FEATURES

- Room access control through NFC technology access cards and Bluetooth communication. Compatible cards:
  - MIFARE DESFire 2K
  - MIFARE Classic 1K
- Available in the following colors: silver (RAL 9006), anthracite black (RAL 9004) and white (RAL 9016)
- 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, UKCA directives (marks on the back side)

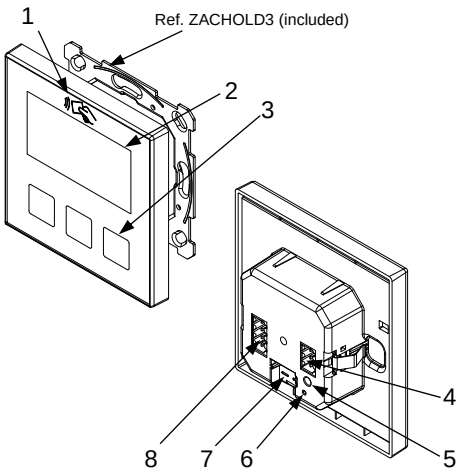


Figure 1: IWAC Display v3

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	

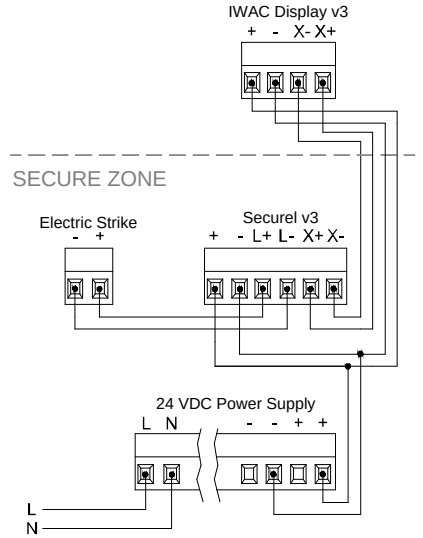
[1] Maximum consumption in the worst-case scenario (KNX Fan-In model).

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 mm² (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 mm² (IEC) / 28-14 AWG (UL)

POWER SUPPLY / COMMUNICATION CONNECTION DIAGRAM

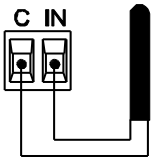


Important: The auxiliary 24 VDC power must remain connected to the device during downloads through the KNX bus.

INPUTS CONNECTION

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

Temperature Probe**



Zennio temperature probe.

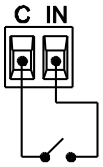
Commons of different devices must not be connected together.

Motion Sensor

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

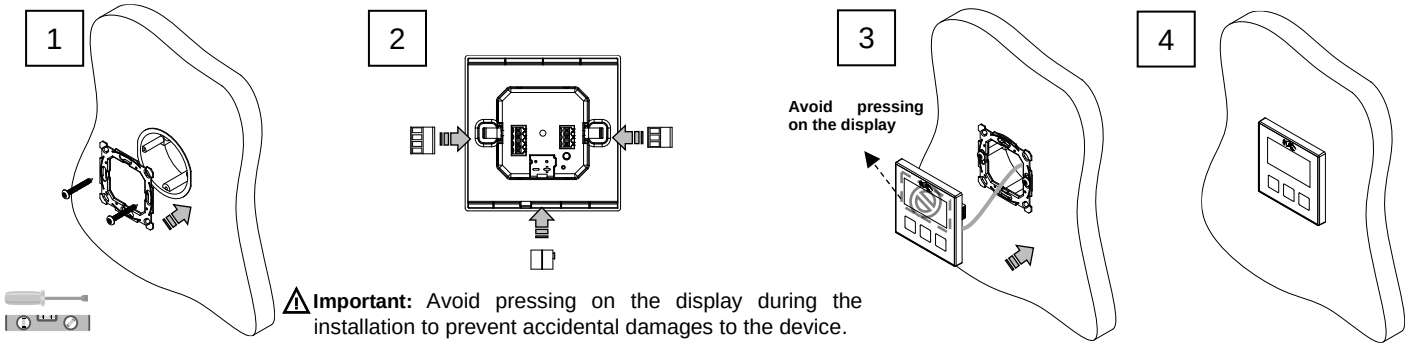
Screw terminal for connecting Zennio motion sensors*

Switch/Sensor/ Push button



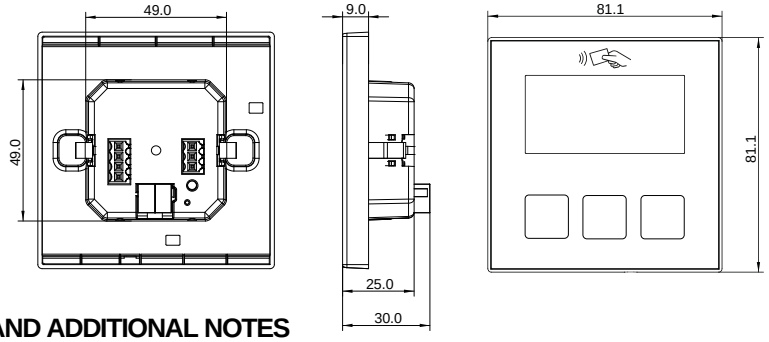
* In case of using ZN1IO-DETEC-P sensor, its micro switch number 2 must be in **Type B position**.
** Zennio temperature probe or any NTC with known resistance values at three points in the range [-55, 150 ºC].

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.