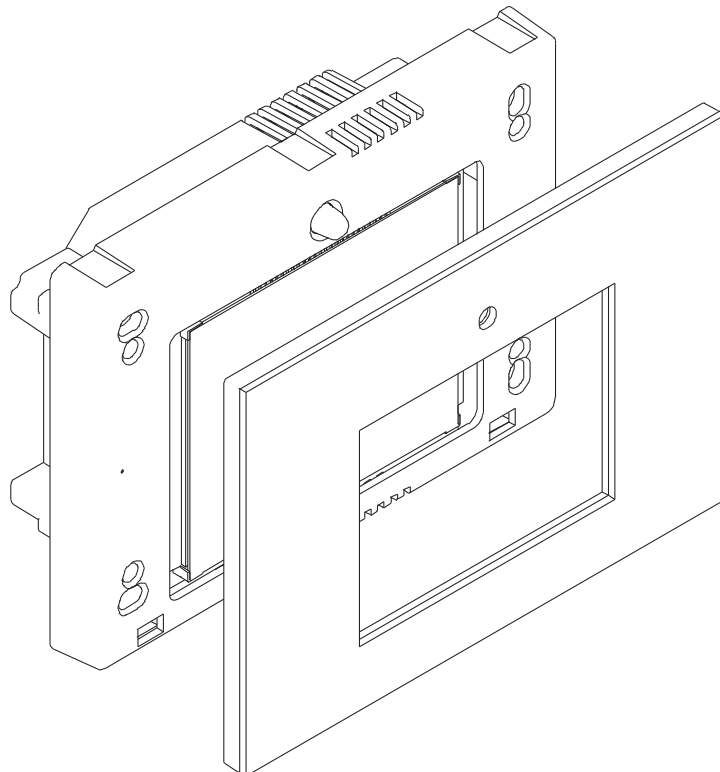


aSmart is a home management device designed to satisfy the most common home automation and control needs. According to its integration philosophy, both its menu and installation can be easily managed. aSmart offers a backlit touch screen provided with a convenient touch-screen interface to make it easier to use. aS.2002 is a model whose features are very appreciated in the context of energy saving as for instance: lighting management, heating/cooling and the possibility to monitor the power consumptions and the connection time of the heating/cooling.

This document is intended to guide installer in pre-installation tasks and a satisfactory installation of the product.



## RECOMMENDATIONS

The suggestions below will help you to protect your warranty coverage:

- Please read all the operation instructions before using aSmart.
- aSmart must be installed indoors.
- Keep this device away from moisture.
- Never use a hard or sharp object to operate the touch screen.
- Use a damp cloth to clean the screen and the frame; do not use any chemical, solvent or detergent.
- Prevent direct solar radiation incidence, proximity of TVs, lamps, fireplaces, heating pipes and in general any other source of heat.
- Avoid exposure to electromagnetic fields.
- Keep the temperature sensor as far away from heat sources as possible in a place where the temperature matches average temperature of the house.

## GUARANTEE

This guarantee shall only be valid if it is correctly completed, The SELLER STAMP and DATE OF SALE are essential.

Two-year guarantee, to be counted from the date of sale, against all operational manufacturing or material defects.

The guarantee shall be considered voided in any of the following circumstances taking place:

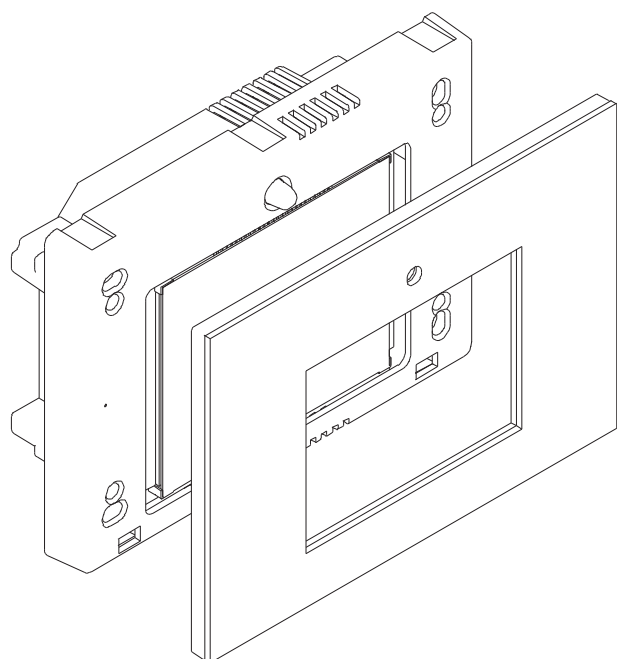
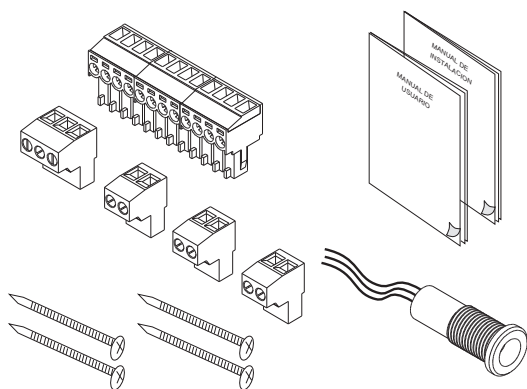
- If the guarantee certificate is not duly completed or its data are manipulated.
- If the equipment has been used improperly and not in accordance with the instructions for use.
- If the equipment has been disassembled or manipulated by persons other than authorized technical service.
- If the fault was caused by knocks or falls, etc..
- If the equipment has been connected to a voltage other than that indicated in the installation manual.

The guarantee does not include repairs for faults occurring as a result of causes not attributable to AVANZA ENGINEERING, such as fires, explosions, floods, lightening or similar events. In addition, the statutory rights of the guarantee holder are not affected.

## BOX CONTENT

aSmart home management device.

- 1 Temperature sensor for mechanism box
- 1 Terminal block, plug-in, 3-way.
- 3 Terminal blocks, plug-in, 2- way.
- 1 Terminal block, plug-in, 12-way
- 1 Beautifying frame.
- 4 Fastening screws for fixing the flush-mounted box
- 1 Installation guide.
- 1 User guide.



## PREINSTALLATION

aSmart pre-installation, envisages the flush mounted box in-wall installation.

We recommend placing aSmart by the exit door and at a height of approximately 140 cm.

At this point aSmart can be handled comfortably and it is located at the ideal viewing angle.

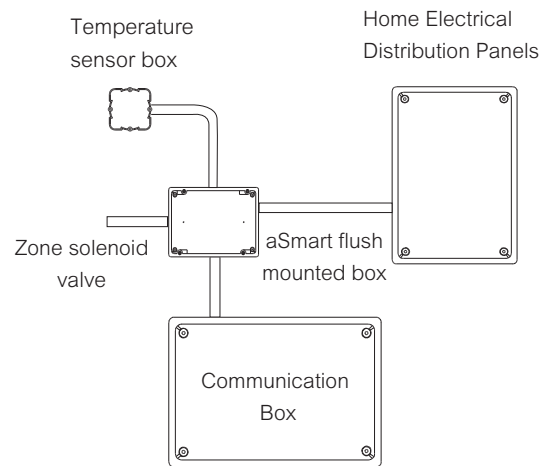
It will be necessary to use corrugated tubes of 20 mm diameter to communicate the flush mounted box with the home electrical distribution panels, the communication box, the boiler or the heating/cooling system of the house.

In the table below is shown the relation between tube diameter, cables section and number of conductors.

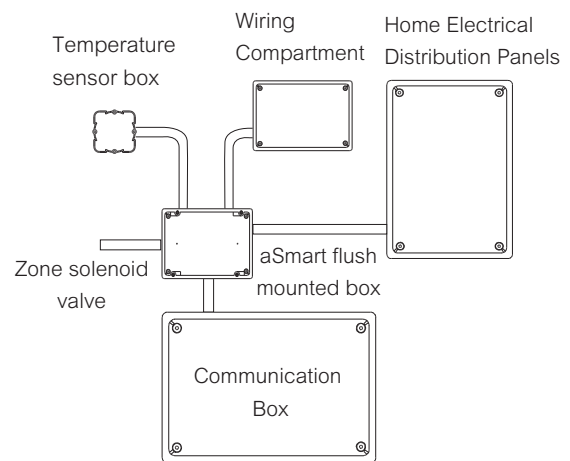
In Figures 1 and 2 are schematically shown two ways of communicating the boxes in the pre-installation, in order to make it easier the later installation of cables and engines.

Figure 1 is the simplest, which is proposed for basic model. In Figure 2 has been considered an additional wiring compartment which will be really useful in the event that the installation provides additional optional sensors.

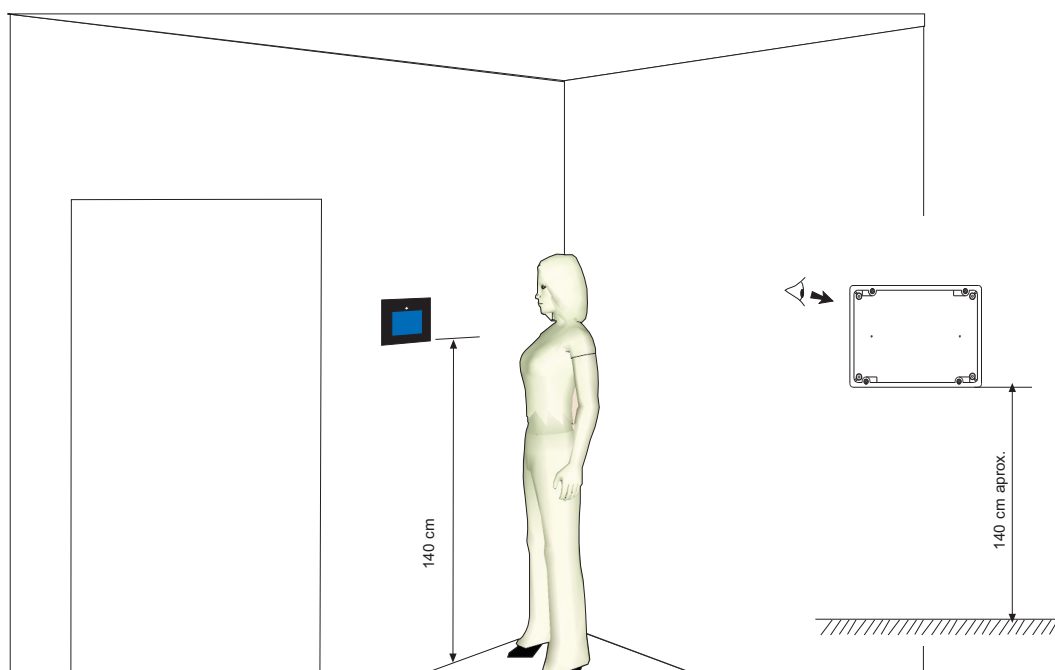
Conductor cross sections (mm <sup>2</sup> )	Tubes external diameter (mm)				
	12	12	16	16	16
1,5	12	12	16	16	16
2,5	12		16	16	20
4	12	16	20	20	20
6	12	16	20	20	25
10	16	20	25	32	32



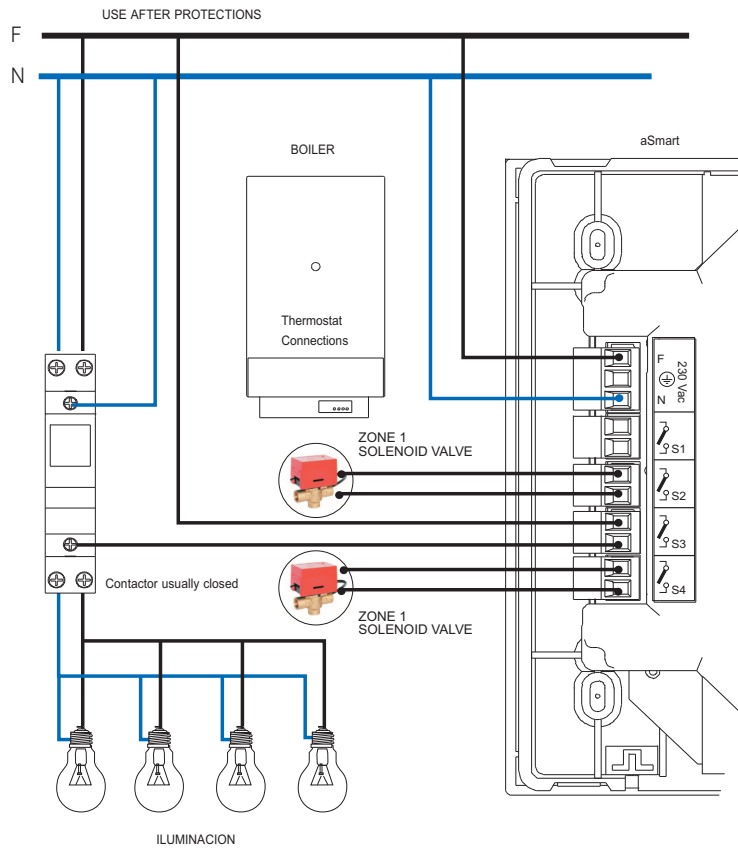
(Fig. 1)



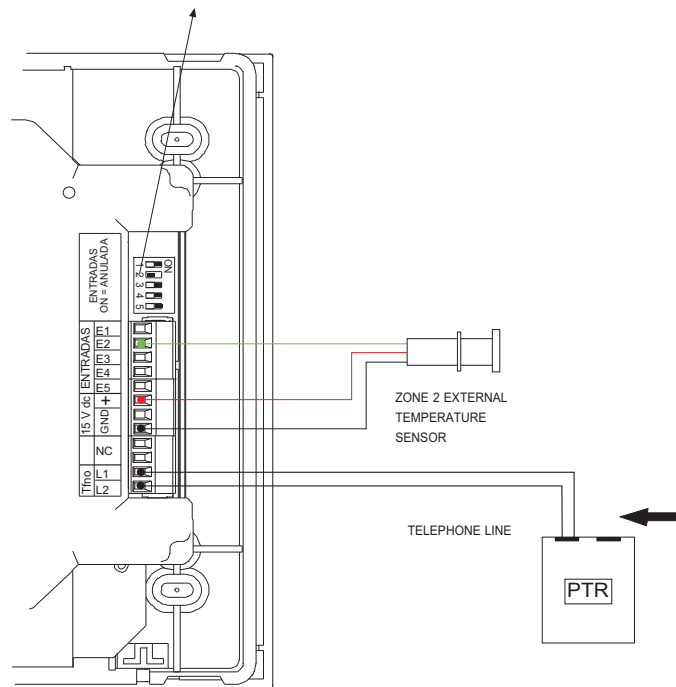
(Fig. 2)



## INSTALLATION DIAGRAM

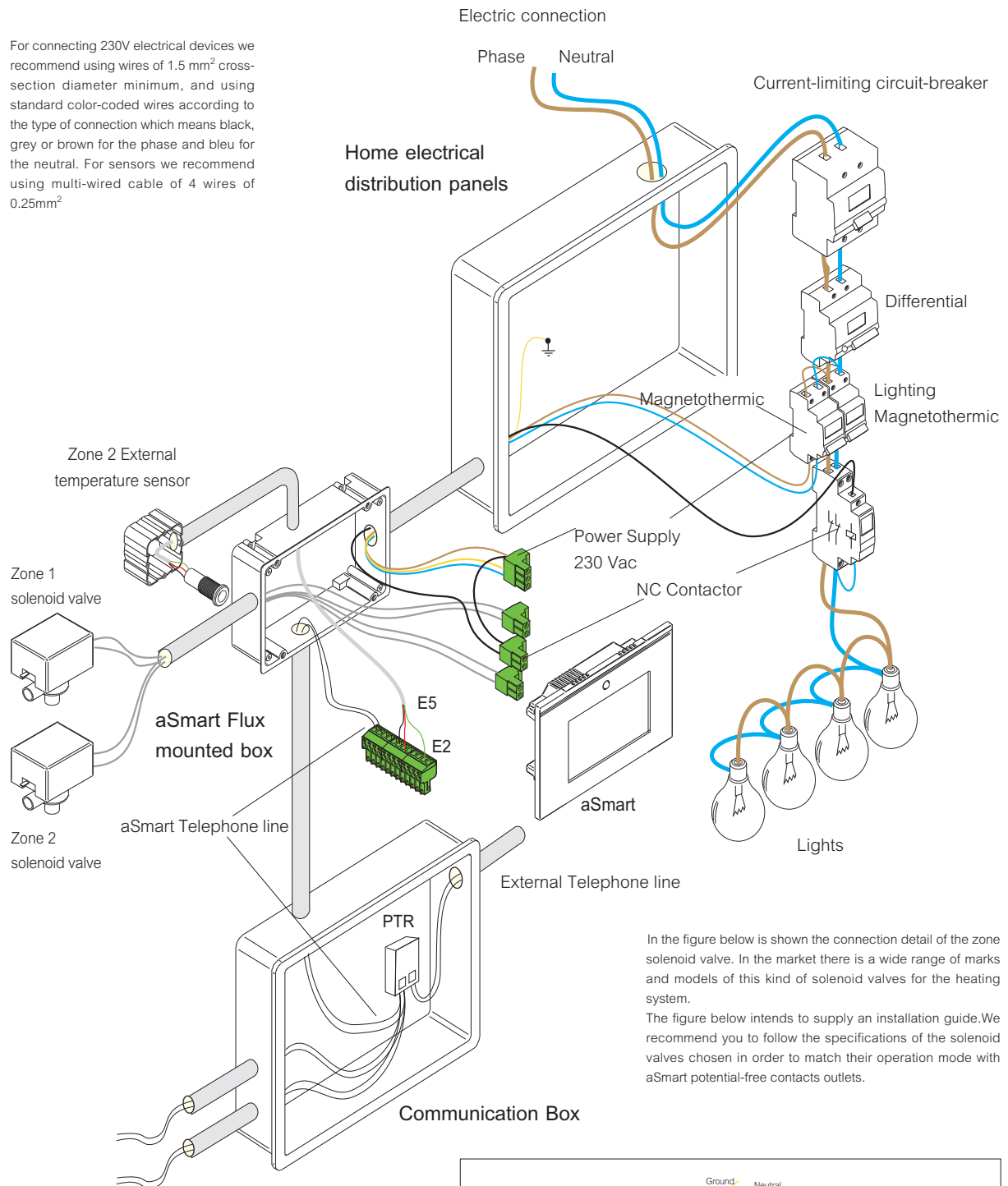


Enable input E2, by putting switch 2 in OFF mode.

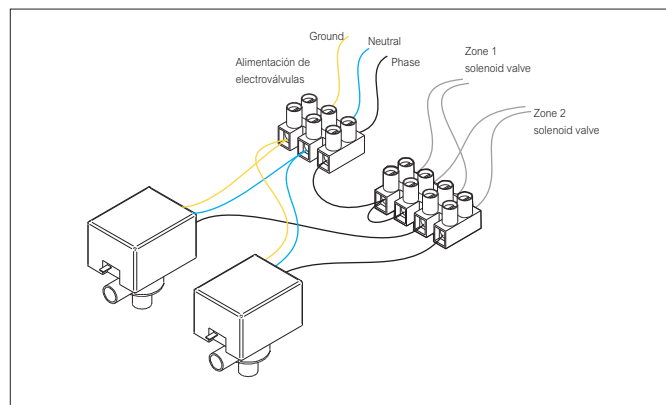


## aS.2002 WIRING

For connecting 230V electrical devices we recommend using wires of 1.5 mm<sup>2</sup> cross-section diameter minimum, and using standard color-coded wires according to the type of connection which means black, grey or brown for the phase and blue for the neutral. For sensors we recommend using multi-wired cable of 4 wires of 0.25mm<sup>2</sup>



In the figure below is shown the connection detail of the zone solenoid valve. In the market there is a wide range of marks and models of this kind of solenoid valves for the heating system. The figure below intends to supply an installation guide. We recommend you to follow the specifications of the solenoid valves chosen in order to match their operation mode with aSmart potential-free contacts outlets.



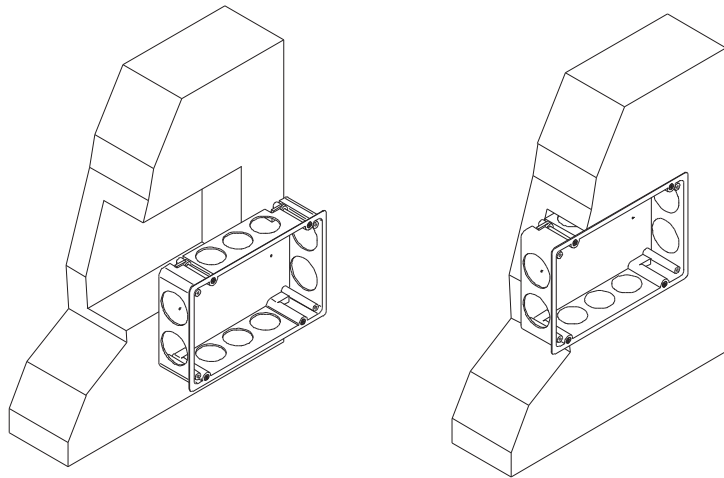
Installation of Telephone internal inlets

## INSTALLATION SEQUENCE

### Step 1

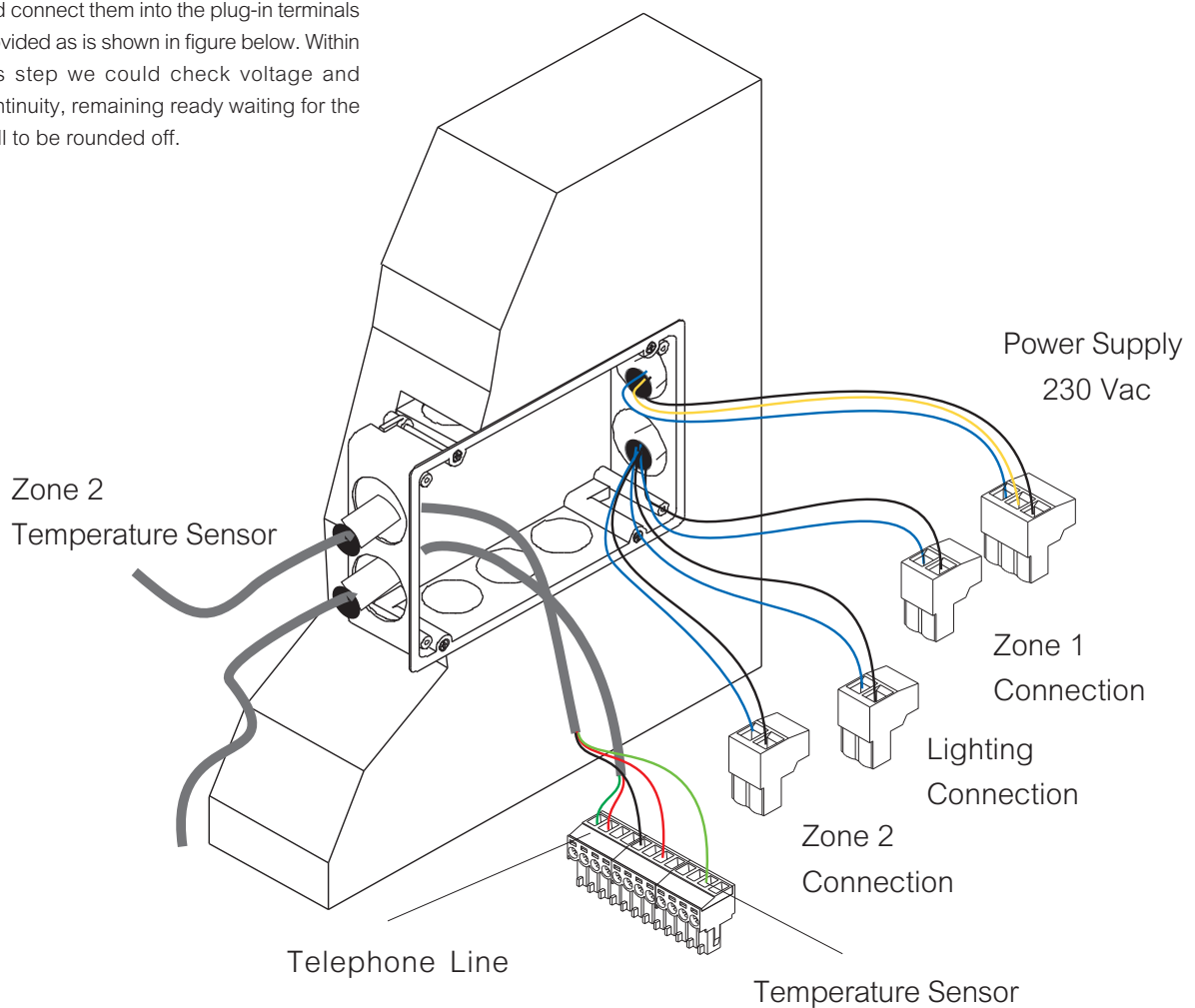
We will place the flush-mounted box at a height of approximately 140 cm from the ground.

The dimensions of the box are: 220 mm x 150 mm x 52mm



### Step 2

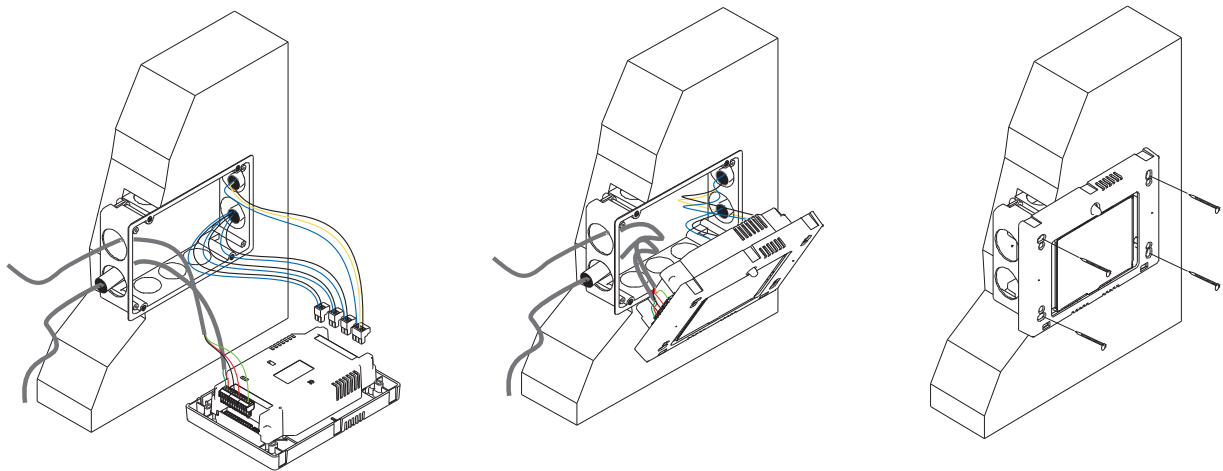
We proceed to introduce the cables up to the flux mounted box. Then we mark cables and connect them into the plug-in terminals provided as is shown in figure below. Within this step we could check voltage and continuity, remaining ready waiting for the wall to be rounded off.



## INSTALLATION SEQUENCE

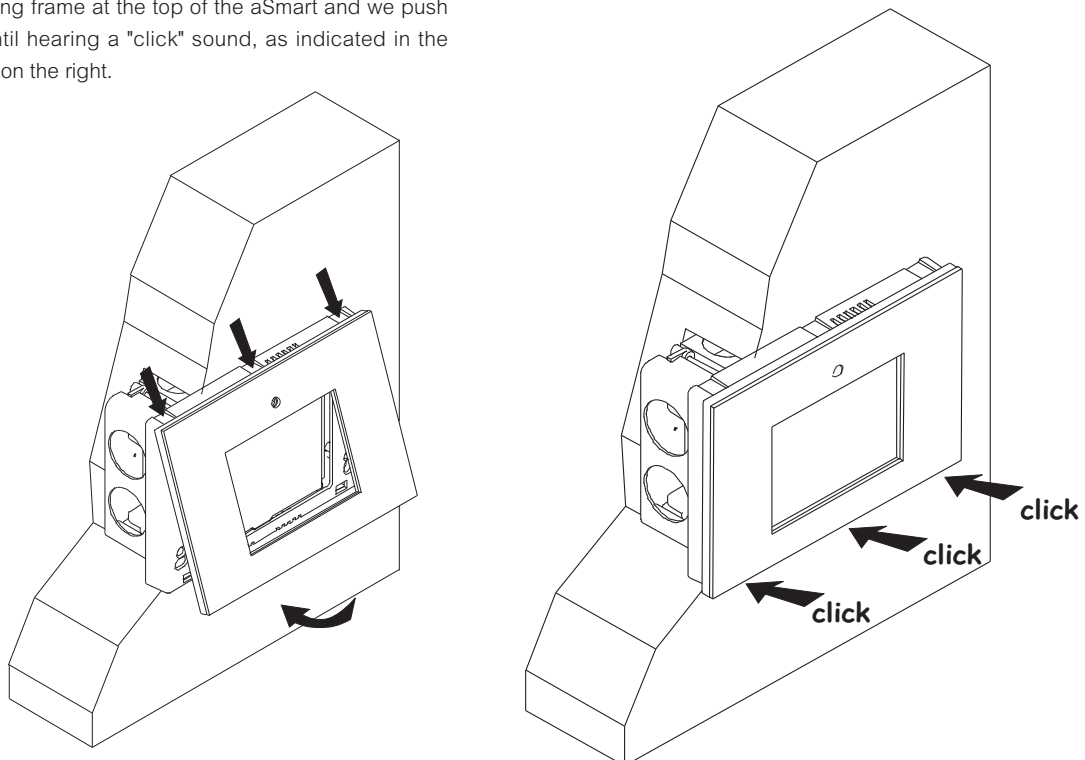
### Step 3

We proceed to connect the terminals to aSmart home management device as indicated in Figure of installation. Then we arrange the wires, and after that we place the device within the flush mounting box and screw them.



### Step 4

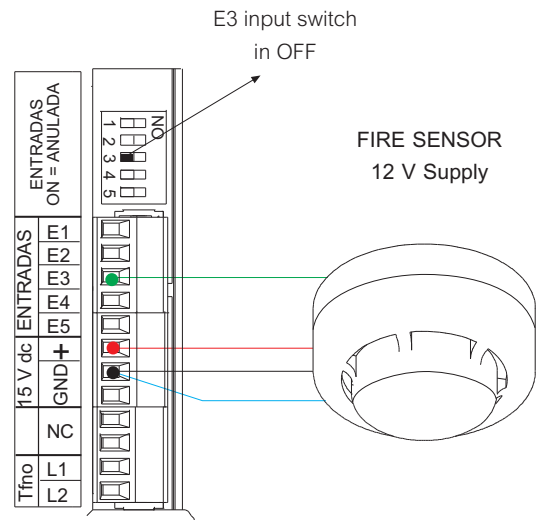
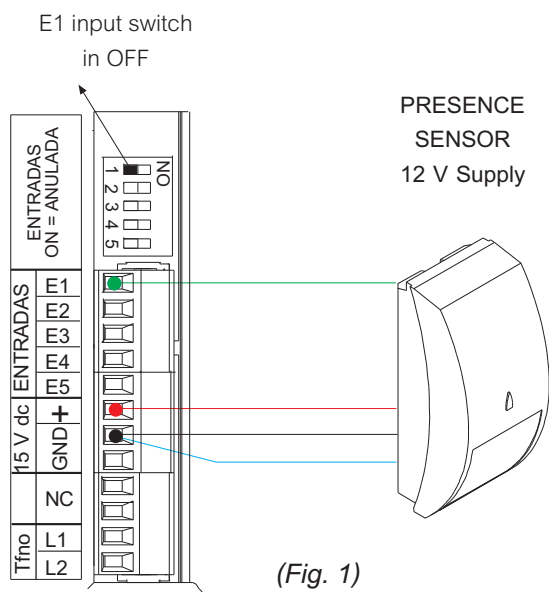
Once the device has been screwed, we place the beautifying frame at the top of the aSmart and we push down until hearing a "click" sound, as indicated in the pictures on the right.



## INSTALLATION OF ADITIONAL SENSORS (optional)

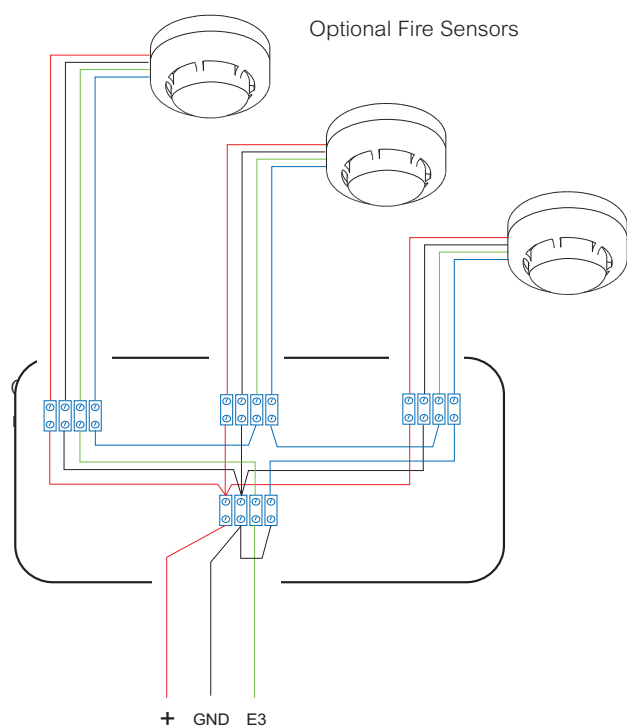
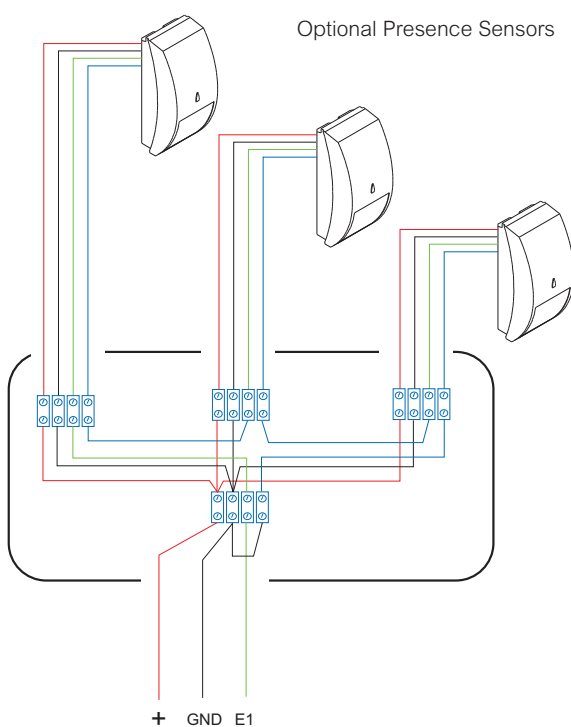
aSmart is fitted with a presence sensor and a fire sensor. Many times the intrusion and fire alarms only require of these sensors to work properly.

aSmart makes it possible to install additional presence and fire sensors to protect other zones if necessary. Installation is shown in figures 1 and 2.



In figures below are shown some installation examples when there are presence and fire additional sensors. aSmart source of electricity makes it possible to supply these external sensors up to a maximum of 6. On this purpose it will be necessary to know the power consumption of the sensors to be installed to avoid exceeding the maximum supply current provided by aSmart source of electricity (150 mA).

In case of doubt we recommend supplying the sensors with an external source of electricity.





## TECNICAL DATA

FEATURES	TERMINALS	DESCRIPTION
<b>POWER SUPPLY INPUT</b>		
Voltage of power supply	F ( Phase )	230 Vac 50Hz (127 Vac 60Hz available upon request) Consumption: < 40mA - 9W
	N ( Neutral )	
	(Ground)	
<b>EXTERNAL SENSORS INPUTS</b>		
Inputs	E1 (Input 1)	* Intrusion Sensors in closed loop with GND
	E2 (Input 2)	External Temperature sensor.
	E3 (Input 3)	* Fire Sensors in closed loop with GND
	E4 (Input 4)	Not Implemented. Switch to On
	E5 (Input 5)	Not Implemented. Switch to On
<b>VOLTAGE OF THE POWER SUPPLY OUTLET TO EXTERNAL SENSORS</b>		
Power source outlet	(+) Positive	15 Vcc Positive with charge (Max. 150mA)
	GND	In case of power outage the internal battery will keep supplying this 15 V
<b>OUTLETS</b>		
NA Potential-free contacts relays	S1 (Outlet 1)	Not used
	S2 (Outlet 2)	Heating/Cooling control. Maximum 16A to 230 ca
	S3 (Outlet 3)	Lighting control. Maximum 16A to 230 ca
	S4 (Outlet 4)	Not used
<b>DIMENSIONS</b>		
Width - height - depth (mm)	224mm x 155 mm x 61,5 mm	
Installed	224mm x 155 mm x 27mm	
<b>OPERATION TEMPERATURE LEVEL</b>		
Home Temperature	from -7°C to 50°C	