

FEATURES

- Room access control through NFC technology access cards and Bluetooth communication. Compatible cards:
 - MIFARE DESFire 2K
 - MIFARE Classic 1K
- Available colour, please refer to: <https://www.zennio.com/finishes>
- 3 touch areas
- Encrypted serial communication with Securel v3 (ZIOSECV3) within the secure zone
- Sound notifications and visual notifications through OLED display (128x64 pixels)
- Auxiliary power supply required
- 2 inputs configurable as binary input, temperature probe or motion detector
- Total data saving on power failure
- Integrated KNX BCU (TP1-256)
- Dimensions 81 x 81 x 25 mm
- Flush mount on back box
- Conformity with CE directives (marks on the back side)

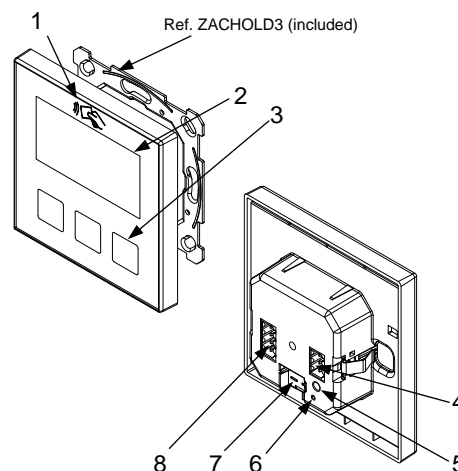


Figure 1: IWAC Display v3

| | | | |
|-------------------------------|--------------------|------------------|--|
| 1. NFC and Bluetooth antennas | 2. OLED display | 3. Touch Areas | 4. Inputs |
| 5. Programming button | 6. Programming LED | 7. KNX connector | 8. Encrypted communication port and auxiliary power supply |

Programming button: short button press to set programming mode. If this button is held while connecting the device to the auxiliary power supply, 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 start up (after reset or power failure) and if the device is not in safe mode, indicator makes a red flash.

GENERAL SPECIFICATIONS

| CONCEPT | | DESCRIPTION | | |
|---|---------------------|---|------|-------|
| Type of device | | Electric operation control device | | |
| KNX supply | Voltage (typical) | 29 VDC SELV | | |
| | Voltage range | 21-31 VDC | | |
| | Maximum consumption | Voltage | mA | mW |
| | | 29 VDC (typical) | 3.45 | 100.1 |
| 24 VDC ¹ | 10 | 240 | | |
| Connection type | | Typical TP1 bus connector for 0.8 mm Ø rigid cable | | |
| External power supply | | 24 VDC. Maximum consumption: 50 mA | | |
| Operation temperature | | 5 .. +45 °C | | |
| Storage temperature | | -20 .. +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 back box | | |
| Minimum clearances | | Not required | | |
| Response on external power supply failure | | Data saving according to parameterization | | |
| Response on external power supply restart | | Data recovery according to parameterization | | |
| Operation indicator | | Programming LED indicates programming mode (red). The display indicates the number or name of the room. | | |
| Weight | | 98 g | | |
| Housing material | | PC+ABS FR V0 halogen free | | |

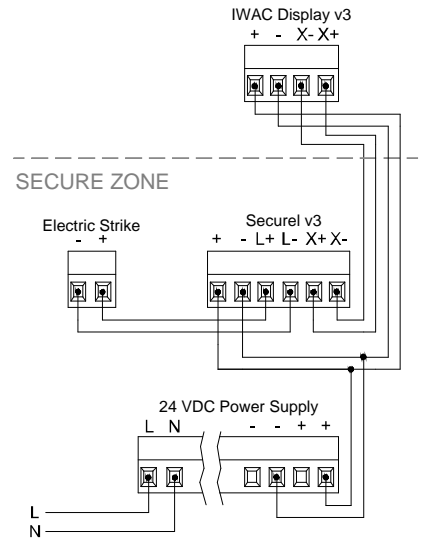
¹ Maximum consumption in the worst-case scenario (KNX Fan-In model).

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

² For Zennio temperature probes.

| EXTERNAL POWER SUPPLY SPECIFICATIONS AND CONNECTIONS | |
|--|--|
| CONCEPT | DESCRIPTION |
| Voltage | 24 VDC |
| Current | 50 mA |
| Connection method | Pluggable screw terminal block (0.2 Nm max.) |
| Cable cross-section | 0.2-1.5 mm ² (IEC) / 28-14 AWG (UL) |

POWER SUPPLY / COMMUNICATION CONNECTION DIAGRAM

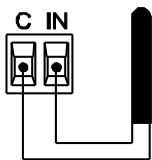


Important: The auxiliary 24 VDC power must remain connected to the device during downloads through the KNX bus.

INPUTS CONNECTION

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

Temperature Probe**



Zennio temperature probe.

⚠ Commons of different devices must not be connected together.

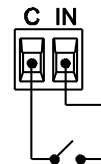
Motion Sensor



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

Screw terminal for connecting Zennio motion sensors*

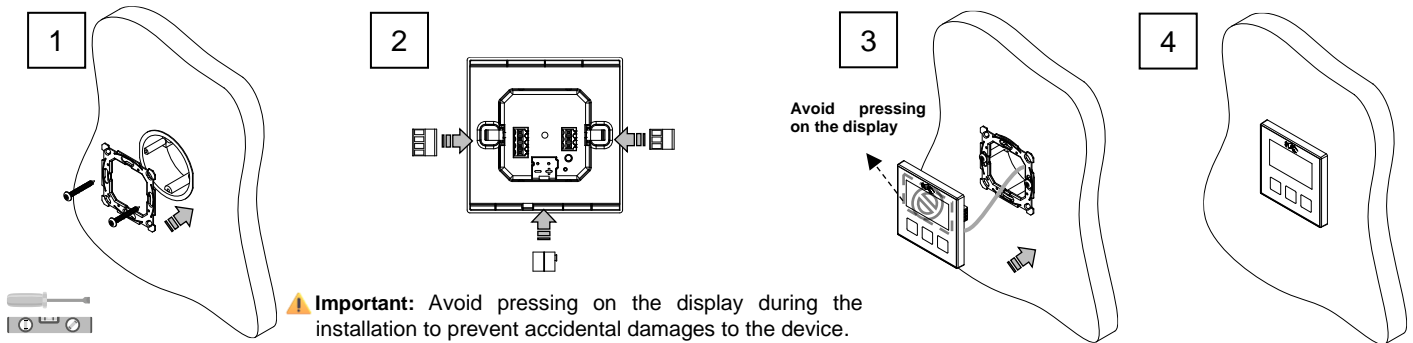
Switch/Sensor/ Push button



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

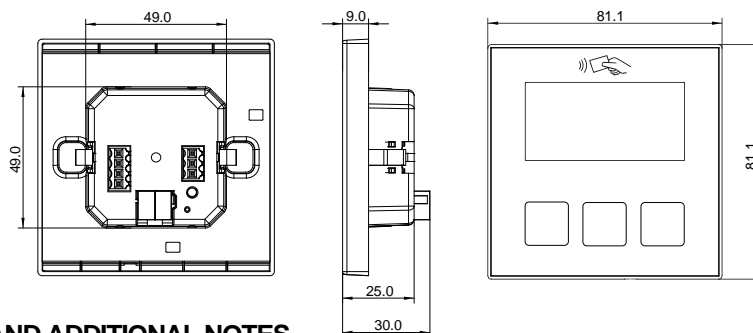
** Zennio temperature probe or any NTC with known resistance values at three points in the range [-55, 150 °C].

INSTALLATION INSTRUCTIONS



⚠ **Important:** Avoid pressing on the display during the installation to prevent accidental damages to 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 <https://zennio.com/licenses>.