aSmart Lite 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 Lite offers an alphanumeric LCD Screen module 16x2, where the information and the messages of the system are displayed. aSmart Lite (aSL.1503) is a model whose features are very appreciated in the context of energy saving as for instance: the heating/cooling management.

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

AV-0017-MIW Rv000

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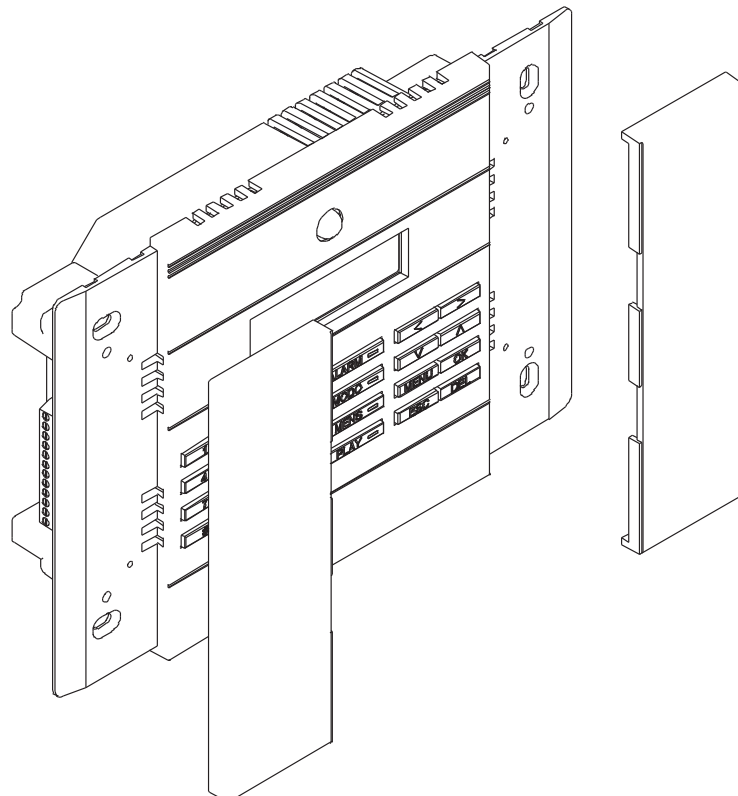
RECOMMENDATIONS

The suggestions below will help you to protect your warranty coverage:
- Please read all the operation instructions before using aSmart Lite .
- aSmart Lite must be installed indoors.
- Keep this device away from moisture.
- 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

1 aSmart Lite home management device
1 Temperature sensor for mechanism box
1 Terminal block, plug-in, 3-way
1 Terminal block, plug-in, 2- way
1 Terminal block, plug-in, 12-way
2 Beautifying lids
4 Fastening screws for fixing the flush-mounted box
1 Installation guide
1 User guide

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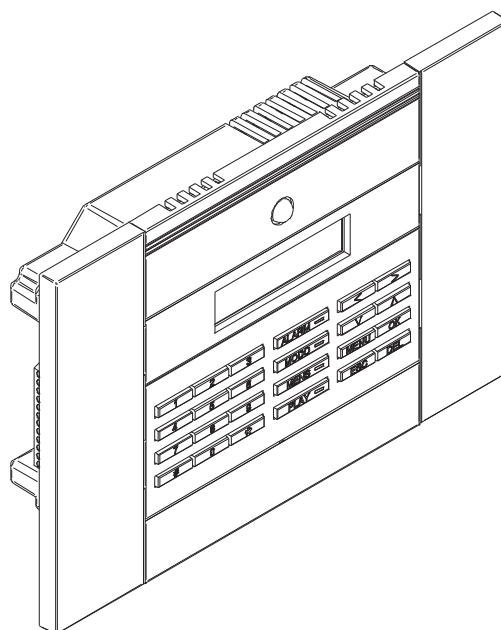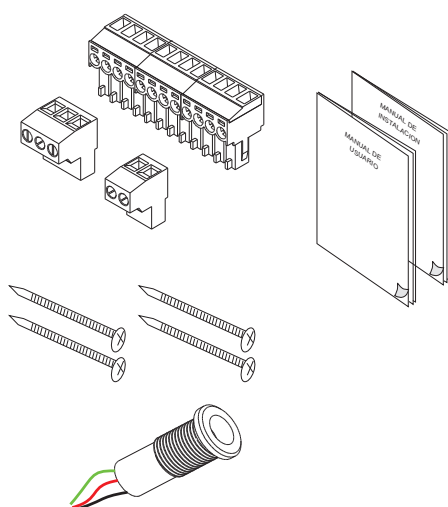
PREINSTALLATION

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

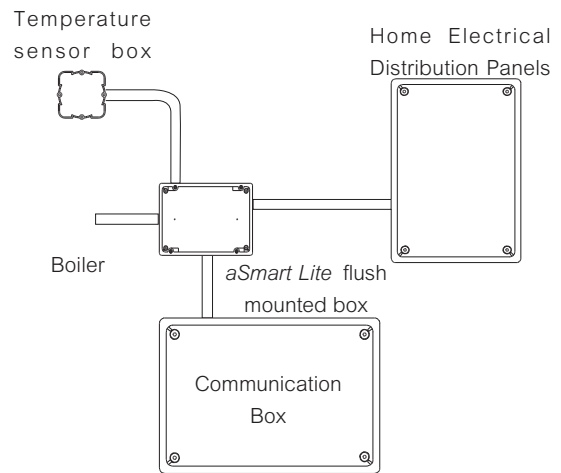We recommend placing aSmart Lite by the exit door and at a height of approximately 140 cm.

At this point aSmart Lite 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.
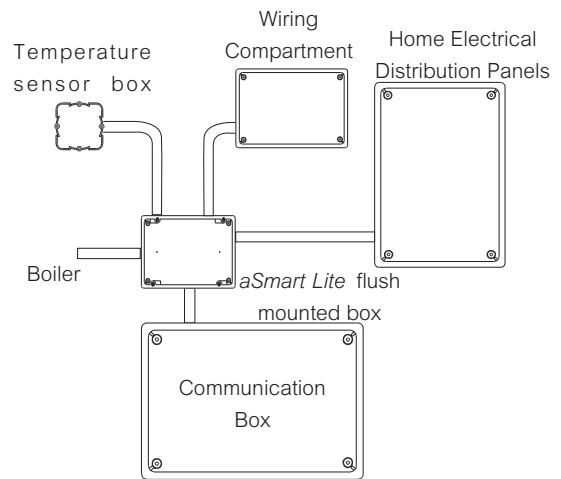
In the table below is shown the relation between tube diameter, cables section and number of conductors.

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. It has been considered a mechanism box to lodge the temperature sensor of temperature management.
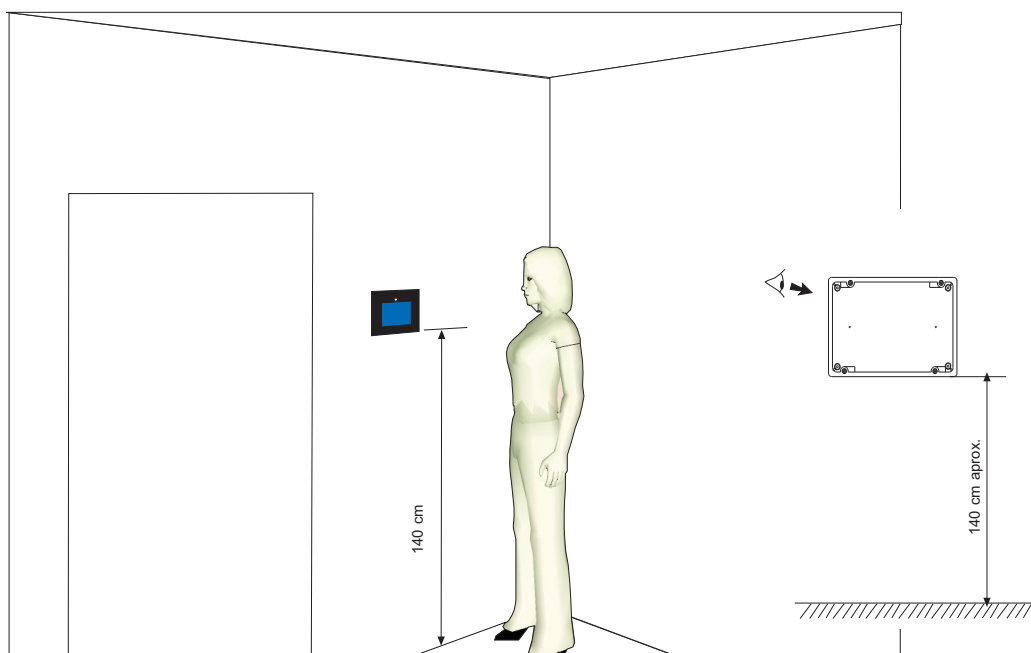

(Fig. 1)

(Fig. 2)

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

140 cm

140 cm aprox.

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INSTALLATION DIAGRAM

USE AFTER PROTECTIONS

F

N

BOILER

Thermostat
Connections

F
230 Vac
N

S1

S2

S3

J1
J2
J3
J4

INPUTS
E1
E2
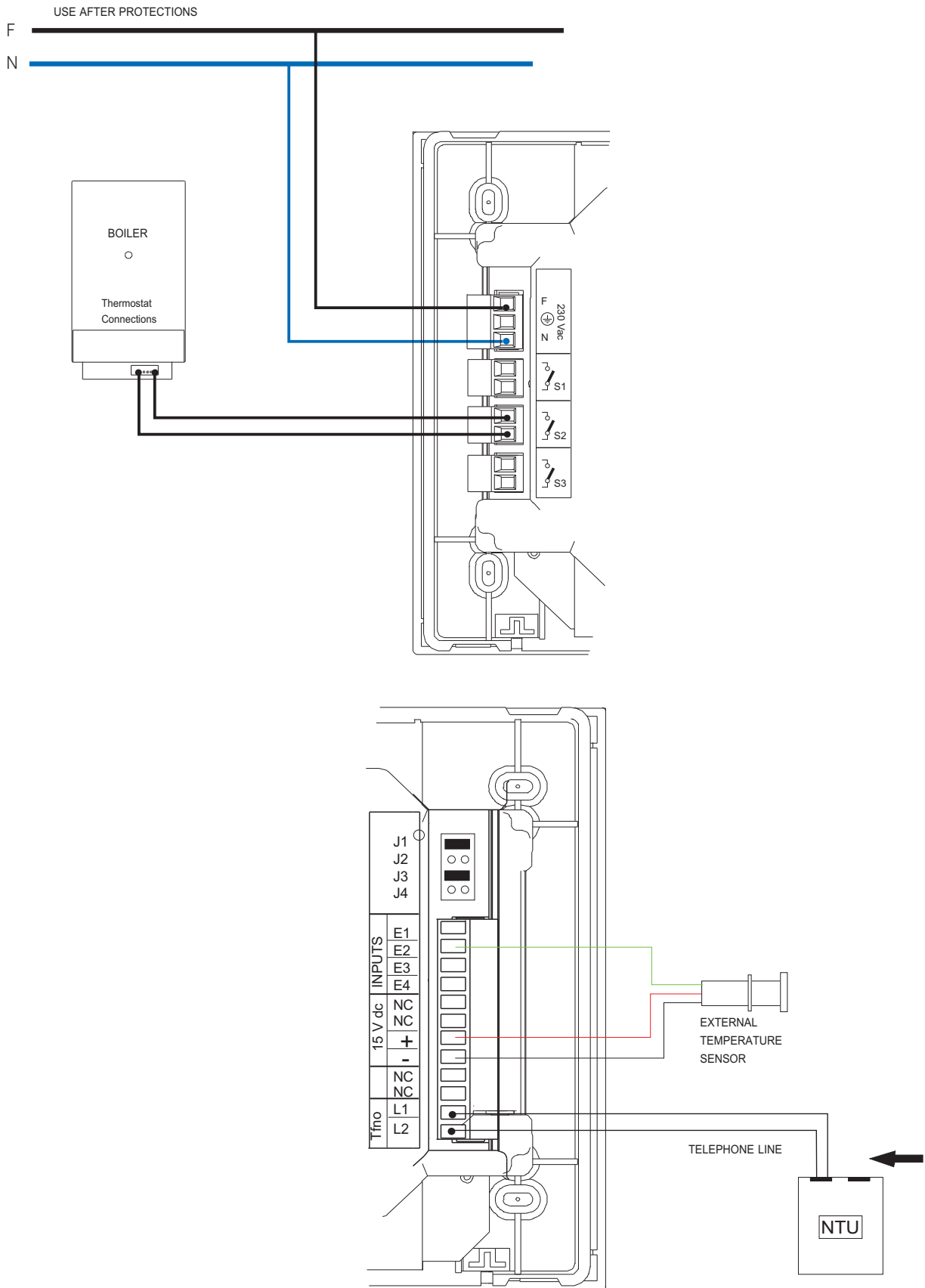E3
E4

15 V dc
NC
NC
+
–

NC
NC

Tfno
L1
L2

EXTERNAL
TEMPERATURE
SENSOR

TELEPHONE LINE
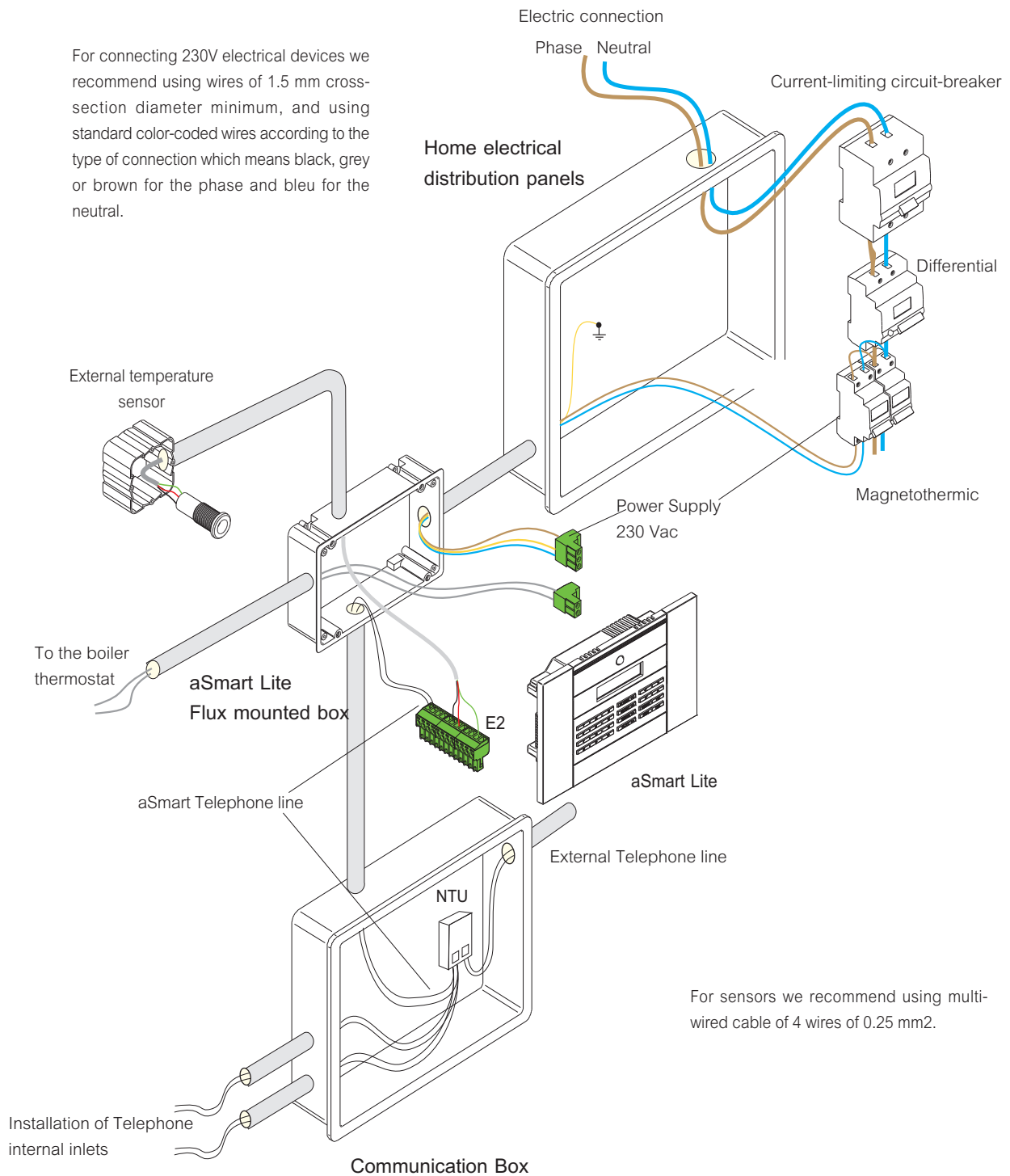
NTU

aSmart Lite WIRING

For connecting 230V electrical devices we recommend using wires of 1.5 mm 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 bleu for the neutral.

Electric connection

Phase   Neutral

Current-limiting circuit-breaker

Home electrical distribution panels

Differential

External temperature sensor

Power Supply 230 Vac

Magnetothermic

To the boiler thermostat

aSmart Lite Flux mounted box

E2

aSmart Lite

aSmart Telephone line

External Telephone line

NTU

For sensors we recommend using multi-wired cable of 4 wires of 0.25 mm2.

Installation of Telephone internal inlets

Communication Box

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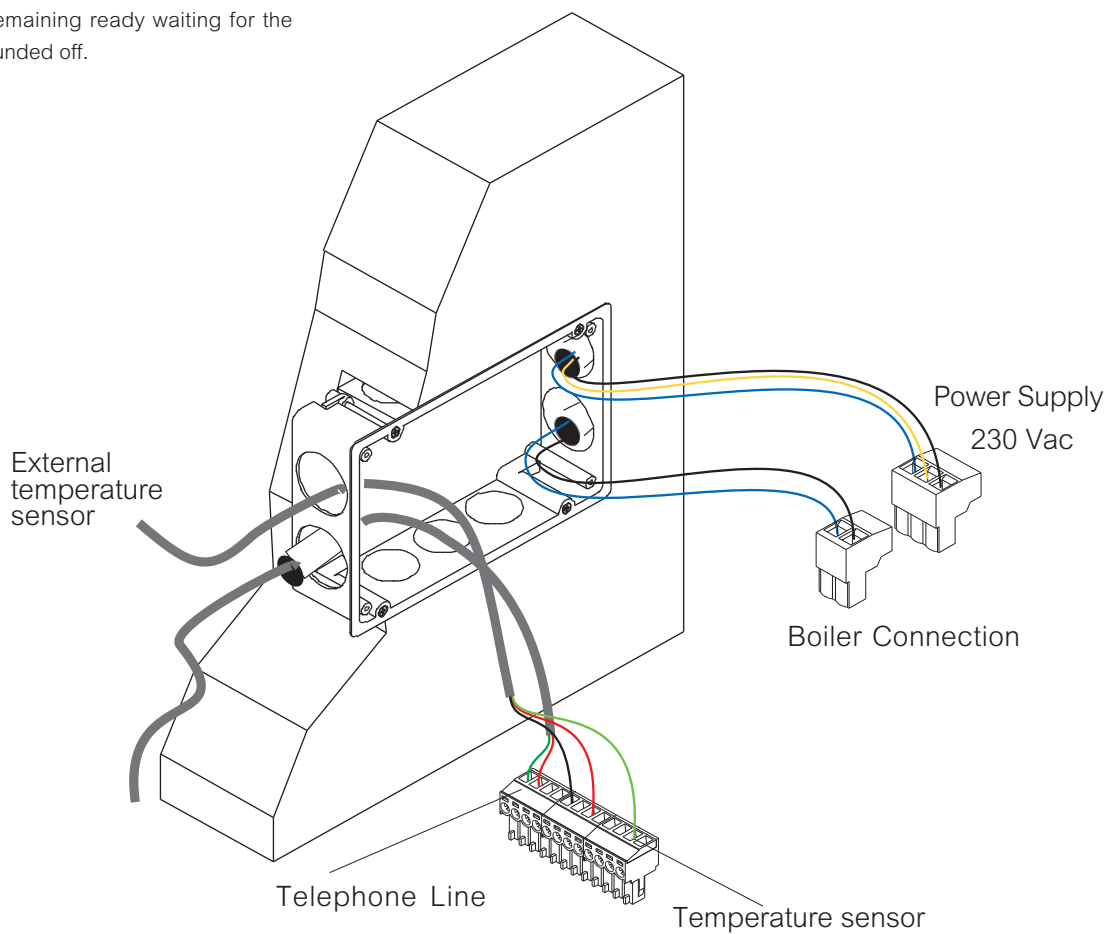## INSTALLATION SEQUENCE

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
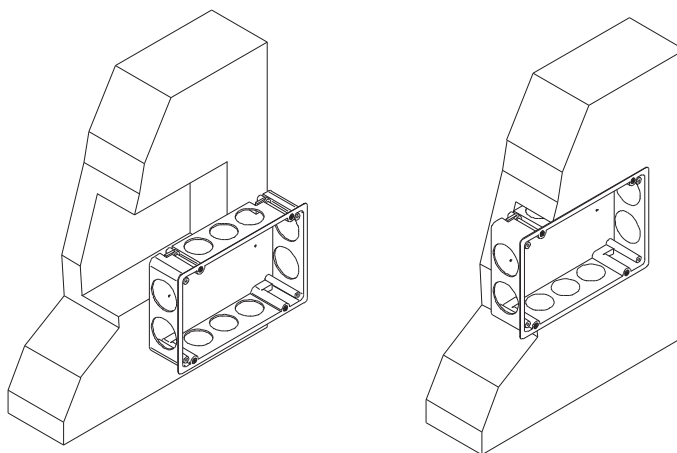
Step 2

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.

External temperature sensor

Power Supply 230 Vac

Boiler Connection

Telephone Line

Temperature sensor

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INSTALLATION SEQUENCE

Step 3

We proceed to connect the terminals to aSmart Lite 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.
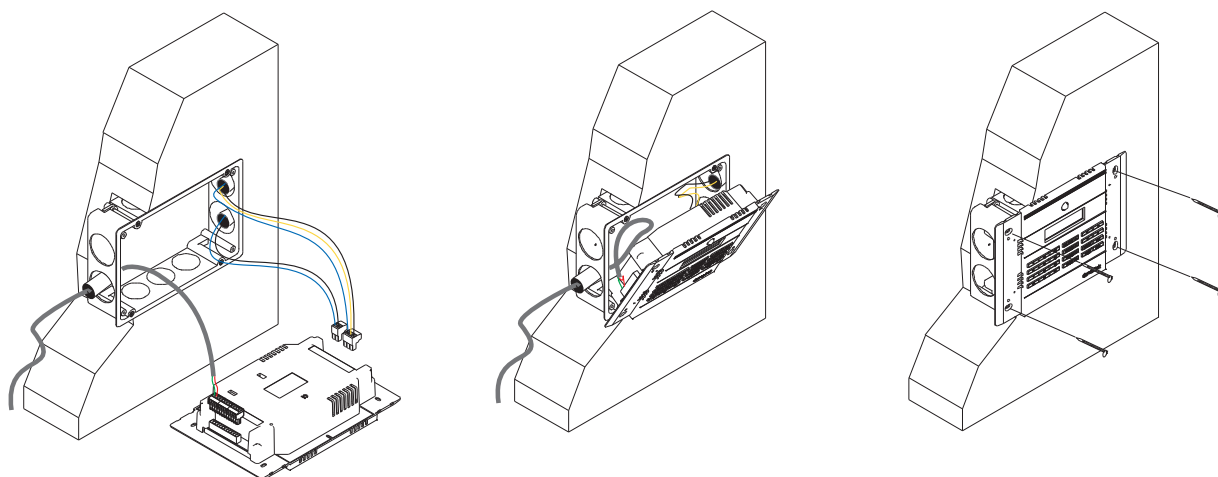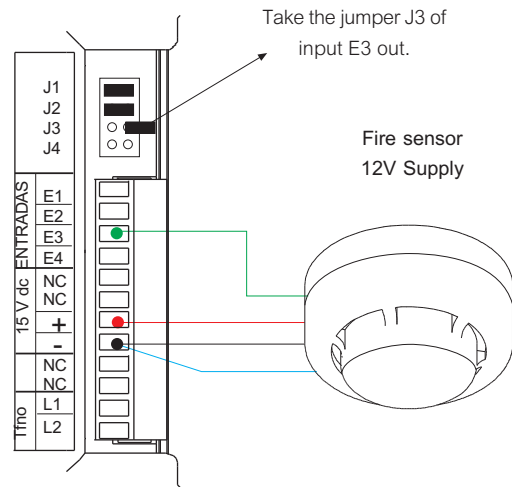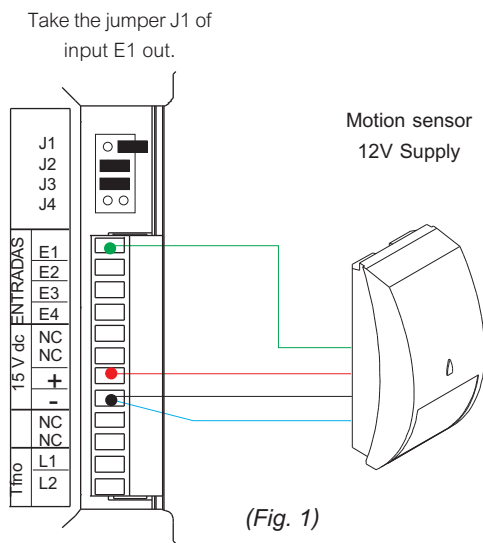
Step 4

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

click
click
click
click

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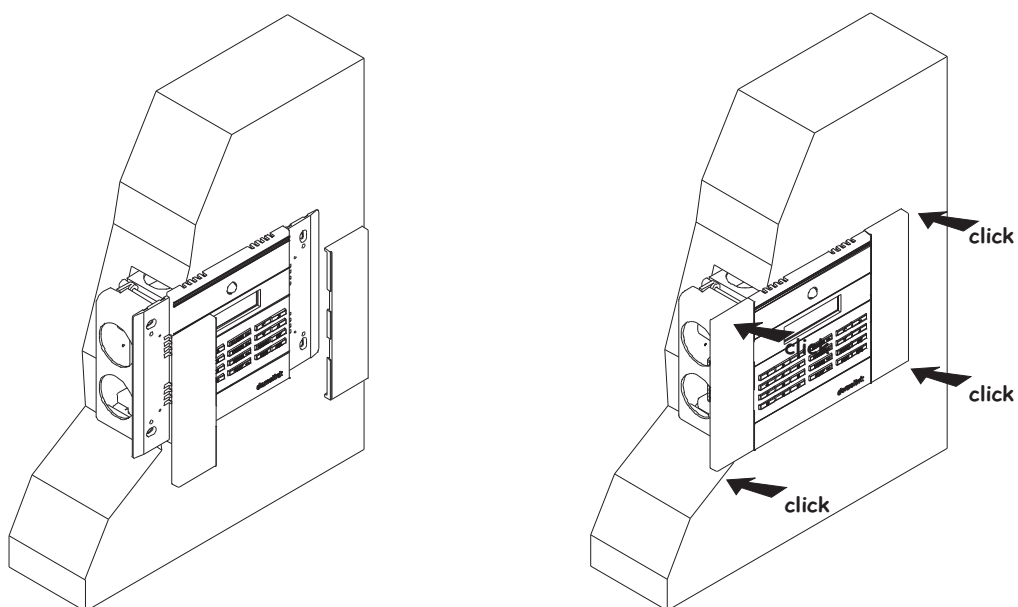
INSTALLATION OF ADITIONAL SENSORS (Optional)

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

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

Take the jumper J3 of input E3 out.

Fire sensor
12V Supply

(Fig. 2)

Take the jumper J1 of input E1 out.

Motion sensor
12V Supply

(Fig. 1)

In figures below are shown some installation examples when there are motion and fire additional sensors.

aSmart Lite source of electricity makes it possible to supply these external sensors up to a maximum of 6.

On this purporse 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 Lite source of electricity (150 mA).

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

Optional Motion Sensors

Optional Fire Sensors

Caja de re

+ GND E1

+ GND E3

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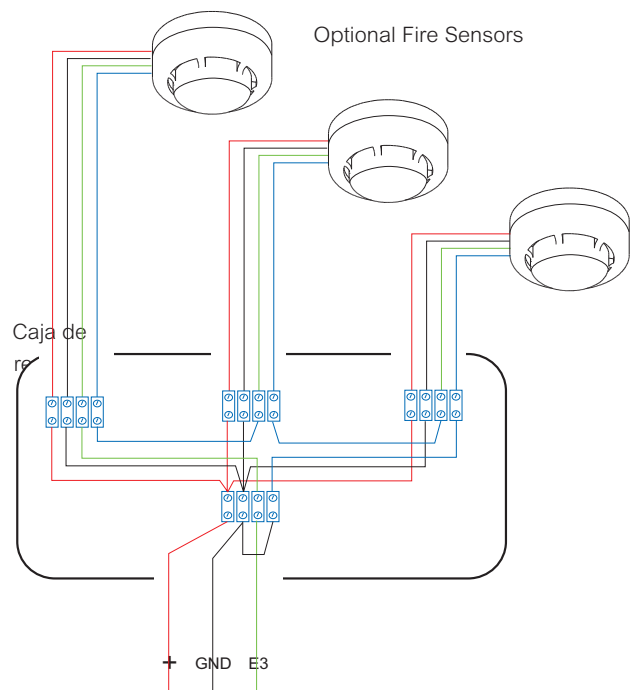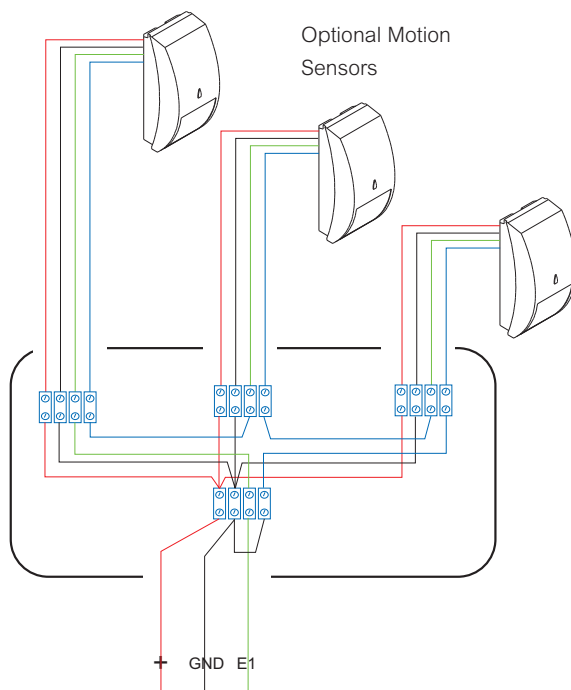
TECHNICAL DATA

FEATURES	TERMINALS	DESCRIPTION
POWER SUPPLY INPUT		
Voltage of power supply	F (Phase)	230 Vac 50 Hz
	N (Neutral)	(127 Vac 60 hz available upon request)
	(Ground)	Consumption:<40mA-9w
EXTERNAL SENSORS INPUTS		
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.
VOLTAGE OF THE POWER SUPPLY OUTLET TO EXTERNAL SENSORS		
Power source outlet	(+) Positive	15 Vcc Positive with charge (Max. 150 mA)
	GND	
OUTLETS		
NA Potential-free contacts relays	S1 (Outlet 1)	Not used
	S2 (Outlet 2)	Heating/Cooling control. Maximum 16A to 230 ca
	S3 (Outlet 3)	Not used
DIMENSIONS		
Width - height - depth (mm)	226mm x 152 mm x 44 mm	
Installed	226mm x 152 mm x 8mm	
OPERATION TEMPERATURE LEVEL		
Home Temperature	from -7ºC to 50ºC	

If you are not going to install these optional motion/fire sensors, it is recommended that you make sure that inputs have been disabled using jumpers J1 and J3 respectively.

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