

### FEATURES

- Printed glass touch panel (image customizable through web application)
- 1, 2, 4 or 6 touch areas
- 2 analog/digital inputs
- Thermostat
- Built-in temperature sensor
- Backlighting of touch areas to indicate status
- Luminosity and proximity sensor
- Total data saving on KNX bus failure
- Integrated KNX BCU
- Dimensions 81 x 81 x 31mm (it protrudes 9mm from the wall)
- Flush mount on back box
- Conformity with the CE directives (CE-mark on the back side)

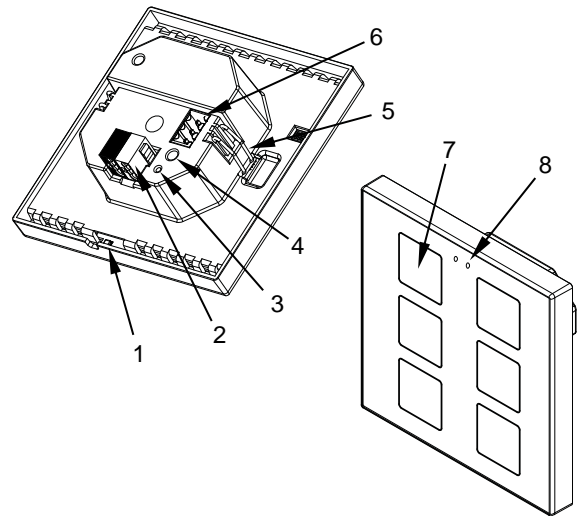


Figure 1: Flat 1/2/4/6 v2

|                       |                     |                    |                                    |
|-----------------------|---------------------|--------------------|------------------------------------|
| 1. Temperature sensor | 2. KNX connector    | 3. Programming LED | 4. Programming button              |
| 5. Fixing clips       | 6. Inputs connector | 7. Touch area      | 8. Luminosity and proximity sensor |

Programming button: short press to set programming mode. If this button is held while plugging the device into the KNX bus, it enters the safe mode.

Programming LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. During the start-up (reset or after KNX bus failure) and if the device is not in safe mode, it emits a red flash.

### GENERAL SPECIFICATIONS

| CONCEPT                       |  | DESCRIPTION  |  |  |
|-------------------------------|--|--|--|--|
| Type of device                |  | Electric operation control device  |  |  |
| KNX supply                    | Voltage (typical)  | 29VDC SELV   |  |  |
|                               | Voltage range  | 21..31VDC  |  |  |
|                               | Maximum consumption  | Voltage  | mA   |  |
|                               |  | 29VDC (typical)  | ZVIF6V2 (17.4)   ZVIF4V2 (16.2)<br>ZVIF2V2 (12.2)   ZVIF1V2 (14.1) | ZVIF6V2 (504.6)   ZVIF4V2 (469.8)<br>ZVIF2V2 (353.8)   ZVIF1V2 (408.9) |
| 24VDC <sup>1</sup>            | ZVIF6V2 (22.5)   ZVIF4V2 (20)<br>ZVIF2V2 (15)   ZVIF1V2 (17.5) | ZVIF6V2 (540)   ZVIF4V2 (480)<br>ZVIF2V2 (360)   ZVIF1V2 (420)   |  |  |
| Connection type               |  | Typical TP1 bus connector for 0.80mm Ø rigid cable   |  |  |
| External power supply         |  | Not required   |  |  |
| Operation temperature         |  | 0°C .. +55°C   |  |  |
| Storage temperature           |  | -20°C .. +55°C   |  |  |
| Operation humidity            |  | 5 .. 95%   |  |  |
| Storage humidity              |  | 5 .. 95%   |  |  |
| Complementary characteristics |  | Class B  |  |  |
| Protection class              |  | III  |  |  |
| Operation type                |  | Continuous operation   |  |  |
| Device action type            |  | Type 1   |  |  |
| Electrical stress period      |  | Long   |  |  |
| Degree of protection          |  | IP20, clean environment  |  |  |
| Installation                  |  | Flush mount on mechanism box   |  |  |
| Minimum clearances            |  | Not required   |  |  |
| Response on KNX bus failure   |  | Data saving according to parameterization  |  |  |
| Response on KNX bus restart   |  | Data recovery according to parameterization  |  |  |
| Operation indicator           |  | The programming LED indicates programming mode (red). Backlighting of touch areas depending on their parameterization. |  |  |
| Weight                        |  | 97g  |  |  |
| PCB CTI index                 |  | 175V   |  |  |
| Housing material              |  | PC+ABS FR V0 halogen free  |  |  |

<sup>1</sup> Maximum consumption in the worst-case scenario (KNX Fan-In model).

## INPUTS SPECIFICATIONS AND CONNECTIONS

| CONCEPT                            | DESCRIPTION                                   |
|------------------------------------|---|
| Number of inputs                   | 2   |
| Inputs per common                  | 2   |
| Operation voltage                  | +3.3VDC in the common                         |
| Operation current                  | 1mA @ 3.3VDC (per input)                      |
| Switching type                     | Dry voltage contacts between input and common |
| Connection method                  | Pluggable screw terminal block                |
| Cable cross-section                | 0.2-1.5mm <sup>2</sup> (IEC) / 28-14AWG (UL)  |
| Maximum cable length               | 30m   |
| NTC probe length                   | 1.5m (extensible up to 30m)                   |
| NTC accuracy (@ 25°C) <sup>2</sup> | ±0.5°C  |
| Temperature resolution             | 0.1°C   |
| Maximum response time              | 10ms  |

<sup>2</sup> For Zennio temperature probes.

## INTERNAL TEMPERATURE SENSOR SPECIFICATIONS

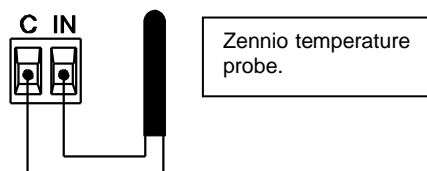
| CONCEPT                            | DESCRIPTION  |
|------------------------------------|--------------|
| Measuring range                    | -30 .. +90°C |
| Temperature resolution             | 0.1°C        |
| NTC accuracy (@ 25°C) <sup>3</sup> | ±0.5°C       |

<sup>3</sup> The accuracy of the NTC sensor may be reduced in case of keeping the backlight status LEDs permanently on.

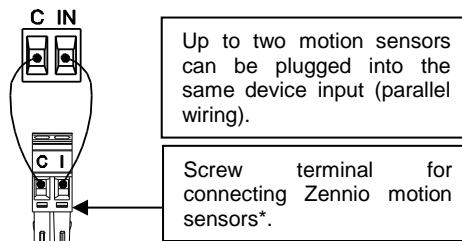
## INPUTS CONNECTION

Any combination of the following accessories is allowed in the inputs:

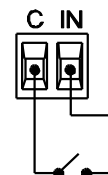
### Temperature Probe\*\*



### Motion Sensor



### Switch/Sensor/ Push button

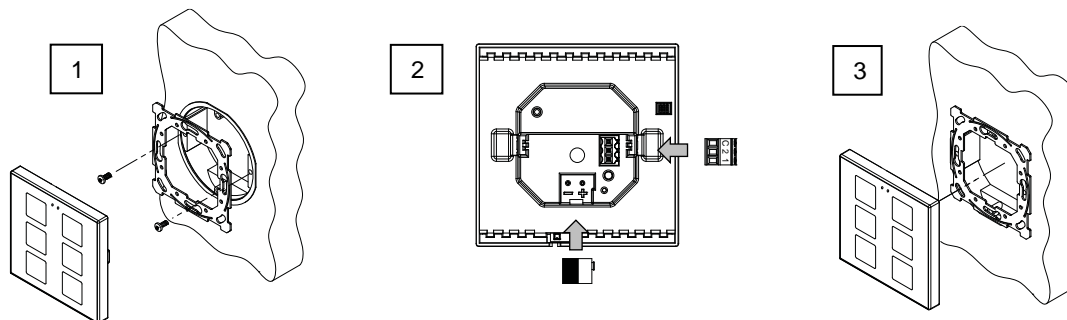


\* In case of using ZN110-DETEC-P sensor, its micro switch number 2 must be in **Type B position**.

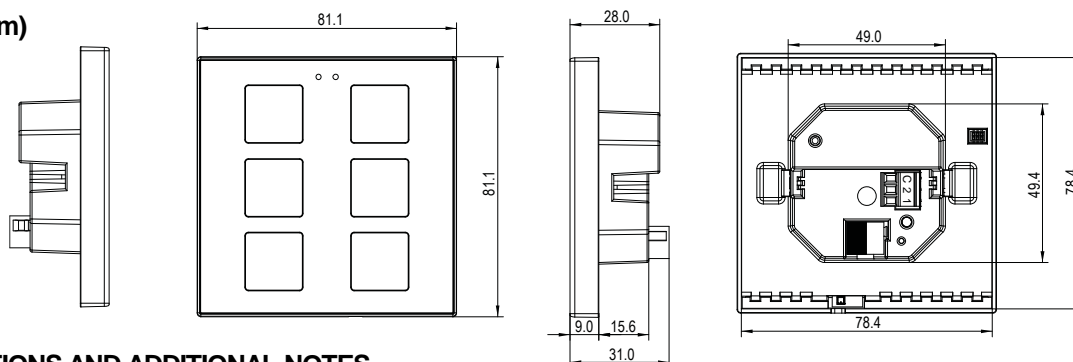
\*\* May be a Zennio temperature probe or any NTC with known resistance values at three points in the range [-55, 150°C].

## INSTALLATION INSTRUCTIONS

1. Fix the metal plate into a square or round flush box by using the screws from the box.
2. Connect the KNX bus and the inputs terminal to the back of the device.
3. Fit the device into its final position and check that the strength of the clips is enough to fix the device.



## DIMENSIONS (mm)



## SAFETY INSTRUCTIONS AND ADDITIONAL NOTES

- Installation should only be performed by qualified professionals according to the laws and regulations applicable in each country.
- Do not connect the mains voltage nor any other external voltage to any point of the KNX bus; it would represent a risk for the entire KNX system. The facility must have enough insulation between the mains (or auxiliary) voltage and the KNX bus or the wires of other accessories, in case of being installed.
- Keep the device away from water (condensation over the device included) and do not cover it with clothes, paper or any other material while in use.
- The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at <https://www.zennio.com/en/legal/wEEE-regulation>.
- This device contains software subject to specific licences. For details, please refer to <http://zennio.com/licenses>.