

## 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 compliant.

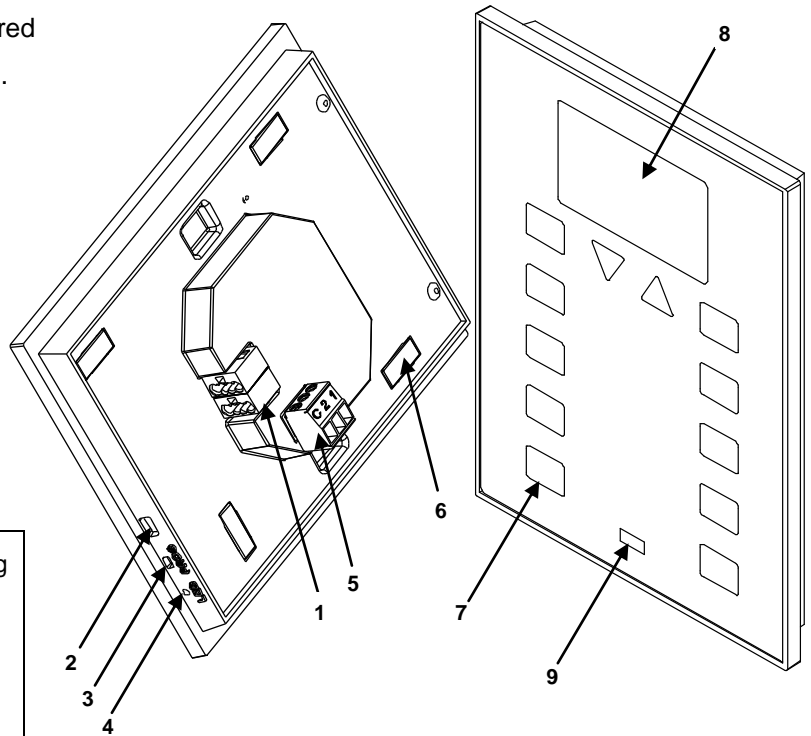


Figure 1. Zennio Analogue Screen

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

**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 safe mode.

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

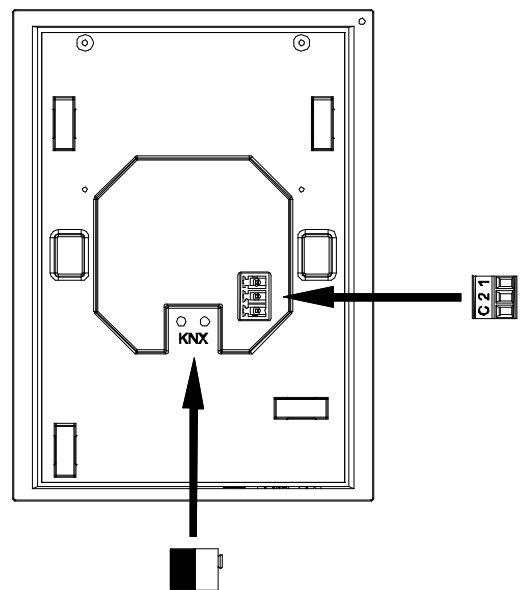
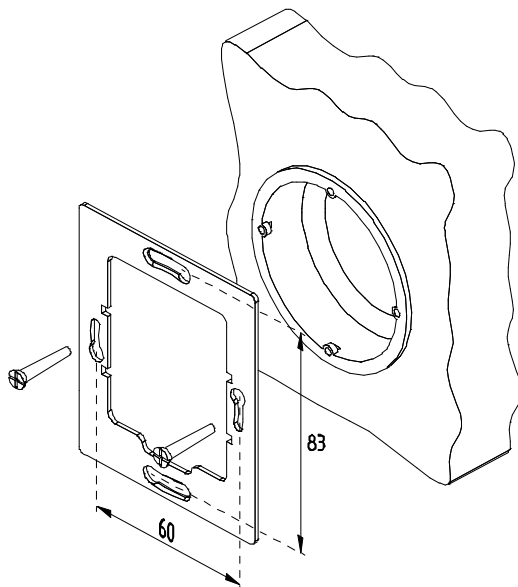
GENERAL SPECIFICATIONS		
CONCEPT	DESCRIPTION	
Device type	Electric operation control device	
KNX supply	Voltage	29VDC SELV
	Voltage range	21...31V DC
	Consumption	Maximum 17mA
	Connection type	Typical bus connector TP1, 0,50 mm <sup>2</sup> section
External power supply	No	
Operating temperature	0° C to +45° C	
Storage temperature	-20° C to +60° 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	III	
Operation type	Continuous operation	
Device action type	Type 1	
Electrical solicitations period	Long	
N° 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	Approx. 250 gr.

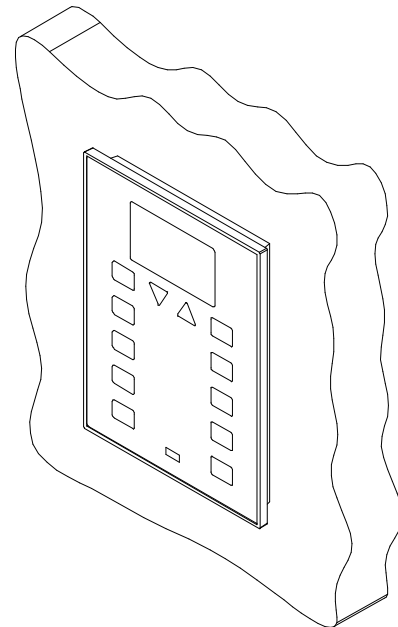
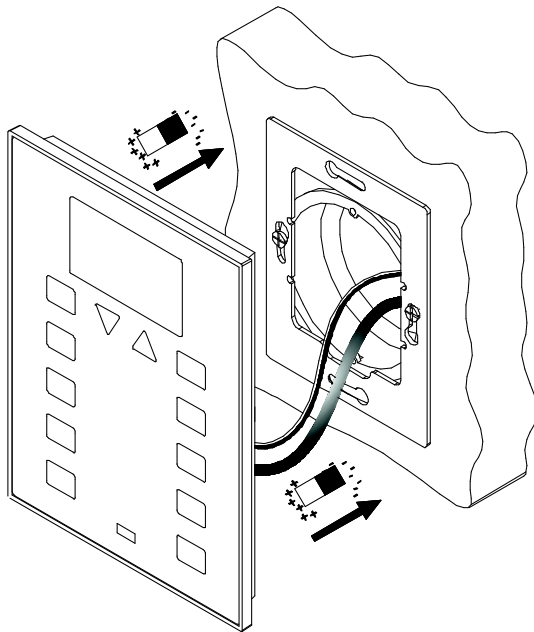
INPUTS CONNECTIONS	
CONCEPT	DESCRIPTION
Number of inputs per common	2
Isolation method	Opto-Coupler
Input voltage	+5V DC for the common (do not connect external voltage into the inputs in any case)
Input current	1.0mA @ 5V DC (each input)
Input impedance	Approx. 3.3kΩ
Switching type	Dry voltage contacts between input and common
Connection method	Cable screw terminal and matching socket
NTC probe length	1.5 m.
NTC accuracy (@ 25°C)	0.5°C
Temperature measure precision	0.1°C
Max. cable length	30 m.
Cable cross-section	0,15 mm <sup>2</sup> to 1 mm <sup>2</sup>
Response time	Max 10ms.

## INSTALLATION AND CONNECTION DIAGRAM

**Step 1:** Place the metallic piece into a squared/rounded standard box.



**Step 2:** Connect the KNX bus at the rear of the device, as well as the inputs terminal.



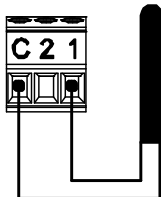
**Step 3:** Once inputs and bus KNX are connected, fit ZAS in the metal platform. The device is fixed thanks to the magnets.

**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\*

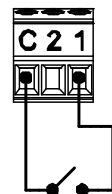


Up to two motion sensors can be plugged into the same ZAS input (parallel wiring)

Motion sensor cable screw terminal.

**Motion sensor references:**  
ZN1IO-DETEC  
ZN1IO-DETEEC-N  
ZN1IO-DETEEC-X  
ZN1IO-DETEEC-P<sup>(1)</sup>

### Switch/Sensor/ Push Button



\* The motion sensor option only can be used in combination with Roll-ZAS application program

(1) The micro switch number 2 in the ZN1IO-DETEEC-P **must be in Type A position** to work properly.

INTERNAL TEMPERATURE PROBE, INTERNAL CLOCK AND INFRARED RECEIVER SPECIFICATIONS	
CONCEPT	DESCRIPTION
<b>INTERNAL TEMPERATURE PROBE</b>	
Measuring range	0°C to 60°C
Max. precision	0.1°C
Accuracy (@ 25°C)	2% (±0.5°C)
<b>INTERNAL CLOCK</b>	
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

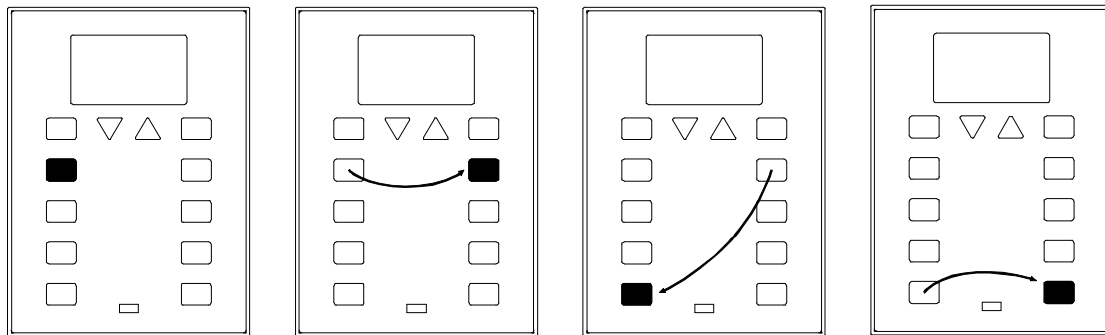
INFRARED RECEIVER	
Carrier frequency	38 KHz
Operating range	8 m (at an angle of 90°, perpendicular)
Angle of reception	130° (from 25° to 155°)

## CALIBRATION

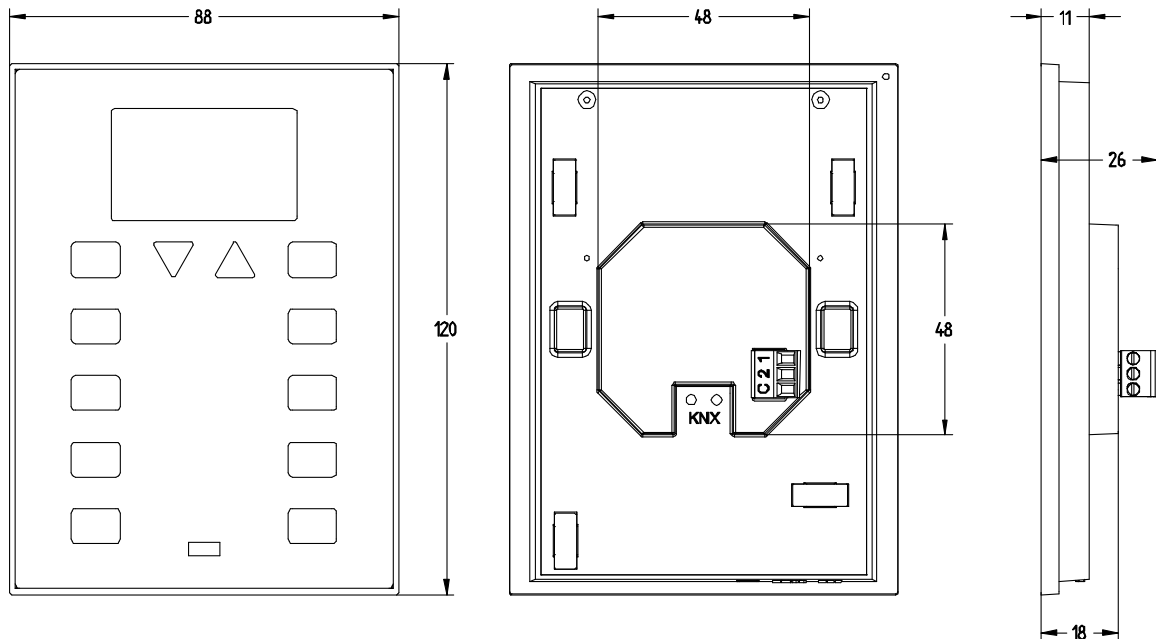
Once the corresponding application program is downloaded, the calibration of device is needed before using it.

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.