HOTEL ROOM MANAGEMENT
Guide for design and installation

INTEGRATED SOLUTIONS
WITH SCS-BUS
TECHNOLOGY

bticino

GUEST ROOM MANAGEMENT SYSTEM

A complete offer
to meet all needs

**Legrand offers a specific system solution
for each requirement.**

Designed to guarantee the best welcoming and supervision services, without overlooking the environmental aspects and the energy efficiency of all the areas of the establishment.

GUEST ROOM MANAGEMENT SYSTEM brings together two aspects: the supervision managed by Hotel personnel and the the customer's user experience.
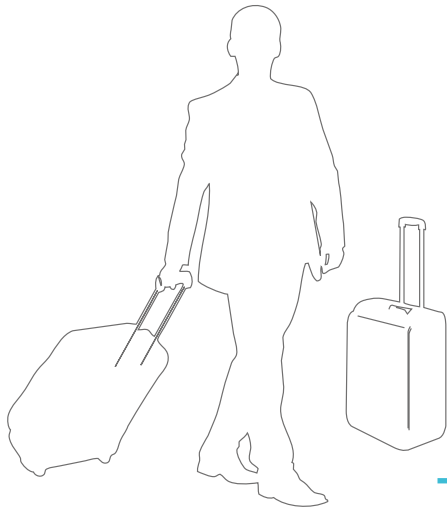
Two separate worlds, that are however in constant communication.

CONTENTS

Specific products and systems for the various areas

A SOLUTION FOR HOTELS

Guest room management

Management of the common areas (hall, reception, corridors, kitchens, conference rooms, etc...)

Supervision of the hotel from the reception using specific software

Integration of the system with solutions and systems of other brands

FROM ACCESS CONTROL TO HOME AUTOMATION, LEGRAND OFFERS ALL THE TECHNOLOGICAL SOLUTIONS FOR THE HOTEL SECTOR

01 INSIDE THE ROOM

- Access control
- Temperature management
  (heating and cooling)
- Lighting control
- Automation management
- Structured cabling devices
- Traditional devices
  (energy sockets, etc...)
- Management and reading of room
  electricity consumptions (EMS)

04

02 IN THE COMMON AREAS FOR CUSTOMERS

- Temperature management (heating and cooling)
- Access control
- Lighting control
- Automation management
- Sound system
- Data network management
- Traditional devices (energy sockets, etc...)

03 AT THE RECEPTION

THE SOFTWARE PROVIDES:
- Supervision and management of functions installed in the hotel
- Control and management of the functions inside the rooms and the common areas
- Management of the room status (free, occupied, customer present, etc.)
- Access control management: programming of key cards and saving of accesses
- Management of bookings using specific software (PMS)

## 04 IN THE REST OF THE BUILDING

- Energy transformation
- Energy distribution
- Service continuity (UPS)
- Energy management (measurement)
- VDI (video data) infrastructure
- Temperature management (heating and cooling)
- Access control
- Lighting control
- Automation management
- Green-Up columns for the charging of electric cars

THE FUNCTIONS
IN THE ROOM

The complete system, for maximum efficiency and comfort in the whole hotel

Guest Room Management System is a solution for the management and supervision of hotel and welcoming establishments. Designed to guarantee the best welcoming and control service without overlooking the environmental aspect, Guest Room Management System brings together two aspects: the supervision, managed by Hotel personnel, and the management of the room by the Customer.

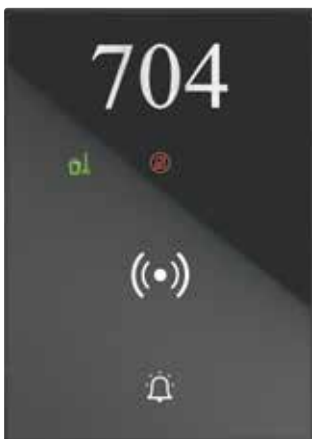Two separate worlds, that are however in constant communication.
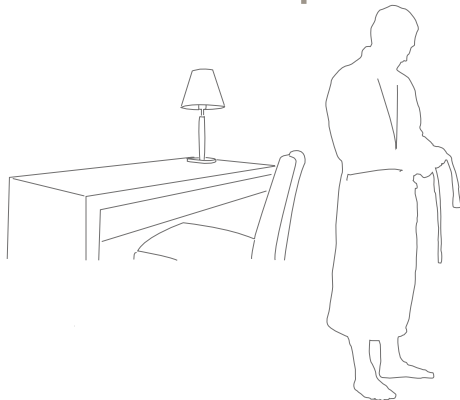
IMMEDIATE COMFORT

Thanks to the new devices:
- bedhead control
- scenario control,
installed at the side of the bed, with one single touch it is possible to create the desired atmosphere, adjusting the light, the temperature, and the shutters.

704

OUTSIDE THE DOOR INDICATOR
+ KEY CARD READER

DND (do not disturb)
MUR (make up the room)

COMFORT

MANAGEMENT OF USERS
Guest Room Management System enables the customer to be perfectly in tune with the room, thanks to a range of devices used to create the desired atmosphere as far as lights, music, and temperature are concerned.

RESPECT OF THE ENVIRONMENT

UP TO **30%** SAVINGS

ENERGY MANAGEMENT
Guest Room Management System gives the hotel establishment the possibility of reducing energy consumptions thanks to the possibility of disabling the devices inside the room when the customer is absent.

SAFETY

Thanks to the RFDI technological devices, maximum safety in the control of accesses to rooms and other zones.

A/V SOCKETS (BTICINO - AXOLUTE)

USB CHARGER SOCKET (BTICINO - AXOLUTE)

INDUCTION CHARGER AND USB

STEP MARKER LAMPS (BTICINO - AXOLUTE)

ENTERTAINMENT

A range of products dedicated to Audio/ Video connections, to the recharge of technological devices (Smartphone, Tablet, etc.), and to the transmission of Wi-Fi data, enables to provide the desired level of entertainment and enjoyment.

SAFETY AT THE TOP

Protected shaver socket, step marker lamps for the night, and bathroom pull cords. Guarantee of maximum safety at any time during the stay.

DIMMABLE READING LAMP
(LIVINGLIGHT AIR)

DIGITAL THERMOSTAT
(LIVINGLIGHT AIR)

UP TO **30%** SAVINGS

DIGITAL TEMPERATURE PROBE WITH TOUCH TECHNOLOGY DISPLAY
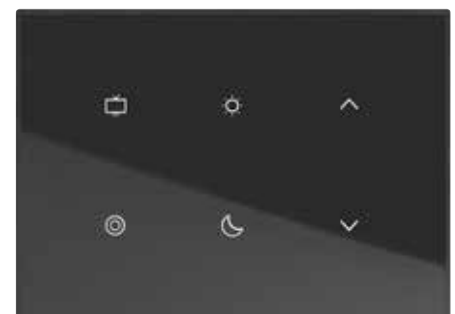
SCENARIO CONTROL IN TOUCH TECHNOLOGY

The management
of the rooms and
the common areas

THE SUPERVISION
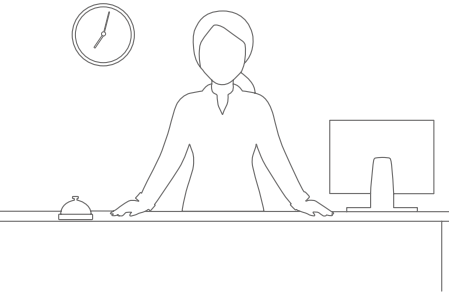
The Guest Room Management System
offer gives the possibility of supervising
and controlling in real time the status
of the rooms, and interact with them.

**Using the supervision software installed in the PC of the reception,
it is possible to interact with the following room parameters:**

- Presence of guests
- Temperature display and modification of the adjustment values
- Display, for each room, who is inside the room (customer or staff)
- Programmed scenario activation
- Alarm notifications and management of the contacts (window, door, …)

The software gives the possibility of managing and programming the key cards
with RFID (Mifare) technology to access the rooms and common areas.

bticino

ROOM

Camera 22

ROOM

ROOM

Camera 21

ROOM

HALL

RECEPTION
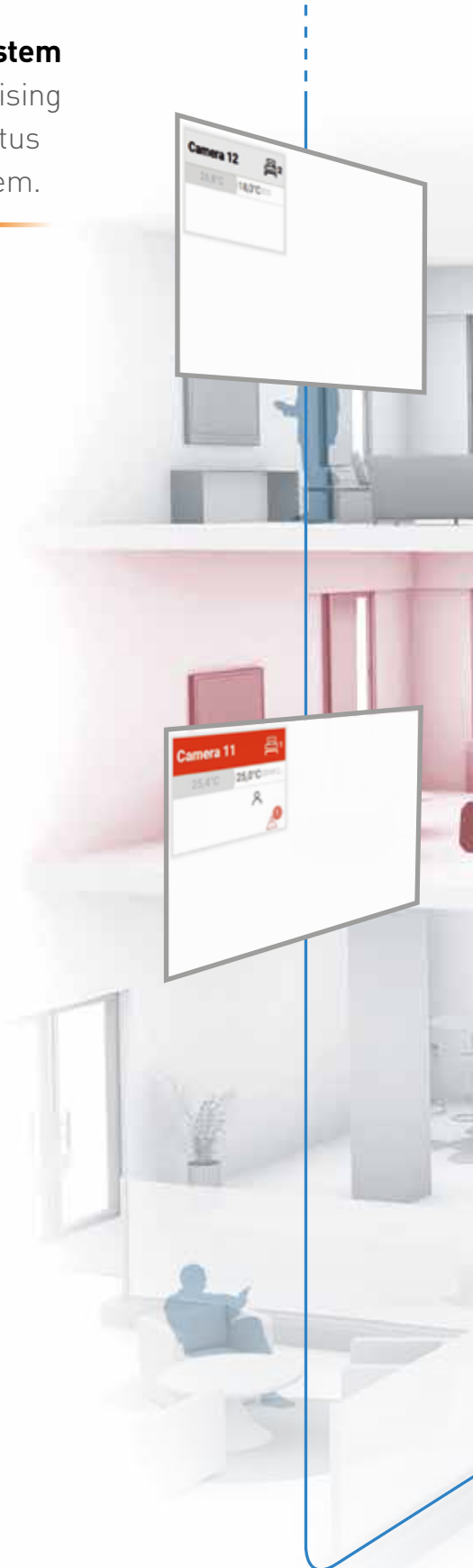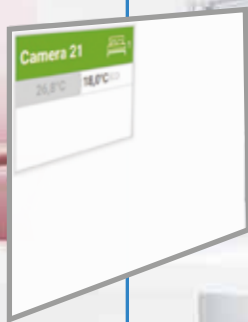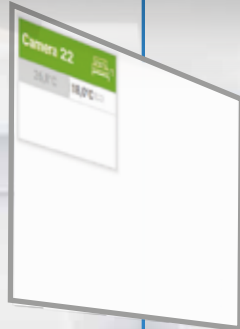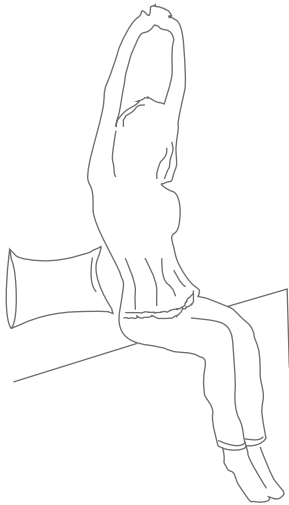
NEW PREMIUM OFFER
TOUCH INTERFACES

The offer of products for the design and realisation of hotel systems is expanded by a new range of touch technology customer interfaces, which allow guests to optimise and improve the way they manage the room.

— **NEW** more intuitive functions

— **MAXIMUM** appearance and icon customisation

— **AVAILABLE TO ORDER** directly from the catalogue in the two colours "black and white"; "magnesium and tech" grey versions only available to order using the customisation software.

— **CAN BE CONFIGURED** just like the other SCS-BUS products using the MyHOTEL_Suite software

OUTSIDE THE DOOR MANAGEMENT

OUTSIDE THE DOOR INDICATOR
with MUR and DND notification, bell pushbutton.
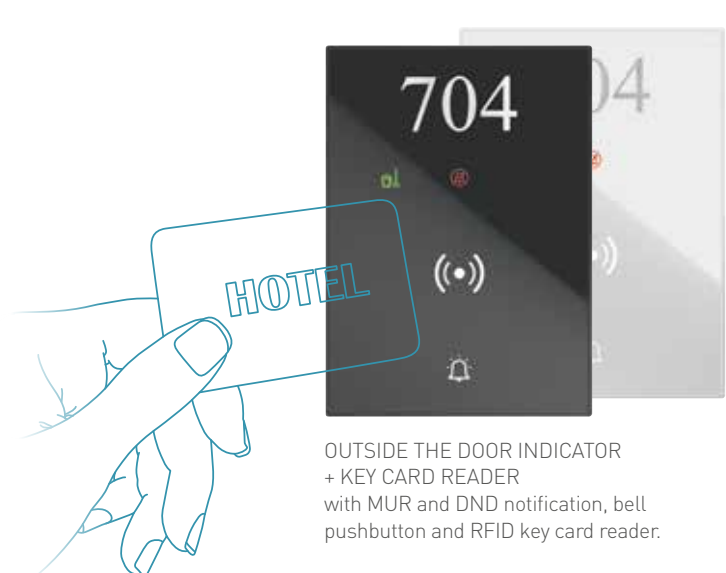
OUTSIDE THE DOOR INDICATOR
+ KEY CARD READER
with MUR and DND notification, bell pushbutton and RFID key card reader.

ROOM MANAGEMENT - KEY CARD SWITCH

KEY CARD SWITCH + READER - BASIC VERSION
in RSD technology with DND and MUR controls + scenario management.

KEY CARD SWITCH + READER - ADVANCED VERSION (*)
with RFID technology with DND and MUR controls, plus customisable scenario management based on the type of key card connected (staff or customer).

ROOM MANAGEMENT - CLIMATE AND SCENARIO CONTROL

DIGITAL TEMPERATURE PROBE WITH TOUCH TECHNOLOGY DISPLAY

DIGITAL TEMPERATURE PROBE WITH DISPLAY + 6 TOUCH CONTROLS

ROOM MANAGEMENT – SCENARIO CONTROL

2-SCENARIO CONTROL + DND AND MUR TOUCH CONTROLS
Example of controls:
- Wake up
- Sleep
- MUR (make up the room)
- DND (do not disturb)
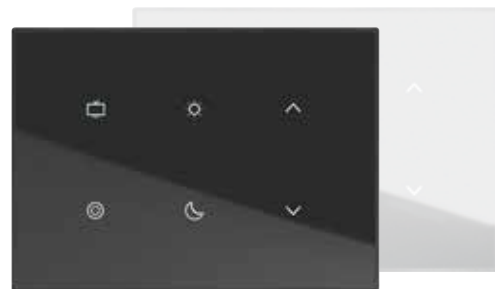
6-SCENARIO TOUCH CONTROL
Example of controls:
- TV
- General OFF
- Wake up
- Sleep
- Curtain opening
- Curtain closure

(*) NOTE: for availability please contact the sales force.

THE SOLUTION FOR
THE WHOLE HOTEL
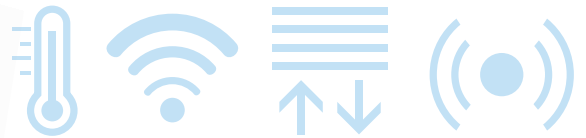
IN THE CORRIDOR - OUTSIDE THE DOOR

OUTSIDE THE DOOR INDICATOR with MUR and DND notification and traditional bell pushbutton.
(LIVINGLIGHT AIR)

OUTSIDE THE DOOR INDICATOR and RFID reader, with MUR and DND notification and traditional bell pushbutton.
(LIVINGLIGHT AIR)

OUTSIDE THE DOOR TOUCH INDICATOR with MUR and DND notification and Touch bell pushbutton.

OUTSIDE THE DOOR TOUCH INDICATOR and RFID key card reader, with MUR and DND notification and touch bell pushbutton.

KEY CARD
RFID (Mifare classic ISO14443 type A) technology, credit card format, to access the rooms or common areas.

INSIDE THE ROOM

KEY CARD SWITCH WITH KEY CARD READER
in basic or advanced version with RFID technology with DND and MUR controls. The advanced version allows the management of customisable scenarios based on the type of key card connected (staff or customer).

KEY CARD SWITCH
with possibility of RFID technology recognition, for the activation of the functions inside the room.
(LIVINGLIGHT AIR)

DND AND MUR CONTROL
DND (do not disturb)
MUR (make up the room).
(LIVINGLIGHT AIR)
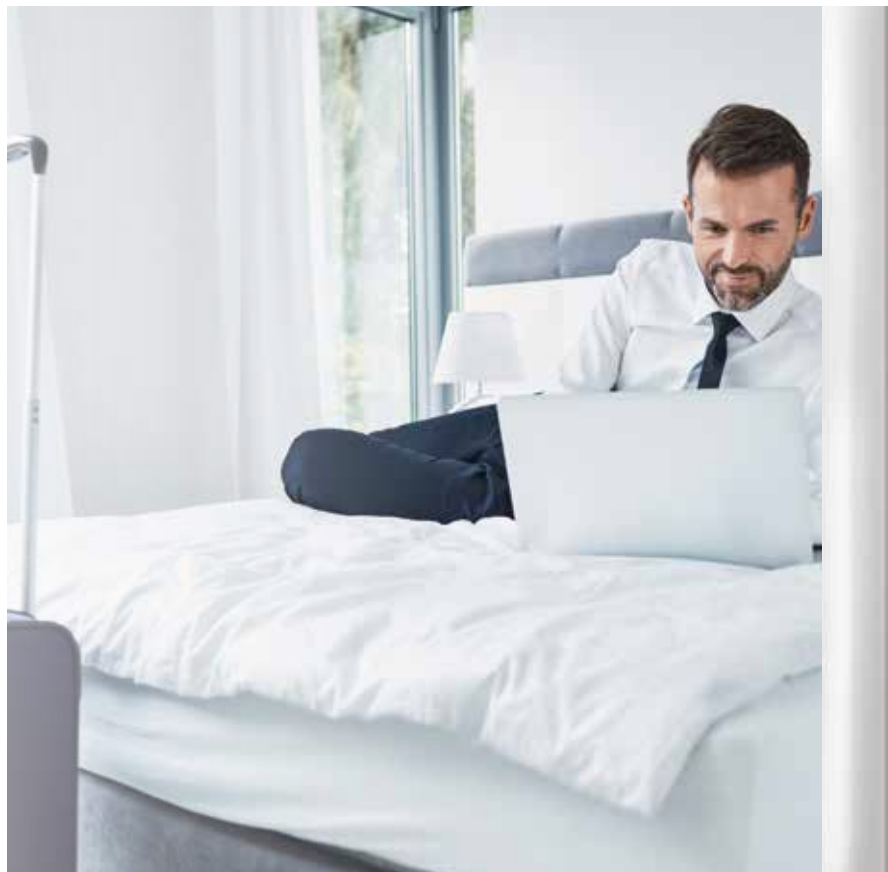
DIGITAL TEMPERATURE PROBE WITH DISPLAY + 6 TOUCH CONTROLS
with preset scenario icon

DIGITAL THERMOSTAT
to set and adjust the temperature simply and intuitively inside the room.
(LIVINGLIGHT AIR)

6-SCENARIO CONTROL IN TOUCH TECHNOLOGY

8 KEY CONTROL
to recall the scenarios (lighting, automation, climate, ...) inside the room.
(LIVINGLIGHT AIR)

THE SOLUTION FOR
THE WHOLE HOTEL

IP SCENARIO MODULE
manages and saves the scenarios (max. 50) of the room or common zone, and acts as interface with the rest of the system and the functions of the Hotel. It connects to the rest of the hotel using the Ethernet network (RJ45).

AT THE ROOM SWITCHBOARD

Some MODULAR DEVICES
for function management inside the rooms.

AT THE RECEPTION

SUPERVISION SOFTWARE

Using one or more PC, it is possible to control the status of the rooms with the corresponding notifications, and manage the available functions. The software also perform functions connected with the programming of the key cards.

2 types of license available:
- Management of up to 20 rooms or common areas
- Management of over 20 rooms or common areas

The key cards must have the following features:
- RFID Mifare classic ISO14443 type A

KEY CARD PROGRAMMER
to connect to the reception PC through USB connection.

IN THE MAIN TECHNICAL ROOM

IP SERVER
to be used in systems with over 100 rooms or common zones (over 100 MH201 installed).

CUSTOMIZATION OF THE PREMIUM OFFER
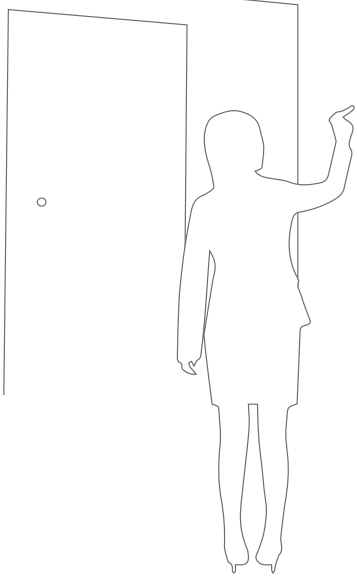
The catalogue offers a complete range of touch interfaces with icons and functions already set, in two different colours: **BLACK AND WHITE.**

For projects requiring something different, **using the customisation tool** it is possible to order a wide range of optional special customisations from BTicino. The tool is a **web-app** that after a guided procedure will generate a pdf "bill of materials" to be sent to the sales representative or the distributor to order the products.

The tool is available in several languages free of charge.

Follow the link to find out more:

🌐 www.uxforupscalehotel.legrand.com

WHAT CAN WE DO WITH THE CUSTOMISATION TOOL?

1 ➤ SELECT THE PRODUCT TO CUSTOMISE.

2 ➤ SELECT THE COVER PLATE COLOUR (BLACK) AND THE COLOUR OF THE COVER PLATE EDGE (GREY)

3 ❯ **SELECT THE DESIRED ICONS IN REPLACEMENT OF THE EXISTING ONES (DRAG&DROP).**

4 ❯ **POSSIBILITY OF ATTACHING THE HOTEL LOGO (.SVG OR .PNG FILE FORMAT)**

5 ❯ **SELECT THE TYPE OF INSTALLATION (WALL MOUNTED IN 503E BOX OR FLUSH MOUNTED)**

6 ❯ **VALIDATE THE CONFIGURATION**

CUSTOMIZATION OF THE PREMIUM OFFER
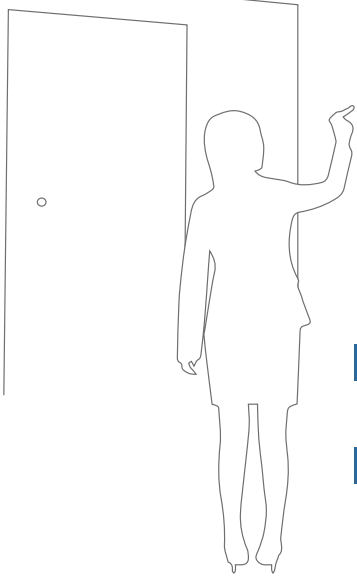
7 ► **ENTER THE QUANTITIES OF PRODUCTS TO ORDER**

8 ► **ADD ANY NOTES OR INDICATIONS FOR BTICINO**

9 ► **ADD OTHER PRODUCTS OR ISSUE THE ORDER FOR BTICINO**
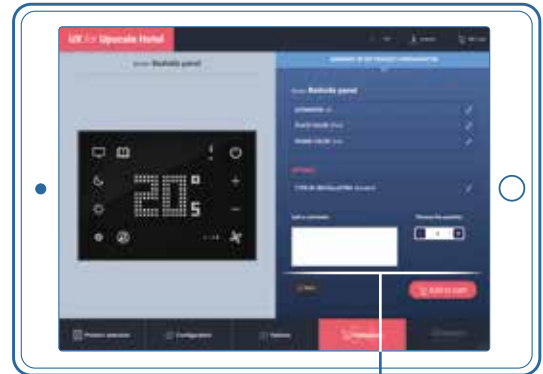
10 ► **FILL THE FORM WITH THE FOLLOWING DETAILS:**
- **Customer**
- **BTicino commercial references (FTC)**
- **Distributor**

11 ► **SEND THE INFORMATION TO BTICINO:** generate the pdf file, forward to BTicino your requirements and you will receive an offer.
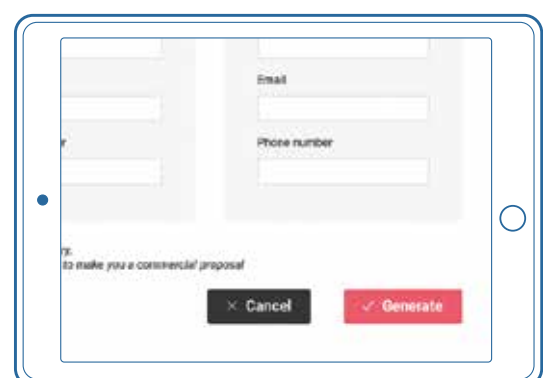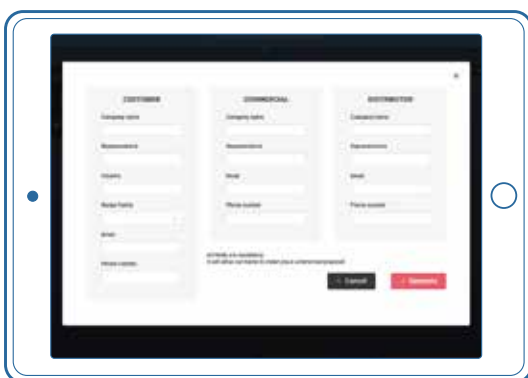
KEY CARDS CUSTOMIZATION

It is also possible to ask to BTicino for **customised key cards.**

Key card customisation is not possible using the tool, but must be requested through our sales representative.

Key card customisation

CUSTOMISATION OF TRADITIONAL COVER PLATES AND GLASS CONTROLS

White key card switch
with **Livinglight Air**
cover plate.

Key card switch available in three colours:
white, tech and anthracite.
The tech version is used together with the
Axolute elliptical cover plate.

To further improve the aesthetic value
of the offer, it is possible to customise
both the cover plates and the key
cards with the logo of the Hotel.

Anthracite 8-key control
used with the **Axolute**
cover plate

The **GLASS CONTROLS** can be customised
with symbols by means of silk screen printing

White glass **Axolute**
control with 6
capacitive touch keys.

**THESE CUSTOMISATIONS MUST BE REQUESTED
TO LEGRAND/BTICINO THROUGH A TECHNICAL/
COMMERCIAL REPRESENTATIVE.**

The SCS-BUS solution can be integrated with systems and products of other brands.

BTicino has developed and makes available the new **DRIVER MANAGER** integration platform, based on the F459 device and on various drivers.

It can manage systems or products of other brands.

INTEGRATION WITH OTHER BRAND SOLUTIONS

It is now possible, by means of the SCS-BUS devices to control, for example, the VRV, VRF and air conditioning systems of the main producers on the market.

The **DRIVER MANAGER** device can interface the SCS-BUS system with the systems of other brands by means of specific drivers tested in collaboration with the various companies.
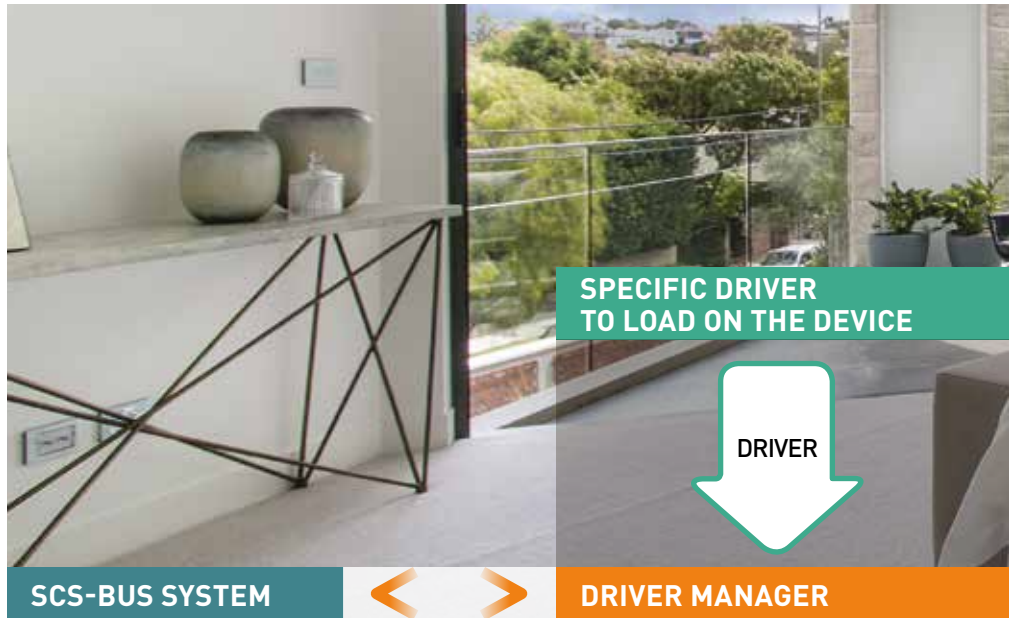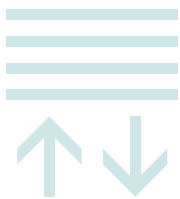
SPECIFIC DRIVER TO LOAD ON THE DEVICE

DRIVER

SCS-BUS SYSTEM   **DRIVER MANAGER**

F459

Contact the agency to check the feasibility of specific integrations and to request the licence needed to use the Driver manager.

< > **OTHER BRAND SOLUTIONS** **>**

- TEMPERATURE CONTROL
- AUTOMATION
- OTHER

EXAMPLES OF INTEGRATIONS WITH TEMPERATURE CONTROL:

- Management of the Fan-coil fan speed with inverter motor
- Integration of the Hitachi temperature control on Modbus
- Integration of the Mitsubishi Electric VRF temperature control
- Management of Olimpia Splendid internal units on Modbus protocol
- Integration of the Daikin temperature control on Modbus
- Management of VRV/VRF internal units using the CoolMasterNet universal Gateway
- Management of Daikin VRV internal units on Modbus protocol
- Management of Toshiba VRF internal units on Modbus protocol
- Management of LG VRF internal units on Modbus protocol
- Management of Mitsubishi Electric internal units on Modbus protocol
- Fujitsu General on Modbus protocol
- Management of floor pump activation

For more information please contact the branch.

Contents

PERFORMANCE AND
CONFIGURATION

THE HOTEL SUPERVISION SYSTEM MUST BE INSTALLED IN A DEDICATED LAN NETWORK OR IN A DEDICATED VLAN

SYSTEM PERFORMANCE:

- Number of zones (rooms and common areas) which can be made = 500 MAX.
- Number of supervision PC which can be installed = 10 MAX
- Install only one MH201 per zone (room or common area).
- Install only one F458 IP server on the same network in the case of systems with more than 100 zones
- Install up to 9 thermostats, 8 outside-door readers and one key card switch per room or common area
- Max 9 customised services (fridge, strongbox, smoke)
- All the new Touch interfaces (PREMIUM offer).

DEVICES:

- IP Server **F458**
- **MH201 IP** scenario module
- all the new **Touch interfaces** of the PREMIUM offer.

They must be configured using the **MyHOTEL_Suite** software, which can be downloaded free of charge from the website:

www.homesystems-legrandgroup.com

While all the other devices in SCS-BUS technology can be configured in both modes:

1) PHYSICAL CONFIGURATION

2) SOFTWARE CONFIGURATION

1. PHYSICAL CONFIGURATION

This is completed using the green and blue configurators, which must be connected to the appropriate housings found on the devices.

PHYSICAL CONFIGURATION
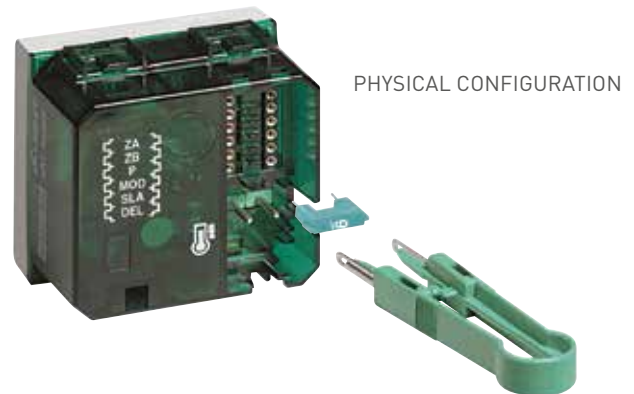
2. SOFTWARE CONFIGURATION

This is performed using a PC with the appropriate **MyHOTEL_Suite** application installed. This solution has the advantage of offering many more options when compared with the physical configuration.

SOFTWARE
CONFIGURATION

All the new advanced interfaces must be configured only using the software.

The software can be downloaded free of charge from the website:

www.homesystems-legrandgroup.com

Download the
software free of charge
(QR code)

"HOTELSUPERVISION"
SUPERVISION SOFTWARE

The **HotelSupervision** software has been purposely designed for the management and supervision of the hotels.

All the management operations can be performed from reception, from where it is possible to have a complete view of what happens in the individual rooms and the common areas.

COMPATIBILITY WITH OPERATING SYSTEMS

In order to check the compatibility of the **"Hotel Supervision"** software with the operating systems visit the dedicated site at the following link.

www.homesystems-legrandgroup.com/BtHomeSystems/ productDetail.action?productId=003

Download the desired version of the HotelSupervision software (QR code)

MAIN FUNCTIONS:

- Display the presence in the room, distinguishing between guests and staff.
- Temperature management with direct control of thermostats, but giving guests the possibility of adjusting the temperature within the set limits.
- Key card management with the possibility of limiting access to certain areas of the hotel and monitoring of movements using each key card.
- Control of different types of alarms and notifications from rooms or common areas.
- Control of DND or MUR type notifications (do not disturb and make up room).

The use of different icons and colours helps the operator to immediately identify the status of the room.

Hotel Supervision Server software can be activated using two types of license:

- **3544SW**
  Management and supervision of up to 20 rooms or common areas
- **3546SW**
  Management and supervision of over 20 rooms or common areas

⚠️

WARNING

A system can consist of up to 10 Pcs with the supervision software installed.
Hotel Supervision Server + Hotel Supervision Client must both only be installed on the 1st PC, while for the 2nd to 10th PC only Hotel Supervision Client is required.

HOTEL SUPERVISION: EXAMPLE SCREENS

ROOM DETAIL

MAXIMUM DISTANCES
AND ABSORPTIONS

In this chapter you will find all the details for correct installation of an SCS BUS system:

- SELV classification
- Maximum distances and absorptions
- Maximum number of configurable devices

For the purpose of the above calculations, refer to the **TECHNICAL DATA** found in the chapter **TECHNICAL SHEETS**.

In calculating the absorption it will be necessary to also consider the current available based on the length of the cable.

CLASSIFICAZIONE SELV

The Automation system belongs to the SELV (Safety Extra Low Voltage) class, as it is powered with □ double safety insulation independent devices not connected to the ground, and has a maximum operating voltage of 27 Vdc, in accordance with CEI EN 60065; it therefore can be compared to a SELV source as described at point 411.125 of CEI 64-8-4. Compliance with SELV classification is only guaranteed subject to full compliance with current installation regulations, and with the general installation regulations for the individual devices and cables making up the system outlined by BTicino.

MAXIMUM DISTANCES OF THE BUS CABLE AND ABSORPTIONS

The maximum number of devices that can be connected to the BUS depends on the total absorption of the same and the distance between the point of connection and the power supply. The power supply can supply up to 1200 mA or 600 mA; the maximum number of devices that can be installed will therefore depend on the sum of their individual absorptions.

During sizing comply with the following rules:

1 The connection length between the power supply and the furthest device must not exceed 250 m.

▭	Power supply
●	Device
─	Length of connection to the furthest device
▪	Junction box
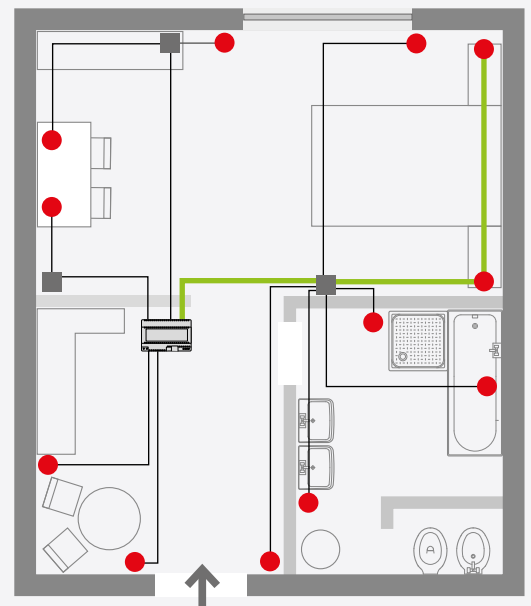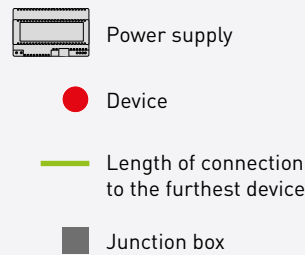
2 The total length of the connections must not exceed 500 m (cable extended).

▭	Power supply
●	Device
─	Connections
▪	Junction box
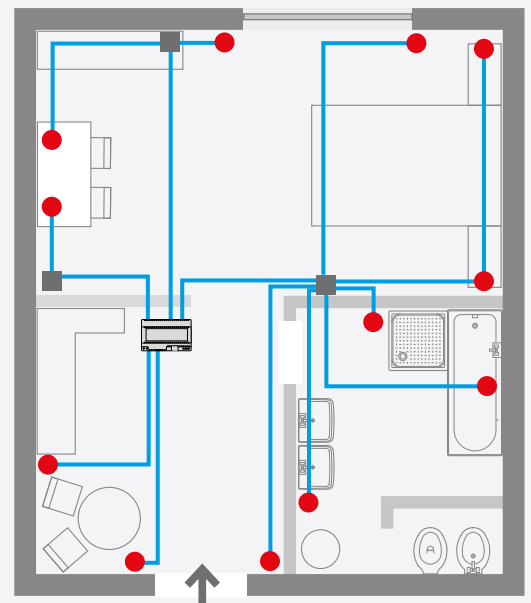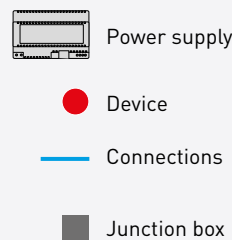
3 For optimum division of the currents on the bus line it is recommended that the power supply is installed in an intermediate position.

E46ADCN

E49
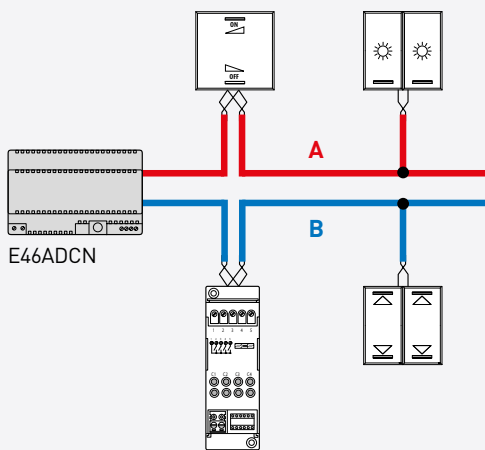
With power supply E46ADCN:

A = 250 m max
B = 250 m max
A + **B** = 500 m

Maximum current provided by the power supply: 1200 mA.
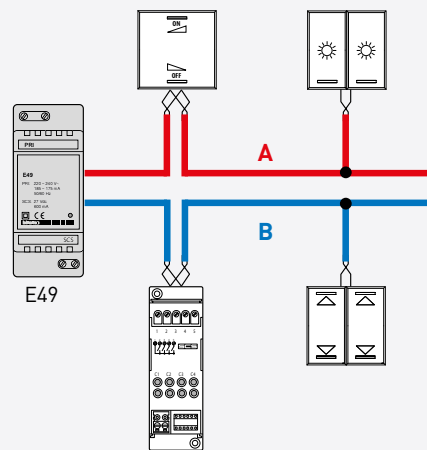
With power supply E49:

A = 250 m max
B = 250 m max
A + **B** = 500 m

Maximum current provided by the power supply: 600 mA.

NOTE: If a UTP5 cable is used in alternative to the L4669 BUS cable, distances are halved.

for more information on the design and installation of the SCS-BUS solutions see the specific MyHOME technical guide

www.catalogo-sfogliabile.bticino.it/myhomegb/

Consult the MyHOME specific catalogue (QR code)

MyHOME
automation

GUIDELINES FOR DESIGN AND INSTALLATION

bticino

MAXIMUM DISTANCES
AND ABSORPTIONS

MAXIMUM DISTANCES FOR THE CONNECTION OF ACTUATORS BASED ON THE LOAD

In order to correctly manage certain types of loads, it is necessary to comply with some installation requirements, applicable to all the actuators used.

Fluorescent lamps: the length of the connection cable between the actuator and the load must not be less than 3 m. Do not connect more than 15 actuators controlling this type of lamps to the same line.

Metal halide and sodium vapour lamps: in addition to the indications provided for fluorescent lamps, also pay attention to the instructions for use for these lamps (for example avoid switching on when hot), do not connect dimmers to the same line of these lamps, keep the BUS line and the power line for these types of lamps separated by at least one metre.

EXAMPLE OF CONNECTION WITH ITEM F411U1
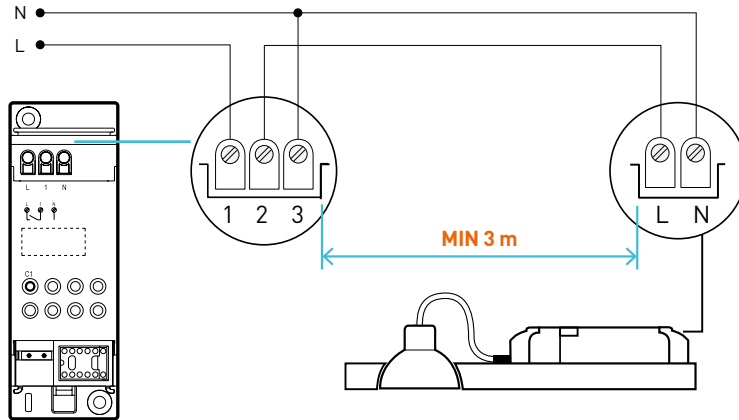
WARNING: Refer to the technical data listed in the technical sheets for each actuator.

Three-phase networks: in case of three-phase networks, check the balancing of the phases, and the quality of the network.

Failure to comply with the above requirements can compromise the correct operation of the devices.

MAXIMUM DISTANCE FOR THE CONNECTION OF THE CONTACT INTERFACE

The length of the connection between the interface (basic or in DIN module) and the traditional type device must not exceed 50 m. Several pushbuttons may be connected to the interface inputs.

MAXIMUM DISTANCES FOR THE CONNECTION OF THE CONTACT INTERFACE

Bathroom pull-cord pushbutton

BUS
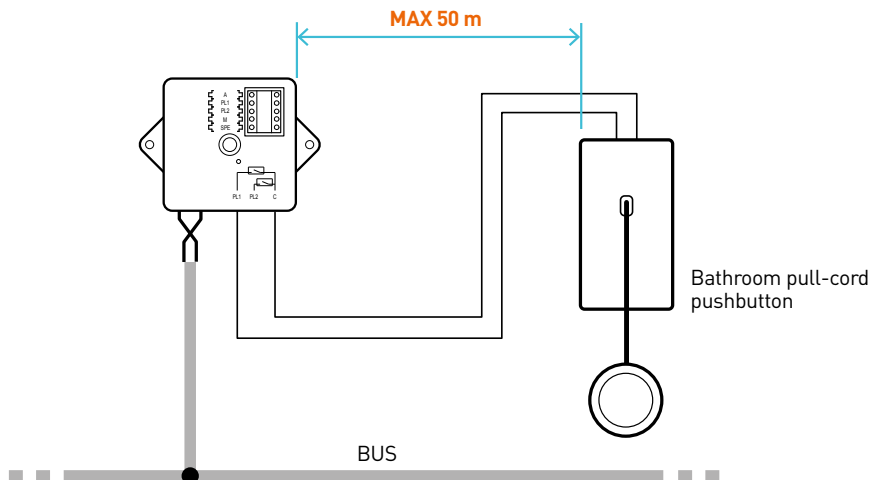
RULES ON THE VLAN
NETWORK INFRASTRUCTURE

Below suggestions are made on how to organise the VLAN networks inside the Ethernet network infrastructure in the hotel.

The services and devices in the hotel should be grouped into sub-networks (VLAN), as suggested in the example below.

VLAN = Virtual Local Area Network

INTERNET

DSL

ROUTER

OTHER AREAS

SWITCH LAYER 3 AREA 1

SWITCH LAYER 3 AREA 2

SWITCH LAYER 3 AREA 3

Other VLAN

VLAN 1	VLAN 2	VLAN 3	VLAN 4
Devices of the hotel system · MH201 · F458 · Supervision software	· IP telephones (VOIP) · PC · Printers · Various services · PMS software	· Wi-Fi data network · Wire data network	· CCTV safety system

VLAN 1	VLAN 2	VLAN 3	VLAN 4
Devices of the hotel system · MH 201	· IP telephones · PC · Printers · Various services · PMS software	· Wi-Fi data network · Wire data network	· CCTV safety system

VLAN network legend

VLAN 1 = virtual network dedicated to the Bticino/Legrand hotel devices

VLAN 2 = virtual network dedicated to the IP telephony (VOIP) and various services (printers, etc...)

VLAN 3 = virtual network dedicated to the distribution of the WiFi and wired "Internet" signal

VLAN 4 = virtual network dedicated to safety (CCTV, etc...)

EXAMPLE OF A NETWORK INFRASTRUCTURE IN A HOTEL
WITH SUBDIVISION IN VLAN

ROOM 4

IP telephone

VLAN 2

VLAN 3

RJ45 data network

704

BUS/SCS

VLAN 1

Access point for floor Wi-Fi

VLAN 3

2ND FLOOR

2ND FLOOR

ROOM 4

IP telephone

VLAN 2

VLAN 3

RJ45 data network

127

DND   MUR

BUS/SCS

VLAN 1

Access point for floor Wi-Fi

VLAN 3

1ST FLOOR

1ST FLOOR

TECHNICAL ROOM

INTERNET

DSL

IP Server (over 100 zones)

VLAN 4

VLAN 1

TVCC-IP camera

VLAN 4

TVCC-IP camera

Router

(backbone 1)

(backbone 2)

(backbone 3)

Interface PMS

VLAN 2

T FLOOR

T FLOOR

32

OTHER FLOORS

Switch layer 3
area 2

VLAN 3

VLAN 2

RJ45 data
network

IP telephone

VLAN 1

704

TVCC-IP
camera

BUS/SCS

ROOM 3

2ND FLOOR

2ND FLOOR

Switch layer 3
area 1

VLAN 3

VLAN 2

RJ45 data
network

IP telephone

VLAN 1

DND   MUR

127

TVCC-IP
camera

BUS/SCS

ROOM 3

1ST FLOOR

1ST FLOOR

VLAN 1

Switch layer 3
area Ø

VLAN 2

Supervision PC

Printer

Access point
for floor Wi-Fi

VLAN 3

IP telephone

RECEPTION

T FLOOR

T FLOOR

RULES ON THE ETHERNET
NETWORK INFRASTRUCTURE

THREE DIFFERENT DIAGRAMS, WITH DIFFERENT SYSTEM TYPES OF ETHERNET NETWORK
DEPENDING ON THE NUMBER OF ROOMS AND AREAS TO BE CONTROLLED AND THE
MONITORING STATIONS IN RECEPTION, ARE SUPPLIED BELOW.

DIAGRAM 1

**Type of system up to 100 zones (rooms or common areas)
and a supervision PC in Reception and PMS software*.**

⚠️

**NOTES FOR THE NETWORK
ADMINISTRATORS:**

Automatic device search
procedures (based on UPnP),
for both MH201 and Supervision
Software, are associated with
this topology. These allow
the association of each area
gateway to its own ID.
In this case the network
administrator must supply
an automatic configuration
service of the hosts in network
on the BTicino/Legrand VLAN
(recommended solution), or
explicitly choose to use the
APIPA protocol, isolating the
Legrand VLAN with the other
network sections.

Hotel Rooms

ROOM 301 — Switch layer 3 — ROOM 310
MH201 — MH201

**＊The PMS software
IS OPTIONAL**

ROOM 201 — Switch layer 3 — ROOM 210
MH201 — MH201

ROOM 101 — Switch layer 3 — ROOM 110
MH201 — MH201

RECEPTION

Hotel management
supervision software

PMS*
interface

Switch layer 3

Layer 3 switch or Router

Ethernet Network

Dedicated BTicino/Legrand VLAN

DIAGRAM
2

⚠️

NOTES FOR THE NETWORK ADMINISTRATORS:

As the number of rooms increases the functions of the UPnP protocol become inefficient.
Consequently the network administrator must make sure that there are no DHCP/DNS services on the BTicino/Legrand VLAN. These services will be supplied by F458. The maximum number of rooms supported in this diagram is 500.

Type of system between 100 and 500 zones (rooms or common areas) and a supervision PC in Reception and PMS software*.

Hotel Rooms

ROOM 400   *ROOM 450*

Switch layer 3

MH201   MH201

ROOM 300   *ROOM 350*

Switch layer 3

MH201   MH201

ROOM 100   *ROOM 150*

Switch layer 3

MH201   MH201

* The PMS software IS OPTIONAL

RECEPTION

Hotel management supervision software

PMS* interface

Switch layer 3

Layer 3 switch or Router

230 V

Power supply 346020

IP SERVER F458

Ethernet Network

Dedicated BTicino/Legrand VLAN
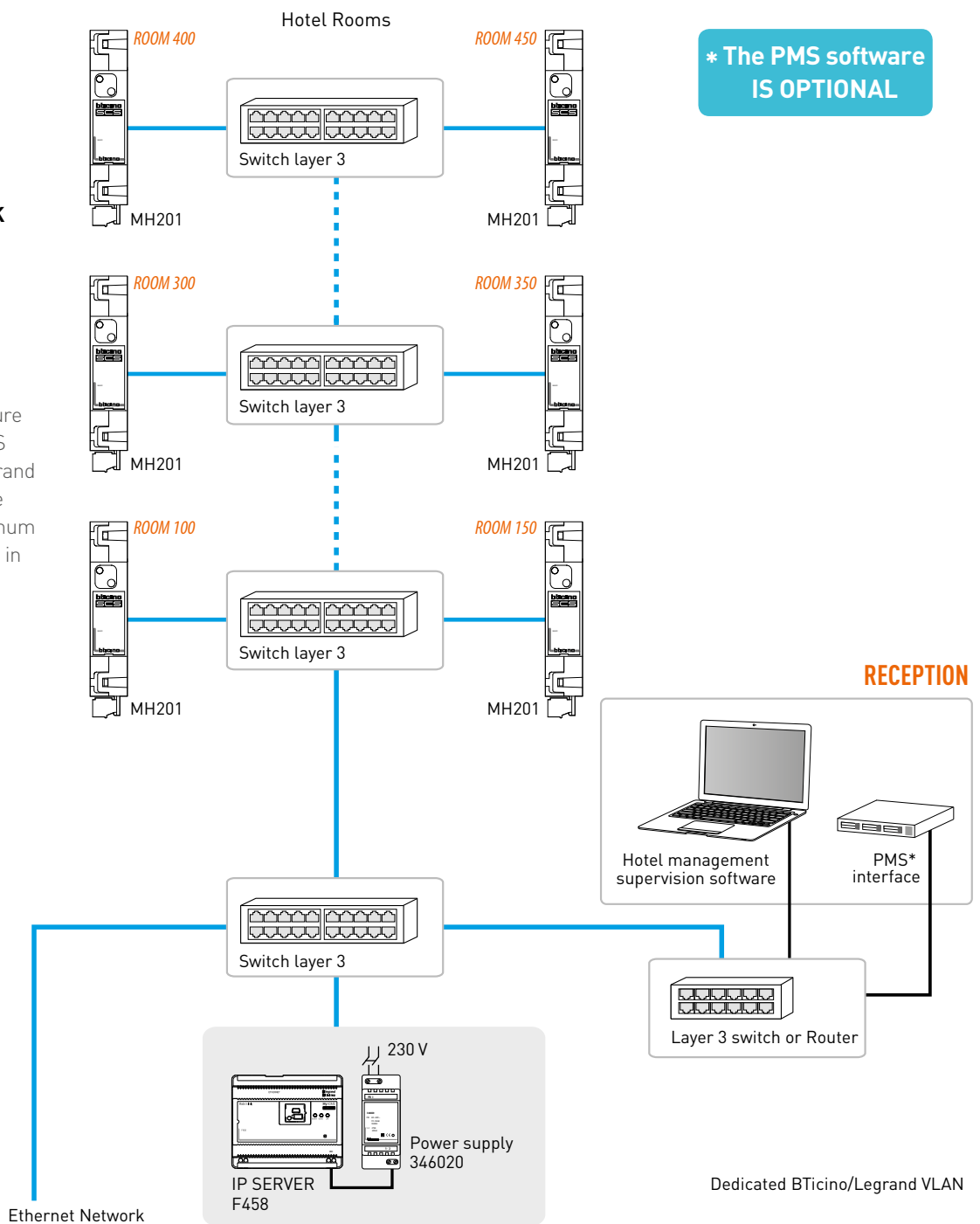
RULES ON THE ETHERNET
NETWORK INFRASTRUCTURE

DIAGRAM
3

Type of system up to 500 areas (rooms or common areas) and 10 supervision PCs and PMS software*.

⚠️

NOTES FOR THE NETWORK ADMINISTRATORS:

As the number of rooms increases the functions of the UPnP protocol become inefficient.
Consequently the network administrator must make sure that there are no DHCP/DNS services on the BTicino/Legrand VLAN. These services will be supplied by F458. The maximum number of rooms supported in this diagram is 500.

Hotel Rooms

ROOM 400

ROOM 450

Switch layer 3

MH201

MH201

ROOM 300

ROOM 350

Switch layer 3

MH201

MH201

ROOM 100

ROOM 150

Switch layer 3

MH201

MH201

Switch layer 3

230 V

Power supply
346020

IP SERVER
F458

Ethernet Network

*** The PMS software
IS OPTIONAL**

RECEPTION

10th PC with Hotel
Supervision software

1st PC
with Hotel
Supervision
software

2st PC
with Hotel
Supervision
software

PMS
interface

Layer 3 switch or Router

Dedicated BTicino/Legrand VLAN
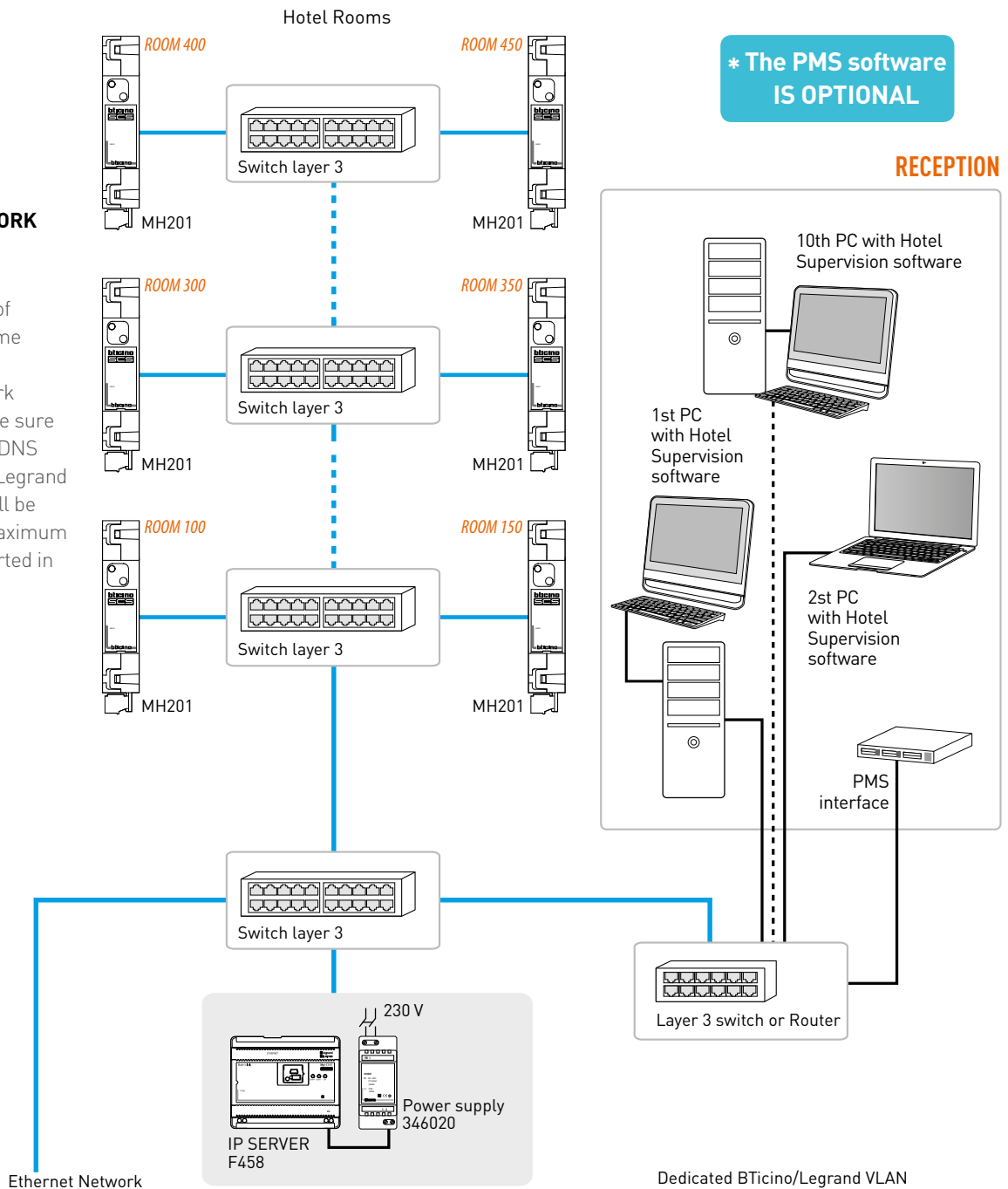
TYPICAL WIRING DIAGRAM FOR
HOTEL ROOM AND COMMON AREAS

THE TYPICAL WIRING DIAGRAMS TO MAKE SYSTEMS IN HOTELS AND B&B OR
IN FARM TOURISM ARE PRESENTED IN THE FOLLOWING PAGES.

The diagrams presented are:

- **Basic wiring diagram – stand alone**
- **Advanced wiring diagrams for centralised systems and with the supervision software**
- **Section with the variants**

Inside the room are the following functions:

- Courtesy light
- Entrance door open control
- Refrigerator door open control
- Safe open control
- Bathroom alarm

- Entrance door bell
- Entrance door electric door lock control
- Air conditioning system Eco function
- Remote switch function

LEGEND

Item	Description
E49	Power supply
F91/12/24	Transformer
F411U1	DIN module 1 relay actuator
F411U2	DIN module 2 relay actuator
F411/4	DIN module 4 relay actuator
F428	DIN module contact interface
F430R8	Air conditioning actuator
F430/4	DIN module 4 relay actuator for temperature control
FT1A2N230	Room remote switch

Arteor

Item	Description
0 675 66 5 727 36 5 722 36	Transponder key card switch
0 675 91	Key card reader outside the door and indicators
0 675 92	8 key scenario control
0 675 93	DND and MUR controls
0 674 59	Thermostat with display
MH201	Scenario module IP
3477	Basic contact interface
3511	Magnetic sensors

Touch Controls

Item	Description
FL4650	outside the door indicator
FL4651	outside the door indicator + key card reader
FL4648	Basic key card switch
FL4649	Advanced key card switch with key card recognition (key cards programmed either as staff or guests).
FL4653	Bedhead control, thermostat with display + 4-scenario control
FL4654	Temperature probe

NOTES

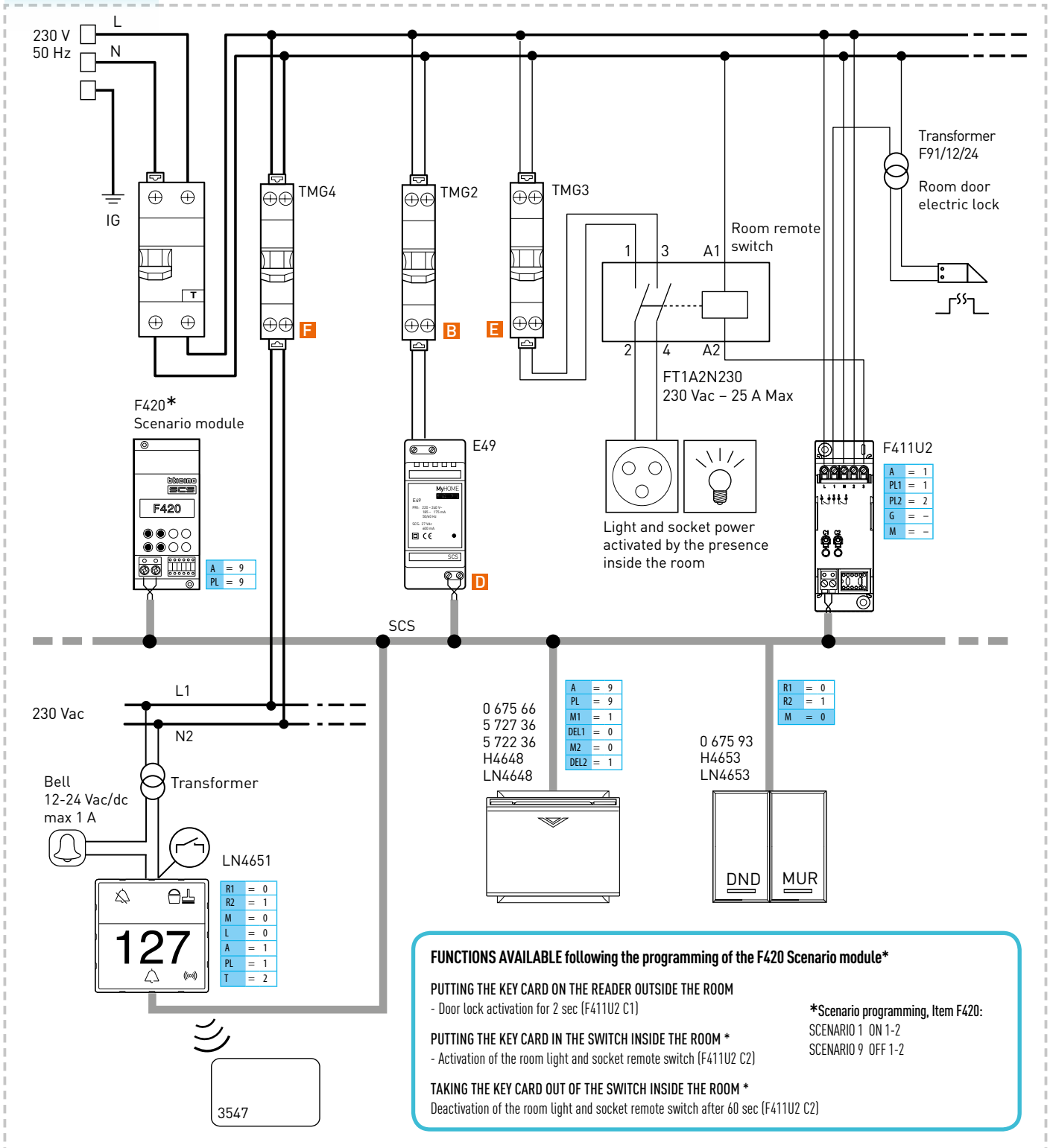| Important notes	
A	The general switch GS (TM+EL) must be selected based on the absorption of the services installed.
B	The TM switch must be selected based on the power supply used.
C E F	The TM switch must be selected based on the loads connected.
D	If the current supplied by the E49 is not sufficient to power the SCS system, it is possible to use the E46ADCN power supply.
G	The actuator to be used depends on the type of air conditioning system installed.
H	In alternative, it is also possible to only use one actuator with 4 conduits (F411/4) instead of the two: F411U2 and F411U1. (For the relay contact load capacity check the power consumption)
I	Only use the most suitable sensor for the mechanical application. See the specific catalogue.
L	The devices to carry out the required functions must be configured using the MyHOTEL_Suite software.
M	The room identification number must be saved in the MH201 during the configuration.

⚠️

NOTE FOR DESIGNER:

- The devices listed in the legend refer to the **Livinglight** series and the Touch controls. For all the other settings, refer to the catalogue section.
- The new Touch controls can only be configured using the configuration software.

TYPICAL DIAGRAM OF A BASIC ROOM: STAND ALONE SOLUTION

DIAGRAM 1

Controls with Livinglight or Axolute.

230 V 50 Hz
L
N
IG
TMG4 — F
TMG2 — B
TMG3 — E

Transformer F91/12/24
Room door electric lock

F420* Scenario module

F420

| A | = 9 |
| PL | = 9 |

E49

MyHOME
E49
PRI: 220 – 240 V~
180 – 175 mA
50/60 Hz
SCS: 27 Vdc
600 mA
SCS
D

Room remote switch

| 1 | 3 | A1 |
| 2 | 4 | A2 |

FT1A2N230
230 Vac – 25 A Max

Light and socket power activated by the presence inside the room

F411U2

A	= 1
PL1	= 1
PL2	= 2
G	= –
M	= –

SCS

230 Vac
L1
N2

Bell 12-24 Vac/dc max 1 A

Transformer

LN4651

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

127

3547

0 675 66
5 727 36
5 722 36
H4648
LN4648

A	= 9
PL	= 9
M1	= 1
DEL1	= 0
M2	= 0
DEL2	= 1

0 675 93
H4653
LN4653

R1	= 0
R2	= 1
M	= 0

DND   MUR

FUNCTIONS AVAILABLE following the programming of the F420 Scenario module*

PUTTING THE KEY CARD ON THE READER OUTSIDE THE ROOM
- Door lock activation for 2 sec (F411U2 C1)

PUTTING THE KEY CARD IN THE SWITCH INSIDE THE ROOM *
- Activation of the room light and socket remote switch (F411U2 C2)

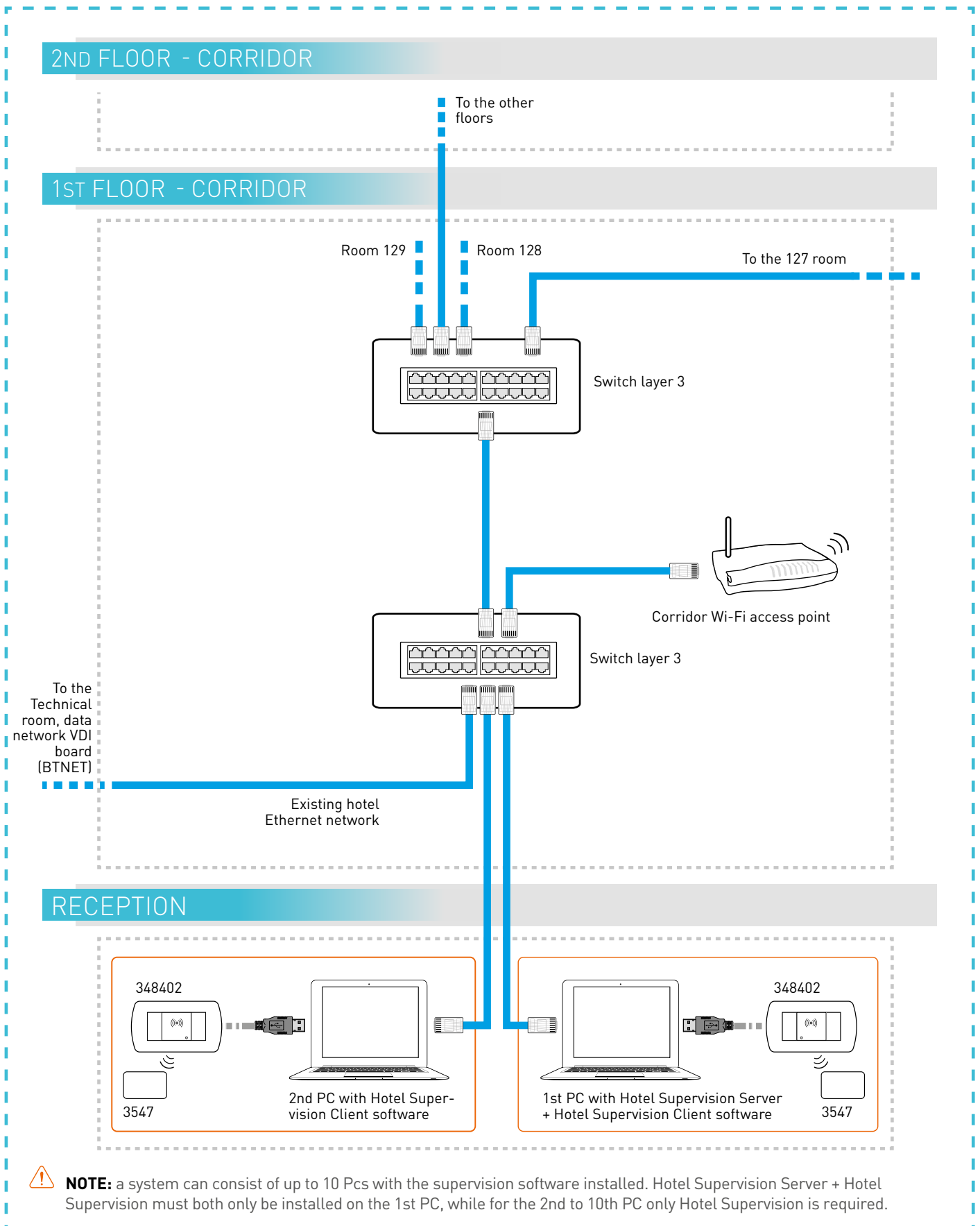**TAKING THE KEY CARD OUT OF THE SWITCH INSIDE THE ROOM ***
Deactivation of the room light and socket remote switch after 60 sec (F411U2 C2)

*Scenario programming, Item F420:
SCENARIO 1 ON 1-2
SCENARIO 9 OFF 1-2

TYPICAL DIAGRAM OF THE ETHERNET
INFRASTRUCTURE IN A HOTEL

2ND FLOOR - CORRIDOR

To the other floors

1ST FLOOR - CORRIDOR

Room 129   Room 128   To the 127 room

Switch layer 3

Corridor Wi-Fi access point

Switch layer 3

To the Technical room, data network VDI board (BTNET)

Existing hotel Ethernet network

RECEPTION

348402

3547

2nd PC with Hotel Supervision Client software

1st PC with Hotel Supervision Server + Hotel Supervision Client software

348402

3547

⚠ **NOTE:** a system can consist of up to 10 Pcs with the supervision software installed. Hotel Supervision Server + Hotel Supervision must both only be installed on the 1st PC, while for the 2nd to 10th PC only Hotel Supervision is required.
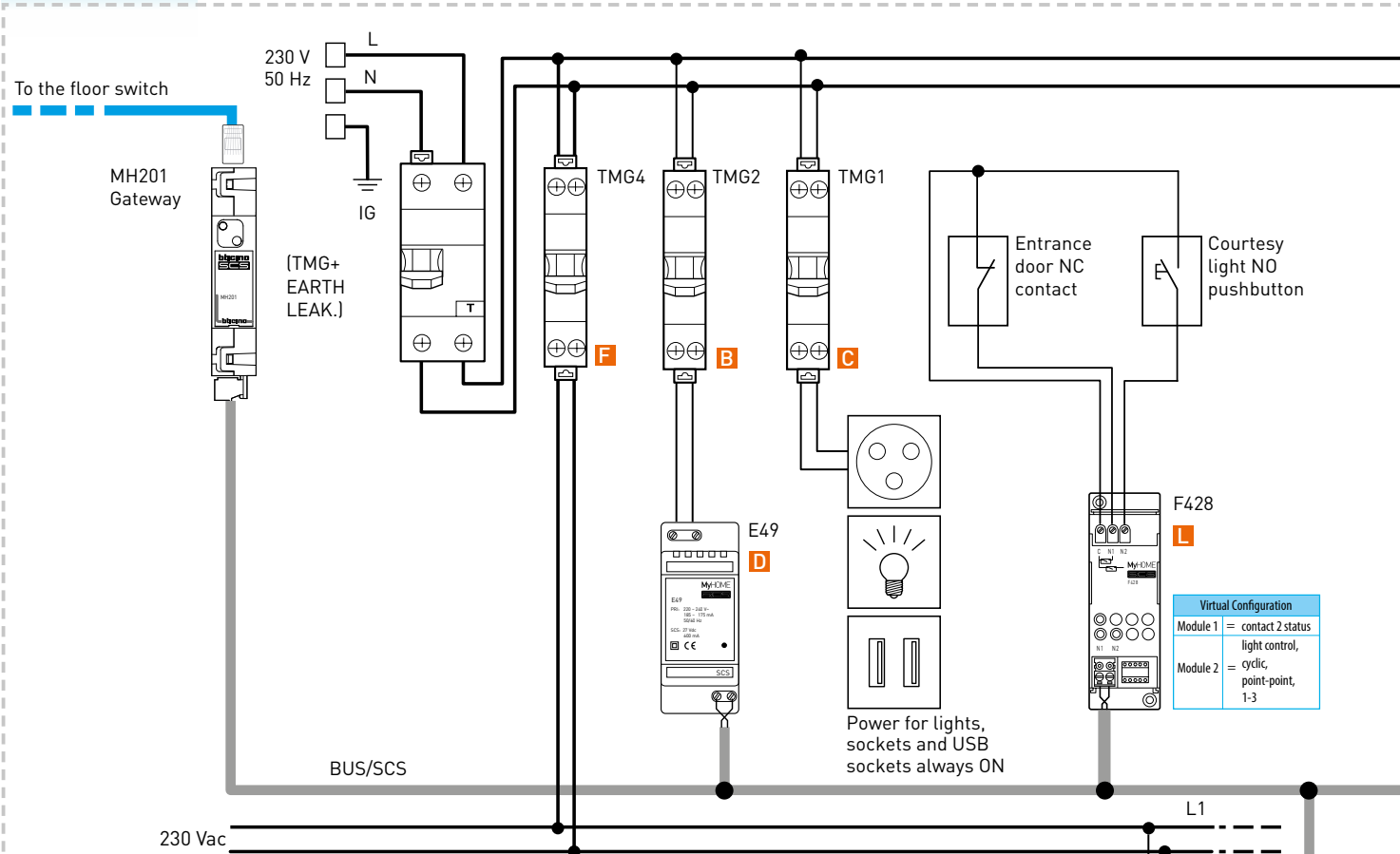
TYPICAL ROOM DIAGRAM:
CENTRALISED SOLUTION WITH TRADITIONAL ELECTRIC SYSTEM

DIAGRAM

2

Controls with Livinglight or Axolute.

To the floor switch

230 V
50 Hz

L

N

MH201
Gateway

IG

(TMG+ EARTH LEAK.)

TMG4

TMG2

TMG1

F

B

C

Entrance door NC contact

Courtesy light NO pushbutton

E49

D

F428

L

Power for lights, sockets and USB sockets always ON

Virtual Configuration		
Module 1	=	contact 2 status
Module 2	=	light control, cyclic, point-point, 1-3

BUS/SCS

230 Vac

L1

N2

Bell outside the door 12-24 Vac/dc max 1 A

Transformer F91/12/24

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

127

0 675 91
H4651
LN4651

3547

Example of scenarios that can be set in the MH201 scenario module:

PUTTING THE KEY CARD ON THE READER OUTSIDE THE ROOM
- Door lock activation for 2 sec (F411/4 C1)
- switching on the courtesy light for 120sec (F411/4 C3)

OPEN/CLOSE THE ROOM ENTRANCE DOOR
- Activation of ¨Warning – Door¨ indication after 12 sec of opening the door without (on SW). Event saved in the room event history
- Automatic reset when the door is closed again

PUTTING THE KEY CARD IN THE SWITCH INSIDE THE ROOM *
- Activation of the room light and socket remote switch (F411/4 C2)
- Setting Comfort temperature >only if window closed<
- Unlock thermostat keys to adjust temperature and fan speed >only if window closed<

TAKING THE KEY CARD OUT OF THE SWITCH INSIDE THE ROOM *
- ECO temperature setting (THERMAL PROTECTION or OFF)
- Deactivation of the room light and socket remote switch after 30 sec (F411/4 C2)
- Switching off the courtesy light after 30sec (F411/4 C3)
- Thermostat key block

OPEN ROOM WINDOW
- ECO temperature setting (THERMAL PROTECTION or OFF)
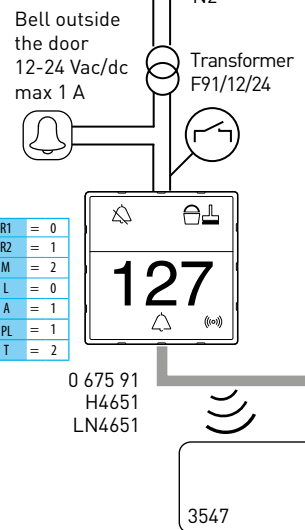- Thermostat key block

CLOSE ROOM WINDOW
- If room occupied: setting ON (COMFORT) temperature and thermostat key unlock
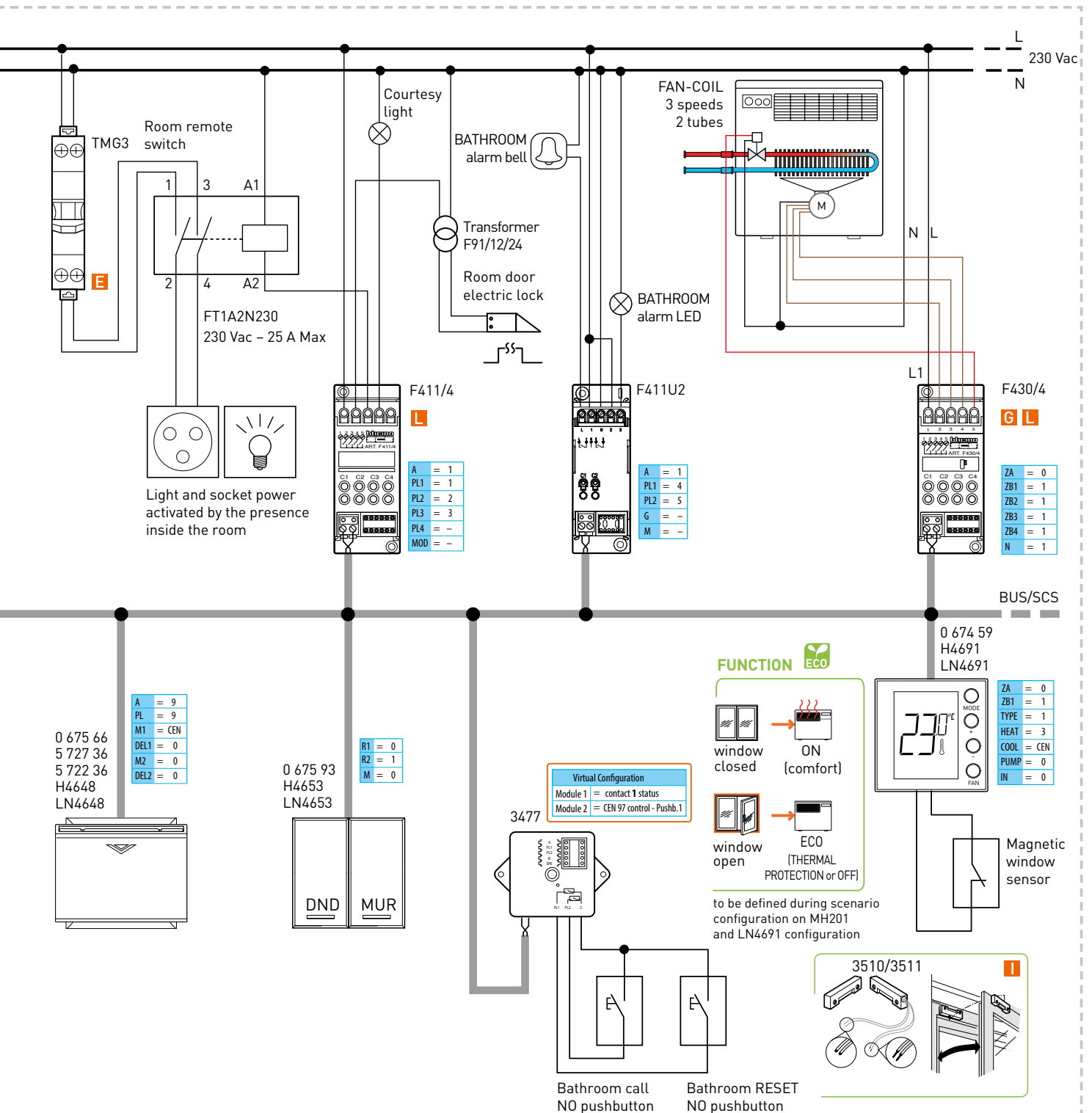- If room not occupied: setting ECO temperature (THERMAL PROTECTION or OFF) and thermostat key lock

COURTESY LIGHT MANAGEMENT USING THE PUSHBUTTON INSIDE THE ROOM (NT4005+F428)
- If there is a key card, step/step management of the courtesy light (F411/4 C3)
- If there is no key card the switching on is timed for 120 sec (F411/4 C3); if in the meantime the key card is put into the switch, the light remains on steadily

BATHROOM SOS ALARM
- Activation of ¨Alarm – SOS¨ (on SW) and backlighting flashing reader outside the room (LN/H4651)
- Manual reset from SW. The local manual reset (CEN control) can be set with different MH201 programming from traditional control or SCS home automation
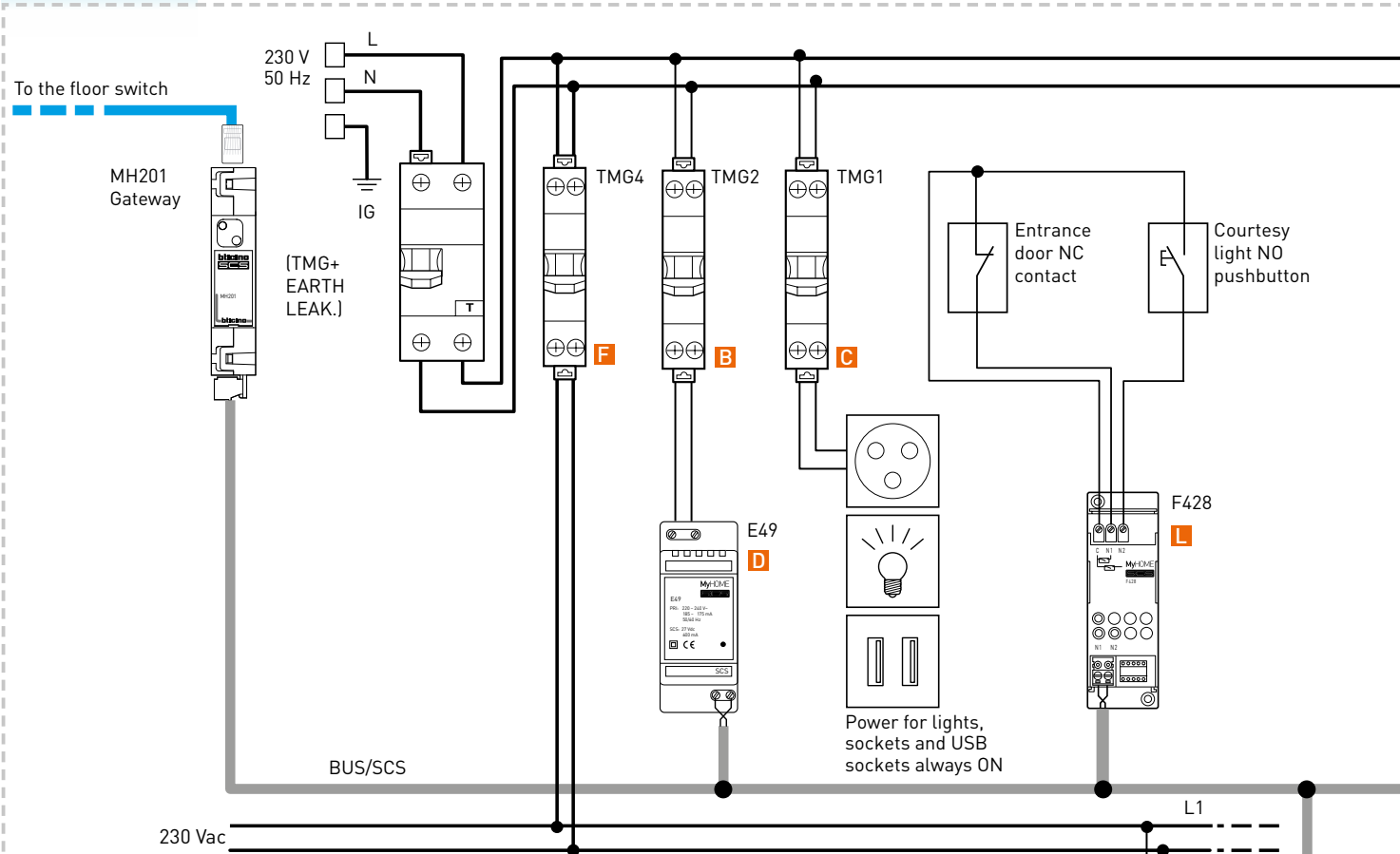
TMG3

E

Room remote switch

1 3 A1

2 4 A2

FT1A2N230
230 Vac – 25 A Max

Light and socket power activated by the presence inside the room

Courtesy light

BATHROOM alarm bell

Transformer F91/12/24

Room door electric lock

BATHROOM alarm LED

FAN-COIL
3 speeds
2 tubes

M

N   L

L   230 Vac
N

L1

F411/4 L

A	=	1
PL1	=	1
PL2	=	2
PL3	=	3
PL4	=	–
MOD	=	–

C1 C2 C3 C4

F411U2

A	=	1
PL1	=	4
PL2	=	5
G	=	–
M	=	–

F430/4 G L

ZA	=	0
ZB1	=	1
ZB2	=	1
ZB3	=	1
ZB4	=	1
N	=	1

C1 C2 C3 C4

BUS/SCS

0 674 59
H4691
LN4691

0 675 66
5 727 36
5 722 36
H4648
LN4648

A	=	9
PL	=	9
M1	=	CEN
DEL1	=	0
M2	=	0
DEL2	=	0

0 675 93
H4653
LN4653

R1	=	0
R2	=	1
M	=	0

DND   MUR

3477

FUNCTION ECO

window closed → ON (comfort)

window open → ECO (THERMAL PROTECTION or OFF)

Virtual Configuration	
Module 1	= contact **1** status
Module 2	= CEN 97 control - Pushb.1

to be defined during scenario configuration on MH201 and LN4691 configuration

Bathroom call
NO pushbutton

Bathroom RESET
NO pushbutton

ZA	=	0
ZB1	=	1
TYPE	=	1
HEAT	=	3
COOL	=	CEN
PUMP	=	0
IN	=	0

Magnetic window sensor

3510/3511 I

TYPICAL ROOM DIAGRAM:
CENTRALISED SOLUTION WITH TRADITIONAL ELECTRIC SYSTEM

DIAGRAM

3

Touch interfaces and controls.

To the floor switch

MH201 Gateway

230 V 50 Hz

L

N

IG

(TMG+ EARTH LEAK.)

TMG4

TMG2

TMG1

F

B

C

Entrance door NC contact

Courtesy light NO pushbutton

E49

D

F428

L

Power for lights, sockets and USB sockets always ON

BUS/SCS

230 Vac

L1

N2

Bell outside the door 12-24 Vac/dc max 1 A

Transformer F91/12/24

127

0 487 76
0 487 86

3547

Example of scenarios that can be set in the MH201 scenario module:

PUTTING THE KEY CARD ON THE READER OUTSIDE THE ROOM
- Door lock activation for 2 sec (F411/4 C1)
- Switching on the courtesy light for 120sec (F411/4 C3)

OPEN/CLOSE THE ROOM ENTRANCE DOOR
- Activation of ¨Warning – Door¨ indication after 12 sec of opening the door without (on SW). Event saved in the room event history
- Automatic reset when the door is closed again

PUTTING THE KEY CARD IN THE SWITCH INSIDE THE ROOM
- Activation of the room light and socket remote switch (F411/4 C2)
- Setting Comfort temperature >only if window closed<
- Unlock thermostat keys to adjust temperature and fan speed >only if window closed<

TAKING THE KEY CARD OUT OF THE SWITCH INSIDE THE ROOM
- ECO temperature setting (PROTEZIONE TERMICA o OFF) Deactivation of the room light and socket remote switch after 30 sec (F411/4 C2)
- Switching off the courtesy light after 30sec (F411/4 C3)
- Thermostat key block

OPEN ROOM WINDOW
- ECO temperature setting (THERMAL PROTECTION or OFF)
- Thermostat key block

CLOSE ROOM WINDOW
- If room occupied: setting ON (COMFORT) temperature and thermostat key unlock
- If room not occupied: setting ECO temperature (THERMAL PROTECTION or OFF) and thermostat key lock

COURTESY LIGHT MANAGEMENT USING THE PUSHBUTTON INSIDE THE ROOM (NT4005+F428)
- If there is a key card, step/step management of the courtesy light (F411/4 C3)
- If there is no key card the switching on is timed for 120 sec (F411/4 C3); if in the meantime the key card is put into the switch, the light remains on steadily

BATHROOM SOS ALARM
- Activation of ¨Alarm – SOS¨ (on SW) and backlighting flashing reader outside the room (LN/H4651)
- Manual reset from SW. The local manual reset can be set with different MH201 programming from traditional control or SCS home automation.
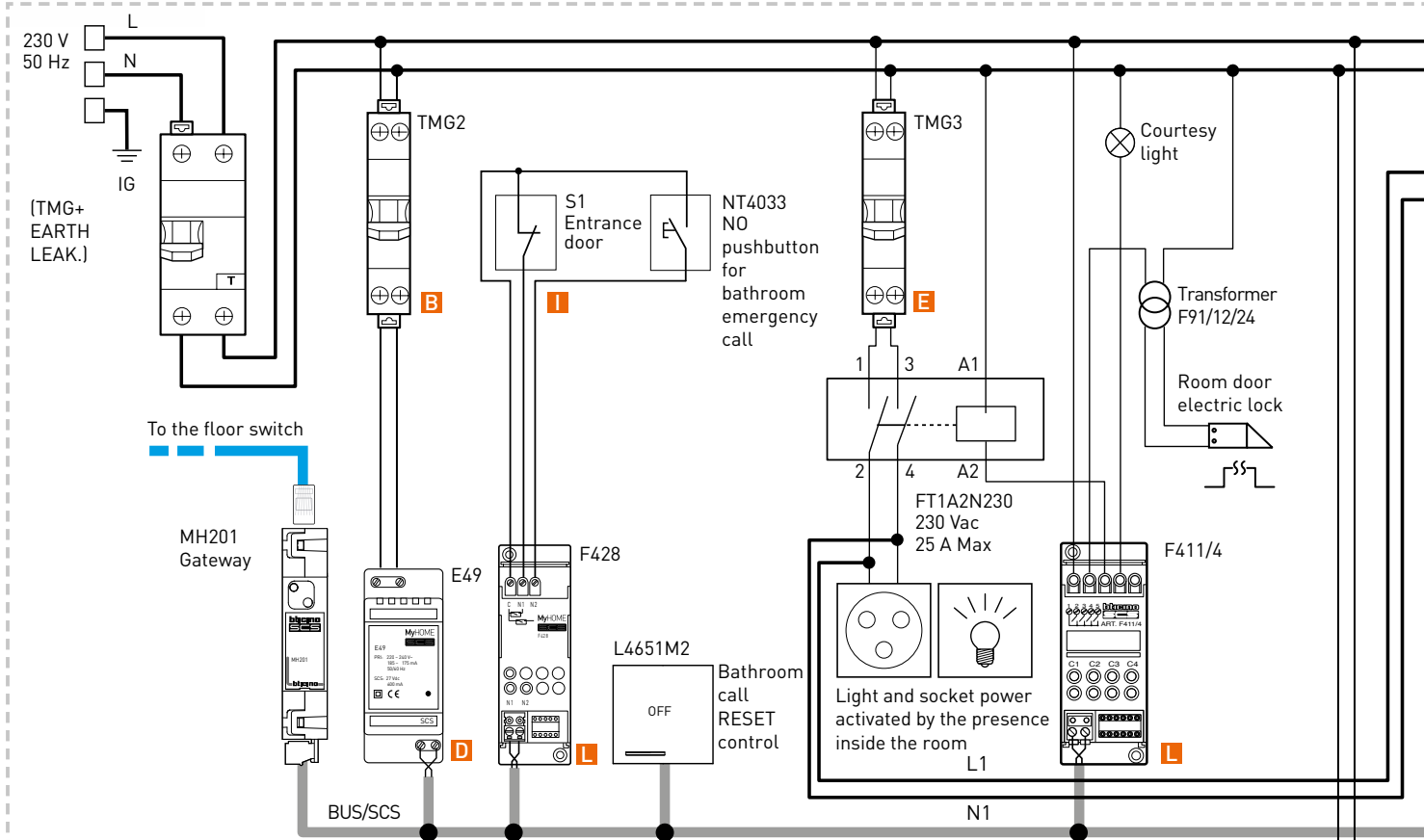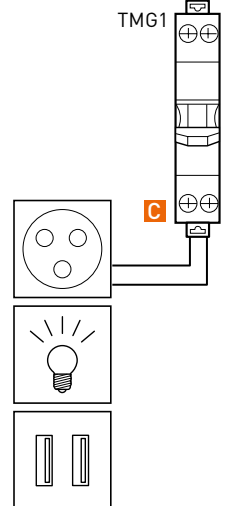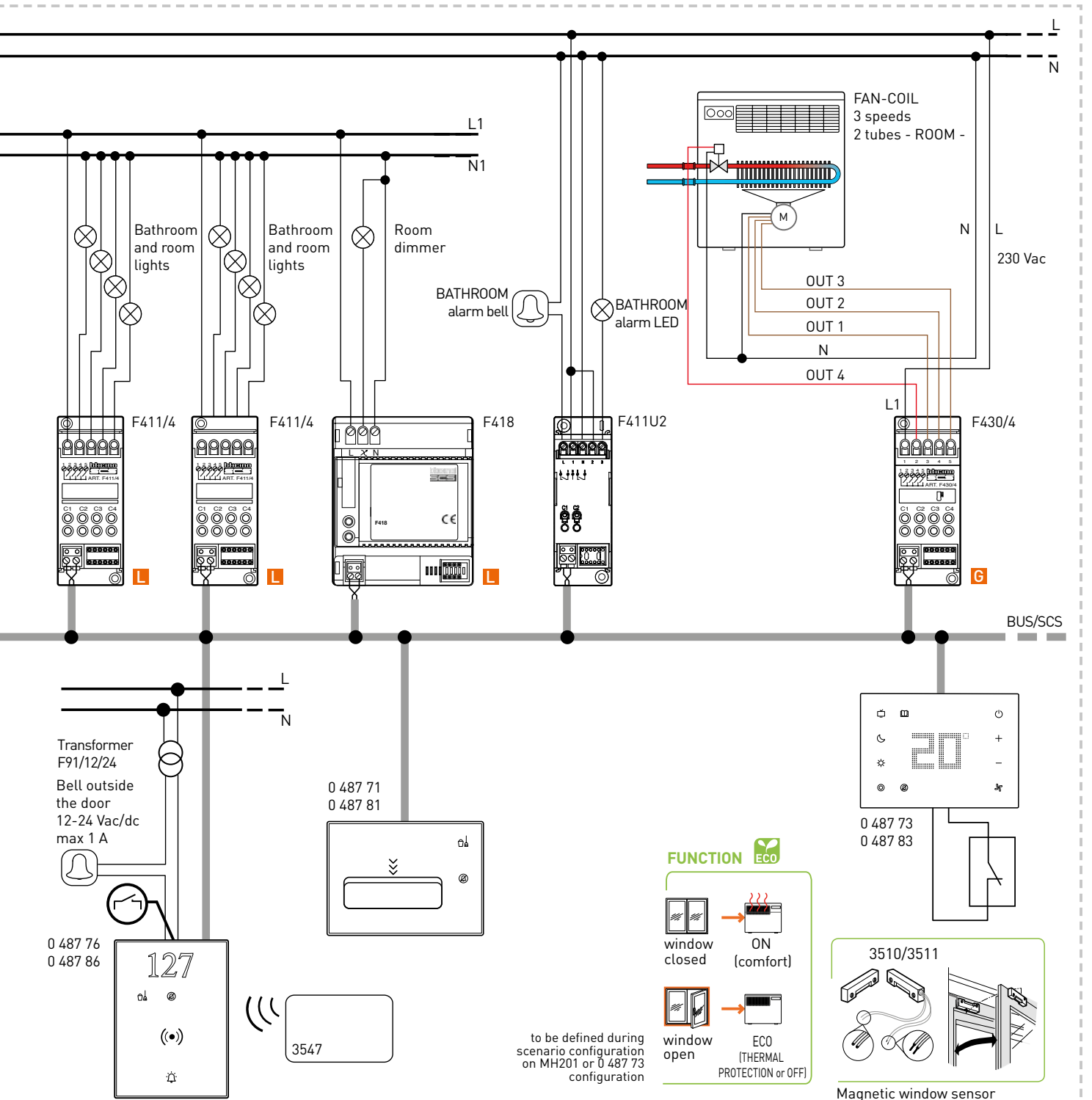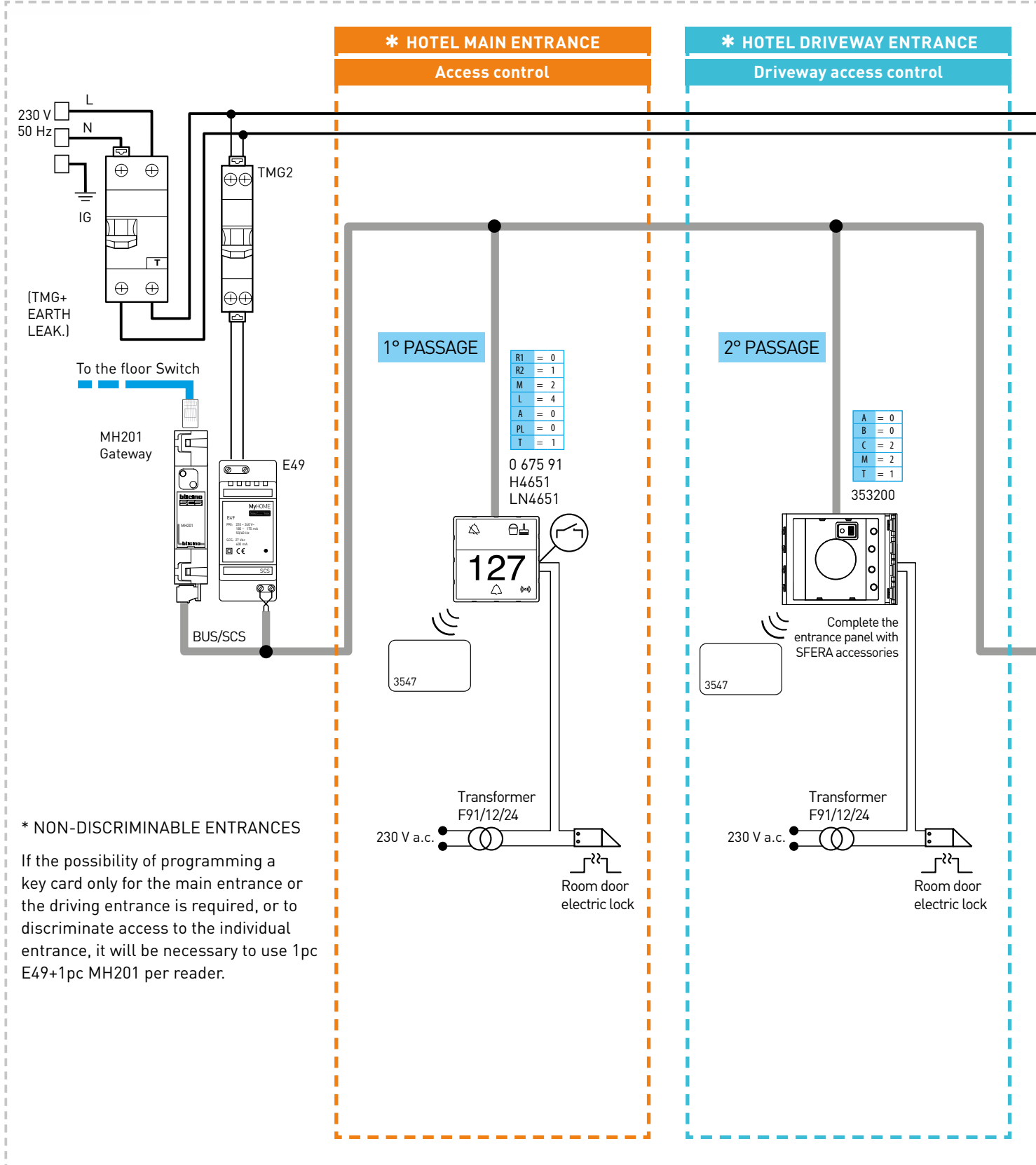
BTicino

L
230 Vac
N

Courtesy light

Room remote switch

TMG3

E

1 3 A1

2 4 A2

FT1A2N230
230 Vac – 25 A Max

Light and socket power activated by the presence inside the room

BATHROOM alarm bell

Transformer F91/12/24

Room door electric lock

BATHROOM alarm LED

F411/4

L

C1 C2 C3 C4

ART. F411/4

F411U2

C1 C2 C3 C4

FAN-COIL
3 speeds
2 tubes

N L

L1

F430/4

G L

C1 C2 C3 C4

ART. F430/4

BUS/SCS

FUNCTION ECO

window closed → ON (comfort)

window open → ECO (THERMAL PROTECTION or OFF)

to be defined during scenario configuration on MH201 and LN4691 configuration

0 487 71
0 487 81

3477

0 487 73
0 487 83

Magnetic window sensor

3510/3511

I

Bathroom call NO pushbutton

Bathroom RESET NO pushbutton

TYPICAL ROOM DIAGRAM:
CENTRALISED SOLUTION WITH HOME AUTOMATION SYSTEM

DIAGRAM

4

Touch interfaces and controls.

230 V 50 Hz

L
N

IG

(TMG+ EARTH LEAK.)

TMG2

B

S1 Entrance door

I

NT4033 NO pushbutton for bathroom emergency call

TMG3

E

1 3   A1

2 4   A2

FT1A2N230 230 Vac 25 A Max

Courtesy light

Transformer F91/12/24

Room door electric lock

To the floor switch

MH201 Gateway

MH201

E49

MyHOME

E49
PRL 230 - 240 V~
185 -   175 mA
50/60 Hz
SCS 27 Vdc
400 mA

SCS

D

F428

C N1 N2

MyHOME
F428

N1 N2

L

L4651M2

OFF

Bathroom call RESET control

Light and socket power activated by the presence inside the room

L1

F411/4

bticino ART. F411/4

C1 C2 C3 C4

L

BUS/SCS

N1

TMG1

C

Power for lights, sockets and USB sockets always ON

Example of scenarios that can be set in the MH201 scenario module:

PUTTING THE KEY CARD ON THE READER OUTSIDE THE ROOM
- Door lock activation for 2 sec (F411/4 C1)
- Switching on the courtesy light/s (F411/4 C3)

OPEN/CLOSE THE ROOM ENTRANCE DOOR
- Activation of ¨Warning – Door¨ indication after 12 sec of opening the door without (on SW). Event saved in the room event history
- Automatic reset when the door is closed again

PUTTING THE KEY CARD IN THE SWITCH INSIDE THE ROOM
- Activation of the room light and socket remote switch (F411/4 C2)
- Setting Comfort temperature >only if window closed<
- Unlock thermostat keys to adjust temperature and fan speed >only if window closed<

TAKING THE KEY CARD OUT OF THE SWITCH INSIDE THE ROOM
- ECO temperature setting
- Switching off all the room lights after 20 sec of deactivation of the room light and socket remote switch after 30 sec (F411/4 C2)
- Thermostat key block

OPEN ROOM WINDOW
- ECO temperature setting (THERMAL PROTECTION or OFF)
- Thermostat key block

CLOSE ROOM WINDOW
- If room occupied: setting ON (COMFORT) temperature and thermostat key unlock
- If room not occupied: setting ECO temperature and thermostat key lock

COURTESY LIGHT MANAGEMENT USING THE PUSHBUTTON INSIDE THE ROOM (NT4005+F428)
- If there is a key card, step/step management of the courtesy light (F411/4 C3)
- If there is no key card the switching on is timed for 120 sec (F411/4 C3); if in the meantime the key card is put into the switch the light remains on steadily

BATHROOM SOS ALARM
- Activation of ¨Alarm – SOS¨ (on SW) and backlighting flashing reader outside the room (LN/H4651)
- Manual reset from SW. The local manual reset (CEN control) can be set with different MH201 programming from traditional control or SCS home automation.

L
N

FAN-COIL
3 speeds
2 tubes - ROOM -

N   L
230 Vac

L1

N1

Bathroom
and room
lights

Bathroom
and room
lights

Room
dimmer

BATHROOM
alarm bell

BATHROOM
alarm LED

OUT 3
OUT 2
OUT 1
N
OUT 4

L1

F411/4

F411/4

F418

F411U2

F430/4

C1 C2 C3 C4

C1 C2 C3 C4

F418

C1 C2 C3 C4

ART. F411/4

ART. F411/4

ART. F430/4

L

L

L

G

BUS/SCS

L
N

Transformer
F91/12/24

Bell outside
the door
12-24 Vac/dc
max 1 A

0 487 71
0 487 81

0 487 73
0 487 83

0 487 76
0 487 86

127

3547

FUNCTION ECO

window
closed

ON
(comfort)

window
open

ECO
(THERMAL
PROTECTION or OFF)

to be defined during
scenario configuration
on MH201 or 0 487 73
configuration

3510/3511

Magnetic window sensor

TYPICAL WIRING DIAGRAMS FOR COMMON AREAS

DIAGRAM

5

	HOTEL MAIN ENTRANCE
	Access control

	HOTEL DRIVEWAY ENTRANCE
	Driveway access control

230 V
50 Hz

L

N

IG

(TMG+
EARTH
LEAK.)

TMG2

To the floor Switch

MH201
Gateway

E49

MH201

MyHOME

E49
PRI: 220 – 240 V~
145 – 175 mA
50/60 Hz
SCS: 27 Vdc
600 mA

SCS

BUS/SCS

1° PASSAGE

R1	= 0
R2	= 1
M	= 2
L	= 4
A	= 0
PL	= 0
T	= 1

0 675 91
H4651
LN4651

127

3547

Transformer
F91/12/24

230 V a.c.

Room door
electric lock

2° PASSAGE

A	= 0
B	= 0
C	= 2
M	= 2
T	= 1

353200

Complete the
entrance panel with
SFERA accessories

3547

Transformer
F91/12/24

230 V a.c.

Room door
electric lock

* NON-DISCRIMINABLE ENTRANCES

If the possibility of programming a
key card only for the main entrance or
the driving entrance is required, or to
discriminate access to the individual
entrance, it will be necessary to use 1pc
E49+1pc MH201 per reader.

RECEPTION
Temperature management

FAN-COIL
3 speeds
2 tubes - ROOM -

M

N   L

L1

F430/4

ZA	=	0
ZB1	=	1
ZB2	=	1
ZB3	=	1
ZB4	=	1
N	=	1

C1 C2 C3 C4

FUNCTION 🌱 ECO

window closed → ON (comfort)

window open → ECO (THERMAL PROTECTION or OFF)

to be defined during
scenario configuration
on MH201 or LN4691
configuration

ZA	=	0
ZB1	=	2
TYPE	=	1
HEAT	=	3
COOL	=	CEN
PUMP	=	0
IN	=	3

0 674 59
H4691
LN4691

Magnetic window sensor

3510/3511

BREAKFAST ROOM
Temperature management

FAN-COIL
3 speeds
2 tubes - ROOM -

M

N   L

L1

F430/4

ZA	=	0
ZB1	=	1
ZB2	=	1
ZB3	=	1
ZB4	=	1
N	=	1

C1 C2 C3 C4

FUNCTION 🌱 ECO

window closed → ON (comfort)

window open → ECO (THERMAL PROTECTION or OFF)

to be defined during
scenario configuration
on MH201 or LN4691
configuration

ZA	=	0
ZB1	=	2
TYPE	=	1
HEAT	=	3
COOL	=	CEN
PUMP	=	0
IN	=	3

0 674 59
H4691
LN4691

Magnetic window sensor

3510/3511

COMMON AREA WC
Emergency call management

BATHROOM alarm bell

BATHROOM alarm LED

F411U2

A	=	1
PL1	=	4
PL2	=	5
G	=	-
M	=	PULL
C	=	-

L 1 N 2 3

To other devices

BUS/SCS

3477

Bathroom call NO pushbutton

Bathroom RESET NO pushbutton

VARIATIONS OF ROOM DIAGRAMS

BELOW ARE THE ALTERNATIVE CLIMATE CONTROL DIAGRAMS.

VARIANT DIAGRAM 1

Room with independent temperature control in the bathroom.

This variant suggests the use of a heating element in the bathroom, with possible control of the ECO function.

Towel warmer
Low temperature system

L

230 Va.c.

N

0 487 73
0 487 83

FUNCTION ECO

window closed → COMFORT

window open → ECO (THERMAL PROTECTION or OFF)

to be defined during scenario configuration on MH201 or 0 487 73 configuration

Magnetic window sensor

3510/3511

Magnetic window sensor

F430/2

ZA	= 0
ZB1	= 2
N1	= 1
ZA	= −
ZB2	= −
N2	= −

BUS/SCS already present in the room

To other devices
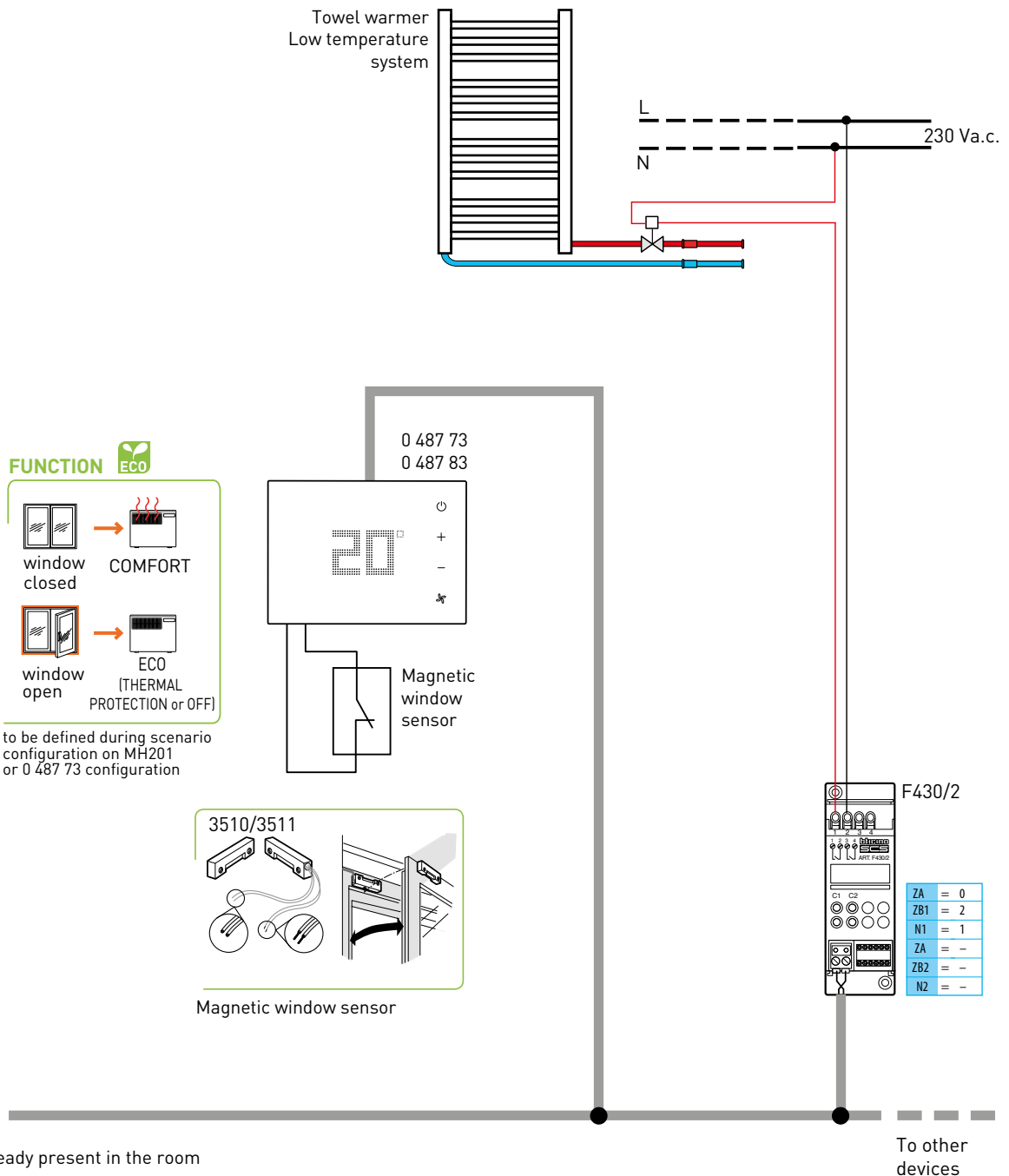
VARIANT DIAGRAM 2

Management and control of 3-speed and 4-tube FAN-COIL.

This variant proposes the diagram to manage a temperature control system with 4 tubes, 3-speed FAN-COIL and the use of a single 8-output actuator.

BUS/SCS
already present

BUS/SCS
To other devices

L
230 Vac

230 Vac

N

0 487 73
0 487 83

FUNCTION ECO

| window closed | → | COMFORT |
| window open | → | ECO (THERMAL PROTECTION or OFF) |

to be defined during scenario configuration on MH201 or 0 487 73 configuration

Magnetic window sensor

3510/3511

Magnetic window sensor

OUT 3
OUT 2
OUT 1
OUT 5
OUT 4

N   L

OUT 3
OUT 2
OUT 1
N
OUT 5
OUT 4

L1   L2   F430R8

ZA	=	–
ZB	=	1
N	=	1
LAOD	=	–
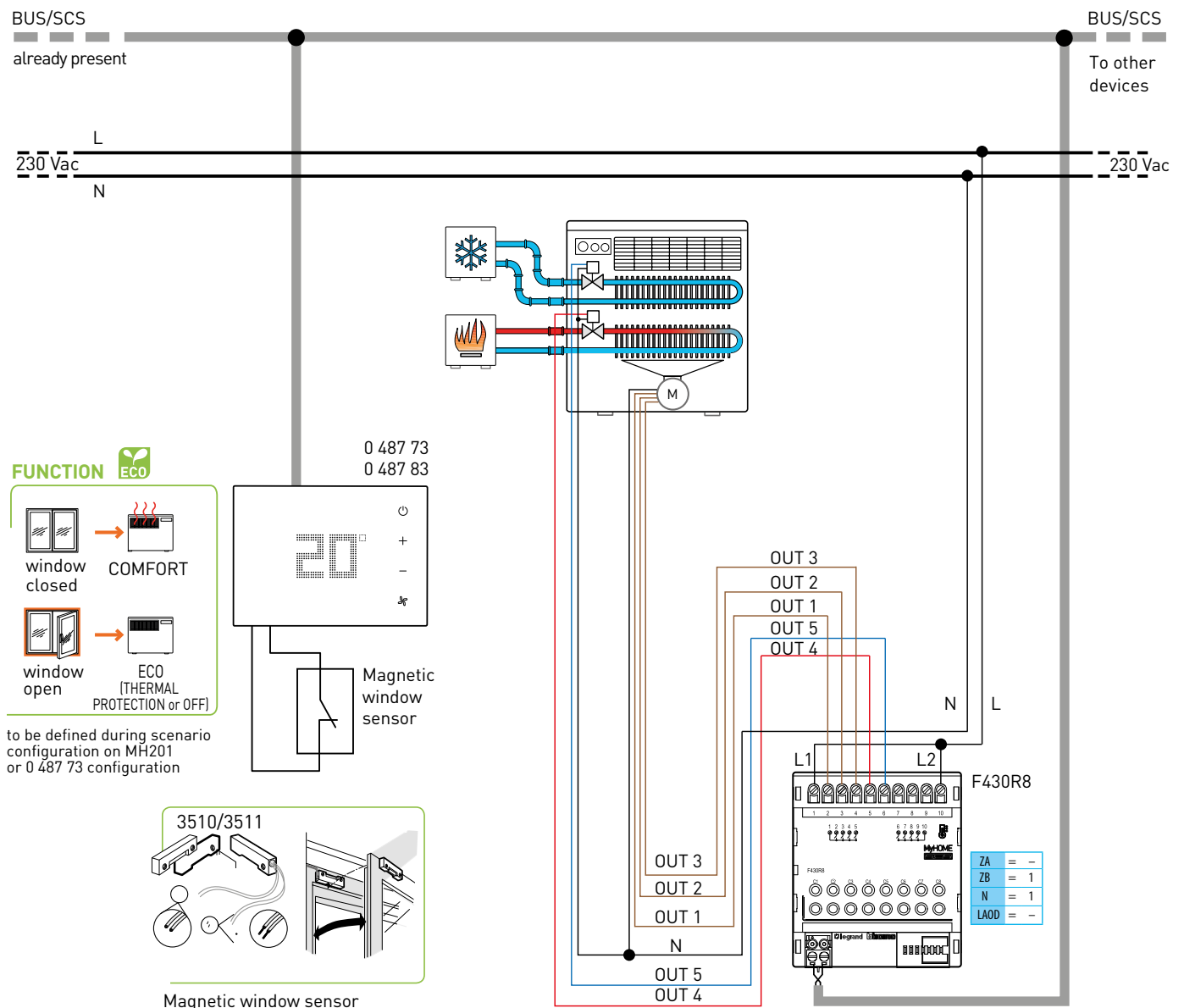
VARIATIONS OF ROOM DIAGRAMS

VARIANT DIAGRAM 3

Fan-coil management and control with 0-10 V control.

This variant proposes an example of connection of one 4-tube fan-coil with 0-10 V speed and the use of two 0-10 V outputs (LOAD 3).

BUS/SCS
already present

To other devices

BUS/SCS

230 Vac

L

N

230 Vac

FUNCTION ECO

window closed → ON (comfort)

window open → ECO (THERMAL PROTECTION or OFF)

to be defined during scenario configuration on MH201 or 0 487 73 configuration

0 487 73
0 487 83

VH= heating valve
VC= cooling valve
COM= common entrance

N   L

Control unit

F430R3V10

Magnetic window sensor

3510/3511

Magnetic window sensor

VARIANT
DIAGRAM
4

"Virtual Key Card" function room activation.

The VIRTUAL KEY CARD function gives the possibility of activating and deactivating the functions inside the room without the need to use the physical key card and the corresponding key card switch. Activation and deactivation are possible thanks to the detection of the individual inside the room by the movement sensors installed in the various areas and the sensor at the entrance door.
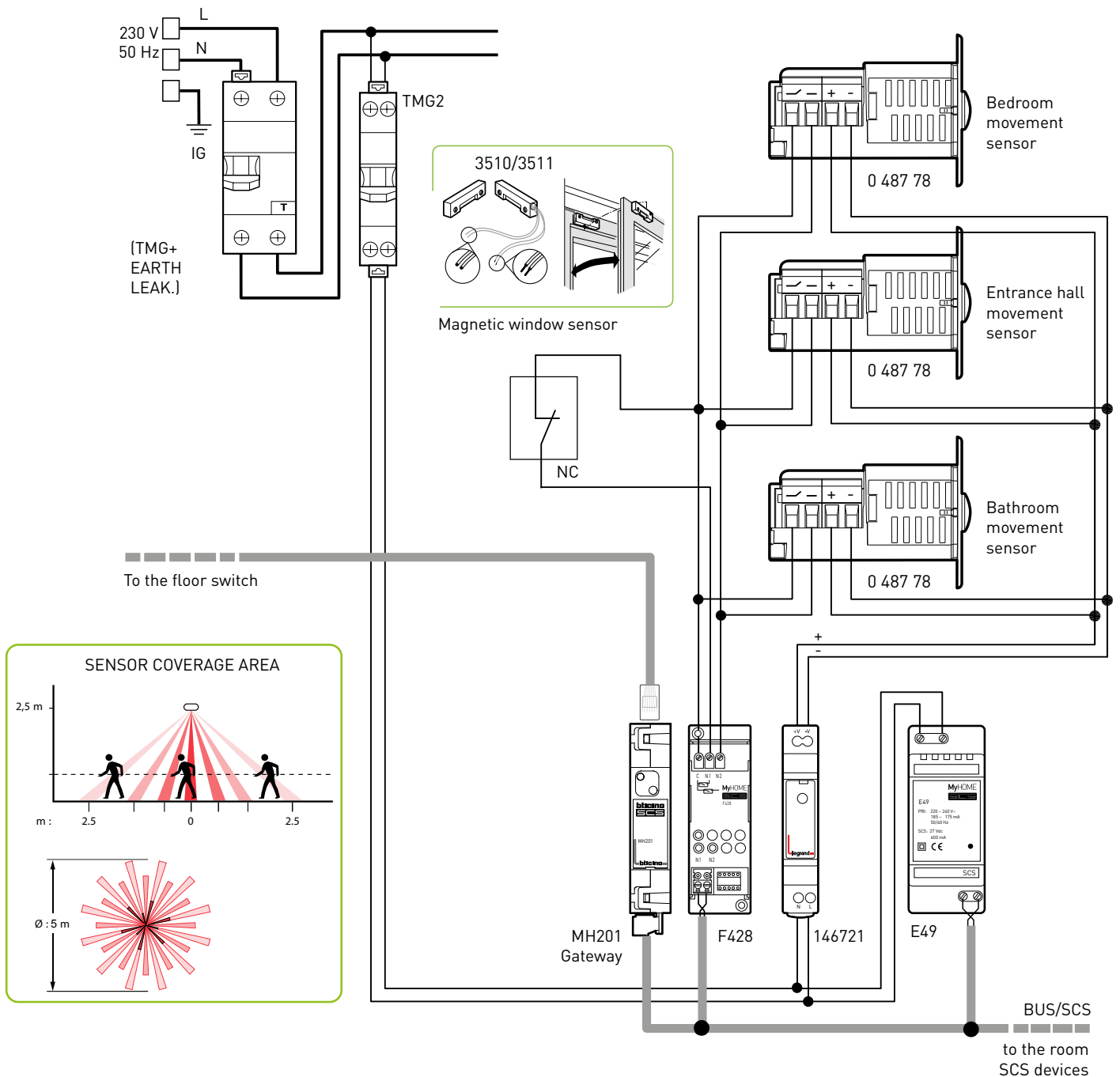
230 V
50 Hz

L

N

IG

(TMG+ EARTH LEAK.)

TMG2

3510/3511

Magnetic window sensor

NC

To the floor switch

SENSOR COVERAGE AREA

2,5 m

m : 2.5   0   2.5

Ø : 5 m

Bedroom movement sensor

0 487 78

Entrance hall movement sensor

0 487 78

Bathroom movement sensor

0 487 78

+
-

MH201
Gateway

F428

146721

E49

BUS/SCS

to the room SCS devices

The "Virtual Key Card" function is not yet available, for information on availability contact the sales staff.

NOTE: as an alternative to 146721+E49, it is possible to install E46ADCN

GENERAL RULES
FOR INSTALLATION

Protruding wall-mounted installation.

Ideal for masonry installations.

HORIZONTAL MODE	VERTICAL MODE

0 800 41	6 890 07	PB502N	0 800 41	6 890 07	PB502N
503E	PB503N		503E	PB503N	

1

0 487 79

2

1

0 487 79

2
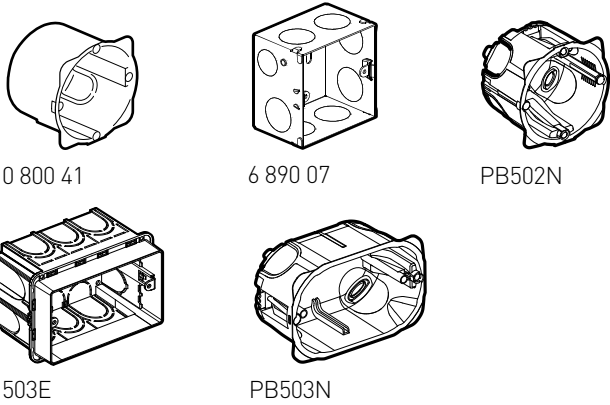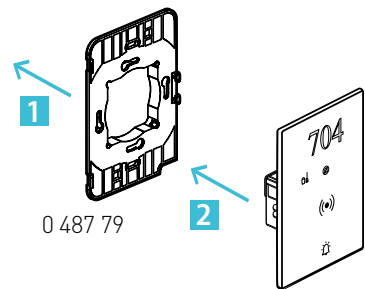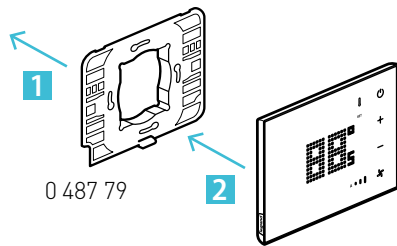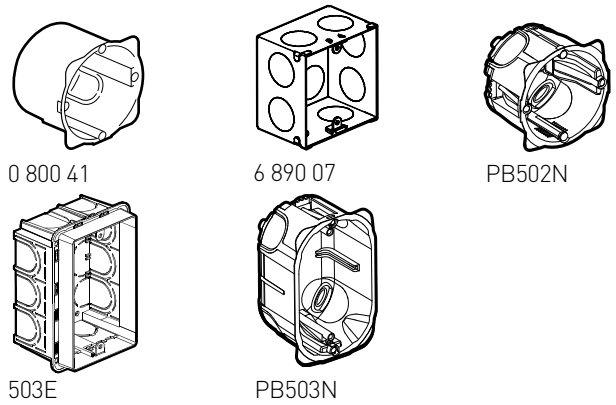
RECOMMENDED HEIGHTS:	**Height recommended for the installation of the readers outside the door.**

H4651
LN4651

FL4651

110 - 120 cm

BTicino
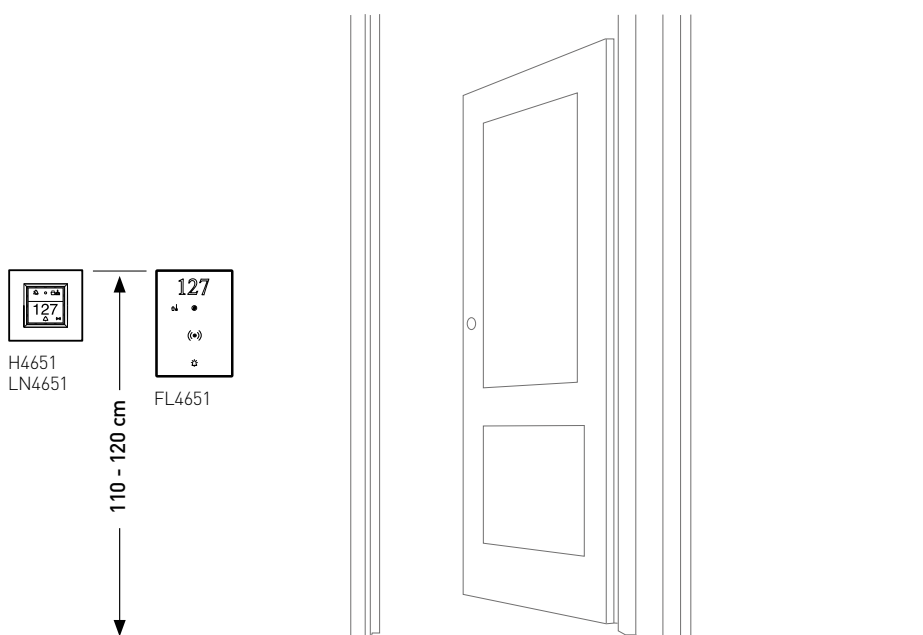
For this installation solution, it is necessary to use item 0 487 88.

0 487 88
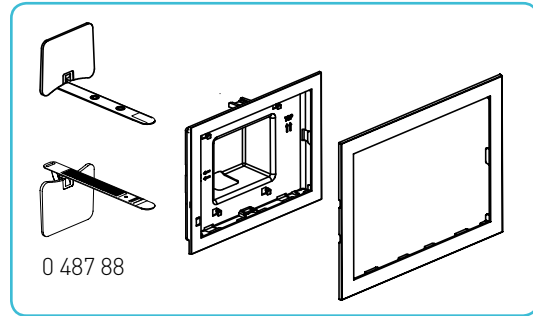
Flush-mounted installation.

Ideal for installation in plasterboard walls, furniture or headboards.

136,5

99

1

0 487 88

2

3 0 487 88

136,5

99

704

0 487 88 **1**

2

3 0 487 88
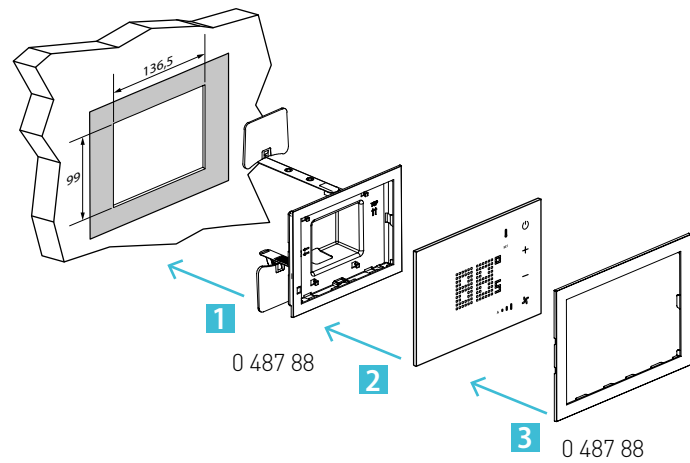
Height recommended for thermostat installation.

LN4691
H4691

FL4654

150 cm
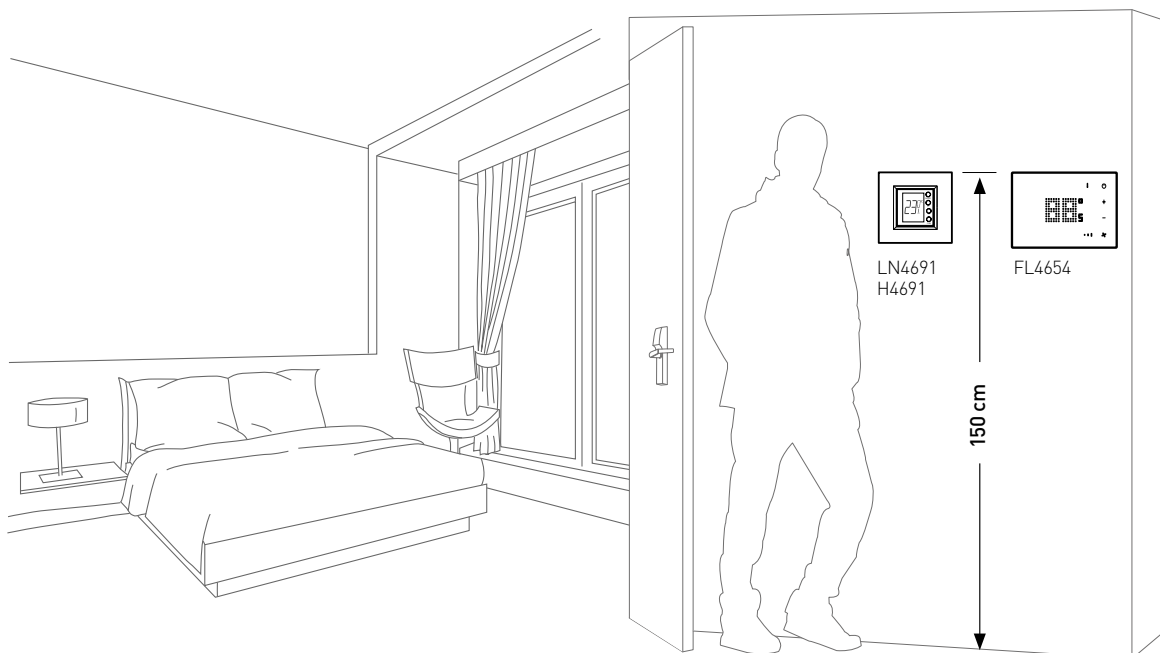
PROCEDURE FOR
STARTING A SYSTEM

The following procedure is an example of the starting of a system.

In the case of a system with fewer than 100 zones; rooms/common areas (without IP Server F458) the passages shown in red must be omitted.

There are alternative methods (such as the creation of the project by scanning the system) which can be used as needed.

1. Install the electric system in the rooms / common areas

2. Install the device IP Server F458

3. Install and run MyHOTEL_Suite (not necessarily on hotel reception PC)

4. Open MyHOTEL_Suite and create a new HOTEL project:

5. Select "IP Server F458" in the "project information" section

6. Enter in "structure"

7. Configure the F458

    a. After sending the F458 configuration wait for 1 minute and SWITCH THE HOTEL SYSTEM ON AND OFF AGAIN (F458+MH201)
The system is up to speed with the assignment of the IP addresses in a few minutes.
In the mean time one can continue with the next steps.

    As an alternative to the disconnection and reconnection of the MH201 power supply, it is also possible to only restart the network devices (switches) to which the MH201 are connected

8. Always in the "Structure" section, add buildings and floors by means of the "Edit" menu

9. Create a room/common area in the corresponding floor

10. For each room/common area created, customise Type, Name and Category
(the MAC address field will be configured in the next steps)

    a. With F458 select DHCP

11. For each room/common area created, edit from the "Properties" window

    a. Configure the MH201 (see the corresponding manual)

    b. Add the necessary SCS devices and configure them appropriately

PROCEDURE FOR
STARTING A SYSTEM

12. Return to the "Structure" section

13. The already created rooms/common areas can be "copied" and "pasted".

In this case the following information must be customised

    a. Type, name and category

    b. Network address (IP) in the MH201

    c. Unique code of the MH201

    d. The ID of the SCS devices

    e. Any other customisations of the individual room/common area (e.g. contacts, scenarios, access control etc.)

14. In the "Structure" area enter the properties window, select "search on network" and search for the IP devices

15. Drag the MH201 devices found in the network to the corresponding rooms/common areas based on MAC ADDRESS (be careful that the correspondence is correct)

16. At this point the configurations can be sent to the devices of each room/common area (by means of the "edit room/area" function)

    a. Send the configuration of the MH201

    b. Connect to the MH20e entering the IP address in the template at the top left and sending the configuration of the SCS devices

17. Save the MyHOTEL_Suite project file just completed by File → Save system

18. Create the project file of the supervision software from File → Create hotel file

19. Install and configure the **"Hotel Supervision Server"** software (see its manual) in which the file just created will be loaded.

20. Install and configure the **"Hotel Supervision"** software (see its manual).

NEW PREMIUM OFFER
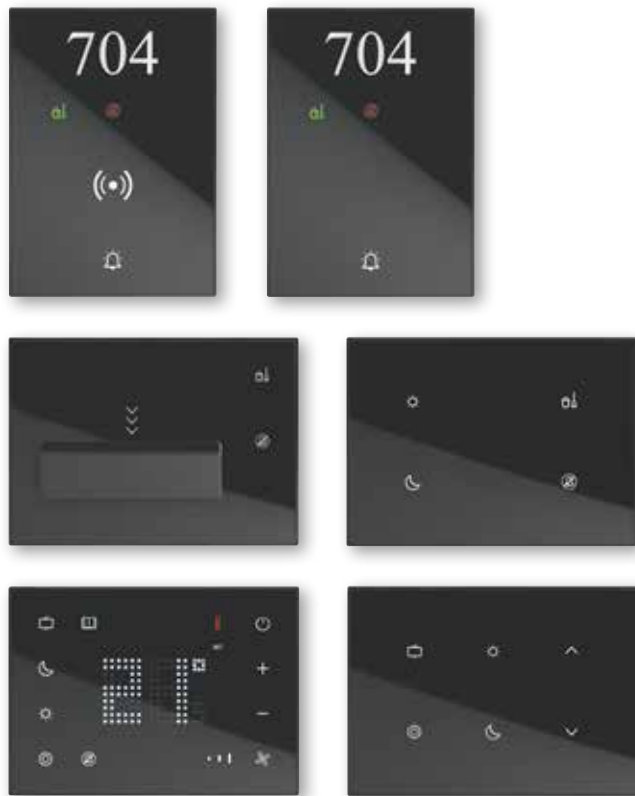
Contents

THE PREMIUM OFFER FOR HOTELS

The offer is enriched by further SPECIFIC DEVICES

New Touch interfaces for the room.

704
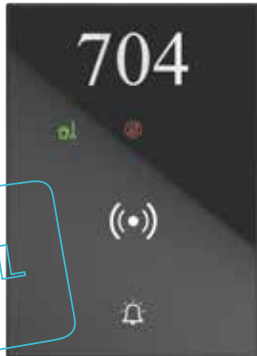
OUTSIDE THE DOOR INDICATOR
+ key card reader
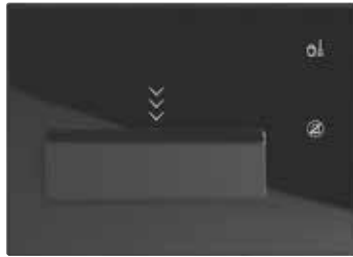
KEY CARD SWITCH WITH READER - BASIC
VERSION: with DND and MUR activation
and notification

CONTROL PANEL:
digital temperature probe with display + 6
touch controls.

THE PRODUCTS OUTLINED IN THESE PAGES ARE SPECIFICALLY INTENDED FOR HOTEL ROOM FUNCTIONS. THE CATALOGUE ONLY SHOWS SOME OF THE AVAILABLE CONFIGURATIONS, BUT MANY MORE ARE ALSO AVAILABLE ON REQUEST.

Their look is compatible with the Axolute and Livinglight series. The catalogue offers **BLACK and WHITE** versions, while **TECH and MAGNESIUM** are also available through the software.

Using the specific **"Web APP"** configuration software, it is possible to further customise the products.

The software also gives the possibility of generating a list of customised codes that can be forwarded to the points of sale and BTicino technical sales personnel when ordering the products.

The software can be downloaded from:

🌐 www.uxforupscalehotel.legrand.com
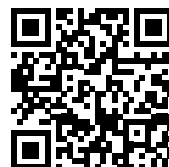
PREMIUM OFFER
NEW TOUCH INTERFACES

FL4650

FL4650W

FL4648
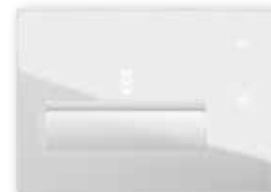
FL4648W

FL4651

FL4651W

FL4649

FL4649W

Item		INDICATORS AND CONTROLS FOR THE ROOM MANAGEMENT
■ FL4650		outside the door indicator, in **black** plastic plate finish. It includes DO NOT DISTURB (DND) and MAKE UP THE ROOM (MUR) indicator and bell pushbutton. The device has a NC clean contact controlled by the bell symbol. The contact can be programmed for the bell function, or the electric door lock release. Vertical installation. Connection to SCS-BUS, dimension: 3 modules.
□ FL4650W		as above - in **white** plastic plate finish.
■ FL4651		key card reader + outside the door indicator in **black** plastic material. It includes key card reader in RFID technology + DO NOT DISTURB (DND) and MAKE UP THE ROOM (MUR) indicators and bell pushbutton. The device has a NC clean contact controlled by the bell symbol. The contact can be programmed for the bell function, or the electric door lock release. Vertical installation Connection to SCS-BUS, dimension: 3 modules.
□ FL4651W		as above - in **white** plastic plate finish.

Item		KEY CARD SWITCHES - BASIC VERSION
■ FL4648		Basic key card switch, in **black** plastic plate finish. It allows the activation of the hotel room functions with RFID technology recognition, and to control the outside the door DO NOT DISTURB (DND) and "MAKE UP THE ROOM (MUR) notifications. Slot for key card with built-in lighting. Connection to SCS-BUS, dimension: 3 modules.
□ FL4648W		as above - in **white** plastic plate finish.

		KEY CARD SWITCHES - ADVANCED VERSION*
■ FL4649		Advanced key card switch in **black** plastic plate finish. It allows the activation of the hotel room functions with RFID technology recognition, and to control the outside the door DO NOT DISTURB (DND) and "MAKE UP THE ROOM (MUR) notifications. Moreover, based on the information stored on the key card (CUSTOMER or STAFF), it allows to recall different scenarios. Slot for key card with built-in lighting. Connection to SCS-BUS, dimension: 3 modules.
□ FL4649W		as above - in **white** plastic plate finish.

(*): for the availability contact the BTicino Sales Staff.

NOTE:
The outside the door indicators with key card readers and key card switches are with RFID technology (Mifare classic ISO14443 type A).

NOTE: □ **White** device ■ **Black** device

PREMIUM OFFER
NEW TOUCH INTERFACES

FL4654

FL4654W

FL4655

FL4655W

FL4653

FL4653W

FL4652

FL4652W

Item		DIGITAL TEMPERATURE PROBE WITH TOUCH TECHNOLOGY DISPLAY
■ FL4654		temperature probe with backlit display, in **black** plastic material. It controls the temperature of an individual zone. It has a temperature and humidity probe and an input for the connection of a contact line (e.g. window contact). It can be used for the management of different types of systems, and the adjustment of the fan speed when Fan Coils are used. Possibility of automatic operation (summer/ winter), with compatible systems. SCS-BUS connection - Sizes: 3 modules.
□ FL4654W		as above - in **white** plastic plate finish.

		DIGITAL TEMPERATURE PROBE WITH DISPLAY + 6 TOUCH CONTROLS
■ FL4653		Control panel to be installed on the bedhead, in **black** plastic material. It includes a temperature probe with backlit display (all the functions of FL4654), plus the following scenario controls: - Reading - TV - Sleep - Wake up - General OFF - DND (do not disturb) The scenarios are to be programmed in the MH201. SCS-BUS connection - Sizes: 3 modules.
□ FL4653W		as above - in **white** plastic plate finish.

Item		2-SCENARIO CONTROL + DND AND MUR CONTROLS
■ FL4655		4-control device, in **black** plastic material. It has 2 scenario controls, to be programmed in the MH201, and 2 fixed commands: do not disturb (DND) and make up the room (MUR). Connection to SCS-BUS, dimension: 2 modules.
□ FL4655W		as above - in **white** plastic plate finish.

		6-SCENARIO CONTROL
■ FL4652		6-scenario control device, in **black** plastic material. The scenarios are: - Wake up - Sleep - TV - General OFF - Curtain opening - Curtain closure The 6 scenario controls must be programmed in the MH201. Connection to SCS-BUS, dimension: 2 modules.
□ FL4652W		as above - in **white** plastic plate finish.

NOTE: □ **White** device ■ **Black** device

PREMIUM OFFER
NEW TOUCH INTERFACES

Dimensional data

0 487 78

0 487 88

0 487 79

ADVANCED INTERFACES

129
93
42,4

PIR SENSOR

Ø 24
Ø 38
Ø 9,7
47
50,3

Item	MOVEMENT DETECTORS
○ 0 487 78	**PIR sensor**

PIR technology sensor for the activation of the "VIRTUAL KEY CARD" function. The VIRTUAL KEY CARD function gives the possibility of activating the functions inside the room through the detection of the presence of an individual in the room, without the need to use the key card switch. The sensor is stand-alone and is not connected to the SCS-BUS (power supply 8 - 30 Vdc); it also has a NO contact output (8 - 30 Vdc - max applicable voltage). Wall mounted or ceiling installation, diameter 20 mm. **When installed on the ceiling at a height of 2.5 m, it covers a range of 5 m.**

The "Virtual Key Card" function is not yet available, for information on availability contact the sales staff.

FLUSH MOUNTED BOX FOR MASONRY WALLS

107
74

503E

FLUSH MOUNTED BOX FOR PLASTERBOARD

110
71

PB503N

	INSTALLATION ACCESSORIES
○ 0 487 79	**Protruding wall mounted installation support.**

Plastic support for wall mounted installation of the products using box 500, 502E, 503E e PB502N, PB503N for 3-module devices.

| ○ 0 487 88 | **Flush mounted installation support.** |

Plastic support for flush mounted installation of the products (ideal for installation on furniture or plasterboard walls). To be installed as an alternative to the item 0 487 79.

Protruding wall mounted installation

500   **502E**   **PB502N**

503E   **PB503N**

1

2

0 487 79
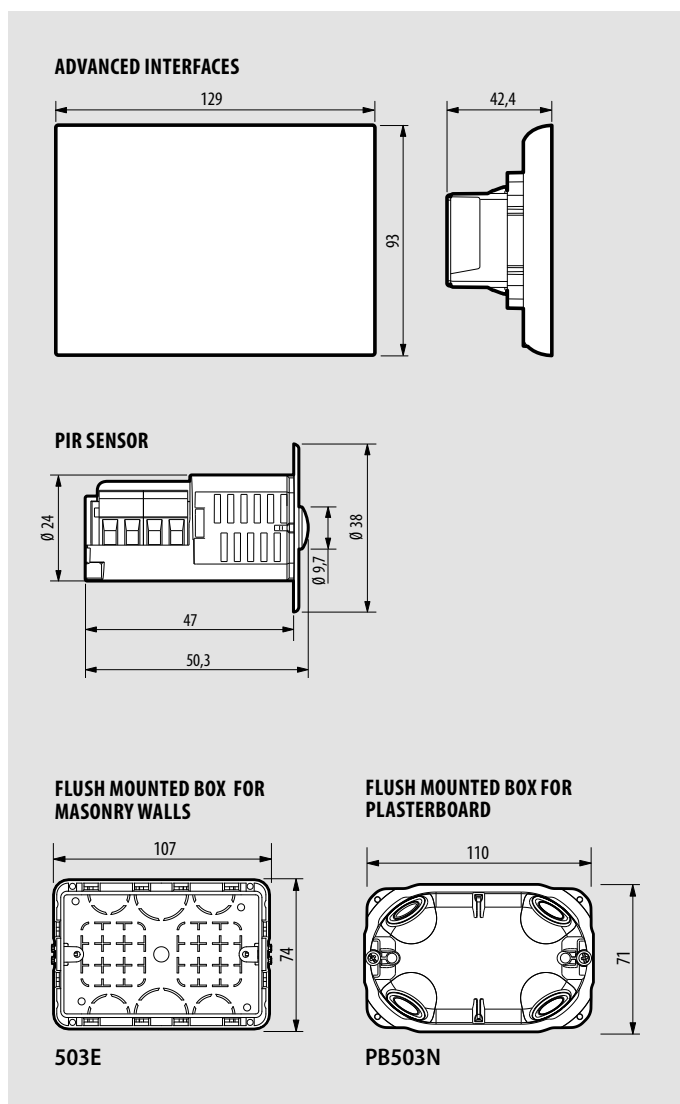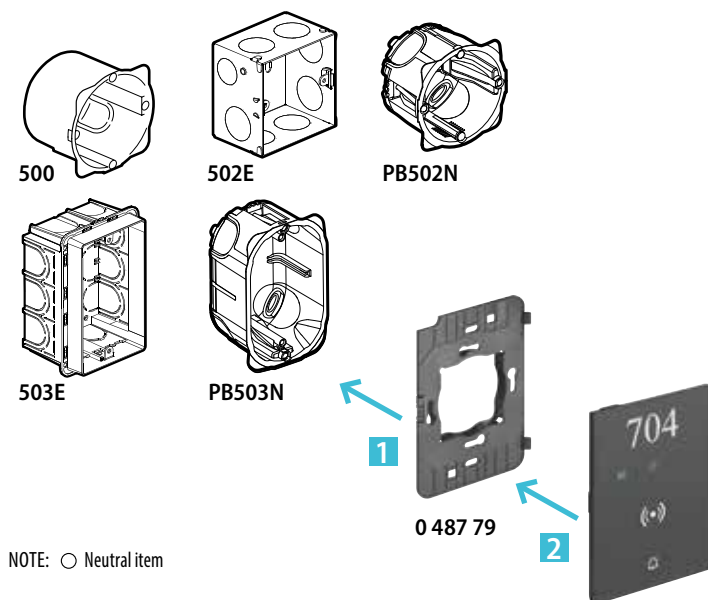
NOTE: ○ Neutral item

Flush mounted installation

99
136,5

1
0 487 88

2

3   0 487 88

704
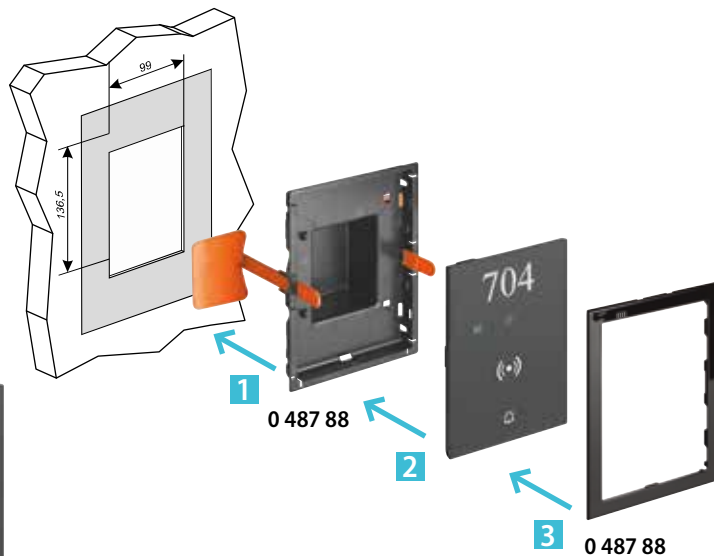
AXOLUTE
HOTEL SOLUTIONS

A complete offer

for a state of the art electric system inside the whole welcoming establishment and in particular inside the hotel room. All this to ensure that customers feel immediately at ease. The offer includes both standard traditional functions, and more advanced functions.

EQUIPMENT INCLUDING SPECIFIC PRODUCTS
for the SCS-BUS room

DESIGNED TO ENHANCE CUSTOMER COMFORT

A solution for all types of hotels

STANDARD EQUIPMENT

The BTicino offer for the rooms, and in wider terms for the whole hotel establishment, includes many more devices that are normally also used for other applications.

Request or view the Axolute catalogue

AXOLUTE
SCS-BUS devices (specific for the hotel)
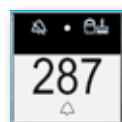
H4650
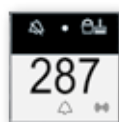
H4651

MH201

F458

F459

H4653

348402

3544SW
3546SW

Item		KEY CARD SWITCHES
○ H4649		key card switch for function activation in the hotel room - slot light with built-in lamp - SCS-BUS connection - sizes: 2 modules - to be completed with front cover in the desired look
○ H4648		key card switch for function activation in the hotel room with RFID technology recognition - slot light with built-in lamp - SCS-BUS connection - sizes: 2 modules - to be completed with front cover in the desired look
		CONTROL INDICATORS FOR ROOM MANAGEMENT
○ H4650		DO NOT DISTURB – MAKE UP THE ROOM indicator and bell pushbutton - SCS-BUS connection - sizes: 2 modules
○ H4651		key card reader in RFID technology + DO NOT DISTURB – MAKE UP THE ROOM indicator and bell pushbutton - SCS-BUS connection - sizes: 2 modules
○ H4653		DO NOT DISTURB – MAKE UP THE ROOM control to be completed with key covers - SCS-BUS connection - sizes: 2 modules
		KEY CARDS AND KEY CARD PROGRAMMER
○ 3547		credit card key card (ISO 50x80 mm). It uses transponder technology Mifare classic ISO14443 type A. To be used together with the key card programmer, item code 348402. The key card can be customised and is sold in lots of 5 pieces.
○ 348402		table-top key card programmer to be connected to the PC in the reception.

Item		IP SCENARIO MODULE
○ MH201		it manages scenarios related to hotel rooms - it works as a gateway for the Configuration and Supervision software - it is necessary to install one module for each room or zone - SCS-BUS and ethernet network connection - sizes: 1 DIN module
		SCENARIO MODULE
○ F420		device to save 16 scenarios for the Automation, Sound system, Temperature control and Video door entry applications - 2 DIN modules
		IP SERVER
○ F458		IP SERVER to be used in systems with over 100 rooms or zones (over 100 MH201 installed). Sizes: 6 DIN modules
		DRIVER MANAGER
○ F459		integration platform with other brand systems. Sizes: 6 DIN modules

Contact the agency to check the feasibility of specific integrations and to request the licence needed to use the Driver manager.

		SOFTWARE
○ 3544SW		Licence for the software for the room status supervision, the basic management and the key card programming for a Hotel with up to 20 rooms
○ 3546SW		Licence for the software as above – for a Hotel with more than 20 rooms

NOTE: To request integration with PMS which use FIAS protocol (e.g. Fidelio) contact the agency.
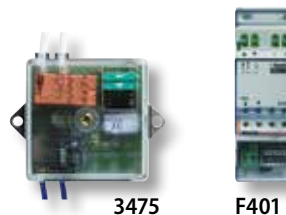
NOTE: ☐ **White** device ◼ **Tech** device ◼ **Anthracite** device ○ Neutral item

AXOLUTE
SCS-BUS devices (lights and automation)

H4651M2   **H4652/2**   **H4652/3**

HD4680   **HS4680**   **H4652**

HD4657M3   **HS4657M3**

Item	CONTROLS
○ **H4651M2**	special control – can drive an actuator performing all the standard functions of a control and in addition some special functions: activation of 4 scenarios saved in module item F420, timings, activation of an actuator installed on a different bus than the control, selection of the fixed adjustment level and the dimmer soft-start and soft-stop speed, sound system, door lock switching on control, call to the floor and switching on staircase light control and management of auxiliary channels. To be completed with 1 or 2-module key covers with one or two functions - 2 modules

	CONTROLS FOR SINGLE OR DOUBLE LOADS
○ **H4652/2**	control which can drive a single actuator for single or double loads or two actuators for single loads or independent double loads – to be completed with 1 2-module key cover for controls with one or two functions or 2 1-module key covers with one or two functions - 2 modules
○ **H4652/3**	control which can drive three actuators for single or double loads or two actuators for single loads or independent double loads – to be completed with 3 1-module key covers for controls with one or two functions - 3 modules

	CONTROL FOR ROLLING SHUTTER MANAGEMENT
○ **H4660M2**	2 module flush mounted control with reduced thickness with 3 pushbuttons, only suitable for operation with advanced actuators H4661M2 and F401, specific for the management of rolling shutters. In addition to monostable and bistable UP/DOWN operation, the device also places the rolling shutter in a stored (PRESET) position.

	SCENARIO CONTROL
□ **HD4680** ■ **HC4680** ■ **HS4680**	customisable scenario control to control 4 independent "room situations" - 2 modules
○ **H4652**	8-KEY control for light management, rolling shutter automation, sound system and scenarios - SCS-BUS connection - sizes: 2 modules
○ **3541** ○ **3542**	A5 sheets for the customisation of the symbols of item H4652 3541 = black; 3542 = white; The sheets can be customised using the tool found in the MyHOTEL_Suite configuration software.

Item	GLASS DIGITAL CONTROLS
	MyHOME control which can control single loads or group loads (e.g. lights and rolling shutters). The configuration can take place in two different ways: physical (putting the physical configurators in their sockets) or virtual (the control can be configured remotely). It has capacitive keys, which are touch activated. They can be identified by LED with light of adjustable intensity.

WHITE GLASS

□ **HD4657M3**		6-key control– size: 3 modules
□ **HD4657M4**		8-key control– size: 4 modules

WHICE

■ **HC4657M3**		6-key control– size: 3 modules
■ **HC4657M4**		8-key control– size: 4 modules

NIGHTER

■ **HS4657M3**		6-key control– size: 3 modules
■ **HS4657M4**		8-key control– size: 4 modules

NOTE: the glass controls can be customised with symbols by means of silk screen printing. On request as special orders.

Installation of the glass digital control

Box

Support

Control

Box	Support	Control
503E	H4703	**HD4657M3** **HC4657M3** **HS4657M3**
504E	H4704	**HD4657M4** **HC4657M4** **HS4657M4**

NOTE: □ **White** device   ■ **Tech** device   ■ **Anthracite** device   ○ Neutral item

AXOLUTE
SCS-BUS devices (lights and automation)

H4672M2

3475   **F401**
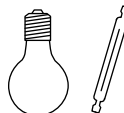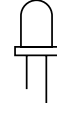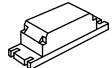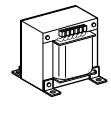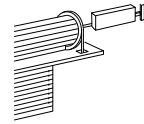
Item	**ACTUATORS AND FLUSH MOUNTED ACTUATORS/DIMMERS**
○ **H4672M2**	actuator/control with 2 independent relays - for single, double or mixed loads: 1380 W resistive, 1380 W incandescence lamps, 460 W for reducer motors, 460 VA cosφ 0,5 for ferromagnetic transformers and 250 W for fluorescent lamps - logic relay interlock via configuration. The device can be also configured to manage a remote actuator - 2 modules.

Item	**BASIC MODULE ACTUATOR**
○ **3475**	1 relay actuator - for single loads: 2 A resistive or incandescence lamps and 2 A cosφ 0.5 for ferromagnetic transformers - suitable for installation in ceiling lamps cups or in flush-mounted boxes behind the control devices.
○ **3476**	1 relay actuator - for single loads: 2 A resistive or incandescence lamps, 2 A cosφ 0.5 for ferromagnetic transformers - a traditional pushbutton with NO contact accepted in input

	ACTUATORS FOR ROLLING SHUTTER MANAGEMENT
○ **H4661M2**	flush-mounted 2-module actuator with 2 internal relays and 4 pushbuttons made to work with the H4660M2 control devices to manage the rolling shutters. In addition to monostable and bistable UP/DOWN operation, the actuator also places the rolling shutter in a stored (PRESET) position.
○ **F401**	as above - with 3 pushbuttons - 2 DIN modules

LOADS THAT CAN BE DRIVEN (230 Va.c. 50/60 Hz)

Actuators	Type						
	Energy saving incandescence and halogen lamps	LED lamps	Linear fluorescent lamps [1]	Compact fluorescent lamps	Electronic transformers [3]	Ferromagnetic transformers [2] [3]	Reducer motors for rolling shutters [4]
H4672M2	1380 W	250 W Max 2 lamps	250 VA	250 W Max 2 lamps	460 W	460 VA	460 W
3475 3476	2 A 460 W	40 W Max 1 lamp	- -	40 W Max 1 lamp	- -	2 A cosφ 0,5 460 VA	- -
H4661M2 F401	-	-	-	-	-	-	2 A 250 Va.c.

Notes:
1) Power factor corrected fluorescent lamps, discharge lamps.
2) Account must be taken of the transformer yield to calculate the effective power of the load connected to the actuator. For example if a dimmer is connected to a 100 VA ferromagnetic transformer with yield 0.8, the effective power of the load will be 125 VA.
3) The transformer must be loaded at its rated power and however never less than 90% of this power. It is preferable to use a single transformer rather than several transformers in parallel. For example it is better to use a single 250 VA transformer with 5 50 W spotlights connected rather than use 5 50 VA transformers in parallel each with a 50 W spotlight.
4) The ⬜⊣ symbol on the actuators refers to the rolling shutter reducer motors.

NOTE: ○ Neutral item

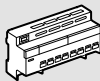# AXOLUTE
SCS-BUS devices (lights and automation)

F411U1   **F411U2**   **F411/4**   **F411/1NC**
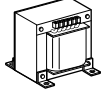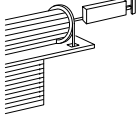
BMSW1003

Item	ACTUATORS FOR CENTRALISATIONS
○ **F411U1**	actuator with 1 two-way relay – for single loads: 16 A resistive, 10 A incandescence lamps, 4 A cosφ 0.5 for ferromagnetic transformers and 4 A for fluorescent lamps - it has ¨Zero crossing¨ technology - 2 DIN modules
○ **F411U2**	actuator with 2 independent relays – for single and double loads: 10 A resistive and 6 A incandescence lamps, 500 W for reducer motors, 2 A cosφ 0,5 for ferromagnetic transformers and 250 W for fluorescent lamps - logic relay interlock via configuration - it has ¨Zero crossing¨ technology - 2 DIN modules
○ **F411/4**	actuator with 4 independent relays - for single, double or mixed loads: 2 A resistive, 2 A incandescence lamps, 500 W for reducer motors, 2 A cosφ 0,5 for ferromagnetic transformers and 70 W for fluorescent lamps - logic relay interlock via configuration - 2 DIN modules
○ **F411/1NC**	actuator with 1 two-way NC relay for single loads 16 A resistive, 10 A for incandescence lamps and 4 A for fluorescent lamps. On switching on the device always has the contact closed (ON status) and the contact is opened with an OFF command. In this way there would be no voltage from the BUS, the device would remain in the ON state, keeping the load on – 2 DIN modules

Item	ACTUATORS FOR CENTRALISATIONS
○ **BMSW1003**	ON/OFF actuator, 4 independent outputs with maximum load 16 A at 230 Va.c., clamp connection and RJ45, IP20 protection index, power supply 100/240 Va.c. 50/60 Hz, pushbuttons for load direct control - zero-crossing function - 6 DIN modules
○ **BMSW1005**	ON/OFF actuator, "Zero Crossing" technology, 8 independent outputs with maximum load 16 A at 230 V a.c., clamp connection, IP20 protection index, power supply100/240 V a.c. 50/60 Hz, pushbuttons for load direct control - 10 DIN modules

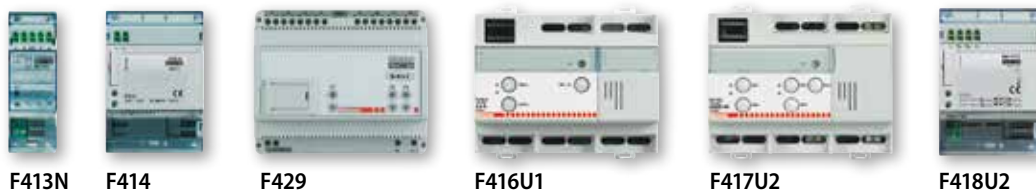|	LOADS THAT CAN BE DRIVEN (250 Va.c. 50/60 Hz)						
Actuators	Type						
	Energy saving incandescence and halogen lamps	LED lamps	Linear fluorescent lamps [1]	Compact fluorescent lamps	Electronic transformers [3]	Ferromagnetic transformers [2] [3]	Reducer motors for rolling shutters [4]
F411U1	10 A 2300 W	500 W Max 10 lamps	4 A 920 W	500 W Max 10 lamps	4 A 920 W	4 A cosφ 0,5 920 VA	- -
F411U2	10 A 1380 W	250 W Max 4 lamps	4 A 230 W	250 W Max 4 lamps	4 A 230 W	4 A cosφ 0,5 460 VA	2 A 460 W
F411/4	2 A 460 W	70 W Max 2 lamps	0.3 A 70 W	70 W Max 2 lamps	0.3 A 70 W	2 A cosφ 0,5 460 VA	2 A 460 W
F411/1NC	10 A 2300 W	500 W Max 10 lamps	4 A 920 W	500 W Max 10 lamps	4 A 920 W	4 A cosφ 0,5 920 VA	- -
BMSW1003	16 A 3680 W	2.1 A 500 VA	10 X (2 X 36 W) 4.3 A	1150 W 5 A	16 A 3680 W	16 A 3680 W	- -
BMSW1005	16 A 3680 W	2.1 A 500 VA	4.3 A 10X2X36 W	5 A 1150 VA	16 A 3680 W	16 A 3680 W	- -

Notes:
1) Power factor corrected fluorescent lamps, discharge lamps.
2) Account must be taken of the transformer yield to calculate the effective power of the load connected to the actuator. For example if a dimmer is connected to a 100 VA ferromagnetic transformer with yield 0.8, the effective power of the load will be 125 VA.
3) The transformer must be loaded at its rated power and however never less than 90% of this power. It is preferable to use a single transformer rather than several transformers in parallel.   For example it is better to use a single 250 VA transformer with 5 50W spotlights connected rather than use 5 50 VA transformers in parallel each with a 50 W spotlight.
4) The ⬚ symbol on the actuators refers to the rolling shutter reducer motors.

NOTE: ○ Neutral item

AXOLUTE
SCS-BUS devices (lights and automation)

F413N   **F414**   **F429**   **F416U1**   **F417U2**   **F418U2**

Item	DIMMERS FOR CENTRALISATIONS
○ F413N	1-output dimmer to supply fluorescent lamps or LED sources with input 1-10 V for single loads up to 2.5 A at 230 Va.c. – type of screw connection - power supply 27 Vd.c. – absorption 30 mA – max 10 ballast that can be connected (clamps 1-2) - with pushbutton for load direct control - version for fastening on DIN rail - 2 modules
○ BMDI1002	1/10V dimmer, "Zero Crossing" technology, 4 outputs with maximum load 4.3 A at 230 V a.c., clamp connection, IP20 protection index, power supply100/240 V a.c. 50/60 Hz, pushbuttons for load direct control - 10 DIN modules
○ F414	1-output dimmer to supply incandescence and halogen lamps with ferromagnetic transformer – power supply 27 Vd.c. – absorption 9 mA - with pushbutton for load direct control - version for fastening on DIN rail - 4 modules
○ F429	DALI dimmer with 8 independent outputs for the connection of up to 16 DALI reactors for each output – 230 V a.c. power supply 50/60 Hz; 110 - 240 Vd.c. – absorption 5 mA - with pushbutton for load direct control - version for fastening on DIN rail - 6 modules

Item	MULTI-LOAD DIMMERS FOR CENTRALISATIONS
○ F416U1	multi-load dimmer, 1 output with maximum load 4.3 A at 230 Va.c., clamp connection and RJ45, IP20 protection index, power supply 100/240 Va.c. 50/60 Hz, pushbutton for load direct control - 6 DIN modules
○ F417U2	multiload dimmer, 2 independent outputs with maximum load 1.7 A at 230 Vac, clamp and RJ45 connection, IP20 protection index, power supply 100/240 Va.c. 50/60 Hz, direct load control pushbutton - 6 DIN modules
○ F418	dimmer for the management of dimmer LEDs, compact fluorescent lamps (CFL), energy saving halogen lamps and electronic transformers at 110-230 V. Power supply 27 Vd.c., absorption 10 mA - version for fastening on DIN rail - 4 modules
○ F418U2	two-channel dimmer for the management of dimmer LEDs, dimmer compact fluorescent lamps (CFL), energy saving halogen lamps and electronic transformers at 110-230V. Possibility of parallelisation of the two channels to increase the maximum power which can be managed. power supply 27 Vd.c., absorption 18 mA - version for fastening on DIN rail - 4 modules

LOADS THAT CAN BE DRIVEN (250 Va.c. 50/60 Hz)						
Actuators	Type					
	Energy saving incandescence and halogen lamps	LED lamps	Linear fluorescent lamps [1]	Compact fluorescent lamps	Electronic transformers [3]	Ferromagnetic transformers [2] [3]	Reducer motors for rolling shutters [4]
BMDI1002	Dimmer per ballast - 4 x 4,3 A outputs - 4x 1000VA@ 230 Vac - 4x500VA@ 230 Vac						
F413N	- -	- -	2 A 460 W [5] Max 10 ballast, type T5, T8, compact or driver for LED	- -	- -	- -	- -
F414	0,25 - 4,3 A 60 - 1000 VA	- -	- -	- -	- -	0,25 - 4,3 A 60 - 1000 VA	- -
F416U1	4,3 A 40 - 1000 W	- -	- -	- -	4,3 A 40 - 1000 W	4,3 A 40 - 1000 W	- -
F417U2	1,7 A 40 - 400 W	- -	- -	- -	1,7 A 40 - 400 W	1,7 A 40 - 400 W	- -
F418	1÷300 W	1÷300 VA	-	1÷300 VA	1÷300 VA	-	-
F418U2	2x300 W	2x300 VA	-	2x300 VA	2x300 VA	2x300 VA	-
F429	SCS/DALI dimmer interface - 8 x16 ballast						

Notes:
1) Power factor corrected fluorescent lamps, discharge lamps. 2) Account must be taken of the transformer yield to calculate the effective power of the load connected to the actuator.
For example if a dimmer is connected to a 100 VA ferromagnetic transformer with yield 0.8, the effective power of the load will be 125 VA.
3) The transformer must be loaded at its rated power and however never less than 90% of this power. It is preferable to use a single transformer rather than several transformers in parallel. For example it is better to use a single 250 VA transformer with 5 50W spotlights connected rather than use 5 50 VA transformers in parallel each with a 50 W spotlight.
4) The ⊏⊐ symbol on the actuators refers to the rolling shutter reducer motors. 5) Only compatible with lamps with 1/10 V ballast.

NOTE: ○ Neutral item

AXOLUTE
SCS-BUS devices (temperature control)

| H4691 | FL4654 | FL4653 | F430R8 | F430R3V10 | F430V10 |

Item	THERMOSTAT	
○ H4691		flush mounted thermostat with backlit display. It can be used to control the temperature of an individual zone, irrespective of a temperature control central unit being installed as part of the system or not. It features a temperature probe and an input for the connection of a contact line (e.g. window contact). It can be used for the management of different types of systems, and the adjustment of the fan speed when fan coils are used. Possibility of automatic operation (summer/winter), with compatible systems. SCS-BUS connection - Sizes: 2 modules.

Item	DIGITAL TEMPERATURE PROBE WITH TOUCH TECHNOLOGY DISPLAY	
■ FL4654		temperature probe with backlit display with **black** cover plate finishing in plastic material. It controls the temperature of an individual zone. It has a temperature and humidity probe and an input for the connection of a contact line (e.g. window contact). It can be used for the management of different types of systems, and the adjustment of the fan speed when Fan Coils are used. Possibility of automatic operation (summer/winter), with compatible systems. SCS-BUS connection - Sizes: 3 modules.
□ FL4554W		digital temperature probe with backlit display in Touch technology with **white** cover plate finishing. Same features of the FL4653

| Item	DIGITAL TEMPERATURE PROBE WITH DISPLAY + 6 TOUCH CONTROLS	
■ FL4653		control panel to be installed on the bedhead with **black** cover plate finishing, in plastic material. It includes a temperature probe with backlit display (all the functions of FL4654), plus the following scenario controls: - Reading - TV - Sleep - Wake up - General OFF - DND (do not disturb) The scenarios are to be programmed in the MH201. SCS-BUS connection - Sizes: 3 modules.
□ FL4653W		control panel to be installed on the bedhead with **white** cover plate finishing. Same features of the FL4653.

Item	DIN ACTUATORS	
○ F430R8		actuator with 8 independent relays for the control of on-off valves, motorised valves (open-close and three points), pumps and fan coils with 2 and 4 tubes - 4A resistive, 1A motor valves, pumps and fan-coils- SCS-bus connection - sizes: 4 DIN modules
○ F430R3V10		actuator with 3 independent relays and 2 x 0-10 Volts outputs for the control of fan coils with 2 and 4 tubes with proportional 0-10 Volt valves - 4A resistive, 1A fan coil - SCS-BUS connection - sizes: 4 DIN modules
○ F430V10		actuator with 2 x 0-10 Volt outputs for the control of 0-10 proportional valves - SCS-BUS connection - sizes: 2 DIN modules
○ F430/2		2 independent relay actuator for the control of on-off valves, (open-close) motor valves and pumps - 6A resistive, 2A motor valves and pumps - SCS-BUS connection - 2 DIN modules
○ F430/4		4 independent relay actuator - for the control of on-off valves, (open-close) motor valves, pumps and 2-tube fan coil - 4A resistive, 1A motor valves, pumps and fan-coil - SCS-BUS connection - 2 DIN modules

NOTE: □ **White** device   ■ **Tech** device   ■ **Black** device   ○ Neutral item

AXOLUTE
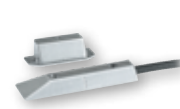## SCS-BUS devices (interface and accessories)

E46ADCN

3515　3510M　3511　3512

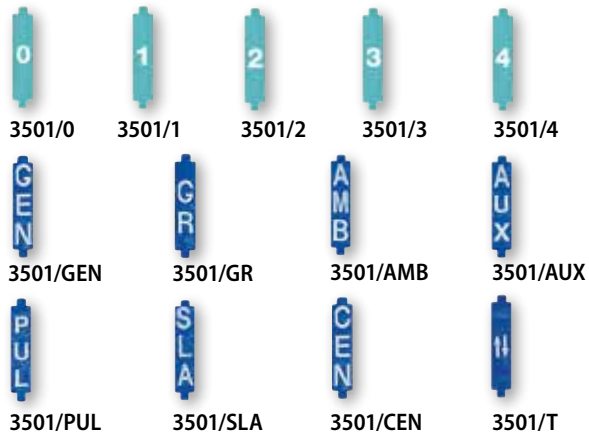| Item		POWER SUPPLIES
○ E46ADCN		power supply - input 230 Va.c. output 27 Vd.c. SELV – maximum consumption 300 mA – maximum output current: 1.2 A - DIN rail mounted model - space requirement 8 DIN modules – for flush mounted or wall mounted switchboards
○ E49		compact power supply - input 230 Va.c. - output 27 Vd.c. - maximum current provided 600 mA - Sizes: 2 DIN modules
○ 346020		Additional power supply. Provides power for Webserver 2 DIN modules 17.5 mm
○ 1 467 21		Super-compact power supply, input 230 Va.c. - output 24 Vd.c. - maximum current provided 630 mA - Sizes: 1 DIN modules

Item		CONTACT INTERFACE
○ 3477		basic module control interface with 2 independent contacts for the control of 2 actuators for single function loads, or 1 actuator for double function loads (shutters) – the inputs accepts two traditional switches or pushbuttons with NO and NC contact, or a traditional two-way switch, or interlocked pushbuttons
○ F428		basic module control interface with 2 independent contacts for the control of 2 actuators for single function loads, or 1 actuator for double function loads (shutters) – the inputs accepts two traditional switches or pushbuttons with NO and NC contact, or a traditional two-way switch, or interlocked pushbuttons - 2 DIN modules

Item		VARIOUS ACCESSORIES
○ 3515		spare removable clamp

Item		MAGNETIC CONTACTS
○ 3510		NC electromagnetic contact interface detectors and protection line - flush mounted version
○ 3510M		NC electromagnetic contact interface detectors and protection line – made of brass with high mechanical resistance, for installation in non ferromagnetic material windows and doors, or in low section doors and windows
○ 3510PB		NC electromagnetic contact interface detectors and protection line – made of brass, with high mechanical resistance for installation in all types of doors and windows and reinforced doors.
○ 3511		NC electromagnetic contact interface detectors and protection line - visible mounted version
○ 3512		NC electromagnetic contact interface detectors and protection line – made of die cast aluminium, for installation on tilting or sliding doors. Preset for floor installation.
○ 3513		NC electromagnetic contact interface detectors and protection line - version for visible installation on metal surfaces

NOTE: ○ Neutral item

AXOLUTE
SCS-BUS devices (accessories)

3501/0   3501/1   3501/2   3501/3   3501/4

3501/GEN   3501/GR   3501/AMB   3501/AUX

3501/PUL   3501/SLA   3501/CEN   3501/T

3501K/1   336904 / L4669HF   L4669 / L4669/500

Item	CONFIGURATORS – SINGLE-TYPE PACKAGE OF 10 PIECES
○ 3501/0	configurator 0
○ 3501/1	configurator 1
○ 3501/2	configurator 2
○ 3501/3	configurator 3
○ 3501/4	configurator 4
○ 3501/5	configurator 5
○ 3501/6	configurator 6
○ 3501/7	configurator 7
○ 3501/8	configurator 8
○ 3501/9	configurator 9
○ 3501/CEN	configurator GEN
○ 3501/GR	configurator GR
○ 3501/AMB	configurator AMB
○ 3501/AUX	configurator AUX
○ 3501/ON	configurator ON
○ 3501/OFF	configurator OFF
○ 3501/OI	configurator OI

	CONFIGURATORS – SINGLE-TYPE PACKAGE OF 10 PIECES
○ 3501/PUL	configurator PUL
○ 3501/SLA	configurator SLA
○ 3501/CEN	configurator CEN
○ 3501/T	configurator ↑↓
○ 3501/TM	configurator ↑↓ M

For more information on the design and installation of the scs-bus solutions see the specific MyHOME technical guide.

www.catalogo-sfogliabile.bticino.it/myhomegb/

Item	CONFIGURATOR KIT
○ 3501K	Configurator kit from No. 0 to No. 9
○ 3501K/1	Kit of configurators AUX, GEN, GR, AMB,ON, OFF, O/I, PUL, SLA, CEN, ↑↓, ↑↓M

	CONNECTION CABLES
○ L4669	specific cable for auxiliary power supply, unshielded, consisting of a grey external sheath and 2 x 0.35 mm2 blue and white twisted flexible conductors. Insulation 300/500 V. In compliance with the standards: EN50575, EN60811, EN50289, EN50290, EN60228, EN50265-2-1, EN50395, EN50396 as described in the IMQ CPT 062 document. Cable not suitable for underground installation. Coil length 100 m. Class of reaction to fire according to the CPR regulation: Eca.
○ L4669/500	As above, coil length 500 metres
○ L4669KM1	As above - reel lenght 1000 metres
○ 336904	specific BUS/SCS cable, unshielded, consisting of a white external sheath and 2 x 0.50 mm2 brown and brown/white twisted flexible conductors. Insulation 400 V. In compliance with the standards: EN50575 EN60811, EN50289, EN50290, EN60228, EN50265-2-1, EN50395, EN50396 as described in the IMQ CPT 062 document. Cable suitable for underground installation inside appropriate conduits (for the details see the technical sheet). Coil length 200 m. Class of reaction to fire according to the CPR regulation: Eca.
○ 336905	specific BUS/SCS cable, unshielded, consisting of a white external sheath and 2 x 0.50 mm2 brown and brown/white twisted flexible conductors. Halogen-free Low toxicity cable; ideal for applications where fire safety is particularly critical. Insulation 400 V. In compliance with the standards: EN 50575 EN60811, EN50289, EN50290, EN60228, 50265-2- 1,EN50395, EN50396 as described in the IMQ CPT 062 document Cable not suitable for underground installation. Coil length 200 m. Class of reaction to fire according to the CPR regulation: Cca-s1b,d1,a1.

NOTE: ○ Neutral item

AXOLUTE

Traditional devices

HD4177

H4549

HC4033

H4372V230H

Finishing accessories for SCS-BUS and traditional devices

HS4547

HC4915DD

HC4915MR

Item		KEY CARD SWITCH
○ H4549		key card switch for the power supply inside the hotel room - slot light with built-in lamp - 30 second switch-off delay - power supply 230 Va.c. - 2 modules - to be completed with front cover in the desired look
○ H4548		key card switch for the power supply inside the hotel room with RFID technology recognition - slot light with built-in lamp - 30 second switch off delay - power supply 230 Va.c. - 2 modules - to be completed with front cover in the desired look

Item		LAMPHOLDER FOR OFF-DOOR NOTIFICATION
○ H4372V230H		off-door lampholder with double optical notification: do not disturb and make up room – use 2 LEDs item LN4742V12T (12V)

		SHAVER SOCKETS
□ HD4177 ■ HC4177 ■ HS4177		shaver socket with insulation transformer - input voltage 230 Va.c. 50/60 hz - output voltage 115/230 Va.c. 20 VA

		PULL-CORD PUSHBUTTON
□ HD4033 ■ HC4033 ■ HS4033		cord pushbutton 1 P NO 10 A for bathroom alarm

Item		FRONT COVERS FOR KEY CARD SWITCHES
□ HD4547 ■ HC4547 ■ HS4547		front cover for traditional or SCS key card switch - 2 modules

		KEY COVERS WITH SYMBOLS FOR SCS CONTROL
□ HD4915DD ■ HC4915DD ■ HS4915DD		"Do not disturb" key covers
□ HD4915M2DD ■ HC4915M2DD ■ HS4915M2DD		"Do not disturb" key covers - 2 modules
□ HD4915MR ■ HC4915MR ■ HS4915MR		"Make up the room" key covers
□ HD4915BL ■ HC4915BL ■ HS4915BL		"Room light" key covers
□ HD4915M2BL ■ HC4915M2BL ■ HS4915M2BL		"Room light" key covers - 2 modules

		KEY COVER WITH SYMBOLS FOR AXIAL CONTROLS
□ HD4921BL ■ HC4921BL ■ HS4921BL		"Bed light" key covers
□ HD4921M2BL ■ HC4921M2BL ■ HS4921M2BL		"Bed light" key covers - 2 modules
□ HD4921DD ■ HC4921DD ■ HS4921DD		"Do not disturb" key covers
□ HD4921MR ■ HC4921MR ■ HS4921MR		"Make up the room" key covers

RJ45, audio and video sockets and the other devices, consult the Axolute catalogue.

NOTE: □ **White** device ■ **Tech** device ■ **Anthracite** device ○ Neutral item

AXOLUTE
USB chargers and lighting devices

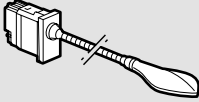| HD4285C1 | HD4285C2 | H4285CW2 | | H4360 | H4361 | HS4362 | H4382V12V24
H4382/230 |

Item	**USB CHARGER**
☐ **HD4285C1** ▨ **HC4285C1** ■ **HS4285C1**	5 Vdc USB charger only for charging electronic devices up to 1,100 mA like mobile phones, smartphones, tablets and similar – 110-230 V 50-60 Hz DIRECT power supply
☐ **HD4285C2** ▨ **HC4285C2** ■ **HS4285C2**	5 Vdc USB charger for quick charge of one single electronic device (mobile phones, smartphones, tablets or similar) up to 2,400 mA or simultaneous charging of two devices up to 1.200 mA – 110-230 Va.c. DIRECT power supply 50-60 Hz

	INDUCTION AND USB CHARGER
○ **H4285CW2**	allows the quick and wireless charging of smartphones with induction receiver. Suitable for the bed head, sideboards, desks and work areas. Compliant with WPC QI (World Power consortium) and EN 62479 (EF emissions) standards. Meets the electromagnetic field safety requirements and does not cause disturbance to other radio emissions (Zigbee TNT, GSM 4G, ...). It has 2 50x80 mm aerials for quick coupling of the smartphone. The antislip support surface is inclined by 10°. Antitheft "lock" function. Energy performance >85%. It has a 2,400 mA type A USB port to supply a second device. 12 W. Size 136.5 x 70 x 56.5 mm

Item	**SWIVEL 360° SPOT LAMP**
○ **H4360**	it is installed above a work place (kitchen, bedroom, desk ...) - Can be oriented by 360° for best lighting of the zone required - It can be controlled by a standard switch or an electronic switch without neutral, by a dimmer or an automatic switch with neutral – LED lamp – Consumption 2.8 W – Luminous flux 70 lumen – Life: Approx. 50,000 hours - supplied with neutral base and front cover plates in white, Tech, anthracite colours - 2 modules

	DIRECTIONAL LAMP
○ **H4361**	allows you to create directional and decorative lighting. We recommend installation at 30 cm from the floor – It can be controlled by a standard switch or an electronic switch without neutral, by a dimmer or an automatic switch with neutral – LED lamp – Consumption 2.2 W – Luminous flux 70 lumen – Life: Approx. 50,000 hours - supplied with neutral base and front cover plates in white, Tech, anthracite colours - 2 modules

	DIMMER READING LAMP
☐ **HD4362** ▨ **HC4362** ■ **HS4362**	it is installed at the bedhead giving directional lighting. It has a flexible arm so that the lighting arm can be directed. The brightness can be dimmed by pressing the integrated ON/OFF control for a long time. It can also be connected to a remote control and, if necessary, the integrated control can be disabled with a 30 sec. press - LED -lamp - Consumption 3 W - Luminous flux 110 lumen (equivalent to 15 W incandescence) - Life 40,000 hours - 1 (flush mounted) module.

NOTE: the photographs of the **REMOVABLE TORCH, SWIVEL 360° SPOT LAMP AND DIRECTIONAL LAMP**, represent the product code indicated, to which one of the three front cover plates (white, Tech or anthracite) available in the package is already fitted.

	STEP MARKER LAMP
○ **H4382V12V24**	step marker lamp with white light LEDs - 12 - 24 Va.c. - on-off switch- 0.6 W at 12 Va.c. - 0.8 W at 24 Va.c.
○ **H4382/230**	step marker lamp with white light LEDs - 230 Va.c. - on-off switch - 0.5 W

NOTE: ☐ **White** device ▨ **Tech** device ■ **Anthracite** device ○ Neutral item

AXOLUTE
Room insulation remote switch

The contactors must be used in the system to switch off some loads or devices in the room when the guest is not present (key card not in the switch).

FT1A2N24   FT2A3N230   FT1A2N24S

Item	AC3 CONTACTORS			
	In = 25A			
	Vn (Vac)	In (A)	Contact	No. of modules
FT1AC1N24	24	25	1NO+1NC	1
FT1A2N24			2 NO	1
FT2A4N24			4 NO	2
FT1AC1N230	230		1NO+1NC	1
FT1A2N230			2 NO	1
FT2A3N230			3 NO	2
FT2A4N230			4 NO	2
FT2AC2N230			2NO+2NC	2
FT1C2N230			2NC	1
FT2C4N230			4 NC	2

Item	AC7A CONTACTORS			
	Vn (Vac)	In (A)	Contact	No. of modules
FT1A2N24M	24	25	2 NO	1
FT1A1N230M	230		1NO	1
FT1A2N230M			2 NO	1
FT2A4N230M			4 NO	2
	In = 40-63A			
FC2A4/24N	24	40	2 NO	2
FC4A4/24N			4 NO	3
FC4A6/24N		63	4 NO	3
FC2A4/230N	230	40	2 NO	2
FC3A4/230N			3 NO	3
FC4A4/230N			4 NO	3
FC4A6/230N		63	4 NO	3

	SILENT			
FT1A1N24S	24	25	1NO	1
FT1A2N24S			2 NO	1
FT1A1N230S	230		1NO	1
FT1A2N230S			2 NO	2

TECHNICAL FEATURES

Reference standards: CEI EN 61095
Rated pulse voltage Uimp (kV): 4
Rated reel voltage Vn (Vac): 24 or 230
Rated insulating voltage Ui (Vac): 500
Rated current In (A) at 30°C: 25-40-63
Conditioned short-circuit current (kA): 3
Rated frequency (Hz): 50/60
Operating temperature (°C): -25 to 40
Max No. of mechanical manoeuvres 1000000
Power consumption for each pole (W): 1.5
Protection index (terminal area/other areas): IP20/IP40
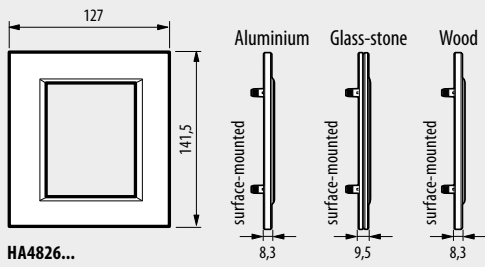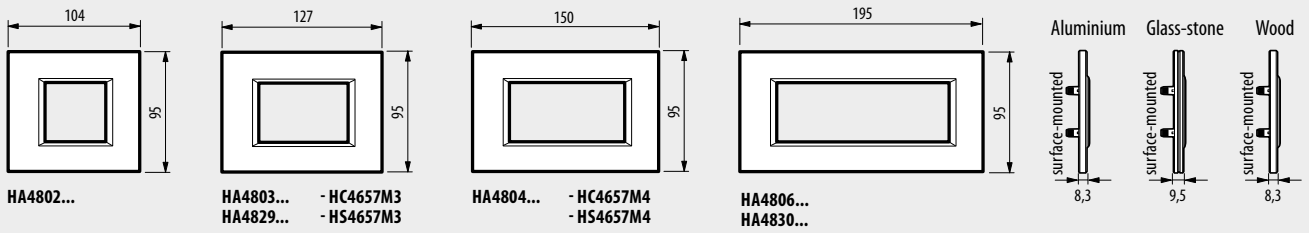Maximum section of connectable flexible/rigid cable (mm^2): see table

AXOLUTE
Dimensional data

AXOLUTE AIR COVER PLATES

HW4802...

HW4803...

HW4804...

HW4806...

HW4826...
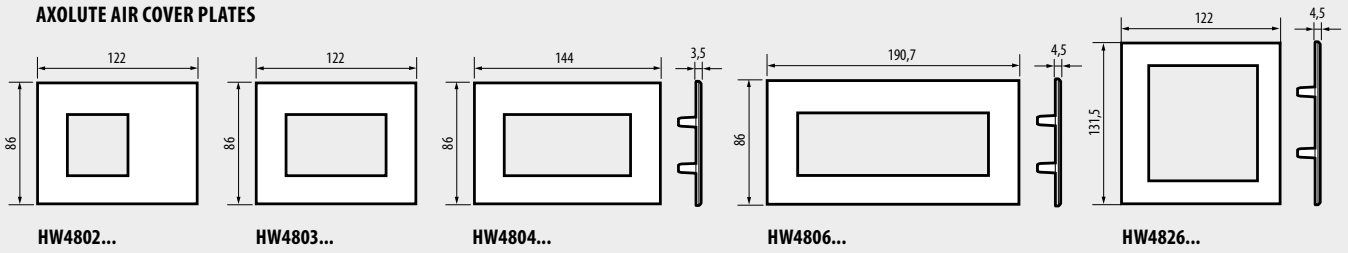
AXOLUTE RECTANGULAR COVER PLATES
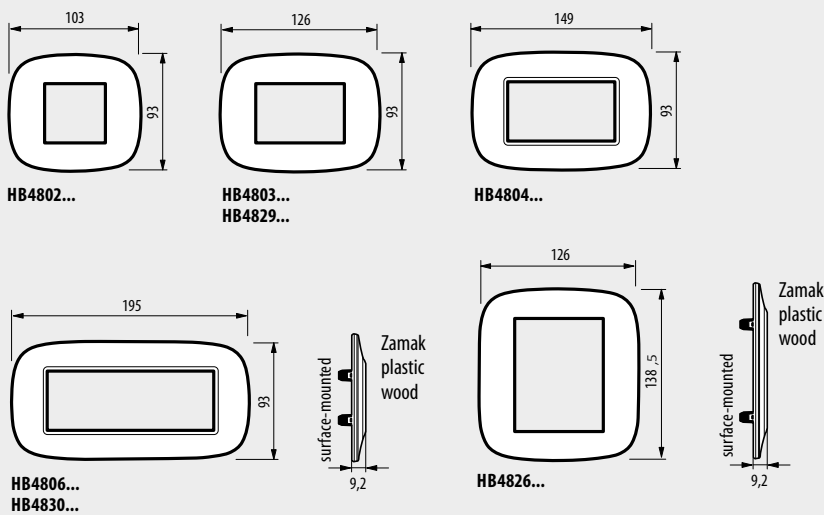
HA4802...

HA4803...
HA4829...
- HC4657M3
- HS4657M3

HA4804...
- HC4657M4
- HS4657M4

HA4806...
HA4830...

Aluminium Glass-stone Wood
surface-mounted surface-mounted surface-mounted
8,3 9,5 8,3

HA4826...

Aluminium Glass-stone Wood
surface-mounted surface-mounted surface-mounted
8,3 9,5 8,3

AXOLUTE ELLIPTICAL COVER PLATES

HB4802...

HB4803...
HB4829...

HB4804...

HB4806...
HB4830...

surface-mounted
Zamak
plastic
wood
9,2

HB4826...

surface-mounted
Zamak
plastic
wood
9,2

TABLE WITH DIN SIZES (mm)			
No. of modules	A	B	C
1	17.5	82	66
2	35	82	66
3	52.5	82	66
4	70	82	66
5	87.5	82	66
6	105	82	66
7	122.5	82	66
8	140	82	66
9	157.5	82	66
10	175	82	66
12	210	82	66

MODULAR DEVICES

1 module

2 modules

3 modules

BASIC INTERFACE MODULE

3475 - 3476 - 3477
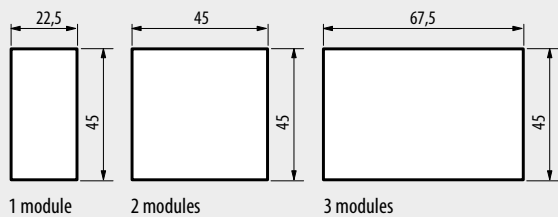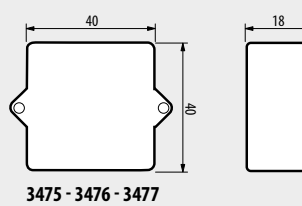
LIVINGLIGHT HOTEL SOLUTIONS

A complete offer

for a state of the art electric system inside the whole welcoming establishment and in particular inside the hotel room. All this to ensure that customers feel immediately at ease. The offer includes both standard traditional functions, and more advanced functions.

EQUIPMENT INCLUDING SPECIFIC PRODUCTS
for the SCS-BUS room

DESIGNED TO ENHANCE CUSTOMER COMFORT

A solution for all types of hotels

STANDARD EQUIPMENT

The BTicino offer for the rooms, and in wider terms for the whole hotel establishment, includes many more devices that are normally also used for other applications.

Request or view the Livinglight catalogue

Livinglight

CATALOGUE

bticino

LIVINGLIGHT
SCS-BUS devices (specific for the hotel)

LN4650   LN4651   MH201   F458   F459

LN4653   348402   3544SW
                                          3546SW

Item		KEY CARD SWITCHES
○ LN4649		key card switch for function activation in the hotel room - slot light with built-in lamp - SCS-BUS connection - sizes: 2 modules - to be completed with front cover in the desired look
○ LN4648		key card switch for function activation in the hotel room with RFID technology recognition - slot light with built-in lamp - SCS-BUS connection - sizes: 2 modules - to be completed with front cover in the desired look
		CONTROL INDICATORS FOR ROOM MANAGEMENT
○ LN4650		DO NOT DISTURB – MAKE UP THE ROOM indicator and bell pushbutton - SCS-BUS connection - sizes: 2 modules
○ LN4651		key card reader in RFID technology + DO NOT DISTURB – MAKE UP THE ROOM indicator and bell pushbutton - SCS-BUS connection - sizes: 2 modules
○ LN4653		DO NOT DISTURB – MAKE UP THE ROOM control to be completed with key covers - SCS-BUS connection - sizes: 2 modules
		KEY CARDS AND KEY CARD PROGRAMMER
○ 3547		credit card key card (ISO 50x80 mm). It uses transponder technology Mifare classic ISO14443 type A. To be used together with the key card programmer, item code 348402. The key card can be customised and is sold in lots of 5 pieces.
○ 348402		Table-top key card programmer to be connected to the PC in the reception.

Item		IP SCENARIO MODULE
○ MH201		it manages scenarios related to hotel rooms - it works as a gateway for the Configuration and Supervision software - it is necessary to install one module for each room or zone - SCS-BUS and ethernet network connection - sizes: 1 DIN module
		SCENARIO MODULE
○ F420		device to save 16 scenarios for the Automation, Sound system, Temperature control and Video door entry applications - 2 DIN modules
		IP SERVER
○ F458		IP SERVER to be used in systems with over 100 rooms or zones (over 100 MH201 installed). Sizes: 6 DIN modules
		DRIVER MANAGER
○ F459		integration platform with other brand systems. Sizes: 6 DIN modules

Contact the branch to check the feasibility of specific integrations and to request the licence needed to use the Driver manager.

		SOFTWARE
○ 3544SW		Licence for the software for the room status supervision, the basic management and the key card programming for a Hotel with up to 20 rooms
○ 3546SW		Licence for the software as above – for a Hotel with more than 20 rooms

NOTE: To request integration with PMS which use FIAS protocol (e.g. Fidelio) contact the agency.

NOTE: ○ Neutral item

LIVINGLIGHT
## SCS-BUS devices (lights and automation)

LN4651M2 **LN4652/2** **LN4652/3**   **N4680** **L4680** **LN4652**

| Item	CONTROLS	
○ **L4651M2**		special control – can drive an actuator performing all the standard functions of a control and in addition some special functions: activation of 4 scenarios saved in module item F420, timings, activation of an actuator installed on a different bus than the control, selection of the fixed adjustment level and the dimmer soft-start and soft-stop speed, sound system, door lock switching on control, call to the floor and switching on staircase light control and management of auxiliary channels. To be completed with 1 or 2-module key covers with one or two functions - 2 modules

CONTROLS FOR SINGLE OR DOUBLE LOADS

Item		
○ **L4652/2**		control which can drive a single actuator for single or double loads or two actuators for single loads or independent double loads – to be completed with 1 2-module key cover for controls with one or two functions or 2 1-module key covers with one or two functions - 2 modules
○ **L4652/3**		control which can drive three actuators for single or double loads or two actuators for single loads or independent double loads – to be completed with 3 1-module key covers for controls with one or two functions - 3 modules

Item	CONTROL FOR ROLLING SHUTTER MANAGEMENT	
○ **LN4660M2**		2 module flush mounted control with reduced thickness with 3 pushbuttons, only suitable for operation with advanced actuators LN4661M2 and F401, specific for the management of rolling shutters. In addition to monostable and bistable UP/DOWN operation, the device also places the rolling shutter in a stored (PRESET) position.

SCENARIO CONTROL

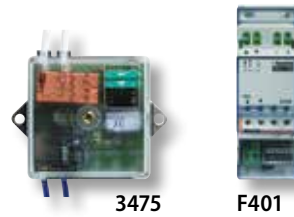|		
□ **L4680** ■ **N4680** ■ **NT4680**		customisable scenario control to control 4 independent "room situations" - 2 modules
○ **LN4652**		8-KEY control for light management, rolling shutter automation, sound system and scenarios - SCS-BUS connection - sizes: 2 modules
○ **3541** ○ **3542**		A5 sheets for the customisation of the symbols of item LN4652 3541 = black; 3542 = white; The sheets can be customised using the tool found in the MyHOTEL_Suite configuration software.

NOTE: □ **White** device ■ **Tech** device ■ **Anthracite** device ○ Neutral item

LIVINGLIGHT
## SCS-BUS devices (lights and automation)

LN4672M2

3475 **F401**

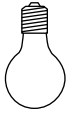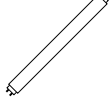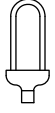| Item	**ACTUATORS AND FLUSH MOUNTED ACTUATORS/ DIMMERS**
○ **LN4672M2**	actuator/control with 2 independent relays - for single, double or mixed loads: 1380 W resistive, 1380 W incandescence lamps, 460 W for reducer motors, 460 VA cosφ 0,5 for ferromagnetic transformers and 250 W for fluorescent lamps - logic relay interlock via configuration. The device can be also configured to manage a remote actuator - 2 modules.

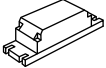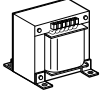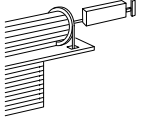| Item	**BASIC MODULE ACTUATOR**
○ **3475**	1 relay actuator - for single loads: 2 A resistive or incandescence lamps and 2 A cosφ 0.5 for ferromagnetic transformers - suitable for installation in ceiling lamps cups or in flush-mounted boxes behind the control devices.
○ **3476**	1 relay actuator - for single loads: 2 A resistive or incandescence lamps, 2 A cosφ 0.5 for ferromagnetic transformers - a traditional pushbutton with NO contact accepted in input

	ACTUATORS FOR ROLLING SHUTTER MANAGEMENT
○ **LN4661M2**	flush-mounted 2-module actuator with 2 internal relays and 4 pushbuttons made to work with the LN4660M2 control devices to manage the rolling shutters. In addition to monostable and bistable UP/DOWN operation, the actuator also places the rolling shutter in a stored (PRESET) position.
○ **F401**	as above - with 3 pushbuttons - 2 DIN modules

LOADS THAT CAN BE DRIVEN (230 Va.c. 50/60 Hz)						
Actuators	Type					
	Energy saving incandescence and halogen lamps	LED lamps	Linear fluorescent lamps [1]	Compact fluorescent lamps	Electronic transformers [3]	Ferromagnetic transformers [2] [3]	Reducer motors for rolling shutters [4]
LN4672M2	1380 W	250 W Max 2 lamps	250 VA	250 W Max 2 lamps	460 W	460 VA	460 W
3475 3476	2 A 460 W	40 W Max 1 lamp	- -	40 W Max 1 lamp	- -	2 A cosφ 0,5 460 VA	- -
LN4661M2 F401	-	-	-	-	-	-	2 A 250 Va.c.

Notes:
1) Power factor corrected fluorescent lamps, discharge lamps.
2) Account must be taken of the transformer yield to calculate the effective power of the load connected to the actuator. For example if a dimmer is connected to a 100 VA ferromagnetic transformer with yield 0.8, the effective power of the load will be 125 VA.
3) The transformer must be loaded at its rated power and however never less than 90% of this power. It is preferable to use a single transformer rather than several transformers in parallel. For example it is better to use a single 250 VA transformer with 5 50 W spotlights connected rather than use 5 50 VA transformers in parallel each with a 50 W spotlight.
4) The ⬚⊣ symbol on the actuators refers to the rolling shutter reducer motors.

NOTE: ○ Neutral item

LIVINGLIGHT
SCS-BUS devices (lights and automation)

F411U1   F411U2   F411/4   F411/1NC

BMSW1003

Item	ACTUATORS FOR CENTRALISATIONS
○ F411U1	actuator with 1 two-way relay – for single loads: 16 A resistive, 10 A incandescence lamps, 4 A cosφ 0.5 for ferromagnetic transformers and 4 A for fluorescent lamps - it has ¨Zero crossing¨ technology - 2 DIN modules
○ F411U2	actuator with 2 independent relays – for single and double loads: 10 A resistive and 6 A incandescence lamps, 500 W for reducer motors, 2 A cosφ 0,5 for ferromagnetic transformers and 250 W for fluorescent lamps - logic relay interlock via configuration - it has ¨Zero crossing¨ technology - 2 DIN modules
○ F411/4	actuator with 4 independent relays - for single, double or mixed loads: 2 A resistive, 2 A incandescence lamps, 500 W for reducer motors, 2 A cosφ 0,5 for ferromagnetic transformers and 70 W for fluorescent lamps - logic relay interlock via configuration - 2 DIN modules
○ F411/1NC	actuator with 1 two-way NC relay for single loads 16 A resistive, 10 A for incandescence lamps and 4 A for fluorescent lamps. On switching on the device always has the contact closed (ON status) and the contact is opened with an OFF command. In this way there would be no voltage from the BUS, the device would remain in the ON state, keeping the load on – 2 DIN modules

Item	ACTUATORS FOR CENTRALISATIONS
○ BMSW1003	ON/OFF actuator, 4 independent outputs with maximum load 16 A at 230 Va.c., clamp connection and RJ45, IP20 protection index, power supply 100/240 Va.c. 50/60 Hz, pushbuttons for load direct control - zero-crossing function - 6 DIN modules
○ BMSW1005	ON/OFF actuator, "Zero Crossing" technology, 8 independent outputs with maximum load 16 A at 230 V a.c., clamp connection, IP20 protection index, power supply100/240 V a.c. 50/60 Hz, pushbuttons for load direct control - 10 DIN modules

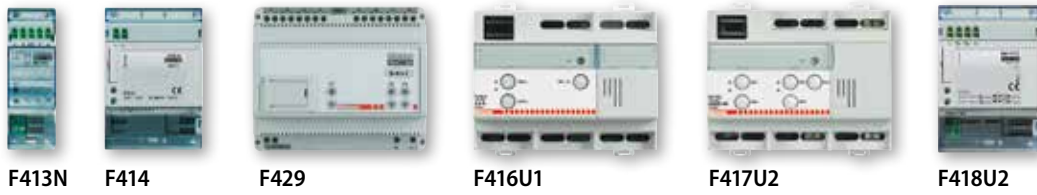| LOADS THAT CAN BE DRIVEN (250 Va.c. 50/60 Hz)						
Actuators	Type					
	Energy saving incandescence and halogen lamps	LED lamps	Linear fluorescent lamps [1]	Compact fluorescent lamps	Electronic transformers [3]	Ferromagnetic transformers [2][3]	Reducer motors for rolling shutters [4]
F411U1	10 A 2300 W	500 W Max 10 lamps	4 A 920 W	500 W Max 10 lamps	4 A 920 W	4 A cosφ 0,5 920 VA	– –
F411U2	10 A 1380 W	250 W Max 4 lamps	4 A 230 W	250 W Max 4 lamps	4 A 230 W	4 A cosφ 0,5 460 VA	2 A 460 W
F411/4	2 A 460 W	70 W Max 2 lamps	0.3 A 70 W	70 W Max 2 lamps	0.3 A 70 W	2 A cosφ 0,5 460 VA	2 A 460 W
F411/1NC	10 A 2300 W	500 W Max 10 lamps	4 A 920 W	500 W Max 10 lamps	4 A 920 W	4 A cosφ 0,5 920 VA	– –
BMSW1003	16 A 3680 W	2.1 A 500 VA	10 X (2 X 36 W) 4.3 A	1150 W 5 A	16 A 3680 W	16 A 3680 W	– –
BMSW1005	16 A 3680 W	2.1 A 500 VA	4.3 A 10X2X36 W	5 A 1150 VA	16 A 3680 W	16 A 3680 W	– –

Notes:
1) Power factor corrected fluorescent lamps, discharge lamps.
2) Account must be taken of the transformer yield to calculate the effective power of the load connected to the actuator. For example if a dimmer is connected to a 100 VA ferromagnetic transformer with yield 0.8, the effective power of the load will be 125 VA.
3) The transformer must be loaded at its rated power and however never less than 90% of this power. It is preferable to use a single transformer rather than several transformers in parallel. For example it is better to use a single 250 VA transformer with 5 50W spotlights connected rather than use 5 50 VA transformers in parallel each with a 50 W spotlight.
4) The ⊏⊐ symbol on the actuators refers to the rolling shutter reducer motors.

NOTE: ○ Neutral item

LIVINGLIGHT
SCS-BUS devices (lights and automation)

F413N **F414** **F429** **F416U1** **F417U2** **F418U2**

Item	DIMMERS FOR CENTRALISATIONS
○ F413N	1-output dimmer to supply fluorescent lamps or LED sources with input 1-10 V for single loads up to 2.5 A at 230 Va.c. – type of screw connection - power supply 27 Vd.c. – absorption 30 mA – max 10 ballast that can be connected (clamps 1-2) - with pushbutton for load direct control - version for fastening on DIN rail - 2 modules
○ BMDI1002	1/10V dimmer, "Zero Crossing" technology, 4 outputs with maximum load 4.3 A at 230 V a.c., clamp connection, IP20 protection index, power supply100/240 V a.c. 50/60 Hz, pushbuttons for load direct control - 10 DIN modules
○ F414	1-output dimmer to supply incandescence and halogen lamps with ferromagnetic transformer – power supply 27 Vd.c. – absorption 9 mA - with pushbutton for load direct control - version for fastening on DIN rail - 4 modules
○ F429	DALI dimmer with 8 independent outputs for the connection of up to 16 DALI reactors for each output – 230 V a.c. power supply 50/60 Hz; 110 - 240 Vd.c. – absorption 5 mA - with pushbutton for load direct control - version for fastening on DIN rail - 6 modules

Item	MULTI-LOAD DIMMERS FOR CENTRALISATIONS
○ F416U1	multi-load dimmer, 1 output with maximum load 4.3 A at 230 Va.c., clamp connection and RJ45, IP20 protection index, power supply 100/240 Va.c. 50/60 Hz, pushbutton for load direct control - 6 DIN modules
○ F417U2	Multi-load dimmer, 2 independent outputs with maximum load 1.7 A at 230 Va.c., clamp connection and RJ45, IP20 protection index, power supply 100/240 Va.c. 50/60 Hz, pushbutton for load direct control - 6 DIN modules
○ F418	dimmer for the management of dimmer LEDs, compact fluorescent lamps (CFL), energy saving halogen lamps and electronic transformers at 110-230 V. Power supply 27 Vd.c., absorption 10 mA - version for fastening on DIN rail - 4 modules
○ F418U2	two-channel dimmer for the management of dimmer LEDs, dimmer compact fluorescent lamps (CFL), energy saving halogen lamps and electronic transformers at 110-230V. Possibility of parallelisation of the two channels to increase the maximum power which can be managed. power supply 27 Vd.c., absorption 18 mA - version for fastening on DIN rail - 4 modules

	LOADS THAT CAN BE DRIVEN (250 Va.c. 50/60 Hz)						
Actuators	Type						
	Energy saving incandescence and halogen lamps	LED lamps	Linear fluorescent lamps [1]	Compact fluorescent lamps	Electronic transformers [3]	Ferromagnetic transformers [2] [3]	Reducer motors for rolling shutters [4]
BMDI1002	Dimmer per ballast - 4 x 4,3 A outputs - 4x 1000VA@ 230 Vac - 4x500VA@ 230 Vac						
F413N	- -	- -	2 A 460 W [5] Max 10 ballast, type T5, T8, compact or driver for LED	- -	- -	- -	- -
F414	0,25 - 4,3 A 60 - 1000 VA	- -	- -	- -	- -	0,25 - 4,3 A 60 - 1000 VA	- -
F416U1	4,3 A 40 - 1000 W	- -	- -	- -	4,3 A 40 - 1000 W	4,3 A 40 - 1000 W	- -
F417U2	1,7 A 40 - 400 W	- -	- -	- -	1,7 A 40 - 400 W	1,7 A 40 - 400 W	- -
F418	1÷300 W	1÷300 VA	-	1÷300 VA	1÷300 VA	-	-
F418U2	2x300 W	2x300 VA	-	2x300 VA	2x300 VA	2x300 VA	-
F429	SCS/DALI dimmer interface - 8 x16 ballast						

Notes:
1) Power factor corrected fluorescent lamps, discharge lamps. 2) Account must be taken of the transformer yield to calculate the effective power of the load connected to the actuator. For example if a dimmer is connected to a 100 VA ferromagnetic transformer with yield 0.8, the effective power of the load will be 125 VA.
3) The transformer must be loaded at its rated power and however never less than 90% of this power. It is preferable to use a single transformer rather than several transformers in parallel. For example it is better to use a single 250 VA transformer with 5 50W spotlights connected rather than use 5 50 VA transformers in parallel each with a 50 W spotlight.
4) The ▭ symbol on the actuators refers to the rolling shutter reducer motors. 5) Only compatible with lamps with 1/10 V ballast.

NOTE: ○ Neutral item

LIVINGLIGHT
SCS-BUS devices (temperature control)

| LN4691 | FL4654 | FL4653 | F430R8 | F430R3V10 | F430V10 |

Item	THERMOSTAT
○ LN4691	flush mounted thermostat with backlit display. It can be used to control the temperature of an individual zone, irrespective of a temperature control central unit being installed as part of the system or not. It features a temperature probe and an input for the connection of a contact line (e.g. window contact). It can be used for the management of different types of systems, and the adjustment of the fan speed when fan coils are used. Possibility of automatic operation (summer/winter), with compatible systems. SCS-BUS connection - Sizes: 2 modules.

DIGITAL TEMPERATURE PROBE WITH DISPLAY IN TOUCH TECHNOLOGY

■ FL4654	digital temperature probe with backlit display in Touch technology with **black** cover plate finishing, in plastic material. It controls the temperature of an individual zone. It has a temperature and humidity probe and an input for the connection of a contact line (e.g. window contact). It can be used for the management of different types of systems, and the adjustment of the fan speed when Fan Coils are used. Possibility of automatic operation (summer/winter), with compatible systems. SCS-BUS connection - Sizes: 3 modules.
□ FL4554W	digital temperature probe with backlit display in Touch technology with **white** cover plate finishing. Same features of the FL4653

DIGITAL TEMPERATURE PROBE WITH DISPLAY + 6 TOUCH CONTROLS

■ FL4653	control panel to be installed on the bedhead with **black** cover plate finishing, in plastic material. It includes a temperature probe with backlit display (all the functions of FL4654), plus the following scenario controls: - Reading - TV - Sleep - Wake up - General OFF - DND (do not disturb) The scenarios are to be programmed in the MH201. SCS-BUS connection - Sizes: 3 modules.
□ FL4653W	control panel to be installed on the bedhead with **white** cover plate finishing. Same features of the FL4653.

Item	DIN ACTUATORS
○ F430R8	actuator with 8 independent relays for the control of on-off valves, motorised valves (open-close and three points), pumps and fan coils with 2 and 4 tubes - 4A resistive, 1A motor valves, pumps and fan-coils- SCS-bus connection - sizes: 4 DIN modules
○ F430R3V10	actuator with 3 independent relays and 2 x 0-10 Volts outputs for the control of fan coils with 2 and 4 tubes with proportional 0-10 Volt valves - 4A resistive, 1A fan coil - SCS-BUS connection - sizes: 4 DIN modules
○ F430V10	actuator with 2 x 0-10 Volt outputs for the control of 0-10 proportional valves - SCS-BUS connection - sizes: 2 DIN modules
○ F430/2	2 independent relay actuator for the control of on-off valves, (open-close) motor valves and pumps - 6A resistive, 2A motor valves and pumps - SCS-BUS connection - 2 DIN modules
○ F430/4	4 independent relay actuator - for the control of on-off valves, (open-close) motor valves, pumps and 2-tube fan coil - 4A resistive, 1A motor valves, pumps and fan-coil - SCS-BUS connection - 2 DIN modules

NOTE: □ **White** device ■ **Tech** device ■ **Anthracite** device ○ Neutral item
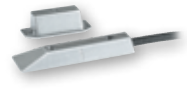
LIVINGLIGHT
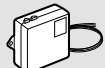## SCS-BUS devices (interface and accessories)

E46ADCN

3515

3510M

3511

3512

Item	POWER SUPPLIES
○ **E46ADCN**	power supply - input 230 Va.c. output 27 Vd.c. SELV – maximum consumption 300 mA – maximum output current: 1.2 A - DIN rail mounted model - space requirement 8 DIN modules – for flush mounted or wall mounted switchboards
○ **E49**	compact power supply - input 230 Va.c. - output 27 Vd.c. - maximum current provided 600 mA - Sizes: 2 DIN modules
○ **346020**	Additional power supply. Provides power for Webserver 2 DIN modules 17.5 mm
○ **1 467 21**	super-compact power supply, input 230 Va.c. - output 24 Vd.c. - maximum current provided 630 mA - Sizes: 1 DIN modules

Item	CONTACT INTERFACE
○ **3477**	basic module control interface with 2 independent contacts for the control of 2 actuators for single function loads, or 1 actuator for double function loads (shutters) – the inputs accepts two traditional switches or pushbuttons with NO and NC contact, or a traditional two-way switch, or interlocked pushbuttons
○ **F428**	basic module control interface with 2 independent contacts for the control of 2 actuators for single function loads, or 1 actuator for double function loads (shutters) – the inputs accepts two traditional switches or pushbuttons with NO and NC contact, or a traditional two-way switch, or interlocked pushbuttons - 2 DIN modules

Item	VARIOUS ACCESSORIES
○ **3515**	spare removable clamp

Item	MAGNETIC CONTACTS
○ **3510**	NC electromagnetic contact interface detectors and protection line - flush mounted version
○ **3510M**	NC electromagnetic contact interface detectors and protection line – made of brass with high mechanical resistance, for installation in non ferromagnetic material windows and doors, or in low section doors and windows
○ **3510PB**	Electromagnetic sensors with NC contact and protection line – brass version with high mechanical resistance for mounting in all types of door lock and in reinforced doors.
○ **3511**	NC electromagnetic contact interface detectors and protection line - visible mounted version
○ **3512**	NC electromagnetic contact interface detectors and protection line – made of die cast aluminium, for installation on tilting or sliding doors. Preset for floor installation.
○ **3513**	NC electromagnetic contact interface detectors and protection line - version for visible installation on metal surfaces

NOTE: ○ Neutral item

LIVINGLIGHT
SCS-BUS devices (accessories)

3501/0   **3501/1**   **3501/2**   **3501/3**   **3501/4**

3501/GEN   **3501/GR**   **3501/AMB**   **3501/AUX**

3501/PUL   **3501/SLA**   **3501/CEN**   **3501/T**

3501K/1   **336904**   **L4669**
L4669HF   **L4669/500**

Item	CONFIGURATORS – SINGLE-TYPE PACKAGE OF 10 PIECES
○ **3501/0**	configurator 0
○ **3501/1**	configurator 1
○ **3501/2**	configurator 2
○ **3501/3**	configurator 3
○ **3501/4**	configurator 4
○ **3501/5**	configurator 5
○ **3501/6**	configurator 6
○ **3501/7**	configurator 7
○ **3501/8**	configurator 8
○ **3501/9**	configurator 9
○ **3501/GEN**	configurator GEN
○ **3501/GR**	configurator GR
○ **3501/AMB**	configurator AMB
○ **3501/AUX**	configurator AUX
○ **3501/ON**	configurator ON
○ **3501/OFF**	configurator OFF
○ **3501/OI**	configurator OI

Item	CONFIGURATORS – SINGLE-TYPE PACKAGE OF 10 PIECES
○ **3501/PUL**	configurator PUL
○ **3501/SLA**	configurator SLA
○ **3501/CEN**	configurator CEN
○ **3501/T**	configurator ↑↓
○ **3501/TM**	configurator ↑↓ M

For More Information On The Design And Installation Of The Scs-Bus Solutions See The Specific MyHOME Technical Guide.

www.catalogo-sfogliabile. bticino.it/myhomegb/

Item	CONFIGURATOR KIT
○ **3501K**	configurator kit from No. 0 to No. 9
○ **3501K/1**	Kit of configurators AUX, GEN, GR, AMB,ON, OFF, O/I, PUL, SLA, CEN, ↑↓ , ↑↓ M

	CONNECTION CABLES
○ **L4669**	specific cable for auxiliary power supply, unshielded, consisting of a grey external sheath and 2 x 0.35 mm2 blue and white twisted flexible conductors. Insulation 300/500 V. In compliance with the standards: EN50575, EN60811, EN50289, EN50290, EN60228, EN50265-2-1, EN50395, EN50396 as described in the IMQ CPT 062 document. Cable not suitable for underground installation. Coil length 100 m. Class of reaction to fire according to the CPR regulation: Eca.
○ **L4669/500**	as above, coil length 500 metres
○ **L4669KM1**	as above - reel lenght 1000 metres
○ **336904**	specific BUS/SCS cable, unshielded, consisting of a white external sheath and 2 x 0.50 mm2 brown and brown/white twisted flexible conductors. Insulation 400 V. In compliance with the standards: EN50575 EN60811, EN50289, EN50290, EN60228, EN50265-2-1, EN50395, EN50396 as described in the IMQ CPT 062 document. Cable suitable for underground installation inside appropriate conduits (for the details see the technical sheet). Coil length 200 m. Class of reaction to fire according to the CPR regulation: Eca.
○ **336905**	specific BUS/SCS cable, unshielded, consisting of a white external sheath and 2 x 0.50 mm2 brown and brown/white twisted flexible conductors. Halogen-free Low toxicity cable; ideal for applications where fire safety is particularly critical. Insulation 400 V. In compliance with the standards: EN 50575 EN60811, EN50289, EN50290, EN60228, 50265-2-1, EN50395, EN50396 as described in the IMQ CPT 062 document. Cable not suitable for underground installation. Coil length 200 m. Class of reaction to fire according to the CPR regulation: Cca-s1b,d1,a1.

NOTE: ○ Neutral item

LIVINGLIGHT
Traditional devices

LN4549

L4177

N4033

N4373H

Finishing accessories for SCS and traditional devices

NT4547

NT4915DD

NT4915MR

NT4915TN

N4915SETBL

Item		
○ LN4549		**KEY CARD SWITCH** key card switch for the power supply inside the hotel room - slot light with built-in lamp - 30 second switch-off delay - power supply 230 Va.c. - 2 modules - to be completed with front cover in the desired look
○ LN4548		key card switch for the power supply inside the hotel room with RFID technology recognition - slot light with built-in lamp - 30 second switch off delay - power supply 230 Va.c. - 2 modules - to be completed with front cover in the desired look
□ N4373H ■ NT4373H ■ L4373H		**LAMPHOLDER FOR OFF-DOOR NOTIFICATION** off-door lampholder with double optical notification: do not disturb and make up room – use 2 LEDs item LN4742V12T (12V)
□ N4177* ■ NT4177 * ■ L4177*		**SHAVER SOCKETS** shaver socket with insulation transformer - input voltage 230 Va.c. 50/60 hz - output voltage 115/230 Va.c. 20 VA

* **NOTE**: In case of installation using AIR cover plates, the box extension must be used to make wiring easier

Item		
□ N4033 ■ NT4033 ■ L4033		**PULL-CORD PUSHBUTTON** cord pushbutton 1 P NO 10 A for bathroom alarm

Item		
□ N4547 ■ NT4547 ■ L4547		**FRONT COVERS FOR KEY CARD SWITCHES** front cover for traditional or SCS key card switch - 2 modules
□ N4551 ■ NT4551 ■ L4551		front cover for traditional or SCS key card switch - 3 modules
□ N4915DD ■ NT4915DD ■ L4915DD		**KEY COVERS WITH SYMBOLS FOR SCS CONTROL** key cover for rocker control devices with "do not disturb" symbol
□ N4915MR ■ NT4915MR ■ L4915MR		key cover for rocker control devices with "make up room" symbol
□ N4915M2DD ■ NT4915M2DD ■ L4915M2DD		"DO NOT DISTURB" key covers - 2 modules
□ N4915TN ■ NT4915TN ■ L4915TN		**KEY COVERS THAT CAN BE CUSTOMISED AND KIT OF DIFFUSERS** key cover for rocker control devices that can be customised with lightable diffuser
□ N4915SETBL ■ NT4915SETBL ■ L4915SETBL		kit of 50 lightable diffusers with bed light symbol

RJ45, audio and video sockets and the other devices, consult the Livinglight catalogue

NOTE: □ **White** device ■ **Tech** device ■ **Anthracite** device ○ Neutral item

LIVINGLIGHT
USB chargers and lighting devices

| N4285C1 | NT4285C1 | L4285C2 | LN4285CW2 | | LN4360 | LN4361 | L4362 | L4382V12V24
L4382/230 |

Item		USB CHARGER
☐ **N4285C1** ■ **NT4285C1** ■ **L4285C1**		5 Vdc USB charger only for charging electronic devices up to 1,100 mA like mobile phones, smartphones, tablets and similar – 110-230 V 50-60 Hz DIRECT power supply
☐ **N4285C2** ■ **NT4285C2** ■ **L4285C2**		5 Vdc USB charger for quick charge of one single electronic device (mobile phones, smartphones, tablets or similar) up to 2,400 mA or simultaneous charging of two devices up to 1.200 mA – 110-230 Va.c. DIRECT power supply 50-60 Hz

		INDUCTION AND USB CHARGER
○ **LN4285CW2**		allows the quick and wireless charging of smartphones with induction receiver. Suitable for the bed head, sideboards, desks and work areas. Compliant with WPC QI (World Power consortium) and EN 62479 (EF emissions) standards Meets the electromagnetic field safety requirements and does not cause disturbance to other radio emissions (Zigbee TNT, GSM 4G, ...). It has 2 50x80 mm aerials for quick coupling of the smartphone. The antislip support surface is inclined by 10°. Antitheft "lock" function. Energy performance >85%. It has a 2,400 mA type A USB port to supply a second device. 12 W. Size 136.5 x 70 x 56.5 mm

Item		SWIVEL 360° SPOT LAMP
○ **LN4360**		it is installed above a work place (kitchen, bedroom, desk ...) - Can be oriented by 360° for best lighting of the zone required - It can be controlled by a standard switch or an electronic switch without neutral, by a dimmer or an automatic switch with neutral – LED lamp – Consumption 2.8 W – Luminous flux 70 lumen – Life: Approx. 50,000 hours - supplied with neutral base and front cover plates in white, Tech, anthracite colours - 2 modules

		DIRECTIONAL LAMP
○ **LN4361**		allows you to create directional and decorative lighting. We recommend installation at 30 cm from the floor – It can be controlled by a standard switch or an electronic switch without neutral, by a dimmer or an automatic switch with neutral – LED lamp – Consumption 2.2 W – Luminous flux 70 lumen – Life: Approx. 50,000 hours - supplied with neutral base and front cover plates in white, Tech, anthracite colours - 2 modules

		DIMMER READING LAMP
☐ **N4362** ■ **NT4362** ■ **L4362**		it is installed at the bedhead giving directional lighting. It has a flexible arm so that the lighting arm can be directed. The brightness can be dimmed by pressing the integrated ON/OFF control for a long time. It can also be connected to a remote control and, if necessary, the integrated control can be disabled with a 30 sec. press - LED -lamp - Consumption 3 W - Luminous flux 110 lumen (equivalent to 15 W incandescence) - Life 40,000 hours - 1 (flush mounted) module.

NOTE: the photographs of the **REMOVABLE TORCH, SWIVEL 360° SPOT LAMP AND DIRECTIONAL LAMP**, represent the product code indicated, to which one of the three front cover plates (white, Tech or anthracite) available in the package is already fitted.

		STEP MARKER LAMP
○ **L4382V12V24**		step marker lamp with white light LEDs - 12 - 24 Va.c. - on-off switch- 0.6 W at 12 Va.c. - 0.8 W at 24 Va.c.
○ **L4382/230**		step marker lamp with white light LEDs - 230 Va.c. - on-off switch - 0.5 W

NOTE: ☐ **White** device ■ **Tech** device ■ **Anthracite** device ○ Neutral item

LIVINGLIGHT
Room insulation remote switch

The contactors must be used in the system to switch off some loads or devices in the room when the guest is not present (key card not in the switch).

FT1A2N24   FT2A3N230   FT1A2N24S

Item	AC3 CONTACTORS			
	In = 25A			
	Vn (Vac)	In (A)	Contact	No. of modules
FT1AC1N24	24	25	1NO+1NC	1
FT1A2N24			2 NO	1
FT2A4N24			4 NO	2
FT1AC1N230	230		1NO+1NC	1
FT1A2N230			2 NO	1
FT2A3N230			3 NO	2
FT2A4N230			4 NO	2
FT2AC2N230			2NO+2NC	2
FT1C2N230			2NC	1
FT2C4N230			4 NC	2

Item	AC7A CONTACTORS			
	Vn (Vac)	In (A)	Contact	No. of modules
FT1A2N24M	24	25	2 NO	1
FT1A1N230M	230		1NO	1
FT1A2N230M			2 NO	1
FT2A4N230M			4 NO	2
	In = 40-63A			
FC2A4/24N	24	40	2 NO	2
FC4A4/24N			4 NO	3
FC4A6/24N		63	4 NO	3
FC2A4/230N	230		2 NO	2
FC3A4/230N		40	3 NO	3
FC4A4/230N			4 NO	3
FC4A6/230N		63	4 NO	3

	SILENT			
FT1A1N24S	24	25	1NO	1
FT1A2N24S			2 NO	1
FT1A1N230S	230		1NO	1
FT1A2N230S			2 NO	2

TECHNICAL FEATURES

Reference standards: CEI EN 61095
Rated pulse voltage Uimp (kV): 4
Rated reel voltage Vn (Vac): 24 or 230
Rated insulating voltage Ui (Vac): 500
Rated current In (A) at 30°C: 25-40-63
Conditioned short-circuit current (kA): 3
Rated frequency (Hz): 50/60
Operating temperature (°C): -25 to 40
Max No. of mechanical manoeuvres 1000000
Power consumption for each pole (W): 1.5
Protection index (terminal area/other areas): IP20/IP40
Maximum section of connectable flexible/rigid cable (mm²): see table

LIVINGLIGHT
Dimensional data

SQUARE COVER PLATES
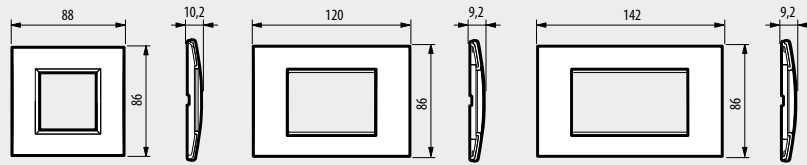
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LND4819KR

LNA4804...
LND4804KR
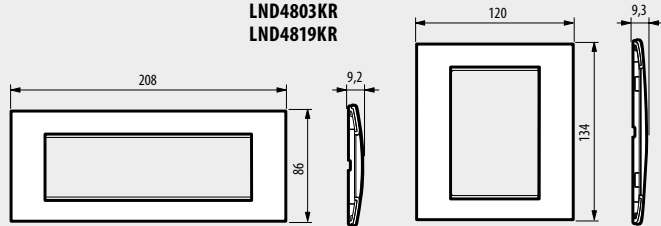
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LNA4826...
LND4826KR

ROUND COVER PLATES
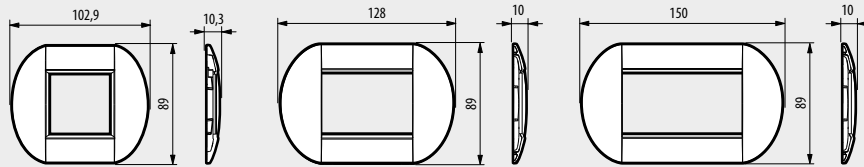
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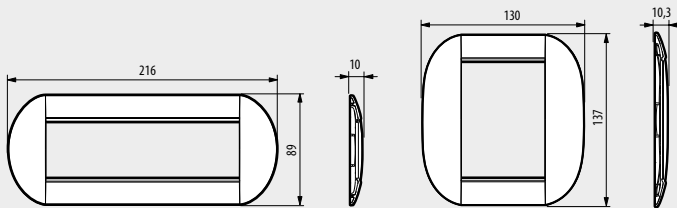
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LIVINGLIGHT AIR COVER PLATES
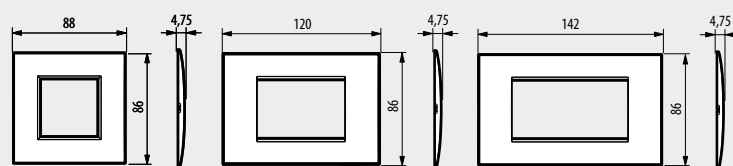
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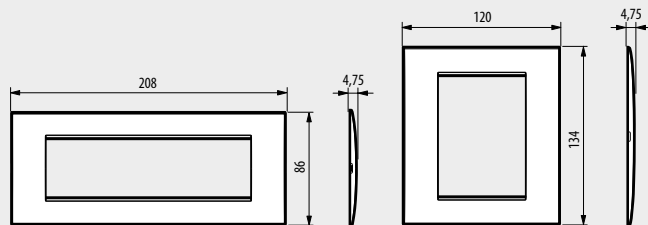
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LIVING INTERNATIONAL COVER PLATES
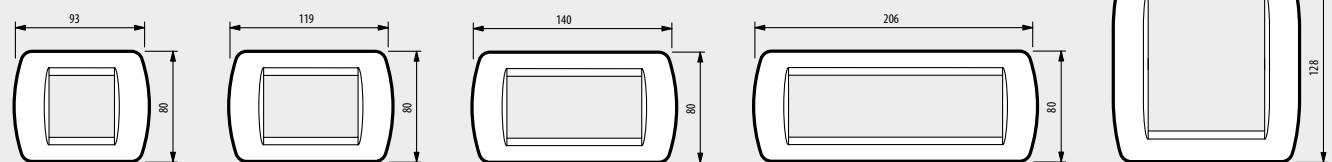
L4802..

L4803..

L4804..

L4807..

L4826..

MODULAR DEVICES
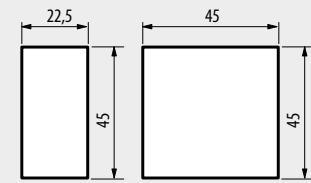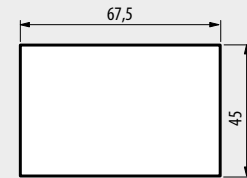
1 module

2 modules

3 modules

DIN DEVICES
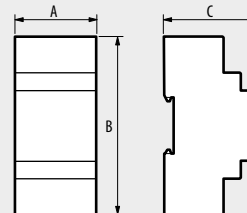
2 DIN modules

TABLE WITH DIN SIZES (mm)			
No. of modules	A	B	C
1	17.5	82	66
2	35	82	66
3	52.5	82	66
4	70	82	66
5	87.5	82	66
6	105	82	66
7	122.5	82	66
8	140	82	66
9	157.5	82	66
10	175	82	66
12	210	82	66

BASIC INTERFACE MODULE
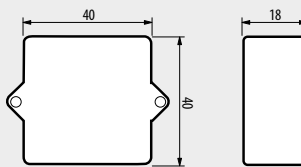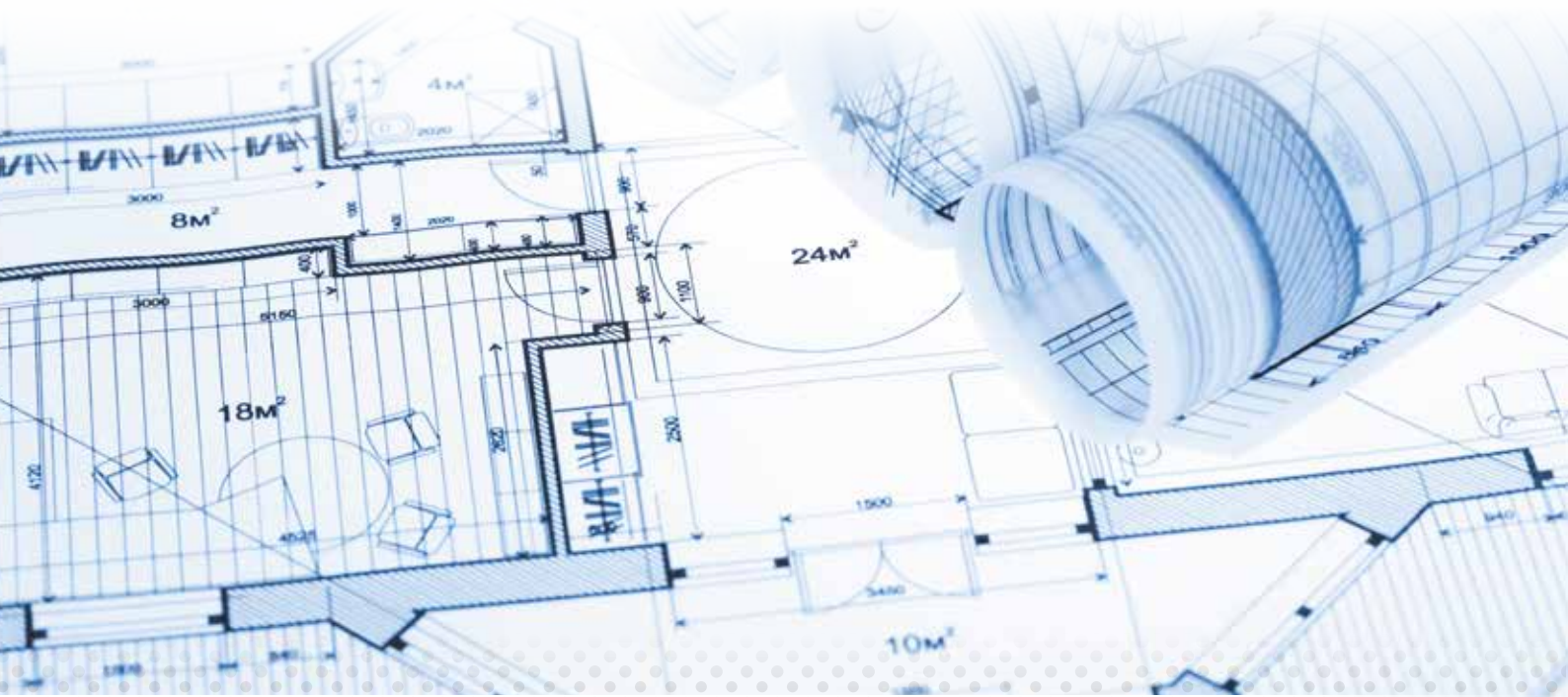
3475 - 3476 - 3477

Contents

The technical sheets in this booklet are only part of the range of SCS-BUS devices in the catalogue pages.

Only the technical sheets of the basic hotel offer are present.

FOR MORE INFORMATION ABOUT DESIGN AND INSTALLATION OF THE SCS-BUS SOLUTIONS, CONSULT THE SPECIFIC MYHOME TECHNICAL GUIDE

www.catalogo-sfogliabile.bticino.it/myhomegb/

BUS SCS
compact power supply

<div align="right">E49</div>

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 600 mA. It is protected by an integrated fuse (not replaceable) 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 2 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.

The device must NOT be configured.

Technical data

PRI (AC power supply input)

Rated voltage:	220 – 240 V
Rated current:	175 – 185 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

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

Dimensional data

2 DIN modukes
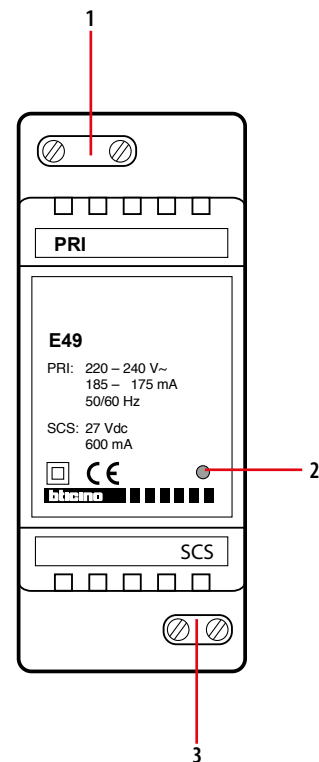
Legend

1. Clamps (PRI) for connection to the power supply voltage

2. LED: – green (power supply ON)

     – red (output current overload)

3. Clamps (SCS) for the connection of the BUS/SCS

BUS SCS 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. 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.
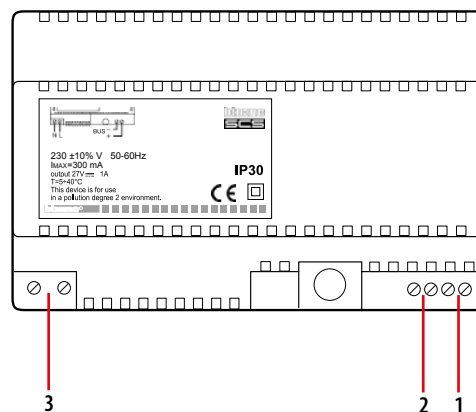
Technical data

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 °C

Dimensional data

Size: 8 DIN modules

Legend

1. Clamps (1-2) with 27 Vdc output voltage
2. Clamps (BUS) for the connection of the BUS/SCS
3. Clamps for connection to the power supply voltage

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 ℃
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

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.
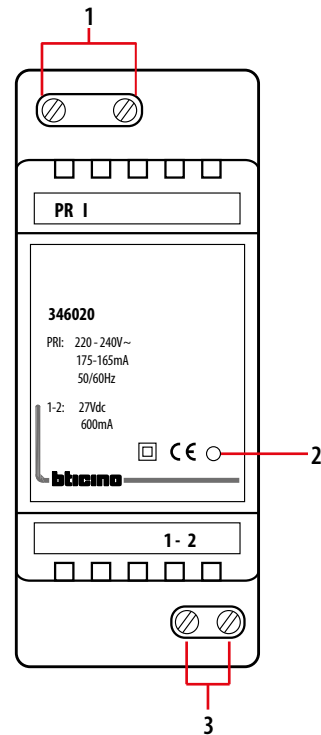
Legend

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

Modular single-phase stabilised switching mode power supplies

1 467 01	1 467 11
1 467 12	1 467 21
1 467 22	1 467 23	1 467 24

UL508

1. USE

Switching mode DC power supplies (electronic) for which the output voltage is independent of the fluctuations in the input voltage.

2. GENERAL CHARACTERISTICS

Operating frequency: 50/60 Hz
Output voltage present indicator
Output voltage adjustment potentiometer on front panel
Output voltage variation: ±1% (except 1 467 01: ±2%)
No-load power consumption less than 0.3 W
Cooling by natural convection
Integrated short-circuit and overload protection on the power supply secondary
Modular products
Class II insulation

3. COMPLIANCE

UL 508 approvals
Conforming to IEC EN 60950-1, EN 61558-2-16
Conforming to EN 55022 class B*, EN 61000-3-2 class A, EN 61000-3-3
Conforming to EN 61000-4-2, 3, 4, 6, level 3, criterion A
        EN 61000-4-5 and 8 level 4, criterion A
        EN 61204-3

* Class B means the power supply can be used in any environment, including residential

4. RANGES/ELECTRICAL CHARACTERISTICS

DC output voltage = 5 V or 12 V or 24 V
Modular plastic casing

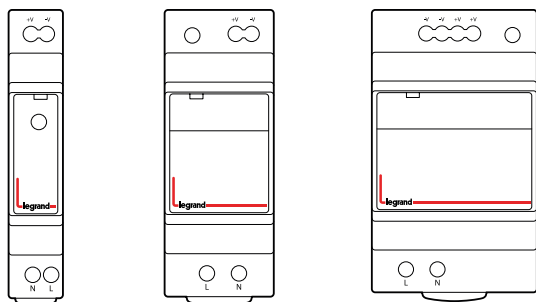| Cat. No.	Output				Input		
	Output		Nominal rating (A)	Nominal power (Pn in W)	Min-Max voltage		Current consumption (A)
	Nominal	Setting range			(VAC)	(VDC)	
1 467 01	5	4.5 - 5.5	2.4	12	85 - 264	120 - 370	0.5/0.25[1]
1 467 11	12	10.8 - 13.8	2	24	85 - 264	120 - 370	0.88/0.48[1]
1 467 12	12	10.8 - 13.8	4.5	54	85 - 264	120 - 370	1.2/0.8[1]
1 467 21	24	21.6 - 29	0.63	15	85 - 264	120 - 370	0.5/0.25[1]
1 467 22	24	21.6 - 29	1.5	36	85 - 264	120 - 370	0.88/0.48[1]
1 467 23	24	21.6 - 29	2.5	60	85 - 264	120 - 370	1.2/0.8[1]
1 467 24	24	24 - 25.5	3.83	92	85 - 264	120 - 370	3/1.6[1]

(1): 115 V AC/230 V AC

Cat. No.	Efficiency (%)	Starting time at Pn (s)	Holding time at Pn (ms)	Operating temperatures w/o derating (°C)	Internal consumption (W)
1 467 01	80	2.08/2.08 (1)	12/30 (1)	- 30 to + 50	3
1 467 11	88	0.55/0.55 (1)	12/30 (1)	-30 to +50	3.3
1 467 12	88	0.55/0.55 (1)	12/30 (1)	-30 to +45	7.4
1 467 21	86	2.08/2.08 (1)	12/30 (1)	-30 to +50	2.5
1 467 22	89	0.55/0.55 (1)	12/30 (1)	-30 to +50	4.5
1 467 23	90	0.55/0.55 (1)	12/30 (1)	-30 to +45	6.7
1 467 24	90	0.56/0.56 (1)	12/30 (1)	-30 to +45	10.3

(1): 115 V AC/230 V AC

Insulation voltage:

- Input/Output: 3000 V min.

**Modular single-phase stabilised
switching mode power supplies**

<div align="right">

1 467 01 1 467 11
1 467 12 1 467 21
1 467 22 1 467 23 1 467 24

</div>

5. WEIGHT AND DIMENSIONS

1 467 01
1 467 21

1 467 11
1 467 12

1 467 12
1 467 23
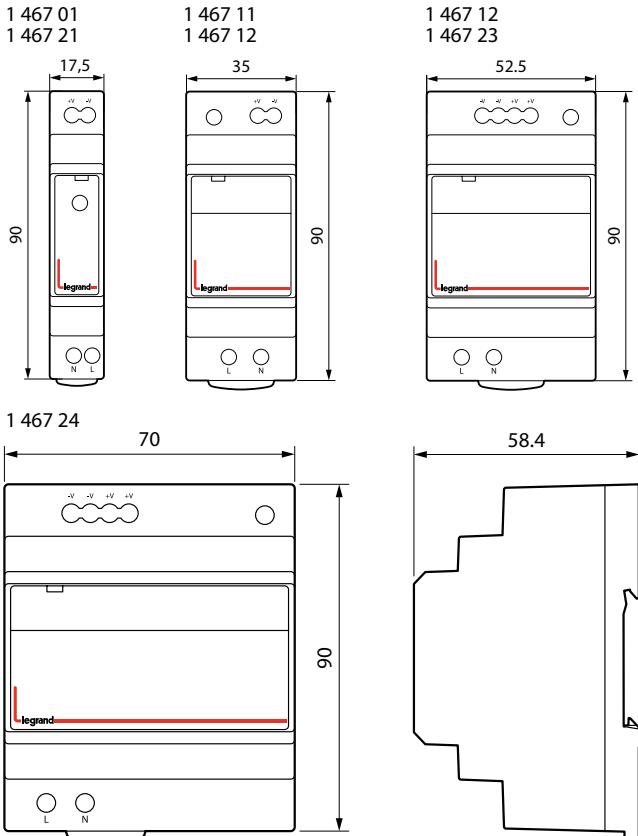
1 467 24

Cat. No.	Weight (g)
1 467 01	78
1 467 11	120
1 467 12	190
1 467 21	78
1 467 22	120
1 467 23	190
1 467 24	270

6. PROTECTION OF THE POWER SUPPLIES

Integrated protection on the secondary
Protection against overloads: automatic reset after correction of the fault.

Protection device to be used at the input of the power supplies:

Power	Cat. No.	Fuse	Circuit breaker	
			Rating	Cat. No.
12 W	1 467 01	F 500 mA H (250 V)	0.5A C	4 077 74
15 W	1 467 21			
24 W	1 467 11	F 1.25A H (250 V)	2A C	4 076 93
36 W	1 467 22			
54 W	1 467 12	F 2A H (250 V)	3 A C	4 076 94
60 W	1 467 23			
92 W	1 467 24	F 2A H (250V)	3 A C	4 076 94

7. POSITIONING

Mounting: Power supply in vertical position, input terminals (AC) at the bottom and output terminals (DC) at the top.

⌐ rail mounting

Environmental conditions:

1 467 01/11/21/22	50°C max
1 467 12/23	45°C max
1 467 24	45°C max

8. CONNECTION
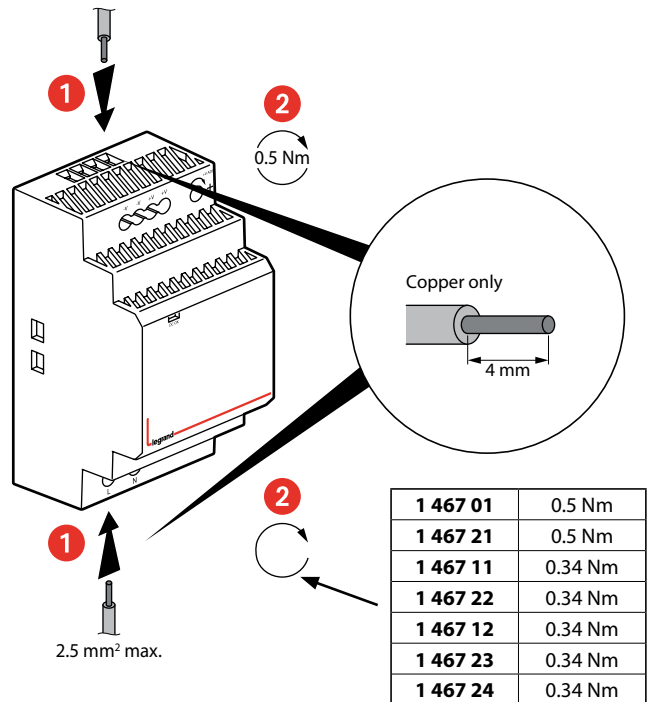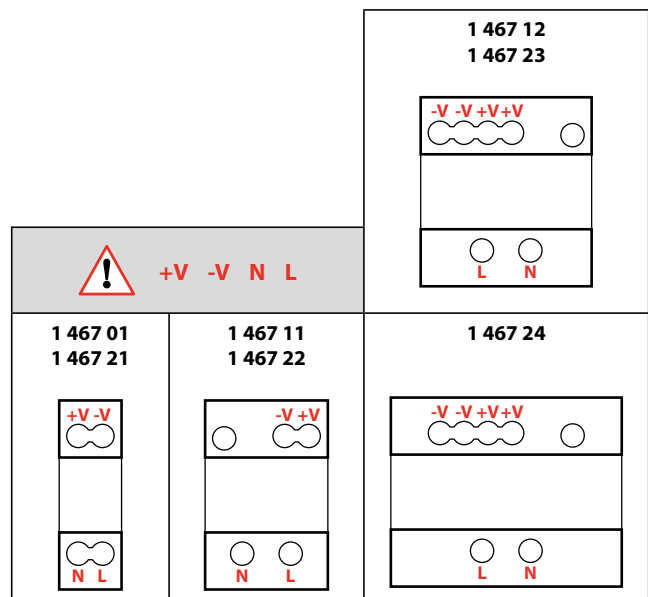
Copper only
4 mm
2.5 mm² max.
0.5 Nm

1 467 01	0.5 Nm
1 467 21	0.5 Nm
1 467 11	0.34 Nm
1 467 22	0.34 Nm
1 467 12	0.34 Nm
1 467 23	0.34 Nm
1 467 24	0.34 Nm

9. OPERATION

F02467EN/00   07/07/2017

legrand   bticino

**Modular single-phase stabilised
switching mode power supplies**

1 467 01   1 467 11
1 467 12   1 467 21
1 467 22   1 467 23   1 467 24

10. DERATING CURVES

1 467 01 - 1 467 11 - 1 467 21 - 1 467 22
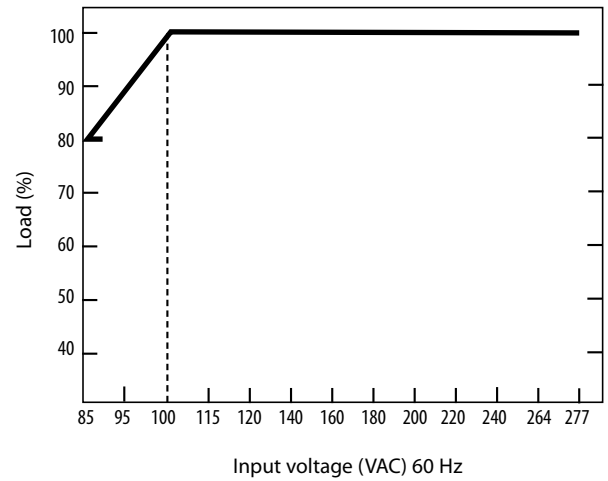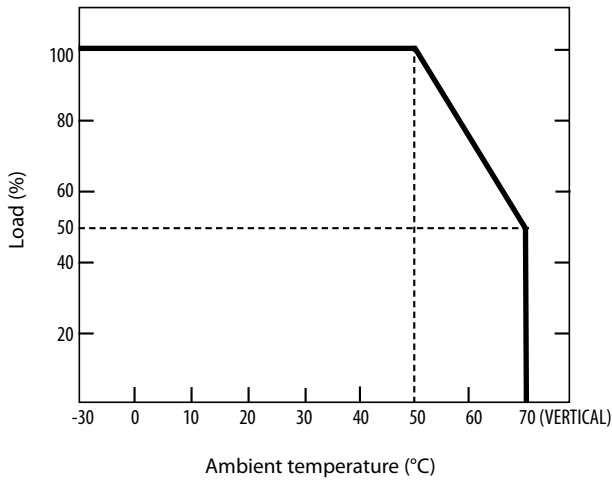
1 467 12 - 1 467 23
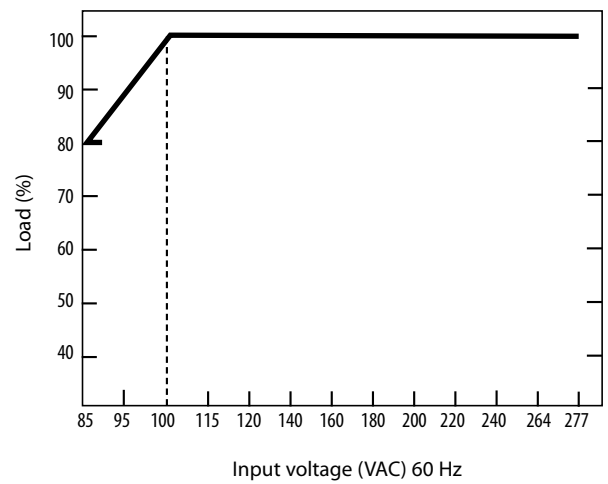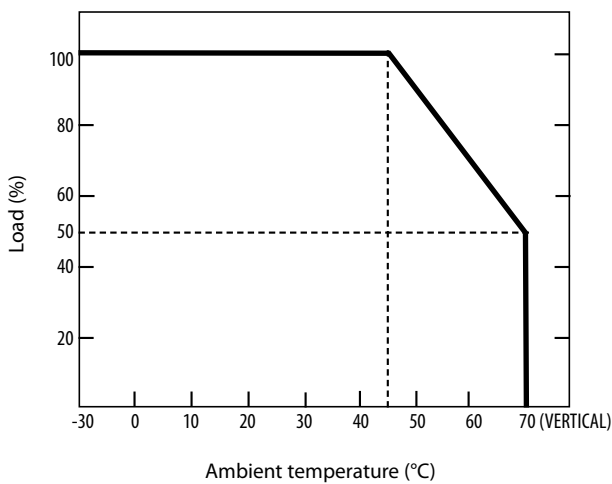
1 467 24
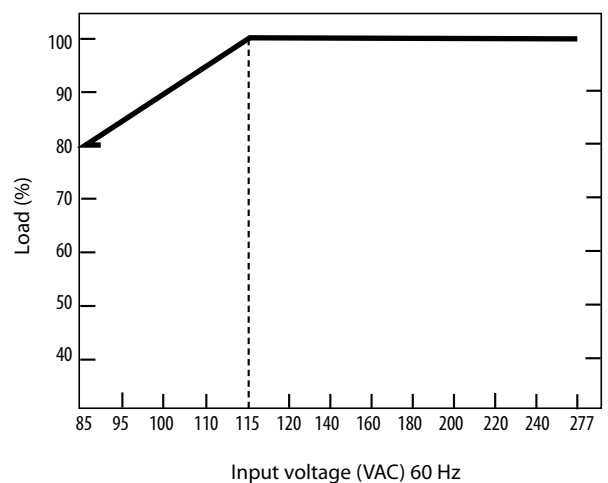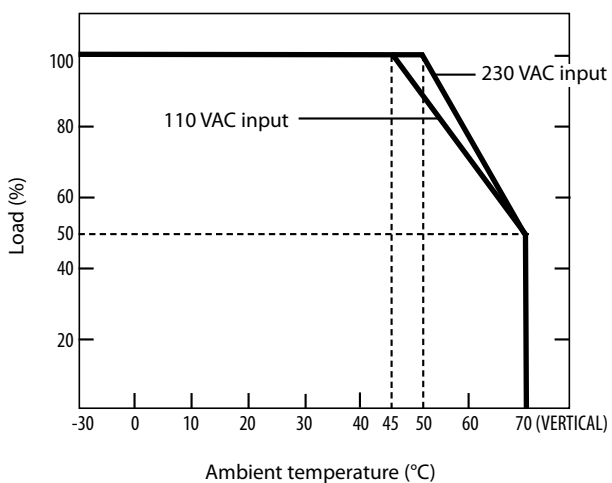
RFID keycard reader BUS/SCS

0 487 71/81
FL4648/48W/58

CONTENTS
Page

1. DESCRIPTION

This is an RFID keycard reader (13.56 MHz) located at the entrance to the room which can, by inserting an RFID keycard in the appropriate slot:
- indicate someone is in the room
- trigger a "welcome" scenario
And by removing it:
- indicate no one is in the room
- trigger a "goodbye" scenario

It indicates and can be used to activate the housekeeping information:
- Do Not Disturb
- Make Up Room
- Extra service, for example picking up laundry (only available on configured version)
The card position is indicated by arrows (illuminated flashing path).

It has a proximity sensor which can be disabled by configuration: when the device detects an approach, it switches from standby state to active state. The LED brightness level (on standby or active) can also be set by configuration.

It can be configured using the MyHOTEL_Suite software, which can be downloaded from the website www.homesystems-legrandgroup.com.

It can also be used for IP installations which include controller 0 484 08/12, and can be configured with the Hotel Room Configuration Software available on the website www.legrandoc.com.

2. TECHNICAL CHARACTERISTICS

BUS/SCS power supply:	18 - 27 VDC
Standby consumption:	12 mA
On-load consumption:	25 mA
RFID frequency:	13.56 Mhz
Operating temperature:	0°C to +40°C
Storage temperature:	-20°C to +70°C
Protection index:	IP 20, IK 04
Plate and surround colour:	Black Cat. No. 0 487 71/FL4648 or white Cat. No. FL4648W

3. STANDARDS, CERTIFICATIONS AND MARKINGS
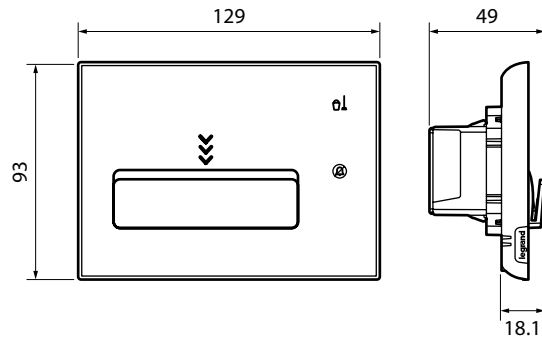
EN 60669-2-5
CE marked

4. DIMENSIONS

Front view   Rear view

Key

1. MUR indicator (green LED on = MAKE UP ROOM)

2. DND indicator (red LED on = DO NOT DISTURB)

3. Keycard slot indicator

4. BUS/SCS plug-in connector

L1 legrand   S000101015EN-1   26/03/2018   **bticino**
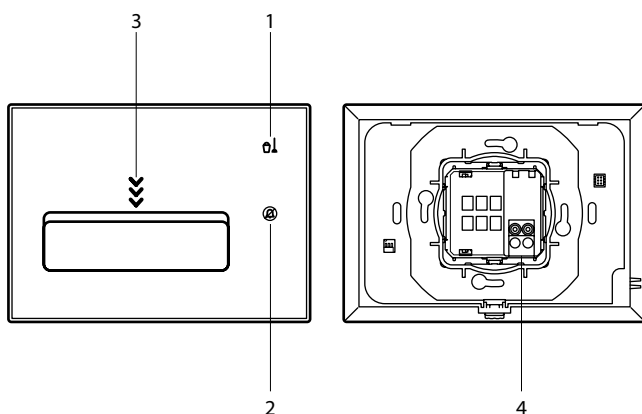
5. CABLING
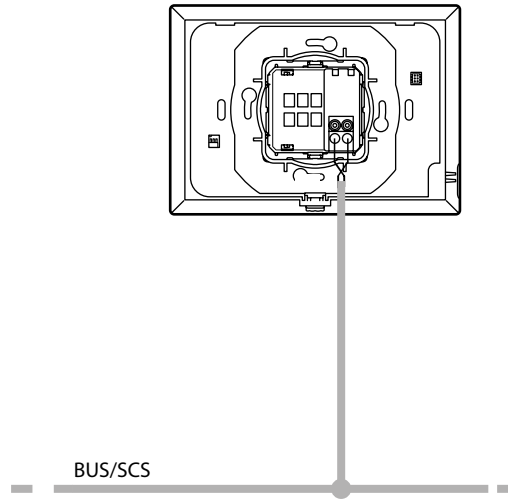
BUS/SCS

6. INSTALLATION

Surface-mounted installation

0 800 41

0 487 79

①

②

6 890 07

503E

With accessory Cat. No. 0 487 88

136.5

99

①

②

③

④
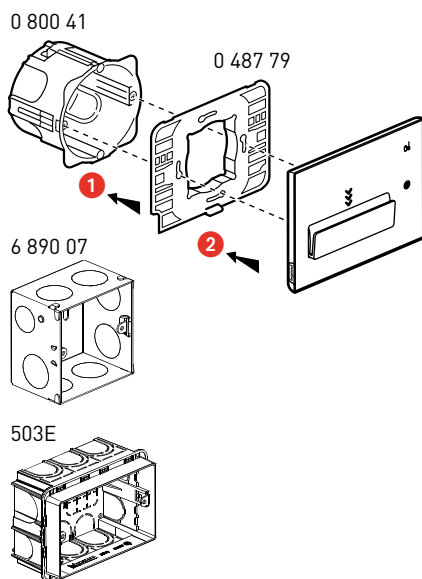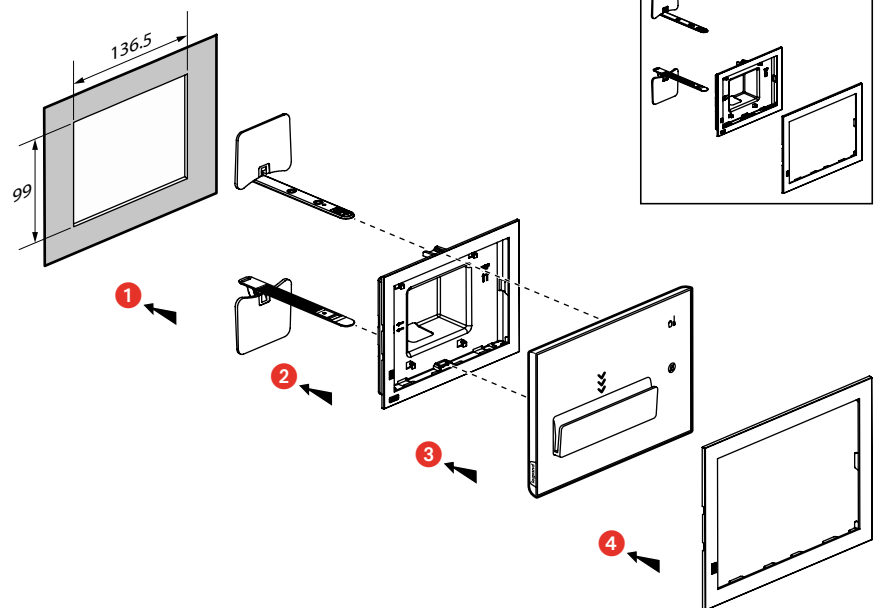
RFID keycard reader BUS/SCS

0 487 71/81
FL4648/48W/58

7. CONFIGURED VERSION CAT. NO. 0 487 81/FL4658

- Make up room
- Empty

- Do not disturb
- Empty

- Extra service
- Empty

Choice of plate colour

Choice of surround colour

Options (predefined position):
- Hotel logo
- Flush-mounted version

The configurator is available on the following website: www.uxforupscalehotel.legrand.com.
The list of pictogram and colour options (plate and surround) can be accessed via the configurator.

L1 legrand

S000101015EN-1   26/03/2018

bticino

| **RFID keycard reader BUS/SCS** | **0 487 70/80** |
| | **FL4649/49W/59** |

1. DESCRIPTION

This is an RFID keycard reader (13.56 MHz) located at the entrance to the room which can, by inserting an RFID keycard in the appropriate slot:
- indicate someone is in the room
- trigger a "welcome" scenario
And by removing it:
- indicate no one is in the room
- trigger a "goodbye" scenario

It can, by configuration, recognise a scenario associated with the keycard profile (customer, management, etc).

It indicates and can be used to activate the housekeeping information:
- Do Not Disturb
- Make Up Room
- Extra service, for example picking up laundry (only available on configured version)
The card position is indicated by arrows (illuminated flashing path).

It has a proximity sensor which can be disabled by configuration: when the device detects an approach, it switches from standby state to active state. The LED brightness level (on standby or active) can also be set by configuration.

It can be configured using the MyHOTEL_Suite software, which can be downloaded from the website www.homesystems-legrandgroup.com.

2. TECHNICAL CHARACTERISTICS

BUS/SCS power supply:	18-27 VDC
Standby consumption:	12 mA
On-load consumption:	25 mA
RFID frequency:	13.56 Mhz
Operating temperature:	0°C to +40°C
Storage temperature:	-20°C to +70°C
Protection index:	IP 20, IK 04
Plate and surround colour:	Black Cat. No. 0 487 70/FL4649 or white Cat. No. FL4649W

3. STANDARDS, CERTIFICATIONS AND MARKINGS
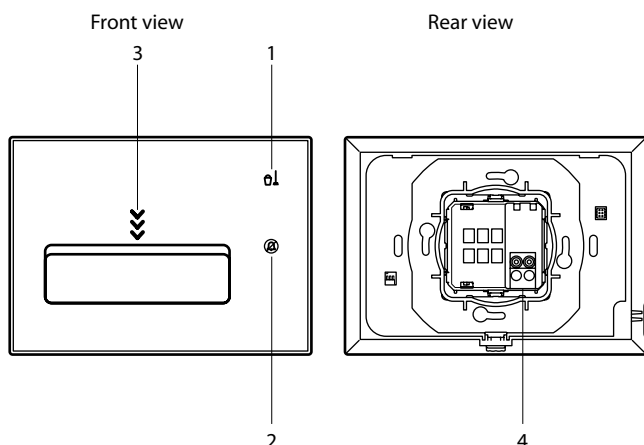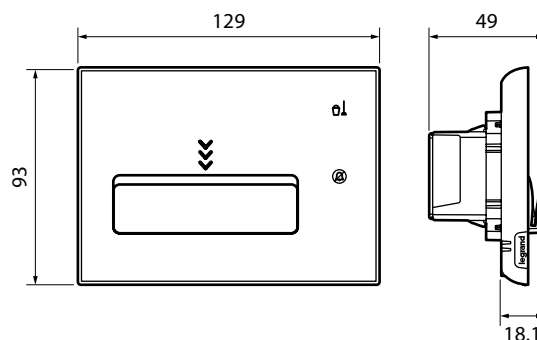
EN 60669-2-5
CE marked

4. DIMENSIONS

Front view   Rear view

Key

1. MUR indicator (green LED on = MAKE UP ROOM)

2. DND indicator (red LED on = DO NOT DISTURB)

3. Keycard slot indicator

4. BUS/SCS plug-in connector

RFID keycard reader BUS/SCS

0 487 70/80
FL4649/49W/59

5. CABLING
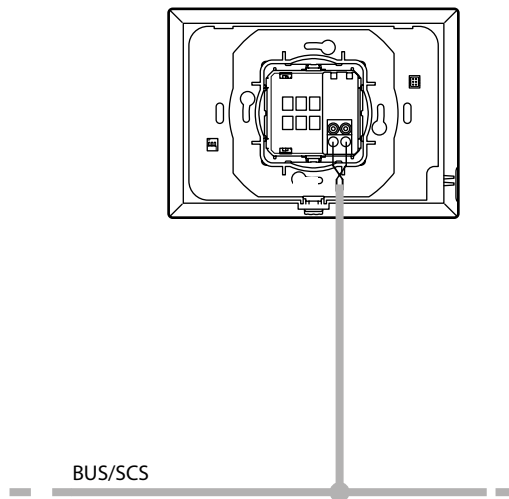
BUS/SCS

6. INSTALLATION

Installazione a parete
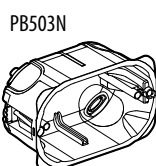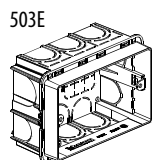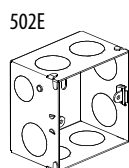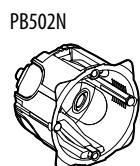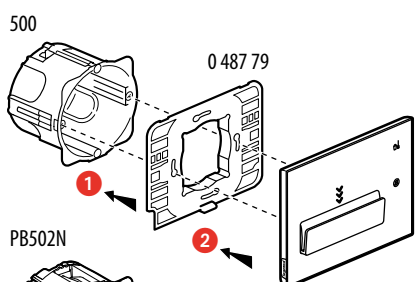
Con accessorio rif. 0 487 88

500

0 487 79

PB502N

502E

503E

PB503N

136,5

99
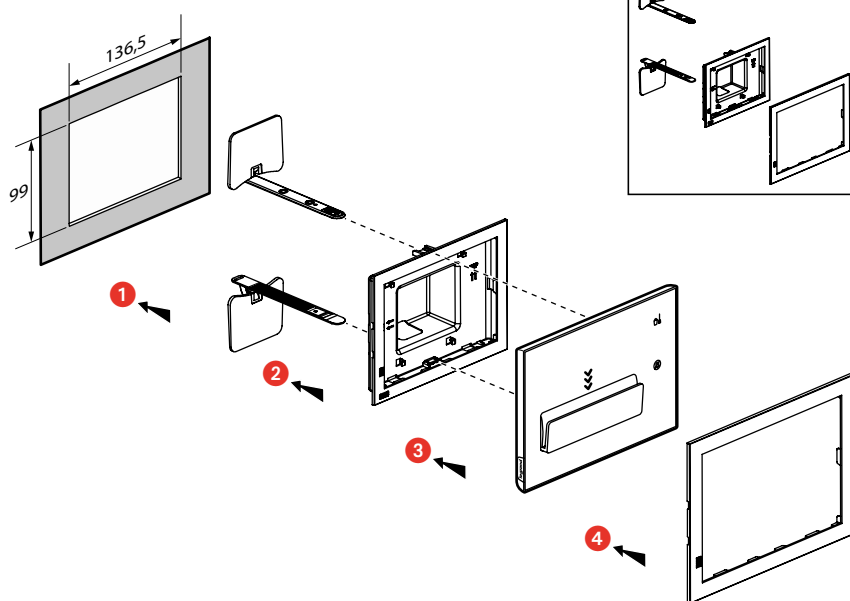
RFID keycard reader BUS/SCS

7. CONFIGURED VERSION CAT. NO. 0 487 80/FL4659
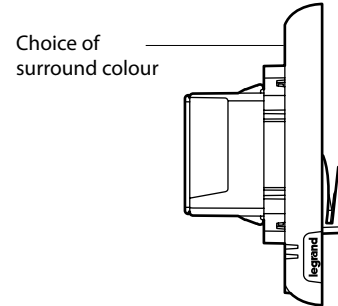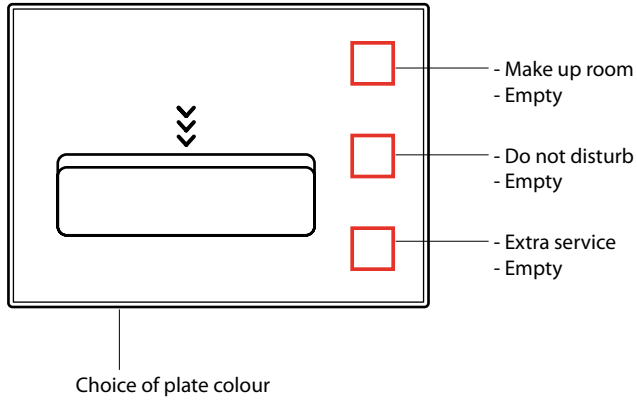
- Make up room
- Empty

- Do not disturb
- Empty

- Extra service
- Empty

Choice of plate colour

Choice of
surround colour

Options (predefined position):
- Hotel logo
- Flush-mounted version

The configurator is available on the following website: www.uxforupscalehotel.legrand.com.
The list of pictogram and colour options (plate and surround) can be accessed via the configurator.

BUS-SCS external indicator display panel
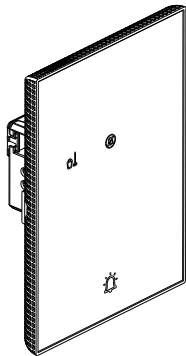
0 487 75/85
FL4650/50W/60

CONTENTS   Page

1. DESCRIPTION

This is an indicator display panel located outside the room (in the corridor) displaying the housekeeping information:
- Do Not Disturb
- Make Up Room
- Extra service (for example Pick up laundry) (only on configured version Cat. No. 0 487 85/FL4660)

It also has a "call bell" touch-sensitive button which flashes for 3 s to show that the command has been recognised.

The "call bell" indicator status shows whether anyone is in the room: on if someone present, off if no one present.

If the DND function is enabled, the "call bell" relay is disabled. When pressed, the DND LED flashes, but the "call bell" indicator does not flash.

Alarms are signalled by the flashing "call bell" indicator. This visual alarm function is only available for SCS installations which include the MH201 device, and can be configured with the MyHotel_Suite software available on the website www.homesystems-legrandgroup.com.

This product is also available for IP installations which include controller Cat. Nos. 0 484 08/12, and can be configured with the Hotel Room Configuration Software available on the website www.legrandoc.com.

2. TECHNICAL CHARACTERISTICS

BUS/SCS power supply:	18 - 27 VDC
Standby consumption:	6 mA
On-load consumption:	8 mA max
Relay contact	
(activated by button on the front):	230 VAC max
	1 A max
Operating temperature:	0°C to +40°C
Storage temperature:	-20°C to +70°C
Protection index:	IP 20, IK 04
Plate and wall box colour (standard):	Black Cat. No. 0 487 75/FL4650
	or white Cat. No. FL4650W

3. STANDARDS, CERTIFICATIONS AND MARKS

EN 60669-2-5
CE marked
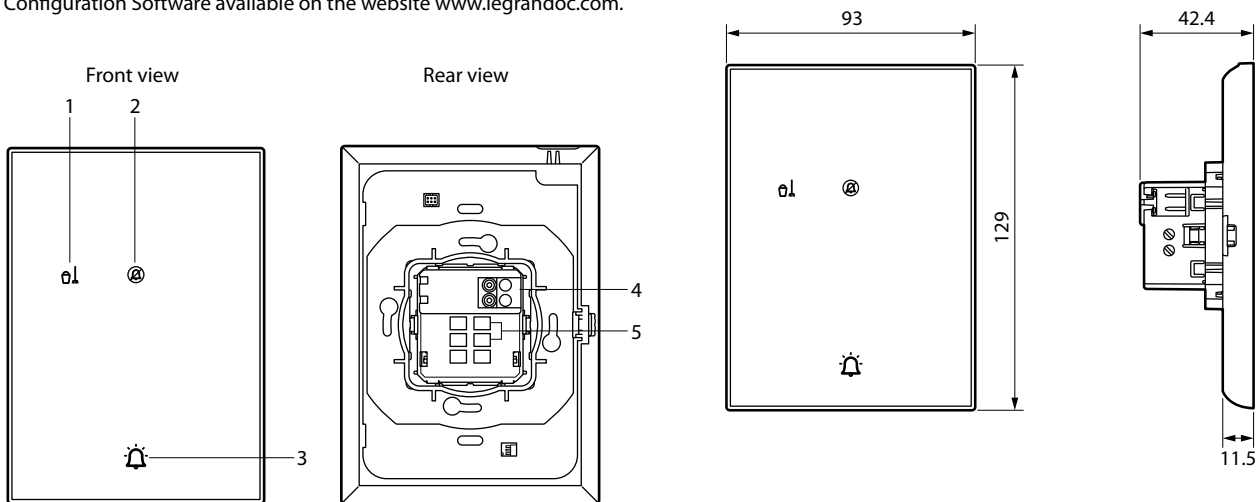
4. DIMENSIONS

Front view   Rear view

Key

1. MUR indicator (green LED on = MAKE UP ROOM)

2. DND indicator (red LED on = DO NOT DISTURB)

3. Door bell call indicator

4. BUS/SCS plug-in connector

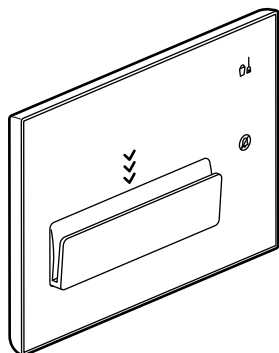5. NO contact for activating the door bell. The contact is controlled by pressing the "door bell" indicator.

5. DOOR BELL CONNECTION DIAGRAMS

The "call bell" relay is active for as long as the device button is pressed.
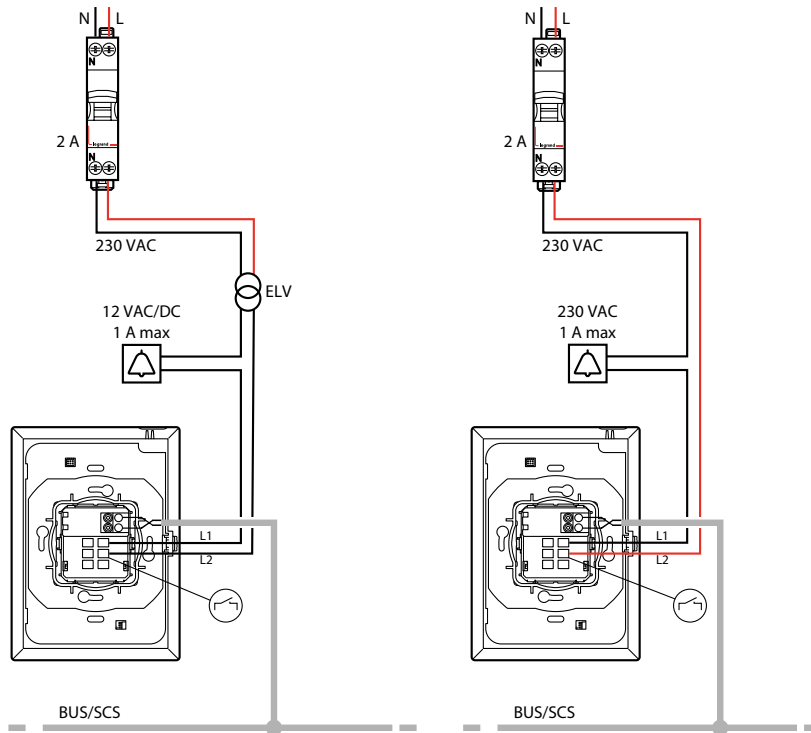
6. INSTALLATION

Surface-mounted with flush-mounting boxes
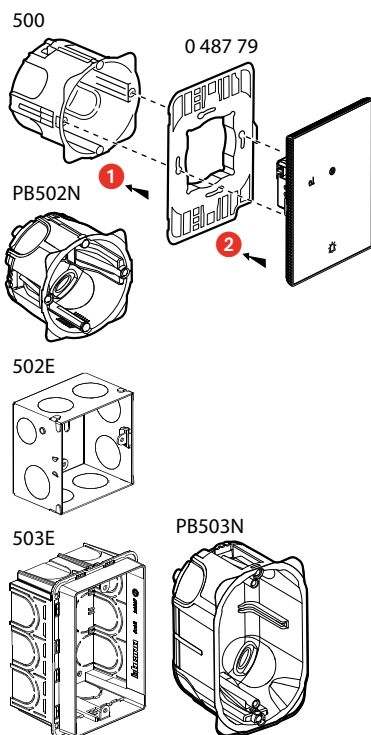
Flush-mounted with accessory
Cat. No. 0 487 88
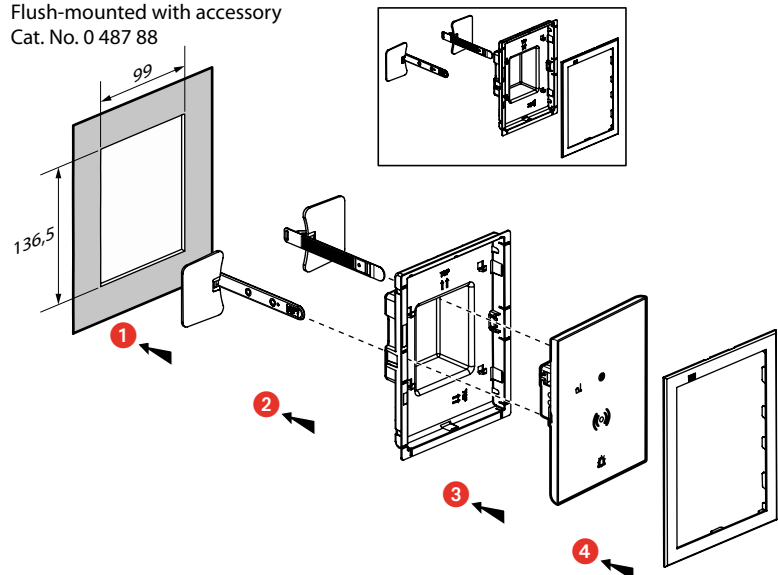
BUS-SCS external indicator
display panel

0 487 75/85
FL4650/50W/60

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7. CONFIGURED VERSION CAT. NO. 0 487 85/FL4660
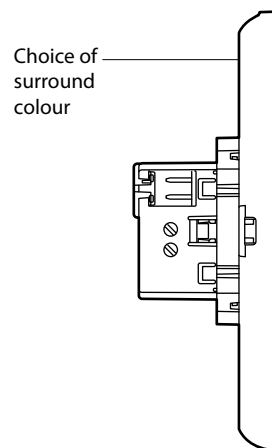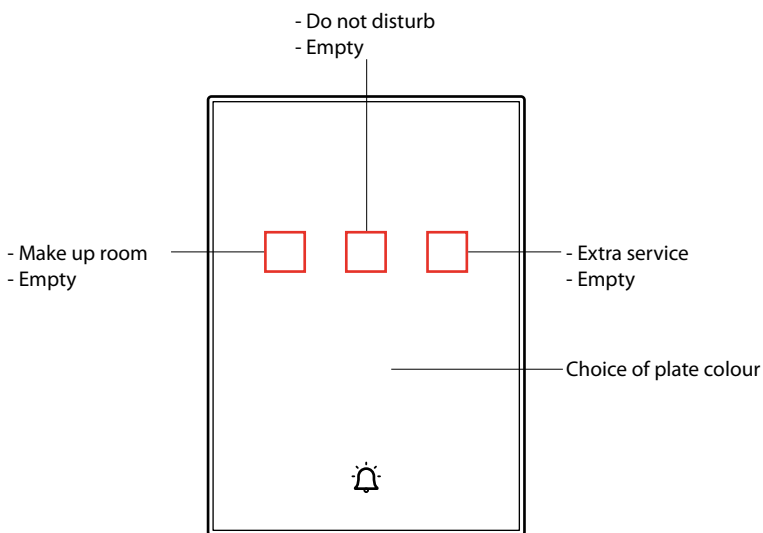
- Do not disturb
- Empty

- Make up room
- Empty

- Extra service
- Empty

Choice of plate colour

Choice of
surround
colour

Options (predefined position):
- Hotel logo
- Room no. (alphanumeric)
- Flush-mounted version

The configurator is available on the following website: www.uxforupscalehotel.legrand.com.
The list of pictogram and colour options (plate and surround) can be accessed via the configurator.

L1 legrand

S000099253EN-1   09/02/2018

bticino

External keycard reader panel
BUS/SCS

0 487 76/86
FL4651/51W/61

CONTENTS ....Page

1. DESCRIPTION

This is an indicator panel incorporating a keycard reader function which can be used to unlock the door. It is located outside the room (in the corridor) and displays the housekeeping information:
- Do Not Disturb
- Make Up Room
- Extra service, for example picking up laundry (only on configured version Cat. No. 0 487 86/FL4661)

It also has a "call bell" touch-sensitive button which flashes for 3 s to show that the command has been recognised.

The "call bell" indicator status shows whether anyone is in the room: on if someone present, off if no one present (set by configuration).

It also has an RFID keycard reader which can be used to open the door.

If the DND function is enabled, the "call bell" relay is disabled. When pressed, the DND LED flashes, but the "call bell" indicator does not flash.

Alarms are signalled by the flashing "call bell" indicator. The product can be configured with the MyHotel_Suite software available on the website www.homesystems-legrandgroup.com.

2. TECHNICAL CHARACTERISTICS

BUS/SCS power supply:	18 - 27 VDC
Standby consumption:	12 mA
On-load consumption:	25 mA max
Relay contact (activated by button on the front):	230 VAC max
	1 A max
Operating temperature:	0°C to +40°C
Storage temperature:	-20°C to +70°C
Protection index:	IP 20, IK 04
Plate and surround colour:	Black Cat. No. 0 487 76/FL4651
	or white Cat. No. FL4651W

### 3. STANDARDS, CERTIFICATIONS AND MARKINGS
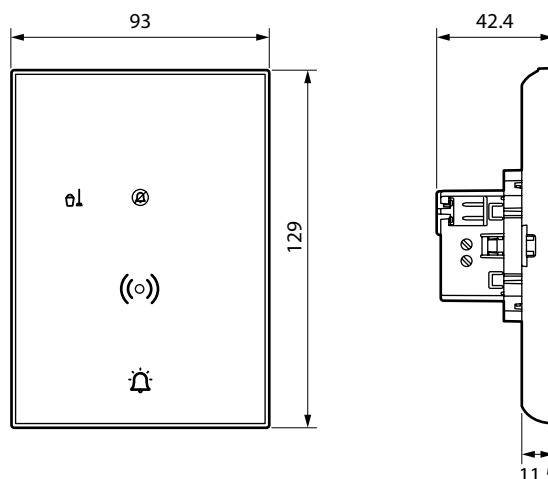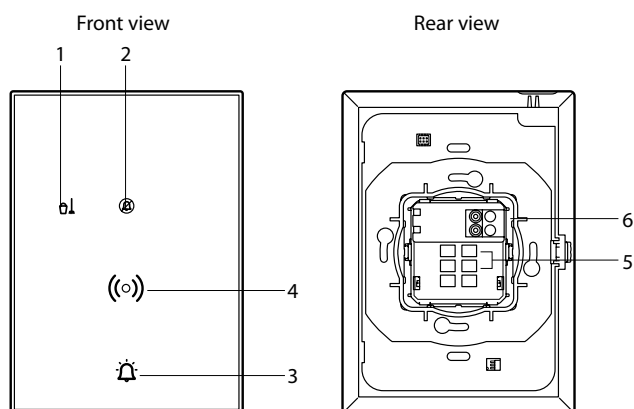
EN 60669-2-5
CE marked

4. DIMENSIONS

Front view   Rear view

Key

1. MUR indicator (green LED on = MAKE UP ROOM)

2. DND indicator (red LED on = DO NOT DISTURB)

3. Door bell call indicator

4. RFID keycard reader (13.56 MHz ISO14443-A (type 2 and 4))

5. NO contact for activating the bell.
   The contact can be used to control the:
   - Door bell
   - Electric lock by keycard recognition (configured in Myhotel_Suite)

6. BUS/SCS plug-in connector

External keycard reader panel   **0 487 76/86**
BUS/SCS   **FL4651/51W/61**

5. DOOR BELL CONNECTION DIAGRAMS

The "call bell" relay is active for as long as the device button is pressed.
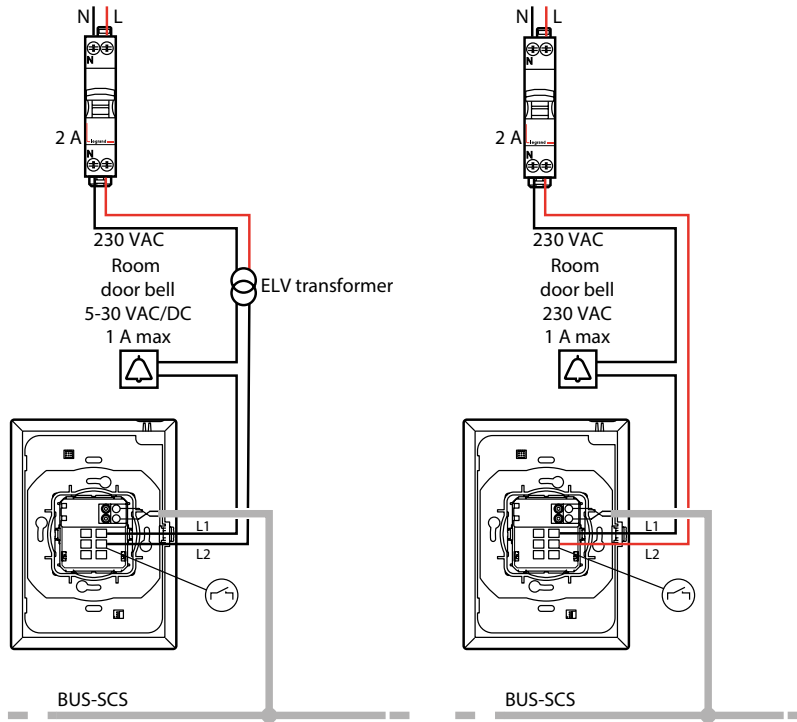
6. ELECTRIC LOCK CONNECTION DIAGRAMS

The electric lock is activated for 3 seconds by the RFID reader after positive keycard reading.

It is still possible, in this mode, to control a door bell by configuration using the MyHotel_Suite software.

Ⅼ legrand   S000101292EN-1   27/03/2018   bticino
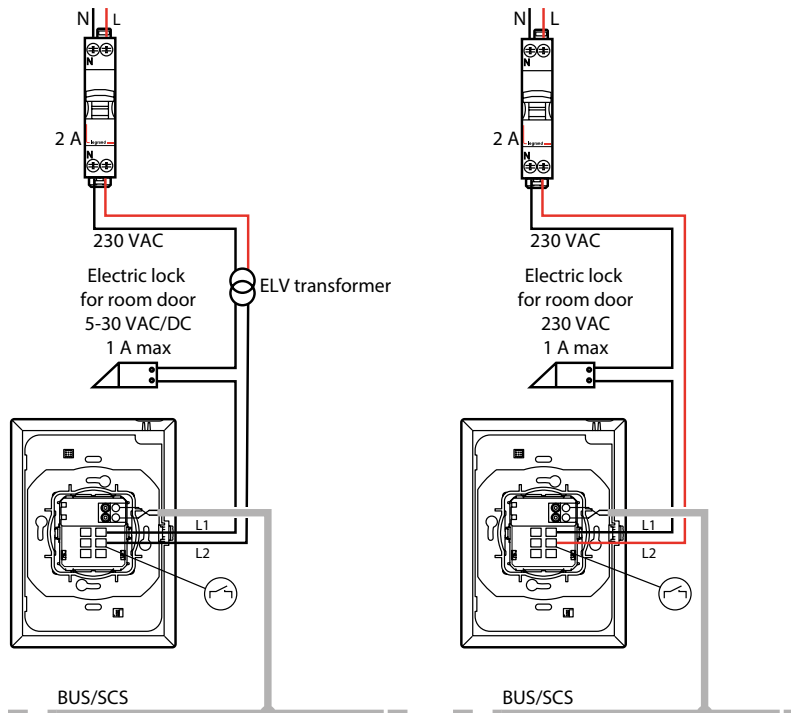
External keycard reader panel
BUS/SCS

0 487 76/86
FL4651/51W/61

7. INSTALLATION

Surface-mounted with flush-mounting boxes
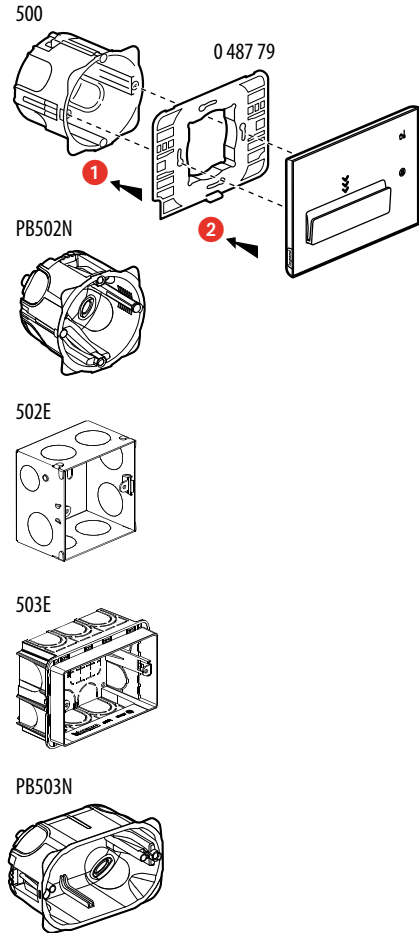
Flush-mounted with accessory Cat. No. 0 487 88

500

0 487 79

PB502N

502E

503E

PB503N

99

136,5

8. CONFIGURED VERSION CAT. NO. 0 487 86/FL4661

- Do not disturb
- Empty

Choice of
surround colour

- Make up room
- Empty

- Extra service
- Empty

Choice of plate colour

Options (predefined position):
- Hotel logo
- Room no. (alphanumeric)
- Flush-mounted version
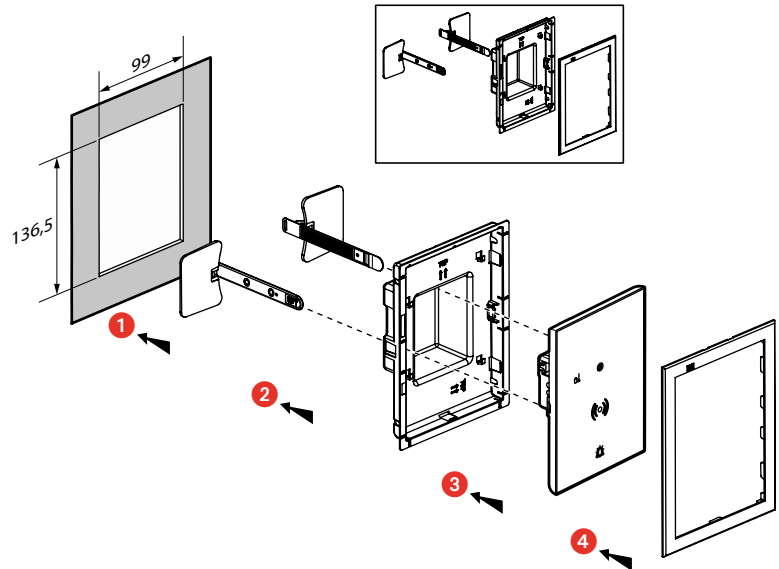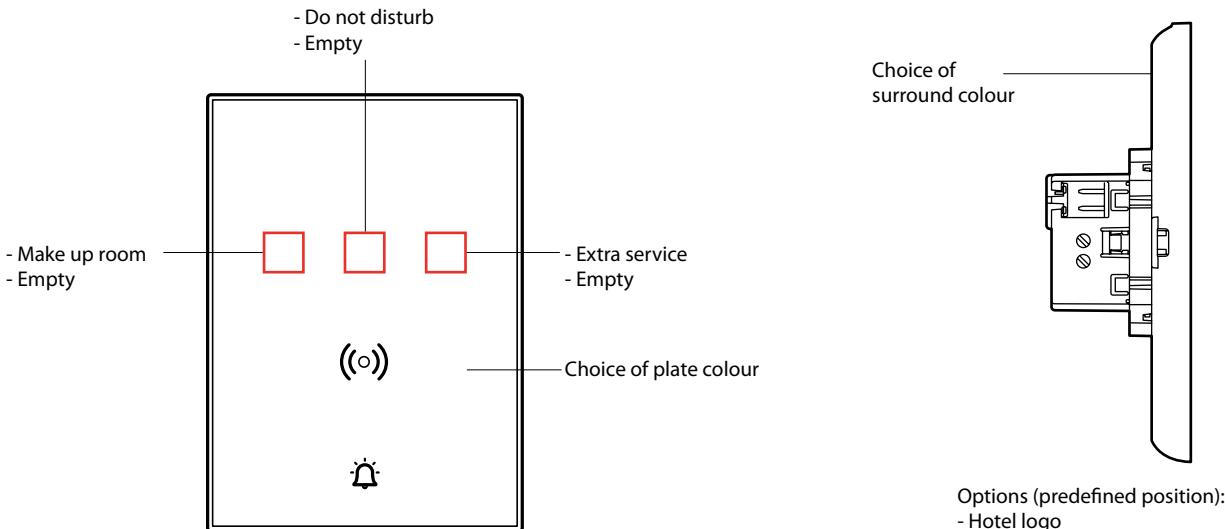
The configurator is available on the following website: www.uxforupscalehotel.legrand.com.
The list of pictogram and colour options (plate and surround) can be accessed via the configurator.

6 functions touch plate
BUS-SCS

0 487 74/84
FL4652/52W/62

CONTENTS   Page

1. DESCRIPTION

This touch plate has 6 buttons which can be used to control the lighting, roller blinds and scenarios (for example: wake up, sleep, TV, general switch-off).

In configured version, it is possible to indicate and activate the housekeeping information:
- Do Not Disturb
- Make Up Room

It has a proximity sensor: when the device detects an approach, it switches from standby state to active state. The LED brightness level (on standby and active) and the time delay before returning to standby state can be set by configuration.

Configuration is possible with the MyHotel_Suite software on SCS installations which include the MH201 device, or with the Hotel Room Controller Software on IP installations which include the 0 484 08 or 0 484 12 device.

2. TECHNICAL CHARACTERISTICS

BUS/SCS power supply: 18 - 27 VDC
Consumption with screen off: 8 mA
Consumption with ultra-bright screen: 20 mA
Operating temperature: 0°C to +40°C
Storage temperature: -20°C to +70°C
Protection index: IP 20, IK 04
Plate and surround colour (standard): Black Cat. No. 0 487 74/FL4652 or White Cat. No. FL4652W

3. STANDARDS, CERTIFICATIONS AND MARKINGS

EN 60669-2-5
CE marked

4. DIMENSIONS

Front view   Rear view

Key

1. Scenarios

2. Roller blind control

3. Connection to the BUS
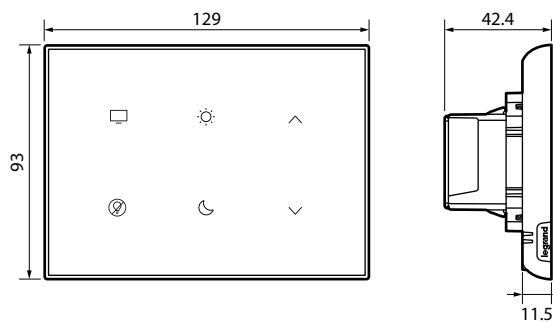
6 functions touch plate   **0 487 74/84**
BUS-SCS   **FL4652/52W/62**

5. WIRING
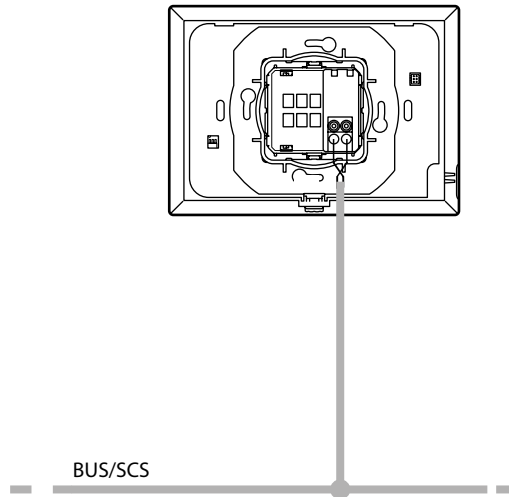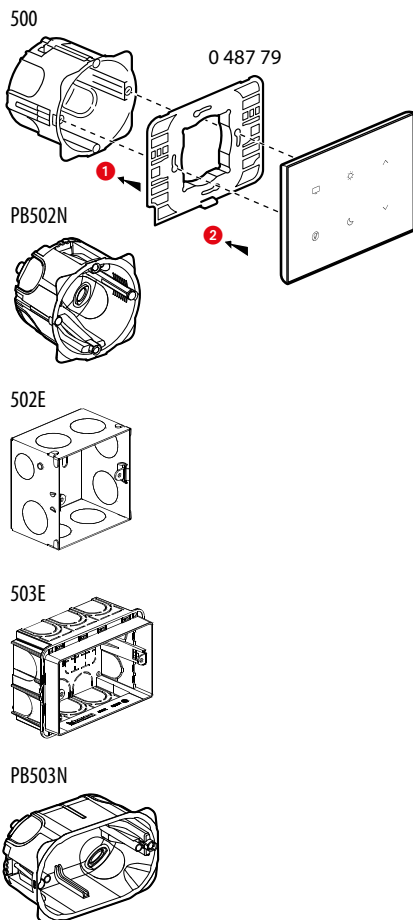
BUS/SCS

6. INSTALLATION

Surface-mounted with flush-mounting boxes   Flush-mounted with accessory Cat. Nos. 0 487 88/89

500

0 487 79

PB502N

502E

503E

PB503N

99

136,5
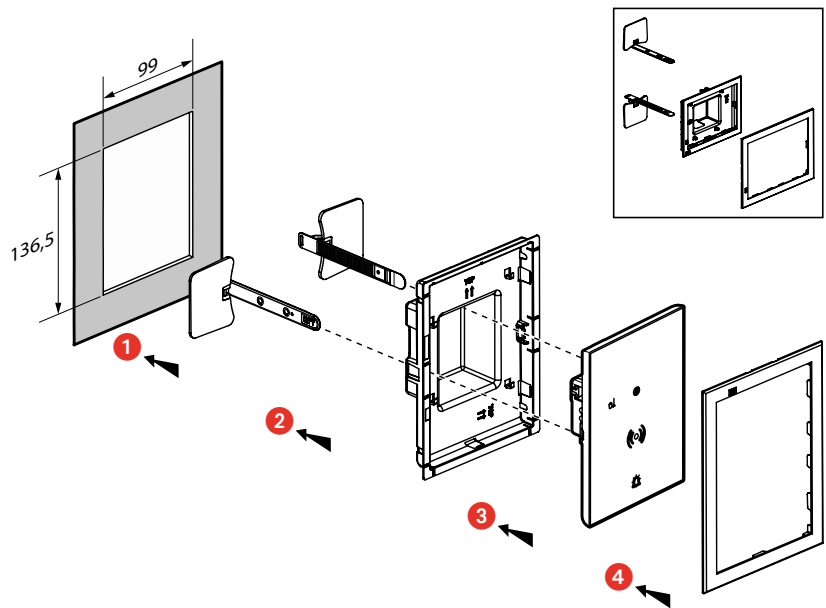
6 functions touch plate
BUS-SCS

0 487 74/84
FL4652/52W/62

7. CONFIGURED VERSION CAT. NO. 0 487 84/FL4662
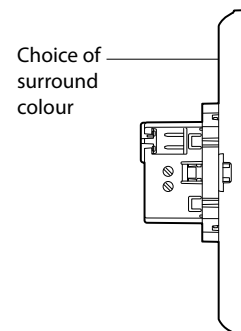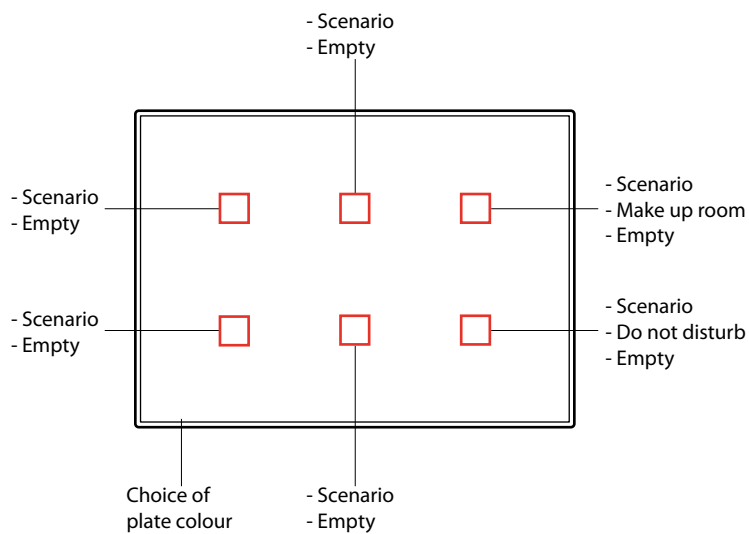
- Scenario
- Empty

- Scenario
- Empty

- Scenario
- Empty

- Scenario
- Make up room
- Empty

- Scenario
- Do not disturb
- Empty

Choice of
plate colour

- Scenario
- Empty

Choice of
surround
colour

Options (predefined position):
- Hotel logo
- Flush-mounted version

The configurator is available on the following website: www.uxforupscalehotel.legrand.com.
The list of pictogram and colour options (plate and surround) can be accessed via the configurator.

Bedside panel
BUS-SCS
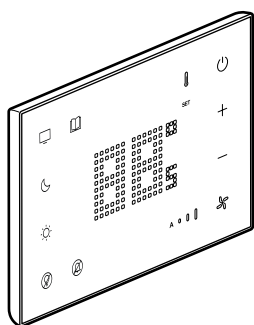
0 487 72/82
FL4653/53W/63

CONTENTS   Page

1. DESCRIPTION

The bedside panel is dedicated to hotels. It has a thermostat function which can be used on heating and/or air conditioning installations, 5 scenario control units and a "Do not disturb" housekeeping function. It is possible to display and set the reference temperature, fan speed, and switch ON with thermal overload protection.
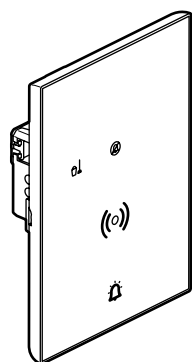
The screen displays the measured ambient temperature or the reference temperature.

It indicates and can be used to activate the housekeeping information:
- Do Not Disturb
- Make up room: only available on configured version.

It has a proximity sensor which can be disabled by configuration: when the device detects an approach, it switches from standby state to active state. The LED brightness level (on standby or active) and the time delay before returning to standby state can also be set by configuration.

The control & management software is used to view and control the thermostat. Configuration is possible with the MyHotel_Suite software on SCS installations which include the MH201 device, or with the Hotel Room Controller Software on IP installations which include the 0 484 08 or 0 484 12 device.

Front view   Rear view

Key

1. Scenario buttons
2. Heating enabled indicator (red) Air conditioning enabled indicator (blue)
3. MODE button: pressing briefly changes from normal mode (ON) to protection mode (frost guard or thermal overload).
A longer press changes the function (heating/air conditioning/automatic) according to the configuration.
4. Measured temperature (SET off) or reference temperature (SET on) indicator

5. + button: increases the reference value
6. – button: decreases the reference value
7. FAN button: sets the fan speed (3 levels + automatic)
8. Fan speed indicator (3 levels) + automatic
9. DND indicator (red LED on: DO NOT DISTURB)
10. Local contact
11. Connection to the BUS

2. TECHNICAL CHARACTERISTICS

BUS/SCS power supply:	18 - 27 VDC
Consumption with screen off:	8 mA
Consumption with ultra-bright screen:	30 mA
Operating temperature:	0℃ to +40℃
Storage temperature:	-20℃ to +70℃
Unit of measurement:	℃ or ℉
Loads controllable by an actuator:	On/Off
	Open/closed
	Fan coil unit with 2 tubes and On/Off valve
	IP gateway (centralised HVAC package)
	Fan coil unit with 2 tubes and proportional valve
	Fan coil unit with 4 tubes and On/Off valve
	Fan coil unit with 4 tubes and proportional valve
	Proportional valve
	Fan coil unit with 2 tubes and proportional speed control
	Fan coil unit with 4 tubes and proportional speed control
Protection index:	IP 20, IK 04
Plate and surround colour (standard):	Black Cat. No. 0 487 72/FL4653 or White Cat. No. FL4653W

DEFAULT VALUES		
	Heating	**Air conditioning**
Setting interval	3-40℃	3-40℃
Comfort	21℃	25℃
Economy	18℃	28℃
Frost guard	7℃	
Thermal overload		35℃

3. STANDARDS, CERTIFICATIONS AND MARKINGS

EN 60669-2-5
CE marked

4. DIMENSIONS

Bedside panel
BUS-SCS

0 487 72/82
FL4653/53W/63

5. CONNECTION DIAGRAMS

Example of installation for hotel room (SCS installation)

BUS power supply

MH201

HVAC actuator

Example of installation for hotel room (Bacnet installation)

BUS power supply

0 484 08/12

0 634 42

HVAC actuator

Bedside panel
BUS-SCS

0 487 72/82
FL4653/53W/63

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6. INSTALLATION

Surface-mounted with flush-mounting boxes

Flush-mounted with accessory Cat. Nos. 0 487 88/89

500

0 487 79

PB502N

502E

503E

PB503N

99

136,5

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7. CONFIGURED VERSION CAT. NO. 0 487 82/FL4663

- Make up room
- Scenario
- Empty

- Scenario
- Empty

- Scenario
- Empty

- Scenario
- Empty

- Scenario
- Empty

SET

A ○ 0 ▯

- Do not disturb
- Scenario
- Empty

Choice of plate colour

Choice of surround colour

Options (predefined position):
- Hotel logo
- Flush-mounted version

The configurator is available on the following website: www.uxforupscalehotel.legrand.com.
The list of pictogram and colour options (plate and surround) can be accessed via the configurator.

Llegrand

S000102895EN-1   31/05/2018

bticino

Thermostat
BUS/SCS

0 487 73/83
FL4654/54W/64
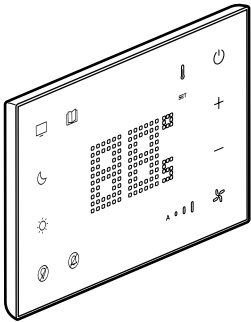
CONTENTS. . . . . Page

1. DESCRIPTION

The thermostat is dedicated to hotels and is equally suitable for heating and/or air-conditioning installations. It can be used to display and set the reference temperature, fan speed, and switch ON with thermal overload protection.

The screen displays the measured ambient temperature or the reference temperature.

It has a proximity sensor which can be disabled by configuration: when the device detects an approach, it switches from standby state to active state. The LED brightness level (on standby or active) and the time delay before returning to standby state can also be set by configuration.

The control & management software is used to view and control the thermostat. Configuration is possible with the MyHotel_Suite software on SCS installations which include the MH201 device, or with the Hotel Room Controller Software on IP installations which include the 0 484 08 or 0 484 12 device.

The thermostat must be installed on a wall at a height of approximately 150 cm above the floor, unless otherwise specified by the applicable standards.

Front view   Rear view
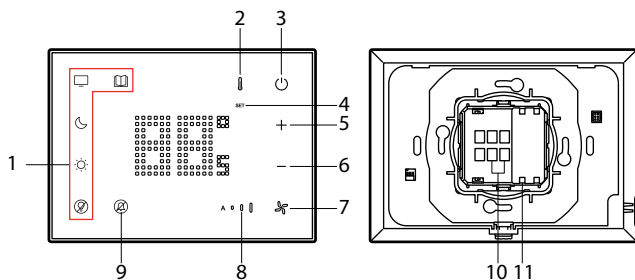
Key

1. MODE button: pressing briefly changes from normal mode (ON) to protection mode (frost guard or thermal overload).
   A longer press changes the function (heating/air conditioning/automatic) according to the configuration.
2. + button: increases the reference value
3. – button: decreases the reference value
4. FAN button: sets the fan speed (3 levels + automatic)
5. Heating enabled indicator (red) Air conditioning enabled indicator (blue)
6. Fan speed indicator (3 levels) + automatic
7. Measured temperature (SET off) or reference temperature (SET on) indicator
8. Local contact
9. Connection to the BUS

2. TECHNICAL CHARACTERISTICS

BUS/SCS power supply:	18-27 VDC
Consumption with screen off:	8 mA
Consumption with ultra-bright screen:	25 mA
Operating temperature:	0°C to +40°C
Storage temperature:	-20°C to +70°C
Unit of measurement:	°C or °F
Loads controllable by an actuator:	On/Off, Open/Close, 3-way or 0-10 V valves Fan coil unit with 2 or 4 tubes with On/Off, 3-way or 0-10 V valves Fan coil unit with 2 and 4 tubes with 0-10 V valve and 0-10 V speed control Radiators (ON/OFF) Centralised air-conditioning system IP gateway
Protection index:	IP 20, IK 04
Plate and surround colour (standard):	Black Cat. No. 0 487 73/FL4654 or White Cat. No. FL4654W

DEFAULT VALUES		
	Heating	**Air conditioning**
Setting interval	3-40°C	3-40°C
Comfort	21°C	25°C
Economy	18°C	28°C
Frost guard	7°C	
Thermal overload		35°C

3. STANDARDS, CERTIFICATIONS AND MARKINGS
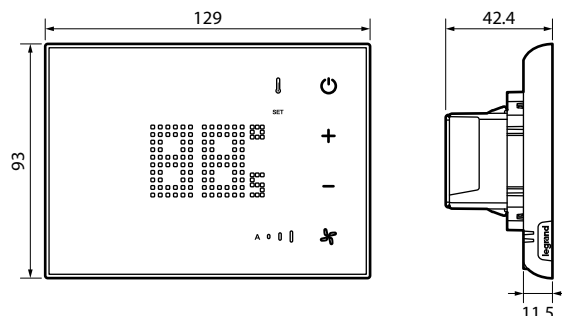
EN 60669-2-5
CE marked

4. DIMENSIONS

129   42.4
93   11.5

5. CONNECTION DIAGRAMS

Example of installation for hotel room (SCS installation)

BUS power supply

MH201

HVAC actuator

Example of installation for hotel room (Bacnet installation)

BUS power supply

0 484 08/12

0 634 42

HVAC actuator
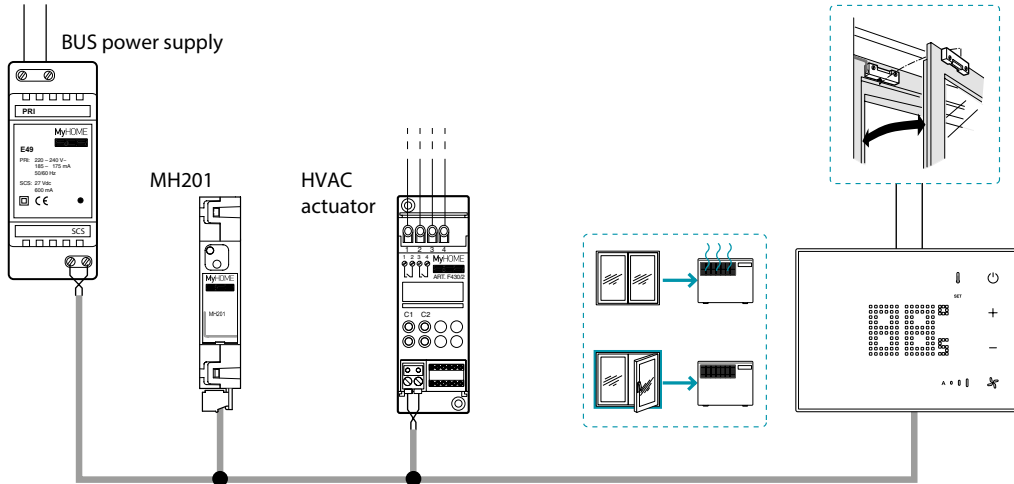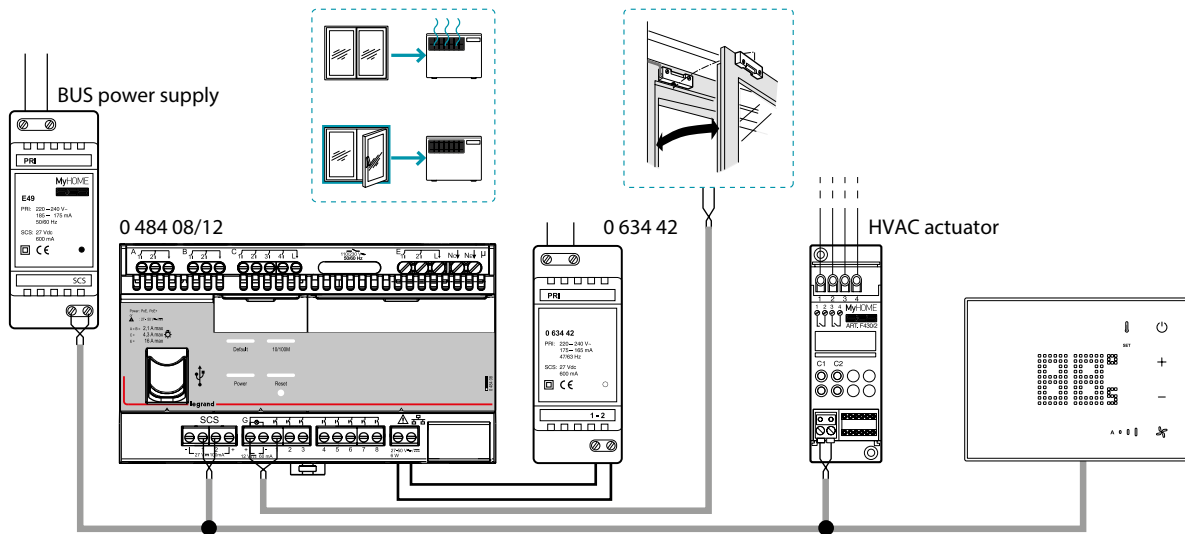
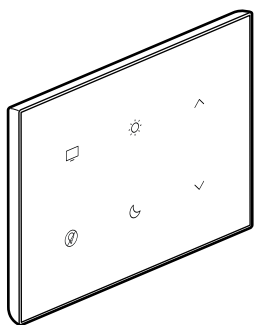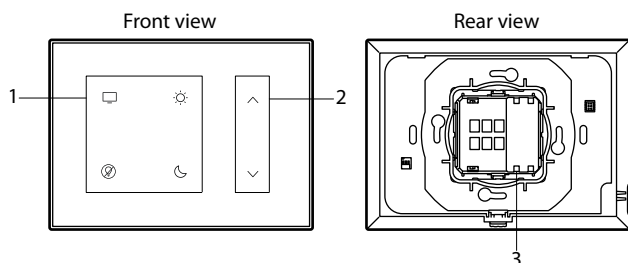**Thermostat**   **0 487 73/83**
BUS/SCS   **FL4654/54W/64**

6. INSTALLATION

Surface-mounted with flush-mounting boxes

Flush-mounted with accessory Cat. No. 0 487 88

500

0 487 79

PB502N

502E

503E

PB503N
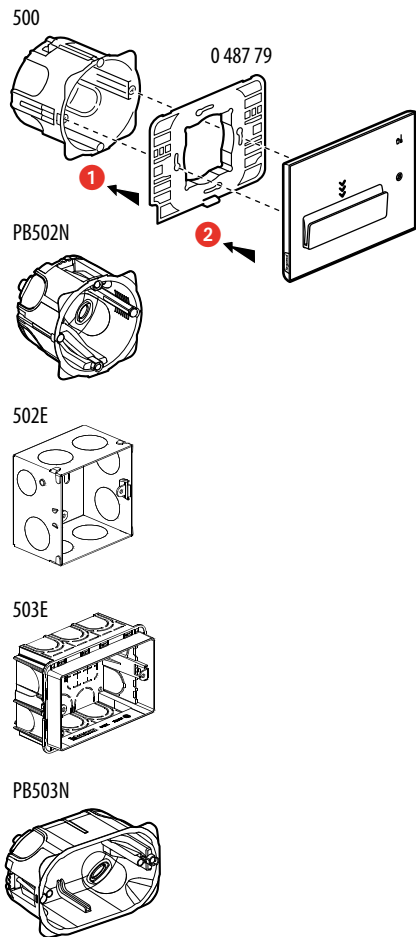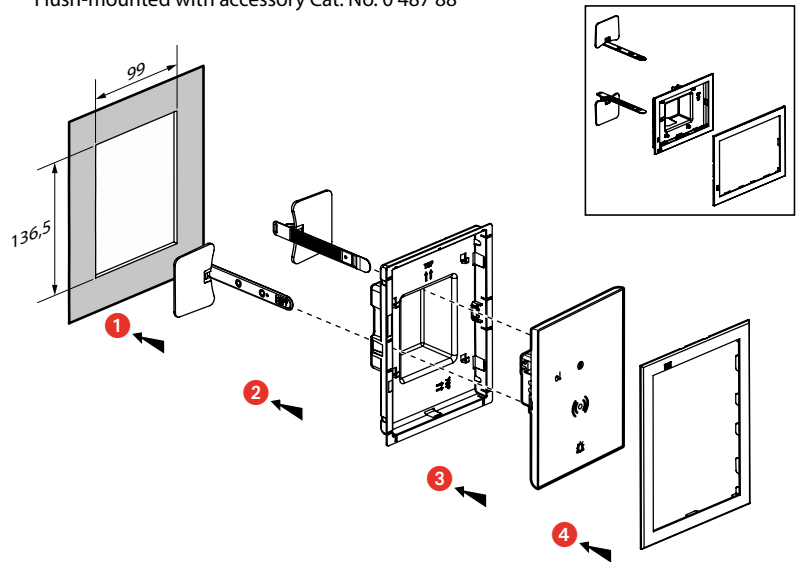
7. CONFIGURED VERSION CAT. NO. 0 487 83/FL4664


Choice of plate colour

Choice of surround colour

Options (predefined position):
- Hotel logo
- Flush-mounted version

The configurator is available on the following website: www.uxforupscalehotel.legrand.com.

L'I legrand   S000102463EN-1   06/04/2018   bticino

bticino

4 functions touch plate
BUS-SCS

0 487 77/87
FL4655/55W/65

1. DESCRIPTION

This touch plate has 2 buttons which can be used to control the lighting, roller blinds and scenarios (wake up/sleep).

It indicates and can also be used to activate the housekeeping information:
- Do Not Disturb
- Make Up Room

In configured version, scenarios can be assigned to the 4 buttons.

It has a proximity sensor which can be disabled by configuration: when the device detects an approach, it switches from standby state to active state. The LED brightness level (on standby and active) and the time delay before returning to standby state can also be set by configuration.

Configuration is possible with the MyHotel_Suite software on SCS installations which include the MH201 device, or with the Hotel Room Controller Software on IP installations which include the 0 484 08 or 0 484 12 device.

Front view   Rear view

Key

1. Scenarios

2. MUR indicator (green LED on = MAKE UP ROOM)

3. DND indicator (red LED on = DO NOT DISTURB)

4. Connection to the bus

2. TECHNICAL CHARACTERISTICS

BUS/SCS power supply:	18 - 27 VDC
Consumption with screen off:	8 mA
Consumption with ultra-bright screen:	15 mA
Operating temperature:	0°C to +40°C
Storage temperature:	-20°C to +70°C
Protection index:	IP 20, IK 04
Plate and surround colour (standard):	Black Cat. No. 0 487 77/FL4655 or White Cat. No. FL4655W

3. STANDARDS, CERTIFICATIONS AND MARKINGS

EN 60669-2-5
CE marked

4. DIMENSIONS

4 functions touch plate
BUS-SCS

<div align="right">

0 487 77/87
FL4655/55W/65

</div>

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5. WIRING
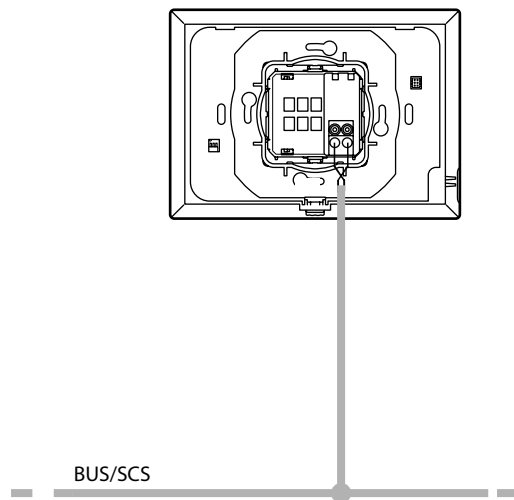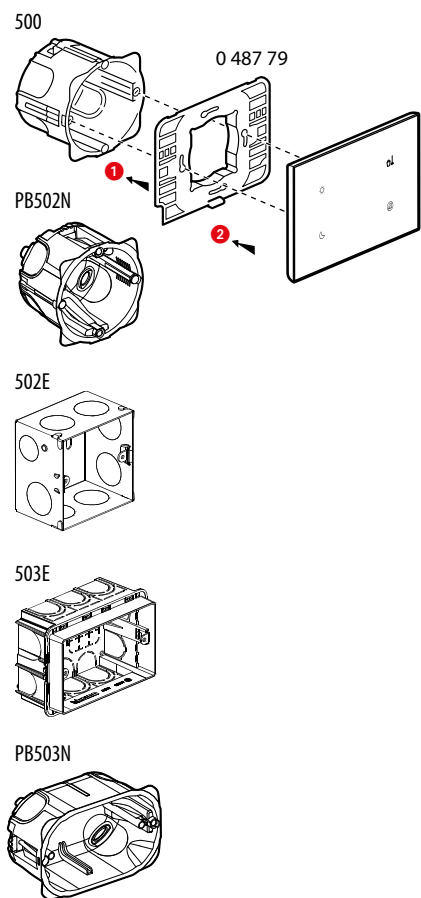
BUS/SCS

6. INSTALLATION

Surface-mounted with flush-mounting boxes

Flush-mounted with accessory Cat. Nos. 0 487 88/89

500

0 487 79

PB502N

502E

503E

PB503N

99

136,5
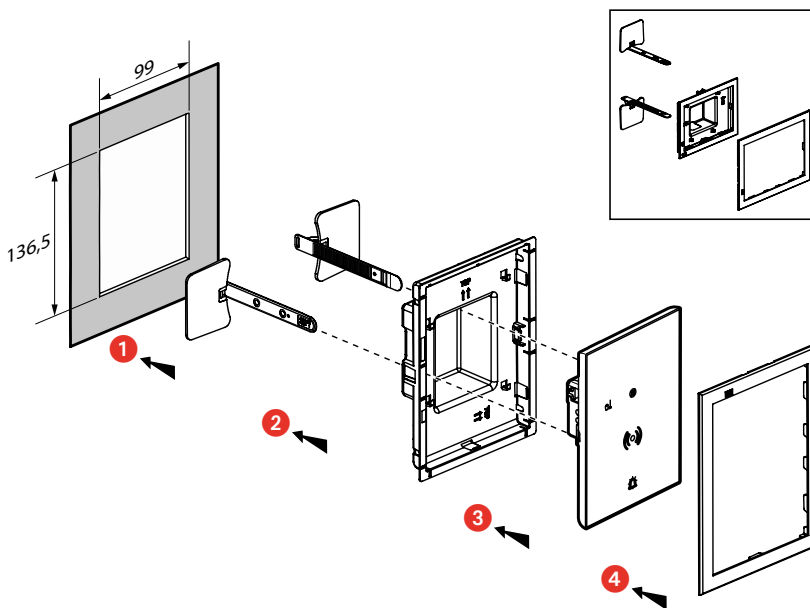
4 functions touch plate
BUS-SCS

0 487 77/87
FL4655/55W/65

7. CONFIGURED VERSION CAT. NO. 0 487 87/FL4665
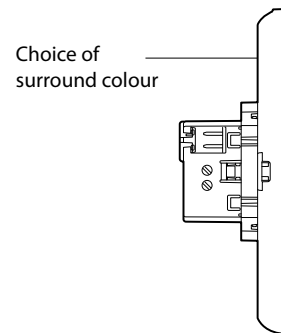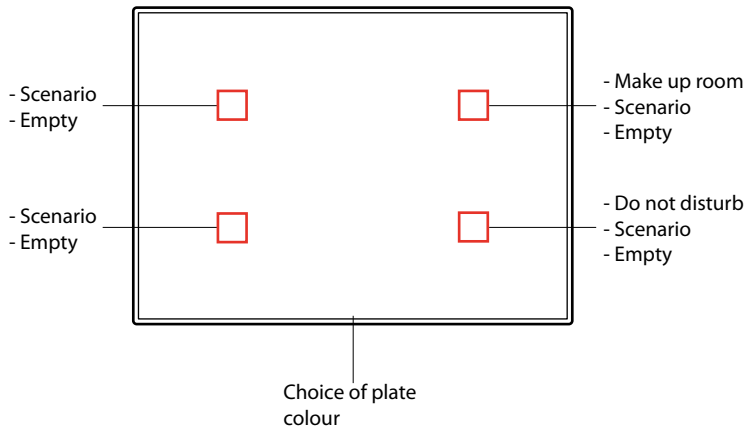
- Scenario
- Empty

- Scenario
- Empty

- Make up room
- Scenario
- Empty

- Do not disturb
- Scenario
- Empty

Choice of plate
colour

Choice of
surround colour

Options (predefined position):
- Hotel logo
- Flush-mounted version

The configurator is available on the following website: www.uxforupscalehotel.legrand.com.
The list of pictogram and colour options (plate and surround) can be accessed via the configurator.

Movement detector
PIR sensor

0 487 78
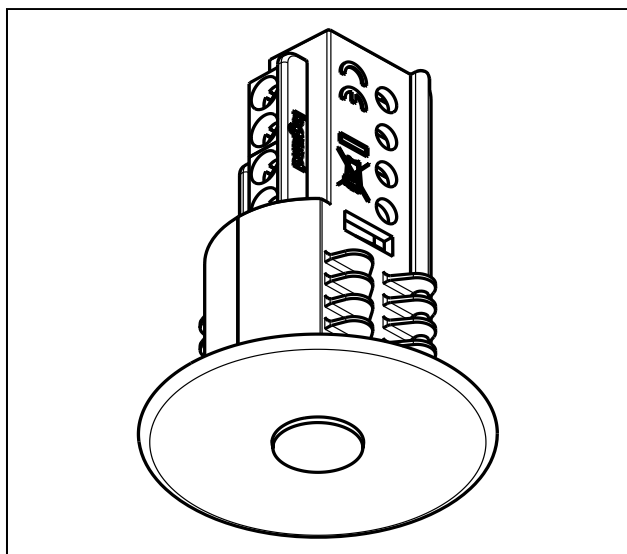
—(V)—	8-30 Vdc
—(A)—	9 mA
▢	2 x 0,6 mm² ≤ ▭ ≤ 2 x 0,9 mm²
⊙	8-30 Vdc
🌡	- 5 °C / + 45 °C
🏃	PIR
⏚	Ø 5 m
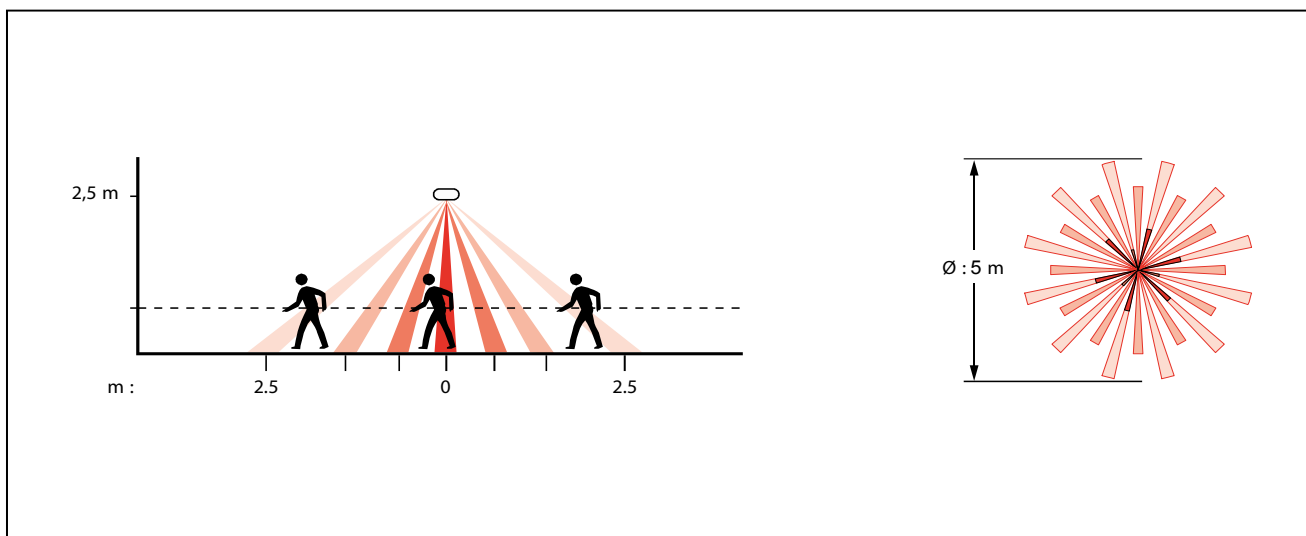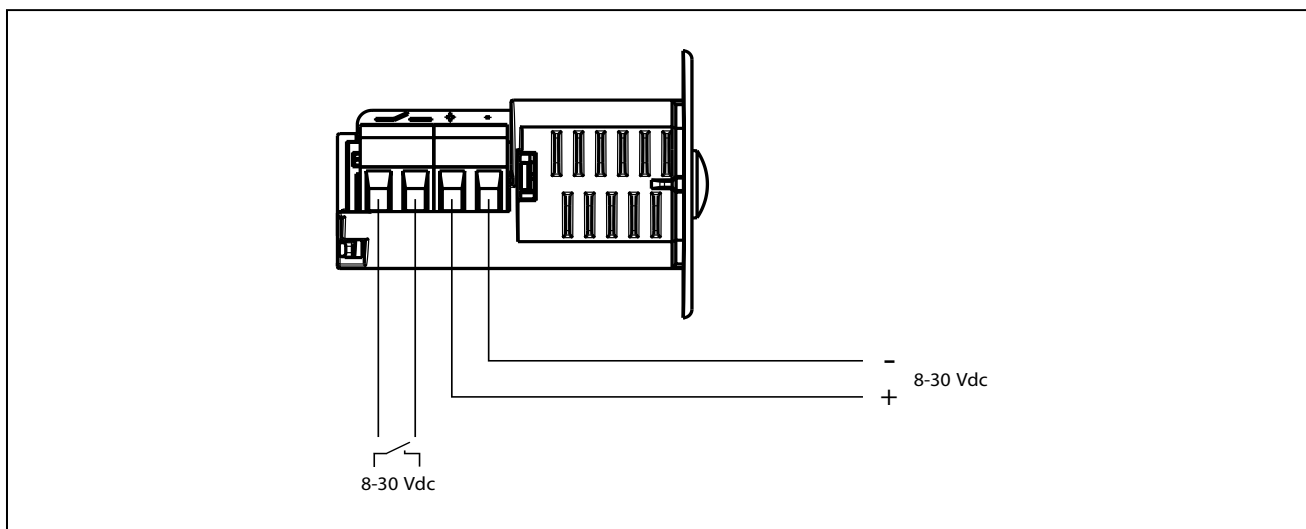
8-30 Vdc

−
8-30 Vdc
+

2,5 m

m :   2.5   0   2.5

Ø : 5 m

The "Virtual Key Card" function is not yet available, for information on availability contact the sales staff.

legrand

bticino

Movement detector
PIR sensor

0 487 78

PIR

Ø 24
Ø 38
Ø 9.7
47
50.3

Ø 25
3 - 20 mm
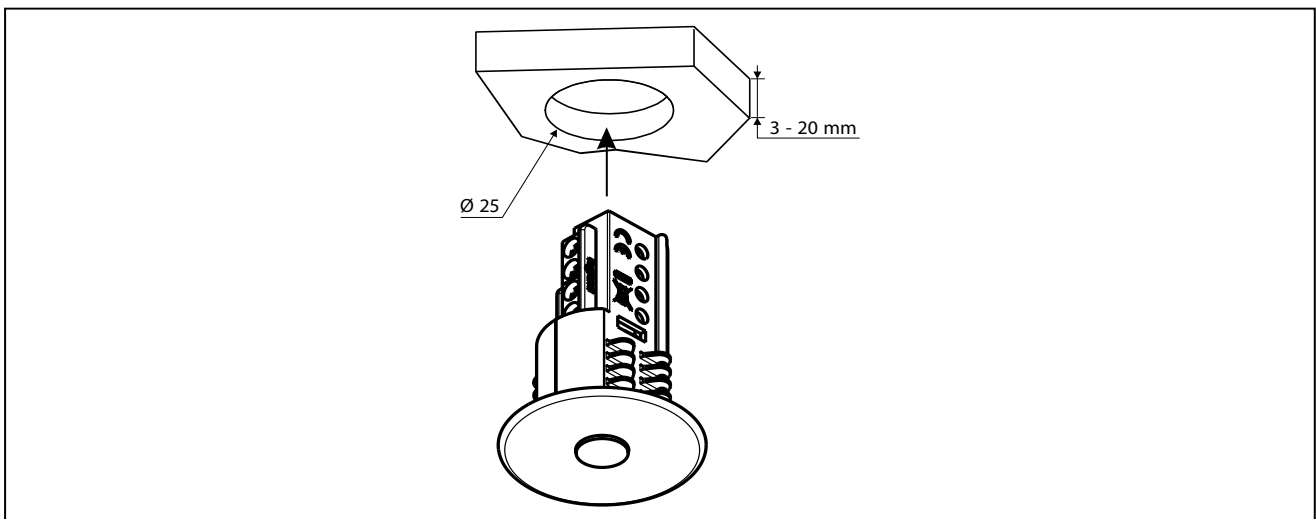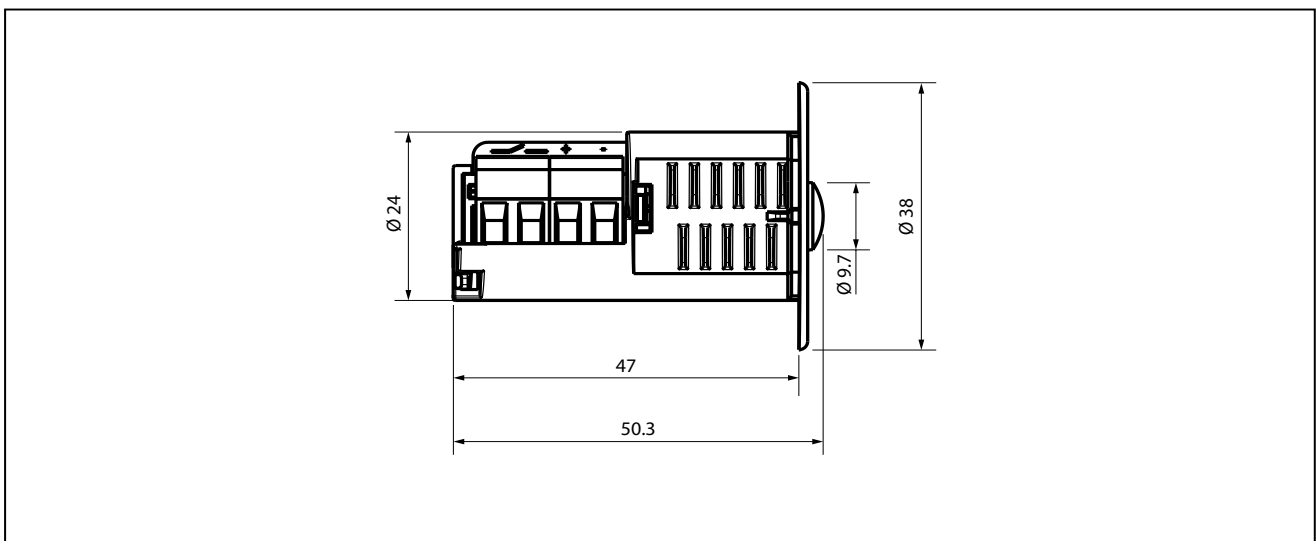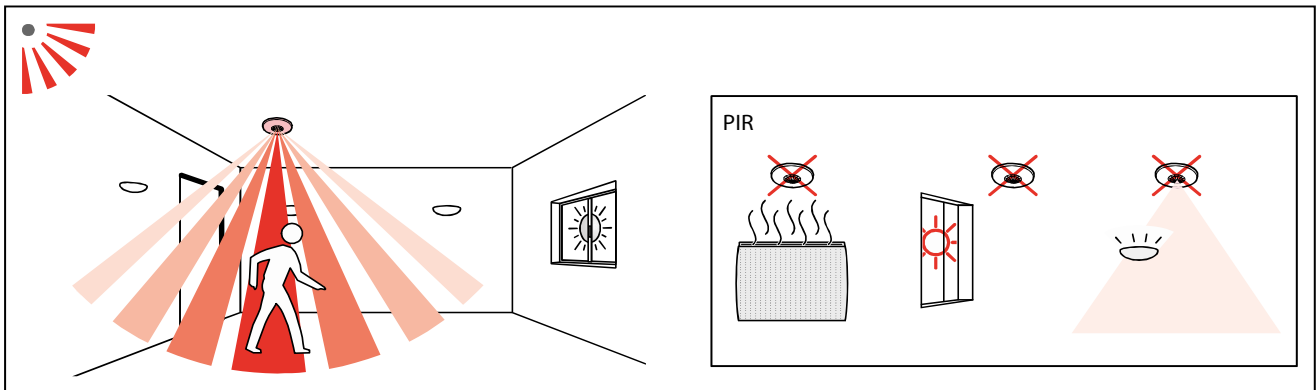
The "Virtual Key Card" function is not yet available, for information on availability contact the sales staff.

btıcıno

BUS-SCS key card switches

0 675 65	H4649
5 727 35	LN4649
5 722 35	

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 MyHOTEL_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 50491-5-1
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

L1 legrand

btıcıno

BUS-SCS key card switches

Physical configuration

Two modes:
- CENTRALIZED (to be used with MH201), 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 MyHOTEL_Suite software

This is performed using the appropriate MyHOTEL_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

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

BUS-SCS key card switches

0 675 65   H4649
5 727 35   LN4649
5 722 35

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.

ROOM
CORRIDOR
RECEPTION

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

F430R8

ZA	= 2
ZB	= 7
N	= 1
LOAD	= –

BUS SCS
To other devices

E

N
L
V1
V2
V3
Heating
Cooling

TM3

D

3513

Magnet
Contact
Contact
Magnet
NC contact
Protection line

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

H4691
LN4691
0 67459

ECO
ON
ECO
WINDOW CLOSED
WINDOW OPEN

H4652
LN4652
0 675 92

A	= 9
PL	= 8
M	= CEN
LED	= –

DND   MUR

H4653
LN4653
0 675 93

R1	= 2
R2	= 7
M	= –

H4649
LN4649
0 675 65
5 727 35
5 722 35

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

TM1

C

To other room services

TM2

B

E49

F

GS
(TM+EL)

A

L
N

230 V
50 Hz

MH201

Transformer

L1 L

127

H4650
LN4650
0 675 90

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

Bell
12 Vac/dc – 230 Vac
max 1A

230 Vac

Ethernet network
Switch layer 3
Ethernet network
Other rooms
PC for room management

Legrand   MM00496-b-EN   02/10/2013   bticino

BUS SCS
RFID key card switches

0 675 66   H4648
5 727 36   LN4648
5 722 36

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 MyHOTEL_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:	5 – 40 °C
RFID key card frequency:	13.56 MHz

Standards, Certifications, Marks

EN 60669-2-1
EN 50491-5-1
EN 50428

Dimensional data

Size: 2 flush mounted modules

Front view
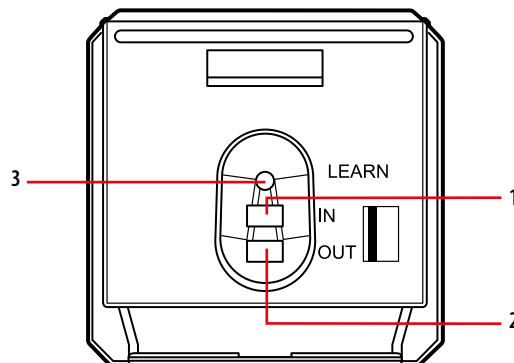
Rear view
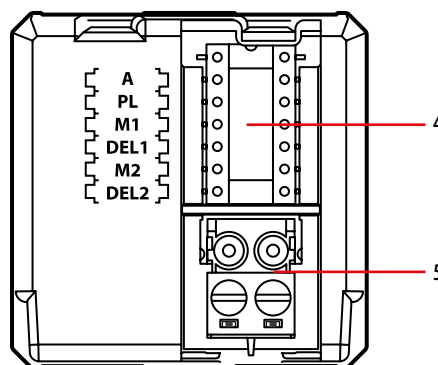
Legend

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

<div align="right">

0 675 66   H4648
5 727 36   LN4648
5 722 36

</div>

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 MyHOTEL_Suite software

This is performed using the appropriate MyHOTEL_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

Ethernet network
Switch Layer 3
MH201
Ethernet network
BUS-SCS
PC for configuration

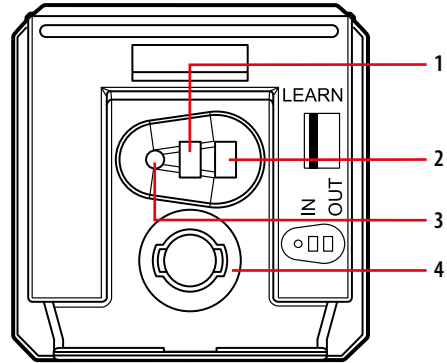### SCENARIO mode programming

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

bticino

DND and MUR flush mounted control
BUS-SCS

0 675 93   H4653
LN4653

Description

Flush mounted control for installation inside the room, for the activation of the "Do Not Disturb" or "Make Up Room" notifications on the indicator outside the door.
The device can be configured in two different ways:
- **Physical configuration**, by inserting the configurators in the appropriate housings.
- **Configuration using the MyHOTEL_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
Absorption: max. 7.5 mA
Operating temperature: 5 – 40 °C

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
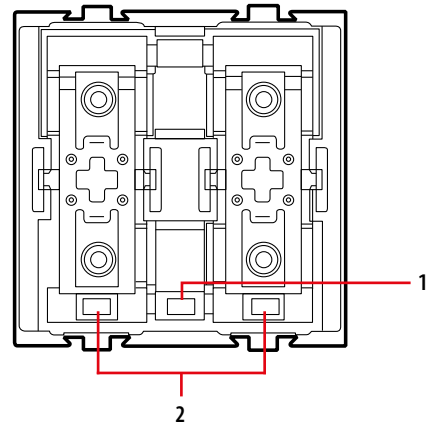
Rear view
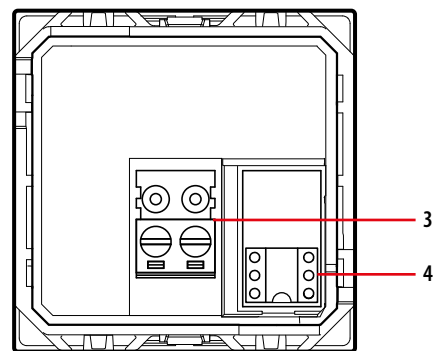
Legend

1. LED adjustment/disable pushbutton
2. LED:
   AXOLUTE/ARTEOR/CÉLIANE: BLUE: message not active
                            PURPLE: message active
   LIVINGLIGHT: GREEN: message not active
                 ORANGE: message active
3. Clamps for connection to the SCS BUS
4. Configurator socket

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MM00775-a-EN   02/10/2013

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DND and MUR flush mounted control
BUS-SCS

0 675 93   H4653
LN4653

Physical configuration

◎	**R1**	◎
◎	**R2**	◎
◎	**M**	◎
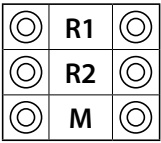
R1, R2 = Room address (R1 identifies the tenths; R2 identifies the units)

M = 0 DND and MUR active - 2 x 1 module key covers

DND	MUR
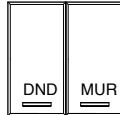
M = 1 DND control only - 1 double key cover

DND
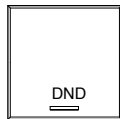
LED brightness adjustment
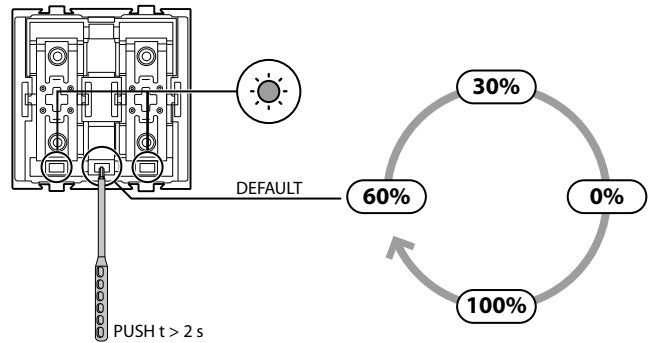
DEFAULT

PUSH t > 2 s

30%

0%

60%

100%

Configuration using the MyHOTEL_Suite software

This is performed using the appropriate MyHOTEL_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.
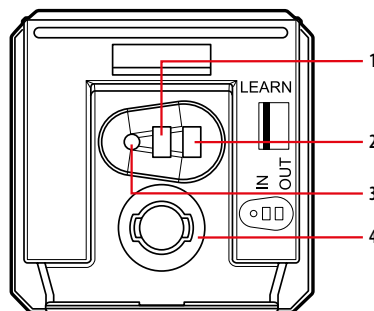
Ethernet connection to the system

Ethernet network

MH201

Switch layer 3

Ethernet network

BUS-SCS

PC for configuration

L legrand

MM00775-a-EN   02/10/2013

bticino

bticino

Outside the door indicator
BUS-SCS

0 675 90   H4650
LN4650

Description

Outside the door indicator with "Do Not Disturb" or "Make Up Room" notifications; it also has a call bell pushbutton and white backlit notification to indicate if someone is in the room, and the presence of alarm conditions.
If the DND function is active, the call pushbutton is disabled.
The white backlight switch on function can be configured for operating in different modes. See the physical configuration section "L configurator".

The "Visual alarm notification" function outside the door is only available for systems with the MH201 device installed, and its programming is only possible using the MyHOTEL_Suite software.
This function is only available for devices with lot number 14w40 or later.

The device can be configured in two different ways:
- **Physical configuration**, by inserting the configurators in the appropriate housings.
- **Configuration using the MyHOTEL_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
Stand-by absorption:	10 mA
	20 mA max
Relay contact (activated by the front pushbutton):	12 Vac/dc – 230 Vac
	1A max
Operating temperature:	5 – 40 °C

Standards, Certifications, Marks

EN 60669-2-1
EN 50491-5-1
EN 50428

Dimensional data

Size: 2 flush mounted modules

Front view
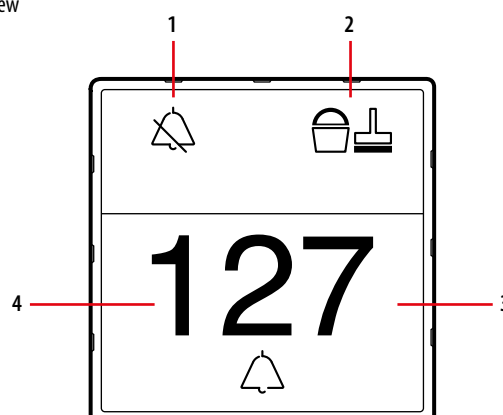
Rear view
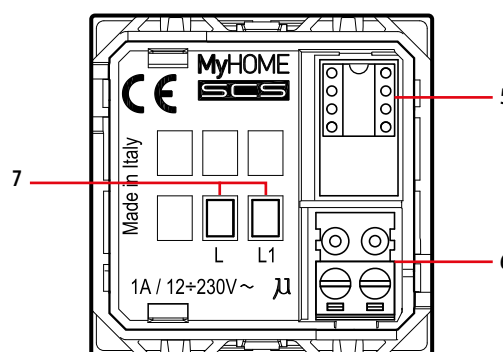
Legend

1. DND indicator (red LED on = DO NOT DISTURB)

2. MUR indicator (green LED on = MAKE UP ROOM)

3. Call pushbutton

4. Room number customisable and backlit area with white notification for: guest in the room and alarm notification

5. Configurator socket

6. Clamps for connection to the SCS BUS

7. NO contact for the activation of the bell. The contact is controlled by the front pushbutton

L1 legrand

MM00774-b-EN   15/01/2015

bticino

btıcıno

Outside the door indicator BUS-SCS

0 675 90   H4650
LN4650

Physical configuration
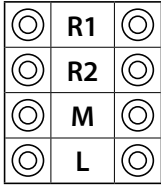
R1, R2 = Room address (R1 identifies the tenths; R2 identifies the units)

M = 0 for use together with F420
M = 1 for use together with MH200N
M = 2 for use together with MH201

L = LED functions

L CONFIGURATOR	WHITE BACKLIGHTING LED	RED DND LED	GREEN MUR LED
0	ON: occupied OFF: free	Enabled	Enabled
1	ON: occupied OFF: free	Enabled	Disabled
2	ON: free OFF: occupied	Enabled	Enabled
3	ON: free OFF: occupied	Enabled	Disabled
4	Always ON	Enabled	Enabled
5	Always ON	Enabled	Disabled
6	Always OFF	Enabled	Enabled
7	Always OFF	Enabled	Disabled

Configuration using the MyHOTEL_Suite software

This is performed using the appropriate MyHOTEL_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
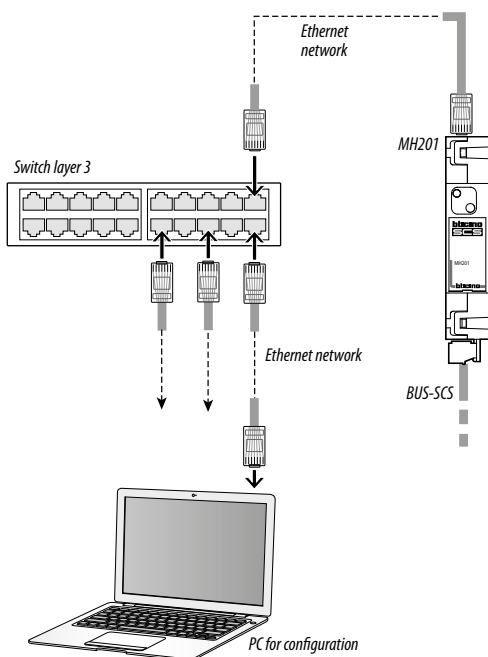
Wiring diagrams

Room 127 bell control diagram
The bell is active while the relevant key on the device is pressed.

Llegrand

MM00774-b-EN   15/01/2015

btıcıno
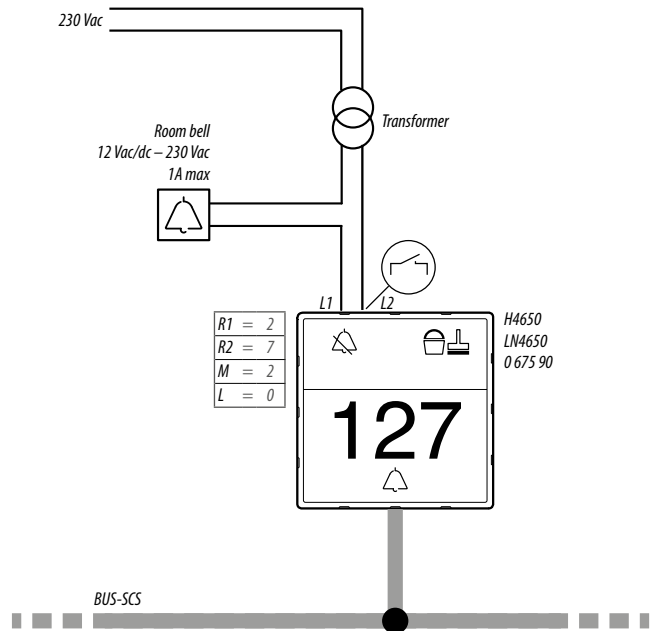
RFID reader and outside the door indicator BUS SCS

0 675 91   H4651
LN4651

Description

Outside the door indicator with "Do Not Disturb" or "Make Up Room" notifications, call bell pushbutton, RFID key card reader (MIfare classic ISO 14443), white backlit notification to indicate if someone is in the room, and the presence of alarm conditions. The white backlight switch on function can be configured for operating in different modes. See the physical configuration section "L configurator".

The "Visual alarm notification" function outside the door is only available for systems with the MH201 device installed, and its programming is only possible using the MyHOTEL_Suite software.
This function, and the compatibility with the MIfare classic ISO 14443 key card, including 3547 key cards, are only available for devices with lot number 14w40 or later.

The device can be configured in two different ways:
- **Physical configuration**, by inserting the configurators in the appropriate housings.
- **Configuration using the MyHOTEL_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.

Front view

Rear view

Technical data

Power supply from SCS BUS:		18 – 27 Vdc
Absorption:	in Stand-by	10 mA
	with relay active	20 mA
	max. with RFID	55 mA
Relay contact (activated by the front pushbutton):		12 Vac/dc – 230 Vac 1A max
Operating temperature:		5 – 40 ℃

Standards, Certifications, Marks

EN 60669-2-1
EN 50491-5-1
EN 50428

Dimensional data

Size: 2 flush mounted modules
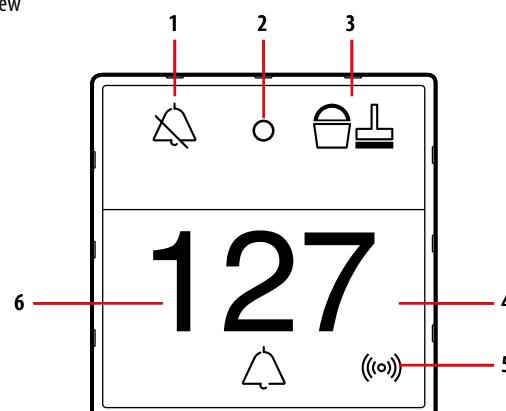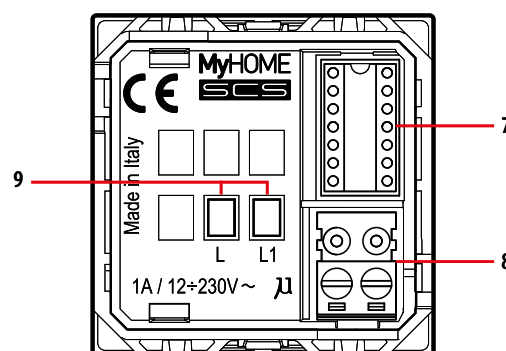
Legend

1. DND indicator (red LED rosso on = DO NOT DISTURB))
2. Green LED on = reading OK
   Red LED on = reading error
   LED flashing = stand alone mode key card programming
3. MUR indicator (green LED on = MAKE UP ROOM)
4. Call pushbutton (it activates the internal relay)
5. RFID key card reader
6. Room number customisable and backlit area with white notification for: guest in the room and alarm notification
7. Configurator socket
8. Clamps for connection to the SCS BUS
9. NO relay contact; the relay can be used to control:
   - bell
   - electric door lock
   The relay is activated by the front pushbutton.

RFID reader and outside the door indicator BUS SCS

0 675 91   H4651
LN4651

◎	R1	◎
◎	R2	◎
◎	M	◎
◎	L	◎
◎	A	◎
◎	PL	◎
◎	T	◎

R1, R2 = Room address (R1 identifies the tenths; R2 identifies the units)

M = 0 for use together with F420
M = 2 for use together with MH201

L = LED functions

L CONFIGURATOR	WHITE BACKLIGHTING LED	RED DND LED	GREEN MUR LED
0	ON: occupied OFF: free	Enabled	Enabled
1	ON: occupied OFF: free	Enabled	Disabled
2	ON: free OFF: occupied	Enabled	Enabled
3	ON: free OFF: occupied	Enabled	Disabled
4	Always ON	Enabled	Enabled
5	Always ON	Enabled	Disabled
6	Always OFF	Enabled	Enabled
7	Always OFF	Enabled	Disabled

A, PL = door lock actuator SCS address

T = door lock relay timer

Configurator	Time
0	½ sec
1	1 sec
2	2 sec
3	3 sec
4	4 sec
5	5 sec
6	6 sec
7	7 sec
8	8 sec
9	9 sec

This is performed using the appropriate MyHOTEL_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.
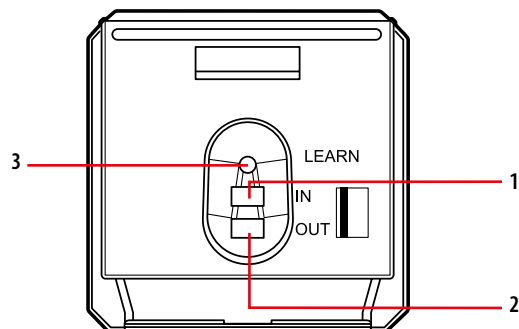
Ethernet connection to the system

Ethernet network
Switch layer 3
MH201
Ethernet network
BUS-SCS
PC for configuration

RFID reader and outside the door indicator BUS SCS

Stand-alone mode key card programming

Master key card programming

If no master key card has been programmed, at the first start up the DND & MUR indicator accepts all the key cards.

To start the Master key card programming procedure press the call pushbutton for 10 seconds and then move the key card close to the reader; this key card will be saved as Master.

The programming of the Master key card cannot be changed; however the device can be reset as follows:

- Disconnect the power supply from the device.
- Reconnect the power supply while pressing the call pushbutton for 10 seconds.

NOTE: this procedure deletes all the key cards saved by the device.

Customer key card programming

- Move the Master key card close to the reader; the green LED starts flashing slowly.
- Move the customer key card to save close to the reader, the green LED stays on steady for two seconds.
- Press the call pushbutton to end the operation (the green LED goes off).

Deleting all the saved customer key cards

- Move the Master key card close to the reader; the green LED starts flashing slowly.
- Move the key card close to the reader again, the green LED starts flashing quickly.
- Move the key card close to the reader a third time, the green LED comes on steady for five seconds before switching off.

Service key card programming

- Move the Master key card close to the reader; the green LED starts flashing slowly.
- Press the call pushbutton; the LED starts flashing orange.
- Move the service key card to save close to the reader, the orange LED stays on steady for two seconds.
- Press the call pushbutton to end the operation (the orange LED goes off).

Deleting all the service key cards

- Move the Master key card close to the reader; the green LED starts flashing slowly.
- Press the call pushbutton; the LED starts flashing orange.
- Move the Master key card close to the reader again, the LED starts flashing quickly.
- Move the key card close to the reader a third time, the orange LED comes on steady for five seconds before switching off.

Programming the key card using the PC and the software

Programming key cards using the PC and the relevant software provides further functions in addition to the basic ones available in stand-alone mode programming: validity settings, guest information, scheduled accesses...
This procedure is only possible using item MH201.

Wiring diagrams

Room 110 bell + electric door lock control diagram

The bell is activated by the front pushbutton of the reader and indicator outside the door. The electric door lock is activated for a period of 2 seconds by the reader and indicator outside the door following a positive reading of the key card.
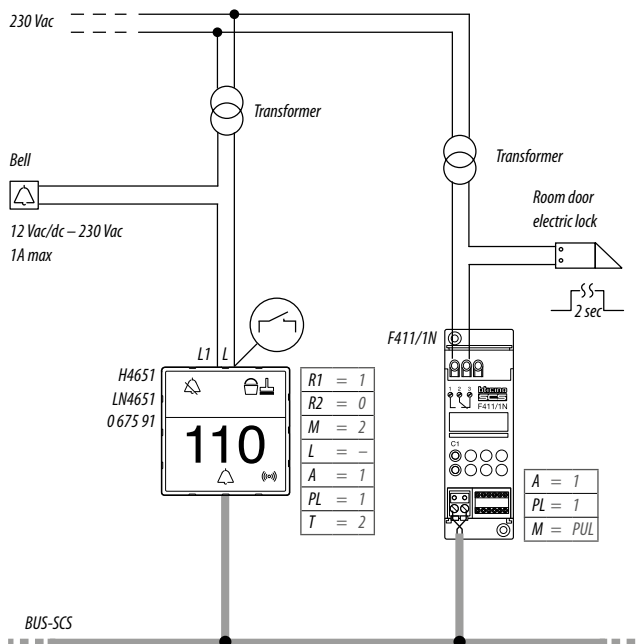
Room 115 electric door lock control diagram

The electric door lock is activated for a period of 3 seconds by the RFID reader following a positive reading of the key card. In this mode the front pushbutton is disabled.
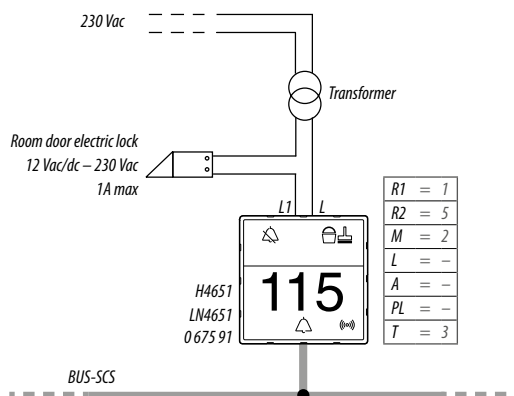
8 key multifunction control
BUS SCS

0 675 92   H4652
LN4652

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 MyHOTEL_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.

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	

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
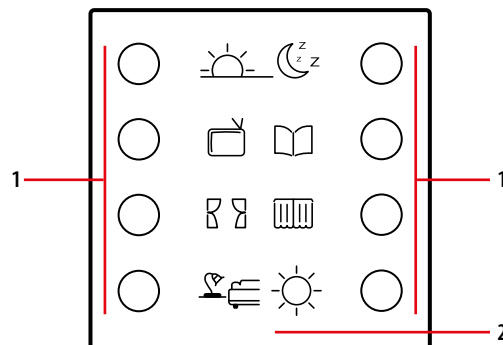
Rear view
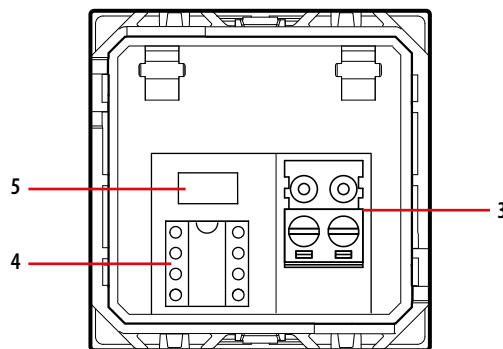
Legend

1. Kyes
2. Customisable labels
3. Clamps for connection to the SCS BUS
4. Configurator socket
5. Programming pushbutton for self-learning and scenario modes

L legrand

MM00778-a-EN   16/09/2013

bticino

8 key multifunction control
BUS SCS

0 675 92   H4652
LN4652

Physical configuration
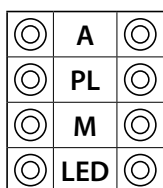
A   room
PL   light point
M   mode (see the dedicated section)
LED   backlight setting
(see the dedicated section)

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:
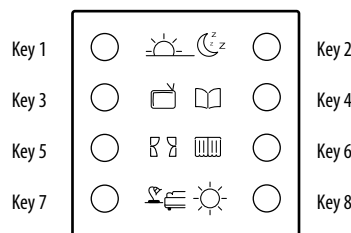
Key number	M=1	M=2
Key 1	Scenario 1	Scenario 9
Key 2	Scenario 2	Scenario 10
Key 3	Scenario 3	Scenario 11
Key 4	Scenario 4	Scenario 12
Key 5	Scenario 5	Scenario 13
Key 6	Scenario 6	Scenario 14
Key 7	Scenario 7	Scenario 15
Key 8	Scenario 8	Scenario 16

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).

F420

programming block/
release key

scenario cancellation key

scenario/learning reset LED

programming status LED

---
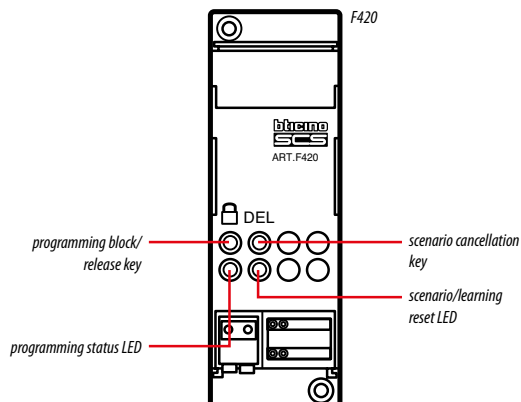
8 key multifunction control
BUS SCS

0 675 92   H4652
LN4652

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 MyHOTEL_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
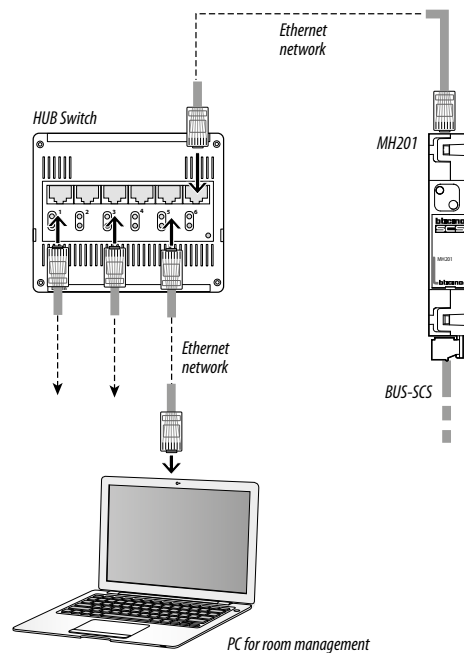
IP scenario module
BUS-SCS
MH201

Description

The IP scenario module is a device of the Hotel range for the management of the room and the common areas.
One MH201 must be used for each room or common area.
For systems with over 100 rooms, or common areas, the IP Server F458 device must also be used.

It's main functions are:

- **Key card management:**
  1) **room access management (key cards saved).** Using the supervision software, it is possible to manage the saving of the key cards (if the external reader is present) used for opening the door with two different profiles (Users or Service). For each key card saved, it is possible to associate a validity end date, 3 access time profiles, and a maximum number of accesses.
  The date of validity can only be associated for user key cards, not for service ones. The access time profiles and the maximum number of accesses can only be associated to common areas.
  For more details refer to the supervision software manual.

- **Management of the room functions:**
  1) **MAKE UP ROOM.** If inside the room MUR is pressed on the appropriate control (LN4653-H4653-0 675 93), the IP scenario module updates the notification to all the display units (LN4651-H4651-0 675 91), also notifying the event occurred to the supervision software.
  Using the CEN operating mode, also other devices can send MUR notifications.
  2) **DO NOT DISTURB.** If inside the room the DND key is pressed on the appropriate control (LN4653-H4653-0 675 93), the IP scenario module updates the notification to all the display units (LN4651-H4651-0 675 91), also notifying the event occurred to the supervision software.
  Using the CEN operating mode, also other devices can send MUR notifications.
  3) **Room alarms.** If an alarm is activated (e.g. bathroom pull cord), the device notifies the supervision software, from where it will then be reset.
  If enabled, the notification will also be sent to the display outside the door.
  4) **Management of the room contacts**. Technical contact for forwarding information and alarm notifications to the supervision software (e.g. window or refrigerator door open).
  5) **Remote thermostat contact**.
  6) **Presence management.** The presence of someone in the room is notified by the key card switch (LN4849-H4648-0 675 66-05 727 36-05 722 36); the IP scenario module sees the notification and forwards it to all the notifying units (LN4651-H4651-0 675 91), and to the supervision software.
- Gateway for the configuration of the devices installed inside the room. The IP scenario module performs the gateway function to enable the configuration of the devices installed inside the room using the MyHOTEL_Suite.
- Communication with the supervision software.
- Scenario management. The device can manage up to 50 scenarios as follows:
  a) 5 start triggers.
  b) 1 stop trigger.
  c) 1 condition "IF".
  d) 10 actions.
  The scenarios are saved using the MyHOTEL_Suite software.
- Management of lights as memory module. The device follows the status of the actuators, and if no network is detected, the status is reset.
- It saves the events occurred inside the room in a log that can be downloaded using the supervision software.

Front view
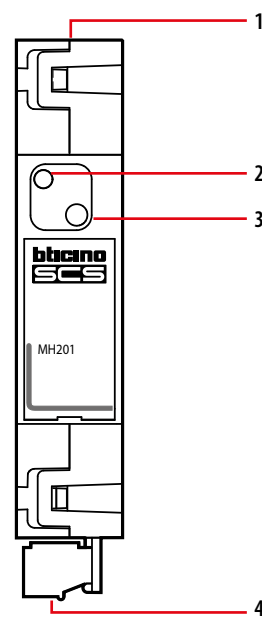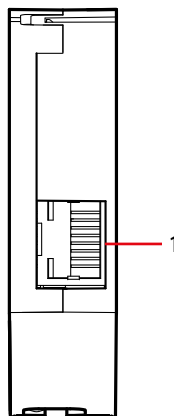
Top view   Bottom view
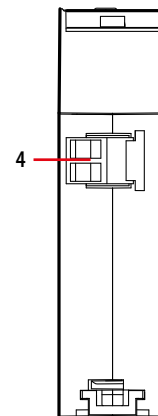
Legend

1. Ethernet data network RJ45 connector
2. LED: red/green bi-colour LED
   Notification: Flashing red, 1 sec. ON/1 sec. OFF, acquiring the Ethernet network address configuration
   Flashing green, 1 sec. ON/1 sec. OFF, Ethernet network configuration acquired
3. Pushbutton:
   - pressure of the pushbutton until it starts flashing green at start-up: set-up of fixed IP 192.168.1.5, Subnet Mask 255.255.255.0
   - extended pressure for 30 seconds: deletion of the log (all the saved events)
4. Clamps for connection to the SCS BUS

IP scenario module
BUS-SCS

MH201

Technical data

Power supply: 18 – 27 Vdc
Absorption: 30 mA
Operating temperature: 5 – 40 ℃

Standards, Certifications, Marks

EN 60669-2-1
EN 50491-5-1
EN 50428

Dimensional data

Size: 1 DIN module

Configuration

The configuration of the scenarios can be completed using the "MyHOTEL_Suite" software.
It is possible to save up to 50 scenarios.
Always using the software, it is possible to change the basic settings of the device:
- Name: max. 16 characters
- Open Password: default 12345 (max 9 characters)

Putting into operation

Pressing the pushbutton until it starts flashing green will set the configuration of the device with the fixed IP address: IP 192.168.1.5, Subnet Mask 255.255.255.0

IP scenario module
BUS-SCS

MH201

Typical wiring diagram (for programs with over 100 rooms or common areas refer to the technical guide)

TO THE OTHER FLOORS

3rd FLOOR

To the other rooms

To the floor services

230 Vac

Switch layer 3

MH201

E49
PRI: 220 – 240 V~
185 – 175 mA
50/60 Hz
SCS: 27 Vdc
600 mA

SCS

E49

BUS SCS

ROOM 301

H4648
LN4648
0 675 66
5 727 36
5 722 36

H4653
LN4653
0 675 93

DND   MUR

H4691
LN4691
0 674 59

H4652
LN4652
0 675 92

301

H4651
LN4651
0 675 91

2nd FLOOR

To the other rooms

To the floor services

230 Vac

Switch layer 3

MH201

E49
PRI: 220 – 240 V~
185 – 175 mA
50/60 Hz
SCS: 27 Vdc
600 mA

SCS

E49

BUS SCS

ROOM 201

H4648
LN4648
0 675 66
5 727 36
5 722 36

H4653
LN4653
0 675 93

DND   MUR

H4691
LN4691
0 674 59

H4652
LN4652
0 675 92

201

H4651
LN4651
0 675 91

1st FLOOR

To the other rooms

To the floor services

230 Vac

Switch layer 3

MH201

E49
PRI: 220 – 240 V~
185 – 175 mA
50/60 Hz
SCS: 27 Vdc
600 mA

SCS

E49

BUS SCS

ROOM 101

H4648
LN4648
0 675 66
5 727 36
5 722 36

H4653
LN4653
0 675 93

DND   MUR

H4691
LN4691
0 674 59

H4652
LN4652
0 675 92

101

H4651
LN4651
0 675 91

RECEPTION

Ethernet network

PC + software for room management

348402

USB cable

3547

Scenario Module   F420

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°C
Size:	2 DIN modules
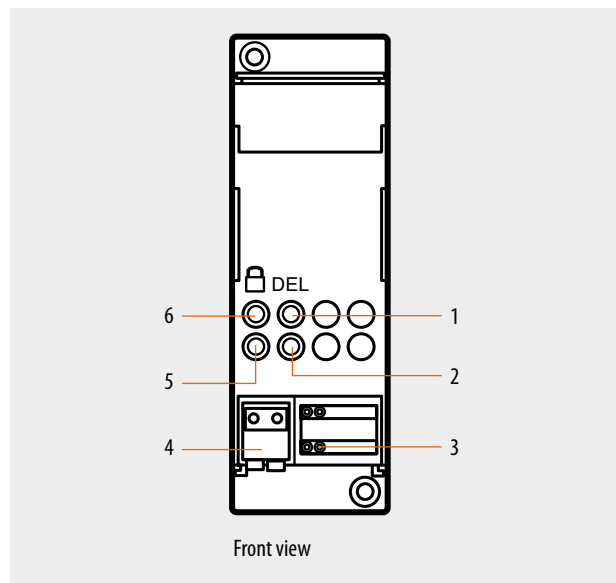
Front view

Legend

1. Scenario cancellation pushbutton
2. Scenarios/learning reset LED
3. Configurator socket
4. BUS
5. Programming status LED
6. Lock/unlock programming pushbutton

Scenario Module   F420

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 MyHOTEL_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 MyHOTEL_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 (MyHOTEL_Suite)	Physical configuration
Point-to-point	Room	0-9	A=0-9
	Lighting point	1-9	PL = 1-9

BUS-SCS
server IP   F458

Description

The server IP device is part of the devices of the hotel offer and must be used when designing or installing systems with over 100 rooms, or areas with over 100 MH201 installed.

Default configuration

Network configuration IP = 192.168.1.51

Netmask: 255.255.255.0

DHCP and DNS default range
in the "MyHOTEL_Suite" software vers. 2.0.91: 192.168.1.52 – 192.168.5.49

Password OPEN: 12345

Technical data

Power supply:	18 – 30 Vdc
Absorption:	55 mA max
Minimum consumption:	1.3 W
Maximum consumption:	3.3 W
Holding Date and time without power supply:	48 hours
Operating temperature:	5 – 45 °C

Standards, Certifications, Marks

EN 60669-2-1
EN 50491-5-1
EN 50428

Dimensional data

Size: 6 DIN modules

Configuration

The device must be configured using the "MyHOTEL_Suite" software.

Front view
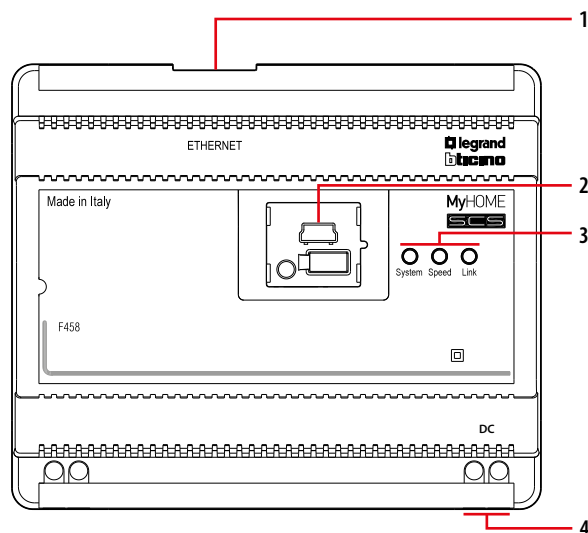
Legend

1. RJ45 connector for Ethernet LAN 10/100 Mbit

2. Mini-USB connector for the configuration using the PC and software update

3. LED notifications
   System LED: it comes on when connecting the power supply, and then it goes off.
   When it later comes back on steady, it means that the device is working correctly
   Speed LED: speed of connection to the network:
   ON = 100 Mbit
   OFF = 10 Mbit
   Link LED: when on, it indicates that the Ethernet network has been found

4. Power supply connection clamps (recommended 346020)

Wiring diagrams

Typical diagram of a system with less than 100 areas (rooms + common areas) and one supervision PC.

Hotel Rooms

ROOM 99   ROOM 100

MH201   MH201

Switch layer 3

ROOM 3   ROOM 4

MH201

Switch layer 3

ROOM 1   ROOM 2

MH201   MH201

Switch layer 3

Hotel management supervision software

PMS interface

Switch layer 3

Layer 3 switch or Router

Dedicated BTicino/Legrand VLAN

Ethernet network

MM00857-a-EN   15/01/2015
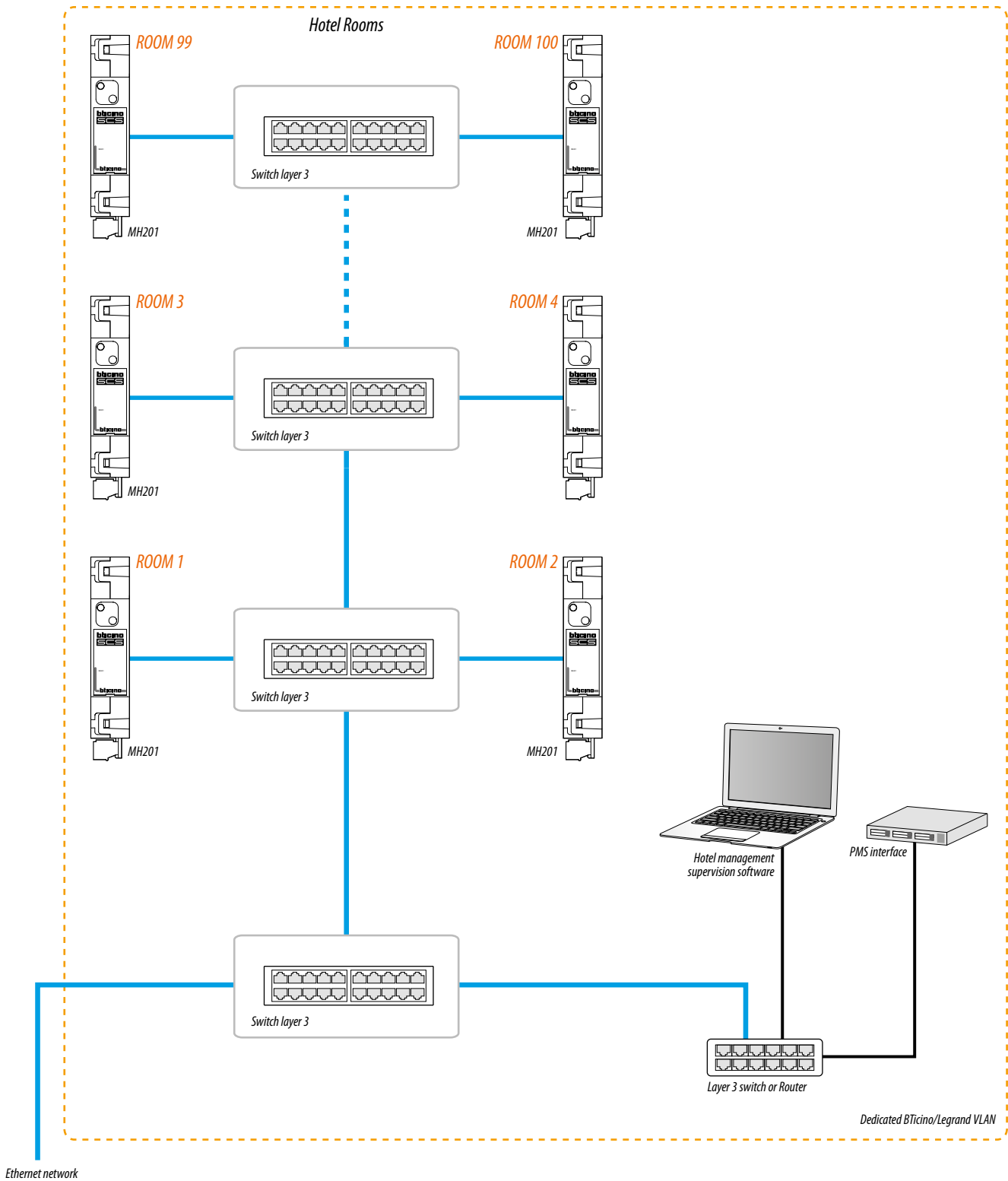
BUS-SCS
server IP

F458

Wiring diagrams

Typical diagram of a system with 100 to 500 areas (rooms + common areas) and one supervision PC.

Hotel Rooms

ROOM 499   ROOM 500

Switch layer 3

MH201   MH201

ROOM 99   ROOM 100

Switch layer 3

MH201   MH201

ROOM 1   ROOM 2

Switch layer 3

MH201   MH201

Hotel management supervision software

PMS interface

Switch layer 3

Layer 3 switch or Router

230 V

Power supply 346020

IP SERVER F458

Dedicated BTicino/Legrand VLAN

Ethernet network
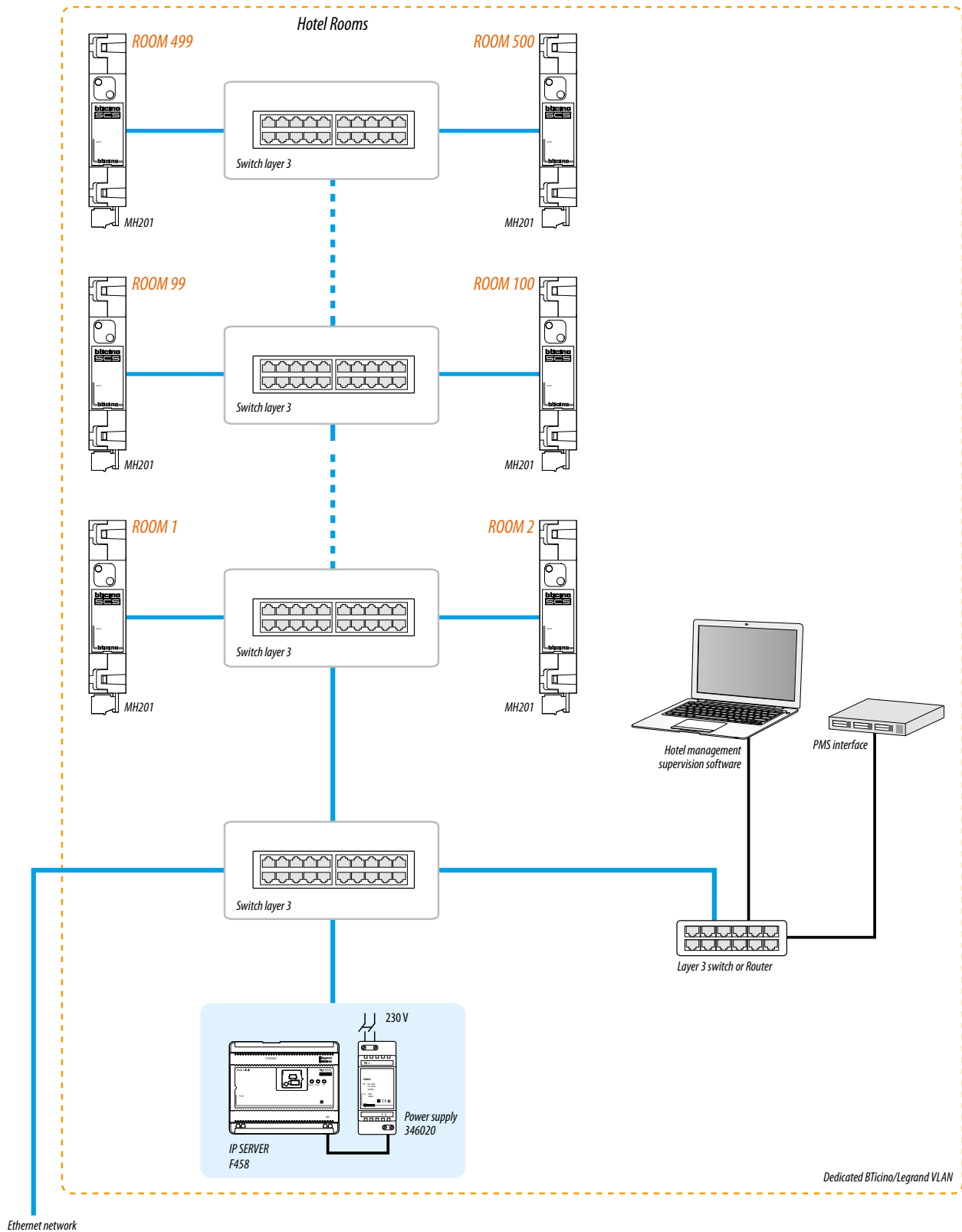
L1 legrand

bticino

Wiring diagrams

Typical diagram of a system with up to 500 areas (rooms + common areas) and up to 10 supervision PCs.
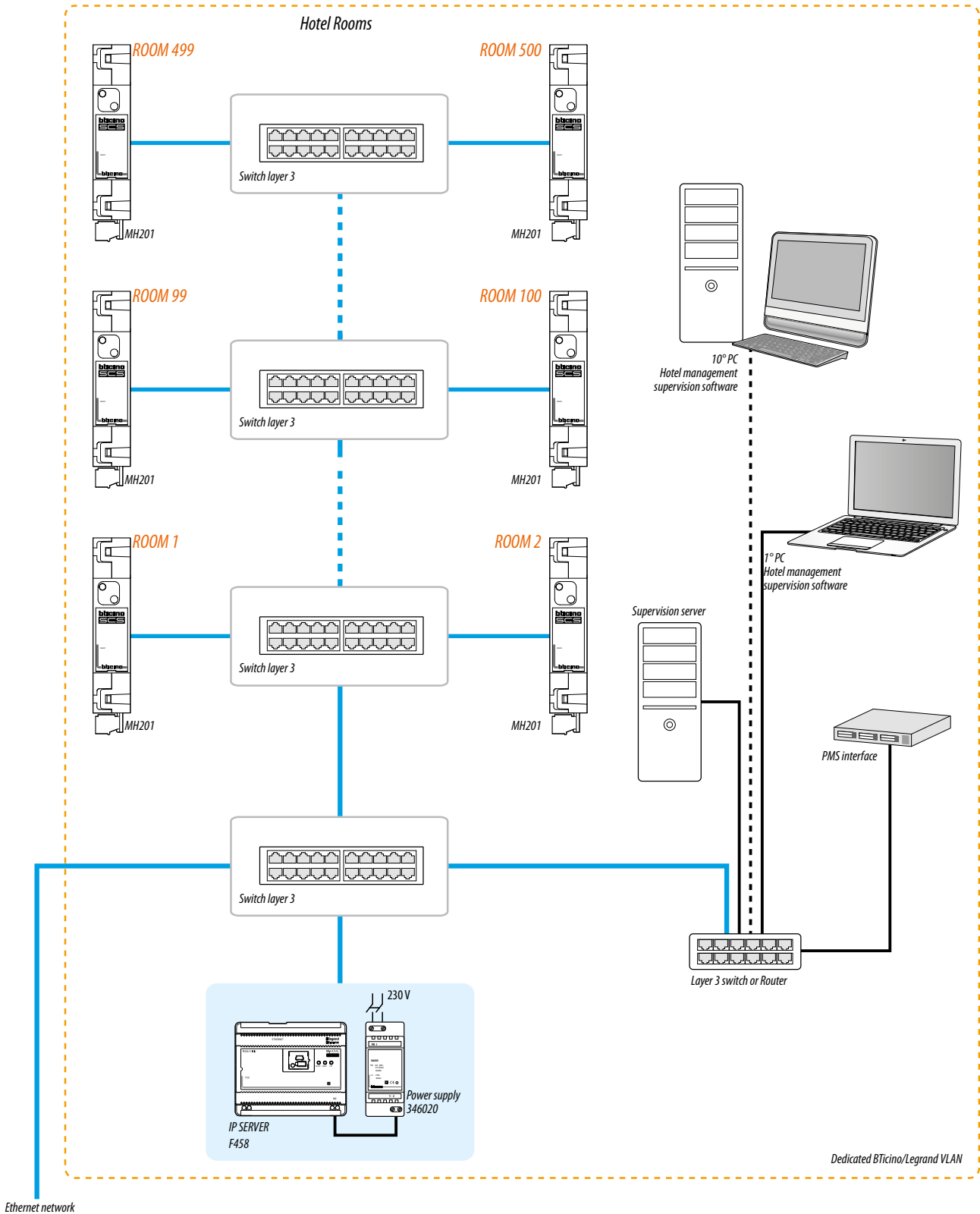
Hotel Rooms

ROOM 499

ROOM 500

Switch layer 3

MH201

MH201

ROOM 99

ROOM 100

Switch layer 3

MH201

MH201

ROOM 1

ROOM 2

Switch layer 3

MH201

MH201

10° PC
Hotel management
supervision software

1° PC
Hotel management
supervision software

Supervision server

PMS interface

Switch layer 3

Layer 3 switch or Router

230 V

Power supply
346020

IP SERVER
F458

Dedicated BTicino/Legrand VLAN

Ethernet network

Thermostat with display

H4691 067459
LN4691   64170

Description

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:

- MyHOTEL 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 °C
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
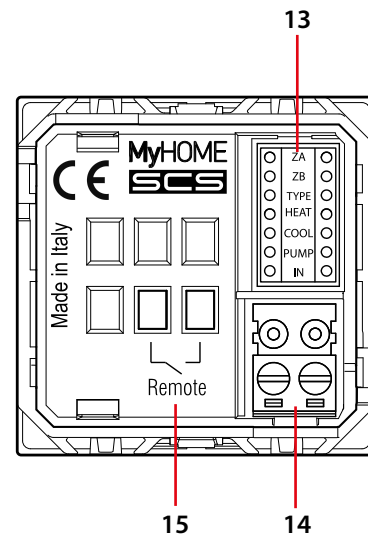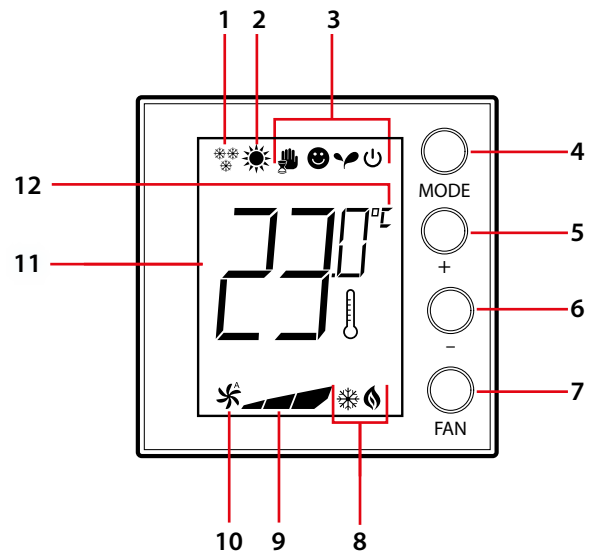
Legend

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 MyHOTEL 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: °C or °F
13. Configurator socket
14. BUS connection
15. Local contact

| **Thermostat with display** | **H4691 067459** |
| | **LN4691   64170** |

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 MyHOTEL_Suite (*), where a dedicated wizard will guide the user through the procedure for correctly configuring the device. The MyHOTEL_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
MyHOTEL temperature control system probe [1]	0
Hotel room thermostat	1
Residential system thermostat	2

(1) If the device is used as a MyHOTEL 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 MyHOTEL systems with temperature control central unit.

Note (*):   - software downloadable from the website
    www.homesystems-legrandgroup.com;
   - the functions are available from version 1.3.

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 MyHOTEL_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 MyHOTEL_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 MyHOTEL_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.

Contact interface in DIN module

F428

Physical configuration

| 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 MyHOTEL_Suite virtual configuration

1. Light switch

1.1 Addressing

Address type		Virtual configuration (MyHOTEL_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 (MyHOTEL_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

Contact interface in DIN module	F428

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

Virtual configuration (MyHOTEL_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 MyHOTEL_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 (MyHOTEL_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 MyHOTEL_Suite virtual configuration

Contact interface in DIN module

2. Automation control

2.1 Addressing

Address type		Virtual configuration (MyHOTEL_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 (MyHOTEL_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
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 (MyHOTEL_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 (MyHOTEL_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
Disable		SPE=1 , M=1
Enable		SPE=1, M=2

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

Contact interface in DIN module

F428

4. Scenario module control

4.1 Addressing

Function	Virtual configuration (MyHOTEL_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 (MyHOTEL_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 MyHOTEL_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 (MyHOTEL_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 (MyHOTEL_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 MyHOTEL_Suite virtual configuration

Contact interface
in DIN module

F428

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 (MyHOTEL_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 (MyHOTEL_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 MyHOTEL_Suite
virtual configuration

**Contact interface
in DIN module**

Wiring diagram

Interface
DIN module

C N1 N2

N1 N2

Actuator

1 2 3 4

1 2 3 4

C1 C2

M

SCS BUS

L

N
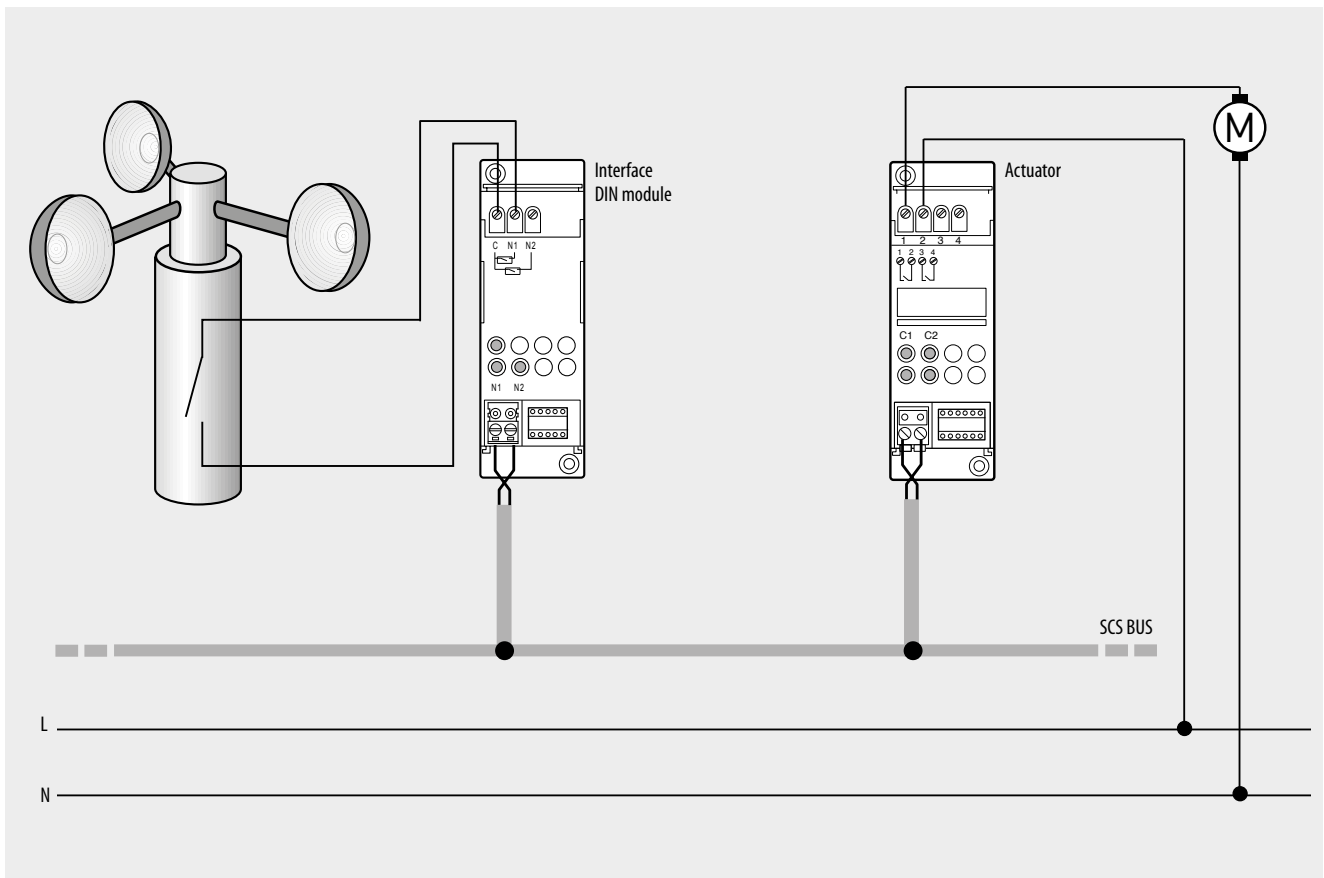
Basic contacts interface   3477

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 MyHOTEL_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 MyHOTEL_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 MyHOTEL_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.

L'legrand   bticino

Basic contacts interface   3477

Function selection

To configure the contact numbers use MyHOTEL_Suite virtual configuration

1. Light switch

1.1 Addressing

Address type		Virtual configuration (MyHOTEL_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 (MyHOTEL_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 (MyHOTEL_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
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 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

Basic contacts interface   3477

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

Virtual configuration (MyHOTEL_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 MyHOTEL_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 (MyHOTEL_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 MyHOTEL_Suite virtual configuration

2. Automation control

2.1 Addressing

Address type		Virtual configuration (MyHOTEL_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 (MyHOTEL_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 (MyHOTEL_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
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 (MyHOTEL_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 3477

3.2 Mode

Virtual configuration (MyHOTEL_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 MyHOTEL_Suite
virtual configuration

4. Scenario module control

4.1 Addressing

Function	Virtual configuration (MyHOTEL_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 (MyHOTEL_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 MyHOTEL_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).

...

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

Addressing type		Virtual configuration (MyHOTEL_Suite)	Physical configuration
	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 (MyHOTEL_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 MyHOTEL_Suite virtual configuration

8. Auxiliary control

For the configuration please refer to MY HOME_ Suite

Basic contacts interface 3477

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 (MyHOTEL_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 (MyHOTEL_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 MyHOTEL_Suite virtual configuration

Follow Me mode

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

Virtual configuration (MyHOTEL_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.

Basic contacts interface   3477

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
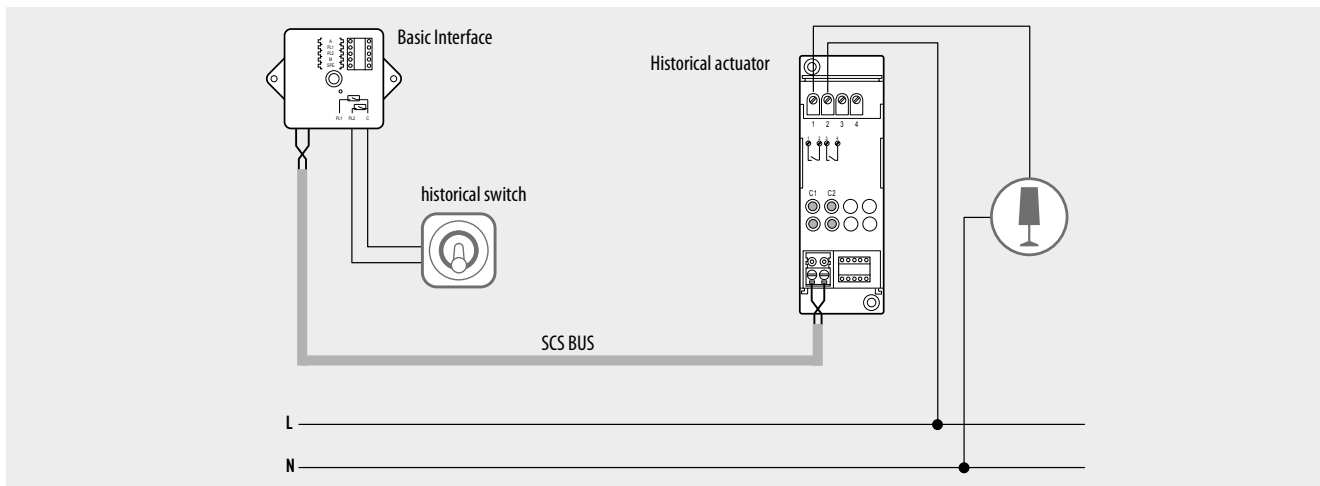
In this operating mode:

Room controls
A=1-9 is the amplifier room

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

Wiring diagram

Basic Interface

historical switch

Historical actuator

SCS BUS

L

N

BUS/SCS cable (grey)

L4669/500
L4669   L4669KM1

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 3 different type of coils:
- 100 m coil, item L4669
- 500 m coil, item L4669/500
- bobina da 1000 m art. 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).

-The cable complies with the EU305/2011 regulation on construction products (CPR).
- The cable DOP is available on the www.bticino.com website
Therefore, it is suitable to be used in:
- Free air installation, inside trunking, trays and conduits
- Inside masonry walls, in appropriate conduits

Cable channels, trays and conduits must meet the regulatory requirements for the specific type of installation.

The grey BUS/SCS cable is not suitable for underground installation even in appropriate conduits.

Technical data

Insulation 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 shielded twisted flexible conductors with sheath
Colour of internal conductors: white and blue
Sheath thickness of internal conductors: 0.60 mm
Sheath material 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
Coil or reel length: 100 m, 500m or 1000 m

Installation notes

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.

Standards, Certifications, Marks

Reference standards: - It complies with the tests required by the following standards: EN60811, EN50289, EN50290, EN60228, EN50265-2-1, EN50395, EN50396, EN 50575 as described in the IMQ CPT 062 document.

Marks obtained:

BUS/SCS AV (white) cable   336904

Description

This cable is used to distribute all the power supplies and operating signals to the BUS devices of the system.

It consists of a white external sheath and two 50 mm2 section brown and brown/white flexible twisted conductors. It is sold in 200 m coils.

-The cable complies with the EU305/2011 regulation on construction products (CPR).

- The cable DOP is available on the www.bticino.com website

Therefore, it is suitable to be used in:

- Free air installation, inside trunking, trays and conduits
- Inside masonry walls, in appropriate conduits
- Underground, in appropriate conduits

Cable channels, trays and conduits must meet the regulatory requirements for the specific type of installation.

Technical data

Insulation voltage: 400 V

Underground installation: YES (see installation notes)

Colour of external sheath: white (RAL 9010)

Diameter of the external sheath: 5.0 +/- 0.1 mm

Thickness of the external sheath: 0.7 mm

Material of the external sheath: PVC (RZ)

Number of internal conductors: 2 sheathed unshielded twisted flexible conductors.

Colour of internal conductors: brown - brown/white

Thickness of the internal conductor sheath: 0.40 mm

Diameter of the internal conductor sheath: 1.70 mm

Material of the internal conductor sheath: LDPE polyethylene

Conductor material: red electrolytic copper

Conductor section: 0.50 mm2 (16 x 0.20 mm2)

Operating temperature: (-15) – (+70) °C

Class of Reaction to Fire: Eca

Coil length: 200 m

Standards, certifications, marks

Standards of reference - the cable meets the requirements of the standards: EN50575, EN60811, EN50289, EN50290, EN60228, EN50265-2-1, EN50395, EN50396 as described in the IMQ CPT 062 document.

Marks:
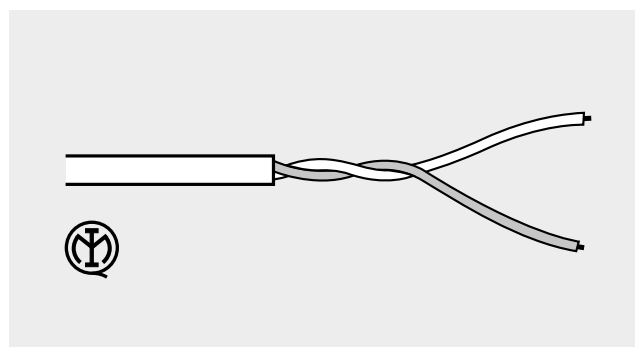
Installation notes

Cable underground installation

The 336940 BUS/SCS cable can be installed underground (protected inside appropriate conduits), together with other signal cables, for voltages <50V.

Installation of cable 336904 together with power cables with energies >50V is strictly forbidden. Failure to comply with the installation requirements shall entitle BTicino to reject all liabilities on the operation of the systems installed.

Cohabitation with other cables

Although the construction of the white cable guarantees the necessary electrical insulation for cohabitation with 400 V system cables, there is no guarantee of immunity from electromagnetic disturbance, which may occur when the cable is installed inside the same conduits as the energy cables.

It is therefore strongly recommended that the white BUS/SCS cable and the power cables are installed in different conduits.

BUS-SCS white cable

336905

Description

This BUS-SCS halogen-free cable has been purposely designed and manufactured for laying in areas with more strong fire hazards. The cable is intended for use in construction works subjected to fire resistance regulations: it is in fact a Cca-s1b, d1, a1 class type cable according to EN 50575, as required by EU regulation NO. 305/2011. This cable is used to distribute all the power supplies and operating signals to the BUS devices of the system. It consists of a white external sheath and two 0,56 mm2 section brown and brown/white flexible twisted conductors. It is sold in 200 m coils.

The white BUS-SCS cable is suitable for underground installation in appropriate conduits.
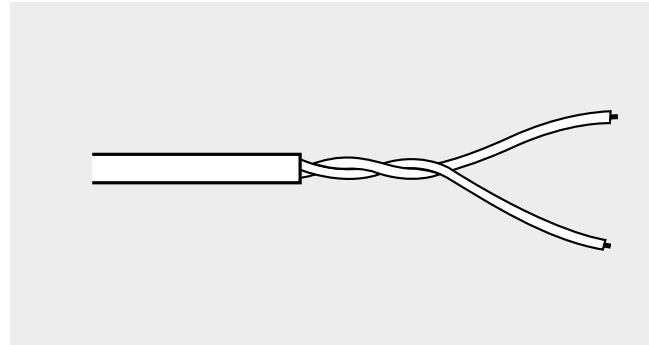
Technical data

Insulation voltage:	400 V
Underground installation:	YES inside appropriate protective conduits
Colour of the external sheath:	white (RAL 9010)
Diameter of the external sheath:	7.3 +/- 0.1 mm
Number of internal conductors:	2 sheathed unshielded twisted flexible conductors
Colour of internal conductors:	brown – brown/white
Conductor material:	red electrolytic copper
Conductor section:	0.56 mmq (7 x 0.32 mmq)
Operating temperature:	(-15) – (+70) °C
Max. short circuit temperature:	150 °C
Coil length:	200 m

Standards, certifications, marks

Reference standards. The cable meets the requirements of the standards: EN50290, EN50395, EN50575.

Installation notes

Cable underground installation
The 336905 BUS/SCS cable can be installed underground (protected inside appropriate conduits), together with other signal cables, for voltages <50V.
Installation of cable 336905 together with power cables with energies >50V is strictly forbidden. Failure to comply with the installation requirements shall entitle BTicino to reject all liabilities on the operation of the systems installed.

Cohabitation with other cables
Although the construction of the white cable guarantees the necessary electrical insulation for cohabitation with 400 V system cables, there is no guarantee of immunity from electromagnetic disturbance, which may occur when the cable is installed inside the same conduits as the energy cables. It is therefore strongly recommended that the white BUS/SCS cable and the power cables are installed in different conduits.

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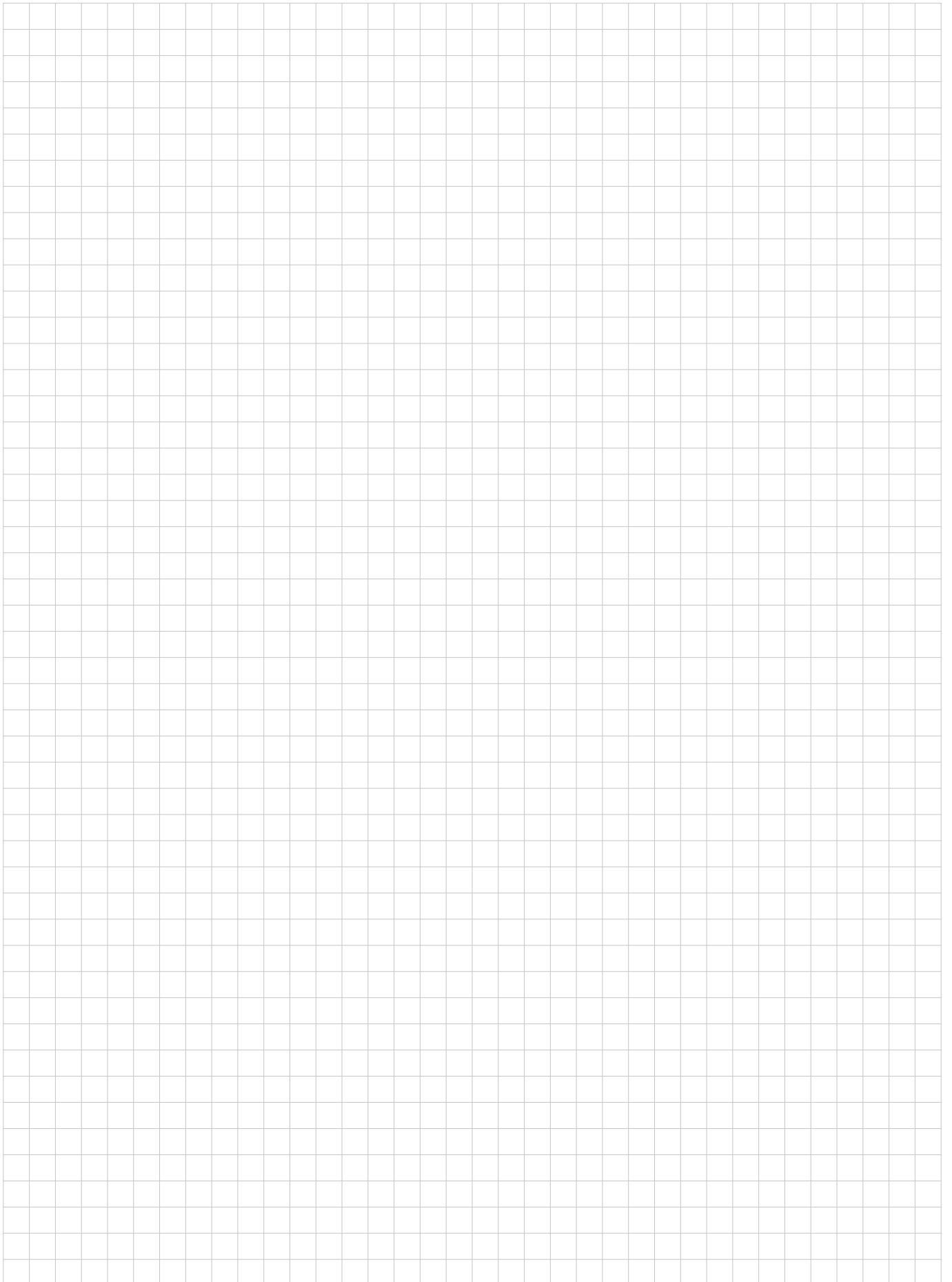
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