1)	

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Configuration

A				B	C	D	E
0	0			20	40	60	80
1	0			30	50	70	90
0	1			21	41	61	81
0	2			22	42	62	82
1	2			32	52	72	92
0	3		20 = B	23	43	63	83
1	3		40 = C	33	53	73	93
0	4	**+**	60 = D	24	44	64	84
0	5		80 = E	25	45	65	85
0	6			26	46	66	86
1	6			36	56	76	96
0	7			27	47	67	87
0	8			28	48	68	88

(A) Configuration selected for the operation of the keys (see previous pages)

(B) Configuration selected for the operation of the keys + **OFFICE** function

(C) Configuration selected for the operation of the keys + **PAGING** function

(D) Configuration selected for the operation of the keys + **HANDSFREE** function **(Can be activated only on a single device for each unit system)**

(E) Configuration selected for the operation of the keys, **OFFICE and PAGING** function

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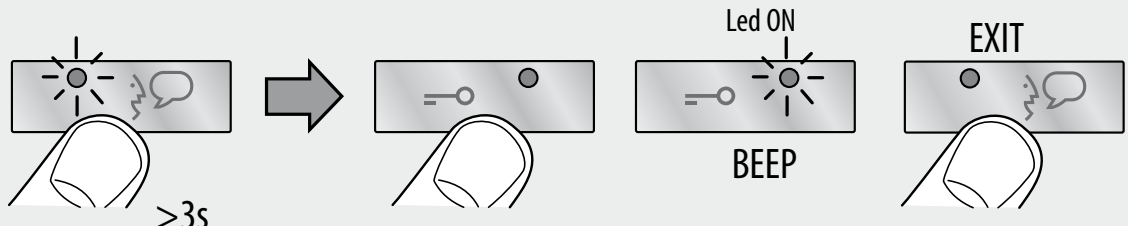
OFFICE FUNCTION DETAIL
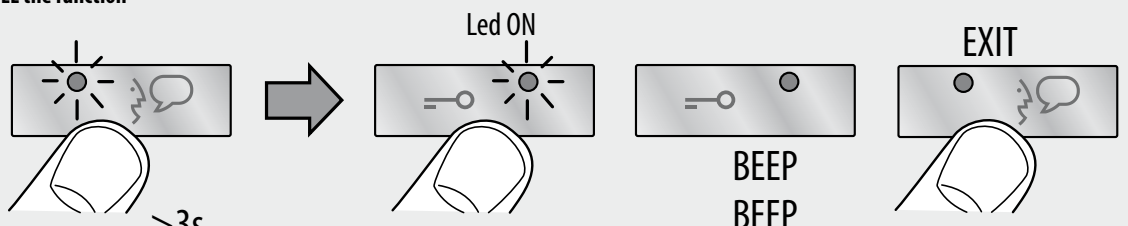
With the function active, when a call is received from the entrance panel, the video handset rings and the associated door lock is automatically released, without the need for pressing the door lock release key on the handset.

To ENABLE the function

Led ON

EXIT

>3s

BEEP

To DISABLE the function

Led ON

EXIT

>3s

BEEP
BEEP

⚠ **WARNING:** the "OFFICE" function cannot be activated together with the "DOOR STATUS" function.

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DOOR STATUS function

This function notifies the status of the door lock. If open, the "door lock LED" flashes, if closed, the LED stays off.

NOTA: è attivabile solo se l'impianto lo prevede; NON è attivabile contemporaneamente alla OFFICE function.

PAGING function

This function can be used to send voice messages using the microphone of the device through the speakers of the sound system. To activate briefly press the "Connection" key while the device is in the idle condition. The activation of the function is confirmed by the green LED coming on. To DISABLE the function press the "Connection" key again.
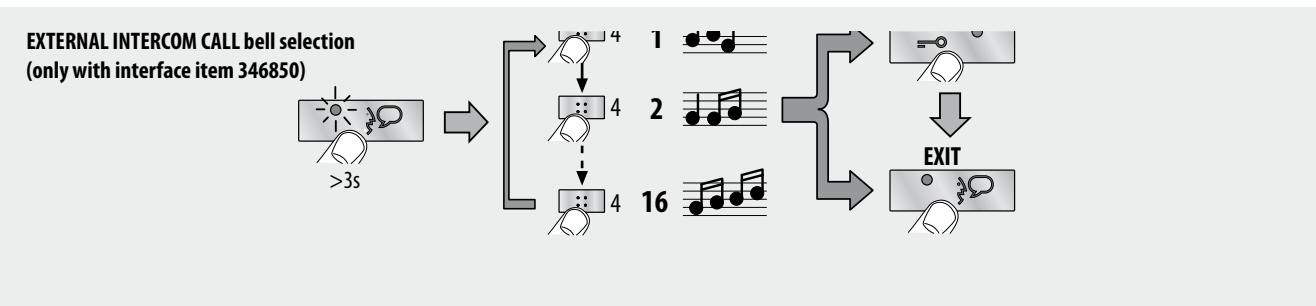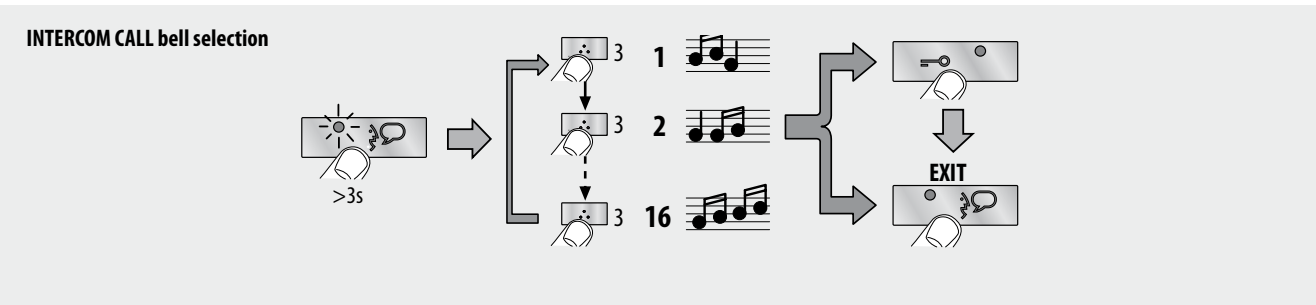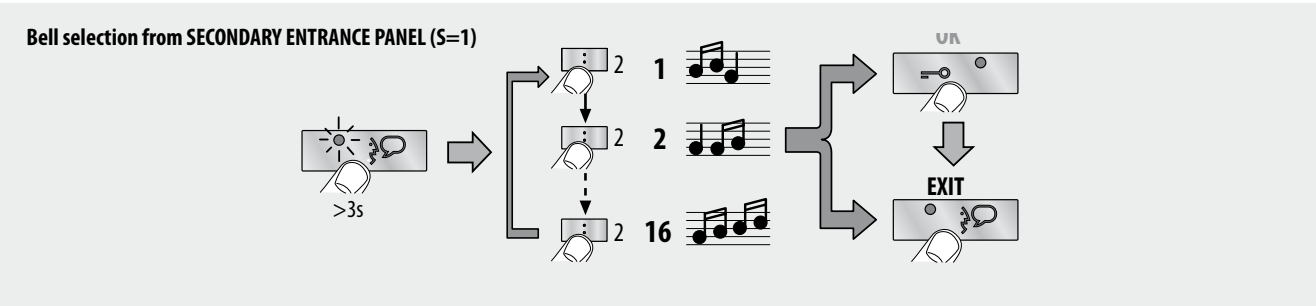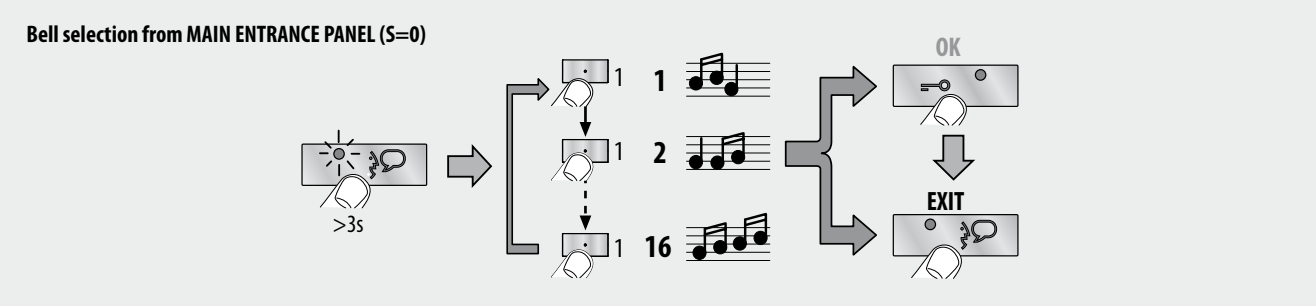
HANDSFREE function

The HANDSFREE function automatically activates the microphone and the loudspeaker when a call is received, without the need for pressing the Connection key to answer (the connection is automatically established when the call is received).

PUSH TO TALK function

If the entrance panel is in a particularly noisy position, during the conversation it will be possible to enable the "PUSH TO TALK" function, which will provide a better quality of communication.

To enable the PUSH TO TALK function during the conversation proceed as follows:
- Press the Connection key for at least 2 seconds, to enable the communication with the entrance panel.
  The LED stays green.
- Release the key to listen to the entrance panel. **The LED turns red.**
- To end the connection press the Connection key briefly. **The LED turns off.**

To ENABLE the function

BEEP   EXIT

>3s

To DISABLE the function

BEEP
BEEP   EXIT

>3s

Enable/disable key sound

In the base configuration, when a key is pressed, a beep is emitted. This function may be disabled/enabled with the following procedure:

To ENABLE the function

BEEP

>3s

To DISABLE the function

BEEP
BEEP

>3s

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344082

Programming of bells

Bell selection from MAIN ENTRANCE PANEL (S=0)

Bell selection from SECONDARY ENTRANCE PANEL (S=1)

INTERCOM CALL bell selection

**EXTERNAL INTERCOM CALL bell selection
(only with interface item 346850)**

FLOOR CALL bell selection
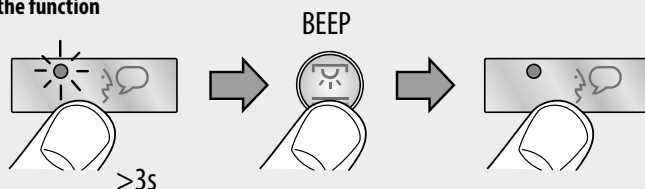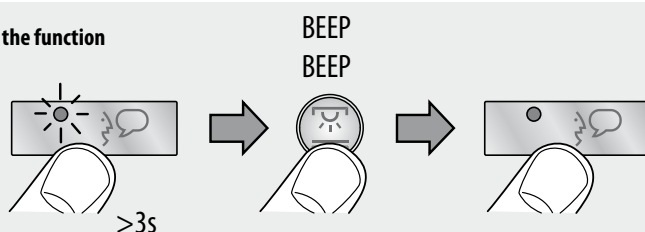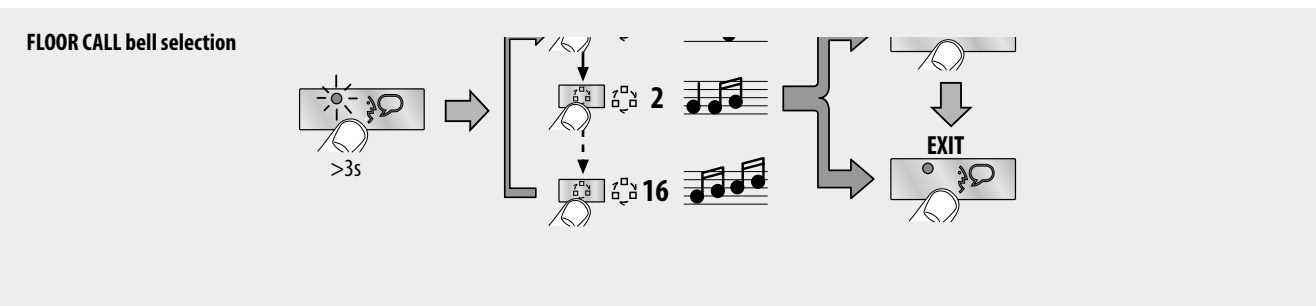
CLASSE 100 A12B
Handsfree internal unit

344252

Description

2 WIRE audio handsfree internal unit for wall mounted installation.
Keys available: auto-switching on / cycling, door lock release, staircase lights control, and handsfree connection.
Depending on the configurator connected to (M), the same keys will perform different functions (see the specific configuration section).
LED used for: call exclusion, door status, connection with the entrance panel. Adjustments for: speaker volume, and call tone volume/exclusion (16 different ringtones available).
For the installation to the wall, the bracket supplied must be used.

Related items

344552   Table top support

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption:	5 mA
Max. operating absorption:	55 mA
Operating temperature:	5 – 40 °C

Dimensional data
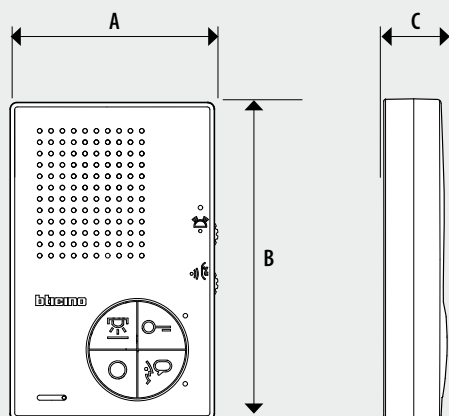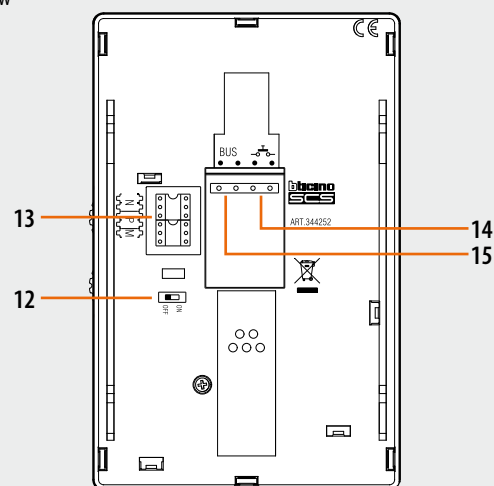
A	B	C
90 mm	140 mm	27 mm

Front view
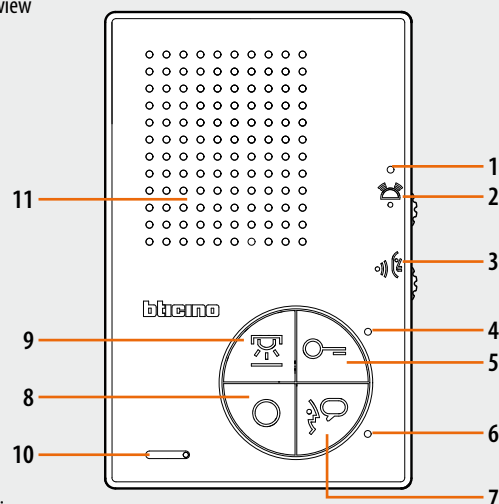
Rear view

Legend

1. Red LED for call exclusion notification
2. Bell volume adjustment/call exclusion
3. Incoming audio volume adjustment
4. Operating status two-colour red/green LED
5. Door lock key
6. Operating status two-colour red/green LED
7. Communication enabling/disabling key
8. Entrance panel/cycling key
9. Staircase light switching on key
10. Microphone
11. Loudspeaker
12. Line termination ON/OFF micro-switch
13. Configurator socket
14. Clamps for the connection of an external call to the floor pushbutton
15. 2 WIRE SCS/BUS connection clamps

Configuration

The device must be only physically configured.

N - handset number

The configurators connected to the N sockets of the device assign an identification number within the system to each handsfree internal unit. The handsets must be configured in progressive order. Handsets with parallel connection (max 3 are allowed inside the apartment without item 346850) must be configured with the same N configurator. Additional audio handsets, handsfree internal unit and/or bells can be installed in parallel to the basic handsfree internal unit.

P – entrance panel association

The configurators connected to the P sockets of the device identify the associated EP, which is the first entrance panel that switches itself on when the pushbutton is pressed the first time, as well as which door lock is activated when pressing the pushbutton while the handsfree internal unit is idle.

M – operating mode

The configurator connected to the M socket of the device assigns the operating modes to the 4 programmable keys based on the following indications.

Below are the various operating modes that can be assigned to the 4 programmable keys:
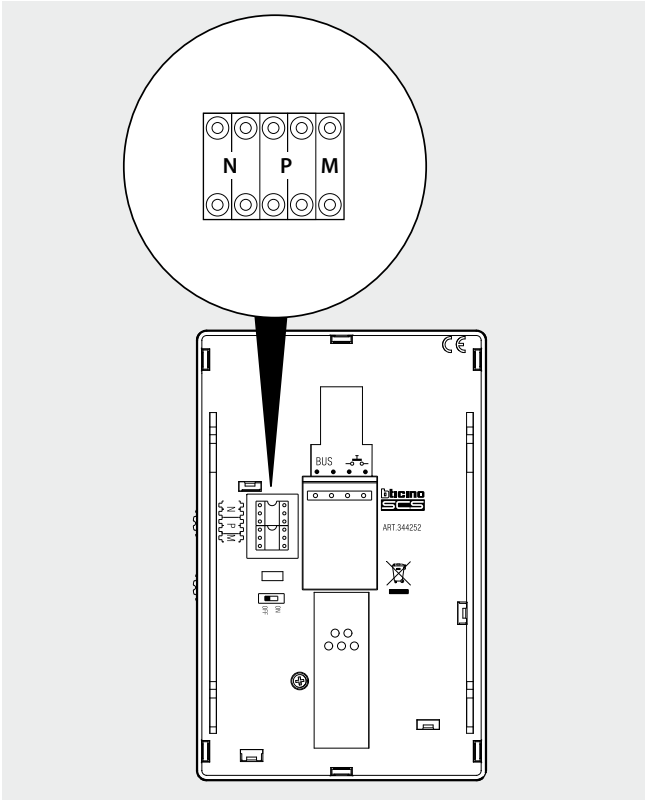
MODE	KEY	FUNCTION
M = 0 (with key tone active)	⌀	Activation of the EP (configured with the same P) directly without call. Cycling of EP and cameras installed in the system. Direct call to the switchboard, if present in the system.
	🗪	Audio enabling / disabling following a call.
	🔑	Direct EP door lock activation (EP configured with the same P), or activation of the EP door lock upon connection.
	💡	Staircase light switching on.
M = 1 (with key tone active)	⌀	Activation of the EP (configured with the same P) directly without call. Cycling of EP and cameras installed in the system. Direct call to the switchboard, if present in the system.
	🗪	Audio enabling / disabling following a call.
	🔑	Direct EP door lock activation (EP configured with the same P), or activation of the EP door lock upon connection.
	💡	EP door lock activation (EP configured with P+1), directly without call, or activation of an actuator 346200 (configured with P+1 and MOD=5), or activation of a door lock actuator 346230 - 346260 (configured with P+1).

Configuration

MODE	KEY	FUNCTION
M = 2 (with key tone active)	(bell icon)	Internal intercom. It sends the call to all the handsets with the same address.
	(audio icon)	Audio enabling / disabling following a call.
	(key icon)	Direct EP door lock activation (EP configured with the same P), or activation of the EP door lock upon connection.
	(light icon)	Staircase light switching on.
M = 3 (with key tone active)	(bell icon)	Activation of the EP (configured with the same P) directly without call. Cycling of EP and cameras installed in the system. Direct call to the switchboard, if present in the system.
	(audio icon)	Audio enabling / disabling following a call.
	(key icon)	Direct EP door lock activation (EP configured with the same P), or activation of the EP door lock upon connection.
	(light icon)	Internal intercom. It sends the call to all the handsets with the same address.
M = 4 (with key tone active)	(bell icon)	"PRESET INTERCOM" function with intercommunicating call to the Handset configured with N=1. From the system handsets it is possible to send an intercom call to the handset configured with N=1. The entrance panel configured with N=1 can intercom calls, but is UNABLE to send them.
	(audio icon)	Audio enabling / disabling following a call.
	(key icon)	Direct EP door lock activation (EP configured with the same P), or activation of the EP door lock upon connection.
	(light icon)	Staircase light switching on.
M = 5		As M=0 but with key tone disabled
M = 6		As M=10 but with key tone disabled
M = 7		As M=2 but with key tone disabled
M = 8		As M=3 but with key tone disabled
M = 9		As M=4 but with key tone disabled

PUSH TO TALK function

If the entrance panel is in a particularly noisy position, during the conversation it will be possible to enable the "PUSH TO TALK" function, which will provide a better quality of communication.
To use the PUSH TO TALK function, during a conversation proceed as indicated below.

During a conversation press the conversation key for >2 minutes: the LED switches ON green, and communication from the handsfree internal unit to the entrance panel is established; when the communication key is released, the LED turns red and communication from the entrance panel to the handsfree internal unit is established. To terminate the conversation press and release the conversation key.

TIME-OUT and conversation times are respectively: 30" after the call, 1' after the start of the conversation.

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344252

Programming of bells

The handsfree internal unit offers the **possibility to select among 16 types of bells** with programmed ringtones, which can be freely associated to the following type of calls:

- Calls from the entrance panel (configured with S = 0);
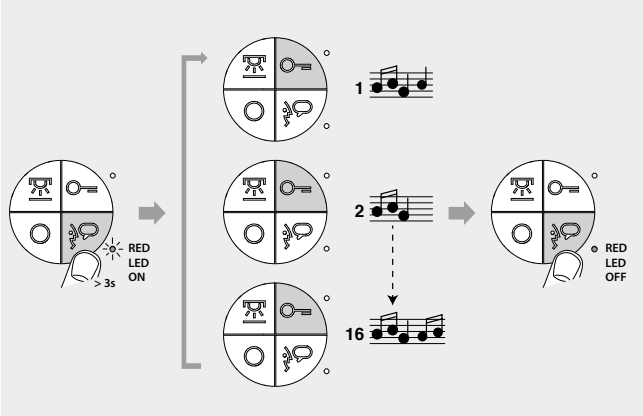- INTERCOM call;
- Floor call.

Selection of the call bells from the main EP (S = 0).
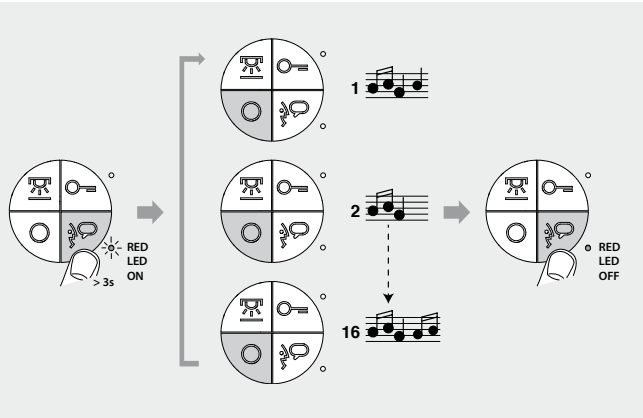
Preset intercom / intercom call bell selection.
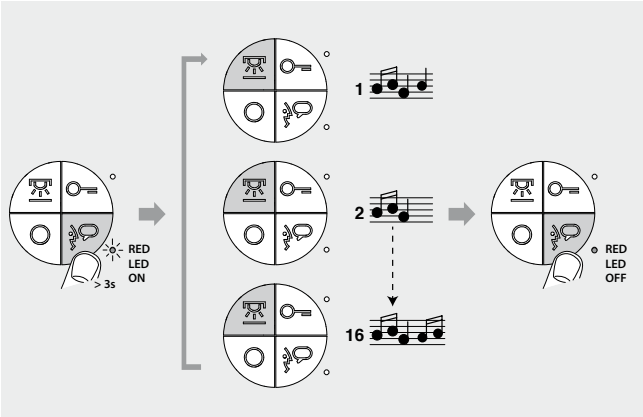
Floor call bell selection.

LED notifications

Door lock status and/or door status red LED notifications:
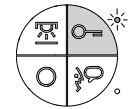
LED ON steady = door lock pushbutton pressed;
LED ON flashing = door open;
LED OFF = door closed.

NOTE: The door status function notifies the status of the door lock. If open the "LED door lock" flashes, and if closed, the LED stays off.
This function is only available in preset systems.

Operating status two-colour (red/green) LED notifications:

LED ON steady (green) = conversation active;
LED ON flashing (green) = call active or intercom call forwarded;
LED ON flashing (red) = programming procedure being performed.

Iryde Touch Phone

345020 - 345021

Description

2 wire telephone and video handset for wall mounted installation (with optional bracket, item 345024) or table-top version (with optional support, item 345023). It has a 16/9, 4.3" LCD colour touch screen display with icon navigation menu, which can be customised using a PC for the management of the functions:
- telephone;
- video door entry
- MY HOME automation: temperature control, sound system, automation scenarios, burglar alarm.

The device also features:
- backlit keypad with blue LED.
- handset with magnet for logic release functions through the Hall sensor fitted inside the base, with extendable spiral cable. On the back of the receiver is a loudspeaker for the handsfree function.

Programming and configuration using the TilrydeTouch Phone software supplied with the product.

Technical data

|	
Power supply from SCS BUS:	18 – 27 Vdc
Maximum absorptions from the BUS:	
- Standby	35 mA and up to 160 mA when the telephone functions are used.
- ON	350 mA
- With additional power supply (1-2)	20 mA
Operating temperature:	5 – 45 °C

Legend

1. Handsfree loudspeaker
2. Handset
3. LCD colour touch screen display: it displays the user menus and shows the images recorded from the entrance panel and from other cameras
4. Handsfree microphone
5. Backlit keypad
6. Mini USB PC connection
7. Call forwarding and repeat/pause telephone function keys
8. Telephone address book key
9. EP switching on and camera cycling key
10. Stair lights switching on key
11. Call exclusion key: press once to disable the ringtone (telephone and video door entry system), and press again to enable. Steady red LED with ringtone disabled, flashing for incoming call and ringtone disabled
12. Handsfree enable/disable key. Green LED when enabled
13. Main EP door lock release key. Notification LED:
14. - off when the door lock is idle and the door is locked, red when the door is open
15. - red flashing when the Office function is active
16. * and # keys used for telephone services
17. Line termination ON/OFF switch
18. PSTN telephone line or PABX switchboard connector
19. 2 wire video SCS/BUS connector
20. 1-21) power supply connector
21. Configurator socket
22. Bracket fixing screw.

Note: 1) The telephone functions are still ensured in case of power cut to the SCS/BUS, provided that an additional power supply is present. (1= –; 2= +)
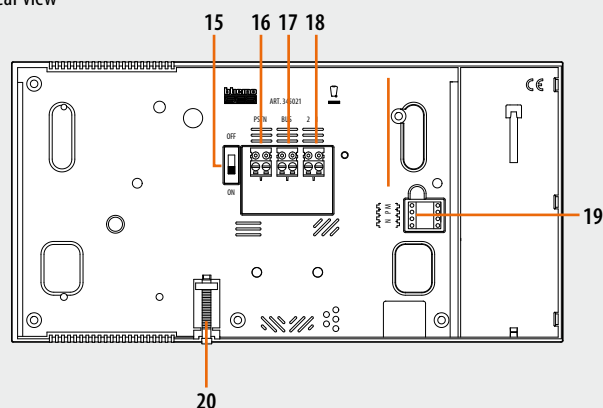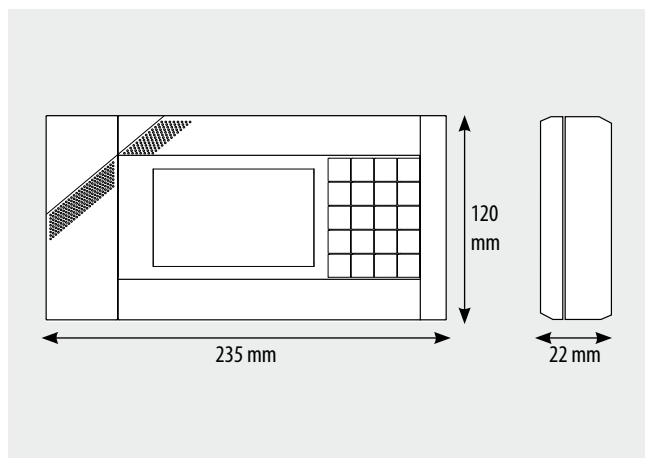
Front view

Keypad

Rear view

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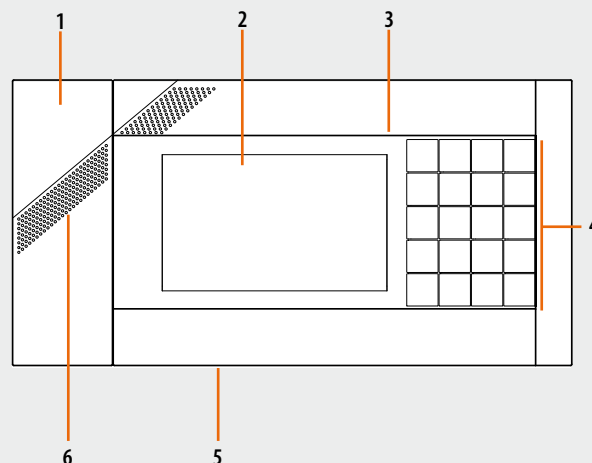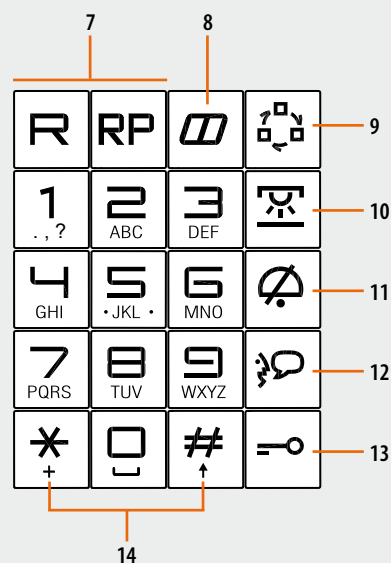
345020 - 345021

Dimensional Data

120 mm

235 mm

22 mm

Rules, certification, marks

Iryde Touch Phone 345020 – 345021 complies with the 1999/5EC directive, certified following the current regulations listed below:
• EN 60950-1:2006-04 + EN 60950-1/A11:2009-03
• EN 50090-2-2/Ec:1997-03 + EN 50090-2-2/A1:2002-01+ EN 50090-2-2/A2:2007-04

Configuration

Iryde Touch Phone can be configured in two different modes:
- **Basic configuration:** when switched on for the first time, the product asks the user to select the language. After this has been done, if no physical configurators are present, the device displays a main page showing the video door entry system icon (inside which, standard door entry system commands can be found: camera, door lock release, intercom, automatic cycling), the telephone icon, and the settings icon. The basic configuration can also be performed using physical configurators: N (address of the device within the video door entry system), P (address of the EP associated to the device)

- **Configuration using the PC:** using the TilrydeTouchPhone software, it gives the possibility of configuring the main menu page without being limited to a pre-set number of functions. Each function may be customised in terms of type, parameter, and text. PC configuration provides:
- better flexibility in the creation of the menu;
- customisation of text;
- functionalities for the management of the MY HOME automation systems.
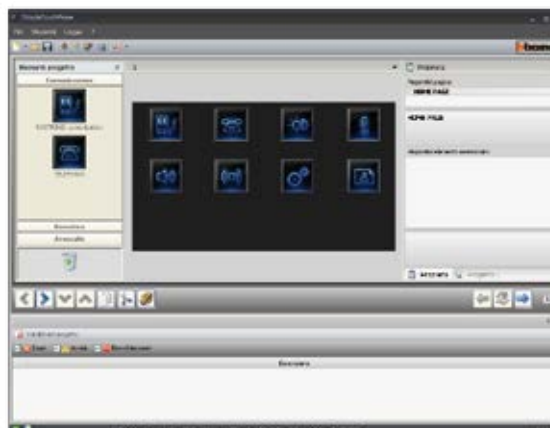
Main functions

• **Simultaneous switching on with additional power supply:** it is possible to connect up to 4 ITPs with no additional power supply. In case of simultaneous switching on of several menus, display brightness limitation occurs. In system with or without PABX switchboard, where however the PSTN telephone line and the SCS BUS are connected using the star wiring solution, the image from the camera is visible on all the ITPs, provided that these are powered individually using the additional power supply (item 346020). In general, when installing systems in apartments with ITPs connected to the telephone line, the installation of the apartment interface, item 346850, is also required.

• **Home automation functions:** using the software, it is possible to configure the pages for the control of the home automation systems installed inside the home. The available pages are: alarms (alarm log display), sound system (programming of the rooms and source names), temperature control (management of the 4 zone and 99 zone system), execution of scenarios.

• **Ringtones:** stored in the ITP, can be associated to specific events: door entry system, telephone, and intercom call, alarms, etc. The ringtones are played by the loudspeaker used for the handsfree function. It is possible to update the ringtones, with Wav or MP3 files, using the configuration software.

- **Address book:** using the telephone menu, the address book can be used for the following functions: add a contact, delete a contact, change a contact, select and call a contact, customise a contact by associating a photo to the number (using the software), management of several numbers (max 3) for each contact.
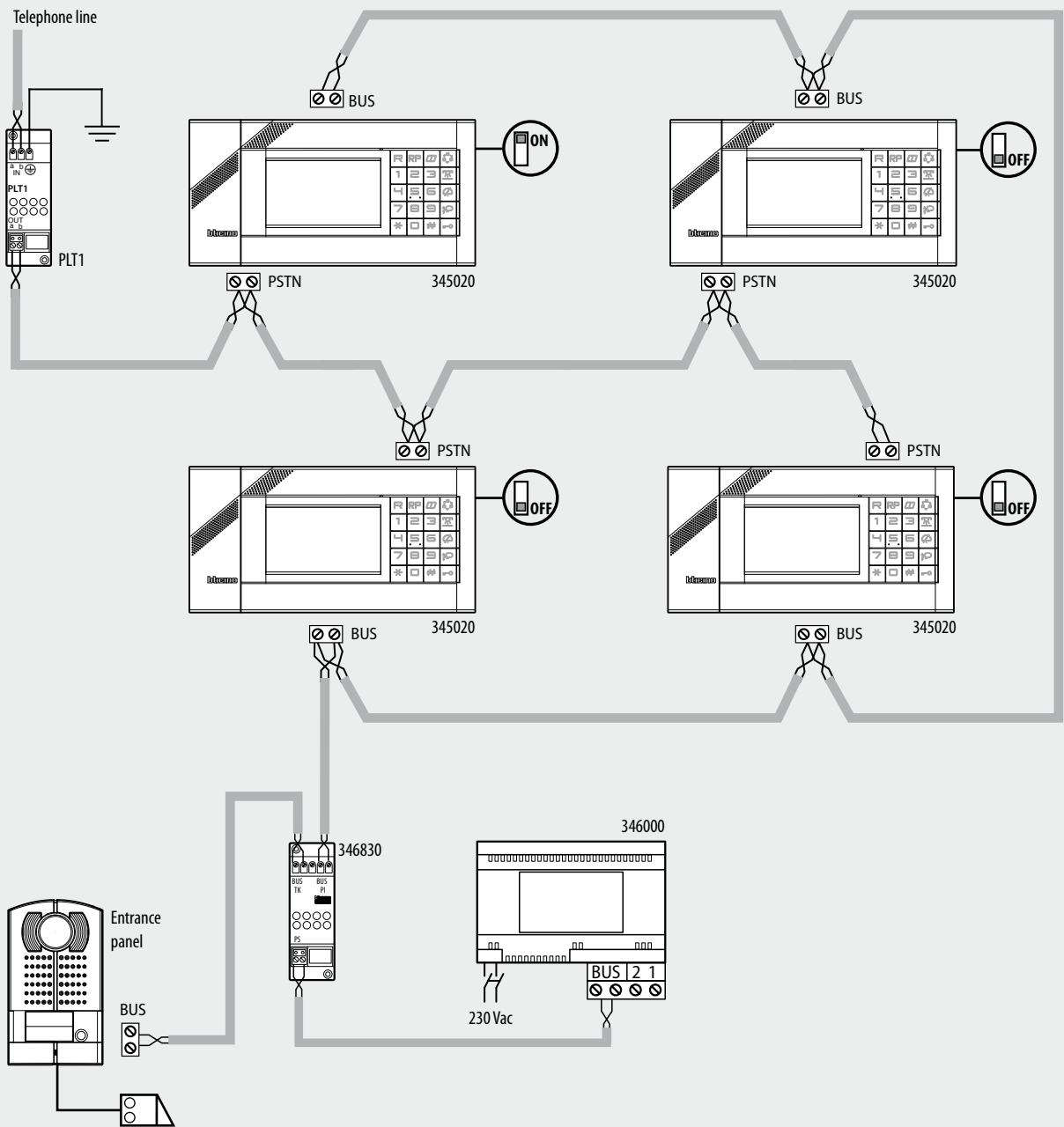
Telephone services

- **Calling a number on the PSTN line:** using the appropriate keypad command, the user can select the PSTN telephone line on which to make the call. ITP is capable of selecting a telephone number on the PSTN line in touch tone mode (DTMF).

- **Calling a number on the private, or system, address book using the PSTN line.**

- **Pager:** Press the dedicated icon to communicate with handsets and telephones with handsfree function.

- **Answering incoming calls.**

- **Differentiated call:** when a call arrives, the user has the possibility of distinguishing between type of calls (intercommunicating, from the outside line, or video door entry system call), by using different sound tracks.

- **CID service:** upon arrival of a PSTN line call, the caller number or name is displayed (if the number is included in the address book), together with the photo of the caller (if present in the private address book). The availability of the service is subjected to the activation of the function for forwarding information by the central unit.

- **Extension call (intercommunicating call):** possibility for the extensions to talk to each other. The selection of the extension to call can be made in two ways:
  - by entering on the code of the extension to call on the keypad (from 401 to 408)
  - by selecting the extension to call from the menu, and then pressing "OK" to confirm the call

- **General call of all the extensions:** it is possible to make an announcement on all CTB and ITP extensions using the loudspeaker on the bases of the telephones. To activate the service lift the handset and press the dedicated icon. The first telephone engaging the line enters in conversation with the caller, excluding all the other extensions called. If no answer is received within the activation time, the service is interrupted and the caller receives a time-out tone. The service can be interrupted by replacing the handset. Press the "pager" key during the activation time or when the time-out tone is heard from the handset to reactivate the service. The microphone used for the pager function can be the handset or the handsfree microphone.

- **Automatic redial of the last external number.**

- **Putting a call on and off hold on the telephone line:** the extension engaged in the call can put the user of the PSTN line on hold by pressing the "R/HOLD" key. While on hold the extension can:
  - enable a permitted service.
  - restart the conversation by replacing the handset (call return).
  - restart the conversation on hold by pressing the "R/HOLD" key again.

- **Answering a second call.**

- **Transfer without consent in case of free tone:** in case of installation with PABX, after pressing "R" and selecting the number of the extension to which to transfer the conversation, the user can replace the handset once a free tone is heard.

- **Transferring a door entry system and DOSA outside line call:** in case of installation with PABX.

- **DISA service, selection of the handset from the outside line using the voice menu:** in case of installation with PABX.

- **Day/lunchtime/night scenarios for the various telephone lines:** in case of installation with PABX.

bticino

345020 - 345021

Wiring diagrams

One-family system without PABX

Telephone line

PLT1

PLT1

BUS

ON

BUS

OFF

PSTN   345020

PSTN   345020

PSTN

OFF

PSTN

OFF

BUS   345020

BUS   345020

346830

BUS TK
BUS PI

IPS

346000

Entrance panel

BUS

230 Vac

BUS 2 1

ITEM	DESCRIPTION	QUANTITY
PLT1	Protection of telephone line	1
345020	Iryde Touch Phone	4
346830	Video adapter	1
346000	AV Power supply, 230 V	1

345020 - 345021

One-family system with PABX

230 Vac

346020

1
2

PSTN

BUS

ON

345020*

PSTN

BUS

345020*

ON

BUS

PSTN

345020*

PSTN

BUS

345020*

ON

BUS

PSTN

345020*

ON

BUS

345020*

Telephone
line

346830

346000

110-240 Vac

PLT1

PLT1

PLT1

PLT1

345829

230 Vac

BUS 2 1

Entrance
panel

Cordless

Fax

Telephone

Note (*): configure the ITPs (using the Menu or the Software) to recognise that the
PABX switchboard is present

ITEM	DESCRIPTION	QUANTITY
PLT1	Protection of telephone line	2
345020	Iryde Touch Phone	5
346830	Video adapter	1
346000	AV Power supply, 230 V	1
345829	Switchboard	1
346020	Power supply	1

![bticino logo]

230 V A/V SCS/BUS power supply

346000

Description

2 wire system power supply unit, to be used in audio systems together with 2 wire speaker modules, or with the universal speaker unit, item 346991, for the installation of systems with up to 100 entrance panels (56 when item 346991 is used), as well as in video or mixed audio/video systems, when using video adapter item 346830, or the audio/video node item F441, or the multichannel matrix F441M.   The device is also suitable as a power supply for sound systems. Additionally, it can also be used as supplementary power supply (output 1 – 2) for local supply to advanced preset handsets. It must be powered at 230 Vac. On the output it provides two power supply outlets, which can be used in alternative to each other, but not both at the same time (27Vdc 1.2 A BUS clamps, and 1-2 27Vdc 1.2 A clamps). It is electronically protected (without fuse) from short-circuit and overload.
It is a double insulation safety device in accordance with CEI.
The power supply unit is inside a 8 DIN modules rail enclosure, and its installation must be in accordance with the regulations of the country of use.
The device must not be configured.

Dati tecnici

PRI (Power supply Vac input):

Rated voltage:	220 – 240 Vac
Rated current:	230 – 250 mA
Working voltage range:	207 – 253 Vac
Working frequency range:	50 – 60 Hz
Input power at full load:	44.9 W (max)
Dissipated power:	11.5 W (max)
Input power without load:	4.2 W (max)
Operating temperature:	5 – 40 °C
Protection index:	IP30

SEC (Vdc output):

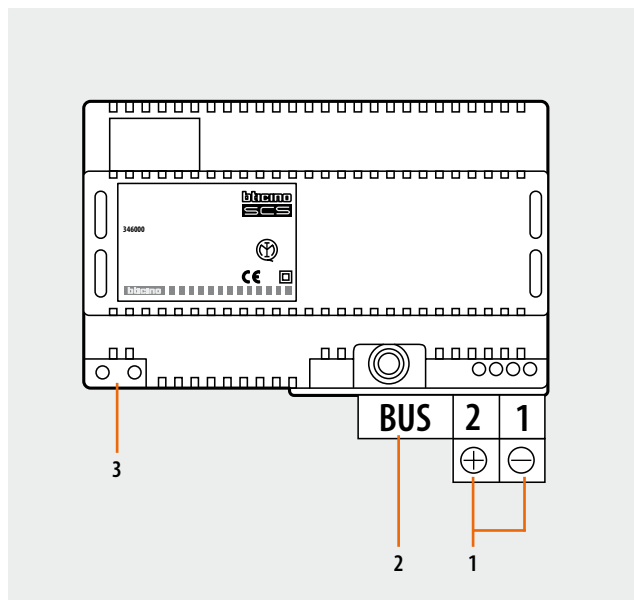|	
Rated voltage (BUS):	27 Vdc +/- 0,1 Vdc
Rated voltage (1-2):	27 Vdc +/- 0.1 Vdc (1=** - 2=**)
Rated current:	0 – 1.2 A
Rated power:	32.4 W

Standards, Certifications, Marks

Standards: **CEI EN60065 - CEI 64-8-4 (punto 411.1.2.5)**

Marks obtained :

Dimensional data

8 DIN modules

Legenda

1. Output connection clamps 1=GND – 2=+27Vdc
2. SCS/BUS output connection clamps
3. 230 Vac input connection clamps

Assembly, Installation

Comply with the following installation requirements:
- The power supply must always be installed in appropriate enclosures.
- It must be kept away from water drips and sprays.
- Do not to obstruct the air vents.
- A double-pole thermal magnetic circuit breaker with contact separation of at least 3 mm must be used, positioned near the power supply. The circuit breaker is used both to disconnect the power supply from the electric network, and to protect it.

Additional power supply
230 V

346020

Description

2 DIN module devices which allows to:
- locally supply the single video door entry handsets and entrance panels.
- supply some accessories of the Communication and MY HOME catalogues (ex: Web server, A/V server, scenario programmers, 2 WIRE/IP interface, switch 10/100, ADSL modem router, Hub-TV and SCS modulator).
It is a double insulation safety device in accordance with CEI.
The power supply is enclosed by a 2 DIN module plastic rail enclosure, and its installation must be in accordance with the regulations of the country of use.
The device must not be configured.

Technical data

PRI (AC power supply input)

|	
Rated voltage:	220 – 240 Vac
Rated current:	180 – 190 mA
Working voltage range:	187 – 265 V
Working frequency range:	47 – 63 Hz
Input power at full load:	20 W max
Dissipated power:	3.8 W (max.)
Performance at full load:	80% typ.
Power in stand by:	< 1 W
Operating temperature:	5 – 40 °C
Integrated fuse (PRI side):	F1 T2A 250V (CANNOT BE REPLACED)

1 - 2 (DC output):

Rated voltage:	27 V +/- 100 mV
Rated current:	0 – 0.6 A
Rated power:	16.2 W

Standards, Certifications, Marks

Standards: **CEI EN60065**

Dimensional data

2 DIN modules
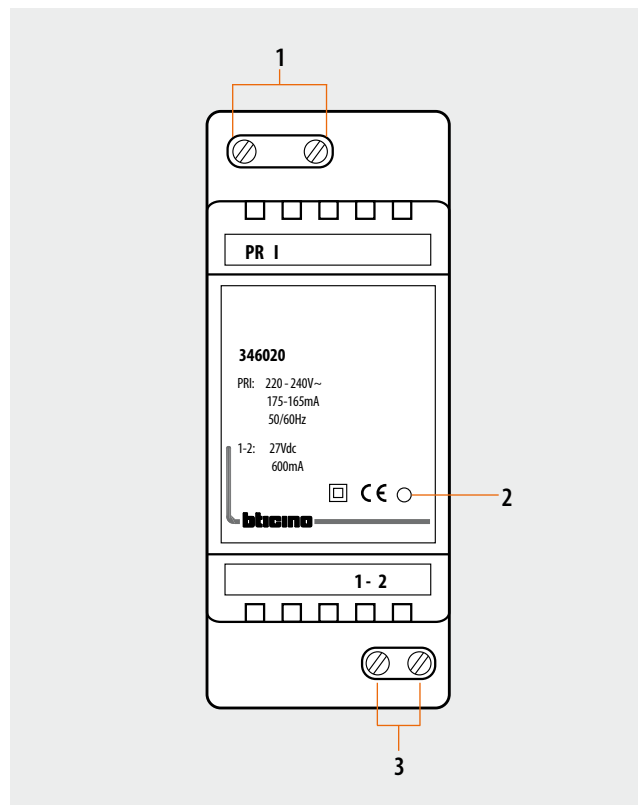
Legend

1 - 230 Vac input connection clamps
2 - Operating status notification LEDs:
   (GREEN ON) – normal operation of the power supply
   (RED ON) – output current overload
3 - Output 1 – 2 connection clamps

Assembly, Installation

Comply with the following installation requirements:

- The power supply must always be installed in appropriate enclosures
- It must be kept away from water drips and sprays.
- Do not to obstruct the air vents.
- A double-pole thermal magnetic circuit breaker with contact separation of at least 3 mm must be used, positioned near the power supply. The circuit breaker is used to disconnect the power supply from the mains, and to protect it.

Mini power supply 230 V

346030

Description

2 DIN module device for:
- basic video door entry systems (e.g. apartment intercom)
- mini SOUND SYSTEMS (absorption up to 600 mA).
It is a double insulation safety device.
The power supply is inside a module plastic rail enclosure, and its installation must be in accordance with the regulations of the country of use.
The device must not be configured.

Technical data

PRI (AC power supply input):

Rated voltage:	220 – 240 Vac
Rated current:	200 - 190 mA
Working voltage range:	187 – 265 V
Working frequency range:	47 – 63 Hz
Input power at full load:	21.5 W max
Dissipated power:	5.3 W (max.)
Performance at full load:	80% typ.
Power in stand by:	< 1 W
Operating temperature:	5 – 40 °C
Integrated fuse (PRI side):	F1 T2A 250V (CANNOT BE REPLACED)

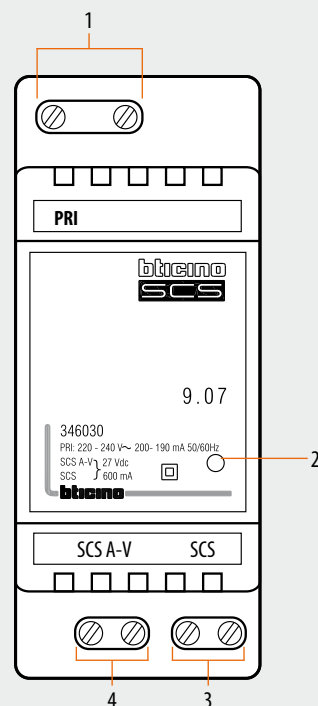**SCS A-V; SCS:**

Rated voltage:	27 V +/- 100 mV
Rated current:	0 – 0.6 A
Rated power:	16.2 W

Standards, Certifications, Marks

Standards: **CEI EN60065 - CEI 64-8-4**

Dimensional data

2 DIN modules

WARNING : THE (SCS - AV) AND (SCS) OUTPUTS CAN BE USED AT THE SAME TIME IN RESPECT TO THE MAXIMUM CURRENT ABSORPTION OF 600 mA

Legend

1 - 230 Vac input connection clamps 50-60 Hz
2 - Operating status notification LEDs:
   (GREEN ON) - normal operation of the power supply
   (RED ON) - output current overload
3 - SCS output connection clamps (BUS 27V)
4 - SCS AV output connection clamps (27 V)

Assembly, Installation

Comply with the following installation requirements:

- The power supply must always be installed in appropriate enclosures.
- It must be kept away from water drips and sprays.
- Do not to obstruct the air vents.
- A double-pole thermal magnetic circuit breaker with contact separation of at least 3 mm must be used, positioned near the power supply. The circuit breaker is used both to disconnect the power supply from the electric network, and to protect it.

Actuator

346200

Description

Relay actuator for digital systems. It allows to switch on lights, to open gate door locks, to control other devices and to repeat call on bell (badenia type).

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption:	15 mA
Max. operating absorption:	30 mA
Operating temperature:	5 – 40 °C
Contact output:	230 Vac - 6 A resistive - 2 A inductive (cosφ = 0.5)
	SELV device

Dimensional data

4 DIN modules
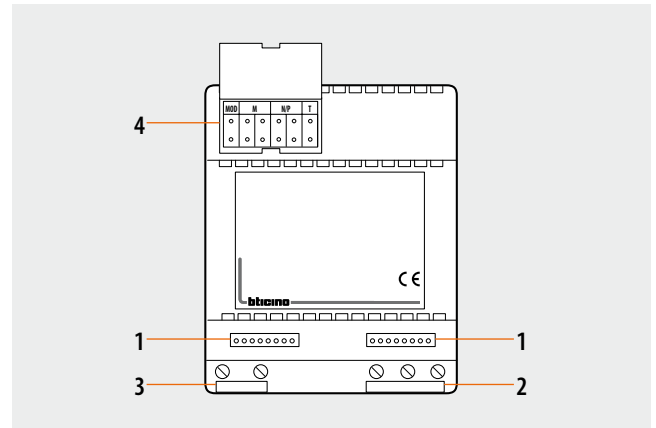
Legend

1 - Clamps for the connection of the 2-wire BUS and power supply 1 - 2
2 - Clamps for the connection of the load to be controlled
3 - Clamps for the connection of an additional pushbutton
4 - Configurator socket

346200

Configuration

The device must be physically configured in terms of:

MOD = Operating mode
The configurator in MOD establishes the operating mode of the actuator (see following tables)

M = number of the riser
In systems with several risers, it identifies on which riser the actuation must be performed

N/P = Handset/Entrance panel number
It defines the association with the Handset or the EP address from which the actuation must be performed.

T = relay closure time delay
The configurator connected to T sets the relay closing time delay (see corresponding table).

MOD = 0 - Staircase light from any handset and EP
- The actuator is enabled by pressing the light pushbutton of the handset and the light key on the entrance panel
- Customize the time through the configurator T.

T = 0 closes the contact for 30"

MOD = 1 - Sundry services (door lock/open the gate/staircase light) from handset unit
- The actuator is enabled by pressing the light pushbutton of the handset belonging to a group
- Customize the time through the configurator T.
- Insert in M the ten and the units of the first handset of the group
- Insert in N/P the ten and the units of the last handset of the group
NOTE: a group is a sequence set of handsets.

Example

Door lock control from the light key of the handsets configured from 1 to 12
T = 1 closes the contact for 1"

MOD = 2 - Staircase lights from all riser handsets
- The actuator is enabled by pressing the staircase light key of all riser handsets
- Customize the time through the configurator T.
- Connect the M configurator of the system expansion interface, item 346851 (configured with MOD = 5) to M

Example

Staircase light control from all handsets of the riser 19
T = 0 closes the contact for 30"

MOD = 2 - Staircase lights from all entrance panel (if fitted with the corresponding key)
- With (MOD = 2) the actuator activates when the light pushbutton of any (preset) entrance Panel is pressed
- Customize the time through the configurator T.

Not inserting the configurator corresponds to insert 0

MOD = 3 - Sundry services from single handset
- The actuator is enabled by pressing the light pushbutton of only one handset.
- Customize the time through the configurator T.
- Put in N/P the ten and the units of the handset that controls the relay

MOD	M	N/P	T
3			1

Unit
Tens

Example

MOD	M	N/P	T
3		1 5	1

Door lock control from the light key of the handset configured with 15
T=1 closes the contact for 1 s

MOD = 4 - Staircase light from EP
- With (MOD = 4) the actuator is enabled by pressing the light pushbutton of only one entrance panel.
- Customize the time through the configurator T.
- Put in N/P the ten and the units of the handset that controls the relay

MOD	M	N/P	T
4			5

Unit
Tens

Example

MOD	M	N/P	T
4		3	5

Door lock control from the light key of the handset configured with P=3
T=5 closes the contact for 1 min

MOD = 5 - Door lock control from all handsets
- Direct door lock opening with handset in pause. The actuator is enabled by pressing the door lock pushbutton of all handsets.
- Customize the time through the configurator T.
- Put in N/P the ten and the units of the associated entrance panel that controls the door lock.

MOD	M	N/P	T
5			1

Unit
Tens

Example

MOD	M	N/P	T
5		2	1

Door lock control of the entrance panel configured with P=2 from the door lock pushbutton of all the associated handsets
T=1 closes the contact for 1 s

MOD = 5 - Door lock control from PIVOT/SWING/POLYX handsets additional keys
- Direct door lock opening with handset in pause.
- Customize the time through the configurator T.
- Insert in N/P the address that the actuator must take inside the system.

The N/P value inserted in the actuator must be between P + 1 and P + 4 of the P configurator P inserted in the handset which controls the door lock. For further information on the configurations of the SWING/POLYX handsets and the 4 additional keys set for PIVOT make reference to the relating technical sheets.

MOD	M	N/P	T
5			1

P + 1
P + 2
P + 3
P + 4

Example

MOD	M	N/P	T
5		2	1

Door lock control by pressing the key 2 of the 4 keys set for PIVOT (PIVOT configured with P = 0)
T=1 closes the contact for 1 s

MOD = 7 - Light on for illumination of the viewing field
At the same time as sending a call from the entrance panel or activating a camera (N/P configuration), the actuator also closes the contact, keeping it closed until:
- if the call is answered, the contact opens when the communication is terminated or the conversation timeout activates (<1 min.)
- if the call is not answered, the contact opens after 30 seconds (at the end of the call forwarding timeout).

MOD	M	N/P	T
7			

The number of the EP or camera to associate to the actuator

Example

MOD	M	N/P	T
7		2	

Closing of contact upon call from the EP configured with P=2.
The contact opens after the call is terminated or after 30 seconds (if there is no answer)

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346200

MOD = 9 - Sundry services (door lock/open the gate/staircase light) from PIVOT/SWING/POLYX handsets additional keys
- Direct door lock opening with handset in pause.
- Customize the time through the configurator T.
- Insert in N/P the address that the actuator must take inside the system.

The N/P value inserted in the actuator must be between P + 1 and P + 4 of the P configurator P inserted in the handset which controls the service.

For further information on the configurations of the SWING/POLYX handsets and the 4 additional keys set for PIVOT make reference to the relating sections configurations.

MOD	M	N/P	T
9	○ ○	○ ○	2
	○ ○	○ ○	

P + 1
P + 2
P + 3
P + 4

Example

MOD	M	N/P	T
9	○ ○	○ 3	2
	○ ○	○ ○	

Device control by pressing the key 2 of the 4 keys set for PIVOT (PIVOT congured with P = 2) T=2 closes the contact for 3 s

MOD = SLA - Call repetition on Badenia bell
- Repeat the calls coming from the entrance panel on Badenia bell.
- Customize the time through the configurator T (Accepted configurators are: 1, 2, 3, 4 and 8).
- Insert in N/P the tens and units of the handset associated to the function.

* The SLA configurator must be bought separately from the configurator kit (item 3501K). Item code for SLA configurator: item 3501/SLA.

MOD	M	N/P	T
SLA	○ ○	○ ○	3
	○ ○	○ ○	

— Unit
— Tens

Example

MOD	M	N/P	T
SLA	○ ○	1 6	3
	○ ○		

The Badenia bell rings for 6 seconds each time there is a call addressed to the handsets configured with N=16
T =3 the Badenia bell rings for 6 s and stops when the call is answered

T configuration (timing)

The T values mentioned in the examples are only an indication of the times commonly used for the different applications.
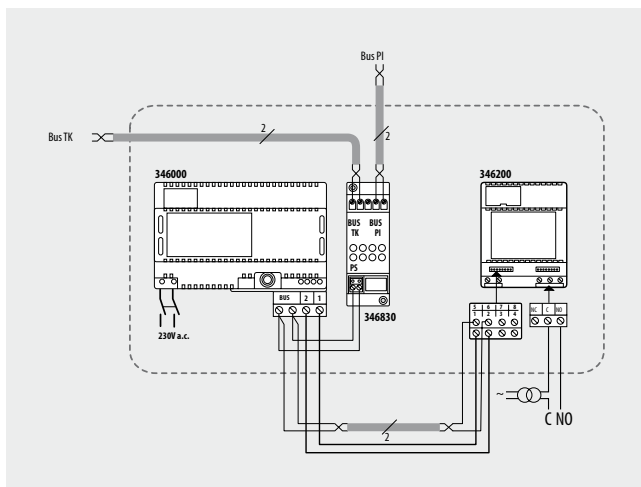By inserting in the T socket a configurator (as mentioned in the table) the relay door locking time can be customized.

T configurator	Time
none	3 min.
1	1 sec.
2	3 sec.
3	6 sec.
4	10 sec.
5	1 min.
6	6 min.
7	10 min.
8	pushbutton
9	cyclic (ON/OFF)

Wiring diagram
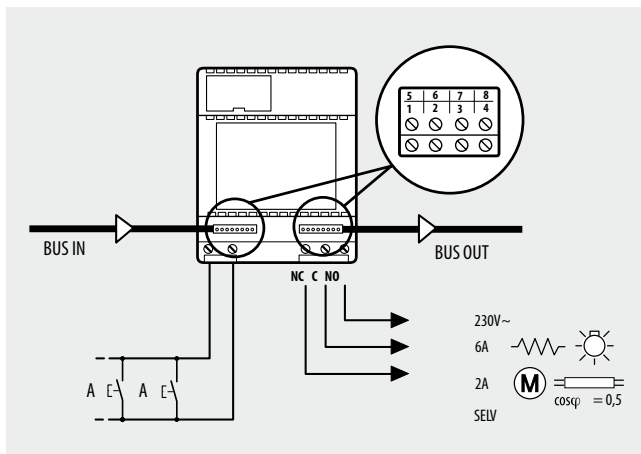
2-wire standard wiring diagram

bticino

Door lock actuator

346230

Description

2-wire system door lock actuator.
It can be used to actuate an electrical door lock without the need for a local transformer, activated by a dedicated handset key.
In systems with handsets with specific LED, it enables to perform the "LOCK STATUS" function when a CISA ELETTRIKA door lock is used.

Related items

346240 CISA ELETTRIKA door lock accessory

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption:	10 mA
Max. operating absorption:	300 mA
Operating temperature:	5 – 40 ℃
Contact load (PL/S+):	6 A – 24 Vac max (cosφ=1)

Dimensional data

2 DIN modules

Configuration

The device must be physically configured in terms of:

P - Associated entrance panel number
A configurator like the one connected to P of the entrance panel must be connected to this socket. When the actuator is associated to the main entrance panel, no configurator must be connected to P.

T - Door lock relay timing
The configurator connected to T sets the relay closing time delay as shown in the following table:

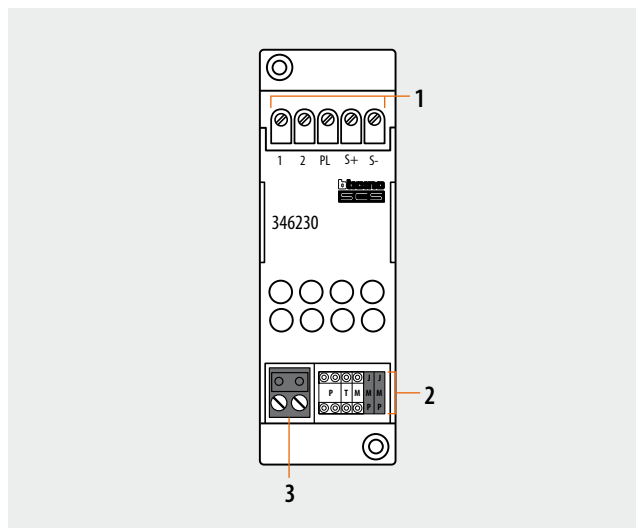| configurator number							
0= No configurator	1	2	3	4	5	6	7
4 sec.	1 sec.	2 sec.	3 sec.	as pushbutt.	6 sec.	8 sec.	10 sec.

M - Operating mode
M=0 - Door lock relay standard operation
M=1 - Door lock relay operation + "door lock status control" – only with handsets fitted with door lock status LED and specific CISA ELETTRIKA door lock with Accessory item 346240.
M=4 - With interface 349410 only it enables:
  - with analogue system and audio Tersystem, the direct control of the electrical door lock
  - with videoporter 2000, the call to the switchboard

JMP - Jumpers to be removed when an auxiliary transformer is used (4A max.)
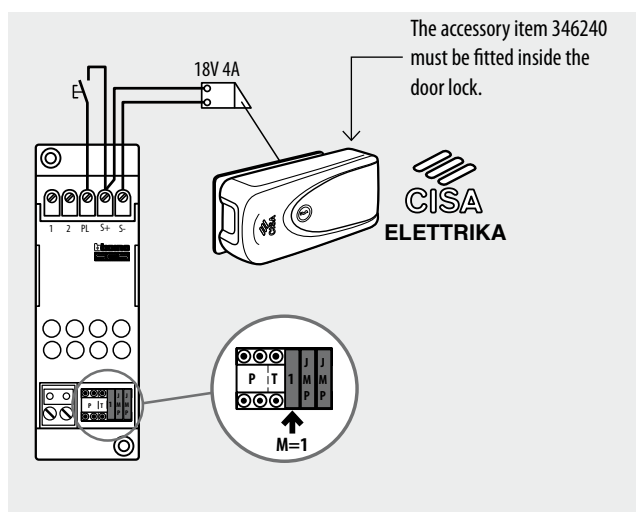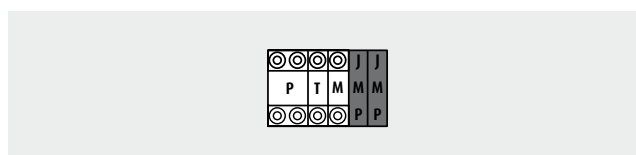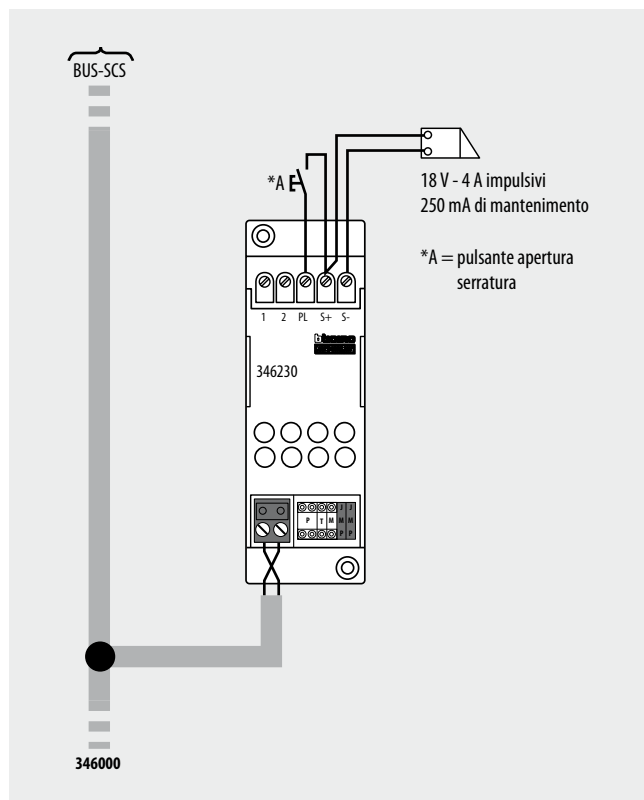

Legend

1 - Clamps for the connection of door lock and additional pushbutton
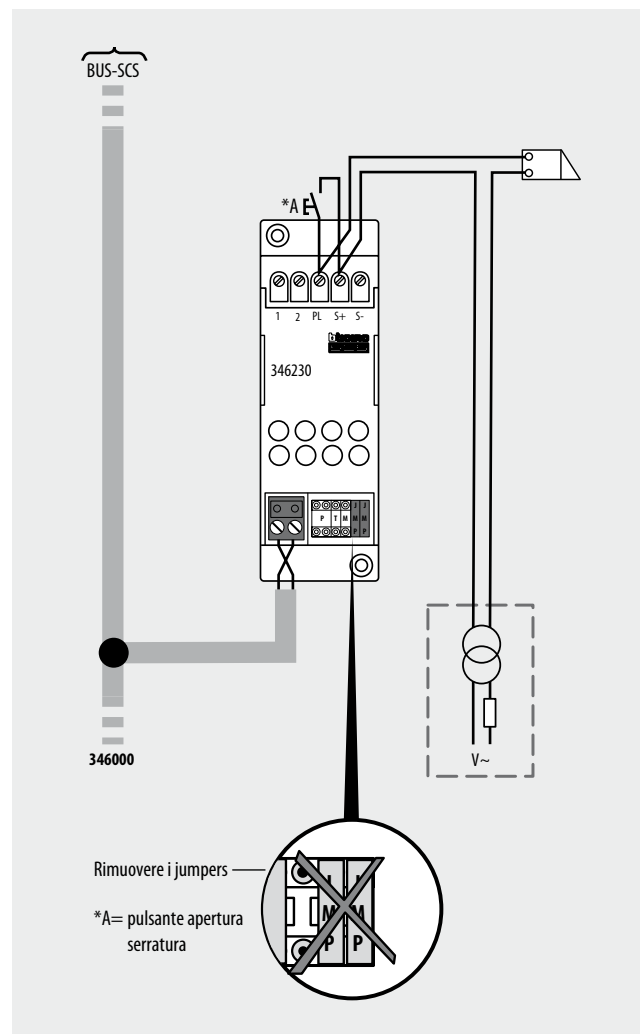**2** - Configurator socket
3 - 2 WIRE BUS connection clamps

The accessory item 346240 must be fitted inside the door lock.

346230

Wiring diagram - 2-wire standard

BUS-SCS

*A

18 V - 4 A impulsivi
250 mA di mantenimento

*A = pulsante apertura
serratura

1 2 PL S+ S-

346230

P T M

346000

Wiring diagram - with auxiliary transformer

BUS-SCS

*A

1 2 PL S+ S-

346230

P T M

346000

V~

Rimuovere i jumpers

*A= pulsante apertura
serratura

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Door lock relay

346250

Description

Relay module for gate opening to be used only with audio/video SFERA New, SFERA ROBUR, SFERA Classic item 342560, LINEA 2000, LINEA 2000 METAL and MINISFERA entrance panels.

It allows to open door locks (NOT managed by BUS) by means of the above mentioned entrance panels (NOT fitted with relay). The device must not be configured.

Related items

341000 (SFERA New - SFERA Robur BASIC speaker phone module)
341100 (SFERA New - SFERA Robur speaker phone module)
341200 (SFERA New - SFERA Robur audio video module)
341300 (SFERA New - SFERA Robur wide angle audio video module)
342560 (SFERA Classic audio/video speaker module)
342702 (MINISFERA audio speaker module)
342708 (MINISFERA video speaker module)
342911/21 (LINEA 2000 audio EP)
342951/61 (LINEA 2000 video EP)
342971/72 (LINEA 2000 METAL audio EP)
342981/82 (LINEA 2000 METAL b/w video EP)
342991/92 (LINEA 2000 METAL colour video EP)
343001/02 (LINEA 2000 METAL flush mounted EP)

S-   S+   C   NC   NO

1   2
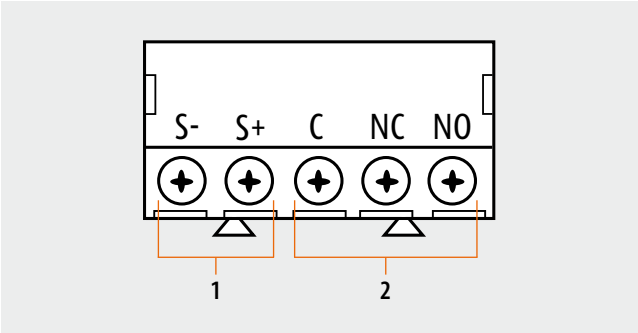
Legend

1 - Clamps for connection to the entrance panel
2 - Clamps- contacts for connection to the electrical door lock

Connection example

NO	8A cosφ=1	24 Vac/24 Vdc
NC	4A cosφ=0.7	24 Vac
C	3A cosφ=0.4	24 Vac

D - EP - relay distance

A = door lock release pushbutton
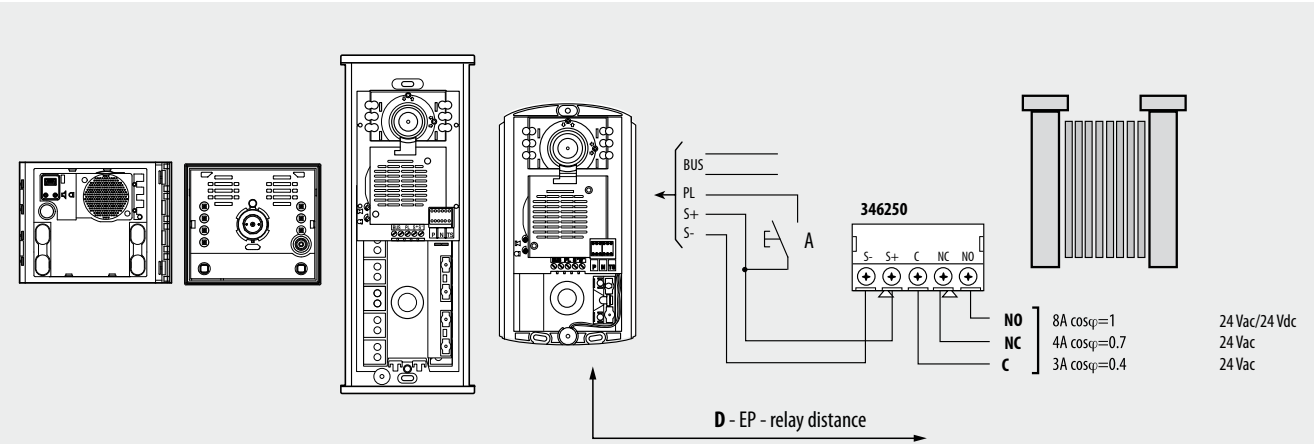
Max. distance (D) depending on the cable used

TYPE OF CABLE CABLE SECTION	mm² 0.28	BTicino Item 336904	BTicino Item L4669	mm² 1
D	30 m	50 m	30 m	100 m

BT00669-a-EN

401

Timed door lock actuator

346260

Description

Timed door lock actuator for 2 WIRE system.

It can be used for switching the lights on, opening gates, or manage electromagnetic door locks, timed door opening, and door status (with NC contact).

The DOOR STATUS function can only be used with door entry systems and video door entry systems fitted with signalling LEDs, and when a magnetic door status contact is present.

It may also be used in systems integrated with an appropriately configured ACCESS CONTROL system.

Technical data

Power supply from SCS BUS: 18 – 27 Vdc
Stand by absorption: 5 mA
Max. operating absorption: 250 mA
Operating temperature: 5 – 40 °C

Dimensional data

4 DIN modules

WARNING: if the TMP and RC contacts are not used, short circuit TMP and RC with (-)
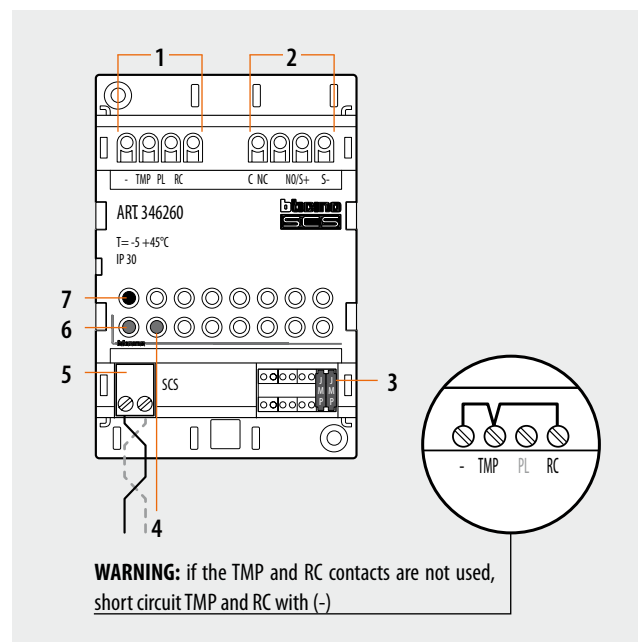
Legend

1 - Door status connection clamps:
   (-) Common
   (TMP) Anti tamper line contact (normally closed on -)
   (PL) Door opening pushbutton contacts (normally open on -)
   (RC) Door status magnetic contact (normally closed on -)

2 - Electromagnetic door lock connection clamps:
   (C) Common
   (NC) Normally closed contact
   (NO/S+) Normally open contact
   (S-) Contact for door lock power supply from BUS (to be used with NO/S+)

3 - Configurator socket
4 - Notification orange LED: on when the relay is active
   (flashing orange + red LEDs for open door notification)
5 - 2 WIRE BUS connection clamps
6 - Notification red LED: flashing in case of system tampering
7 - Door opening local pushbutton

Configuration

The device must be physically configured in terms of:

P - Associated entrance panel number
A configurator like the one inserted in P of the entrance panel must be connected to this socket. When the actuator is associated to the main entrance panel, no configurator must be connected to P.

P			M	R	T	J1	J2
A	B	C				JMP	JMP

A = DO NOT USE (access control only)
B - **C** = P CONFIGURATOR SOCKETS

M = Operating mode
Assigns the operating mode to the internal relay of the actuator, based on the following table:

M =	0	1	2	3	4	5	6
Management of access control	YES	YES	Signal repetition	YES	YES	NO	NO
Management of 2 WIRE video door entry system	NO	NO	NO	YES	YES	YES	YES
Actuator relay status	② Normally open	③ Normally closed. Electromagnetic door lock	④ Signal repetition	⑤ Normally open	⑤ Normally closed. Electromagnetic door lock	Normally open	Normally closed

R = Enabling/disabling of the anticipated relay switching function[1]

Configurator	0	1
Advance of closing	Enabled (2 sec.)	Disabled

T = Door lock relay timing

Configurator	0	1	2	3	4	5	6	7
Time sec.	4	1	10	20	40	60	90	180

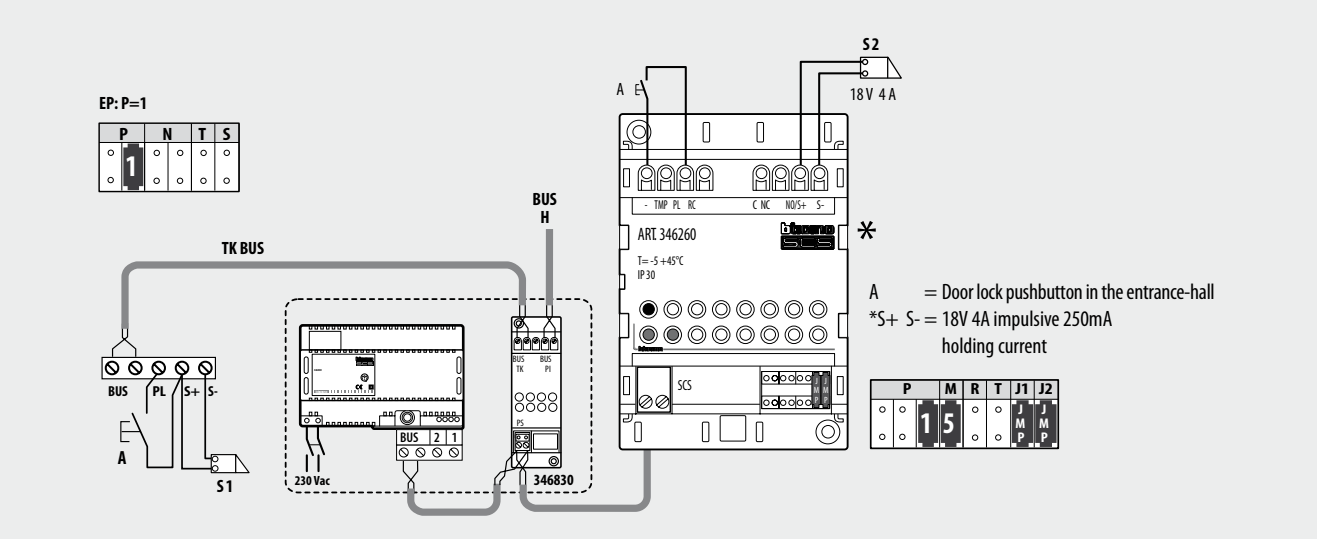**J1 - J2 = Jumpers for the selection of the door lock power supply**
CONNECTED = DOOR LOCK POWERED BY THE BUS
DISCONNECTED = DOOR LOCK POWERED BY AN EXTERNAL DEVICE

Note:

(1) If enabled, 2 seconds after the opening of the entrance, anticipated relay switching occurs, irrespective of the T time set (this function can be used with door status magnetic contact and for T = s).

(2) The device supplies the NC and NO contacts of the internal relay. It is therefore possible, also with M = 0, to use the internal relay as normally closed.
It must be noted that in case of power cut from the power line (230 Vac), the relay stays normally closed and, if the power supply of the electric door lock is fitted with a back-up battery, the door lock stays closed.

(3) In this mode, the software forces the relay to perform the opposite operation (positive safety). The NO contact stays in the closed status, and is opened in order to open the door (passage). In case of power cut from the main power line (230 Vac), the relay opens, and the door lock opens, even if the power supply line of the door locks is fitted with a back-up battery.

(4) Operation as signal repeater. In case of system intrusion or opening of a door, the relay output can also activate an external notification device (sound or visual notification), based on the time value set in T.

(5) Integration mode between video door entry system and access control (see instructions of item 348000).

346260

Connection example

A = Door lock pushbutton in the entrance-hall
*S+ S- = 18V 4A impulsive 250mA holding current

bticino

Video adapter

346830

Description

2 WIRES video adapter that must be used wih the power supply item 346000 in the installation of video systems (or audio/video combined), video door entry systems and sound systems.

Allows the connection to its 3 BUS clamps. Hence it is possible to realize installations with 2 video entrance panels and 1 riser and installations with 1 video entrance panel and 2 risers.

The device must be installed next to the system power supply item 346000.

The device must not be configured.

Related items

346000 (2 WIRE system power supply)

Technical data

Power supply from SCS BUS: 18 - 27 Vdc
Operating temperature: 5 - 40°C

Dimensional data

2 DIN modules.
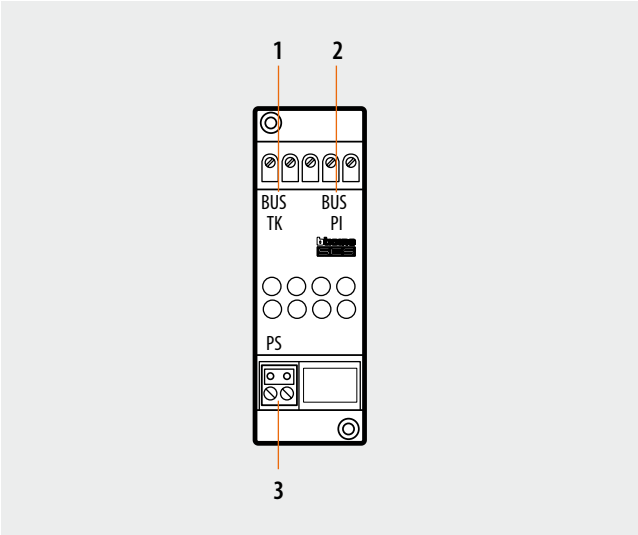
Legend

1 - BUS TK output towards the EP (fixed clamp entrance panels)
2 - BUS output towards the handsets (fixed clamp handsets)
3 - BUS PS input from the power supply (removable clamp)

Floor call interface

346833

Description

Floor call interface which allows, by means of a traditional pushbutton, to make the following functions:
- general floor call
- addressed floor call
- staircase light switching on
- Door lock opening (with specific actuator)
- associate the video image to the call to the floor

WARNING: the maximum connection distance between the interface and the connected pushbuttons must not exceed 3 metres.

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption:	15 mA
Max. operating absorption:	15 mA
Operating temperature:	5 – 40°C

Dimensional data

BASIC plastic enclosure

40 mm
18 mm
40 mm

Legend

1 - Configurator socket (to access remove the upper plastic protection cover)
2 - Clamps for the connection to the 2-wire BUS
3 - Clamps for the connection of the pushbuttons / contacts (connect a pushbutton between PL1 and C and one between PL2 and C)
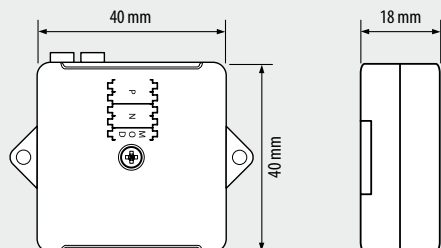
Configuration

The device must be physically configured in terms of:

N = address of the handset to call
(To be used only with MOD = 0)

P = address of the entrance panel associated to the door lock to open
(To be used only with MOD = 2 and MOD = 3)

MOD = Operating mode
the configurator connected to MOD assigns the operating modes to the pushbuttons connected between (PL1 and C) and (PL2 and C), as shown in the table:

MOD	N	P	PL1	PL2
0	Handset address (00-99)	-	Addressed floor call	Staircase lights from Handset with 00
1	-	-	General floor call	Staircase lights from Handset with 00
2	-	Door lock address (00-95)	Door lock opening	Staircase lights from Handset with 00
3	-	Door lock address (00-95)	Door lock opening	Door lock opening (P+1)
4(*)	Handset address (00-99)	Camera address (00-95)	-	-

(*): see installation notes on next page.

bticino

Note installative

The MOD = 4 configuration mode enables associating the video image of a camera to the call to the floor generated by the off-door pushbutton.

To use this function correctly, the following must be taken into account:
- The involved handsets, the 346833 interface, and the camera must be physically connected on the same SCS BUS.
- In multi-family systems connect the involved devices downstream the apartment interface item 346850 - (cameras and handsets are local resources of the individual user).
- The active function keeps the SCS BUS busy for approximately 30″, during which no other call can be forwarded. If the handset connects, the BUS will be busy until the TIME OUT period elapses, or the handset itself is disconnected.
- Only the following 2-wire BTicino cameras that can be used for this function: 391670 – 391657 – 391658 – 391659 – 391667 – 391668 - 391669 – 391661 – 391662 – 391663.

Floor shunt

346841

Description

The floor distribution block can be used for video door entry systems with a star distribution of the wiring.

The distribution block is in a plastic enclosure with much reduced dimensions for easier positioning (above all during the refurbishments) even with the installation inside flush mounted boxes.

It is also possible to install systems with combined wiring risers, where a part can be of IN/OUT type and the other part is used for the floor distribution block.

The device automatically adapts the video signal.

Max. 3 devices (handsets, bells or additional bells) can be connected on the same output.

The device must not be configured.

Technical data

Power supply from SCS BUS: 18 – 27 Vdc
Stand by absorption: 15 mA
Max. operating absorption: 15 mA
Operating temperature: 5 – 40 °C

Dimensional data

BASIC plastic enclosure

40 mm
18 mm
40 mm
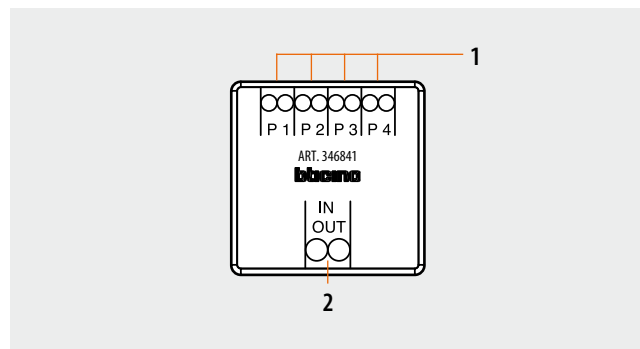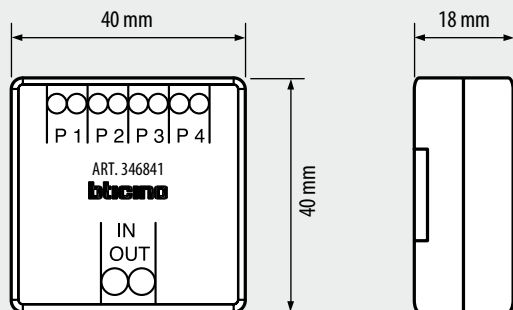
Legend

1 - 4 outputs (P1, P2, P3, P4) - handset BUS
2 - Input/output of riser (IN-OUT) on the same pair of clamps

Apartment interface   **346850**

Description

Interface to be used for the installation (inside the apartment/home) of a dedicated 2 WIRE system separated from the apartment complex riser. The system downstream the interface (inside the apartment/home) can include dedicated entrance panels and cameras, and if required can also be integrated with the MyHOME automation applications. Intercom calls inside or outside the apartment are also possible.
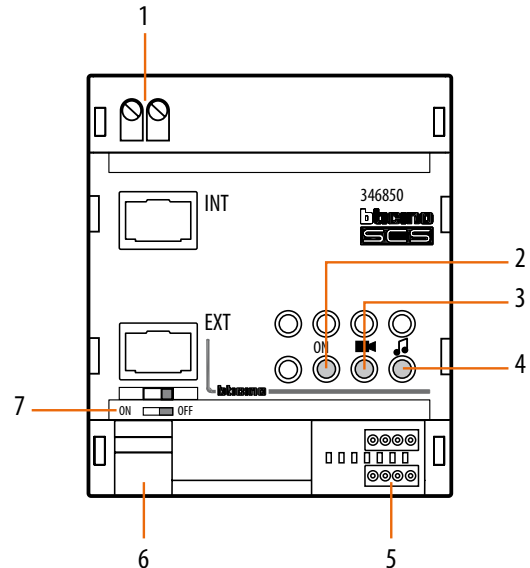
Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Operating temperature:	5 – 40 ℃
Dissipated power:	2,25 W
Stand by absorption:	from the INT connection 15 mA
	from the EXT connection 5 mA
Operating maximum absorption:	from the INT connection 50 mA
	from the EXT connection 30 mA

Dimensional data

4 DIN modules

Front view

Legend

1. Clamp for the connection of the apartment 2 WIRE system

2. Interface status notification LED:
   - Flashing green LED = STAND BY
   - Fixed green LED = EXT-INT connection active

3. Video signal status notification LED:
   - Green LED = OK
   - Green/red LED = operation close to the limit
   - Red LED = no video signal or limits exceeded

4. Not used

5. Configurator socket: N = interface address, M = 3 (connected at the factory)

6. Clamp for the connection to the 2 WIRE riser

7. Line termination ON/OFF micro-switch

Configuration

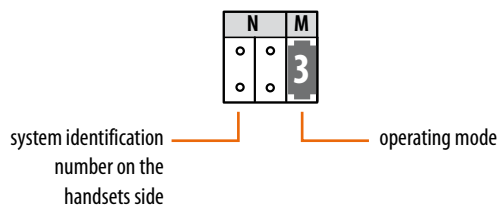The device must be physically configured in terms of :

N = device ID number
The configurator assigns to the interface a unique handset number inside the system.
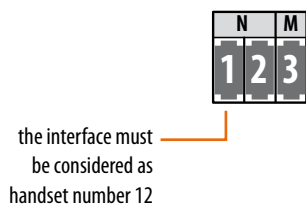
M = Operating mode
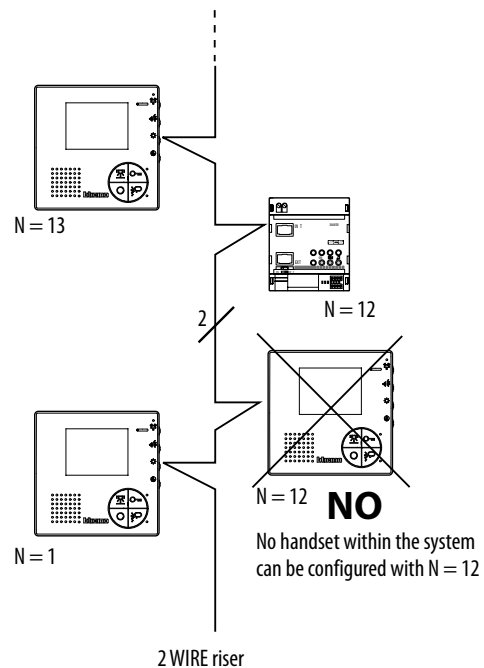
(M=3) - Standard factory configuration

(M=4) - If one or more internal units with local power supply are installed inside the apartment/home, **a configurator 4 must be connected to M**.

system identification number on the handsets side ———— operating mode

Example of configuration

the interface must be considered as handset number 12

Installation example

N = 13

N = 12

2

N = 12 **NO**
No handset within the system can be configured with N = 12

N = 1

2 WIRE riser

System expansion interface

346851

Description

Interface in DIN modular enclosure, used to increase the performance of the 2 WIRE system in one-family or apartment installations. It enables creating 2 WIRE risers with entrance panels at the bottom of the stairs, independent audio and video, as well as providing expansion for: regeneration of the video signal and extension of distances for a further 200 meters (cable item 336904 required), increase of the number of devices that can be connected to the BUS, and use of up to a maximum of 3 interface modules connected in cascade.

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Dissipated power:	2.25 W (max)
Operating temperature:	5 – 40°C
Absorption:	

IN clamp (configuration MOD = 0)
Stand by absorption:	30 mA
Max. operating absorption:	30 mA

IN clamp (configuration MOD = 2 - MOD = 7)
Stand by absorption:	20 mA
Max. operating absorption:	30 mA

IN clamp (configuration MOD = 5 - MOD = 6)
Stand by absorption:	5 mA
Max. operating absorption:	30 mA

OUT clamp (configuration MOD = 0)
Stand by absorption:	50 mA
Max. operating absorption:	50 mA

OUT clamp (configuration MOD = 2 - MOD = 7)
Stand by absorption:	30 mA
Max. operating absorption:	50 mA

OUT clamp (configuration MOD = 5 - MOD = 6)
Stand by absorption:	15 mA
Max. operating absorption:	50 mA

Dimensional data

Size: 4 DIN modules
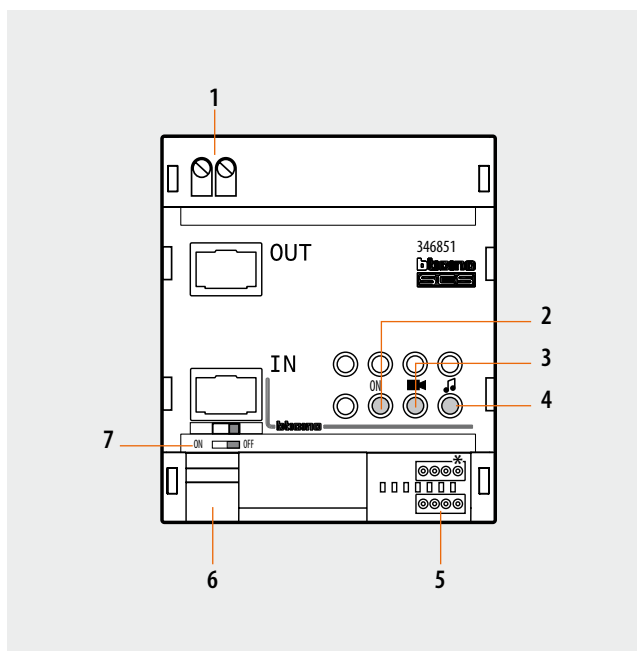
Legend

1. OUT clamps for the connection of the output SCS BUS

2. Interface status notification LED:
   - green flashing = STAND BY
   - green steady = IN - OUT connection active

3. Video signal level notification LED:
   - green steady = operation OK
   - green / red = operation nearing the limit
   - red steady = no video signal or limit exceeded

4. Presetting - NOT USED

5. Configurator socket - the socket marked with the asterisk * is NOT USED

6. SCS/BUS IN connection clamps

7. Line termination ON/OFF micro-switch

Configuration

The device MUST BE configured with physical configurator connection to the appropriate sockets as follows:

M = progressive number within the system

The configurator connected to the M sockets (from 1 to 99) assigns an identification number within the system to the interface. Addresses in M with (MOD = 0 - MOD = 2 - MOD = 7) and (MOD = 5 - MOD = 6) ARE NOT IN CONFLICT.

MOD = operating mode

The configurator connected to the MOD socket of the interface defines its operating mode as follows:

MOD = 0 (no configurator connected) - GALVANIC SEPARATION MODE

MOD = 2 - ENTRANCE PANEL LINE EXPANSION MODE

MOD = 0 (galvanic separation)
This configuration mode is used to double the line length or to increase the system performance - see the following example:

M   MOD   *

* Not used
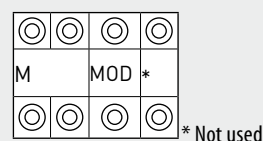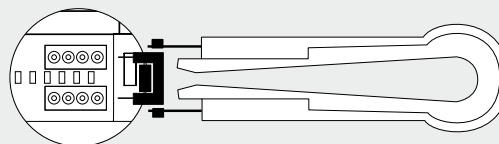
MOD = 5 - Independent risers MODE

MOD = 6 - Extended riser MODE

MOD = 7 - Extended riser expansion MODE

MOD = 2 (entrance panel line expansion)
This mode is used in systems with interface connection between the entrance panel and the F441 audio/video node, to extend the entrance panel line – see the following example:

⚠ **WARNING**

■ After the system expansion module item 346851, 200 metres of line B are available (interface 346851 - Furthest Handset). A maximum of 3 interfaces item 346850 and item 346851 can be installed in cascade. Only 2 of them will regenerate the signal.

M - interface progressive number (from 1 to 99)

⚠ **WARNING**

■ After the system expansion module item 346851 200 metres of line B are available (interface 346851 - Furthest Handset). A maximum of 3 interfaces item 346850 and item 346851 can be installed in cascade. Only 2 of them will regenerate the signal.
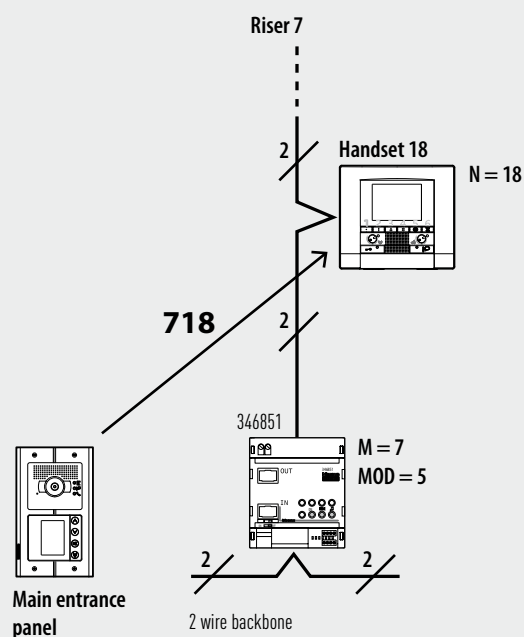
346851

MOD = 5 (independent risers)

This mode is used to create systems with 2 WIRE risers, with independent audio and video (39 risers maximum) - see the following example:
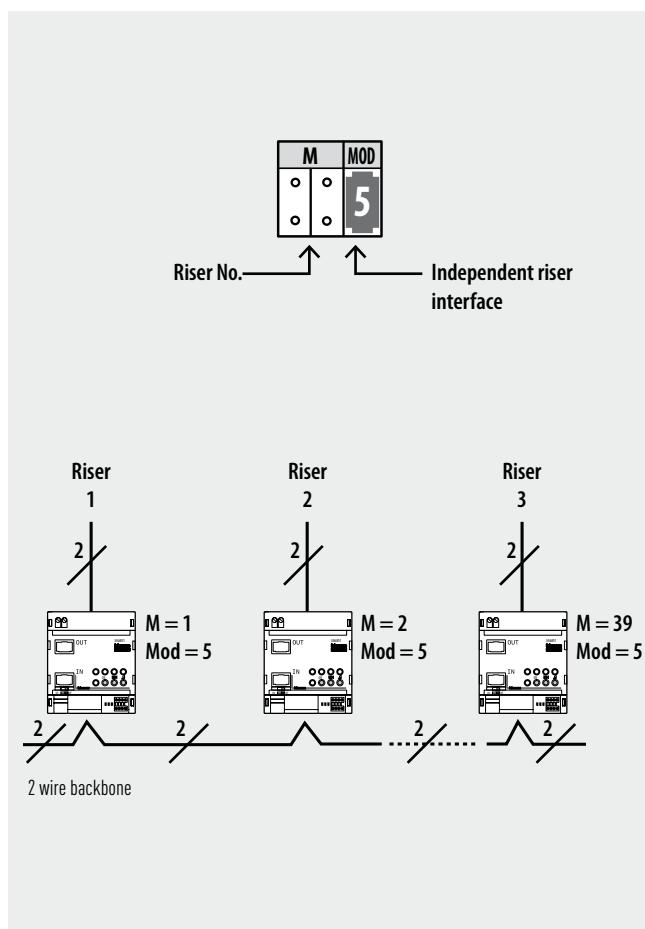
Riser No. ——→ ←—— Independent riser interface

Riser 1   Riser 2   Riser 3

2   2   2

M = 1   M = 2   M = 39
Mod = 5   Mod = 5   Mod = 5

2   2   2   2

2 wire backbone

The handsets connected to the single riser will be identified at the main entrance panel by the M configurator of 346851 x 100 + the N configurator of the single handset.

Riser 7

2   Handset 18   N = 18

718   2

346851

M = 7
MOD = 5

Main entrance panel

2 wire backbone

2   2

As far as the EP is concerned, the handset is number 718: this is the M of 346851 (7) x 100 + N of the handset connected to the riser (18).
(7 x 100) + 18 = 718

NOTE:
A maximum of 3 interfaces item 346850 and 346851 can be installed in cascade. Only 2 of them will regenerate the signal.

MOD = 6 (extended riser)
MOD = 7 (extended riser expansion)
These configuration modes offer the possibility of riser line expansion up to the logic limit of 300 riser handsets (3 lines of 100 handsets each).
The limit of 100 handsets for each line is subjected to the use of apartment interface item 346850.

When interface item 346850 is not used, this 100 handsets line limit will be further reduced (refer to the system technical guide for more information).
Interface item 346850 CANNOT be installed on the last line. It is possible to cross up to 3 interfaces item 346850 and 346851 connected in cascade.

BUS PI

Handsets (301 – 399)   Handsets (101 – 399)

346851
M = 3
MOD = 7
ON OFF
OUT
346851
IN

346850
INT 346850
EXT

Handsets (201 – 299)   2

2

346851
M = 2
MOD = 7
ON OFF
OUT
346851
IN

346850
INT 346850
EXT

Handsets (101 – 199)   2

2

346851
M = 1
MOD = 6
ON OFF
OUT
346851
IN

BUS PI

Handsets (601 – 699)   Handsets (401 – 699)   Handsets (701 – 999)

346851
M = 6
MOD = 7
ON OFF
OUT
346851
IN

346850
INT 346850
EXT

Handsets (501 – 599)   2

2

346851
M = 5
MOD = 7
ON OFF
OUT
346851
IN

346850
INT 346850
EXT

Handsets (401 – 499)   2

2

346851
M = 4
MOD = 6
ON OFF
OUT
346851
IN

Maximum 100 interfaces item 346850

346851
M = 7
MOD = 6
ON OFF
OUT
346851
IN

2

2

EP BUS
(Main Entrance Panel)

Note 1: maximum 3 interfaces item 346850 and 346851 can be installed in cascade. Two of them will regenerate the signal.

Note 2: for this type of systems we recommend that you contact your local technical support service representative.

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Coaxial - 2 WIRE interface

347400

Description

Interface used for connecting the cameras with 12 Vdc power supply (max. absorption 150 mA) and coaxial video output (1 Vpp @ 75 ohm) to the 2-wire video BUS.
The interface provides direct power supply to the camera.
the device can be used as an interface for the separate camera; to associate a camera to an audio entrance panel simply configure both the camera and the entrance panel using the same configurator in P.

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption:	5 mA
Max. operating absorption:	210 mA - see note (*)
Operating temperature:	(-20) – (+70)°C

(*) note: max. 150 mA when the interface supplies power to the 12 V camera

Dimensional data

BASIC plastic enclosure

40 mm

18 mm

40 mm

bticino SCS 347400
P N Z M A PL
VIDEO | PWR
V — | + 1 2 — 1

1

bticino SCS 347400
P N Z M A PL
2
VIDEO | PWR
V — | + 1 2 — 1

4

3

Distance
347400 - COAX cameras
max. 3 m
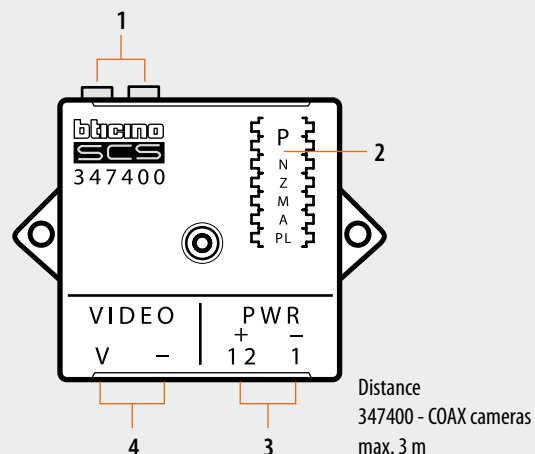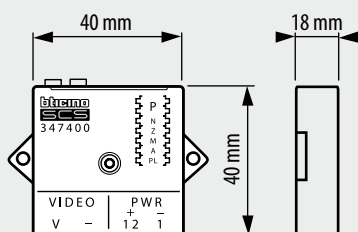
Legend

1 - 2 WIRE BUS connection clamps
2 - Configurator socket (to access remove the upper plastic protection cover)
3 - Clamps for the connection of the camera power supply (12 Vdc - 150 mA max.)
4 - Clamps for the connection of the camera video signal output

Configuration

The device must be physically configured in terms of:

P = camera address
The configurator in seat P of the interface assigns to it a recognition number inside the system. The interface is considered as a video entrance panel, therefore it must be configured with a progressive number in relation to (P) of the entrance panel.

N = address of the handset called in case of alarm
In those systems integrated with Bticino burglar alarm systems, the configurator connected to N of the interface, determines which handset must be called in case of alarm occurred in the Z zone configured in the interface. Then, the handset will display the images of the interface associated to the Z zone.

Z = zone of the burglar-alarm system associated to the camera

M = Operating mode
M = 0 - standard operation
M = SLA - Configuration for association to several audio EP

A/PL = Address of the SCS light actuator connected to the camera
        Address of the scenarios module associated to the camera
In systems integrated with BTicino automation applications, the configurator connected to A/PL of the interface associates the switching on of the camera with the activation of a SCS actuator configured with the same A/PL.
(Example: switching on of lights to illuminate the field of view, only with camera active).

P | N | Z | M | A | PL

PI   M= SLA

P | N | Z | S L A | A | PL

PN

PI - PN = Range of audio EP associated to the camera (max 5).

btıcıno
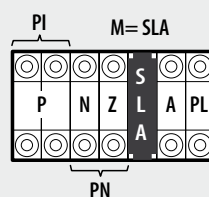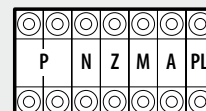
347400

Configuration

Example of configuration

EP 1

EP 2

Interface
CAM. 1

Interface
CAM. 2

P	N		T	S

P	N		T	S
1				

P	N	Z	M	A	PL
2					

P	N	Z	M	A	PL
3					

System with 2 video EP and 2 cameras.

Interface
CAM. 1

Interface
CAM. 2

P	N		T	S
1				

P	N	Z	M	A	PL
1					

P	N	Z	M	A	PL
2					

System with audio EP and 2 camera (CAM. 1 associated to the EP)

P	N	Z	M	A	PL
	1		2	S	
				L	
				A	

P	N	Z	M	A	PL
	PI		PN	S	
				L	
				A	

PI: address of the first audio EP
PN: address of the last audio EP

346000

346830

P=0   P=1   P=2

Coupling the switching on of the camera with several audio EP (max. 5)

AXOLUTE VIDEO DISPLAY

349311 - 349312 - 349313

Description

2-wire speaker phone video handset for flush mounted installation. With 2.5" colour LCD display with PC customisable OSD navigation icon menu for the management of the following MY HOME applications: video door entry system, temperature control, sound system, automation (scenarios) and anti-intrusion. LED signalling for: call exclusion, door status, and connection to the entrance panel.

Suitable for flush mounted installation using item 506 boxes. To be completed with front cover plate (all those suitable for item 506E of the AXOLUTE series).

Programming and configuration using the TiAxoluteDisplay software supplied with the product.

Related items

item 506E	3+3 modules flush mounted box
item PB526	3+3 modules plasterboard box
item HA/HB4826...	3+3 modules front cover plate (see AXOLUTE finishes)
item 349319	VIDEO DISPLAY table-top base

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption:	10 mA
Max. operating absorption:	320 mA
Operating temperature:	5 - 40℃

Dimensional data

105,5 mm · 9,5 mm · 2,5" · 118 mm · 30,2 mm

127 mm · 141,5 mm
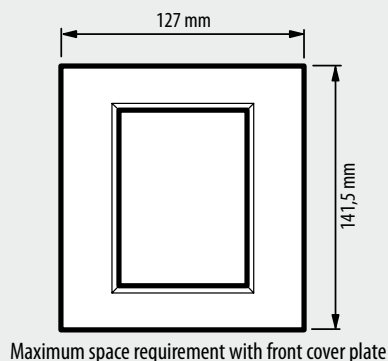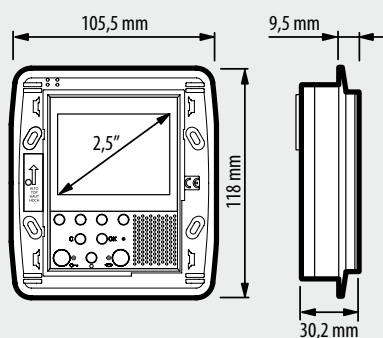
Maximum space requirement with front cover plate
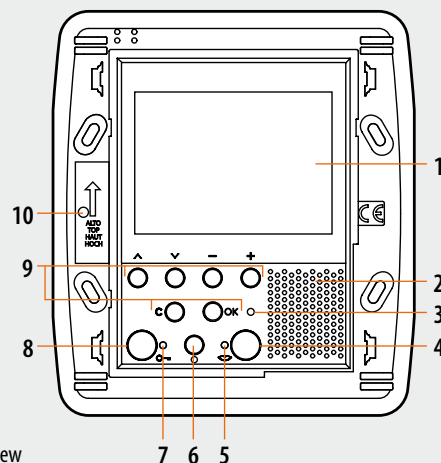
Front view

Legend

1 - 2.5" colour LCD display
2 - Loudspeaker
3 - LED for call exclusion notification
4 - Connection key; enable/disable the connection
5 - Connection status LED
6 - Entrance panel and cycling activation key
7 - Door lock status LED
8 - Tasto Door lock opening
9 - Navigation keys and confirmation inside the menu
10 - Microphone
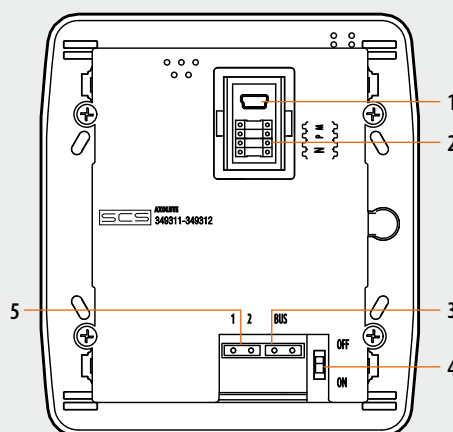
Rear view

Legend

1 - Mini-USB connector for PC connection
2 - Configurator socket
3 - 2 WIRE SCS/BUS connection clamps
4 - Line termination ON/OFF micro switch
5 - Clamp for connection of the additional power supply

349311 - 349312 - 349313

Configuration

AXOLUTE VIDEO DISPLAY can be configured in 2 different modes:

- **Fast configuration** (through the connection of physical configurators)
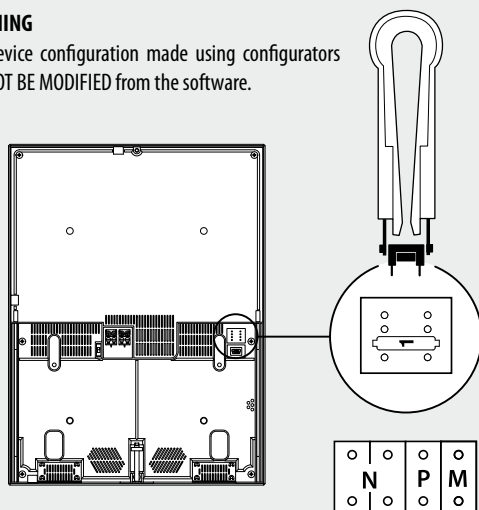- **Advanced configuration** using the TiAxoluteDisplay software supplied with the product.

Fast configuration enables the user to access the menu of the video door entry functions. This is the standard configuration using configurators to be connected to the appropriate sockets on the back of the device itself.
If the apartment interface, item 346850, is installed in the apartment, configuration of the video handset using the software supplied is recommended.

WARNING: The configuration of the device is performed using configurators and cAnnot be changed from the menu.

The advanced PC configuration using the TiAxoluteDisplay software (CD supplied), provides the user with a higher degree of customisation, with the possibility to:
- create customized menus;
- customize text messages;
- access all home automation functions.

To transfer the configuration performed using the TiAxoluteDisplay software, or to update the firmware, connect AXOLUTE VIDEO DISPLAY to the PC using an USB-miniUSB cable.
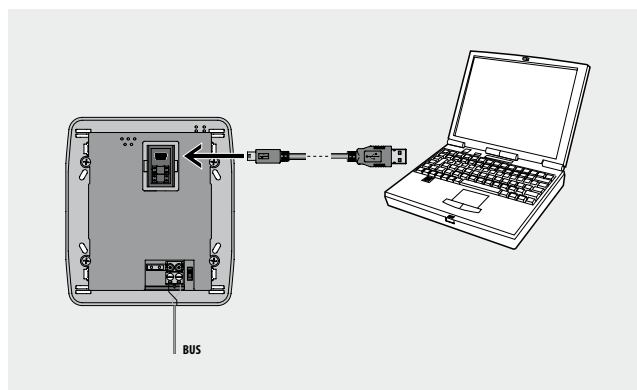
To ensure that the communication is successful, AXOLUTE VIDEO DISPLAY must be powered and not physically configured.

N - numero del Handset
The N configurator assigns each video handset an identification number within the system. The handsets must be configured in progressive mode. Handsets with parallel connection (max 3 are allowed inside the apartment without item 346850) must be configured with the same N configurator. Additional audio handsets, video handsets and/or bells can be installed in parallel to the basic video handset.

P - entrance panel association
The P configurator identifies the associated EP, or the first entrance panel that switches itself on when the pushbutton (◯) is pressed the first time, as well as which door lock with idle video handset is activated, when the pushbutton (◯) is pressed.

M - Operating mode
The M configurator identifies the main menu of the device and therefore all the usable functions (see manual supplied with the product).

AXOLUTE
Nighter & Whice VIDEO STATION

349320 - 349321

Description

2-wire speaker phone video handset for wall mounted installation. With 8" colour LCD display, backlit capacitive keypad with soft touch controls and PC customisable OSD navigation icon menu for the management of the following MY HOME applications: video door entry system, temperature control, sound system and multimedia, automation (scenarios) and anti-intrusion.

In systems integrated with the sound system, the VIDEO STATION behaves as an amplifier, enabling playback of all audio/video sources connected to the system.

LED signalling for: call exclusion, door status, and connection to the entrance panel.

It can be integrated with MY HOME, also in combination with the Multimedia interface, item 3465 - (in this case, allow for a local video door entry system power supply).

Suitable for wall mounted installation using the special bracket (supplied as standard).

Programming and configuration using the TiNighterandWhiceStation software supplied with the product.

Technical data

Power supply from SCS BUS: 18 – 27 Vdc
Stand by absorption: 30 mA
Max. operating absorption: 520 mA
Operating temperature: 5 - 40°C

Dimensional data

Front view
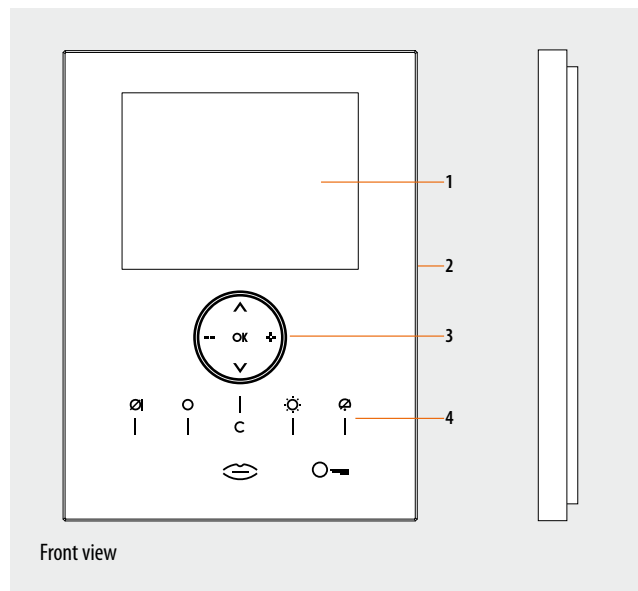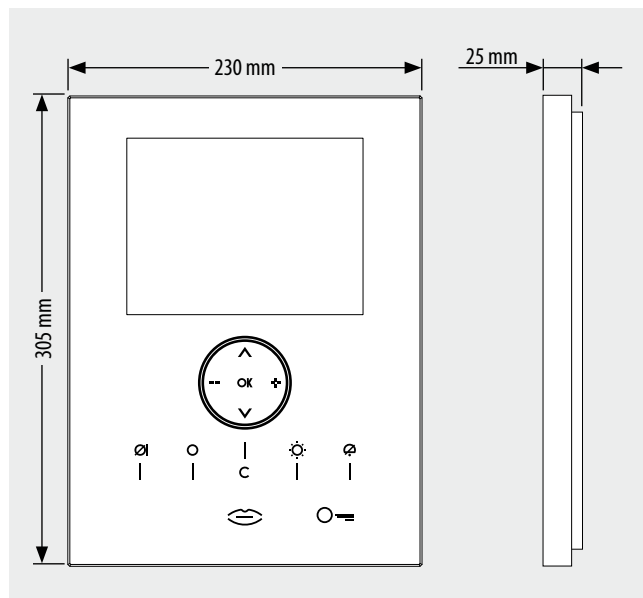
Legend

1 - 8" LCD colour display
2 - Microphone
3 - Navigation keys and confirmation inside the menu
4 - Led and video door entry function keys

Rear view
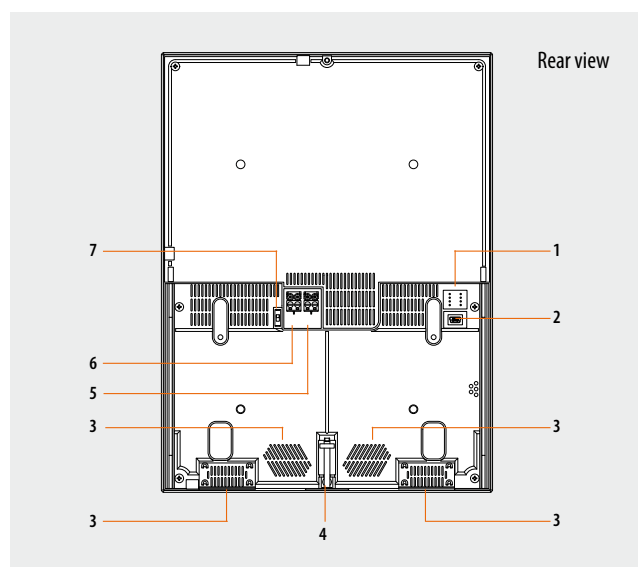
Legend

1 - Configurator socket
2 - Mini-USB connector for PC connection
3 - Loudpspeakers; for the broadcasting of voice and stereo sound
4 - Screw used to fasten the Video Station to the metal base
5 - Additional power supply connection clamps
6 - Clamps for the connection of the 2-wire SCS BUS
7 - Line termination ON/OFF micro switch

bticino

349320 - 349321

Configuration

AXOLUTE Nighter & Whice VIDEO STATION can be configured in 2 different modes:

- **Fast configuration** (through the connection of physical configurators)
- **Advanced configuration** using the TiAx**oluteNighterAndWhiceStation software (CD sup**plied)

Fast configuration enables the user to access the menu of the video door entry functions. This is the standard configuration using configurators to be connected to the appropriate housing on the back of the device itself.
If the apartment interface, item 346850, is installed in the apartment, configuration of the video handset using the software supplied is recommended.

WARNING
The device configuration made using configurators CANNOT BE MODIFIED from the software.

N   P   M

The advanced PC configuration using the TiAxoluteNighterAndwhiceStation software (CD supplied), provides the user with a higher degree of customisation, with the possibility to:
- create flexible menus
- customize text messages
- access all home automation functions

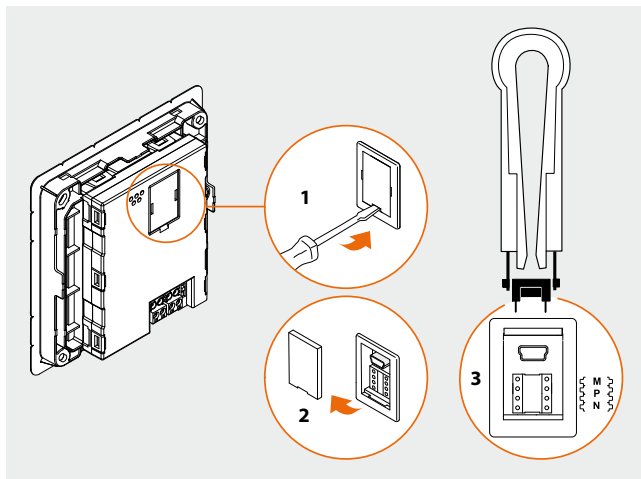To transfer the configuration performed using the TiAxoluteNighterAndwhiceStation software, or to update the firmware, connect Axolute Video Station to the PC using the USB-mini cable.

BUS
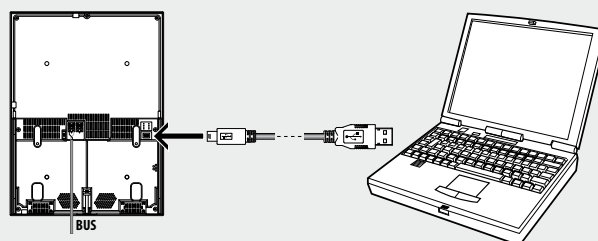
To ensure that communication is successful, Axolute Video Station must be powered and not configured physically.

N - numero del Handset
The N configurator assigns each video handset an identification number within the system. The handsets must be configured in progressive mode. Handsets with parallel connection (max 3 are allowed inside the apartment without item 346850) must be configured with the same N configurator. Additional audio handsets, video handsets and/or bells can be installed in parallel to the basic video handset.

P - entrance panel association
The P configurator identifies the associated EP, or the first entrance panel that switches itself on when the pushbutton ( ) is pressed the first time, as well as which door lock with idle video hanset is activated, when the pushbutton ( ) is pressed.

M - Operating mode
The M configurator identifies the main menu of the device and therefore all the usable functions (see manual supplied with the product).

Axolute Etèris Video Display

349340

Description

2 WIRE speaker phone video handset for flush mounted installation. With 2.5" colour LCD display with PC customisable icons OSD navigation menu for the management of the following MY HOME applications: Video door entry system, temperature control, sound system, scenarios, burglar alarm. LED signalling for: call exclusion, door status, connection with entrance panel. Flush mounted / plasterboard installation using the appropriate boxes.

To be completed with dedicated front cover and front cover plate available in the Axolute white, anthracite, and tech colour variants. Programming and configuration using the TiAxoluteMemoryDisplay software supplied with the product.

Related items

528W	Flush mounted box
PB528W	Plasterboard box
349243	White front cover
349241	Axolute tech front cover
349242	Anthracite front cover
HW4826HD	White front cover plate
HW4826HC	Axolute tech front cover plate
HW4826HS	Tech front cover plate
346020	(additional 2 DIN modules power supply) - optional, for local powering of the video handset, when maximum installation distances are necessary.

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand-by absorption:	10 mA
Max. operating absorption:	320 mA
Operating temperature:	0 – 40 °C

Dimensional data

Front view

Back view

Legend

1. 2.5 " LCD colour display
2. Loudspeaker
3. Bell exclusion notification LED
4. Audio connection activation/deactivation key
5. Connection status LED
6. Entrance panel/camera scrolling activation key
7. Door lock status LED
8. Door lock activation key
9. Navigation and confirmation keys in the icon menu
10. Microphone
11. Mini USB connector for connection to the PC
12. Configurator socket
13. 2 WIRE SCS/BUS connection clamps
14. Line termination ON/OFF micro-switch
15. Additional power supply connection clamps (1-2)

bticino

349340

Flush mounted box 528W

128,5 mm   58 mm

128,5 mm

Plasterboard box PB528W

116,5 mm   58 mm

116,5 mm
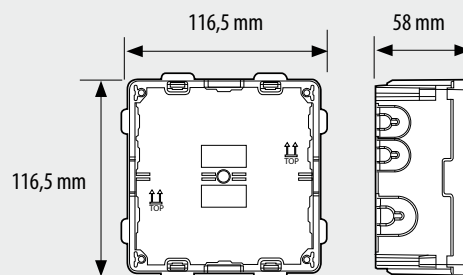
Configuration

Axolute Etèris Video Display can be configured in two different modes:

- **Quick configuration** (with physical configurator connection)
- **Advanced configuration** (using the TiAxoluteDisplay software supplied)

The quick configuration enables the user to access the video door entry system function menu. This is the standard configuration with configurators to be connected to their own housing on the back of the device itself.

If the apartment interface, item 346850, is installed inside the apartment, configuration of the video handset using the software supplied is recommended.

The PC advanced configuration using the software (CD supplied), provides the user with the highest degree of customisation, with the possibility of:

- create customized menus;
- customize text messages;
- access all home automation functions.

Connection to the PC
To transfer the configuration performed using the software, or to update the firmware, connect Axolute Etèris Video Display to the PC using the USB-miniUSB cable.

1
2
3
M
P
N

USB-miniUSB

N – handset number
The N configurator assigns to each video handset an identification number within the system. The handsets must be configured in progressive order.Handsets with parallel connection (max 3 are allowed inside apartments without item 346850) must be configured using the same N configurator. In parallel with the main video handset, additional handsets, video handsets and/or bells may be installed.

P – entrance panel association
The P configurator identifies the entrance panel associated, or the first entrance panel to activate before pressing the key and which door lock is activated when the key is pressed while the video handset is idle.

M – operating mode
The M configurator identifies the main menu page and therefore the preset functions that may be used (see manual supplied with the product).

To ensure that the communication is successful, the video handset must be powered and not physically configured.

SFERA NEW - SFERA ROBUR
Audio video module

351200

Description

Audio/video module for the installation of 2 WIRE colour video systems.
With Colour camera with 1/3" sensor and white LEDs for the lighting of the shooting field. Mist prevention heating resistance. Loudspeaker and Microphone volume adjustments. It can manage up to 98 pushbutton calls using the additional double row pushbutton modules. Horizontal and vertical camera position adjustment, +/- 10° in both directions. It offers the possibility of opening an electrical door lock directly connected to clamps S+ and S- (18 V 4 A impulsive - 250 mA holding current 30 Ohm max) and of connecting a local door lock release pushbutton on clamps PL. Preset for additional power supply. Fitted with front LEDs for the notification of the operating status: door lock release, communication active, call put through, and system busy.   Integrated optic sensor for the switching on of the night backlighting. To be completed with surround plate. The device must be configured physically or using a PC and the TiSferaDesign software.

Related items

351201   Sfera New A/V front cover - Allmetal (IK 08)
351202   Sfera New A/V front cover - Allwhite (IK 08)
351203   Sfera New A/V front cover - Allstreet (IK 08)
351211   Sfera New A/V front cover, 1 pushbutton - Allmetal (IK 08)
351212   Sfera New A/V front cover, 1 pushbutton - Allwhite (IK 08)
351213   Sfera New A/V front cover, 1 pushbutton - Allstreet (IK 08)
351221   Sfera New A/V front cover, 2 pushbuttons on double column - Allmetal (IK 08)
351222   Sfera New A/V front cover, 2 pushbuttons on double column - Allwhite (IK 08)
351223   Sfera New A/V front cover, 2 pushbuttons on double column - Allstreet (IK 08)
351205   Sfera Robur A/V front cover (IK 10)
351215   Sfera Robur A/V front cover, 1 pushbutton (IK 10)
351225   Sfera Robur A/V front cover, 2 pushbuttons on double column (IK 10)

Technical data

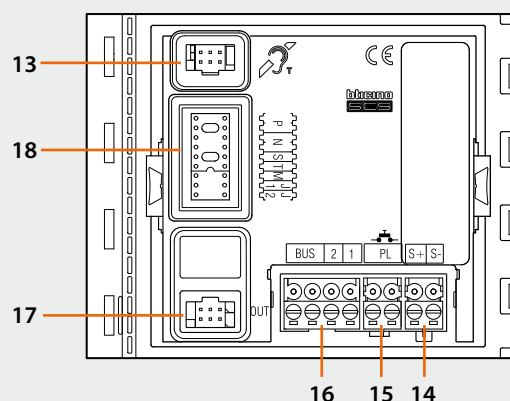|	
Power supply from SCS BUS:	18 - 27 Vdc
Stand by absorption (with backlighting LEDs off):	15 mA
Stand by absorption (with backlighting LEDs on):	20 mA
Max. operating absorption:	140 mA
Colour sensor:	1/3"
Lens:	F2.5 f3.3 mm
Resolution:	330 TV lines (horizontal)
Illumination of the viewing field:	white LED
Brightness adjustment:	Automatic
Interlace:	2 : 1
Mist prevention heating resistance	
Operating temperature:	(-25) - (+70)°C
Protection index (pushbutton panel assembled):	IP 54

Dimensional data

115 mm

91 mm

Front view

Rear view

Legend

1. Loudspeaker
2. Mini-USB connector for the connection to the PC : download/upload the advanced configuration and device firmware update
3. Microphone volume adjustment
4. LED for door status notification.   **GREEN ON = door open**
5. LED for communication status notification. **GREEN ON = active communication**
6. LED for system status notification.   **GREEN ON = put through call**
                                           RED ON= busy system
7. Call pushbuttons
8. White LEDs for night lighting of the shooting field
9. Light sensor for automatic switching on of the night backlighting
10. Colour camera
11. Microphone
12. Loudspeaker volume adjustment
13. Connector for the connection of the 352700 teleloop module
14. Plug-in clamps for the connection and control of the electrical door lock (18 V 4 A impulsive 250 mA holding current 30 ohm max)
15. Plug-in clamps for the connection of the local door lock release pushbutton
16. Plug-in clamps for the connection of the local power supply and the 2 WIRE SCS BUS
17. Connector for the connection to subsequent modules
18. Configurator socket

Configuration

The device must be configured. The configuration can be performed in two ways :

Mode 1 - with physical configurator connection
Mode 2 - with PC and software TiSferaDesign

Mode 1

Mod 1 requires the physical connection of the configurators to their sockets

P - entrance panel number
The configurator in socket P of the speaker module assigns to this a recognition number inside the system. The numbering of the entrance panels must always start from P=0. The entrance panel configured with P=0 must be a common (or main) entrance panel.

N - call number
Assigns the correspondence between the entrance panel pushbuttons and the audio handsets or video handsets.
In common entrance panels made using pushbutton modules, 1 must be inserted in N of the speaker module. The number of the first riser handset must be inserted in the local entrance panels.

S - type of call signal
The configuration of S determines the call tone of handsets.
One can thus differentiate the calls from different entrance panels.

For the SWING, PIVOT, POLYX and AXOLUTE handsets, **S** associates the Entrance panel to the bell programmed in the same apartment. It is possible to chose between 16 different preset bells.

For the SPRINT handsets, **S** sets the call ringtone, according to the following table:

Configurator	0	1	2	3
Type of bell	2-tone	2-tone	2-tone	One-tone
	1200 Hz	1200 Hz	1200 Hz	1200 Hz
	600 Hz	0 Hz	2400 Hz	

In one-family systems S=9 to configure the general call.

T - door lock relay timing

	Configurator number						
0=no configurator	1	2	3	4*	5	6	7
4 sec	1 sec	2 sec	3 sec	as pushbutt.	6 sec	8 sec	10 sec

*Operation as pushbutton for 10 sec. max, after which standby mode is activated.
To extend operation time over 10 seconds, use actuator item 346200 configured with MOD=5.

P	N	S	T	M	J1	J2

M - enabling/disabling of call tones, door lock release tones night lighting management always ON

The M configurations gives the possibility of managing the entrance panel call and door lock release tones . It also gives the possibility of enabling night backlighting always ON (light sensor disabled) according to the following table:

Configurator	M=0	M=1	M=2	M=3
Tone status	All tones **enabled**	Door lock tone **disabled**	Call tone **disabled**	All tones **disabled**

Configurator	M=4	M=5	M=6	M=7
Night backlighting status	All tones **enabled** + backlighting **always ON**	Door lock tone **disabled** + backlighting **always ON**	Call tone **disabled** + backlighting **always ON**	All tones **disabled** + backlighting **always ON**

J1 - activation of call pushbutton columns
The J1 configurator gives the possibility of managing the Call pushbuttons of the speaker module as follows:

J1 CONNECTED = Only the right pushbutton column is enabled
J1 DISCONNECTED = Both pushbutton columns are enabled (right + left)

J2 - additional EP power supply

Configurator J2 gives the possibility of enabling the additional power supply (1-2) of the speaker module in the following mode :
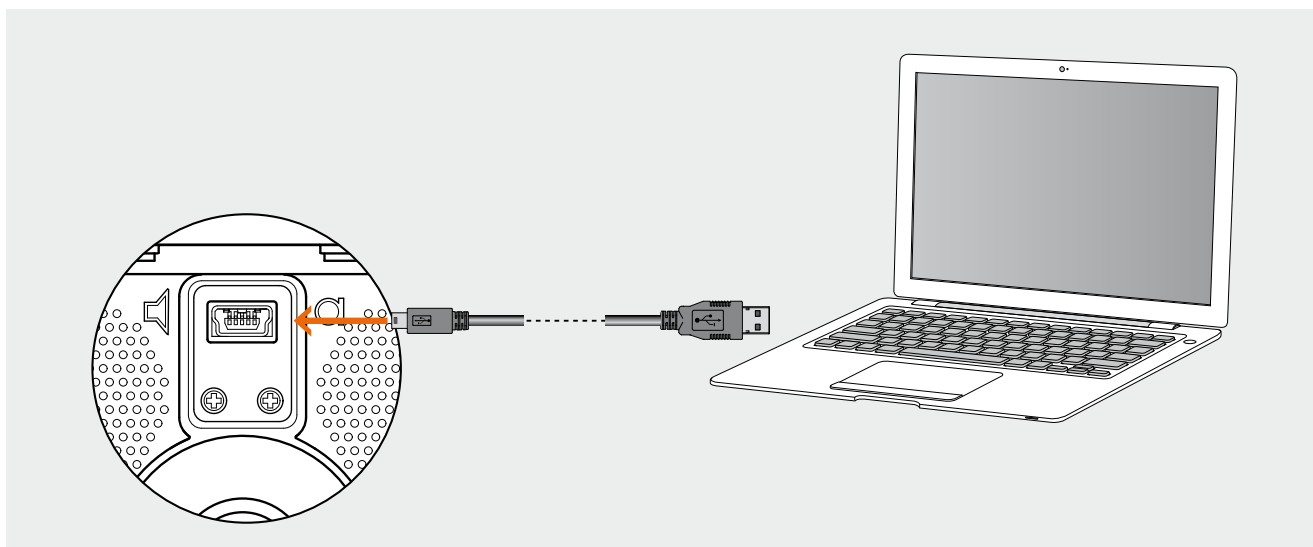
J2 CONNECTED = Additional power supply disabled
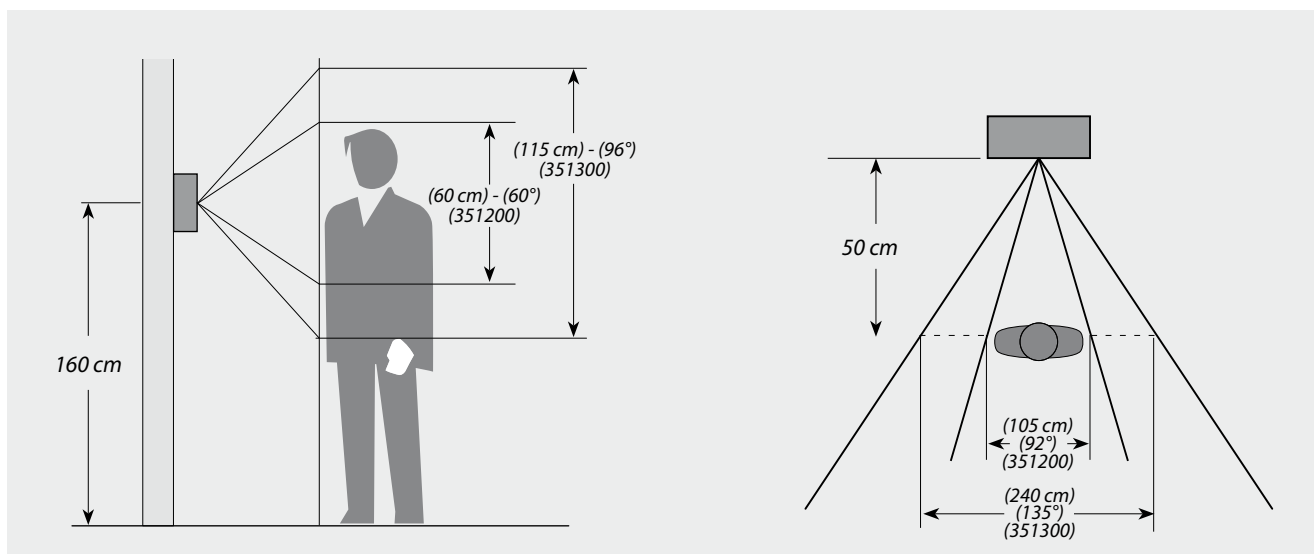**J2 DISCONNECTED** = Additional power supply enabled

CONFIGURATION - Mode 2

Mode 2 requires advanced configuration of the device, performed using a PC and the TiSferaDesign software (which can be downloaded free of charge from the www.bticino.com). For the connection to the PC use a USB - mini USB cable. The software gives the possibility of configuring, programming, and updating the firmware of the speaker module.The presence of the mini USB connection of the front of the speaker module gives the possibility of performing these operations without the need to disassemble the device.

Warning: In order to correctly send the configuration to the device, jumper (J1) must be removed. Also ensure that there are no configurators connected to the socket on the back of the module.

Camera shooting field

bticino

SFERA NEW - SFERA ROBUR
Wide angle audio and video module   351300

Description

Wide angle audio/video module for the installation of 2 WIRE colour video systems. With Colour camera with 1/3" sensor and white LEDs for the lighting of the shooting field. Mist prevention heating resistance. Loudspeaker and Microphone volume adjustments. It can manage up to 98 pushbutton calls using the additional double row pushbutton modules. It offers the possibility of opening an electrical door lock directly connected to clamps S+ and S- (18 V 4 A impulsive - 250 mA holding current 30 Ohm max) and of connecting a local door lock release pushbutton on clamps PL. Preset for additional power supply. Fitted with front LEDs for the notification of the operating status: door lock release, communication active, call put through, and system busy.   Integrated optic sensor for the switching on of the night backlighting. To be completed with surround plate. The device must be configured physically or using a PC and the TiSferaDesign software.

Related items

351301   Sfera New wide angle A/V front cover - Allmetal (IK 08)
351302   Sfera New wide angle A/V front cover - Allwhite (IK 08)
351303   Sfera New wide angle A/V front cover - Allstreet (IK 08)
351311   Sfera New wide angle A/V front cover with 1 pushbutton - Allmetal (IK 08)
351312   Sfera New wide angle A/V front cover with 1 pushbutton - Allwhite (IK 08)
351313   Sfera New wide angle A/V front cover with 1 pushbutton - Allstreet (IK 08)
351321   Sfera New wide angle A/V f/cover with 2 pushbuttons on double row - Allmetal (IK 08)
351322   Sfera New wide angle A/V f/cover with 2 pushbuttons on double row - Allwhite (IK 08)
351323   Sfera New wide angle A/V f/cover with 2 pushbuttons on double row - Allstreet (IK 08)
351305   Sfera Robur wide angle A/V f/cover (IK 10)
351315   Sfera Robur wide angle A/V f/cover with 1 pushbutton (IK 10)
351325   Sfera Robur wide angle A/V f/cover with 2 pushbuttons on double row (IK 10)

Technical data

Power supply from SCS BUS:	18 - 27 Vdc
Stand by absorption (with backlighting LEDs off):	15 mA
Stand by absorption (with backlighting LEDs on):	20 mA
Max. operating absorption:	140 mA
Colour sensor:	1/3"
Lens:	F2.5 f1.8 mm
Resolution:	330 TV lines (horizontal)
Illumination of the viewing field:	white LED
Brightness adjustment:	Automatic
Interlace:	2 : 1
Mist prevention heating resistance	
Operating temperature:	(-25) - (+70)°C
Protection index (pushbutton panel assembled):	IP 54

Dimensional data

115 mm

91 mm

Front view

Rear view

Legend

1. Loudspeaker
2. Mini-USB connector for the connection to the PC : download/upload the advanced configuration and device firmware update
3. Microphone volume adjustment
4. LED for door status notification. GREEN ON = door open
5. LED for communication status notification. GREEN ON = active communication
6. LED for system status notification. GREEN ON = put through call
                                         RED ON= busy system
7. Call pushbuttons
8. White LEDs for night lighting of the shooting field
9. Light sensor for automatic switching on of the night backlighting
10. Wide angle colour camera
11. Microphone
12. Loudspeaker volume adjustment
13. Connector for the connection of the 352700 teleloop module
14. Plug-in clamps for the connection and control of the electrical door lock (18 V 4 A impulsive   250 mA holding current 30 ohm max)
15. Plug-in clamps for the connection of the local door lock release pushbutton
16. Plug-in clamps for the connection of the local power supply and the 2 WIRE SCS BUS
17. Connector for the connection to subsequent modules
18. Configurator socket

BT00598-a-EN

Configuration

The device must be configured. The configuration can be performed in two ways :

Mode 1 - with physical configurator connection
Mode 2 - with PC and software TiSferaDesign

Mode 1

Mod 1 requires the physical connection of the configurators to their sockets

P - entrance panel number
The configurator in socket P of the speaker module assigns to this a recognition number inside the system. The numbering of the entrance panels must always start from P=0. The entrance panel configured with P=0 must be a common (or main) entrance panel.

N - call number
Assigns the correspondence between the entrance panel pushbuttons and the audio handsets or video handsets.
In common entrance panels made using pushbutton modules, 1 must be inserted in N of the speaker module. The number of the first riser handset must be inserted in the local entrance panels.

S - type of call signal
The configuration of S determines the call tone of handsets.
One can thus differentiate the calls from different entrance panels.

For the SWING, PIVOT, POLYX and AXOLUTE handsets, **S** associates the Entrance panel to the bell programmed in the same apartment. It is possible to chose between 16 different preset bells.

For the SPRINT handsets, **S** sets the call ringtone, according to the following table:

Configurator	0	1	2	3
Type of bell	2-tone	2-tone	2-tone	One-tone
	1200 Hz	1200 Hz	1200 Hz	1200 Hz
	600 Hz	0 Hz	2400 Hz	

In one-family systems S=9 to configure the general call.

T - door lock relay timing

Configurator number							
0=no configurator	1	2	3	4*	5	6	7
4 sec	1 sec	2 sec	3 sec	as pushbutt.	6 sec	8 sec	10 sec

*Operation as pushbutton for 10 sec. max after which standby mode is activated.
 To extend operation time over 10 seconds, use actuator item 346200 configured with MOD=5.

M - enabling/disabling of call tones and door lock release tones, and management of night backlighting always ON

The M configurations gives the possibility of managing the entrance panel call and door lock release tones. It also gives the possibility of enabling night backlighting always ON (light sensor disabled) according to the following table:

Configurator	M=0	M=1	M=2	M=3
Tone status	All tones **enabled**	Door lock tone **disabled**	Call tone **disabled**	All tones **disabled**

Configurator	M=4	M=5	M=6	M=7
Backlighting status	All tones **enabled** + backlighting **always ON**	Door lock tone **disabled** + backlighting **always ON**	Call tone **disabled** + backlighting **always ON**	All tones **disabled** + backlighting **always ON**

J1 - activation of call pushbutton columns
The J1 configurator gives the possibility of managing the Call pushbuttons of the speaker module as follows:

J1 CONNECTED = Only the right pushbutton column is enabled
J1 DISCONNECTED = Both pushbutton columns are enabled (right + left)

J2 - additional EP power supply

Configurator J2 gives the possibility of enabling the additional power supply (1-2) of the speaker module in the following mode :
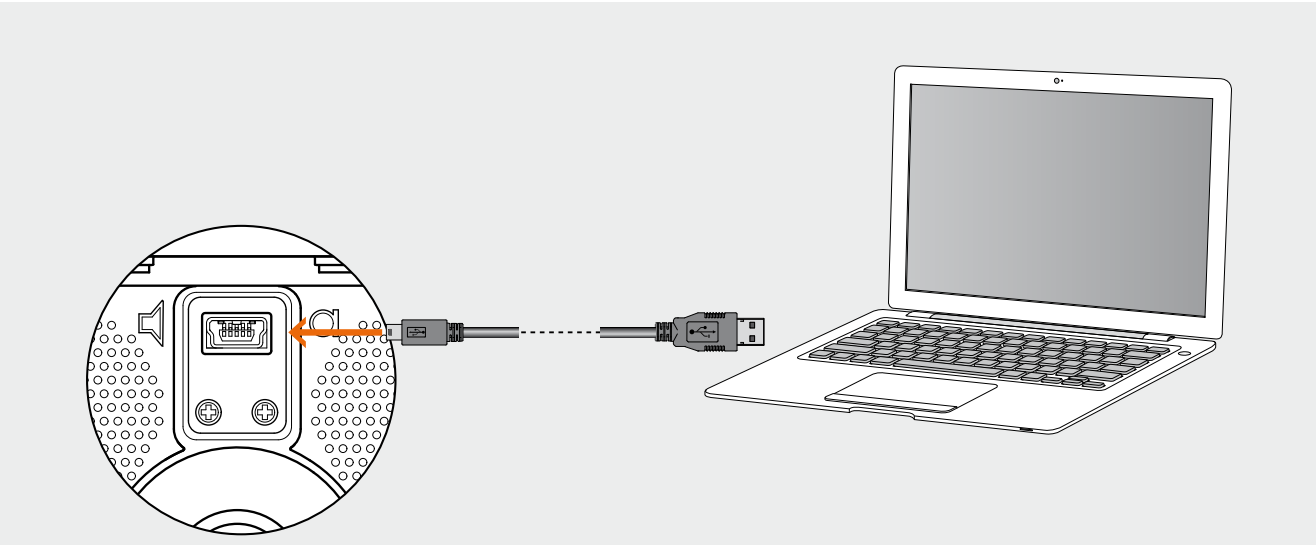
J2 CONNECTED = Additional power supply disabled
J2 DISCONNECTED = Additional power supply enabled
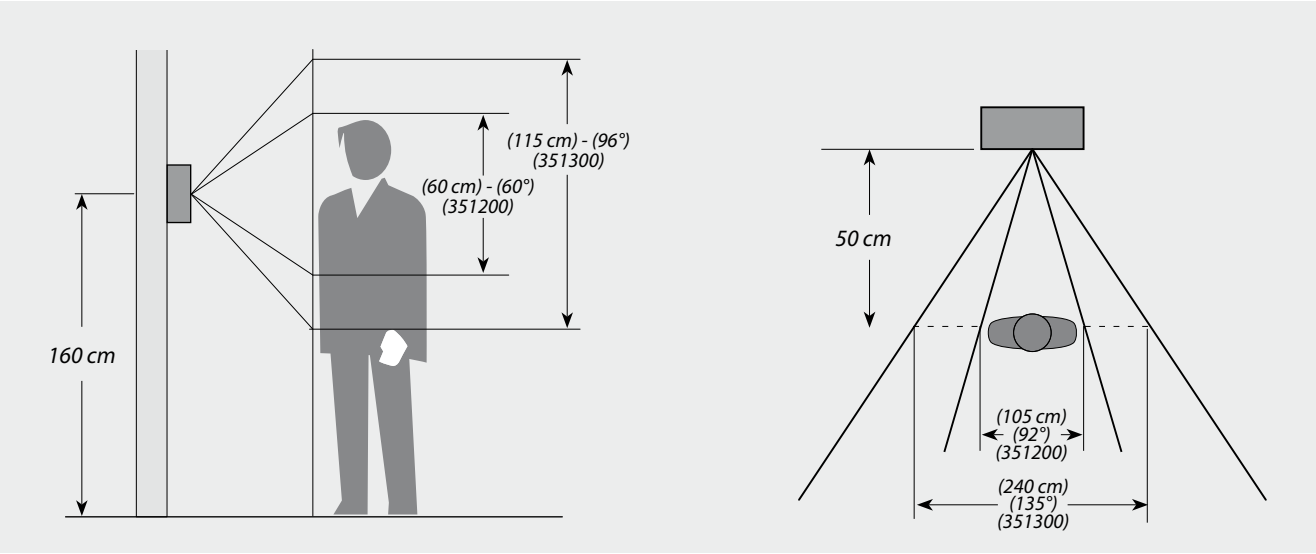
bticino

351300

Configuration

Mode 2 requires advanced configuration of the device, performed using a PC and the TiSferaDesign software (which can be downloaded free of charge from the www.bticino.com). For the connection to the PC use a USB - mini USB cable. The software gives the possibility of configuring, programming, and updating the firmware of the speaker module. The presence of the mini USB connection of the front of the speaker module gives the possibility of performing these operations without the need to disassemble the device.

Warning: In order to correctly send the configuration to the device, jumper (J1) must be removed. Also ensure that there are no configurators connected to the socket on the back of the module.

Camera shooting field

(115 cm) - (96°)
(351300)

(60 cm) - (60°)
(351200)

160 cm

50 cm

(105 cm)
(92°)
(351200)

(240 cm)
(135°)
(351300)

SFERA NEW - SFERA ROBUR
Nameplate module

352200

Description

Nameplate module normally used for displaying the house number or other notifications (e.g. Legend for calls using digital pushbutton panels, opening/closing times, etc.). Connection using the appropriate multicable supplied. Night backlighting controlled by the speaker module or the audio/video module connected.
To be completed with surround plate.

The device must not be configured.

Related items

352201	Sfera New nameplate front cover - Allmetal (IK 08)
352202	Sfera New nameplate front cover - Allwhite (IK 08)
352203	Sfera New nameplate front cover - Allstreet (IK 08)
352205	Sfera Robur nameplate front cover (IK 10)

Technical data

Power supply from SCS BUS:	18 - 27 Vdc
Stand by absorption with backlighting LEDs off:	0 mA
Stand by absorption with backlighting LEDs on:	6 mA
Operating temperature:	(-25) – (+70)°C
Protection index (pushbutton panel assembled):	IP 54

Front view

Rear view

Dimensional data

115 mm

91 mm
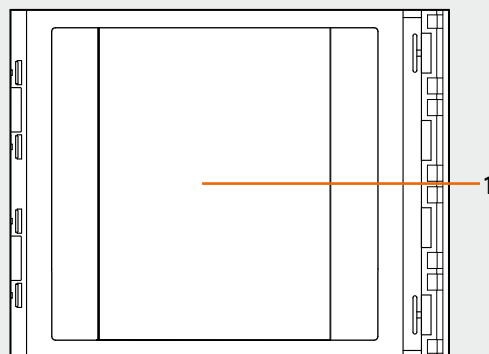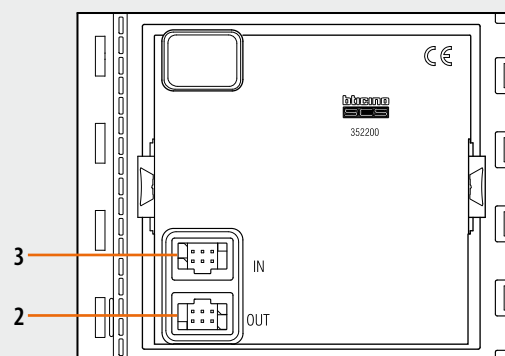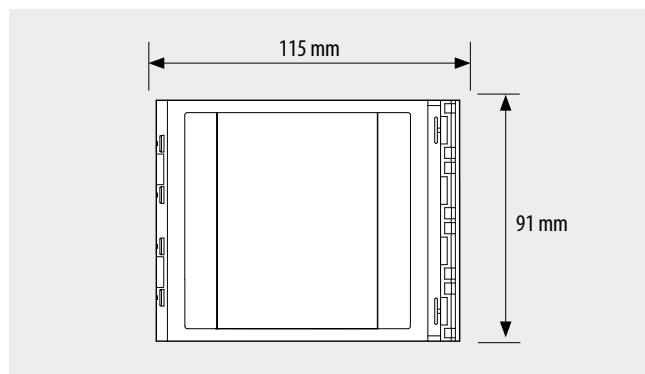
Legend

1. Area used for entering information
2. Connector for the connection to subsequent modules
3. Connector for the connection to previous modules

bticino

SFERA NEW - SFERA ROBUR
N&D and wide angle camera module

352400

Description

Night & Day and wide angle camera module for the installation of colour video systems.
Fitted with 1/3″ sensor with N&D function and automatic removal of the IR filter.
IR LED for the lighting of the field of view. Mist prevention heating resistance.
Automatic brightness adjustment. Connection to the speaker module (351100) using the multicable supplied.   To be completed with surround plate.

The device must not be configured.The device must not be configured.

Related items

352401   Sfera New front cover for N&D and wide angle camera - Allmetal (IK 08)
352402   Sfera New front cover for N&D and wide angle camera - Allwhite (IK 08)
352403   Sfera New front cover for N&D and wide angle camera - Allstreet (IK 08)
352405   Sfera Robur front cover for N&D and wide angle camera (IK 10)

Technical data

Power supply from SCS BUS:	18 - 27 Vdc
Stand by absorption:	20 mA
Max. operating absorption:	115 mA
Colour sensor:	1/3″
Lens:	F2.5 f1.85 mm
Resolution:	330 TV lines (horizontal)
Illumination of the viewing field:	LED IR
Brightness adjustment:	automatic
Interlace:	2 : 1
N&D function with automatic IR filter removal:	
Mist prevention heating resistance:	
Operating temperature:	(-25) - (+70)°C
Protection index (pushbutton panel assembled):	IP 54

Front view

Rear view

Dimensional data

115 mm

91 mm
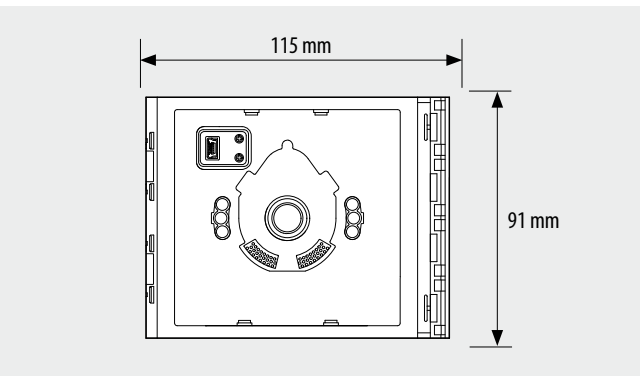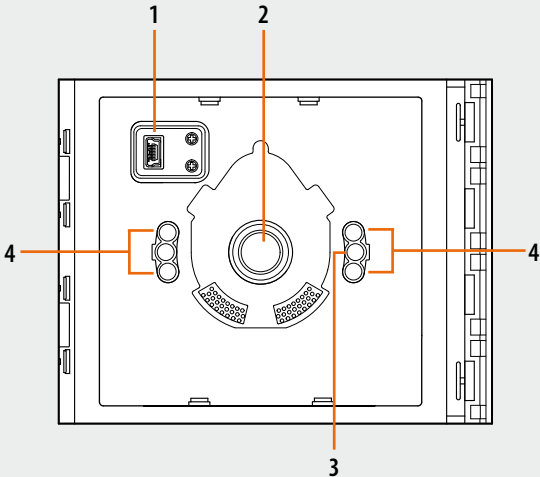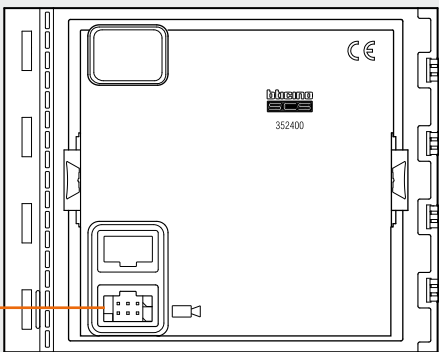
Legend

1. Mini-USB connector for the connection to the PC : device firmware update

2. Night & Day camera

3. Light sensor

4. IR LED for night lighting of the field of view

5. Connector for the connection of the speaker module 351100

352400

Connection to the PC

It is possible to update the device Firmware using a PC and the TiSferaDesign software (which can be downloaded free of charge from the www.bticino.com). For the connection to the PC use a USB - mini USB cable.

The software gives the possibility of updating the firmware of the speaker module.
The presence of the mini USB connection of the front of the speaker module gives the possibility of performing these operations without the need to disassemble the device.

Camera shooting field

(115 cm) - (96°)

160 cm

50 cm

(240 cm) - (135°)

bticino
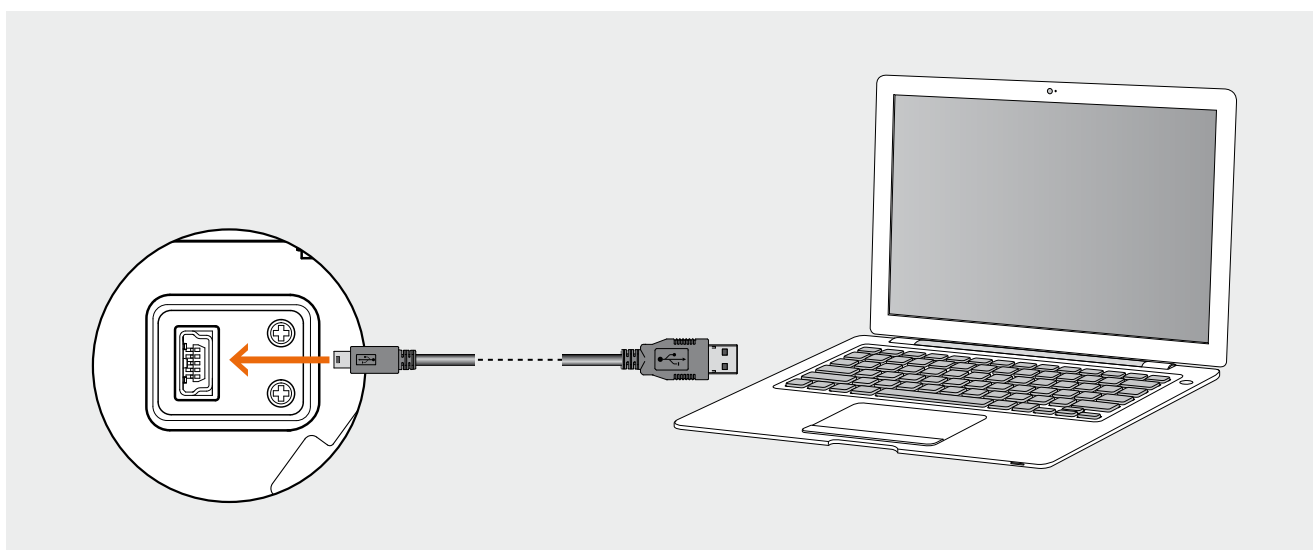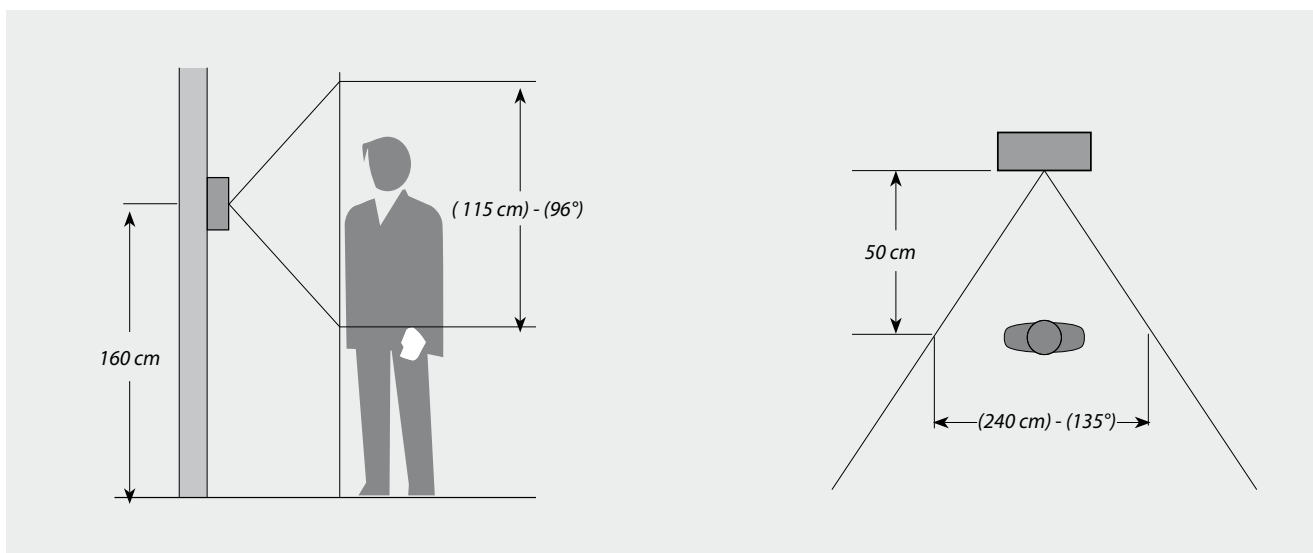
SFERA NEW - SFERA ROBUR
Display module

352500

Description

Graphic display module to be used with speaker module 351100 or with audio/video modules 351200 – 351300 (connection using the multicable supplied). It can operate in two modes: call from address book, or digital call. The call from the address book gives the possibility of sending the call by scrolling on the display the names associated to the residents. It is possible to store up to 4000 residents names. Using the keypad module item 353000 it is also possible to directly call the apartment by entering the number corresponding to the resident. The digital call is also performed using the keypad module item 353000 by entering the numerical code. It is recommended that one or more nameplate modules, item 352200, are installed at the side of the pushbutton panel to display the correspondence between the numerical codes and the names of the users. It is possible to program the names in the address book in two different ways: manual inclusion using the pushbuttons of the display module or inclusion using a PC with the TiSferaDesign software installed, by downloading the file to the display module (RECOMMENDED). System power supply cuts do NOT cause the loss of memory data. To be completed with surround plate.

The device must not be configured.

Related items

352501   Sfera New display front cover - Allmetal (IK 08)
352502   Sfera New display front cover - Allwhite (IK 08)
352503   Sfera New display front cover - Allstreet (IK 08)
352505   Sfera Robur display front cover (IK 09)

Technical data

Power supply from SCS BUS:	18 - 27 Vdc
Stand by absorption:	40 mA
Max. operating absorption:	50 mA
Display type:	Negative transflective
FSTN	
Display resolution:	160 x 240
Operating temperature:	(-25) – (+70)°C
Protection index (pushbutton panel assembled):	IP 54

Dimensional data

115 mm

91 mm
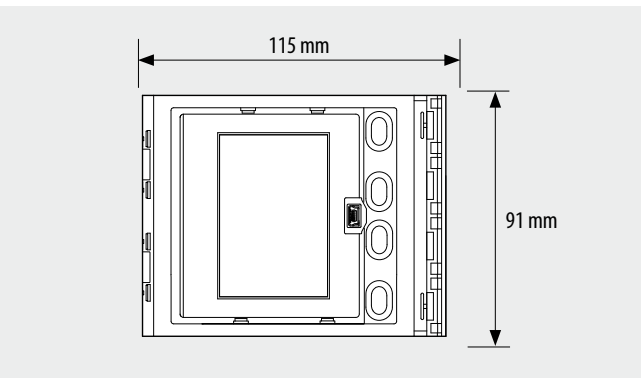
Front view
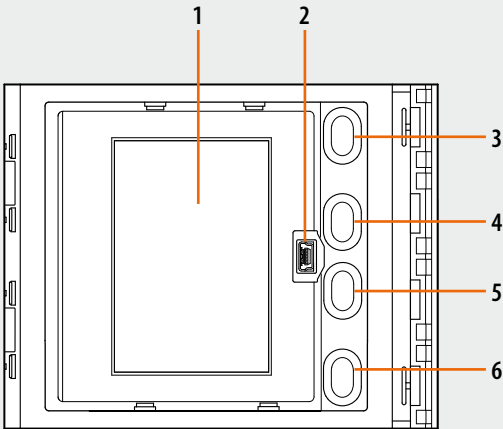
Rear view
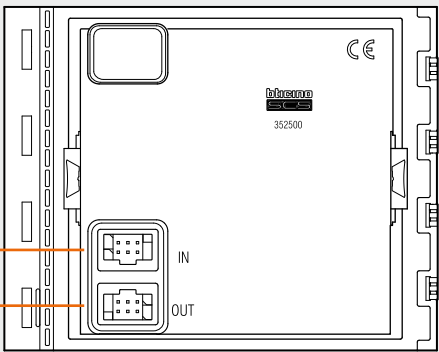
Legend

1. Graphic display
2. Mini-USB connector for the connection to the PC : programming of residents address book and device firmware update
3. Residents names scroll pushbutton (UP)
4. Residents names scroll pushbutton (DOWN)
5. Confirmation pushbutton – send call (OK)
6. Quick scroll pushbutton
7. Connector for the connection to subsequent modules
8. Connector for the connection to previous modules

BT00603-a-EN

352500

Connection to the PC

It is possible to program the residents address book and update the device Firmware using a PC and the TiSferaDesign software (which can be downloaded free of charge from the www.bticino.com).
For the Connection to the PC, use a USB - mini USB cable.

The software gives the possibility of updating the device and download the residents address book. The presence of the mini USB connection of the front of the speaker module gives the possibility of performing these operations without the need to disassemble the device.
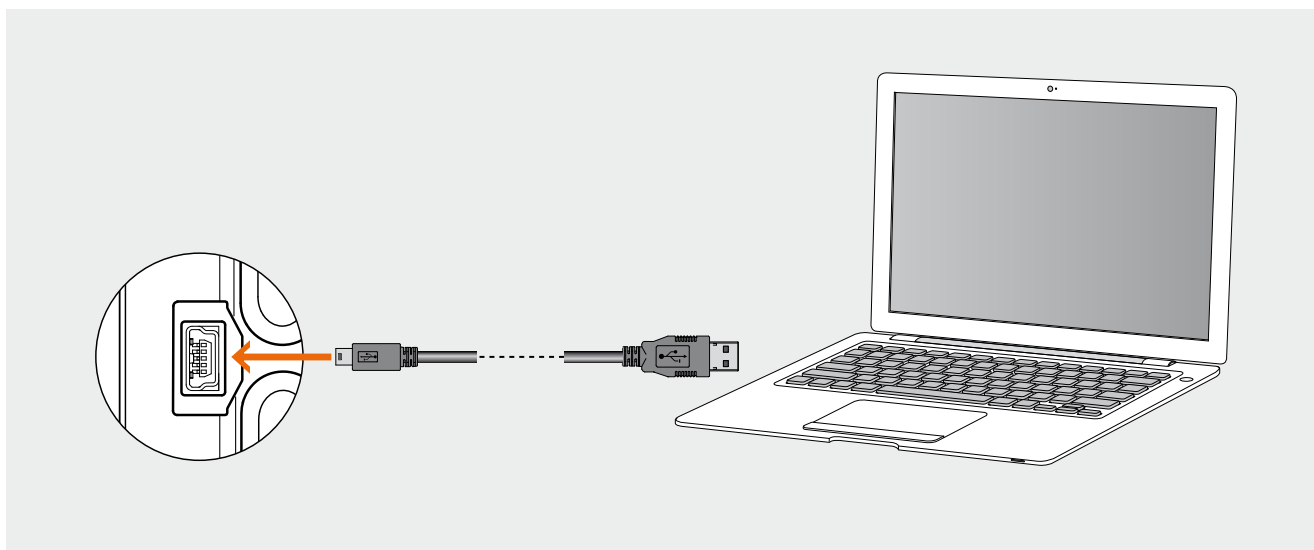
SFERA NEW - SFERA ROBUR
Inductive loop and control speech synthesis module
352700

Description

Inductive loop and control speech synthesis module, to be used with the 351100 speaker module or with audio/video modules 351200 - 351300, to enable use by people wearing hearing aids (fitted with T selector). It is connected to the speaker module using the appropriate multicable supplied. To be completed with surround plate. The device can be configured either physically or using the PC and the TiSferaDesign software.

Related items

352701	front cover for the Sfera New inductive loop and control speech synthesis - Allmetal (IK 08)
352702	front cover for the Sfera New inductive loop and control speech synthesis - Allwhite (IK 08)
352703	front cover for the Sfera New inductive loop and control speech synthesis - Allstreet (IK 08)
352705	front cover for the Sfera Robur inductive loop and control speech synthesis (IK 10)

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption:	18 mA
Max. operating absorption:	60 mA
Operating temperature:	(-25) – (+70) °C
Protection index (pushbutton panel assembled):	IP 54

Dimensional data

Front view

Rear view

115 mm

91 mm
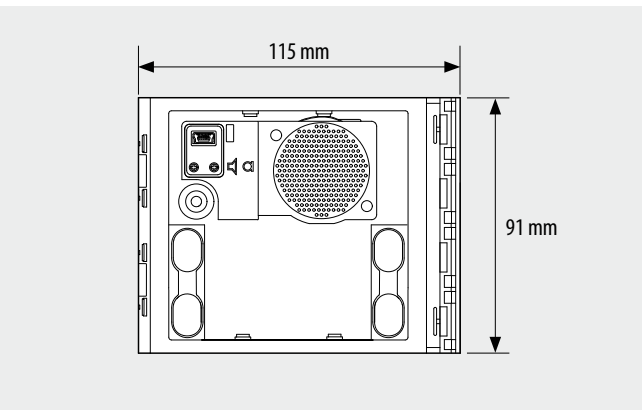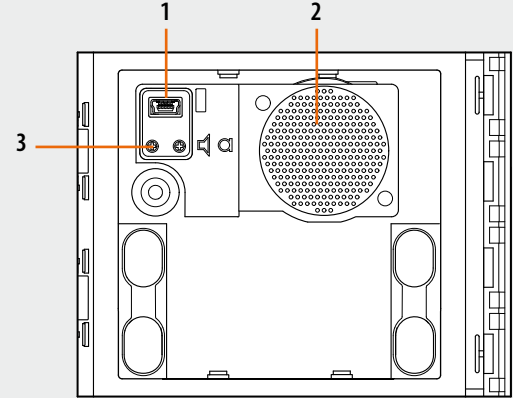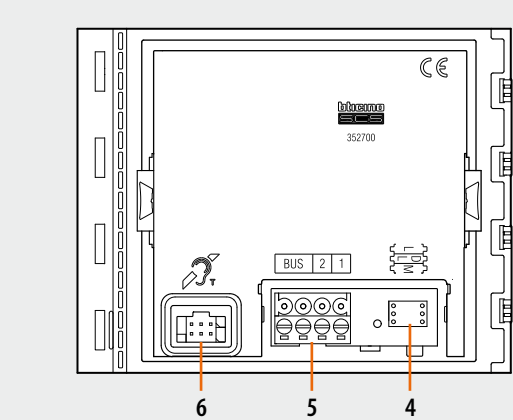
Legend

1. Mini-USB connector for the connection to the PC : configuration and device firmware update
2. Loudspeaker
3. Loudspeaker volume adjustment
4. Configurator socket
5. Plug-in clamps for the connection of the local power supply and the 2 WIRE SCS BUS
6. Connector for the connection of the speaker module

Configuration

The device must be configured.
The configuration can be performed in two ways:

Mode 1 - with physical configurator connection
Mode 2 - with PC and software TiSferaDesign

Mode 1

Mod 1 requires the physical connection of the configurators to their sockets:
The configurator connected to the L socket defines the language for the control speech synthesis.

L- Selection of the speech synthesis language:
The configurator connected to the L socket defines the language for the control speech synthesis as for the following table:

Configurator	Language
none	default language (English)
1	English
2	French
3	Italian
4	Spanish
5	German
6	Flemish
7	Portuguese

DL - Selection of the default speech synthesis language:
The configurator connected to the DL socket defines the default language for the control speech synthesis. The default language is selected from the preloaded language pack, as for the following table:

Configurator	Language
none	1st language of the preloaded language pack
1	2nd language of the preloaded language pack
2	3rd language of the preloaded language pack
3	4th language of the preloaded language pack
4	5th language of the preloaded language pack
5	6th language of the preloaded language pack
6	7th language of the preloaded language pack
7	8th language of the preloaded language pack
8	9th language of the preloaded language pack
9	10th language of the preloaded language pack

M - Operating mode:
The configurator connected to the M socket sets the operating mode of the device as indicated below:

M = 0 (no configurator) - Inductive loop and control speech synthesis both enabled
**M = 1 - Inductive loop enable, control speech synthesis disabled**
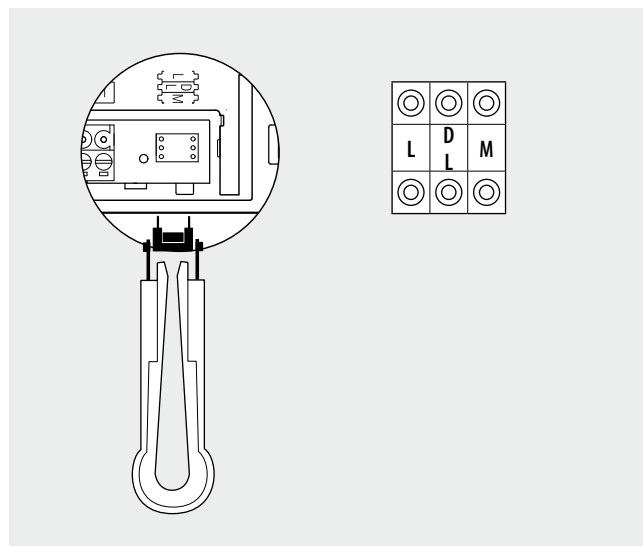
352700

Mode 2

Mode 2 requires advanced configuration of the device, performed using a PC and the TisferaDesign software (which can be downloaded free of charge from the www.bticino.com). For the connection to the PC, use a USB - mini USB cable. The software gives the possibility of configuring, programming, and updating the firmware of the speaker module. The presence of the mini USB connection of the front of the speaker module gives the possibility of performing these operations without the need to disassemble the device.
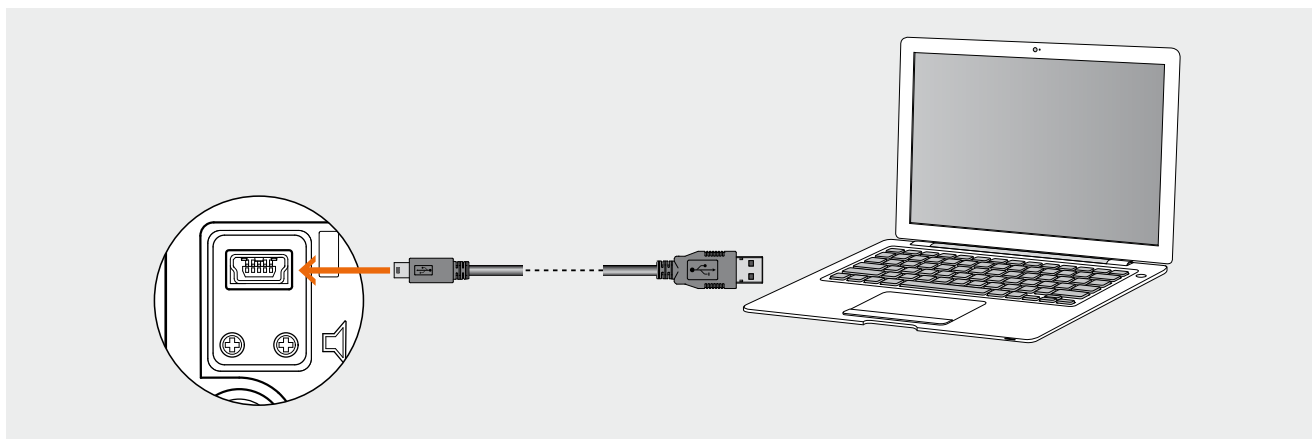
Notes on the use of the inductive loop

Switch the selector of the acoustic device to the T position

40 cm
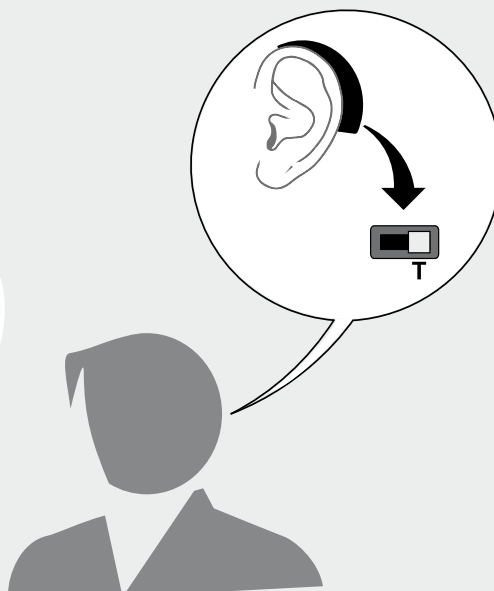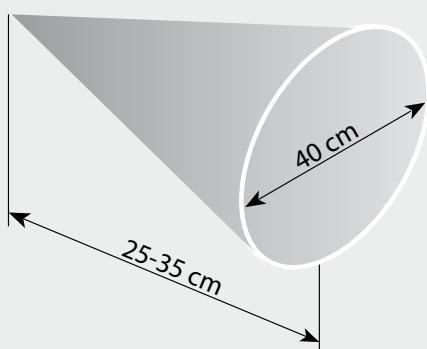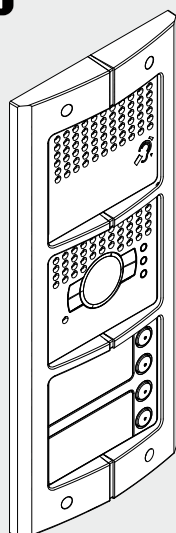
25-35 cm

To ensure correct magnetic coupling between the device and the acoustic device, we recommend a position in front of the device, at a distance of 25-35 cm.

It is reminded that the presence of metal and background noise generated by electric/electronic devices (e.g. computer) may compromise the performance and the quality of the coupling device.

SFERA NEW - SFERA ROBUR
Keypad module

353000

Description

Door lock release keypad module. It is fitted with relay with contacts (C – NC – NO) and clamps (CP- P1 – P2) for the connection of a local door lock release pushbutton.

The numerical code for the opening of the door lock can be programmed using the keypad itself, or using a PC after downloading the module programming file. It also has a programming reset pushbutton and LEDS for the visual notification of the access status. Night backlighting with LEDs. To be completed with surround plate. It is connected to the other modules using the appropriate multicable supplied. The device may also be used as a stand alone unit with independent power supply and operation.

Configuration performed using physical configurators, or a PC with the TiSferaDesign software installed.

Related items

353001   Sfera New keypad front cover - Allmetal (IK 08)
353002   Sfera New keypad front cover - Allwhite (IK 08)
353003   Sfera New keypad front cover - Allstreet (IK 08)
353005   Sfera Robur keypad front cover (IK 09)

Technical data

Power supply from SCS BUS:	18 - 27 Vdc
Stand by absorption (with backlighting LEDs off):	10 mA
Stand by absorption (with backlighting LEDs on):	25 mA
Max. operating absorption:	45 mA
Operating temperature:	(-25) – (+70) ℃
Protection index (pushbutton panel assembled):	IP 54

Front view

Rear view

Dimensional data

115 mm

91 mm
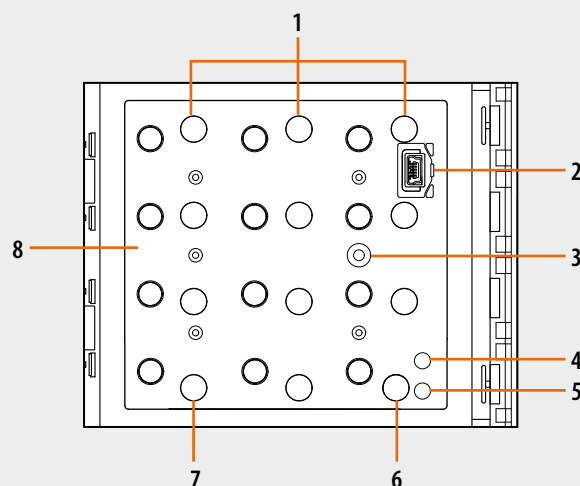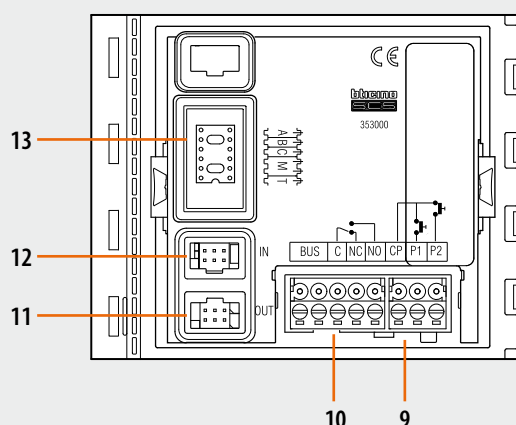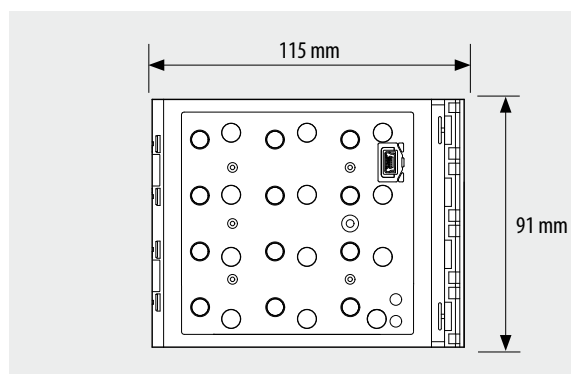
Legend

1. LEDs for night backlighting

2. Mini-USB connector for the connection to the PC : download/upload the configuration and device firmware update

3. RESET pushbutton

4. Red LED for access status notification Red   **LED ON = access denied**

5. Green LED for access status notification Green   **LED ON = access granted**

6. Cancel pushbutton (C)

7. Pushbutton for the selection of the door lock release code

8. Numeric keypad used for entering the codes

9. Plug-in clamps (CP – P1 P2) for connection of the additional local pushbutton

10. Plug-in clamps (C – NC – NO) for local relay contacts and connection to the 2 WIRE SCS BUS

11. Connector for the connection to subsequent modules

12. Connector for the connection to previous modules

13. Configurator socket

353000

Configuration

The configuration of the device is different depending on the type of installation:

- **Device installation inside a SFERA NEW pushbutton panel in 2 WIRE SCS systems.**
- **installation as STAND ALONE device**

In both cases, the configuration can be performed in two ways:

- **Mode 1 - with physical configurator connection**
- **Mode 2 - with PC and software TiSferaDesign**

| A | B | C | M | T |

Mode 1

Mod 1 requires the physical connection of the configurators to their sockets.

PHYSICAL CONFIGURATION FOR INSTALLATION WITH A SFERA NEW EP:

A + B + C - NOT USED

M - Operating mode - NOT USED

T -local relay time delay – NOT USED
(the time delay of the local relay is set by the T configurator connected to the speaker module or to the audio video module used).

PHYSICAL CONFIGURATION IN STAND ALONE INSTALLATION:

A + B + C - progressive address of the device
The configurators connected to the A B C sockets assign a progressive address to the device inside the system (range 000 – 999).
Example : A+B+C = 003 - device 003 of the system.

M - Operating mode - NOT USED

T – local relay time delay
The configurator connected to T sets the relay closing time delay as shown in the following table:

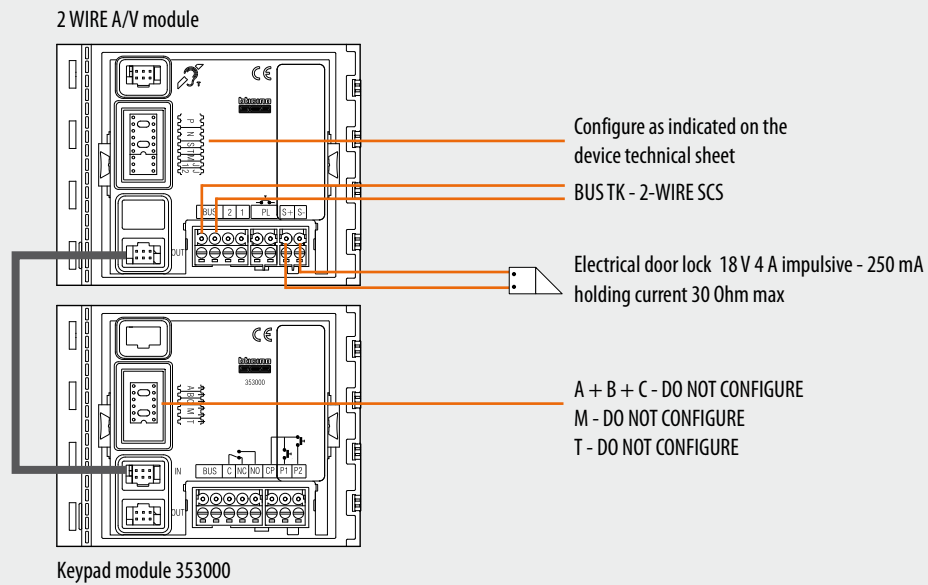| Configurator	0 = no configurator	1	2	3	4	5	6	7
Contact closing time	4″	1″	10″	20″	40″	1′	1.5′	3′
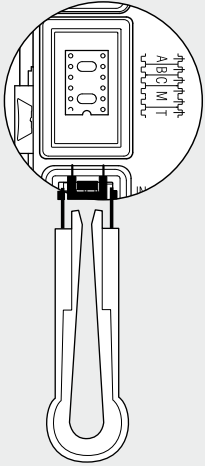
Mode 2

Mode 2 requires advanced configuration of the device, performed using a PC and the TisferaDesign software (which can be downloaded free of charge from the www.bticino.com).
For the connection to the PC use a USB - mini USB cable. The software gives the possibility of configuring, programming, and updating the firmware of the speaker module. The presence of the mini USB connection of the front of the speaker module gives the possibility of performing these operations without the need to disassemble the device.
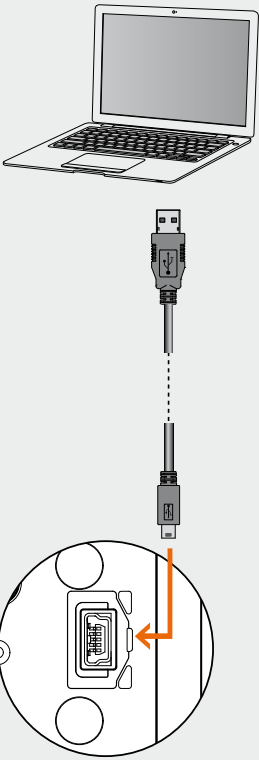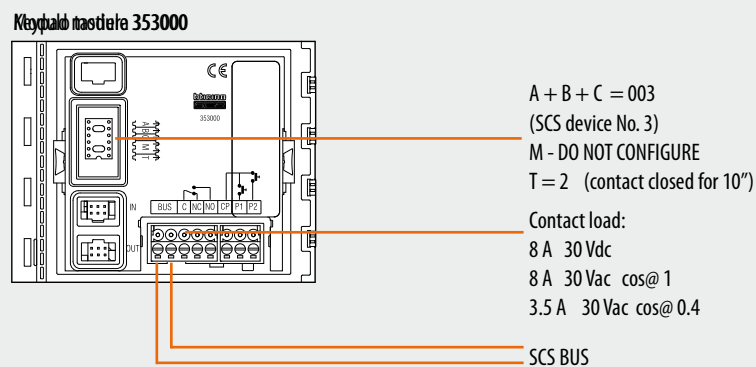
Wiring diagram- Installation with SFERA NEW EP

Example of installation of the keypad module inside a 2 WIRE SFERA NEW pushbutton panel with SCS BUS NOT CONNECTED to the keypad module

2 WIRE A/V module

Configure as indicated on the
device technical sheet

BUS TK - 2-WIRE SCS

Electrical door lock 18 V 4 A impulsive - 250 mA
holding current 30 Ohm max

A + B + C - DO NOT CONFIGURE
M - DO NOT CONFIGURE
T - DO NOT CONFIGURE

Keypad module 353000

Wiring diagram- STAND ALONE installation

Example of STAND ALONE installation connection with the SCS BUS connected to the keypad module.

Keypad module 353000

A + B + C = 003
(SCS device No. 3)
M - DO NOT CONFIGURE
T = 2   (contact closed for 10")

Contact load:
8 A   30 Vdc
8 A   30 Vac   cos@ 1
3.5 A   30 Vac   cos@ 0.4

SCS BUS

btⅠcⅠno

SFERA NEW - SFERA ROBUR
Badge reader module

353200

Description

RFID badge reader module for the release of the door lock by swiping the badge. It manages up to 20000 badges. It's fitted wiTh relay contacts (C – NO - NC) and clamps (CP - P1 - P2) for the connection of a local door release pushbutton. The badge for the release of the door lock can be programmed from the module itself, or using a PC after downloading the module programming file.

It also has a programming reset pushbutton and LEDS for the visual notification of the access status. Night backlighting a LEDs. To be completed with surround plate. It is connected to the other modules using the appropriate multicable supplied. The device may also be used as a stand alone unit with independent power supply and operation.

Configuration performed using physical configurators, or a PC with the TiSferaDesign software installed.

Related items

353201	Sfera New badge reader front cover - Allmetal (IK 08)
353202	Sfera New badge reader front cover - Allwhite (IK 08)
353203	Sfera New badge reader front cover - Allstreet (IK 08)
353205	Sfera Robur badge reader front cover (IK 09)
348200	badge - black
348201	badge - red
348202	badge - green
348203	badge - blue
348204	badge - orange
348205	badge - grey
348206	badge - yellow

Technical data

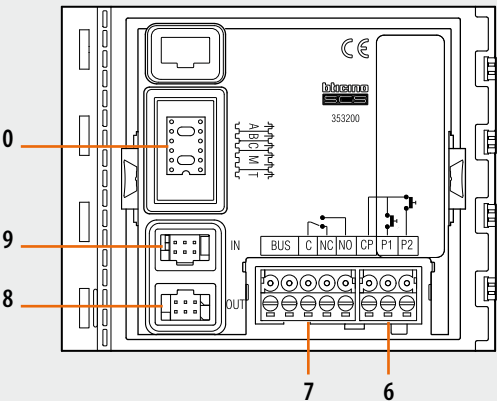|	
Power supply from SCS BUS:	18 – 27 Vdc
Stand by absorption (with backlighting LEDs off):	75 mA
Stand by absorption (with backlighting LEDs on):	85 mA
Max. operating absorption:	105 mA
Operating temperature:	(-25) – (+70) °C
Protection index (pushbutton panel assembled):	IP 54

Dimensional data
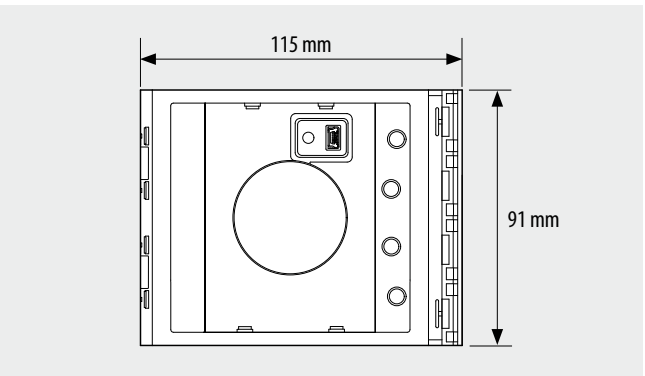
Front view
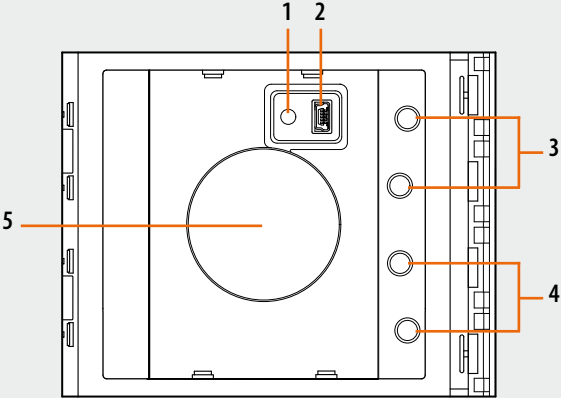
Rear view

Legend

1. RESET pushbutton

2. Mini-USB connector for the connection to the PC : programming and device firmware update

3. Red LED for access status notification.   **Red LED ON = access denied**

4. Green LED for access status notification.   **Green LED ON = access granted**

5. Antenna

6. Plug-in clamps (CP - P1 - P2) for the connection of an additional pushbutton and tamper

7. Plug-in clamps (C – NC – NO) for local relay contacts and connection to the 2 WIRE SCS BUS

8. Connector for the connection to subsequent modules

9. Connector for the connection to previous modules

10. Configurator socket



115 mm

91 mm

BT00606-a-EN

Configurazione

The configuration of the device is different depending on the type of installation:

- **device installation inside a SFERA NEW pushbutton panel in 2 WIRE SCS systems,**
- **installation as STAND ALONE device.**

In both cases, The configuration can be performed in two ways:

Mode 1 - with physical configurator connection
Mode 2 - with PC and software TiSferaDesign
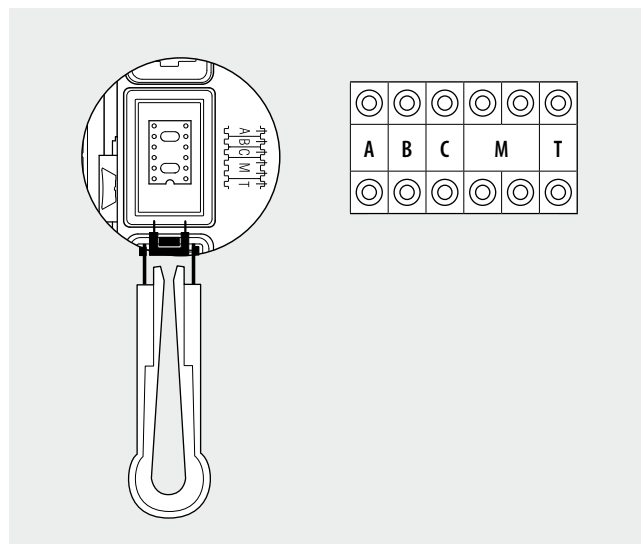
Mode 1

Mod 1 requires the physical connection of the configurators to their sockets.

Physical configuration for installation with a sfera new ep:

A + B + C - NOT USED

M - operating mode, badges management
The configurator connected to the M socket sets the badges management mode as indicated below:

M = 0 - management of badges with manager MASTER ONLY
The MANAGER MASTER badges (max. 20) are used both for the management of PASSEPARTOUT badges (max. 100) and for the management of the RESIDENTS max (max. 5) of each apartment.

M = 1 - badges management with APARTMENT MASTER
The MANAGER MASTER badges (max. 20) directly manage the PASSPARTOUT badges (max. 100) and the APARTMENT MASTER badges (max. 4000); the APARTMENT MASTER badges manage the RESIDENTS badges (max. 5) of the corresponding apartment.
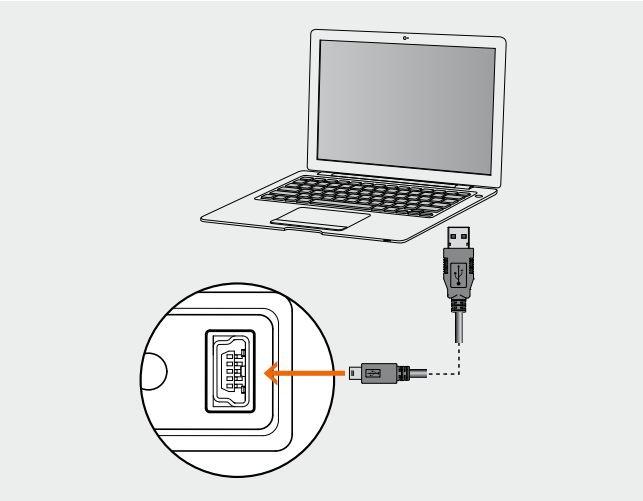
T -local relay time delay – NOT USED
(the time delay of the local relay is set by the T configurator connected to the speaker module or audio video module used).

Physical configuration in stand alone installation:

A + B + C - progressive address of the device
The configurators connected to the A B C sockets assign a progressive address to the device inside the system (range 000 – 999).
Example: A+B+C = 003 – device 003 of the system.

M - operating mode, badges management
The configurator connected to the M socket sets the badges management mode as indicated below:

M = 0 - management of badges with MANAGER MASTER ONLY
The MANAGER MASTER badges (max. 20) are used both for the management of PASSEPARTOUT badges (MAX. 100) and for the management of the RESIDENTS badges (max. 5) of each apartment.

M = 1 - badges management with APARTMENT MASTER
The MANAGER MASTER badges (max. 20) directly manage the PASSPARTOUT badges (max. 100) and the APARTMENT MASTER badges (max. 4000); the APARTMENT MASTER badges manage the RESIDENTS badges (max. 5) of the corresponding apartment.

T – local relay time delay
The configurator connected to T sets the relay closing time delay as shown in the following table:

Configurator	0 none	1	2	3	4	5	6	7
Contact closing time	4″	1″	10″	20″	40″	1′	1.5′	3′

btIcino

Mode 2

Mode 2 requires advanced configuration of the device, performed using a PC and the TisferaDesign software (which can be downloaded free of charge from the www.bticino.com).
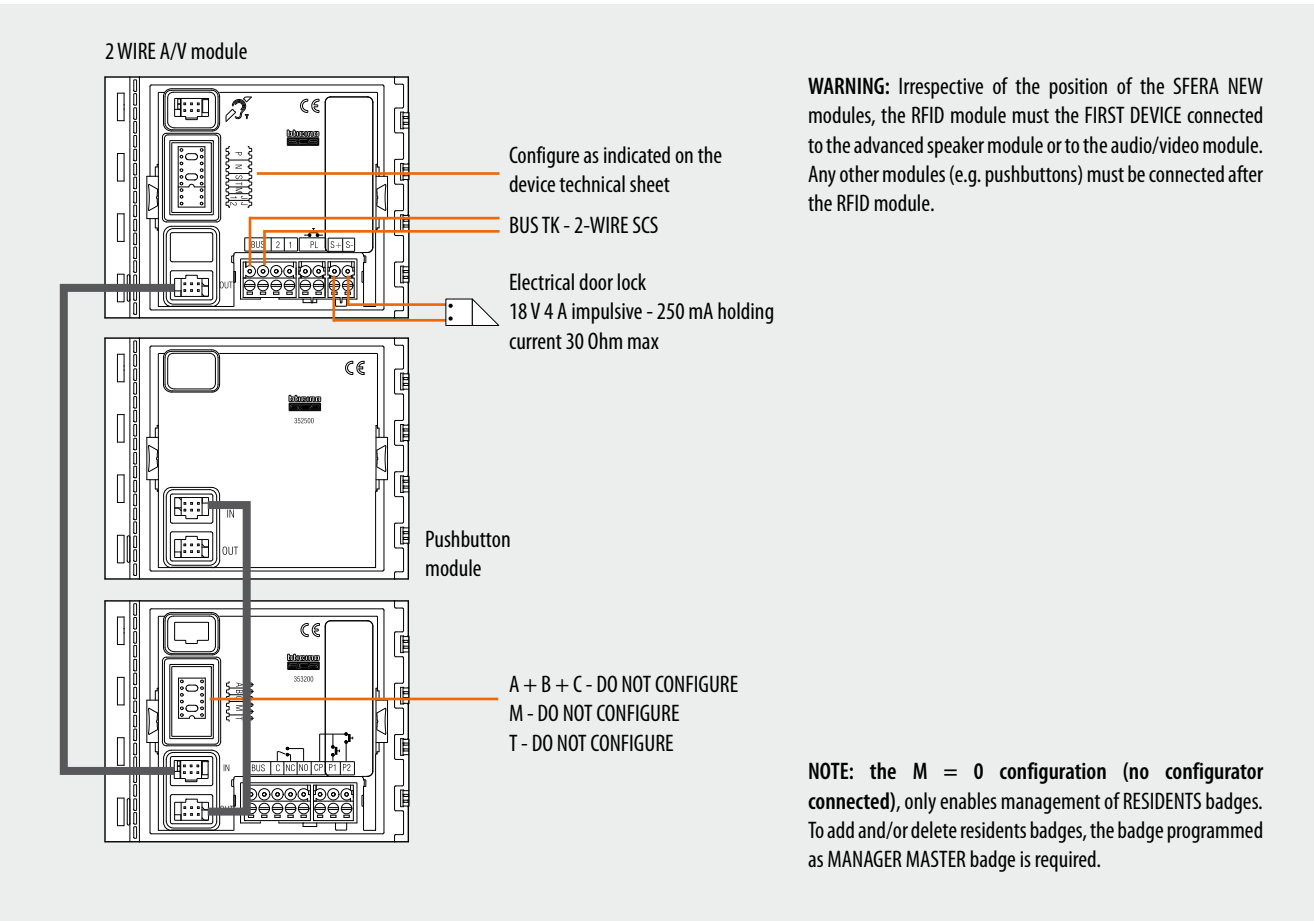
For the connection to the PC use a USB - mini USB cable. The software gives the possibility of configuring, programming, and updating the firmware of the speaker module. The presence of the mini USB connection of the front of the speaker module gives the possibility of performing these operations without the need to disassemble the device.

Wiring diagram

Wiring diagram- Installation with SFERA NEW EP

Example of installation of the RFID module inside a 2 WIRE SFERA NEW pushbutton panel with SCS BUS NOT CONNECTED to the RFID module

2 WIRE A/V module

Configure as indicated on the device technical sheet

BUS TK - 2-WIRE SCS

Electrical door lock
18 V 4 A impulsive - 250 mA holding current 30 Ohm max

Pushbutton module

A + B + C - DO NOT CONFIGURE
M - DO NOT CONFIGURE
T - DO NOT CONFIGURE

WARNING: Irrespective of the position of the SFERA NEW modules, the RFID module must the FIRST DEVICE connected to the advanced speaker module or to the audio/video module. Any other modules (e.g. pushbuttons) must be connected after the RFID module.

NOTE: the M = 0 configuration (no configurator connected), only enables management of RESIDENTS badges. To add and/or delete residents badges, the badge programmed as MANAGER MASTER badge is required.

Wiring diagram- STAND ALONE installation

Example of STAND ALONE installation connection with the SCS BUS connected to the RFID module.

Keypad module 353200
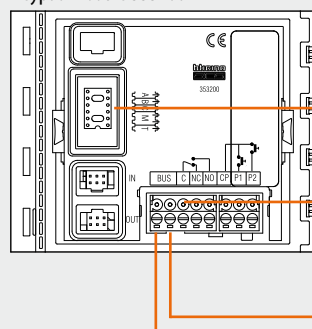
A + B + C = 003
(SCS device No. 3)
M - DO NOT CONFIGURE
T = 2   (contact closed for 10")

Contact load:
8 A   30 Vdc
8 A   30 Vac   cos@ 1
3.5 A   30 Vac   cos@ 0.4

SCS BUS

NOTE: The M = 1 configuration also gives the possibility of managing APARTMENT MASTER badges. To add and/or delete residents badges, the badge programmed as APARTMENT MASTER badge is required.

bticino

Flush mounted
2 wire indoor colour camera

391657-391658-391659
391661-391662-391663

Description

2 wire indoor colour camera for video monitoring system functions. Flush mounted or wall mounted installation using the dedicated accessories of the AXOLUTE, LIVING, LIGHT, LIGHT TECH residential series.

WARNINGS : do not point the camera towards the sun or towards light sources.

Related items

The device must be completed with the accessories and the front cover plates of the AXOLUTE, LIVING, LIGHT, LIGHT TECH residential series.
Refer to the corresponding catalogues.

Technical data

Power supply from SCS BUS:	18-27 Vdc
Sensor:	from 1/3" colour CCD
Stand by absorption:	5 mA
Max. operating absorption:	140 mA
Lens:	"semi pin-hole" 3.7 mm
Interlace:	2:1
Scanning:	Standard CCIR
Horizontal frequency:	15625 Hz
Vertical frequency:	50 Hz
Image elements:	537 (H) x 597 (V)
Horizontal resolution:	380 TV lines at the image centre
Video signal:	PAL compatible
Minimum illumination:	5 lux
Operating temperature:	5 – 40 °C
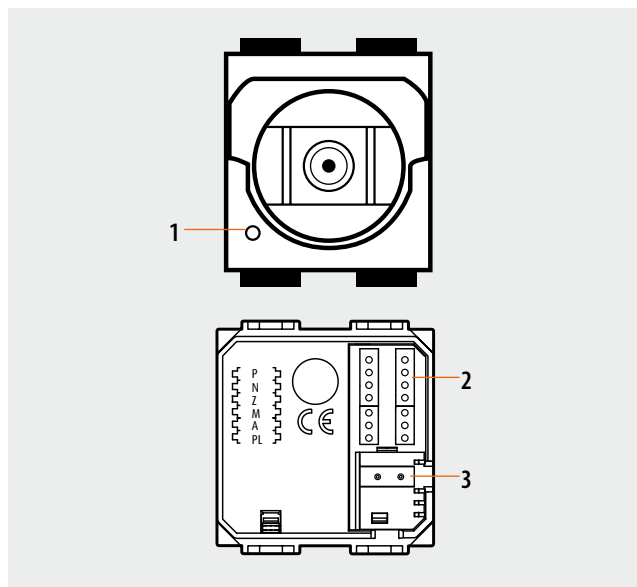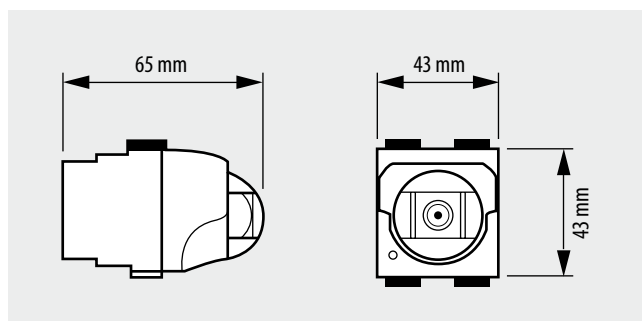
Legend

1 - Microphone
2 - Configurator socket
3 - 2 WIRE BUS connection clamp

Dimensional data

65 mm
43 mm
43 mm

Camera adjustment
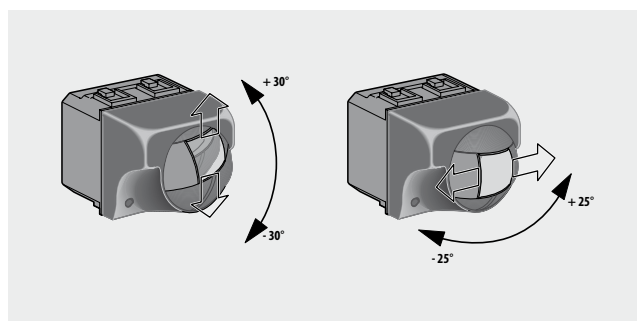
+ 30°
- 30°
+ 25°
- 25°

Configuration

The device must be physically configured in terms of:

P – Camera address
The configurator assigns to the camera the address inside the apartment.

NOTE (*) : connect an OFF configurator here to disable the microphone (function available for cameras configured from 0 to 9, for other cameras the microphone cannot be excluded).

N – Address of the handset called in case of alarm

Z – Zone of the alarm system the camera is associated to

M – Mode of operation when a camera is switched on
Each time a camera is switched on (call, selfswitching on, alarm) the MY HOME actuator and the scenario configured in A and PL are activated. When the camera is switched off, the associated actuator also switches off, while the scenario remains active.

If an actuator used by the automation system is also associated to the camera, the actuator will switch itself off when the camera is switched off, even if it was already on when the camera came on. To avoid this problem, the load should be activated using an actuator item F411/2, configuring different PL and setting the contacts with parallel connection.

M	A/PL
M = 0	Address of the SCS control device associated to the camera
M = 1 - 9	Address of the scenarios module associated to the camera

P	N	Z	M	A	PL
○	○	○	○	○	○	○
*						
○	○	○	○	○	○	○

bticino

Outdoor 2-wire colour camera

391670

Description

2-wire compact outdoor (IP65) colour camera.
It can be used for video monitoring system installations, or for turning audio systems into video systems, using a separate camera.

WARNINGS : do not point the camera towards the sun or towards light sources.

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Enclosure:	aluminium
Sensor:	1/3" CMOS colour
Stand by absorption:	5 mA
Max. operating absorption:	65 mA
Lens:	f: 6 mm; F: 2.3 mm
Image elements:	628 (H) x 586 (V)
Horizontal resolution:	330 TV lines at the image centre
Minimum illumination:	2 Lux F=2.0
Operating temperature:	(-20) – (+70) °C; RH 95% max
Protection index:	IP65

Dimensional data
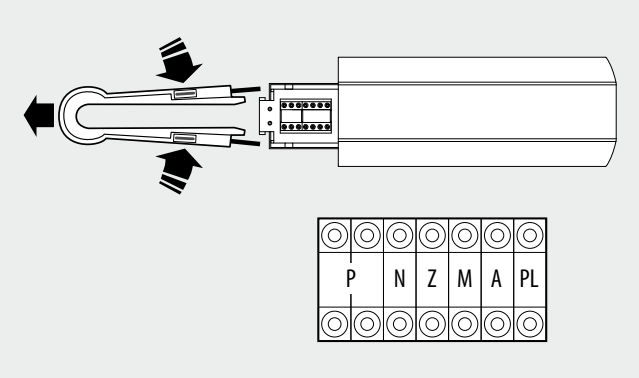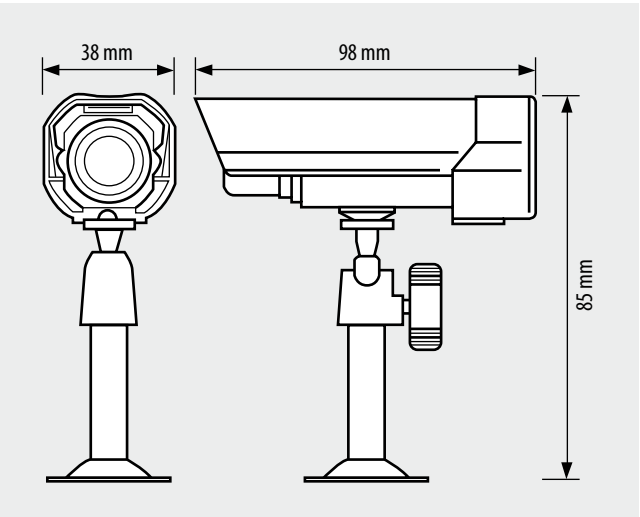
38 mm 98 mm 85 mm

Configuration

The device must be physically configured in terms of:

P – Camera address
The configurator assigns to the camera the address inside the apartment.

N – Address of the handset called in case of alarm

Z – Zone of the alarm system the camera is associated to

M – Mode of operation when a camera is switched on
Each time a camera is switched on (call, selfswitching on, alarm) the MY HOME actuator and the scenario configured in A and PL are activated. When the camera is switched off, the associated actuator also switches off, while the scenario remains active.
If an actuator used by the automation system is also associated to the camera, the actuator will switch itself off when the camera is switched off, even if it was already on when the camera came on. To avoid this problem, the load should be activated using an actuator item F411/2, configuring different PL and setting the contacts with parallel connection.

M	A/PL
M = 0	Address of the SCS control device associated to the camera
M = 1 - 9	Address of the scenarios module associated to the camera
M = SLA	Configuration of the audio entrance panel associated to the camera (see following details)

M = SLA

PI PN S L A A PL

Pi - Pn = range of audio EP associated to the camera (max.5)

PI - PN =	Audio entrance panels associated to the camera (max. 5)	
PI	=	Address of first associated EP
PN	=	Address of last associated EP
A/PL	=	Address of the SCS control associated to the camera

Audio/video node

F441

Description

The audio/video node is a mixer device enabling distribution of up to 4 sound sources or 2-wire audio/video risers.
The 4 outputs will all have the same signal coming from the input selected among the 4 available.
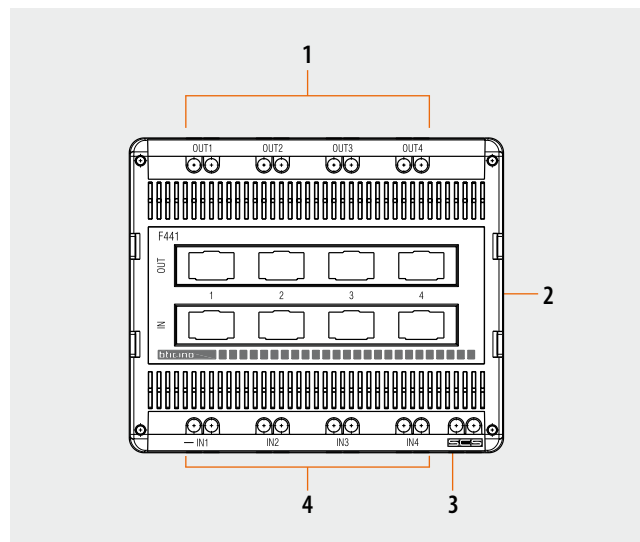
The device must not be configured.
WARNING : Connections using both screw clamps and patch cords at the same time are NOT possible.

Technical data

Power supply from SCS BUS:	18 - 27 Vdc
Absorption from BUS:	20 mA
Dissipated power:	0.5 W
Operating temperature:	5 – 40 °C
Number of inputs available:	4
Number of outputs available:	4

Dimensional data

6 DIN modules

Legend

1 - Output clamps (OUT1 - OUT2 - OUT3 - OUT4) for the connection of 2-wire video risers or amplifiers
2 - Sockets for patch cord connection
3 - Clamps for the connection of the SCS BUS
4 - Input clamps (IN1 - IN2 - IN3 - IN4) for the connection of sound sources or entrance panels / cameras

bticino

Multi-channel matrix

F441M

Description

The multi-channel matrix is a device which can distribute up to 4 stereo sound sources and a video signal from entrance panels or cameras simultaneously.

The matrix is made up of 8 inputs and 8 outputs (to wire 8 rooms).

Video entrance panels and cameras (first 4 inputs) and stereo sound sources (last 4 inputs) can be wired in input.

On each output of the matrix there is a clearly separate room.

The rooms must be set in ascending order (room 1 - OUT, room 2 - OUT 2 etc.).

The stereo signals are distributed at the same time and independently on any output. However, it is not possible for the audio signals of two separate sound sources to be mixed on the same output branch.

The stereo signal of a sound sources and the video signal of one of the 2-wire video door entry sources can travel at the same time on the same branch (entrance panel or camera).

The device must not be configured.

Technical data

Power supply from SCS BUS:	18 - 27 Vdc
Absorption da BUS:	46 - 60 mA
Dissipated power:	1.5 W
Operating temperature:	5 – 45 °C
Number of inputs available:	8
Number of outputs available:	8

Dimensional data

10 DIN modules
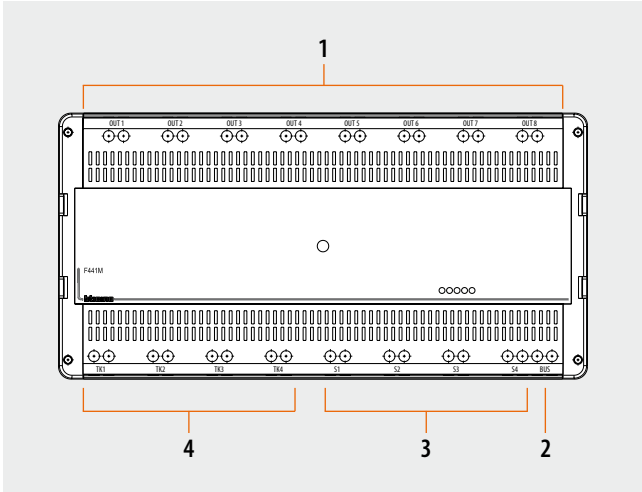
Legend

1 - Clamps for the connection of the amplifier and the video door entry system handsets.
2 - Clamps for the connection of the SCS BUS
3 - Clamps for the connection of the input sound sources (S1-S2-S3-S4)
4 - Clamps for the connection of the 2-wire cameras / entrance panels (TK1-TK2-TK3-TK4)

Technical sheets - Sound system

Insulator for sound sources

Description

The insulator for sound sources is a device which can adapt the audio signal from the external sound sources to the Sound system keeping the BUS with SELV features. The insulator for sound sources must always be used when the sound source is not battery powered. The device is made up of 4 female RCA clamps divided between "IN" and "OUT". Connect the external sound source on the "IN" clamps, and connect the stereo interface to the "OUT" clamps, (RCA input item HC/HD/HS/L/N/NT4560, AM5740, 067301 and 573926/27).

Technical data

"IN" clamps:	RCA female impedance 680 Ω
"OUT" clamps:	RCA female impedance 680 Ω
Response in frequency at mW/600 Ω:	60 Hz-20 kHz
Response in frequency at mW/600 Ω:	30 Hz-20 kHz
IN/OUT insulation:	1500 Vrms
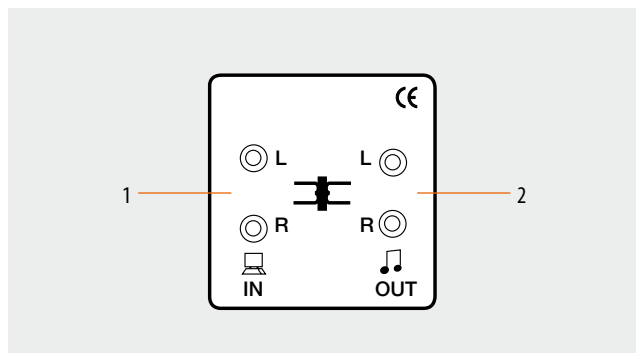
Legend

1. RCA female connectors for stereo audio input
2. RCA female connectors for stereo interfaces (inputs RCA). RCA-RCA cable supplied.

IP Touch Screen
adapter

Description

This accessory, to be used in conjunction with TOUCH SCREENS can be used to play remote audio files found on the server (e.g. on the PC connected to the local network), or audio IP Contents (e.g. radio streaming), through 2 wire stereo sound systems. By using the RJ45 connection of the TOUCH SCREEN, and connecting this to the local network linked to the PC, server etc., the TOUCH SCREEN adapter sends the audio files of the various devices towards the Sound System.

Installation mode

H/HW4890
LN4890/A
AM4890
067292
573958

3496

Ethernet (1)   BUS (2)

(3)
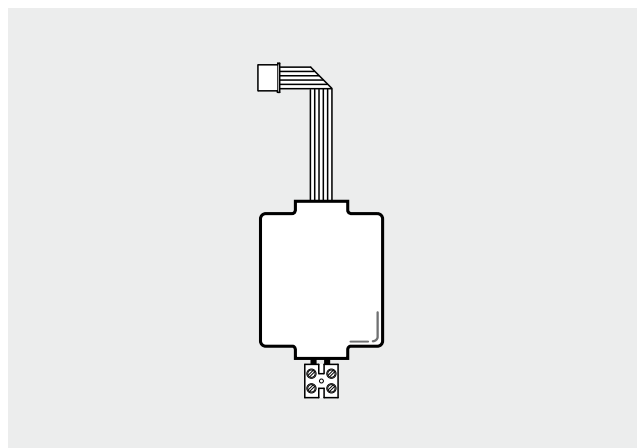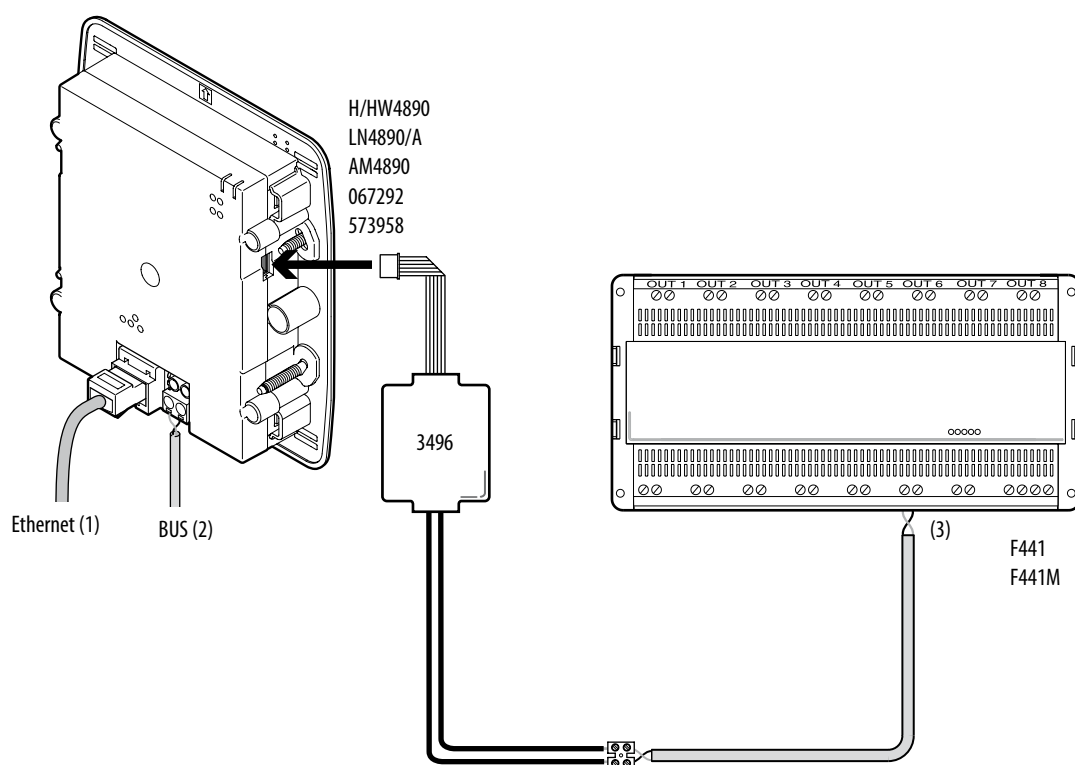
F441
F441M

NOTE: **(1)** cable connection to the local LAN network.

(2) the BUS line output must be connected to the mixers item F441 or item F441M, or to the power supply line of the BUS themselves. In case of integration with the Automation system, it may be connected to the automation BUS.

(3) when connected to the F441M matrix, the device cannot be wired to the "S1" clamp of the sound sources.

RCA input

Description

The device allows the interfacing and adaptation of the signal level of an external stereo audio source. It is connected with the audio signal by means of two RCA female connectors (red = right channel; white = left channel) on the front of the device. There is also a knob to adjust the input signal sensitivity and two LEDs to indicate the device state (ON/STANDBY) and the correct adjustment.

Connections:
- directly to the RCA input, if the sound source is battery powered
- through the sound source insulator (item 3495), if the sound source is powered by the mains network (230 Vac or 127 Vac).

Related articles
682 61 (White Cover)
685 61 (Titanium Cover)

Technical data

|	
Power supply:	18-27 Vdc from BUS
Max. absorption:	30 mA
Absorption in stand-by:	12 mA
Operating temperature:	5 °C-45 °C
RCA input impedance:	14 kΩ
Input sensitivity:	100 mVrms-1 Vrms
TYP channel balancing:	± 0.5 dB
MIN channel balancing:	± 1.5 dB
Frequency range @ -3 dB:	20 Hz-20 kHz

## Dimensional data

Size: 2 DIN modules

Configuration

S: 1-4   local address of the source
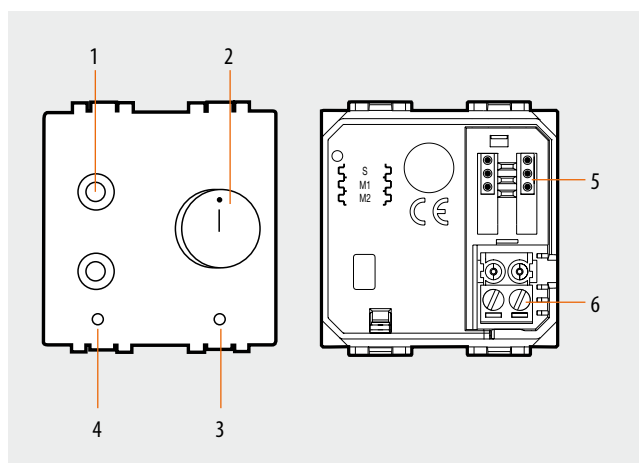
Legend

1. RCA female connectors for stereo audio input
2. sdjustment knob for the audio output to the BUS
3. LED for audio adjustment on the BUS:
   • off: no audio signal
   • green: signal with minimum level
   • flashing orange: best adjustment
   • steady orange: signal too high
4. dtate indication LED:
   • green: standby
   • orange: device ON
5. configurator socket
6. removable clamp for BUS connection

Stereo control

Description

The device manages and interfaces an external stereo audio source (e.g. Hi-Fi system) with infrared remote control and only one IR detector.

The device can save and reproduce the controls given by the stereo source remote control. The controls saved by the stereo control are sent to the external stereo control through a cord with infrared transmitter (supplied). In this way one can, by means of the various control devices (special controls and Touch Screen, etc...) and the amplifiers, manage the switching on of the saved stations and activation of a CD reader and change the CD track. On the front of the stereo control there are pushbuttons which, with the aid of an indication LED, adjust the audio signal entering the device.

Stereo control must be programmed using the configuration software supplied with the product. During normal operation of the stereo control, when the device activates the Hi-Fi, the loudspeakers directly connected to the system also come on. When the last amplifier goes off, following an OFF control, the loudspeakers also go off, but the HI-FI system remains active for one minute.

Note (*): The device might not be compatible with some remote control brands and models

Technical data

Power supply:	18-27 Vdc
Max. absorption:	40 mA
Absorption in stand-by:	12 mA
Operating temperature:	5 ℃ - 45 ℃
Signal learning capacity:	20 kHz–80 kHz
RCA input impedance:	14 kΩ
Input sensitivity:	20 mVrms-1 Vrms
TYP channel balancing:	± 0.5 dB
MIN channel balancing:	± 1.5 dB
Frequency range @ -3 dB:	20 Hz-20 kHz

Dimensional data

Size: 4 DIN modules

Configuration

S1: 1-4   local address of the source

M1: 1-4   Configuration of how many devices must be controlled inside the same device, Max 4 (example HI-FI systems with radio, cd reader etc...).

M2: 1-6   time which elapses between a control and the next during the source switching on sequence (see instruction sheet).

When using the multichannel matrix, item F441M, the configuration must be M=1 (management of one source only).
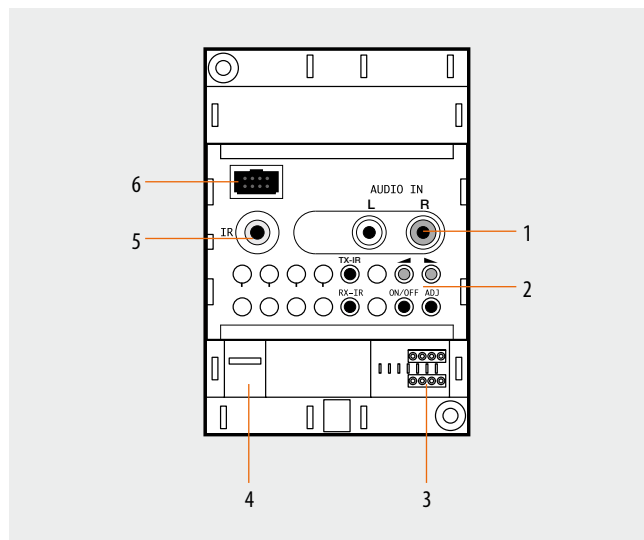
Legend

1. RCA female connectors for stereo audio input
2. Keys, LED and sensors to adjust the output audio on the BUS
3. configurator soket
4. Mini-USB input for device programming
5. Jack input for connection of cable with IR detector (supplied)
6. Clamp for connection of the stereo control to the BUS by patch cord
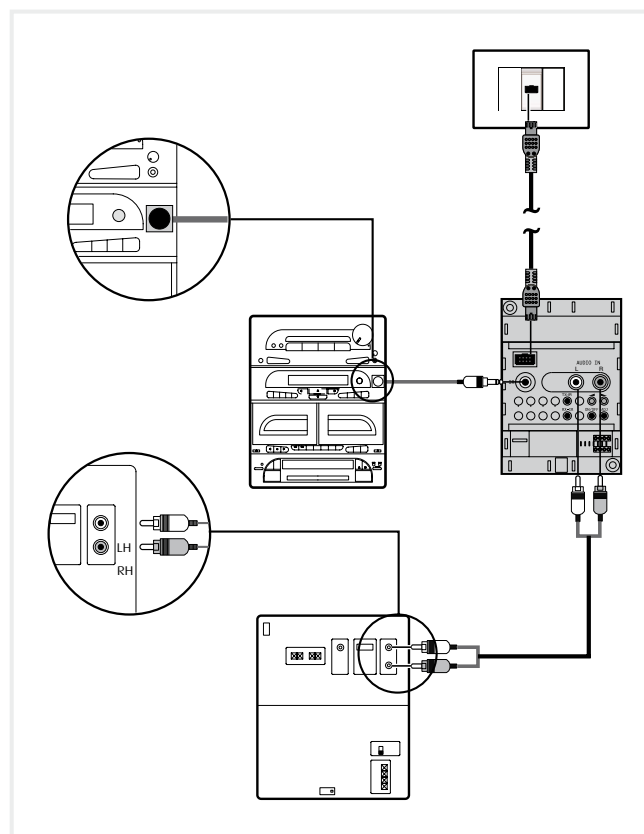
Flush mounted stereo amplifier

Description

This device amplifies the stereo signal on the BUS and controls up to two loudspeakers with impedance between 8-16 Ω. On the front the amplifier has two pushbuttons which can: switch the loudspeakers ON/OFF, adjust the volume in output, change the audio source and cycle the saved stations (for the radio) or change the CD tracks. Correctly configured the amplifier can have two modes:

- "FOLLOW ME" mode: function which allows the same music in another room after the amplifier of the room previously occupied has been switched off and switching on the amplifier on the room you are now in.
- "NO FOLLOW ME" mode: when another amplifier is switched on, on changing room, the source configured the same as the configurator (inserted on M2) inserted on the amplifier switches ON, not necessarily the source which was being listened to before.

By using the "+" input of one channel and the "-" input of the other channel, it is possible to install only one loudspeaker and create a monophonic system.

Related articles
Axolute, LivingLight button covers
1-module button covers art. L/N/NT4911... (art. L4562) or art. HC/HD/HS4911... (art. H4562)

Arteor button covers
5739 66, 5739 64 (White cover)
5739 67, 5739 65 (Magnesium cover)

Céliane button covers
682 63, 682 64 (White cover)
685 63, 685 64 (Titanium cover)
680 83 (White front finishing frame)
683 83 (Titanium front finishing frame)

Technical data

Power supply:	18-27 Vdc
Max. absorption:	250 mA with 8 Ω loudspeaker on 2 L-R outputs
	130 mA with 8 Ω loudspeaker on 1 L-R output
	130 mA with 16 Ω loudspeaker on 2 L-R outputs
	90 mA with 16 Ω loudspeaker on 1 L-R outputs
	40 mA (MUTE)*
Absorption in stand-by:	6 mA
Operating temperature:	5 ℃ - 45 ℃
Power (on 8Ω):	2 Wrms (1 Wrms+1 Wrms)
	16 Wpmpo (8 Wpmpo+8 Wpmpo)
TYP channel balancing:	± 0.5 dB
MIN channel balancing:	± 1.5 dB
Frequency range @ -3 dB:	20 Hz – 20 kHz
TYPS distortion:	0.1%
Noise signal ratio:	68 dB

*take into account this value when the Sound system is integrated with the 2-WIRE video door entry system.

Dimensional data

Size: 2 modules
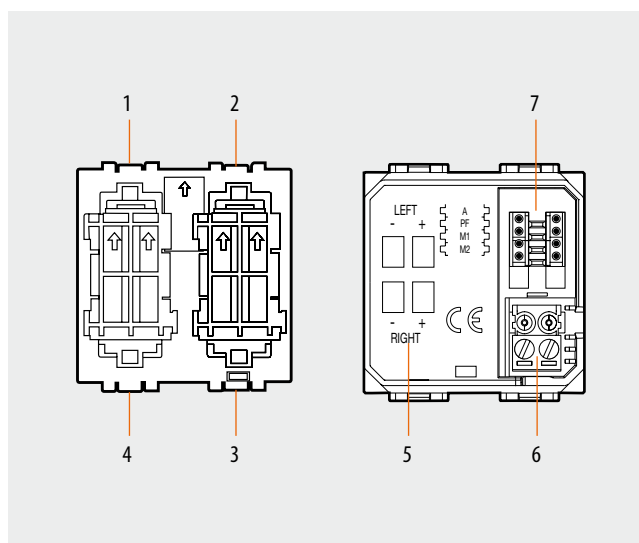
Legend

1. control to switch on the amplifier (simple touch) and increase the volume (extended pressure)
2. control to cycle and activate the available stereo sources
3. control to scan the stations saved (for the radio)
4. control to switch off the amplifier (simple touch) and decrease the volume (extended pressure)
5. screw clamps for connection of the loudspeakers
6. removable clamp for BUS connection
7. configurator socket

Configuration

A: 1-9   address of the amplifier room
PF: 0-9   amplifier address
M2: -   (no configurator) when the amplifier is switched on, the last source which was on is activated, "FOLLOW ME" mode
      1-4   when the amplifier is switched on, the source with the same configuration as that set on the device itself switches on (example amplifier with M2=2, in this case the source with S=2 will switch on), "NO FOLLOW ME" mode.

Flush mounted loudspeakers

Description

Flush mounted loudspeakers for flush mounted installation. No support required.

Related articles
flush mounted boxes:
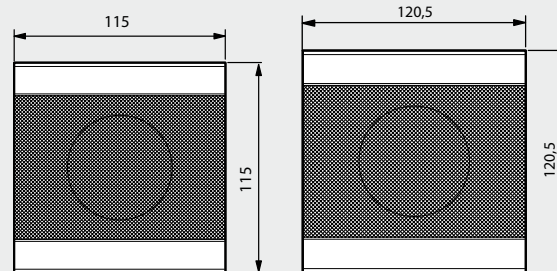art. 506E and art. PB526 (only for HC/HD/HS4565 and L/N/NT4565)
art. 89379 and 89279

Technical data

Type:	wide band
Power:	6 Wrms/12 W musical
Impedance:	16 Ω
Frequency range:	160 -16 kHz
Sensitivity:	80 dB (1 W/1 m)

Dimensions

115

115

L/N/NT4565

120,5

120,5

HC/HD/HS4565

128

128
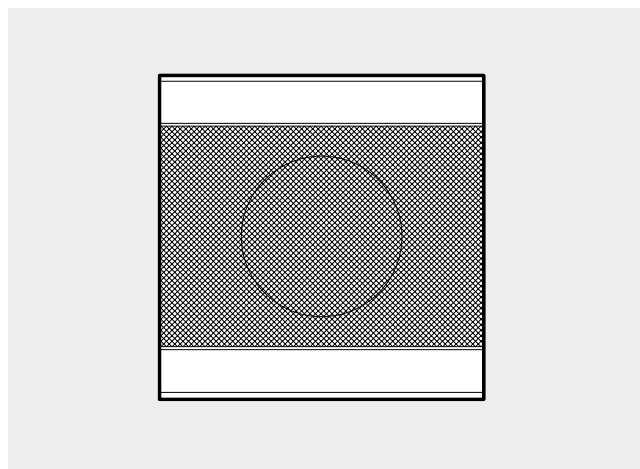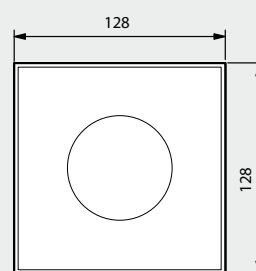
573977-067303

False ceiling mounted loudspeakers

L4566/10

Description

20 W ceiling mounted loudspeakers. Thanks to its small size (diameter 10 cm) and easy hooking (by springs) the loudspeaker can be installed with just a few operations.

Technical data

Type:	wide band
Power:	10 Wrms/20 W musical
Impedance:	8 Ω
Frequency range:	200 - 20 kHz
Sensitivity:	86 dB (1 W/1 m)
Feature:	loudspeaker to be installed on the ceiling
Weight:	400 g

Dimensional data

Mounting hole diameter:	90 mm
External diameter:	100 mm
Depth:	57 mm
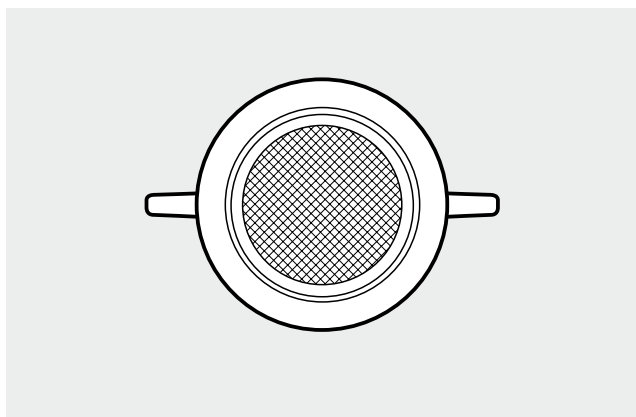
Dimensions
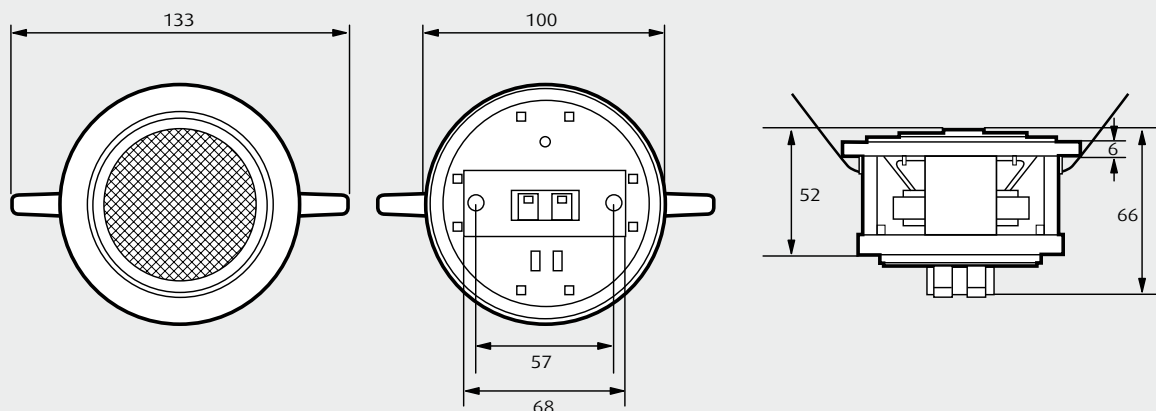
False ceiling mounted loudspeakers

Description

100 W loudspeaker for false ceiling installation, suitable for installation in large rooms.

Technical data

Type:	2 way coaxial
Power:	50 Wrms/100 W musical
Impedance:	8 Ω
Frequency range:	50 - 20 kHz
Sensitivity:	88 dB (1 W/1 m)
Feature:	loudspeaker to be installed on the ceiling
Weight:	1.7 kg

Dimensional data

Mounting hole diameter:	210 mm
External diameter:	240 mm
Depth:	140 mm

Dimensions

Ø 240 mm

157 mm

Ø 205 mm
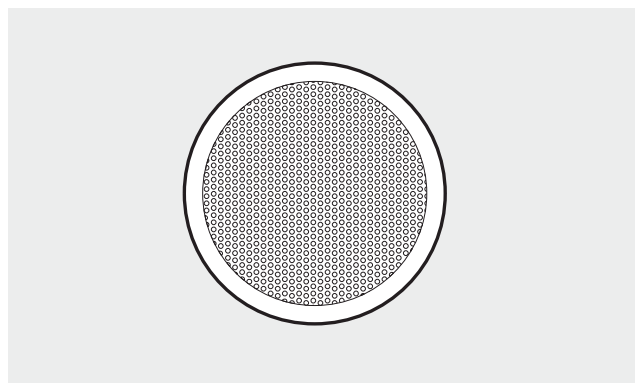
Wall mounted loudspeakers
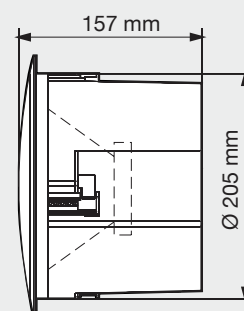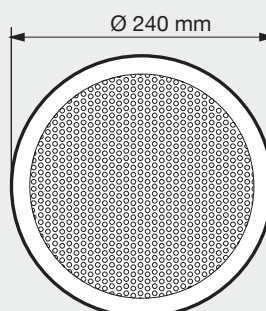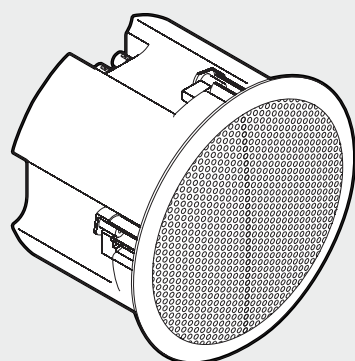
Description

Reduced thickness loudspeakers (37 mm thickness only), for direct wall installation.

Technical data

Type:	2 ways
Power:	20 Wrms/40 W musical
Impedance:	8 Ω
Frequency range:	75 - 20 kHz
Sensitivity:	88 dB (1 W/1 m)
Feature:	shallow loudspeaker to be installed on the wall
	(complete with fastening screws and 4 m of cable)
Weight:	1 kg

Dimensional data

Size: 184x271x37 mm (lxhxd)
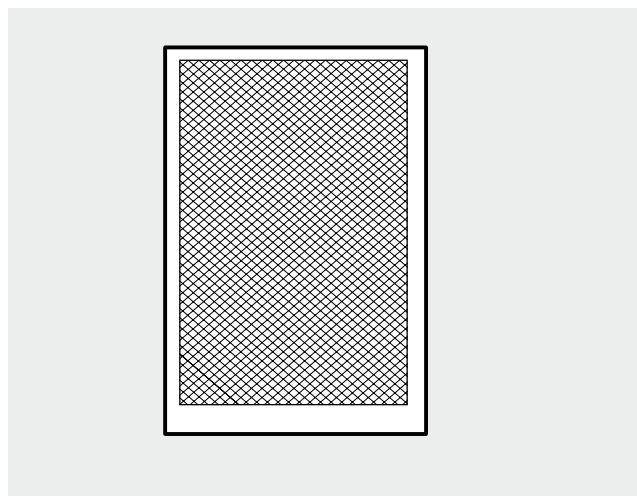
Outdoor loudspeakers

Description

2 way loudspeaker with IPx4 protection index, black colour, impedance 8 Ω, power 140 W. This particular loudspeaker may be installed outdoor using the brackets provided.

Technical data

Type:	2 separate ways
Power:	70 Wrms/140 W musical
Impedance:	8 Ω
Frequency range:	45 - 20 kHz
Sensitivity:	88 dB (1 W/1 m)
Feature:	outdoor loudspeaker
Weight:	4.4 kg
Protection index:	IPx4

Dimensional data

Size: 300x215x208 mm (lxhxd)
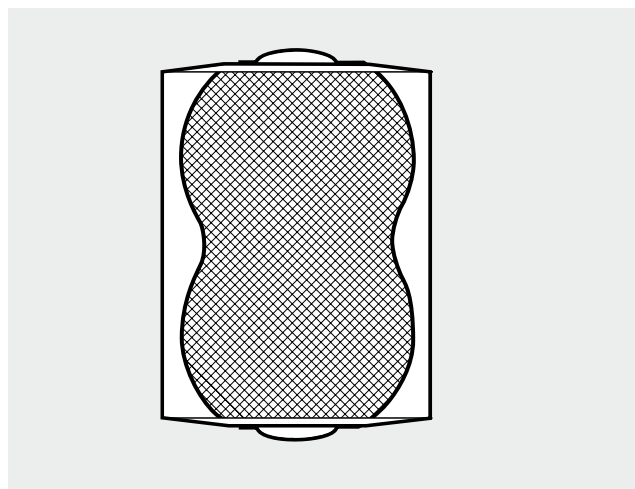
Dimensions
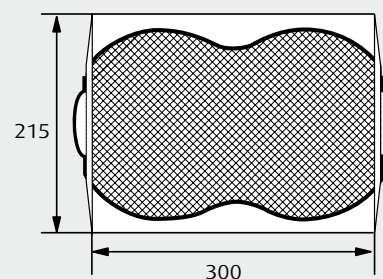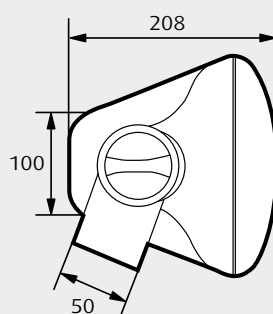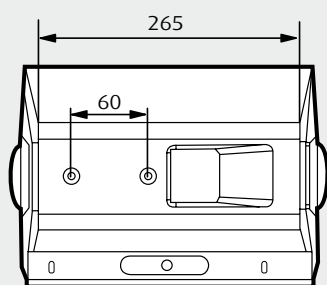
Flush mounted loudspeakers

5739 28 (White)   067304

5739 29 (Magnesium)   H4570

Description

100 W, 8 Ω impedance, flush mounted loudspeaker, for installation inside boxes with flush mounting (such as MULTIBOX art. 16104 for loudspeaker H4570).
Preset for back installation of a DIN amplifier, item F502.

Technical data

Type:	2 separate ways
Power:	50 Wrms/100 W musical
Impedance:	8 Ω
Frequency range:	50 - 20 kHz
Sensitivity:	88 dB (1 W/1 m)
Weight:	1.74 kg

Dimensional data

Size:	256x347x82 mm (lxhxd)
Depth of the flush mounted box:	80 mm
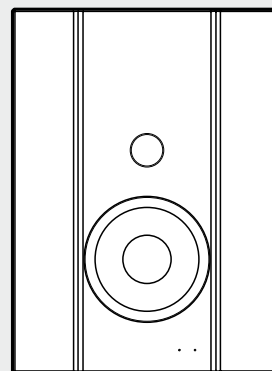
H4570

Dimensions and installation mode

256

347

230Vac

item 16104
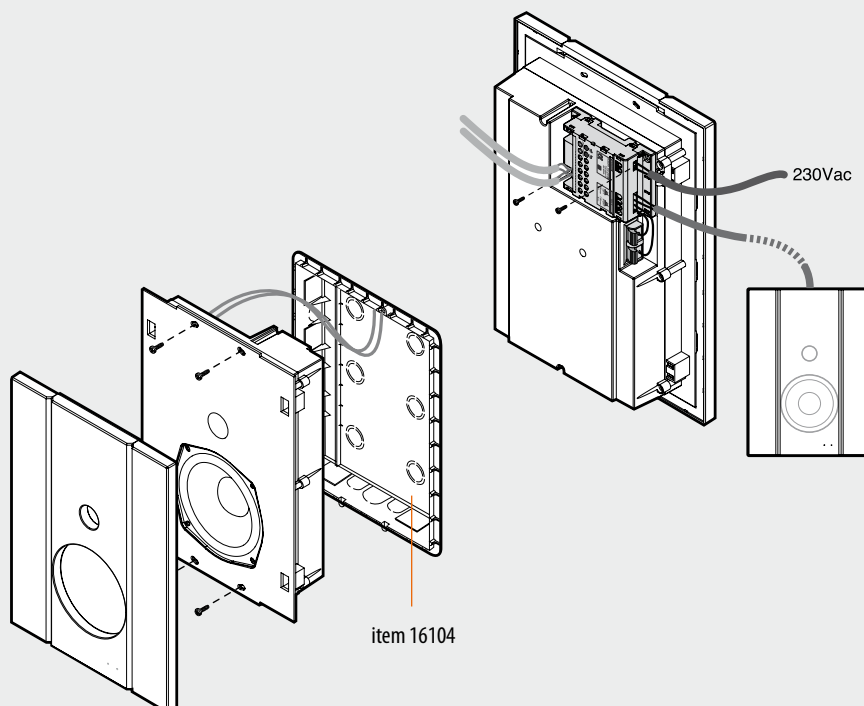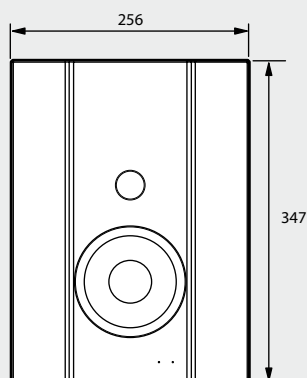
Radio tuner

Description

The radio tuners item F500N can receive FM radio stations. The front pushbuttons and the backlit display adjust the device locally, save 15 radio stations and display RDS messages and the tuned frequency.

It is also capable of performing two types of station searches: manual and automatic.

The device can be managed (switching ON and OFF, frequency change, etc.) both locally and remotely (via the SCS BUS) using the flush mounted amplifier, or the MY HOME control devices (e.g. Touch Screen and Local Display).

In order to receive the radio channels correctly the type of antenna used must be selected: if the F500N is installed in a zone of the building with sufficient signal strength, the wire antenna can be used. If the signal strength inside the building is not sufficient, the external antenna can be used (e.g. antenna installed on the roof), using the coaxial connector and the appropriate adapter cable. The type of antenna is selected using the configurator.

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Max. absorption:	20 mA @27 V – 25 mA @18 V
Absorption in stand-by:	5 mA @27 V – 9 mA @18 V
Dissipated power:	0.5 W
Operating temperature:	5 - 45 °C
FM reception band:	87.5 – 108 MHz

Antenna to be connected

Maximum level (*):	70 dBμV
Minimum level (*):	40 dBμV (mono) - 50 dBμV (stereo)

(*) The maximum and minimum levels that must be guaranteed at the antenna socket for correct FM band reception.

Dimensional data
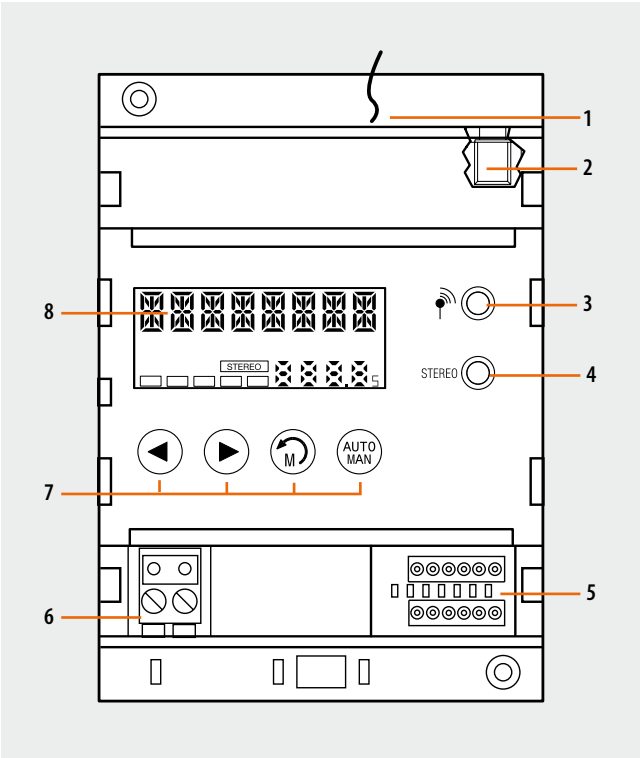
4 DIN modules

Configuration

S: 1 – 4 local address of the source

MEM: number of stations that can be stored

Configurator	No. of stations
–	5
2	10
3	15

ANT: this indicates the type of antenna used by the radio

Configurator	Type of antenna
–	Indoor (wire)
1	Outdoor (Coax)

Legend

1. Wire antenna
2. MCX connector for the outdoor antenna (e.g. roof antenna) (*)
3. Green LED on steady: good quality signal reception
4. Red LED on steady: stereo reception (mono reception when off)
5. Configurator socket
6. Removable 2 pole connector for the connection to the SCS BUS of the sound system
7. Radio tuner programming and radio program scanning keys

   ◀ Frequency decrease

   ▶ Frequency increase

   (M) Selection/storage of stations (short/extended pressure)

   (AUTO MAN) Frequency scanning mode: manual/automatic

   (M) (AUTO MAN) Press at the same time for 5 seconds to store the station in the memory

8. LED backlit display for the display of frequency, RDS messages, and stored stations

   (*) Cable with MCX-F connector supplied as standard.

Amplifier for DIN rail

Description

This amplifier, fitted with hooking device for installation on DIN rail, is particularly suited for non residential applications, or in more general terms, where there are no space constraints inside distribution boards/switchboards. Directly powered by the power line voltage, the low level of current consumption on the BUS makes multiple installations possible (max. 40 amplifiers and 80 loudspeakers). Depending on its configuration, a stereo or a mono signal can be set on the output towards the loudspeakers. Loudspeakers with both 8 Ω and 16 Ω impedance may be connected to the amplifier. The device may be controlled using either its own keys, the TOUCH SCREEN, or special controls.
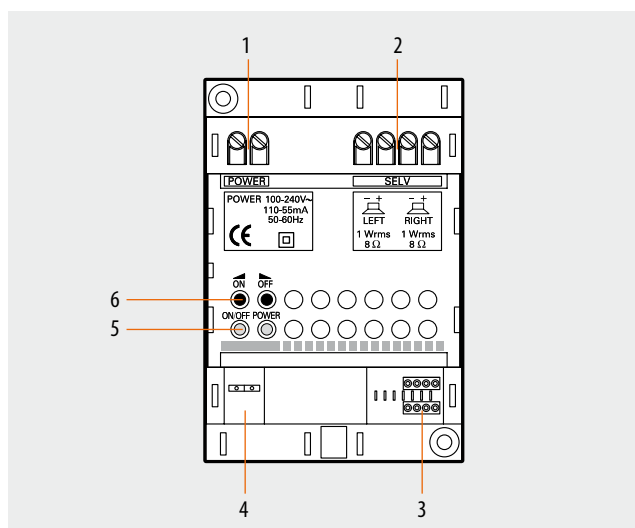
Technical data

BUS voltage:	18-27 Vdc
Power supply:	110-230 Vac (50 – 60 Hz)
Absorption on the BUS:	5 mA
Absorption on the line:	110 mA (at 110 Vac) – 56 mA (at 230 Vac)
Dissipated power:	2 W
Operating temperature:	5 - 45 °C
Power (on 8 Ω):	2 Wrms (1 Wrms+1 Wrms)
	16 Wpmpo (8 Wpmpo+8 Wpmpo)
TYP channel balancing:	± 0.5 dB
MIN channel balancing:	± 1.5 dB
Frequency range @ -3 dB:	20 Hz–20 kHz (su 8 Ω)

Dimensional data

Size: 4 DIN modules

Configuration

A: 1-9   address of the amplifier room

PF: 0-9   amplifier address

M1*:   -   (no configurator) volume level equal to 20% and "MUTE" mode: in this mode, when the video door entry system is being used the volume of the sound sources will be decreased

      1   volume level equal to 20% but "MUTE" mode not available"

      2   volume level equal to 50% and "MUTE" mode: in this mode, when the video door entry system is being used the volume of the sound sources will be decreased

      3   volume level equal to 50% but "MUTE" mode not available

      4   volume level equal to 100% and "MUTE" mode: in this, mode, when the video door entry system is being used the volume of the sound sources will be decreased

      5   volume level equal to 100% but "MUTE" mode not available

M2:   -   (no configurator) when the amplifier is switched on, the last source which was on is activated, "FOLLOW ME" mode

     1-4   when the amplifier is switched on, the source with the same configuration as that set on the device itself switches on (example amplifier with M2=2, in this case the source with S=2 will switch on), "NO FOLLOW ME" mode.

M3   -   (no configurator) working correctly

      1   both the outputs reproduce the signal received on the LEFT channel

      2   both the outputs reproduce the signal received on the RIGHT channel

      3   the amplifier reproduces a monophonic signal on both the loudspeaker outputs

*   this mode can only be activated when the Sound System is integrated with the 2-wire audio and video door entry system. This combination allows the "pager" function and the volume level is set via the configurators.

Legend

1. clamp for connection of the power supply
2. clamps for loudspeaker connection
3. configurator socket
4. removable clamp for BUS connection
5. the LED under "ON/OFF" indicates the amplifier state: if it is off there is no BUS, if it is green the device is in Stand-By, if it is orange the amplifier is on. The LED under "PO-WER" indicates: when off, no power line voltage is detected, if it is RED the amplifier is powered.
6. pushbuttons for local switching on or off of the amplifier (simple touch), and for volume adjustment (prolonged pressure).

Power amplifier
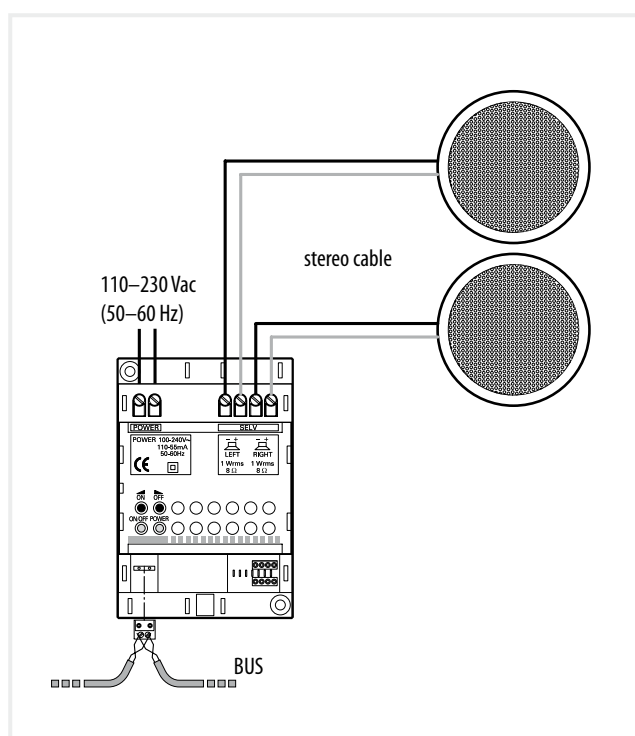
Description

The stereo amplifier, item F503, ensures accurate reproduction of the sound signal, both from the SCS/BUS and, in alternative, from the AUX input (MP3 or CD player, etc.). The wide range of adjustments of high and low tones available, the 10 preset equalisation levels, as well as the additional 10 levels that can be customised by the customer, the virtual surround, to name a few, ensure pleasurable listening in each room, following the taste of the user. Each parameter can be displayed on the OLED graphic display.
All the adjustments are performed using the keys of the amplifier, or remotely using the Touch Screen devices.

Technical data

BUS voltage:	18 – 27 Vdc
Power supply (PRI):	110 – 240 Vac @ 50 – 60 Hz
Absorption on the BUS:	12 mA
Absorption on the line:	85 mA (at 110 Vac) – 45 mA (at 230 Vac)
Dissipated power:	stand-by 3.5 Wmax - ON: 13 Wmax @ 1 kHz input tone
Operating temperature:	5 – 45 °C
Potenza (su 8 Ω):	60 Wrms (3 Wrms + 30 Wrms) 480 Wpmpo (240 Wpmpo + 240 Wpmpo)
Low tones adjustment:	±20 dB max
High tones adjustment:	±20 dB max
Frequency range @ -3 dB:	20 Hz–20 kHz (on 8 Ω)
AUX input:	1 Vrms max
AUX Output:	1 Vrms max, @Rout = 600 Ω
Equalisation adjustment:	±8 dB max

Dimensional data

10 DIN modules
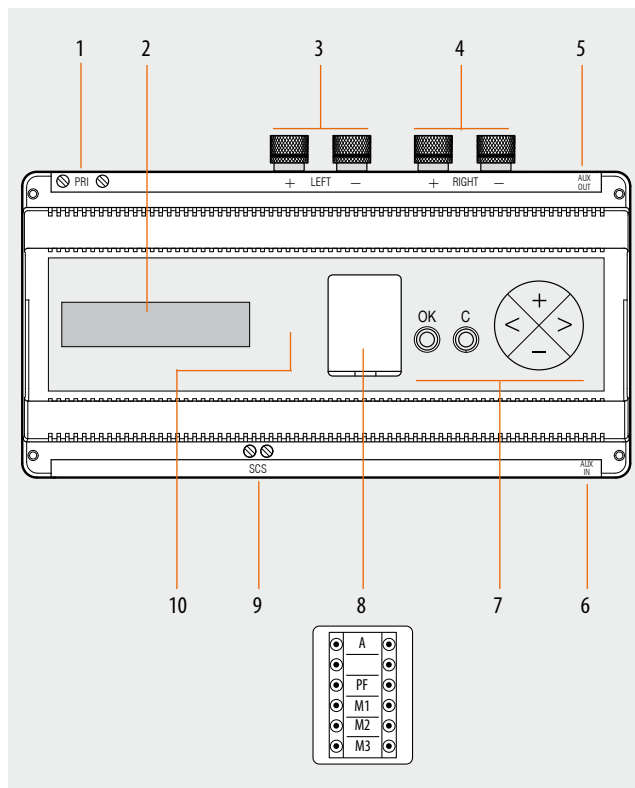
Legend

1. 110 – 230 Vac power supply clamps
2. Graphic OLED display
3. Left channel loudspeaker connectors
4. Right channel loudspeaker connectors
5. AUX audio output (for the connection use a 3.5 mm stereo jack)
6. AUX audio input (for the connection use a 3.5 mm stereo jack)
7. Selection and navigation keys
8. Configurator socket
9. SCS audio input (sound system BUS/SCS)
10. Status LEDs*

* The LEDs are under the plastic front cover plate, and can only be seen when the device is on:
- Upper LED (power supply status), blue for STAND BY/ purple for ACTIVE
- Lower LED (110 to 230 Vac power supply), blue for power supply PRESENT

Power amplifier

Description

To access the configurator sockets remove the protection cover. A description of the configurators is printed on the inside of the cover.


A: 1-9   address of the amplifier room
PF: 1-9   address of the amplifier sound source:
M1**: -   (no configurator) volume level equal to 20% and "MUTE":
    mode: this mode, when the video door entry system is being used the volume of the sound sources will be decreased
   1   volume level equal to 20% but "MUTE" mode not available"
   2   volume level equal to 50% and "MUTE" mode: in this mode, when the video door entry system is being used the volume of the sound sources will be decreased
   3   volume level equal to 50% but "MUTE" mode not available

   4   volume level equal to 100% and "MUTE" mode: in this, mode, when the video door entry system is being used the volume of the sound sources will be decreased
   5   volume level equal to 100% but "MUTE" mode not available
   SLA   amplifier slave operation mode:
M2: -   (no configurator) when the amplifier is switched on, the last source which was on is activated, "FOLLOW ME" mode
   1-4   when the amplifier is switched on, the source with the same configuration as that set on the device itself switches on (example amplifier with M2=2, in this case the source with S=2 will switch on), "NO FOLLOW ME" mode.
M3 -   (no configurator) working correctly
   1   both the outputs reproduce the signal received on the LEFT channel
   2   both the outputs reproduce the signal received on the RIGHT channel
   3   the amplifier reproduces a monophonic signal on both the loudspeaker outputs

** This mode can only be activated when the Sound System is integrated with the 2-wire audio and video door entry system. This combination allows the "pager" function and the volume level is set via the configurators.

Wiring diagrams

Wiring diagram with SCS BUS connected (the power amplifier plays back the sources from the 2-wire sound system).

110 – 230 Vac
(50 – 60 Hz)
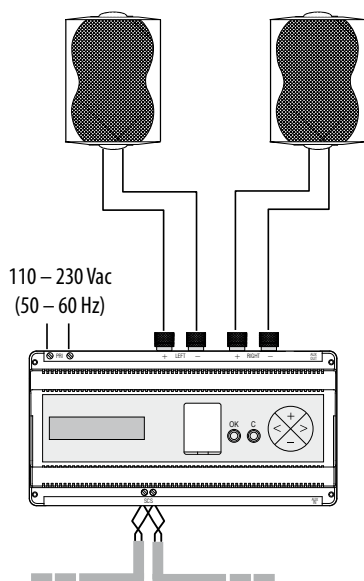
Wiring diagram with SCS BUS disconnected (the power amplifier is independent from the SCS BUS and plays back the source connected to the AUX IN input).

110 – 230 Vac
(50 – 60 Hz)

Sound source
(CD player, iPOD)
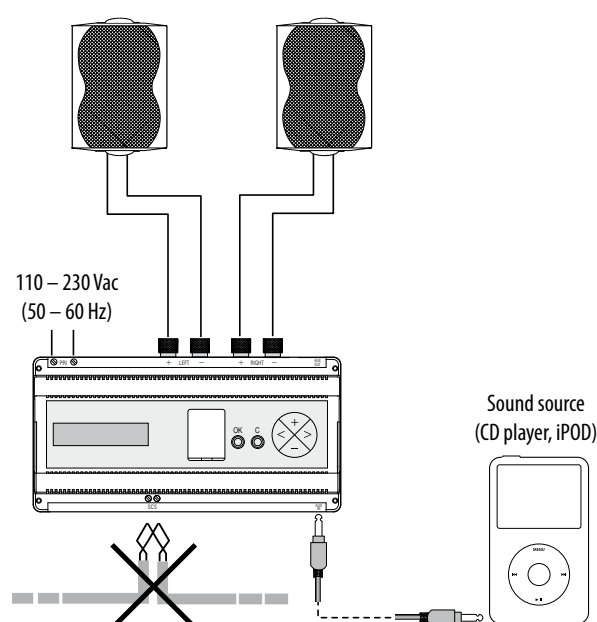
Note: The desired input, SCS or AUX IN, must be selected using the local keys (see the installation manual for the correct procedures).

Technical sheets - Residential structured cabling

Patch module

Description

Patch module fitted with Toolless connector for the capping of the cable from the user socket. Possibility of device rotation to accept wiring cables coming either from the top or the base of the electric distribution board.
Fitted with visual indicator, for the identification of the service transmitted.
Connects to other data network devices using patch cords L4665L20 and L4665L40.

Related items

FLAT L4665L20 and L4665L40 patch cords

Technical data

Category: 6
Operating temperature: 5 – 40 ℃

Dimensional data

1 DIN module

Fitting and installation

Device rotation for best positioning based on the side the wiring is coming from.
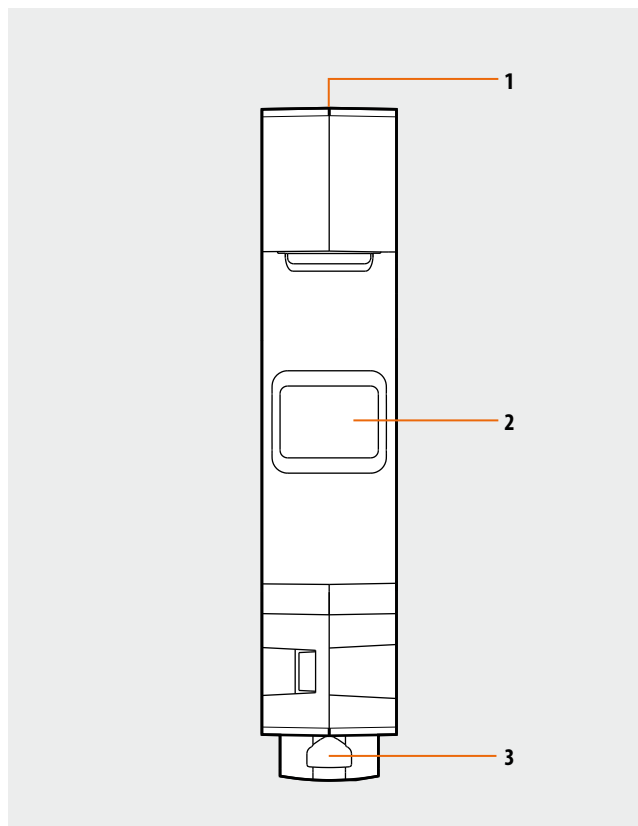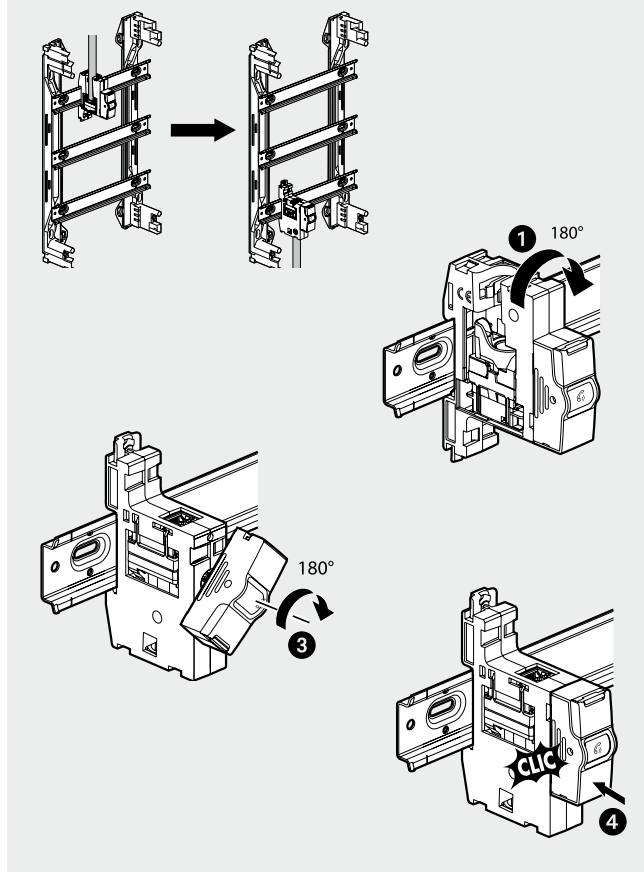
Legend

1. RJ45 input port
2. Visual indicator
3. RJ45 output port

Llegrand

bticino

Patch module

Wiring

1

OK

NO

2

OK

3

CLIC

4

NO

5
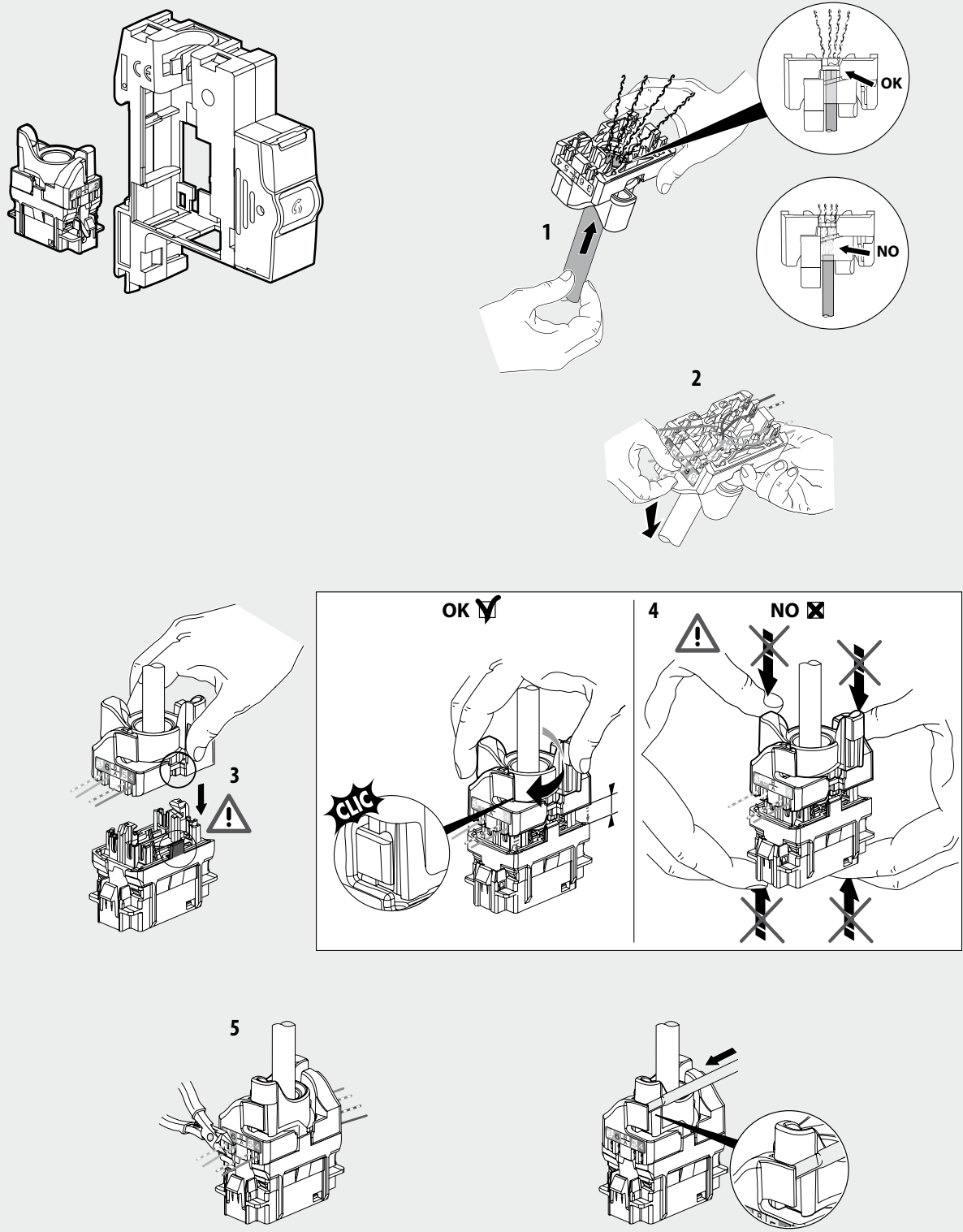
5 port switch

Description

Device use for distributing the data network to several points of the home.
It has 5 RJ45 ports (1 input and 4 outputs) and supports 10/100 Mbit/s Ethernet connections, automatically adapting to the maximum speed supported by the network terminals connected to each port. Should It be necessary to extend the home data network to more than 4 terminals, a port may be connected to a second switch.
For the connection use patch cords L4665L20 and L4665L40.

Related items

Power supply F552

Technical data

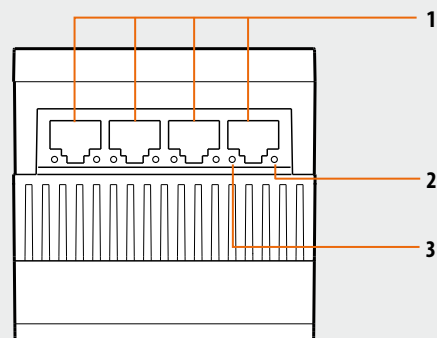|	
Power supply voltage:	9 Vdc
Absorption:	220 mA
Transmission speed:	10/100 Mbit/s
Operating temperature:	5 – 40 °C

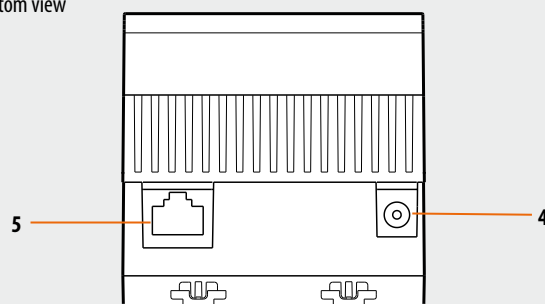### Dimensional data

4 DIN modules

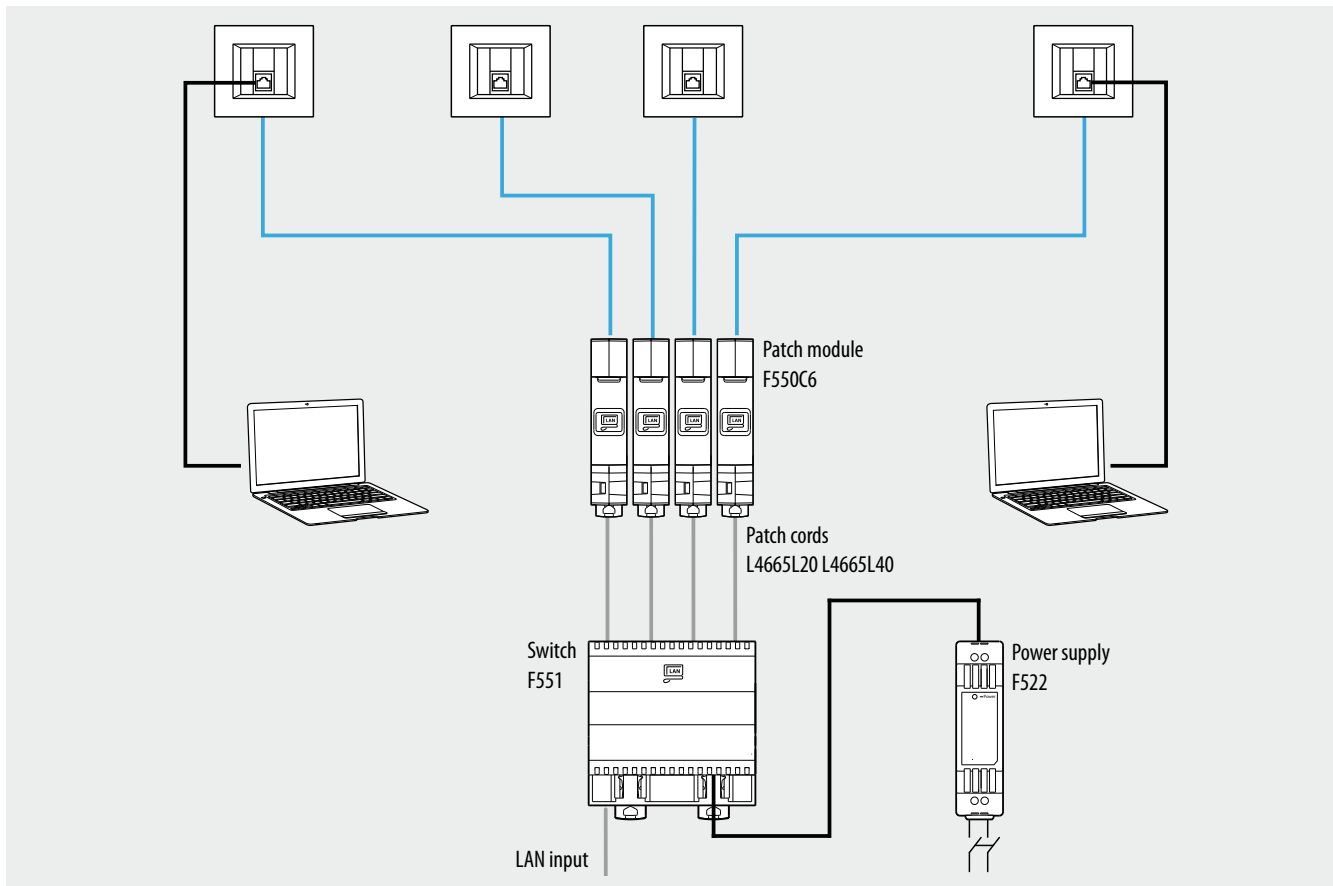Front view
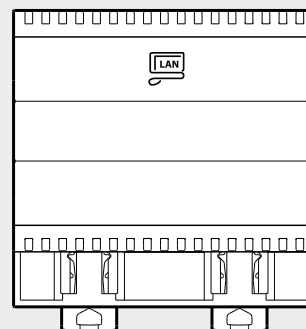
Side view

Bottom view

Legend

1. RJ45 output ports
2. Orange LED: - OFF: speed 10Mbit/s
   - ON: speed 100Mbit/s
3. Green LED: - flashing: data transmission
   - ON: device active
4. Electric power supply connector (F552)
5. RJ45 input port

5 port switch

Wiring diagram

Patch module
F550C6

Patch cords
L4665L20 L4665L40

Switch
F551

Power supply
F522

LAN input

Connection of the switches in series, to increase the number of LAN lines available on the output

LAN input
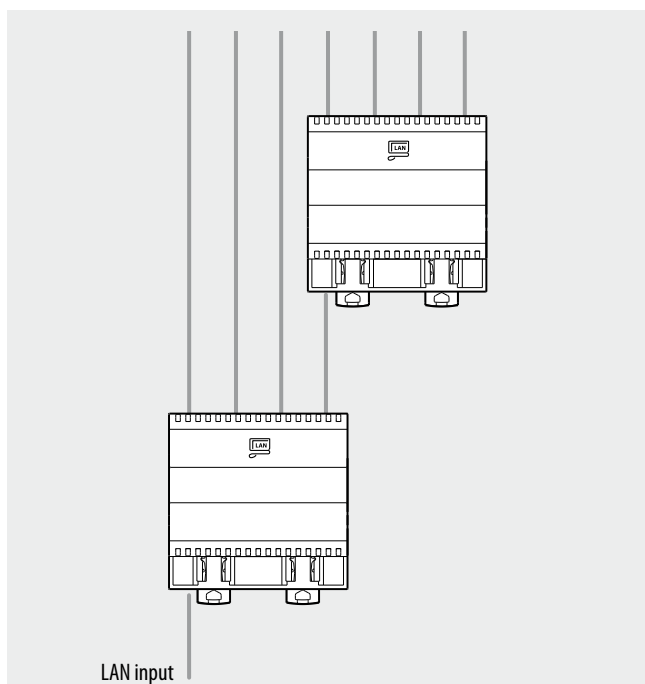
Power supply

Description

DIN modularity device for providing power supply to the Switch, item F551.

Related items

Switch F551

Technical data

|	
Power supply voltage:	115 - 230 Vac 50 - 60 Hz
Output voltage:	9 Vdc
Maximum current delivered:	1.6 A
Operating temperature:	5 – 40 ℃

Dimensional data

1.5 DIN modules

Fitting and installation

The installation must be performed in accordance with current local regulations.

In general, the following requirements must be met:
- The device must be installed inside appropriate containers;
- It must not be exposed to water drips or sprays;
- Do not obstruct the air vents;
- In order to ensure overload and direct contact protection, it must be powered using a two-pole circuit breaker with contact separation of at least 3 mm, located nearby the device.
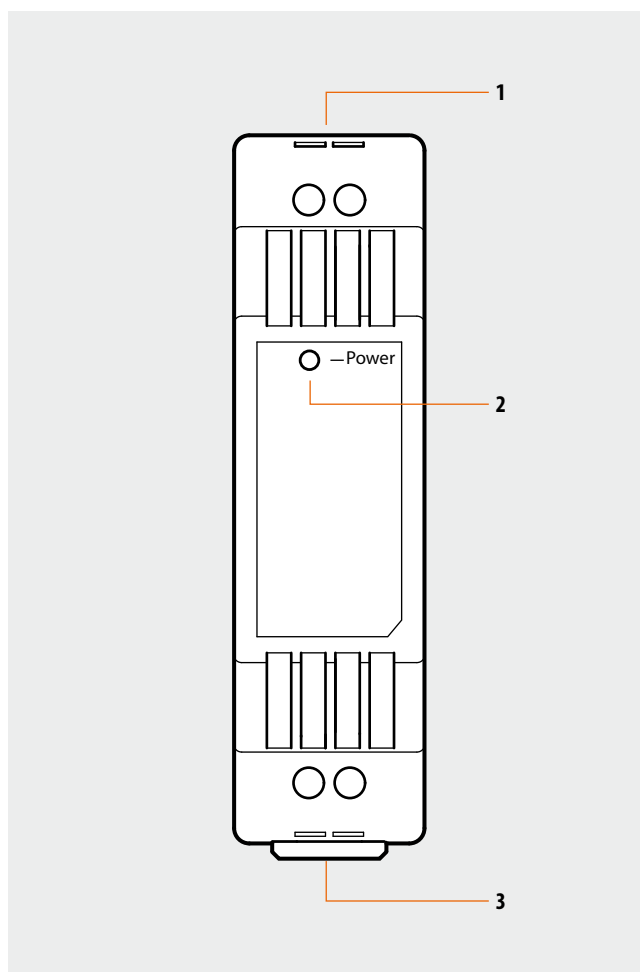
Legend

1. Clamps for the connection of the device power supply
2. 230 V network present LED
3. Power line voltage connection clamps

TV/SAT distribution frame

Description

This device, which does not require electric power supply, is used for the distribution of the television signal to 6 TV/SAT jacks.

It is fitted with an F type input connector for the signal from the TV switchboard, and of six output connectors, for the connection of the TV/SAT jacks, which must have electric features compatible with the device, and be of the "shunted" type.

The distribution frame is supplied with 3 plugs in case protection of the unused outputs is required.

Related items

Shunted TV/SAT jacks HC/HS/L/N/NT4202D, HC/HS/L/N/NT4269F, A/AM5173D, A/AM5175D, C4202D
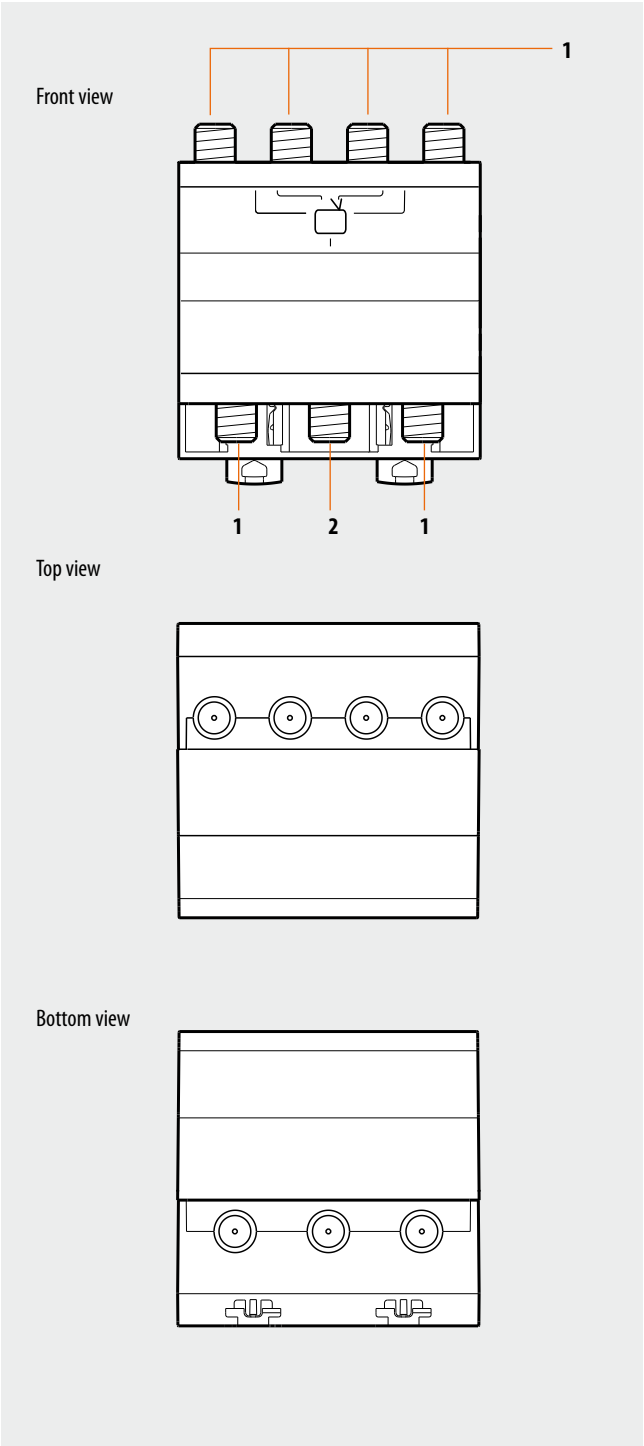
Technical data

Frequency range: 5 - 2400 MHz
Impedance: 75 Ohm

Direct loss (db):

Frequency (MHz)	Type	Max.
5 - 470	13	13.5
470 - 862	13	14
950 - 2150	16	17

Return loss- (db):

Frequency (MHz)	Type	Max.
5 - 40	11	10
40 - 1000	13	14
1000 - 2150	15	14
2150 - 2400	15	14

Operating temperature: 5 – 40 ℃

Standards, Certifications, Marks
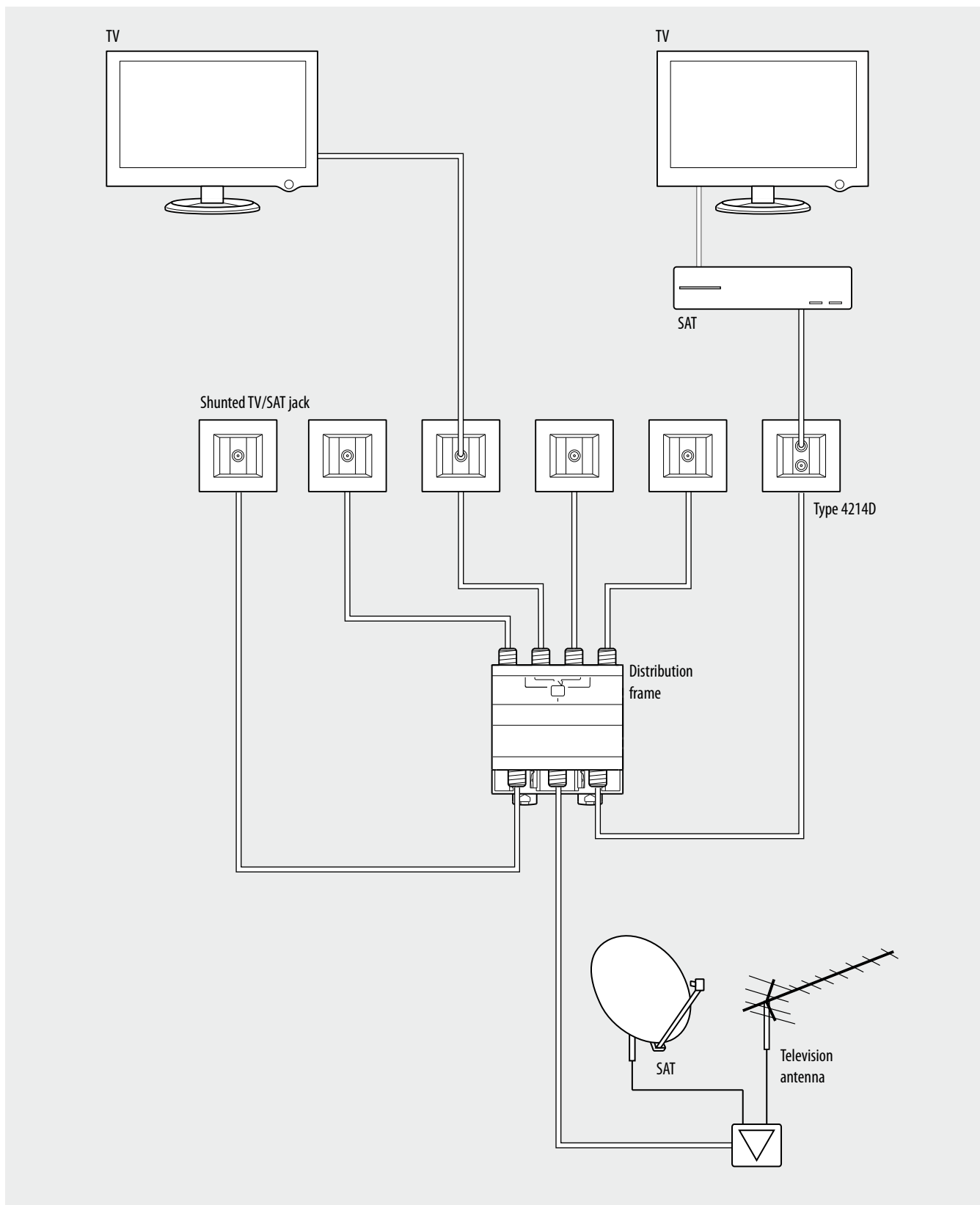
EN 50083

Dimensional data

4 DIN modules

Front view

Top view

Bottom view

Legend

1. F type output connector

2. F type input connector

L legrand   **bticino**

TV/SAT distribution frame

Wiring diagram

TV

TV

SAT

Shunted TV/SAT jack

Type 4214D

Distribution
frame

SAT

Television
antenna

Telephone distribution frame

Description

Device with two input ports and eight RJ45 output ports for the distribution of one or 2 telephone lines in the following way:
- one telephone line can be shunted on all the output ports;
- two telephone lines can be shunted on two groups of output ports.

The selection of the mode of shunting is made using the changeover switch, as shown in the following table:

IN			OUT							
			1	2	3	4				
							5	6	7	8
L1+L2		1	x	x	x	x				
		2					x	x	x	x
L1		1	x	x	x	x	x	x	x	x

In alternative to the connection using the RJ45 connector, the input line cables may also be connected using traditional screw clamps.

Should it be necessary to distribute more than eight telephone lines, a second similar device may be connected in cascade to the main distribution frame.

Related items
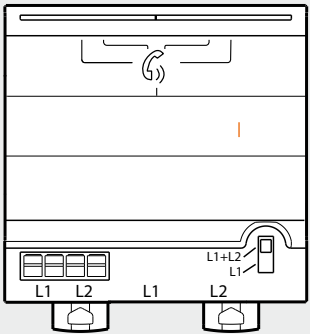
L4665L20 and L4665L40 patch cord
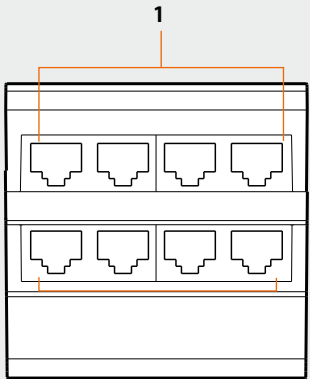
Technical data

Operating temperature: 5 – 40 °C
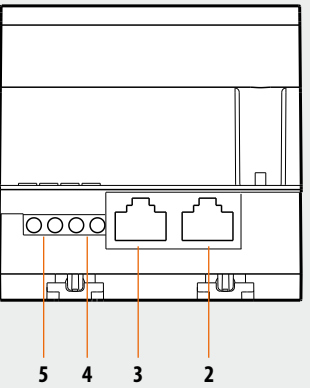
Dimensional data

4 DIN modules

Front view

Top view

1

Bottom view

5   4   3   2

Legend

1. RJ45 ports, output telephone line
2. RJ45 port, line 2 input
3. RJ45 port, line 1 input
4. Screw clamp, line 2 input
5. Screw clamp, line 1 input

Telephone distribution frame

Wiring diagram

Diagram for the shunting of one telephone line

To tel. No. 5, 6, 7 and 8

Telephone No. 4
Telephone No. 3
Telephone No. 2
Telephone No. 1

L1+L2
L1
L1   L2   L1   L2

Input telephone line
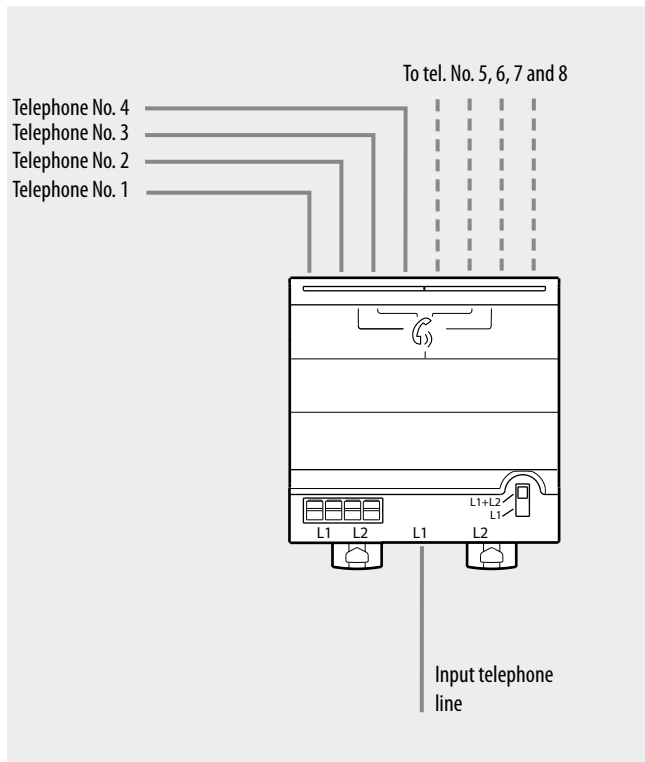
Diagram for the shunting of two telephone lines

Line 2

To tel. No. 1, 2, 3 and 4

Telephone No. 4
Telephone No. 3
Telephone No. 2
Telephone No. 1

Line 1

L1+L2
L1
L1   L2   L1   L2

Telephone line 1 input
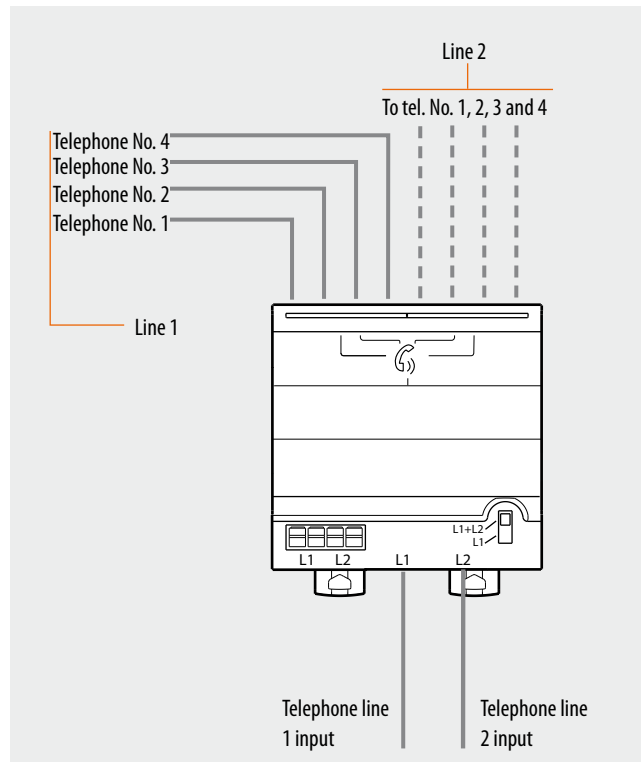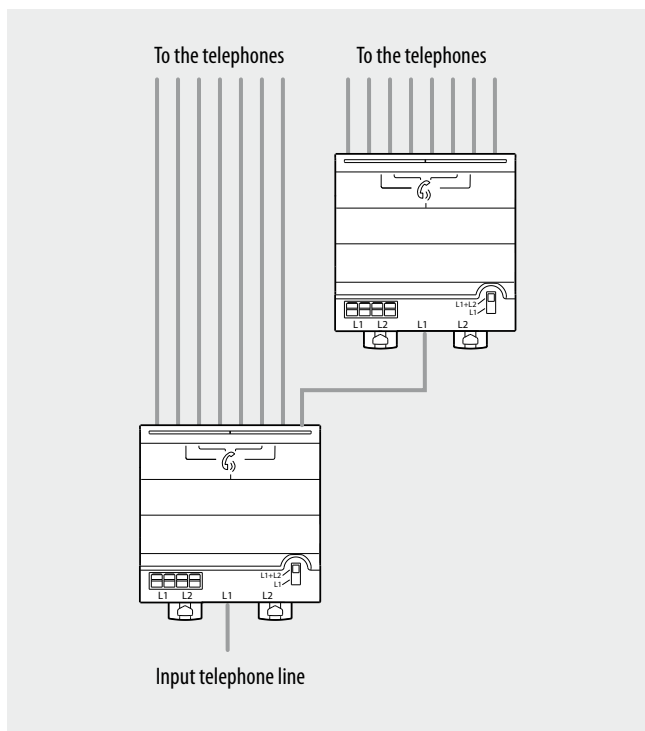
Telephone line 2 input

"In series" connection of the distribution frames to increase the number of available telephone lines

To the telephones   To the telephones

L1+L2
L1
L1   L2   L1   L2

L1+L2
L1
L1   L2   L1   L2

Input telephone line

xDSL filter with telephone distribution frame

F558

Description

This device, with one input port and four output ports, RJ45 type, performs a double action:
- it makes the ADSL signal intended for a modem available to an output port;
- it makes the telephone signal intended for the other three telephone lines available to the other three output ports.

In alternative to the RJ45 connector, the input telephone line can also be connected using a traditional screw clamp.

The filter is compatible with ADSL, ADSL2+, VDSL and VDSL2 standards.

If more than three telephone lines are required, it will be possible to use the device in conjunction with the F555 telephone distribution frame using patch cords L4665L20 and L4665L40.

Related items

Telephone distribution frame F555
L4665L20 and L4665L40 patch cord

Technical data

Audio frequency range:	0.3 - 3.4 kHz
Bandwidth splitter	from continuous current up to 16 kHz
DSL frequency range:	32 kHz - 30 MHz
Input signal rated voltage:	21 mV pp - 5.4 Vpp
Telephone call voltage:	40 - 150 Vrms
Line impedance:	250 - 750 Ohm

DSL loss (db):

Frequency	Type
32 kHz - 138 kHz	> 45
138 kHz - 30 MHz	> 55

Operating temperature:	5 – 40 ℃

Front view

Top view

Bottom view

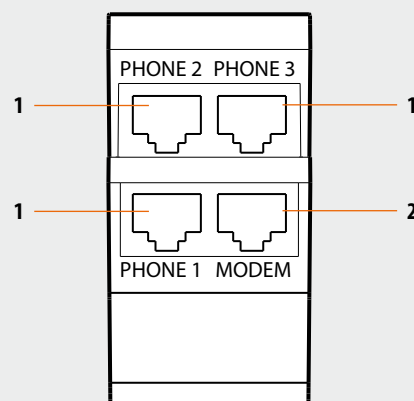## Dimensional data

2 DIN modules
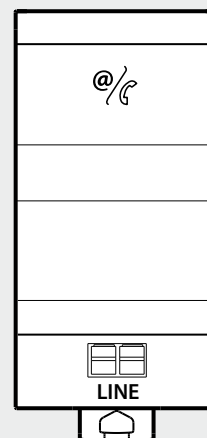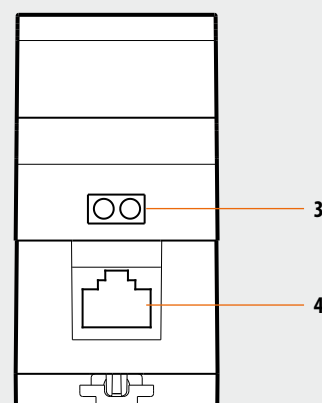
Legend

1. RJ45 port, output telephone line
2. RJ45 port, output ADSL line to the modem
3. Screw clamp for input telephone line
4. RJ45 port for input telephone line

Scenario Module

Description

Up to 16 scenarios may be saved in the scenario module, with up to 100 controls each. The scenarios can also give door entry and video door entry controls for one-family systems to switch on the staircase lights and open the door lock. If installed in large systems with gateway F422 in logical expansion, the module can save automation controls for the system where it is installed. On the front cover of the item there are two keys and two LEDs. The first pushbutton (padlock) locks or unlocks the programming procedure avoiding involuntary operations such as cancelling the scenarios and the corresponding LED indicates the status: **green** programming possible, **red** programming blocked, **amber** temporary block. The second pushbutton (DEL) cancels all the scenarios, the LED underneath indicates that the cancellation has taken place or that the device is performing the learning procedure.

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	20 mA
Operating temperature:	0 – 40℃
Size:	2 DIN modules

Front view
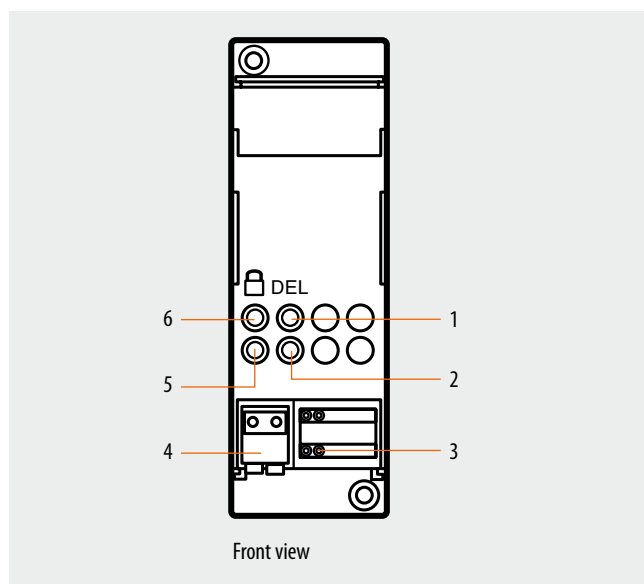
Legend

1. Scenario cancellation pushbutton
2. Scenarios/learning reset LED
3. Configurator socket
4. BUS
5. Programming status LED
6. Lock/unlock programming pushbutton

Configuration

If the device is installed in a My Home system it can be configured in two ways:
- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MYHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com.
For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MYHOME_Suite software package.

The combination of the scenario module with a control device is ensured by assigning to both items the same address. This is identified by the configurators with a numeric value for position **A = 0-9** and position **PL = 1-9**. Several scenario modules may be installed in one system, allocating a different address to each module.

Scenario programming
In order to program, change or cancel a scenario, it is necessary to enable the programming mode of the Module item F420 so that the status LED is green (press the lock/unlock key on the Scenario Module for at least 0.5 seconds); continue with the following operations:

1) Press one of the four scenario control keys the scenario should be paired with for 3 seconds. The corresponding LED starts flashing.
2) Set the scenario using the corresponding controls for the various Automation, Temperature control, Sound system, etc. functions.
3) Confirm the scenario by quickly pressing the corresponding key on the control to exit programming mode.
4) To change or create new scenarios to be linked to the other keys, repeat the procedure starting from point 1.

To recall an already set scenario, briefly pressing the corresponding button on the control is enough.

If the module does not receive any input for 30 minutes from the start of the learning procedure, programming will automatically be interrupted. If you want to delete a scenario completely, press and hold down the corresponding button for approximately 10 seconds. To erase the entire memory keep the DEL pushbutton on the Scenario module pressed for 10 seconds, the yellow "reset scenarios" LED flashes quickly. Once the operations have been performed lock the programming by pressing the lock/unlock pushbutton for at least 0.5 seconds, so that the corresponding LED becomes red.

NOTES:
Inside the system itself one Scenario module can be programmed at a time as the other devices are temporarily locked; during this phase the "programming status" LED becomes orange signalling the temporary Lock. During the learning procedure and when there are timed controls or group controls, the Scenario module does not save events for 20 seconds. You must thus wait before continuing with creating the scenario. During the scenario learning procedure only the changes of status are saved. It is important to configure the scenario module with a different A and PL address to that of an actuator. If the configuration is wrong the Programming status LED flashes ORANGE. In case of "virtual" configuration the LED flashes RED.

1.1 Addressing

Address type		Virtual configuration (MYHOME_Suite)	Physical configuration
Point-to-point	Room	0-9	A=0-9
	Lighting point	1-9	PL = 1-9

SCS/SCS
gateway

Description

The gateway is an interface that provides communication among different BUS systems. The interface has two BUS clamps, IN and OUT. On the front is a C key for virtual configuration and a LED for the notification of:
- correct power supply and configuration (ON steady)
- BUS not detected (OFF)
- configuration not detected or incorrect configuration (flashing).

The device may operate in six different modes:

- Physical expansion: can increase the total BUS length or exceed the current draw limit of 1200 mA for the individual power supply unit.
- Logical expansion: can increase the number of devices of a system, which is 175 (max 11 in rooms defined with A = 0 to 10 and 16 light points with PL = 0 to 15).
  Address A = 0, PL = 0 is not permitted.
- Burglar alarm/automation interface: it allows communication between these two systems.
- Public riser: it provides alarm event supervision for the common parts of the video door entry system.
- Galvanic separation: can interface two different functions (eg: Sound System with Automation).
- Physical separation: brings together the features of the Physical expansion mode and the Galvanic separation mode. It can be used for systems with devices preset for virtual configuration.

NOTE: Regardless of the interface mode of use, it must be taken into account that the two Buses connected constitute at all effects two systems, and, as such, they must be subjected to all existing sizing and installation rules.

Technical data

Power supply via SCS BUS:	27 Vdc
Operating power supply with SCS BUS:	18 – 27 Vdc
IN clamp current draw:	25 mA
OUT clamp current draw:	5 mA
Dissipated power with max. load:	1 W

Dimensions

Size: 2 DIN modules

Legend

1. Configurator socket
2. BUS
3. Signalling LED
4. Button for future use
5. OUT clamp

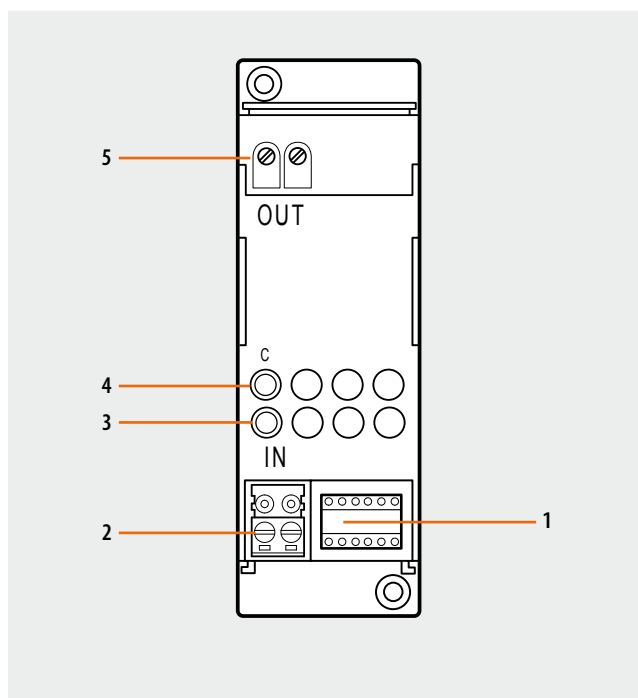## Configuration

The interface is configured only with the physical configuration.

| I1 | I2 | I3 | I4 | MOD |

Sockets I1, I2, I3, and I4 are used to uniquely identify, using numerical configurators, the addresses of the interfaces inside the system.

1) "Physical expansion" operating mode - configurator MOD = 1 -

With the interface configured in this mode, it will be possible to extend the physical limit of the maximum length of the BUS, or exceed the limit of 1200 mA delivered by the individual power supply, but not the maximum number of actuators (max. 175). The positions identified with I1 and I2 must not be configured. The "separation address" between the two buses connected to the interface must instead be defined in positions I3 and I4. Supposing as in the example that I3=3, I4=2:

- On the input BUS (IN) the addresses must go from A=0 / PL=1 and A=3 / PL=1;

- On the output BUS (OUT) the addresses must be between A=3 / PL=3 and A=9 /PL=9 or the address of the next interface. As it can be seen from the example, all the automation BUS 1 addresses are lower than that of the interface, while all the automation BUS 2 addresses are higher; the interface address therefore separates all the addresses of which the complete system might be made up of into two or more blocks.

Installation example

A/PL = 33 → 53 **2**

Automation

A/PL = 78 → 175 (*) **4**

Automation

OUT

OUT

I1	=	–
I2	=	–
I3	=	3
I4	=	2
MOD	=	1

IN

OUT

OUT

I1	=	–
I2	=	–
I3	=	5
I4	=	4
MOD	=	1

IN

OUT

OUT

I1	=	–
I2	=	–
I3	=	7
I4	=	7
MOD	=	1

IN

A/PL = 01 → 31 **1**

Automation

A/PL = 55 → 76 **3**

Automation
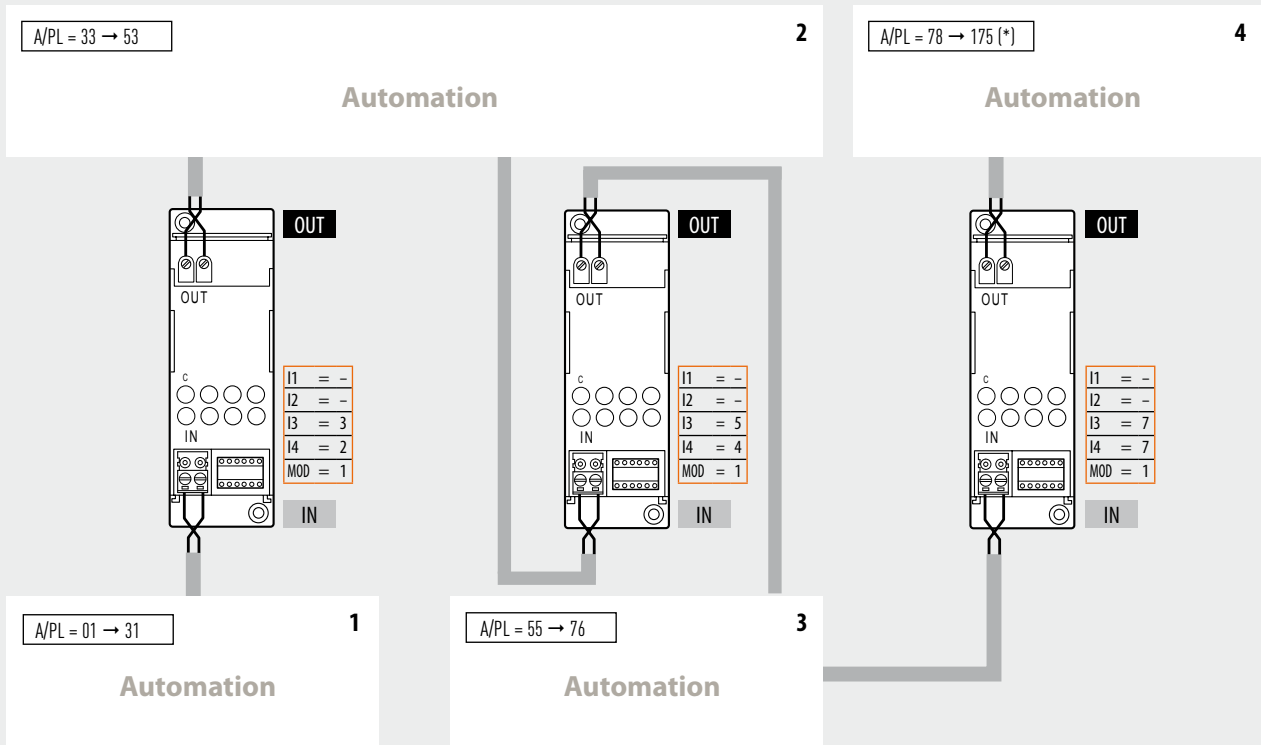
Note (*): maximum number of addresses available with virtual configuration of the devices.
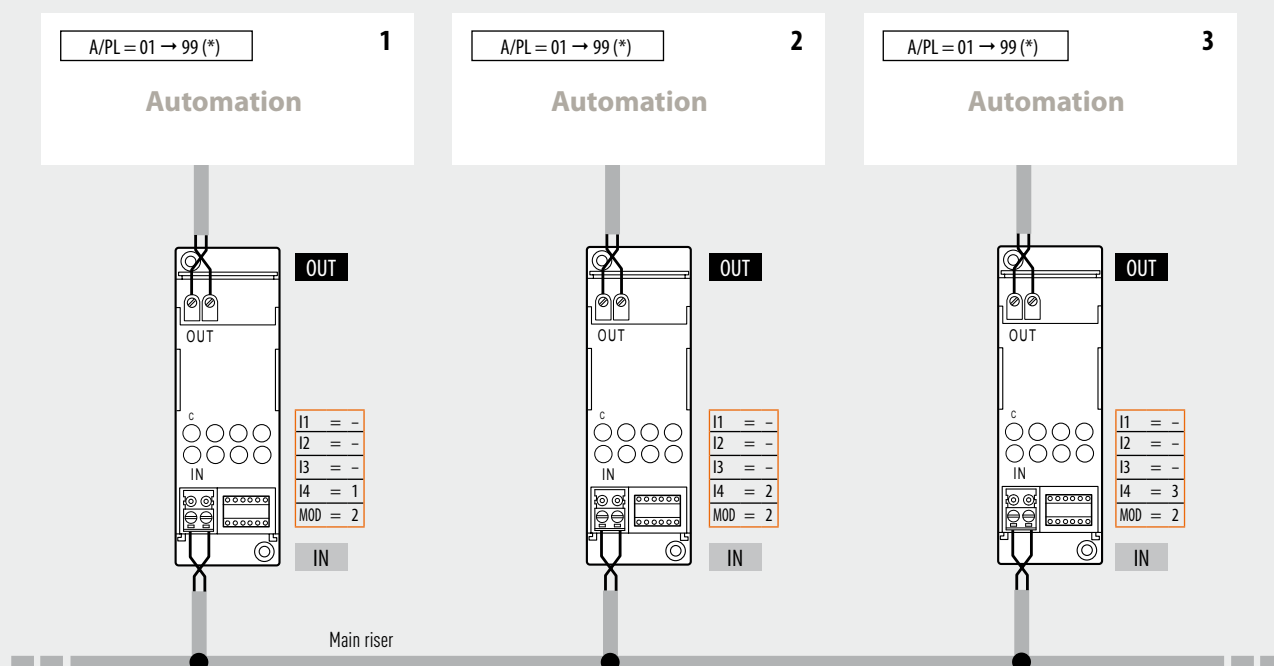
Installation rules:

- Configure both I3 and I4 with configurators from 1 to 9, to set the separation between the two Buses.

- I1 and I2 must not be configured.

- If several interfaces are installed in series, the addresses of the devices between one interface and the other must be within those of the two interfaces (see system example).

- In this mode, it is not possible to install two interfaces in parallel on the same BUS.

- It is possible to install up to four interfaces in series, which subdivide the system in 5 separate sections, individually powered.

- The scenario module, the memory module, the IR emitter for the control of air conditioning units, and the devices that can be configured in self-learning mode, must be installed on the BUS section corresponding to the own local address (e.g. if the scenario module is configured as A=0/PL=1, it will have to be placed on system no. 1 - see system example).

- The web server and the scenario programmer must be installed on the BUS line with the lowest addresses (system **1** on the drawing).

- All control devices configured for sending Point-Point, Room, Group, and General controls may be connected to any branch of the system (no.1 or no. 2), without limitation, irrespective of their respective addresses in the A and PL positions.

- The above also applies to actuators configured in "slave" operating mode.

- Interface F422 allows Point-Point, Group, Room, and General controls to travel through the various systems. It is therefore possible to install, for example, in system no. 2 a control configured as A=1 and PL=5 that will control actuator A=1 and PL=5 installed in system no. 1.

- Within the system, no device must be configured with the same address as the interface.

2) "Logic expansion" operating mode - configurator MOD = 2

This mode enables separation of control systems, with each of them therefore capable of using all the addresses available. It is therefore possible to connect several systems to an automation BUS, with each system having all the 175 addresses available. The BUS to which all others are connected therefore operates as main riser. This BUS must necessarily belong to an automation system. It is recommended that this mode is used for systems installed in large villas or in the service/industrial sector.

A typical example may be a large villa on several floors: A system may be installed for each floor, all connected to each other through another system operating as a riser. The positions identified with I1, I2 and I3 must not be configured, while in the I4 position, the address of the interface (I4 from 1 to 9) connected to the riser must be configured.

Installation example

Note (*): maximum number of addresses available with physical configuration. Maximum 175 addresses may be managed with virtual configuration.
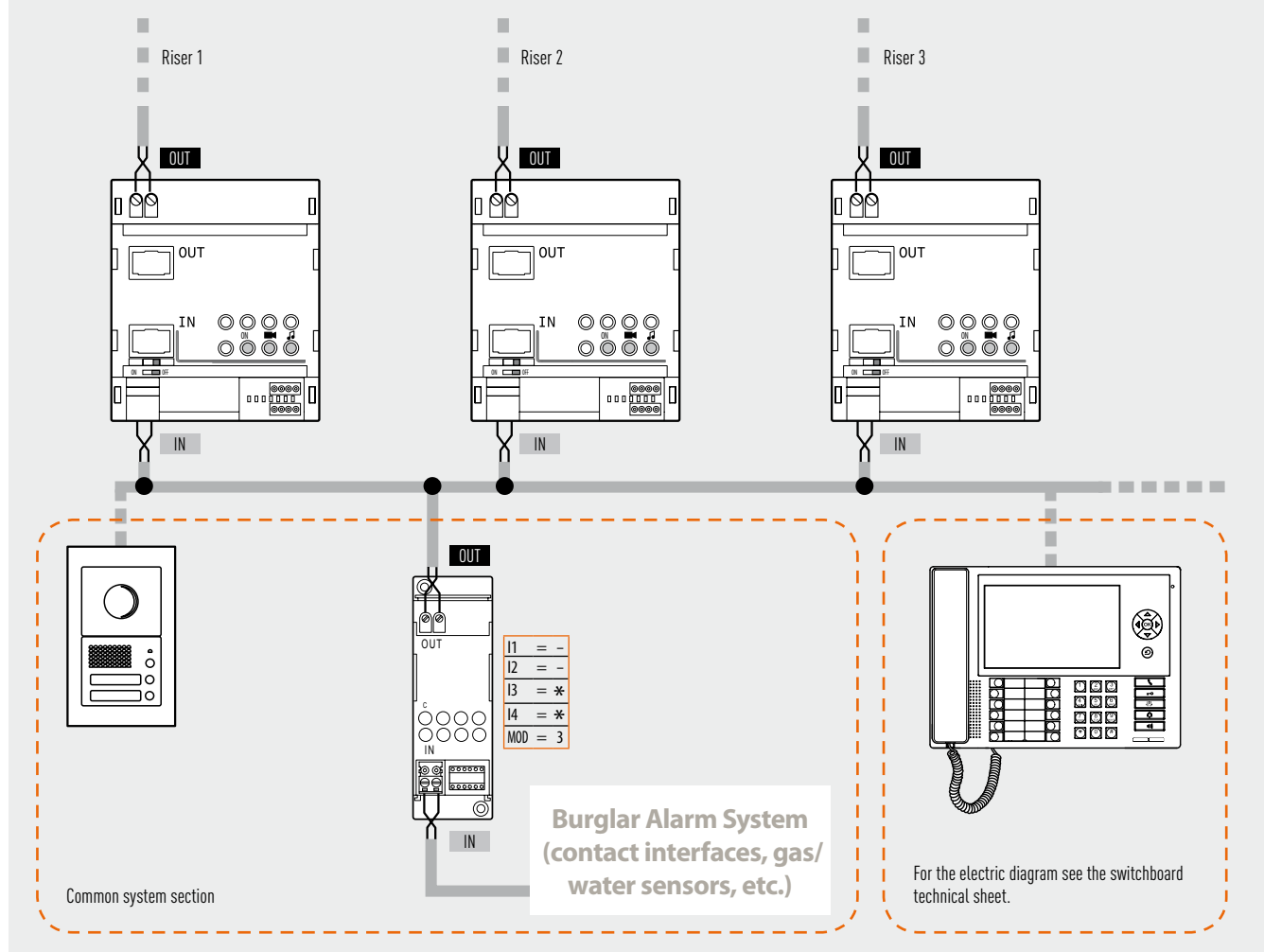
Installation rules:

- Configure I4 with configurators from 1 to 9 to number the Buses connected to the riser.

- I1, I2 and I3 must not be configured.

- The BUS of the individual system connected to the main riser must be connected to the OUT clamp of the interface.

- The main riser must consist of an Automation system in which, in addition to the corresponding control devices and actuators, it will also be possible to install the Energy management central unit, temperature central unit, and the MH200N scenario programmer.

- In this mode up to nine interfaces may be connected to the main riser; it is possible to manage up to ten systems as if they were a single one. Each system connected to the riser can have all 81 addresses allowed.

- The web server and the scenario programmer must be installed on the BUS line with the lowest addresses (system **1** on the drawing).

- From the main riser (IN clamp), arrive the general controls (rolling shutters and lights), group controls (this allows a minimum centralisation of the controls, using standard devices of the control system), and power management controls (to allow positioning of the power management central unit on the riser). On the other hand, point-point controls are stopped by the interface, and therefore remain inside the individual system, including the riser. The controls of all systems other than automation, including AUXILIARY controls, travel in the two directions without any processing. In order to send controls from one system to the other, the special controls H4651M2, L4651M2, AM5831M2 and 067553 may be used in extended control mode.

- The interface address cannot be the same as that of other devices (e.g. configure the interface I1= -, I2= -, I3= -, I4=1 and MOD = 2, if a scenario module is configured with A = - and PL = 1).

3) "Public riser" operating mode - configurator MOD = 3

This mode is indicated when display of burglar alarms and technical alarms are required, generated within the common sections, using a switchboard, item 346310, installed on the backbone or the riser of the video door entry system.

Simple diagram for the display of alarms on common parts

I1	=	–	
I2	=	–	
I3	=	✳	
I4	=	✳	
MOD	=	3	

Riser 1 Riser 2 Riser 3

Burglar Alarm System (contact interfaces, gas/ water sensors, etc.)

Common system section

For the electric diagram see the switchboard technical sheet.
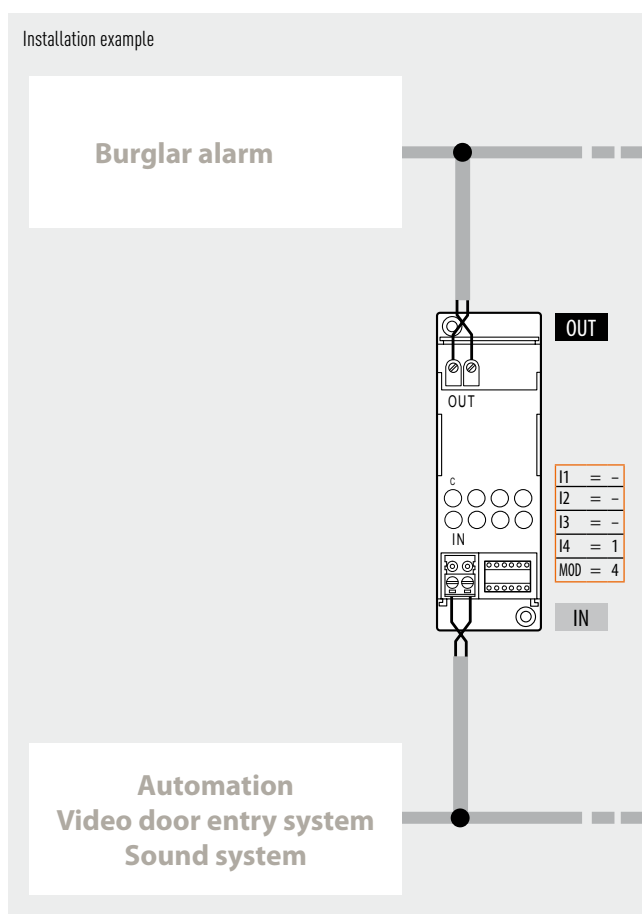
Installation rules:
• On the common sections it is possible to connect contact interfaces, or technical alarms (gas/water leak), up to a total of 9 auxiliary channels; these must be connected to the IN clamp of interface item F422.

(✳) Use a free address of the video handset.

This mode can be used to interface the Automation system to the burglar alarm system, to facilitate interaction and exchange of information between the two BUS. Thanks to this function, it is possible to remotely control the automation system using the telephone communicator. The positions identified with I1, I2 and I3 must not be configured, while in the I4 position, the address of the interface (I4 from 1 to 9) must be configured.

This configuration enables keeping the power supplies of the two buses separate, allowing interfacing of different My Home functions (e.g. sound system and automation). In some cases, the use of this interface is necessary (for example when the sound system is installed). In other cases installation alternatives are possible; for example, it will be possible (but not compulsory) to install Temperature Control on a separate BUS, and interface it with Automation using an interface in Galvanic Separation mode.
The positions identified with I1, I2 and I3 must not be configured, while in the I4 position, the address of the interface (I4 from 1 to 9) must be configured.
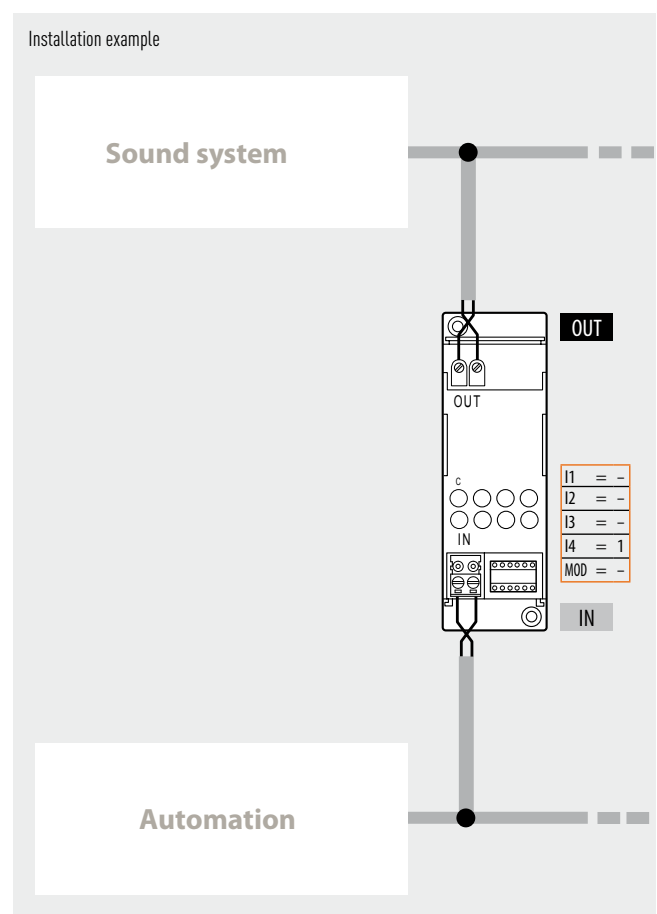
Installation example

Installation example

Installation rules:
- Configure I4 with configurators from 1 to 9.
- I1, I2 and I3 must not be configured.
- The BUS of the Burglar Alarm system must be connected to the OUT clamp of the interface.
- It is not possible to connect other interfaces to the Burglar Alarm system, to physically extend the BUS, or to increase the maximum number of devices.
- Only one interface may be connected to the Burglar Alarm system. It is therefore not possible to connect together two Automation systems through the Burglar Alarm system.
- Installation of the Automation system actuators within the Burglar Alarm system is not allowed.
- The interface does not use any addresses of the Automation system.

Installation rules:
- Configure I4 with configurators from 1 to 9.
- I1, I2 and I3 must not be configured.
- The Automation BUS must be connected to the IN clamp. The other systems must be connected to the OUT clamp (e.g. Sound System).
- It is not possible to connect several Automation systems to the same Sound System.
- Thanks to this mode, using the Web Server A/V it is possible to control a one-family system (a video door entry system and an Automation system, at the most subdivided into lines, following the physical and/or logic expansion mode procedure).
- The interface does not use any addresses of the Automation system.

6) "Physical separation" mode - configurator MOD=6

This mode brings together the features of the "physical expansion" mode and the "galvanic separation" mode.

Each system may be connected to both the OUT and the IN clamps of the interface and, differently from what is required for "physical expansion" MOD=1, the addresses of the devices of the two systems may be selected freely.

In view of the above, it will no longer be necessary to indicate the system separation address in positions I3 and I4; therefore, the interface will have to be configured by assigning any address from 01 to 99, including any address already used by actuator devices installed in the connected systems. If several interfaces are used, these must have different addresses.
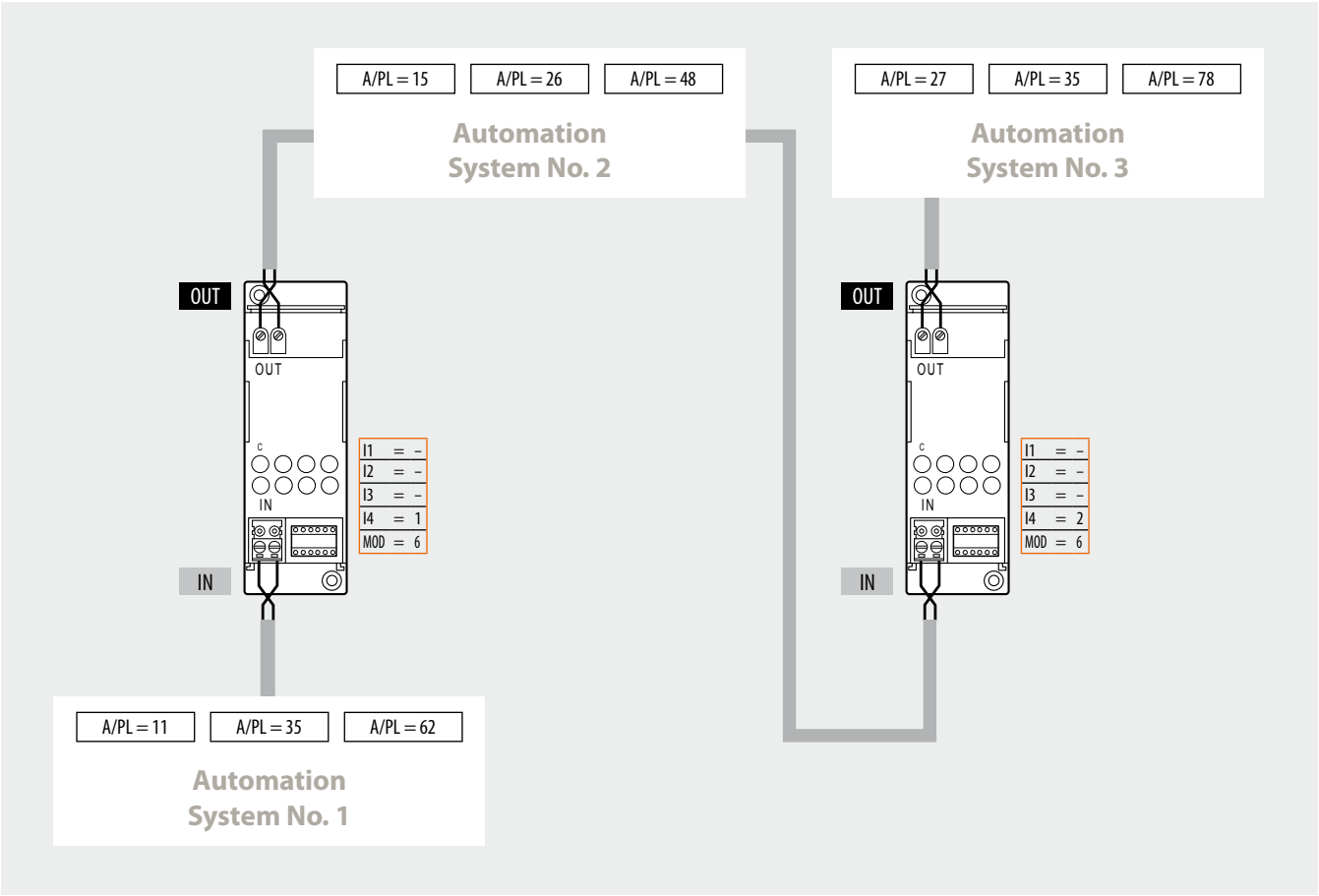
The use of the interface with this mode may be useful to keep the Automation system and the Temperature control system separate (for example when using independent power supplies).
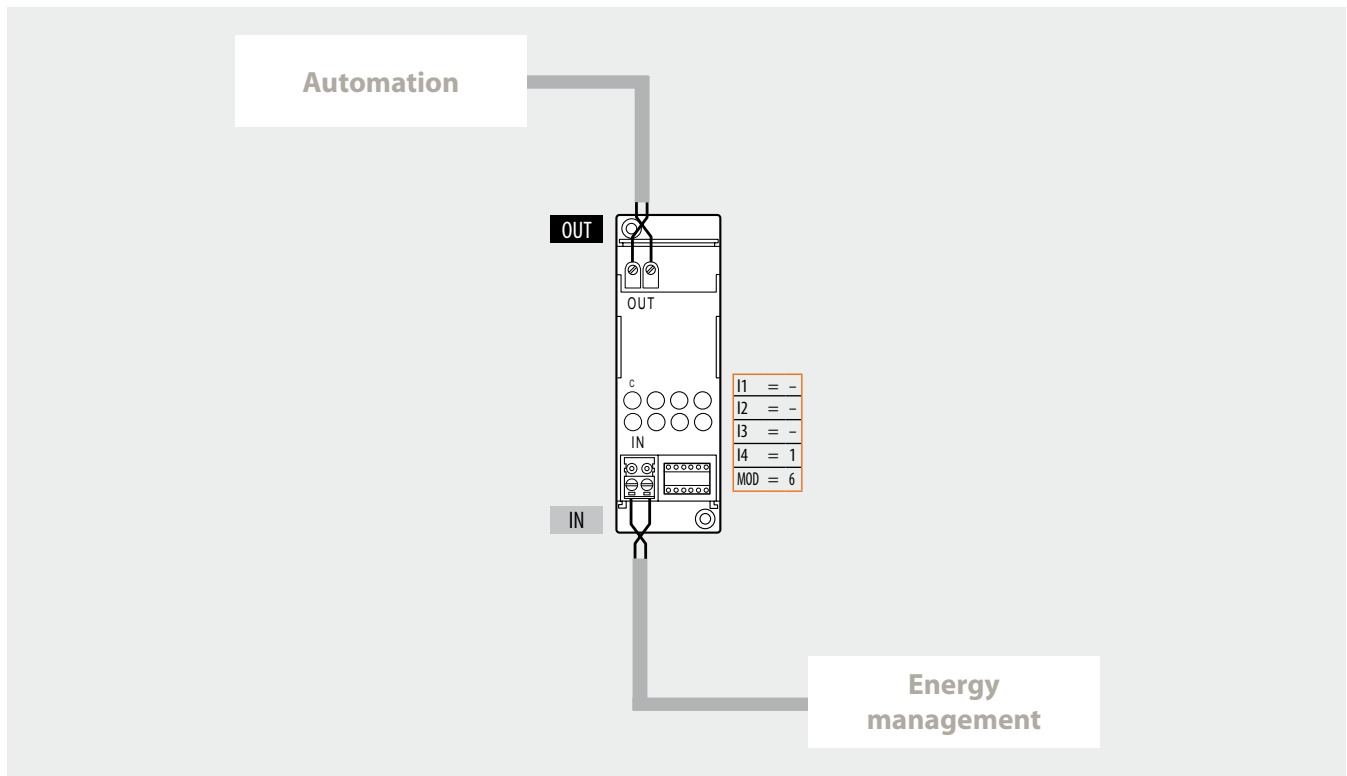
Installation rules:
- Each individual system connected to the IN or OUT clamps of the interface must be powered by its own power supply.
- It is possible to use up to 4 interfaces in MOD=6 for the connection of the Automation and/ or Energy Management, and Temperature Control systems to each other.
- In case of cascade connection of several Automation and/or Energy management, and Temperature Control systems, each individual system must be connected to the OUT clamp of one interface and the IN clamp of the other. Therefore, do no connect the system to the two interfaces only using the OUT clamps.
- Do not configure positions I1 and I2.
- In positions I3 and I4, address I3=0 to 9 and I4=1 to 9 of the interface must be specified. This address may also correspond to that of other actuator devices installed in the connected systems. If several interfaces are installed, these must have different addresses.
- The interface does not use any addresses of the Automation system.
- The scenario module and the devices that can be configured in self-learning mode can be connected to any branch of the system (no. 1 or no.2). The memory module must be connected to the system connected to the OUT clamp of the last interface.
- All control devices configured for sending Point-Point, Room, Group, and General controls may be connected to any branch of the system (no.1 or no. 2), without limitation, irrespective of their respective addresses in the A and PL positions.
- The above also applies to actuators configured in "slave" operating mode.
- Interface F422 allows Point-Point, Group, Room, and General controls to travel through the various systems. It is therefore possible to install, for example, in system no. 2 a control configured as A=1 and PL=5 that will control actuator A=1 and PL=5 installed in system no. 1.

Configuration:
For correct operation, the interface must be configured to:
- define its address within the system;
- acquire the address of the devices of the systems connected to the IN and OUT clamps.
Configuration of the interface address:
The device may be configured in 3 different modes:
- using numerical configurators, 0 to 9, in positions I3 and I4;
- using the Virtual Configurator application as indicated in the software User Manual;
- using the "self-configuration" procedure as indicated below:
1. press the interface pushbutton for a few instants; the LED flashes slowly.
2. press the pushbutton again; the LED flashes quickly and the device starts the self-configuration procedure.
3. Once the configuration procedure has been completed correctly, the LED comes on steady. Repeat this operation for all the interfaces in MOD-6 of the system.

Acquisition of the addresses of the connected devices:
This procedure must only be carried out after the configuration of the interface address (or several interfaces, as applicable). It is possible to select one of two modes:
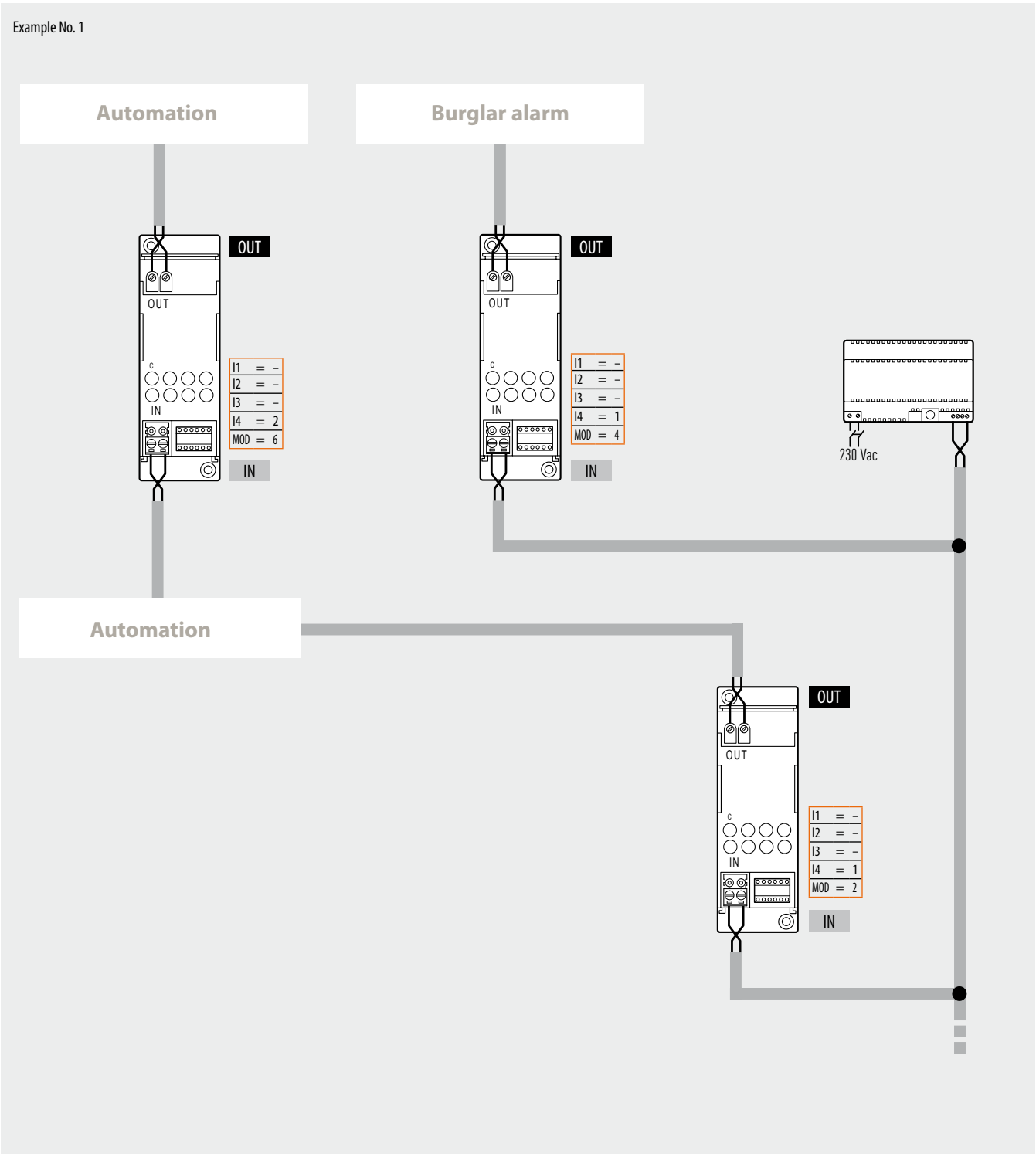- using the Virtual Configurator application as indicated in the software User Manual;
- pressing the interface pushbutton for at least 2 seconds. Any other interfaces in MOD=6 installed in the system will automatically acquire the configuration of the devices.
Before performing this operation check that all system interfaces and actuators have their addresses configured.

7) Use of interfaces with different modes

For home automation systems of a certain complexity, several systems may be integrated with interfaces configured in different modes. For example, it is possible to create a system with three interfaces for the connection of two Automation systems and one Burglar alarm system to one single riser.

If necessary, each of these can be expanded (physical expansion mode) or interfaced with the Video Door Entry System or the Sound System using other interfaces. For example, in case of a villa consisting of several large floors.

Example No. 1

Example no. 2: system with logic expansion

A/PL = 01 → 31	**1a**
A/PL = 33 → 53	**1b**
A/PL = 55 → 175	**1c**

Automation
(low addresses)

Automation
(intermediate addresses)

Automation
(high addresses)
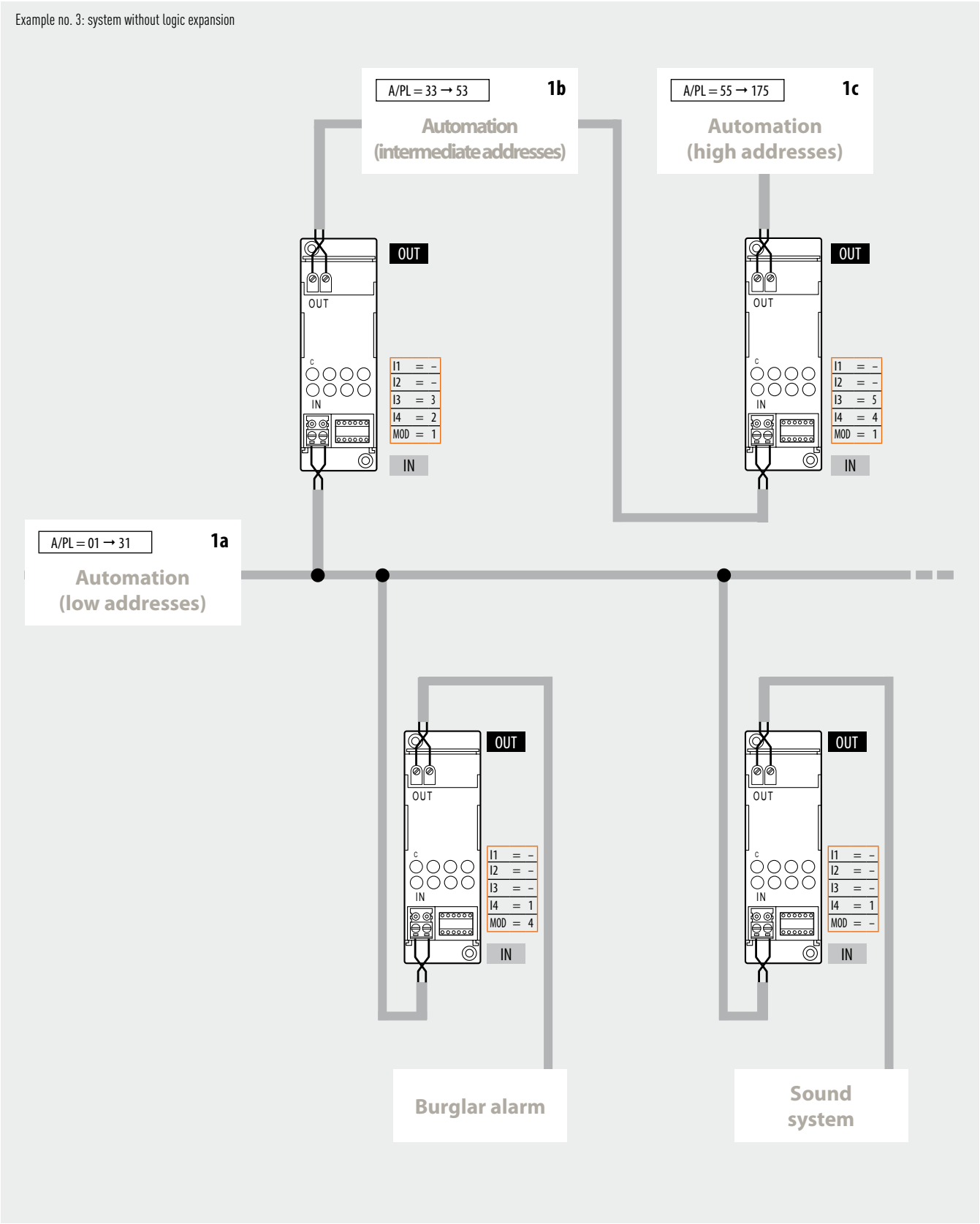
OUT

OUT

I1	=	–
I2	=	–
I3	=	3
I4	=	2
MOD	=	1

IN

OUT

OUT

I1	=	–
I2	=	–
I3	=	5
I4	=	4
MOD	=	1

IN

Main riser

OUT

OUT

I1	=	–
I2	=	–
I3	=	–
I4	=	1
MOD	=	2

IN

OUT

OUT

I1	=	–
I2	=	–
I3	=	–
I4	=	2
MOD	=	2

IN

OUT

OUT

I1	=	–
I2	=	–
I3	=	–
I4	=	1
MOD	=	4

IN

OUT

OUT

I1	=	–
I2	=	–
I3	=	–
I4	=	1
MOD	=	–

IN

Automation **2**

Automation **3**

Burglar alarm

Sound
system
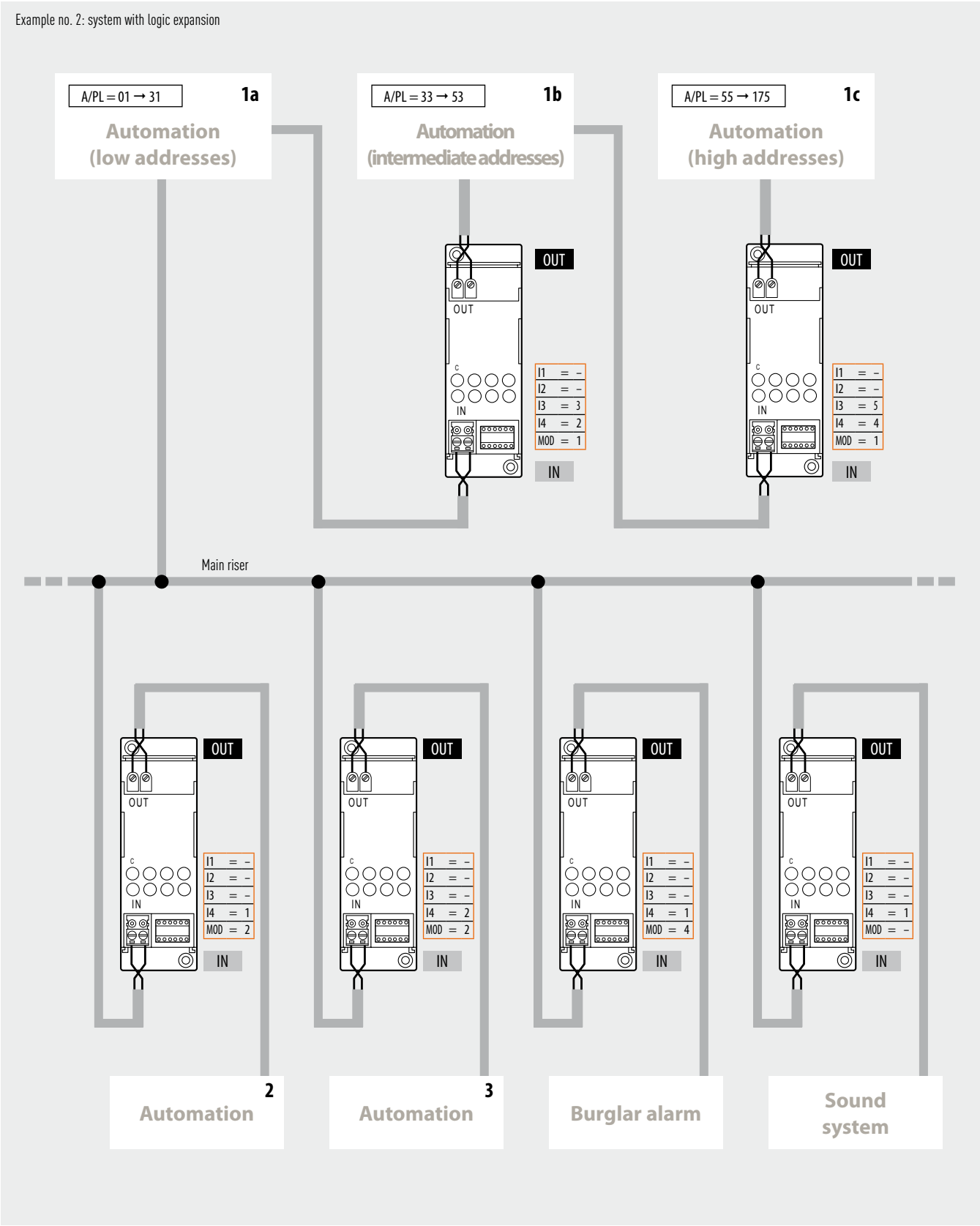
Example no. 3: system without logic expansion

A/PL = 33 → 53	**1b**

Automation
(intermediate addresses)

A/PL = 55 → 175	**1c**

Automation
(high addresses)

OUT

OUT

C

IN

I1	=	–
I2	=	–
I3	=	3
I4	=	2
MOD	=	1

IN

OUT

OUT

C

IN

I1	=	–
I2	=	–
I3	=	5
I4	=	4
MOD	=	1

IN

A/PL = 01 → 31	**1a**

Automation
(low addresses)

OUT

OUT

C

IN

I1	=	–
I2	=	–
I3	=	–
I4	=	1
MOD	=	4

IN

OUT

OUT

C

IN

I1	=	–
I2	=	–
I3	=	–
I4	=	1
MOD	=	–

IN

Burglar alarm

Sound
system

OPEN-BACNET Gateway

F450

Description

OPEN-BACnet gateway for control via MyHome Touch Screen of Air Conditioning, Fan Coils, Air Treatment Units (ATU), VAV and underfloor heating via BACnet protocol.

Technical data

Power supply via SCS BUS:	18 – 27 Vdc
Current draw:	55 mA max
Operating temperature:	5 – 45°C

Dimensions

6 DIN modules

Configuration

The device is configured with the TiOpenBacnet software package thanks to a LAN connection (with crossed cable if the connection between the PC and the gateway is direct without using
a HUB/SWITCH) or via a generic cable with USB and mini USB connectors.

Front view
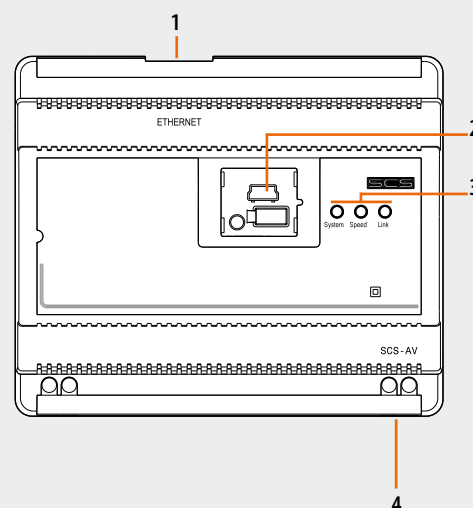
Legend

1. RJ 45 for 10/100 Mbit Ethernet LAN
2. USB port for configuration via PC and firmware upgrading
3. User interface:
   - System: When the power supply is connected, it comes on, goes off, and then comes on again, to indicate that the gateway is working
   - Speed: Connection Speed: on = 100 Mbit; off = 10 Mbit - Link: ON it indicates the presence of the Ethernet network
4. 2-wire BUS for connecting to the BUS

Audio/Video Web Server

Description

Audio/Video Web Server for local and remote control of MY HOME applications using dedicated web pages.
The Web Server can also be used as a gateway for the management of the system using devices like PCs and Smartphones, and for virtual configuration, using a dedicated software.

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Absorption:	125 mA max (with active video interface)
Operating temperature:	5 – 35 °C

Dimensional data

6 DIN modules

Configuration

The audio/video web server is configured using the TiF454 software thanks to a LAN connection (with cross-over cable if the connection between PC and F454 is direct, without using a HUB/SWITCH) or using a standard USB and mini USB cable.
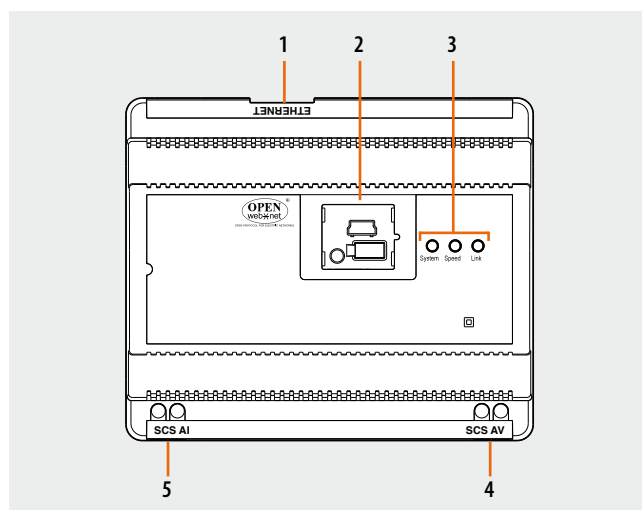
Legend

1. RJ 45 for 10/100Mbit Ethernet LAN
2. Under the door are:
   - USB ports for PC configuration and Firmware update
   - RESET pushbutton
   - Serial connector RS232
3. User interface:
   - Speed: Connection speed; ON = 100 Mbit;
              OFF = 10 Mbit
   - Link: ON it indicates the presence of the Ethernet network
   - System: when the power supply is connected, it comes on, goes off, and then comes on again, to indicate that the web server is working
4. 2-wire BUS for video door entry system connection
5. 2-wire BUS for burglar alarm system

MyHOME_Screen10

0672 67   MH4892
0672 68   MH4893

Description

MyHOME_Screen10 with 16:9 10" LCD screen and new graphic interface:
- management of all My Home and Video door entry system functions
- navigation by rooms
- management of multimedia contents through USB connection, SD Card, LAN network, or IP
- management of customised profiles
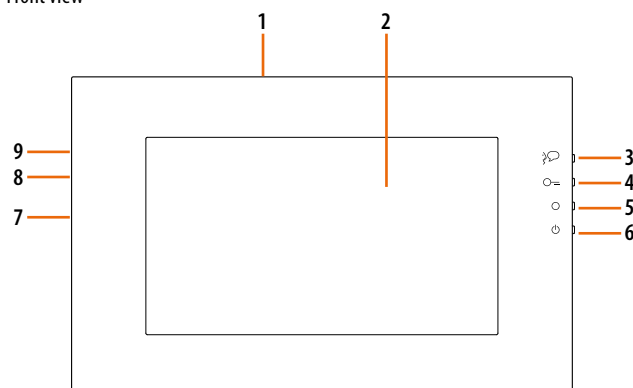- possibility of customising background images

Installation: the device is suitable for wall mounted installation using the bracket supplied.

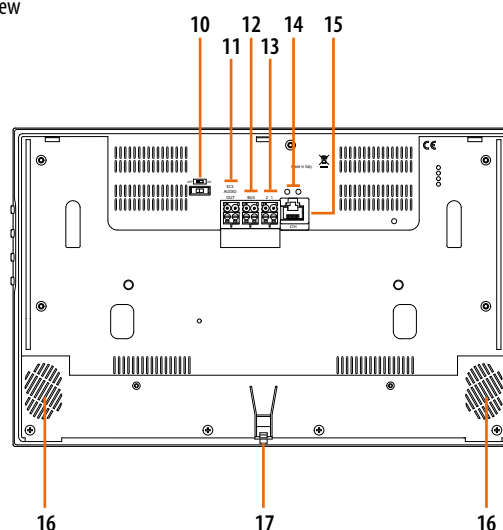Available in white and in black. No additional surround plate needed.

Technical data

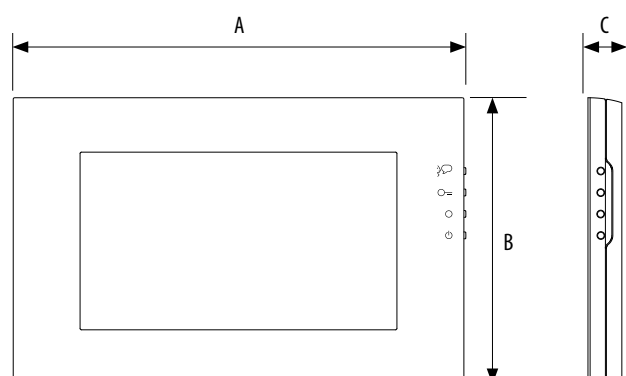|	
Power supply from SCS BUS:	18 – 27 Vdc
Local power supply (1 – 2):	22–27 Vdc
Local max. absorption (1 – 2):	370 mA
Max. absorption from SCS BUS:	50 mA
Operating temperature:	5 – 45 °C

Front view

Rear view

Dimensional data

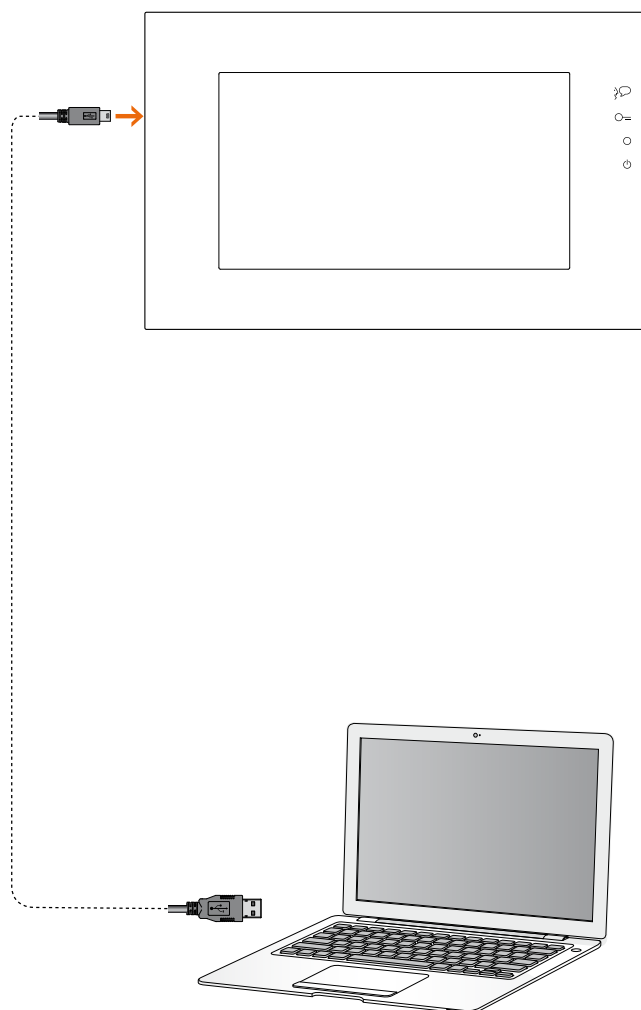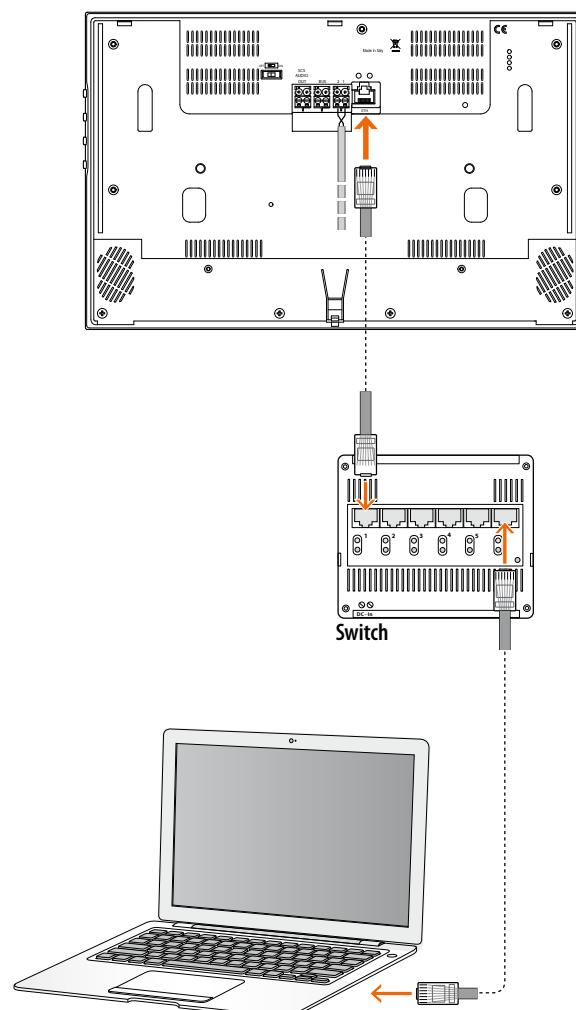| A	B	C
315 mm	200 mm	24 mm

Legend

1. Microphone
2. 10" touch screen colour LCD display
3. Call answer pushbutton
4. Door lock release
5. Switching on/Camera scrolling
6. Monitor off
7. USB connector
8. Mini-USB connector for the connection to the PC
9. Secur Digital memory card connector
10. Line termination ON/OFF micro-switch
11. Sound system output connector
12. 2 WIRE video BUS/SCS connector
13. 1 - 2 power supply connector
14. LAN connection signalling LED
15. RJ45 connector for Ethernet connection
16. Loudspeakers
17. Safety spring

MyHOME_Screen10

Configuration

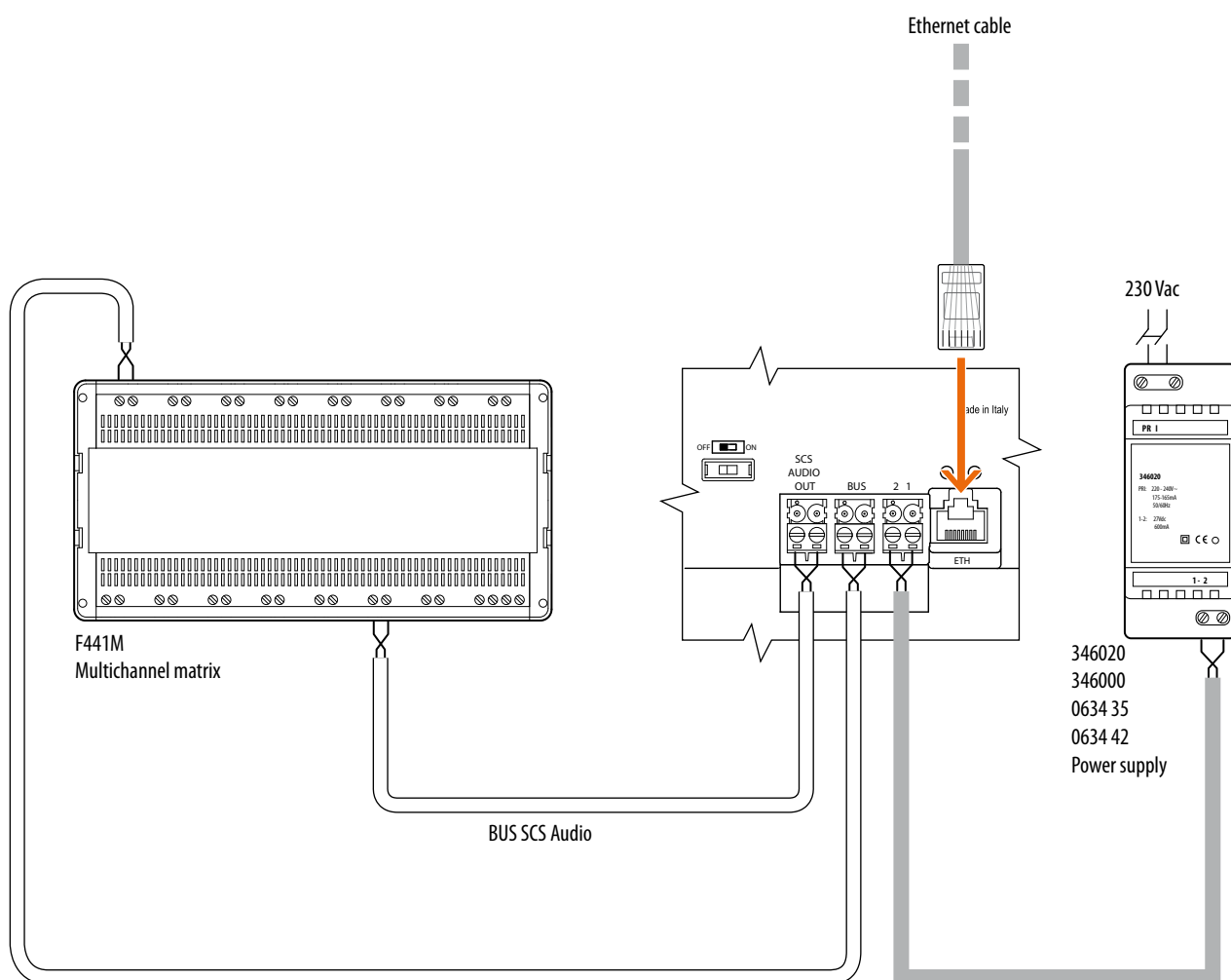**My**HOME_Screen10 must be configured using the software.
In order to receive/transfer the configuration performed, or to update the firmware, connect the device to the PC using one of the following solutions:
- USB-miniUSB cable;
- Ethernet cable.

USB connection

Ethernet connection

Switch

For the configuration download the software from the website www.homesystems-legrandgroup.com

Wiring diagram

Ethernet cable

230 Vac

OFF ON

SCS
AUDIO
OUT   BUS   2 1

ade in Italy

ETH

346020

PR I

PRI: 220 - 240V~
175-165mA
50/60Hz
1-2:   27Vdc
600mA

1 - 2

F441M
Multichannel matrix

346020
346000
0634 35
0634 42
Power supply

BUS SCS Audio

Touch Screen

Description

Touch Screen is a device that enables controlling the MY HOME and Lighting Management functions, by means of simple and intuitive icons displayed on a 3.5" touch screen LCD display.

The device can be used to manage the automation, lights, temperature control, sound system, burglar-alarm, energy management, and scenario functions.

For each application, it is possible to manage up to 20 actuations (for example 20 actuators, 20 amplifiers, etc.).

Technical data

Power supply from SCS BUS:	27 Vdc
Operating power supply with SCS BUS: 18 – 27 Vdc	18 – 27 Vdc
Absorption:	80 mA
Operating temperature:	0 – 40 °C

Dimensional data

Size: 3+3 flush mounted module

Installation

Touch Screen can be installed very easily on the wall using a box and integrates perfectly with any domestic room thanks to its compatibility with all cover plates of the Axolute, Living and Màtix civil series.
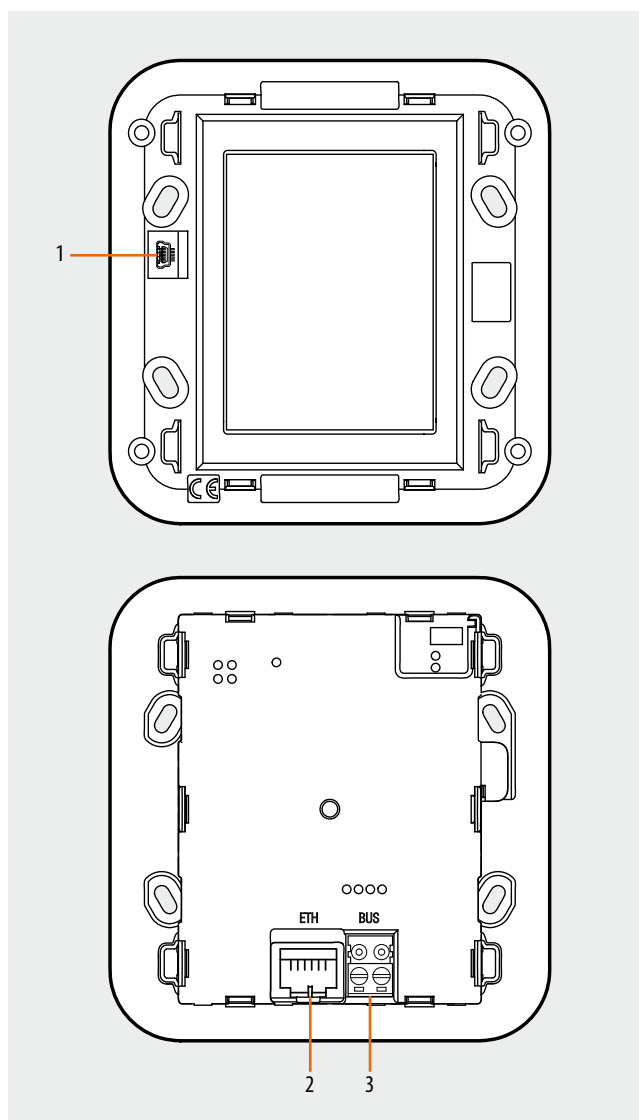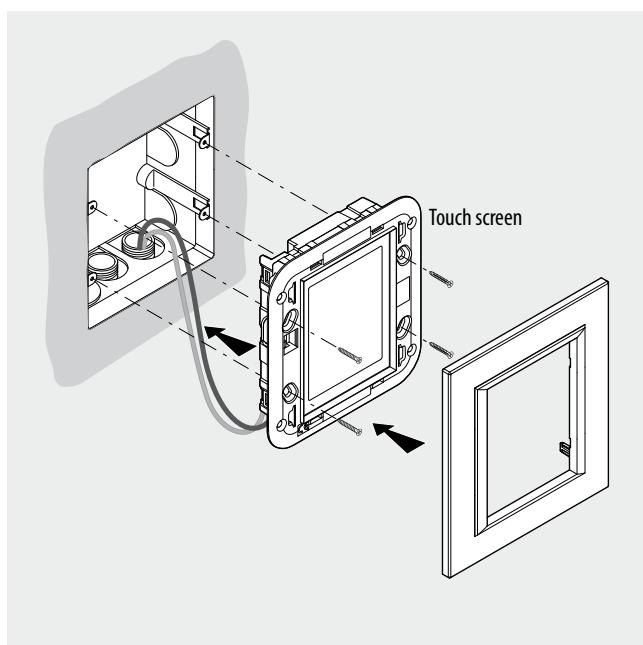
Touch screen

Legend

1. USB connector for programming and firmware update
2. RJ45 Ethernet connector
3. Clamp for SCS BUS connection

Touch Screen

Configuration

Touch Screen is programmed by connecting it to a PC using the interface cable, item 335919 (RS232 version), 3559 (USB version), or an Ethernet cable, and the TiTouchScreen software.

The software creates a link between the preconfigured icons, which will be shown on the Display, and the functions that must be managed and performed by the devices of the Automation and lighting, Sound, burglar-alarm, temperature control, energy management and scenario systems.

Based on the requirements of the customer, it is possible to create a new configuration, or manage an existing one. The program also gives the possibility of configuring extra Touch Screen functions, such as scenarios with logic or time conditions, the display of the time and the date, and the setup of a protection password.
It is also possible to define the graphic style of the icons to complement the look of the device. For further information refer to the software documentation.

Connection to the Personal Computer

USB/mini USB

Crossover type
Ethernet cable
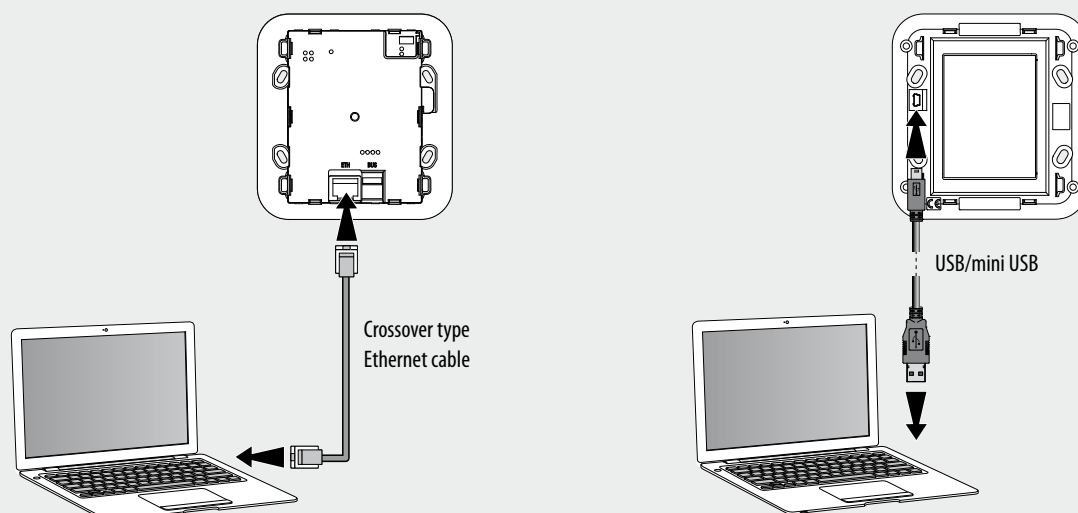
Connection to the Personal Computer for HW4890
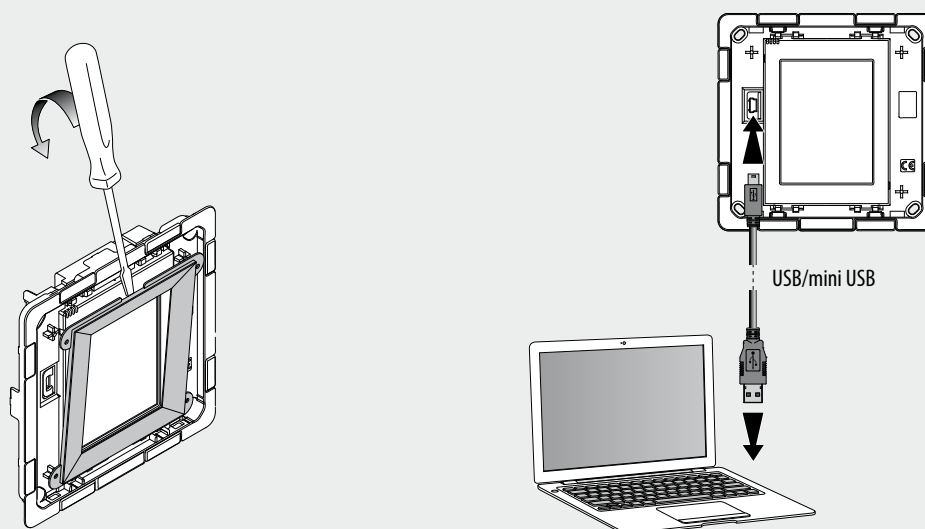
USB/mini USB

Local display

Description

Local Display is a device that gives the possibility of 4 home automation functions by means of simple and intuitive icons displayed on a 1.2" OLED display with touch screen technology.

It can be used to manage the temperature control, sound system, energy management, and scenario functions.

The back of Local Display has a USB socket, which can be used to connect the device to a PC, to update the configuration, the set of characters, and the icon, as well as the firmware.

Technical data

- Power supply from BUS: 18 – 27 Vdc
- Stand-by Absorption: max 10 mA @ 27 Vdc
                                max 15 mA @ 18 Vdc
- Operating absorption: max 50 mA @ 27 Vdc
                                max 70 mA @ 18 Vdc
- Operating temperature: 5 – 35 °C
- Size: 2 flush mounted modules

Configuration

Local Display may be configured in two ways:
- physical configuration, by connecting the configurators to the appropriate sockets. This mode gives the possibility of configuring with basic parameters only 1 function to manage, among the ones listed below. For the configuration of the advanced parameters use the software.
- from the PC, using the dedicated software. This mode gives the possibility of configuring all the parameters, for the management of 1 to 4 functions listed below.

Avaible functions

- Scenario control
- Temperature control with external probe
- Temperature control with probe
- Sound system
- Consumption display
- Load management
- Advances scenario (with scenario programmer installed in the system), to be configured using the software only

Front view

Rear view
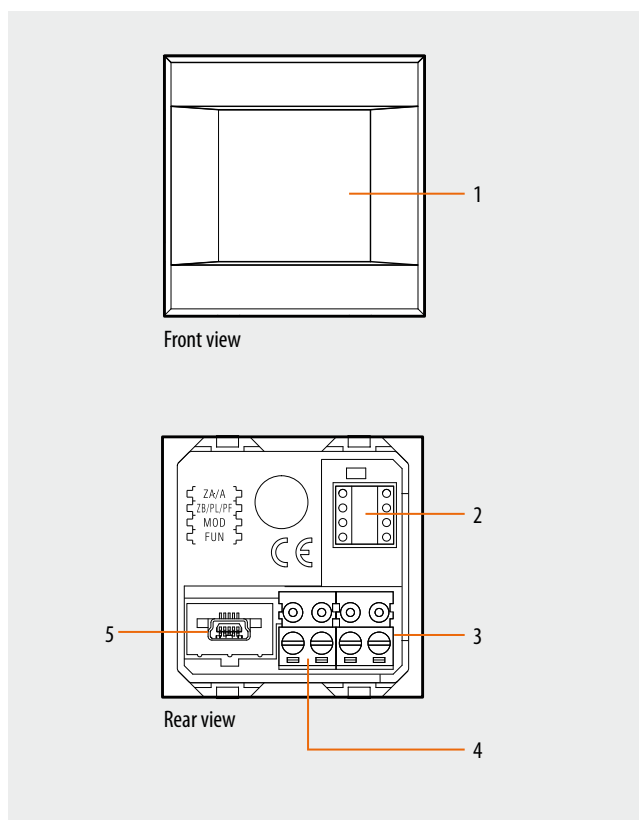
Legend

1. OLED technology Touch Screen
2. Configurator socket
3. BUS clamp
4. Clamp for the connection of the external temperature probe
5. USB connector

Local display

Installation

Local Display is installed using a traditional procedure, using a box, support, and cover plate; the device is not fitted with a temperature probe. Therefore, it will not be necessary to comply with the probe installation requirements.
The recommended installation height is 150 - 160 cm.

Local Display physical configuration

- Scenario control mode - FUN = 1

Thanks to this mode, it will be possible to manage and change 4 different associated scenarios of the scenario module, and activate them by pressing one of the 4 icons shown on the display.

A	Room	0 – 9, room of the scenario module item
PL	Light point	1 – 9, light point of the scenario module
MOD	Mode	1 – 4, scenario number (*)
FUN	Function	1

(*) Correspondence among the 4 icons and the numbers of the scenarios that can be saved in the scenario module

Configurator MOD	Icon 1	Icon 2
1	Scenario 1	Scenario 2
2	Scenario 5	Scenario 6
3	Scenario 9	Scenario 10
4	Scenario 13	Scenario 14

Configurator MOD	Icon 3	Icon 4
1	Scenario 3	Scenario 4
2	Scenario 7	Scenario 8
3	Scenario 11	Scenario 12
4	Scenario 15	Scenario 16

Scenario programmer

In order to program, change or cancel a scenario, it is necessary to enable the programming mode of the SCS/SCS Module so that the status LED is green (press the lock/unlock key on the Scenario Module for at least 0.5 seconds); continue with the following operations:

1) press one of the four control keys the scenario should be associated to for 3 seconds. The screen shows the name and icon of the selected scenario and the programming bar, to indicate that the learning procedure has started If the device does not receive any input for 30 minutes from the start of the learning procedure, programming will automatically be interrupted;
2) set the scenario using the corresponding controls for the various Automation, Temperature control, Sound system, etc. functions;
3) confirm the scenario by quickly pressing the display
4) to change or create new scenarios to be linked to the other keys, repeat the procedure starting from point 1.

To call a set scenario just press its pushbutton on the control quickly.

Main functions that can be set using the software

Main possible functions using the software:
- selection of the operating mode to set for the device, temperature control, scenarios, sound system, load management, consumption display.
- configuration of the settings of the probe and of its parameters;
- definition of the type of temperature central unit;
- parameters for the measurement of energy production, or consumption costs;
- configuration of the general device parameters;
- icon style definition.
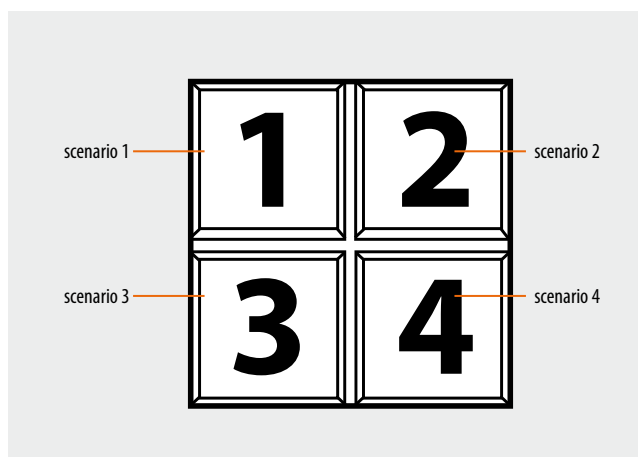
NOTE: Once the operations have been performed lock the programming, pressing the lock/unlock pushbutton, of the senario module, for at least 0.5 seconds, so that the corresponding LED becomes red.

To delete a scenario, proceed as follows:
1) the scenario module must be enabled for programming.
2) press the pushbutton of the scenario you want to cancel for at least 7 seconds; The display will confirm that the scenario has been deleted and return to the main screen. To erase the entire memory keep the DEL pushbutton on the Scenario module pressed for 10 seconds, the yellow "reset scenarios" LED flashes quickly.

Local display

067271   067272   HD4891   HC4891   HS4891
573716   573717   L4891   N4891   NT4891

– Sound system control mode - FUN = 2
With this mode, for the associated amplifier the user can control the switching ON or OFF, the volume, the cycling through the sources, and their management (where allowed). Information on the currently active source is also displayed.
In this mode the parameters that can be configured are the local address of the display (which must coincide with the A/Pf address, and the M1 mode of the associated amplifier), and the name of the sources that can be controlled.

A	Room	0 – 9, amplifier room
PF	Loudspeaker	1 – 9, Amplifier loudspeaker
MOD	Mode	0 – 8, Source switching ON (*)
FUN	Function	2

NOTA (*): If M=0, source 1 is switched on without first switching OFF the sources (follow-me mode).

Functions

A quick pressure of keys 5 and 7 will respectively switch ON and OFF the associated amplifier. If the associated amplifier is on, an extended pressure of keys 5 and 7 may be used to adjust the volume, the intensity of which will be displayed by means of an icon 5. A short pressure of keys 2 and 4, will respectively cycle through the sources installed in the system, and launch a control for the currently active source. If the associated amplifier is off and no source is on, the screen
will not show any information. Press key 4 for 3 seconds to configure the alarm clock (see the user manual for details).
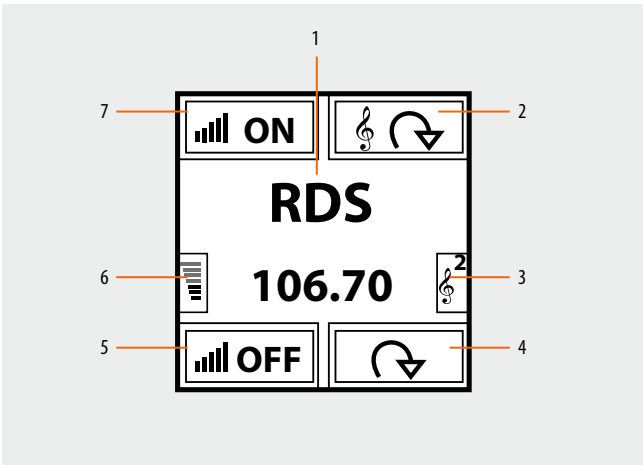
Legend

1. Indication of the amplifier status or radio frequency
2. Cycling of sources (radio/aux)
3. Active source indication
4. Change radio station
5. Associated amplifier OFF and volume decrease
6. Volume level indication
7. Associated amplifier ON and volume increase

Local display

- **Temperature control probe mode with external probe - FUN = 3**

Warning: the physical configuration can only be performed if the system includes a 99-zone temperature central unit.

An external temperature probe, with the following characteristics, can be connected on the back of Local Display:
- 10 KΩ at 25 °C BETA 3435
- max. length of the connection 10 metres

Local Display shows the temperature value measured by the external probe, the set temperature value, and the local selector adjustment. The operations that may be performed by user are:
- variation of the temperature set using the local selector,
- FAN-COIL speed management,
- operating mode management.

temperature probe

BUS - SCS
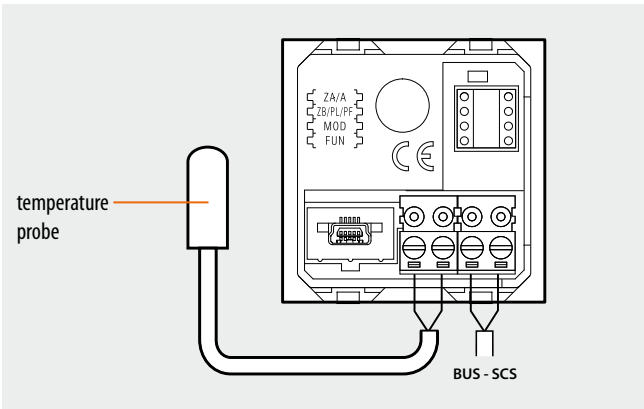
ZA	Zone address	0 – 9, Local Display address
ZB	Zone address	1 – 9, Local Display address
MOD	Mode	0 – 8, Slave probe number
FUN	Function	3

For simple systems, where each zone controls at most one heating actuator and one air conditioning actuator, both of the ON/OFF type, and on a system with only one pump per function, the configuration of the system can be performed by simply connecting the configurators that identify the address of the device and, in case of probe, indicate the number of slaves present.
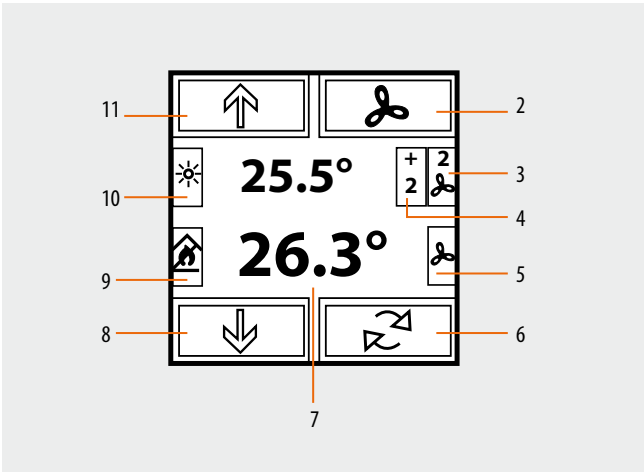
For more complex systems, the probe can memorize the actuators to activate, and the pumps to control on the BUS. The programming operation must be completed directly from the central unit. The central unit can also be used for the calibration of the probe. During the system setting stage, it will be necessary to specify the actuators used for the heating system, and those used for the air conditioning system, as they operate in a complementary way.

Legend

1. Set temperature
2. Fan-Coil adjustment
3. Fan-Coil speed indication
4. Temperature variation indication
5. Fan-Coil operation indication
6. Change operating mode
7. Measured temperature
8. Decrease temperature
9. Operating mode indication
10. System status indication
11. Increase the temperature

Functions

A short pressure of keys 8 and 11 can be used to locally change the temperature by +/-3 °C, in relation to the settings received from the central unit. A short pressure of key 6 can be used to select the mode of operation, cycling through the OFF, antifreeze/thermal protection, and automatic statuses respectively. Each mode of operation is identified by a different icon. A short pressure of key 2 will force the speed the fan-coils, cycling through speed 1, 2, 3 or automatic.

- Temperature control probe mode with probe - FUN = 4

Warning: physical configuration can only be used if a 99-zone temperature control central unit is installed in the system

This mode is different from the previous one in the fact that the external probe is not connected to Local Display. Being unable to autonomously establish the temperature, it must be associated to at least one probe. The user is shown the temperature value measured by the associated probes, the set temperature value, and the adjustment of the local selector.

The possible operations for the user are the adjustment of the set temperature using the local selector, and the change of status of the probe. In this mode, the parameters that can be configured are the local display address (which must coincide with the ZA/ZB address of the associated probe), the type of control of the pump, the type of mode, and the number of slave probes.

ZA	Zone address	0 – 9, probe address
ZB	Zone address	1 – 9, probe address
MOD	Mode	1 – 8, Slave probe number
FUN	Function	4

For simple systems, where each zone controls at most one heating actuator and one air conditioning actuator, both of the ON/OFF type, and on a system with only one pump per function, the configuration of the system can be performed by simply connecting the configurators that identify the address of the device and, in case of probe, indicate the number of slaves present.

For more complex systems, the probe can memorize the actuators to activate, and the pumps to control on the BUS. The programming operation must be completed directly from the central unit. The central unit can also be used for the calibration of the probe. During the system setting stage, it will be necessary to specify the actuators used for the heating system, and those used for the air conditioning system, as they operate in a complementary way.

Example of configuration of a zone (address 47) with Local Display and probe
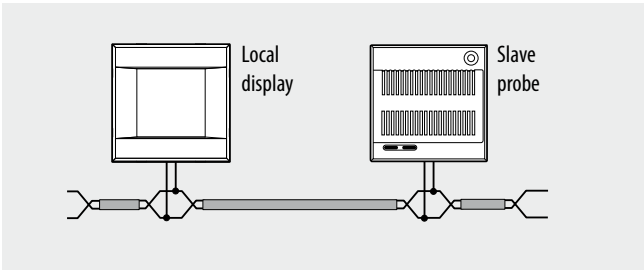
Local Display		Probe Slave	
Socket	Configurator	Socket	Configurator
ZA	4	ZA	4
ZB	7	ZB	7
MOD	1	MOD	SLA
FUN	4	SLA	1

Functions

A short pressure of keys 8 and 11 can be used to locally change the temperature by +/-3°C, in relation to the settings received from the central unit. A short pressure of key 6 can be used to select the mode of operation, cycling through the OFF, antifreeze/thermal protection, and automatic statuses respectively.

Each mode of operation is identified by a different icon. A short pressure of key 2 will force the speed the fan-coils, cycling through speed 1, 2, 3 or automatic.

Local display

- Energy Management Mode – consumption display FUN=5

It is possible to display the consumptions and the production of several energies of the system, with monitoring of up to a maximum of ten lines.

Warning: with physical configuration, only the consumptions of one line can be displayed.

For each line, the consumptions and the instantaneous, daily, monthly, and annual economic evaluation are displayed.

It will be possible to set two maximum consumption values, with the device emitting visual and sound notifications if these are exceeded. In this case, the displayed value will be green when below both limits, yellow when one has been exceeded, and red when both have been exceeded.

ZA	Line address	0 – 9
ZB	Line address	1 – 9
MOD	Type	0 = ELECTRICITY 1 = WATER 2 = GAS 3 = DHW 4 = HEATING/COOLING
FUN	Function	5

Functions

Once the device has been configured, it will be possible to scroll through the various lines using icon 4. For each measurement interface, by pressing briefly icon 3 it will then be possible to display the consumptions or the economic evaluation.

Press and hold down icon 3 to access a submenu where it will be possible to change the basic value of the economic evaluation.

Consumption and economic evaluations are themselves split into: instantaneous, daily (D), monthly (M), annual (Y). It is possible to scroll through these settings using icon 1.

Press and release icon 2 to access a submenu that can be used to set the time, the date, the threshold levels (if enabled), and the possibility of enabling or disabling the beep emitted when the threshold is exceeded.
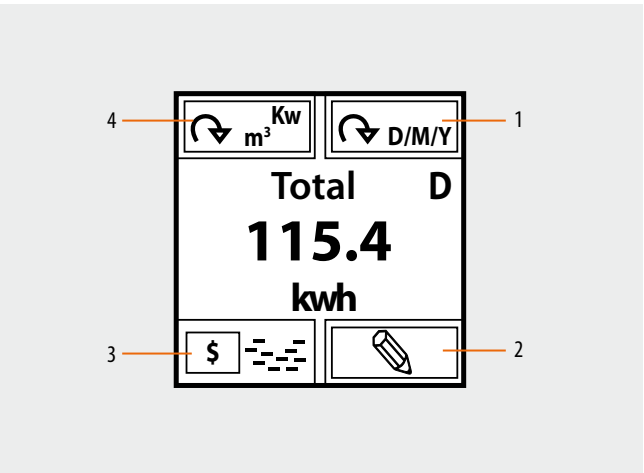
Legend

1. selection of display times
2. setting of the functions (time, date, max. power, etc.)
3. economic display of the consumptions
4. selection of the lines to display

Local display

- Load Management Mode

This mode, only available if Local Display is configured using the software, gives the possibility of displaying loads, with their priority levels, and force their activation. The device can manage up to 20 loads; if these are connected to actuators with current sensor it will be possible to display other load information, like the instantaneous power consumption.

When the central unit for load management intervenes on a load, the device (if enabled during the configuration) notifies the event with an indication on the display and an audible notification.

Functions

After the configuration of the device it will be possible to select the various loads using icon 1.

Icon 4 is disabled until the moment the central unit disables the load; when this happens, the icon becomes active, and can be selected to force the activation of the load.

In this condition, icon 3, used to intervene on the status of the load, is disabled.

However, if icon 4 is disabled, it will be possible to select icon 3 to pre-force the load, and avoid disconnection in case of intervention of the central unit when consumptions are exceeded.

If the loads are connected to actuators with current sensor, use icon 2 to access a submenu that can be used to display the instantaneous power consumption, as well as information form the line total consumption meters. While in this submenu, you can use the RESET icon to reset the meters. Press key 2 for 3 seconds to access the menu used for setting the time, the date, and the sound notification (beep).

- Advanced CEN Scenario mode

For systems with scenario programmers, Local Display can be used to enable 1 of the 4 scenarios displayed. This is done using the associated icons.

This function is only available if Local Display has been configured using the software.
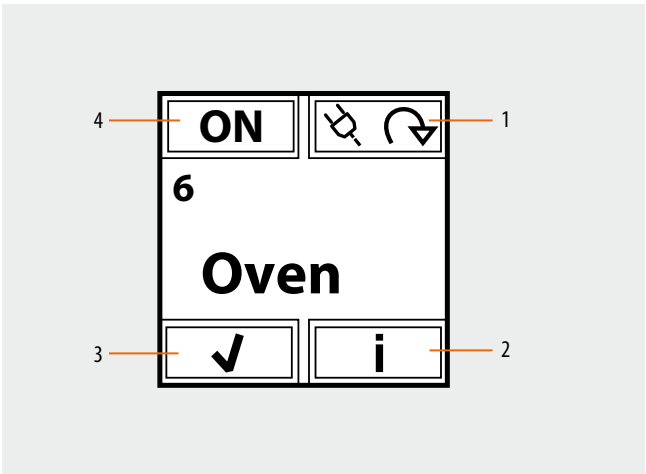
Legend

1. selection of the load to control
2. display of consumption data and device setup
3. activation/deactivation of the load
4. forced activation of the load disconnected by the energy management central unit, due to consumptions being exceeded.
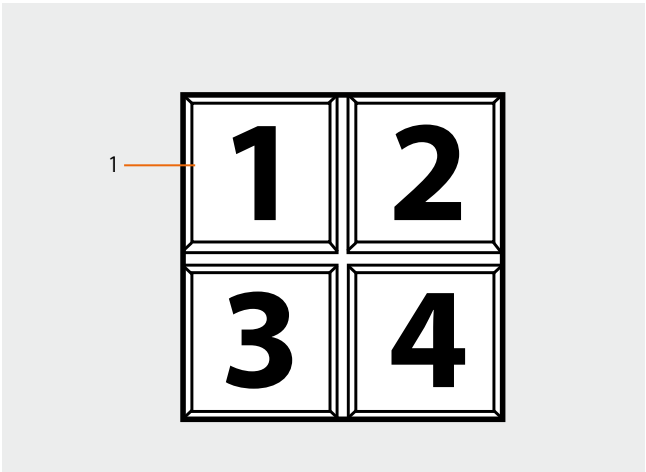
Legend

1. scenario indication icon

Scenario programmer

Description

This device can be used to manage up to 300 simple and advanced scenarios.
Thanks to the scenario programmer, the MY HOME system can perform certain actions, not only following a command from the user, but also when external events occur, such as the opening of a door, or a signal generated by light or temperature sensors.
The execution of an advanced scenario based on a set time and date, or the arming/disarming of the burglar alarm system, may initiate, for example, the simulation of a presence inside the home, by automatically activating the rolling shutters or the lights at certain preset times, when no one is in fact at home.
The scenarios are programmed on the device using the TiMH200N software that can be found in the CD supplied. The installation of the scenario programmer, item MH200N only requires the connection to the power supply and to the MY HOME automation BUS.
Thanks to the possibility of connection to the Ethernet network, the device is also suitable for advanced applications, like:

- Use as SCS/LAN Gateway device for:
    - Managing or configuring the MY HOME system with the MHVisual program and Virtual Configurator respectively, installed on PCs connected to the network;
    - Displaying the status of a scenario through web pages (enabled/disabled);
    - Managing new functions relating to the 4 zone temperature control system and current sound system and automation devices (new F503 amplifier, 100 level dimmer, lighting sensor);
- Managing the burglar alarm system (arming and disarming) based on events.
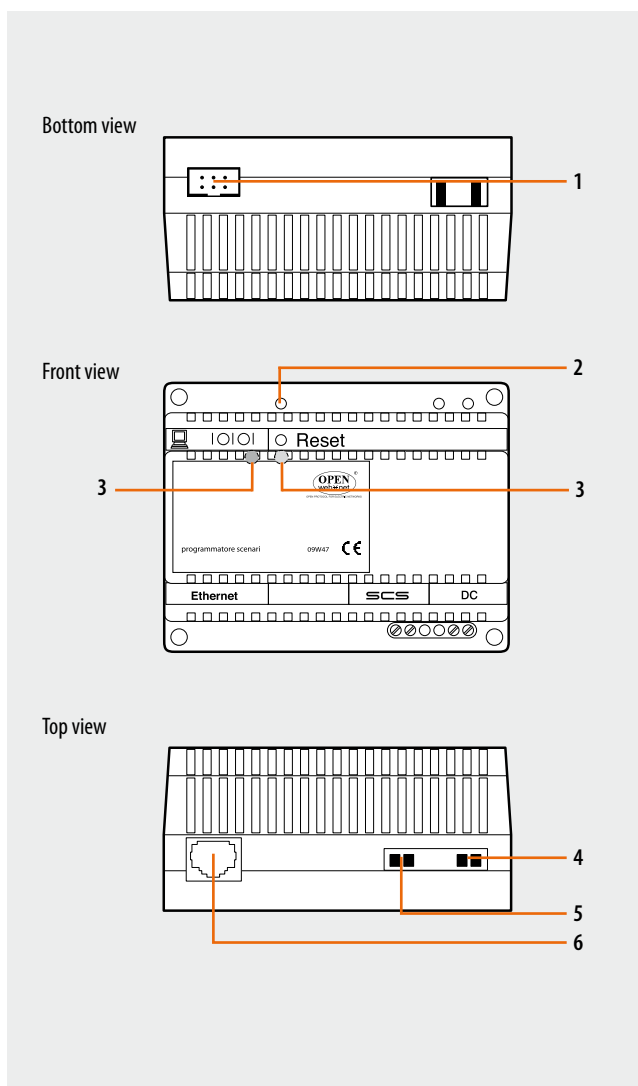
Related items

Power supply 27 Vdc 346020

Technical data

Power supply:	27 Vdc
Power supply from SCS BUS:	18-27 Vdc
Max. absorption:	200 mA
Operating temperature:	5 – 40 °C

Dimensional data

6 DIN modules

Bottom view

Front view

Top view

Legend

1. Connection to the PC serial port
2. Reset key
3. Status LED
4. Power supply (Item 346020)
5. BUS
6. Ethernet network RJ45 connector

Scenario programmer

Configuration

For the configuration of the device the TiMH200N program must be used, for creating scenarios (actuation of light points, rolling shutters, etc.) of different degrees of complexity, based on time events or events detected on the system (alarms, pushbuttons pressed, etc.). If the scenario is activated by a control device (configured with M=CEN), it will be possible to associate the corresponding key to the scenario itself.

The scenarios are grouped in a collection directly saved in the project.

The collection enables saving several scenarios, with only the required ones being activated.

The project created must then be transferred (downloaded) to the scenario programmer. This is done by connecting the device to the PC using a crossover type Ethernet cable (see figure). In alternative, it is also possible to update MH200N remotely. To do this, both the IP address and the OPEN password must be known (see manual found inside the CD supplied with the device).

In the same way, it is possible to upload the files from the device to check the saved configuration. The TiMH200 program also enables updating the unit permanent base MH200 software, by downloading any new versions published on the Bticino website (Update Firmware).

CEN operating mode

This special mode is used for managing MH200N scenario programmers, by manually activating the control device or the MY HOME automation range set by connecting the CEN configurator in M.

The association between the key (upper or lower) of the control device and the scenario to be activated, is obtained using the MiMH200N software. For example, it is possible to activate two independent scenarios using the special H/L4651M2, AM5831M2, 067553 control, using the T1 (upper) and T2 (lower) pushbuttons. For the correspondence between the control keys and the scenarios to activate see the table below.

In addition to the listed devices, the CEN operating mode may be managed using the Touch Screen, the Multimedia Touch Screen, the Web Server, and a Personal Computer with the MHVisual supervision software installed.

NOTE: The control devices configured with M=CEN mode can be connected to any point of the system; The address specified in the A and PL positions must be different from the addresses assigned to the actuators.


Personal Computer with TIMH200N software

3559

MH200N scenario programmer
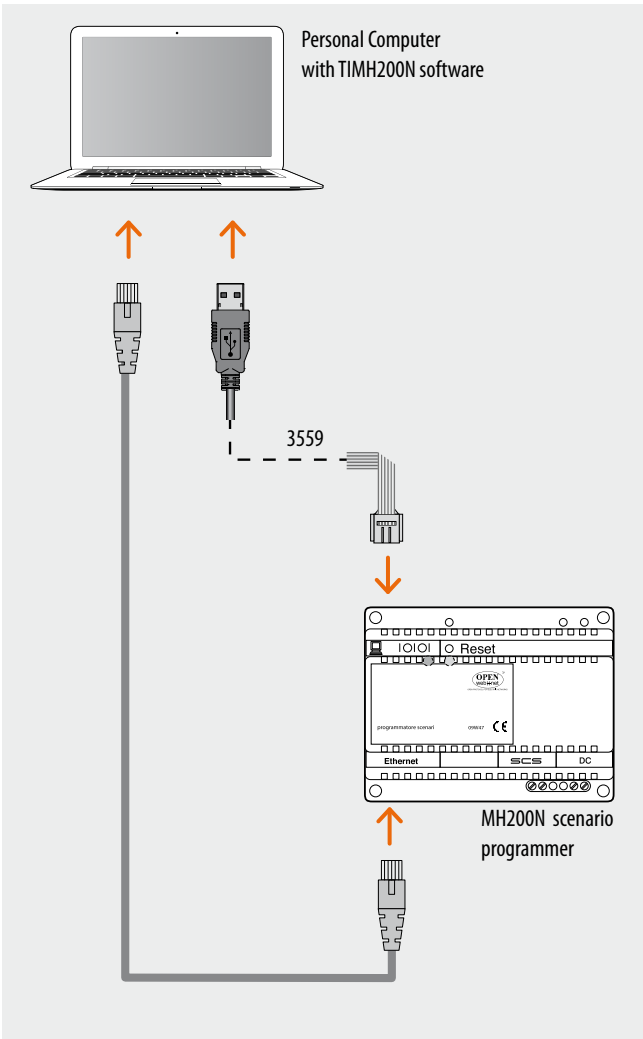
Type of control	Configuration	Identification of scenario activation keys
067553, H/L4651M2 and AMS831M2 special control	A=0-9; PL=0-9; M=CEN; LIV1/AUX=-; LIV2=-; SPE=-;I=-	T1 / T2
Basic control for 2 independent loads, 067552, H/L4652/2 and AM5832/2	A=0-9; PL1=0-9; M1=CEN; A2=-; PL2=-; M2=-	T1 / T2
	A=0-9; PL1=0-9; M1=CEN; A2=-; PL2=-; M2=CEN	T1 / T2 / T3 / T4
Basic control for 3 independent loads, 067554, H/L4652/3 and AM5832/3	A=0-9; PL=0-9; M=CEN; LIV1/AUX=-; LIV2=-; SPE=-;I=-	T1 / T2 / T3 / T4 / T6

Scenario programmer

Assembly, installation

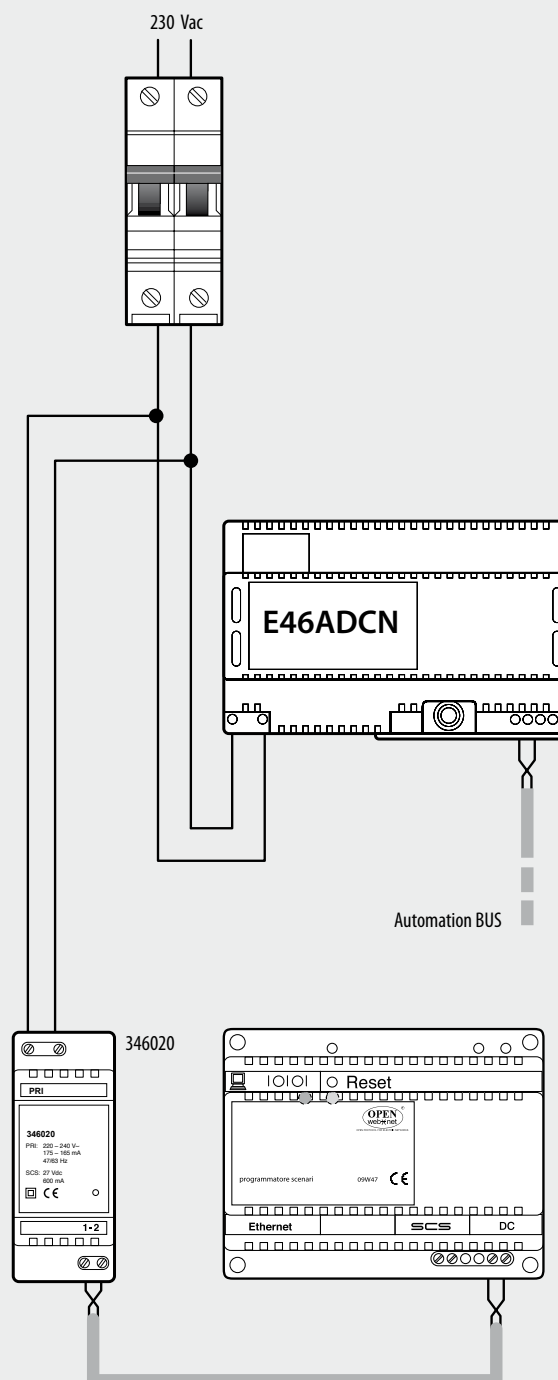Install the wiring in an ordered way.

OK

NO
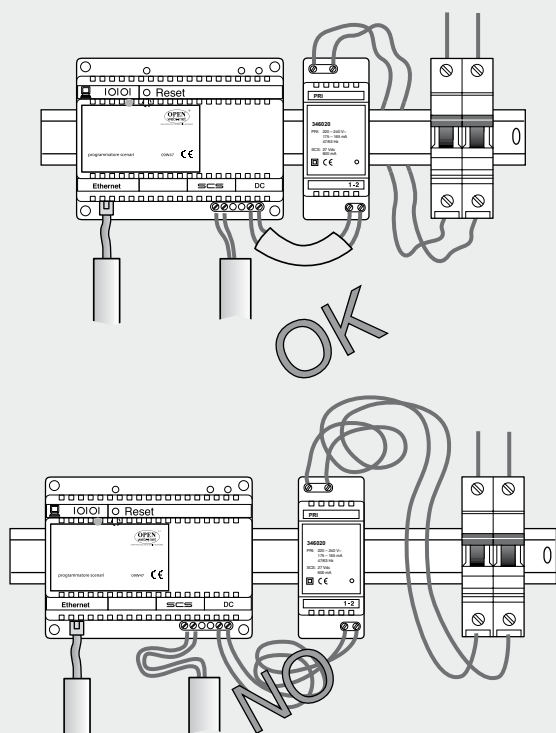
Do not place devices that may generate electromagnetic interferences near the Scenario Programmer.

NO   NO
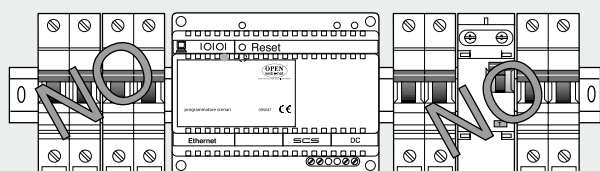
Configuration

Note: connect the E46ADCN power supply of the automation system and the 346020 power supply of the Scenario Programmer to a standard double-pole switch.

230 Vac

E46ADCN

Automation BUS

346020

A Group brand | legrand

AD-ITMH14ST/GB - Edition 08/2014