CHARACTERISTICS

- No Power Supply different from the BUS required
- Temperature sensor with thermostat function.
- 1.8" back-lighted display 128 x 64 pixels.
- Touch display in limited areas.
- 2 opto coupled A/D inputs.
- IR receiver with specific remote.
- Magnetic fit.
- KNX BCU integrated.
- Thin profile (11 mm.).
- CE directives OK.

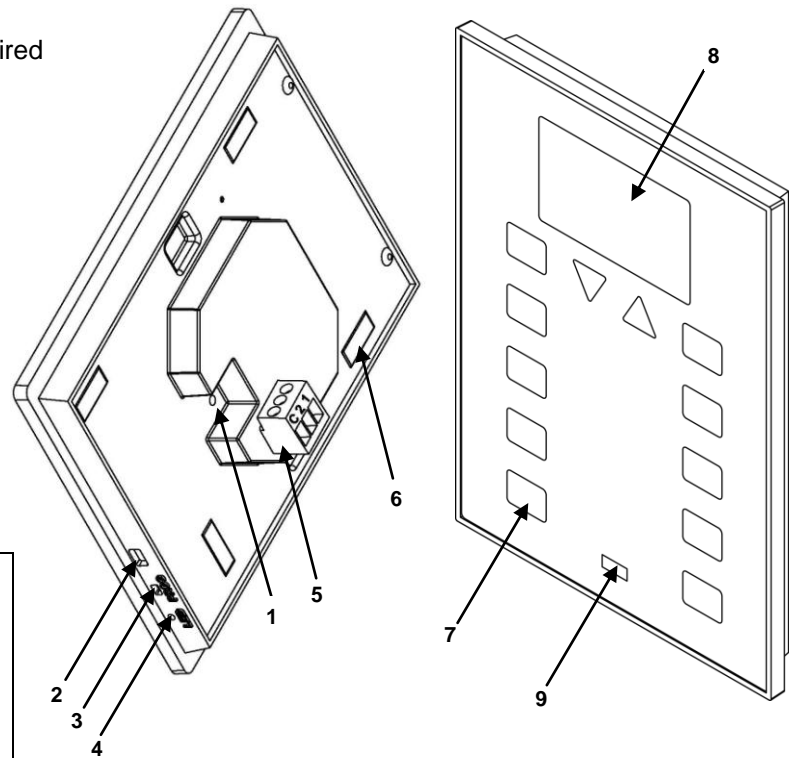|		
1. KNX Connector	**2.** Temperature sensor	**3.** Programming button
4. Programming LED	**5.** Inputs (analog /digital)	**6.** Magnet
7. Tactile area	**8.** Display	**9.** IR receiver

Figure 1. Zennio Analogue Screen

Prog Button: a push button to set the programming mode. If this button is held while plugging the device into the KNX bus, it goes into secure mode.

LED: programming mode indicator. When the device goes into secure mode, it blinks every half second.

GENERAL SPECIFICATIONS		
CONCEPT		**DESCRIPTION**
Device Type		Electric operation control device
KNX Supply	Voltage	29V DC SELV
	Voltage range	21…31V DC
	Consumption	Maximum 17mA
	Connection type	Typical BUS connector TP1, 0,50 mm² section
External power supply		No
Operating temperature		0º C to +45º C
Storage temperature		-20º C to +60º C
Ambient humidity (relative)		30 to 85% RH (no condensation)
Storage humidity (relative)		30 to 85% RH (no condensation)
Complementary characteristics		Class B
Safety class		II
Operation type		Continuous operation
Device action type		Type 1
Electrical solicitations period		Long
Nº of automatic cycles per auto action		100.000
Type of protection		IP20. Clean environment
Assembly		Independent control assembly device Vertical position, with the temperature sensor to the bottom. See "installation figure"
Minimum clearances		Keep away from heat and cold air flows to get better temperature sensor measures

| Response to BUS voltage failure	Complete data saving
Response to BUS failure recovery	Before failure data recovery
Function indicator	Several on display as programmed
Accessories	IR remote control, 24 keys (optional)
PCB CTI index	175 V
Enclosure material	PC+ABS FR V0 halogen free
Weight	Aprox. 250 gr.

INPUTS CONNECTIONS	
CONCEPT	**DESCRIPTION**
Number of inputs per common	2
Isolation method	Opto-Coupler
Input voltage	+5V DC for the common (do not connect external voltage into the inputs in any case)
Voltage range	---
Input current	1.0mA a 5V DC in every input
Input impedance	Aprox. 3.3kΩ
Switching type	Dry voltage contacts between input and common
Connection method	Cable screw terminal and matching socket
Max.cable lenght	25 m.
Cable cross-section	0,15 mm² a 1 mm²
Response time OFF → ON	Max 10ms.
Response time ON → OFF	Max 10ms.
Operation indicator	None

INSTALLATION AND CONNECTION DIAGRAM

Step 1: Place the metallic piece into a squared/rounded standard box, UNE-EN 60670-1 (50 x 50 mm. or Ø63 mm. minimum) with the own screws from the box
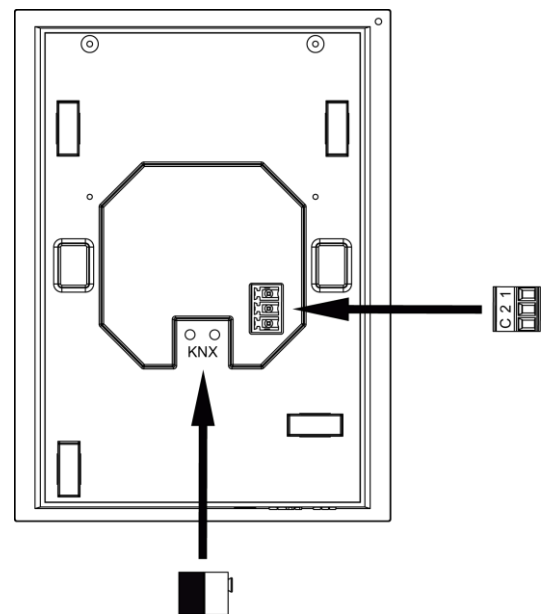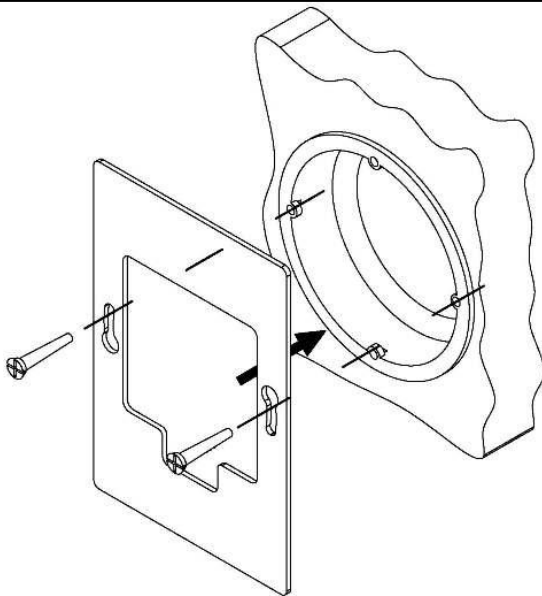
Step 2: Connect the KNX bus at the rear of the device, as well as the inputs terminal.

ZAS – Zennio Analogue Screen
ZN1VI-TPZAS
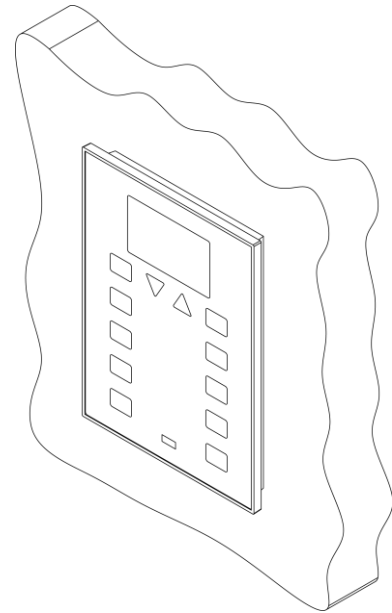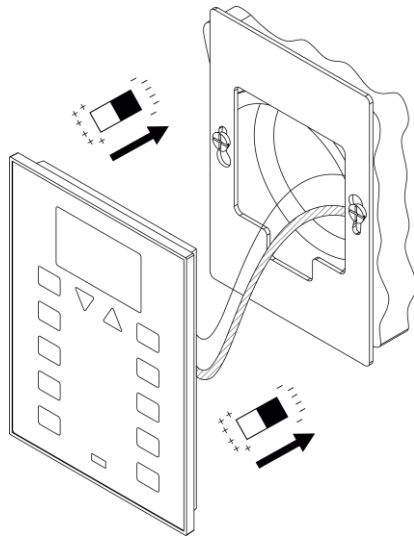
Step 3: Once inputs and bus KNX are connected, fit ZAS in the metal platform. The device is fixed thanks to the magnets.

Step 4: Check, from the side, that nothing unless ZAS outline can be seen (the metal platform should be completely hidden by ZAS)

INPUT CONNECTIONS

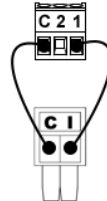Any combination of the next **accessories** is allowed in the inputs:

Temperature Probe
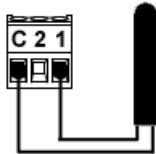
Temperature probe references:

ZN1AC-NTC68E
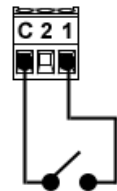ZN1AC-NTC68F
ZN1AC-NTC68S

Motion Sensor

Up to two motion sensors can be plugged into the same ZAS input (parallel wiring)

Motion sensor cable screw terminal.

Motion sensor reference: ZN1IO-DETEC

Switch/Sensor/ Push Button

| INTERNAL TEMPERATURE PROBE, INTERNAL CLOCK AND INFRARED RECEIVER SPECIFICATIONS	
CONCEPT	**DESCRIPTION**
INTERNAL TEMPERATURE PROBE	
Measuring range	0ºC to 60ºC
Max. resolution	0.1ºC
Tolerance (at 25ºC)	2 % (±0.5ºC)
INTERNAL CLOCK	
Resolution	1 min.
Precision	50 ppm
Date/Time set	Manual: set from screen Auto: through bus telegram
Response to bus power failure	Internal clock saves last time displayed
Response to bus power recovery	Internal clock recovers last time displayed

| INFRARED RECEIVER	
Carrier frequency	38 KHz
Operating range	8 m (at an angle of 90º, perpendicular)
Angle of reception	130º (from 25º to 155º)

CALIBRATION

Once the corresponding application program is downloaded, the calibration of device is needed before using it.

Just follow the steps that appear in the display (the sequence of keys to push are in the figure below).The LEDs corresponding to each touch area light according to the sequence, in order to make this process easier.

Calibration can be made at any time if this option is selected as a parameter, from the menu
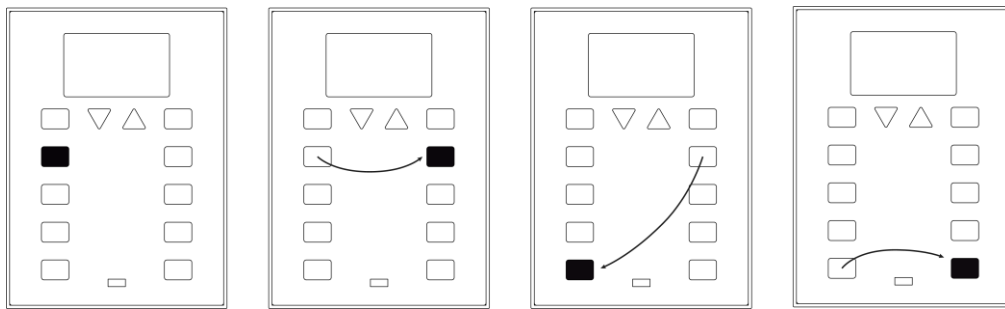
MAIN DIMENSIONS
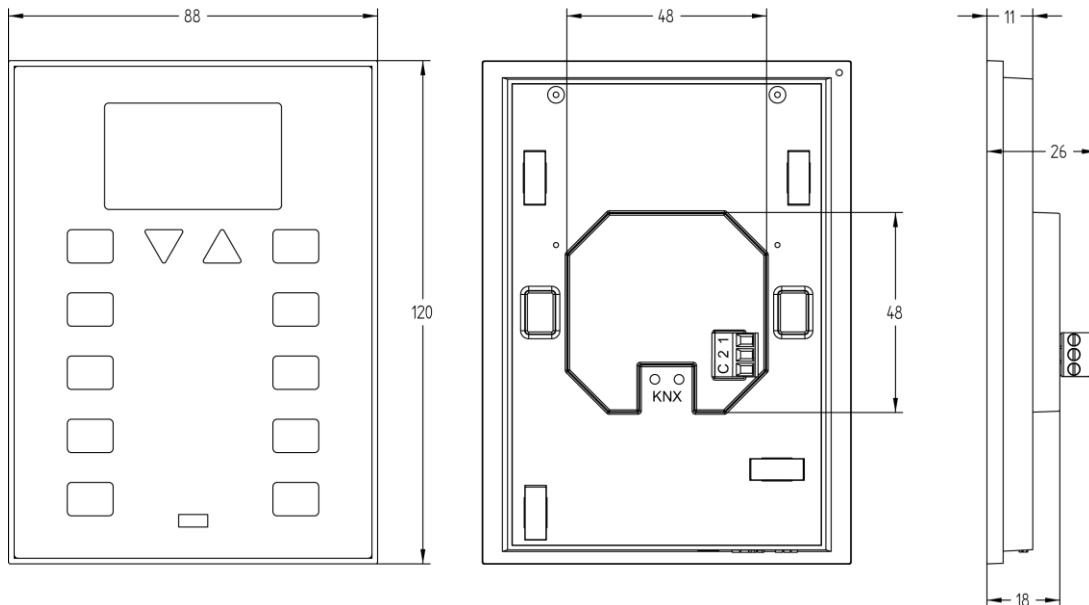
GENERAL CARE
- Do not use aerosol sprays, solvents, or abrasives that might damage ZAS.
- Clean the product with a clean, soft, damp cloth.

SAFETY INSTRUCTIONS
- Do not connect the main voltage (230V) or any other external voltages to any point of the KNX Bus. Connecting an external voltage might put the KNX system into risk.
- Ensure that there is enough insulation between the AC Voltage cables and the KNX Bus.
- Do not expose this device to rain or high humidity.