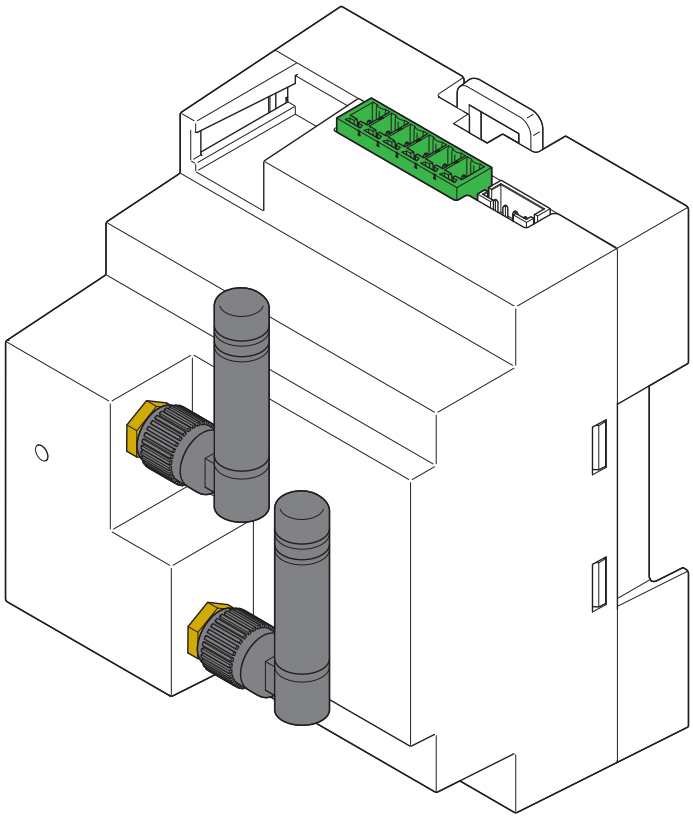
salto
INSPIRED ACCESS

INSTALLATION GUIDE

XS4 Sense GREMS Controller



MODELS: ELECTRONIC INFO. GREMS01

228256 - ED.0 - 30/09/2025

SALTO WECOSYSTEM

Manufacturer's data:
SALTO SYSTEMS S.L.
Arkotz 9, Polígono Lanbarren 20180
Oiartzun (Guipúzcoa) - Spain
Tel. +34 943 34 45 50

Dear client,
Thank you for choosing one of our products.
This manual contains all the information necessary for a successful installation.
We therefore recommend that you read it carefully and keep it safe for future reference.
If you need further clarification, we remain available to provide you with any information required.
The manufacturer reserves the right to make improvements to the equipment or accessories at any time without prior notice.
 The measures provided are indicative and not binding.
In case of disputes, the original language of the manual is Italian. The Manufacturer is not responsible for any translation/interpretation errors.

1 SAFETY WARNINGS

Before proceeding with any installation operation, in order to acquire adequate knowledge of the product, it will be necessary to inspect it thoroughly. Make sure that all the information in this manual corresponds exactly to the configuration of the product you have purchased.
In the event that differences are identified, it is necessary to contact the Manufacturer, in order to obtain the assistance and specific technical information necessary to operate.
In the event that supplementary documentation is provided to this manual, it must be kept together with this booklet and must be considered an integral part of it.

Before proceeding with the installation of the product, it is mandatory to read this booklet.

All installation, assembly, connections to the electricity network and ordinary/extraordinary maintenance must be carried out only by technicians who comply with the legal requirements and must use personal protective equipment (e.g. gloves, etc.), according to the regulations in force in the country of use and in compliance with the regulations relating to systems and safety at work.

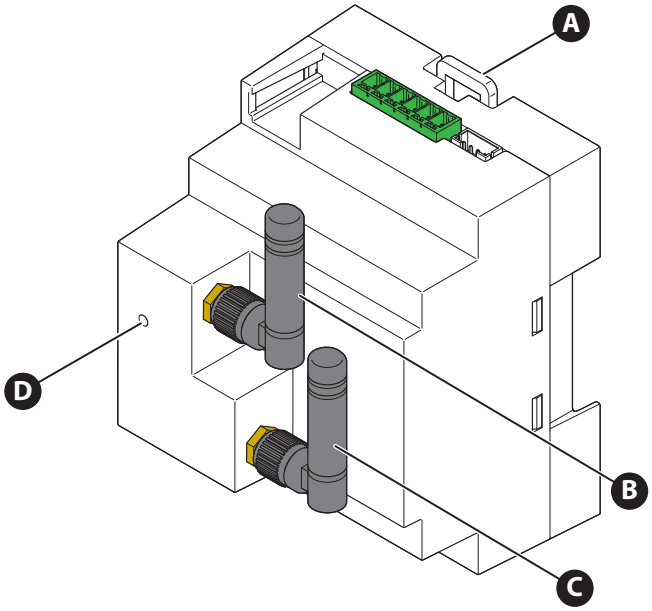
Installers and maintenance technicians may NOT operate on the product in the case of:

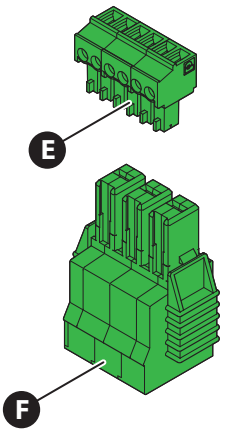
- lack of experience, of responsibility or if minors;
- with physical impairments or in less than perfect psychophysical conditions;
- do not possess the mastery of the operation of the product;
- have not followed a theoretical/practical preparation training alongside an operator, or alongside a technician of the manufacturer.
- Personnel should not attempt to “self-train” on the basis of documentation or experience that is not conducted directly on products identical to those covered by the manual.

The Manufacturer cannot be held responsible under any circumstances for accidents or damage resulting from the inappropriate installation of the product.

The installation of the product must take place in environments where the temperature is between 0 °C and 45 °C and humidity between 0 and 99%.

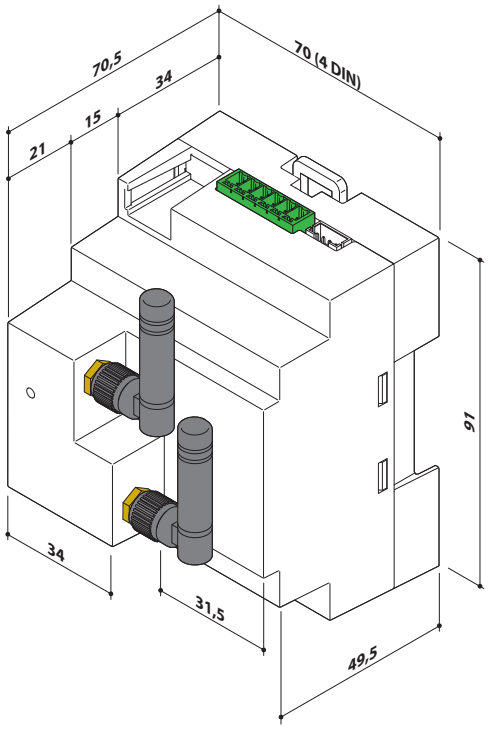
2 IDENTIFICATION OF COMPONENTS



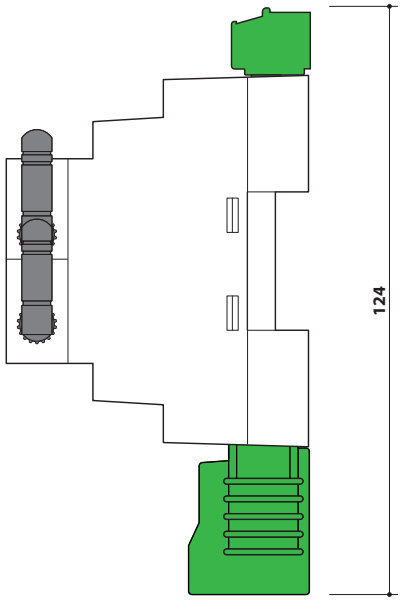


A) Closing hook
B) Antenna WiFi
C) Antenna BLE
D) Pair button
E) Signal connector
F) Power and load connector

3 DIMENSIONS



The controller occupies 4DIN.



Measurements expressed in millimeters.

4 SPECIFICATIONS

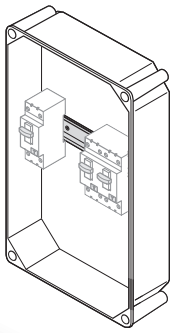
XS4 SENSE CONTROLLER CHARACTERISTICS	
Frequency range	2400 MHz to 2483,5 MHz
Connection standards	Bluetooth Low Energy 5.0 Wi-Fi (IEEE 802. 11 b/g/n) 2.4GHz (20/40MHz)
Transmit power	14.34 dBm (Bluetooth) 20.34 dBm (Wi-Fi)
Internal range	10-15 meters

POWER CONSUMPTION		
Normal	Max	Units of Measurement
5	10	Watt

ENVIRONMENTAL CONDITIONS			
	Minimum	Max	Units of Measurement
Temperature	0	45	°C
Humidity	0	99	%

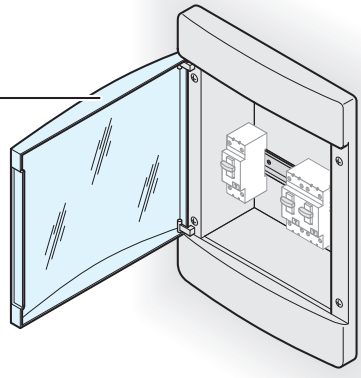
Environmental factors such as metal or concrete walls can significantly affect the Bluetooth and WiFi signal range. The controller should be placed in front of the Multi-Sensor, the Door/Window Sensor and the WiFi Access Point. Recommended connectivity range: 10-15 meters.

5 POSSIBLE INSTALLATIONS



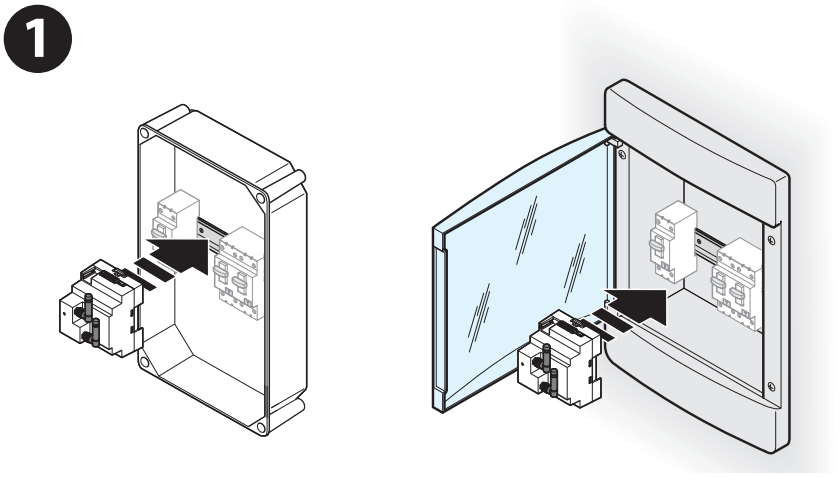
PLASTIC

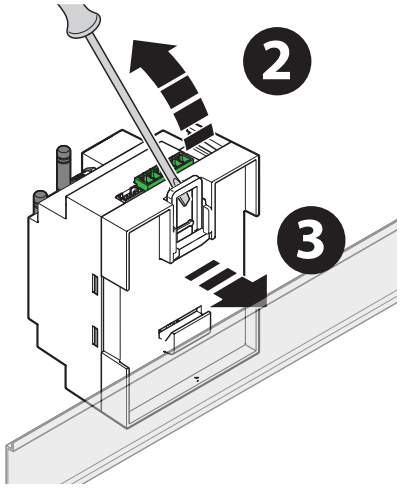
METAL

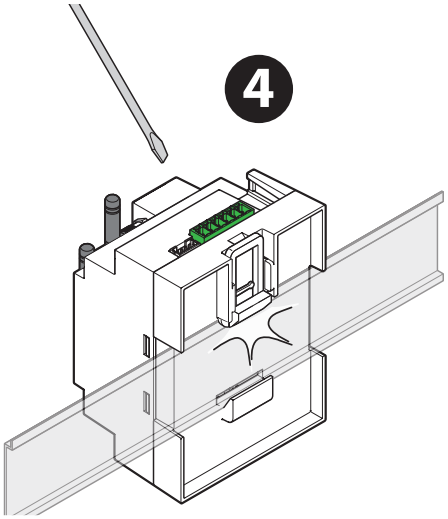


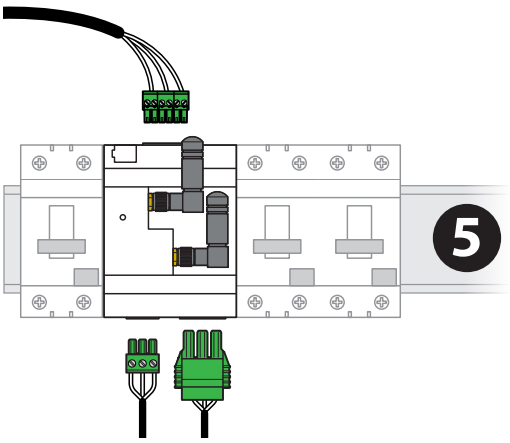
Do not install the device on electrical panels whose containment box is made of metal.

6 INSTALLATION







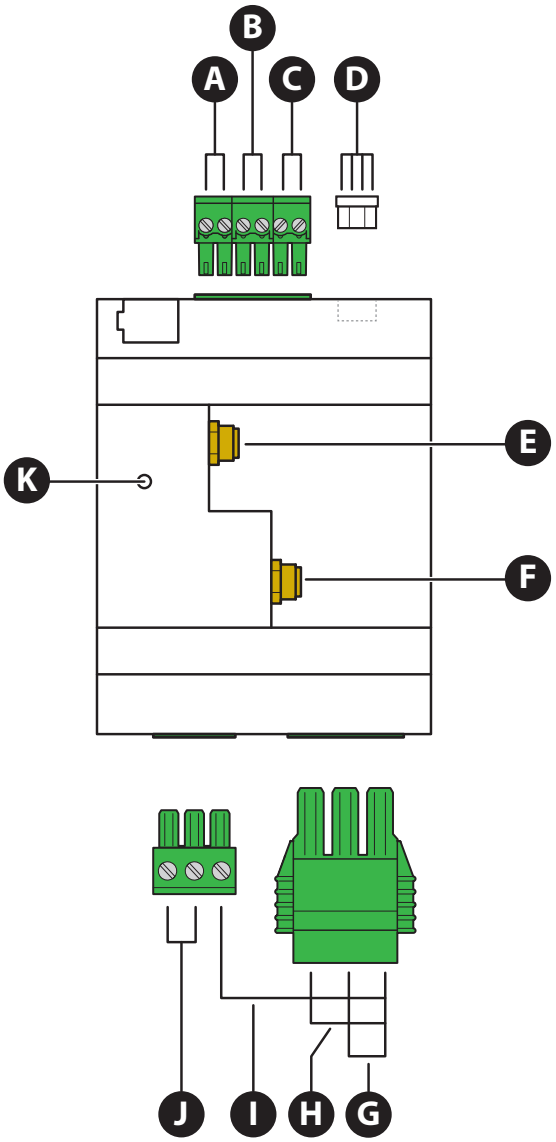


Make the various connections to the controller.

NOTE: Make sure that the loads connected to relays 1 and 2 do not exceed the maximum capacity of each XS4 Sense controller relay, which is 1A. For higher loads, install separate contactors.

NOTE: Make sure that the total current load of all room equipment connected to the XS4 Sense does NOT exceed 16A. For higher loads, use an external energy meter.

7 TERMINAL INDICATIONS



A) Digital input. (Use the digital inputs to connect the existing wired door and window contacts)

B) RS485 ModBus port (future application)

C) Output power 12VDC - 0.4A

D) Connection port for inRoomNode with C08 connector

E) Antenna WiFi

F) Antenna BLE

G) Upload Output
(16A, 110-230Vac, Output Loads)

H) Power connection
(110-230Vac, 50-60Hz)

I) Relay Output 2
(1A, 110-230Vac, phase output)

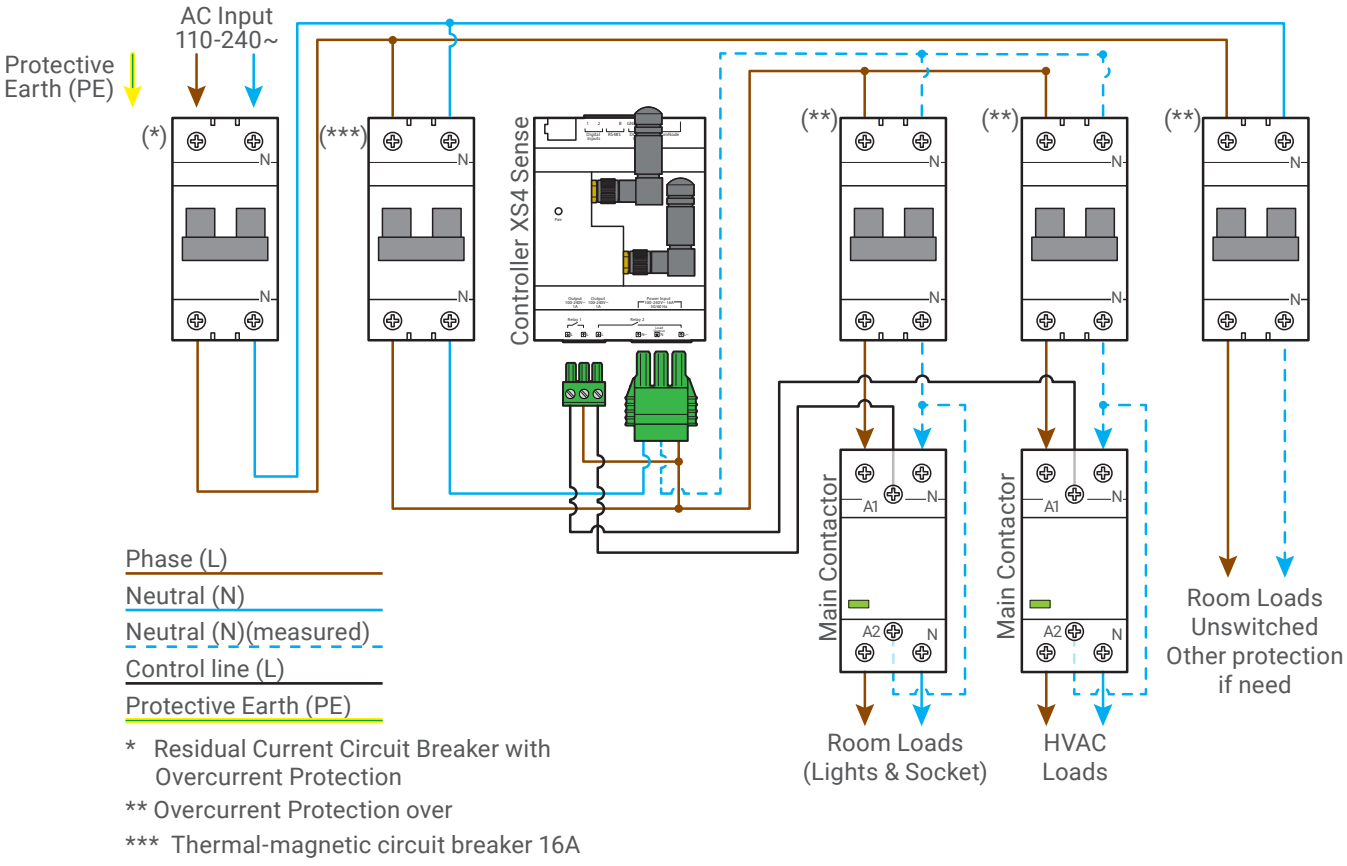
J) Relay Output 1
(1A, 110-230Vac, dry contact output)

K) Pairing button:
Press the button briefly to commission the controller. Press and hold the button for 15 seconds to reset the controller.

The button **(K)** has an internal LED. During normal operation, the LED is off.
When you press the button, the controller enters pairing mode and the LED flashes red once per second.
When the mobile application is connected to the controller, the LED flashes rapidly

CONNECTION PORTS				
Name	**Number of Ports**	**Pin Connection**	**Maximum Load Handled**	**Cable recommendation**
Digital input	2	Digital Input 1/2		28-16AWG
Modbus RS485	1	A - B		28-16AWG
12VDC Output	1	12V - GND	400mA	28-16AWG
inRoomNode	1	inRoomNode		
Relay 1	1	L↑ - L↓	100-240Vac, 50-60Hz, 1A	28-12 AWG
Relay 2	1	L↓	100-240Vac, 50-60Hz, 1A	28-12 AWG
Power connection	1	N↑(input) - L↑(input)	100-240Vac, 50-60Hz	28-8 AWG
Measured power	1	N↓(output)	100-240Vac, 50-60Hz, 16A Normal Current 32A Peak Current	28-8 AWG

8 INSTALLATION EXAMPLE USING INTERNAL MEASUREMENT IN ONLINE CONFIGURATION

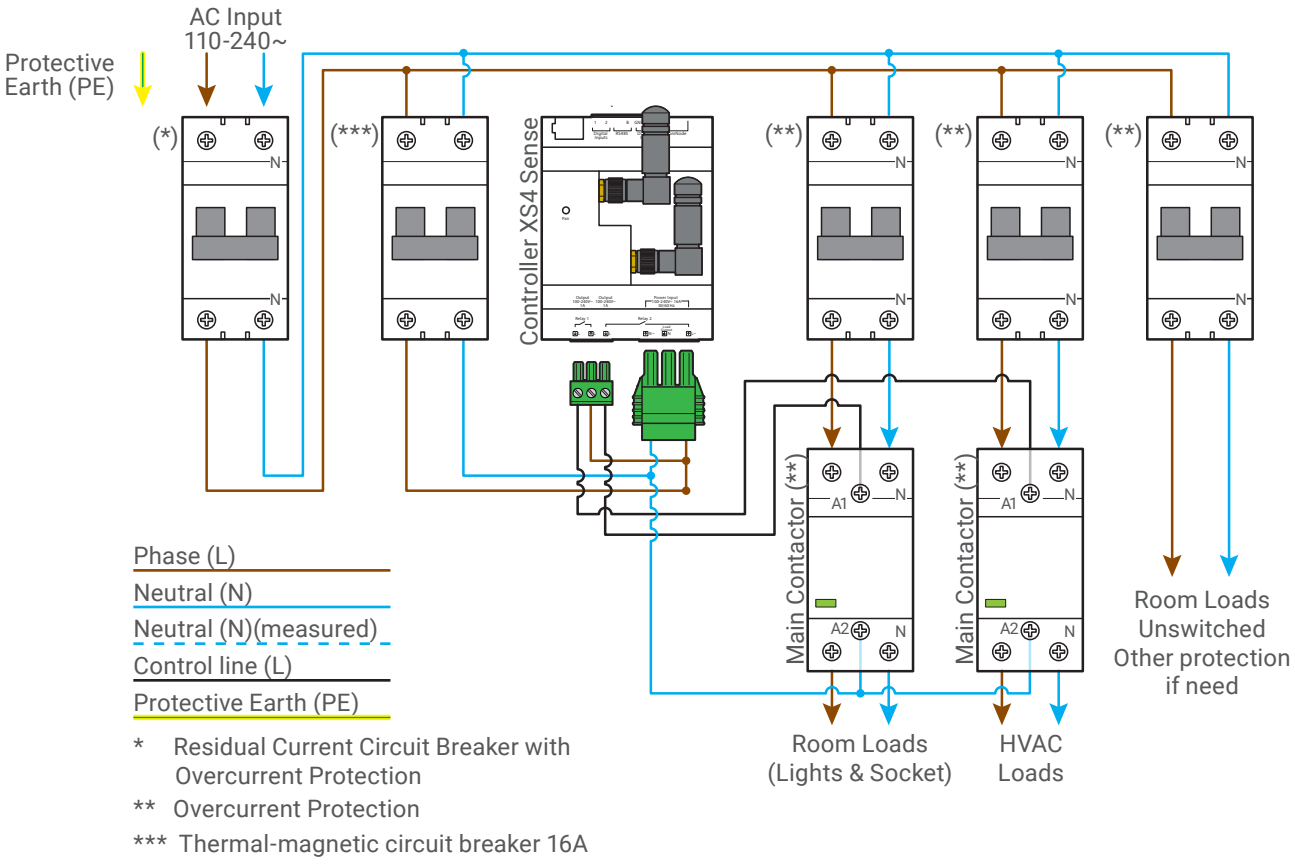


All devices marked with (*) and (**) must be correctly sized to meet specific requirements. For the Main Contactor, we suggest using a device with a manual bypass switch.

IMPORTANT

- The installer must check that the total load of the appliances in the room connected to the meter via the “Load Output N” and “N~” terminals does NOT exceed 16 A.
- The power supply line of the XS4 Sense controller must be protected by a 16 A double-pole thermal-magnetic circuit breaker installed upstream.
- In addition, to protect the devices from electrical wiring failures and failures, a residual current circuit breaker must be installed. The maximum current rating must comply with local safety regulations.
- The two external contactors, as shown in the diagrams above, must be used at all times.
- The manufacturer is not responsible for damages or malfunctions caused by incorrect wiring, improper installation, or failure to comply with the local regulations of the country regarding electrical connections and safety standards. Installation and wiring must always be carried out by qualified personnel in accordance with applicable laws. The selection and sizing of conductors are under the sole responsibility of the installer and must always comply with the applicable electrical codes and safety regulations in the country of installation.

9 INSTALLATION EXAMPLE WITHOUT MEASUREMENT IN OFFLINE CONFIGURATION



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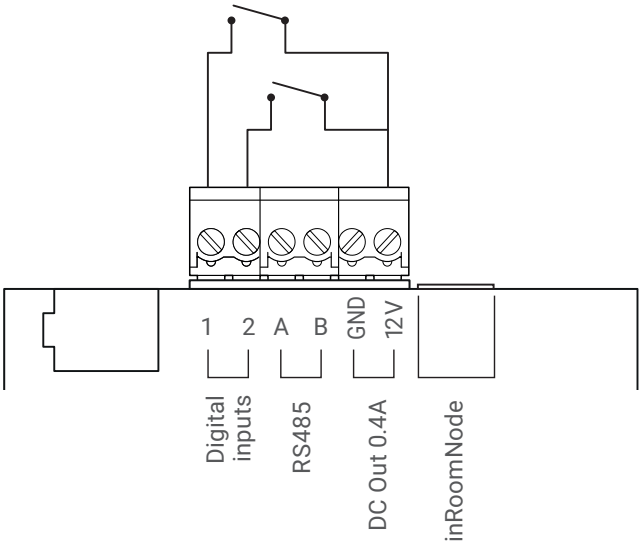
10 CONNECT WIRED DOOR/WINDOW CONTACTS

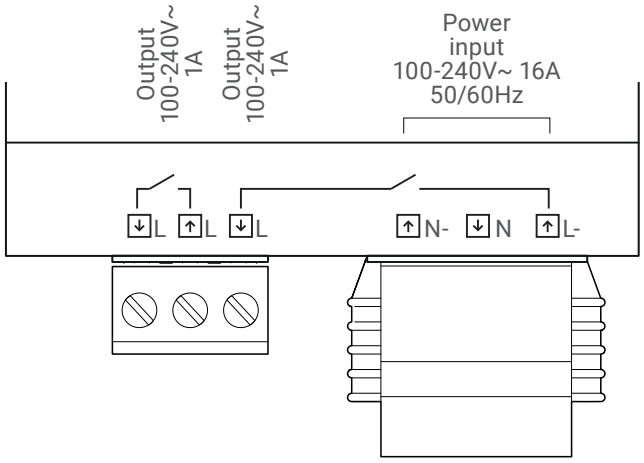


NOTE: If more than one window contact is required, connect all contacts in series or parallel depending on whether the contacts are normally open (NO) or normally closed (NC).

The default configuration uses a (NC) contact: the circuit is closed when the door/window is closed and opens when it is opened.

Using the mobile app, you can also configure (NO) contacts and assign their function as door entry or window

11 EXAMPLES OF RELAY-CONTROLLED LOADS



The different types of loads usually found in a hotel room are:

- Loads that must always remain powered, such as the minibar, certain power sockets for USB charging, security devices, emergency lamps, and in some cases the IPTV decoder, do not need to be turned off and are usually not connected to the main contactor of the room. Depending on the situation, the current for these loads may or may not pass through the XS4 Sense.
- Appliances that do not need to remain powered when the room is unoccupied must be controlled by the XS4 Sense and switch on/off automatically. These include lighting circuits, selected power sockets, water heaters, coffee machines, sockets for curtain motors, wardrobe lights, bathroom sockets, etc. Relay 2 is used to control these loads through an external contactor, in order to prevent the maximum rated current of the relay from being exceeded.
- A special type of load is the A/C system, which requires an analysis to determine how it should be controlled and switched. Typically, Relay 1 is used to control the A/C system, unless the control is performed via infrared remote control, in which case the infrared transmitter built into our Multisensor.

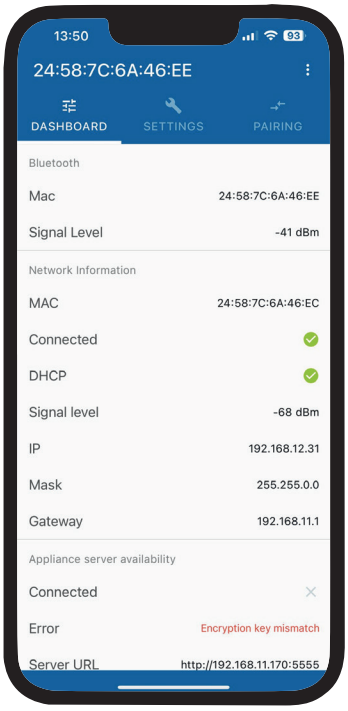
NOTE: Some split A/C systems may have an input terminal for a window switch on the wall or ceiling unit, enabling on/off control via a dry contact. In this case, Relay 1 can be used to control the window switch.

12 TEST THE CONTROLLER

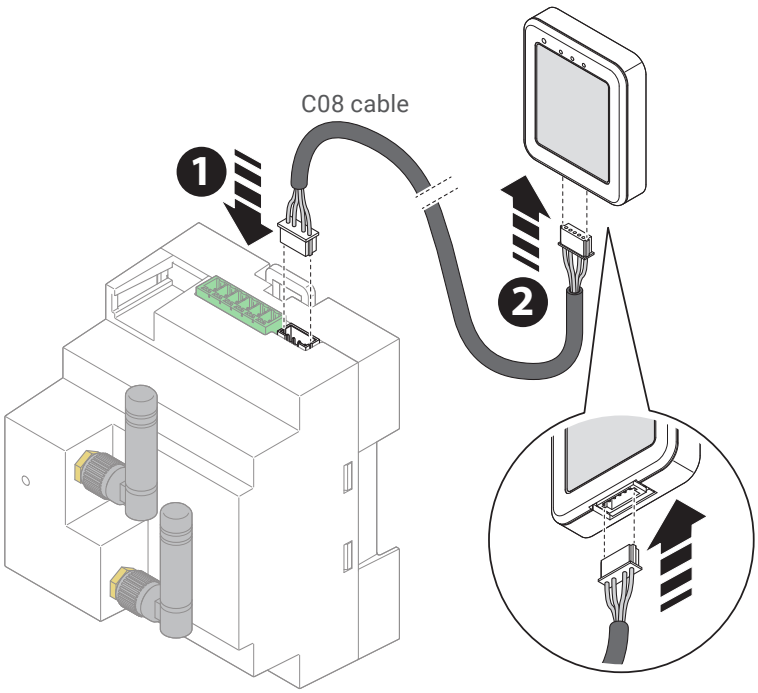
After installing the controller and completing the electrical connections, finish the setup with the XS4 Sense mobile app. A strong Wi-Fi signal is essential for reliable device performance:

−30 dBm ▸ Excellent signal
−50 to −65 dBm ▸ Good signal
−75 dBm ▸ Fair signal – occasional instability may occur
−85 dBm or lower ▸ Poor signal – high risk of disconnections

Refer to the support portal for additional information and tips.



13 CONNECTION BETWEEN CONTROLLER and INROOMNODE



Regarding the behavior of the LEDs of the inRoomNode, refer to its installation manual.