

FEATURES

- Room access control through NFC technology access cards (MIFARE DESFire EV1 and MIFARE Classic).
- 3 touch areas.
- Encrypted serial communication with Secure1 v2 (ZIOSECV2) within the secure zone.
- Sound notifications and visual notifications through OLED display.
- Total data saving on power failure.
- Auxiliary power supply required.
- 2 inputs configurable as binary input, temperature probe or motion detector.
- Integrated KNX BCU.
- Dimensions 81 x 81 x 28mm.
- Flush mount in mechanism box.
- Conformity with CE directives (CE-mark on the back side).

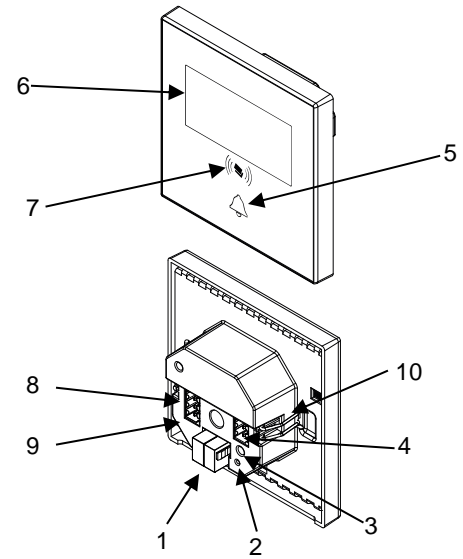


Figure 1: IWAC Display v3

1. KNX connector	2. Programming LED	3. Programming button	4. Inputs	5. Touch Areas
6. OLED display	7. NFC antenna	8. Auxiliary power supply	9. Encrypted communication port	10. Fixing clips

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)	29VDC SELV		
	Voltage range	21..31VDC		
	Maximum consumption	Voltage	mA	mW
		29VDC (typical)	3.45	100.1
24VDC ¹	10	240		
Connection type		Typical TP1 bus connector for 0.80mm Ø rigid cable		
External power supply		24VDC. Maximum consumption: 50mA		
Operation temperature		5°C .. +45°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 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		98g		
PCB CTI index		175V		
Housing material		PC+ABS FR V0 halogen free		

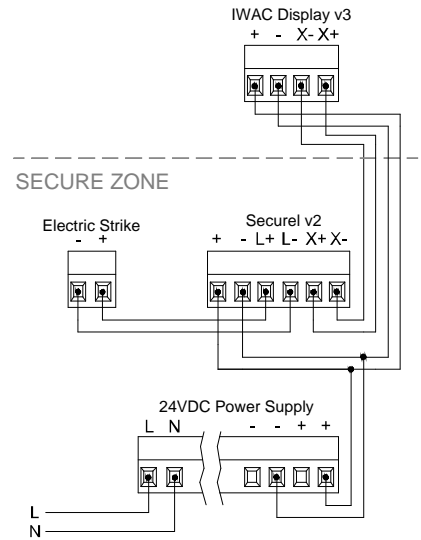
¹ Maximum consumption in the worst case scenario (KNX Fan-In model)

INPUTS SPECIFICATIONS AND CONNECTIONS	
CONCEPT	DESCRIPTION
Number of inputs	2
Inputs per common	2
Operation voltage	+3.3VDC 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 ² (IEC) / 28-14AWG (UL)
Maximum cable length	30m
NTC probe length	1.5m (up to 30m)
NTC accuracy (@ 25°C) ²	±0.5°C
Temperature resolution	0.1°C
Maximum response time	10ms

² For Zennio temperature probes.

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

POWER SUPPLY / COMMUNICATION CONNECTION DIAGRAM

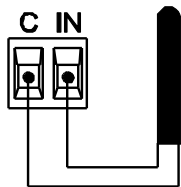


Important: The auxiliary 24VDC power must remain connected to the device during downloads through the KNX bus.

INPUTS CONNECTION

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

Temperature Probe**



Zennio temperature probe.

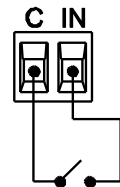
Motion Sensor



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

Screw terminal for connecting Zennio motion sensors*

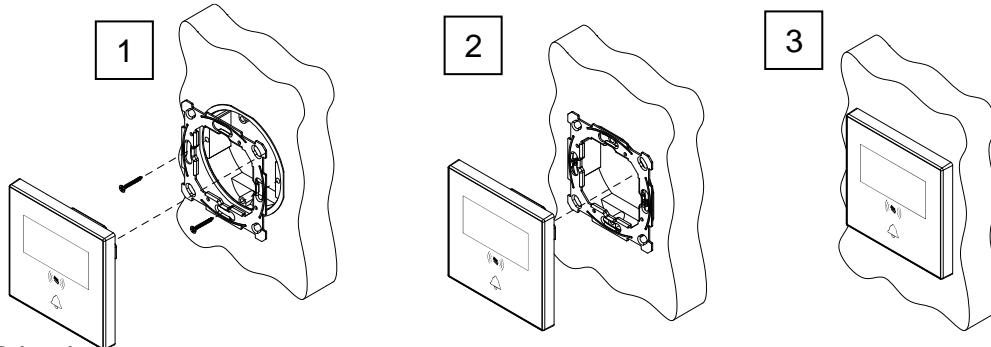
Switch/Sensor/ Push button



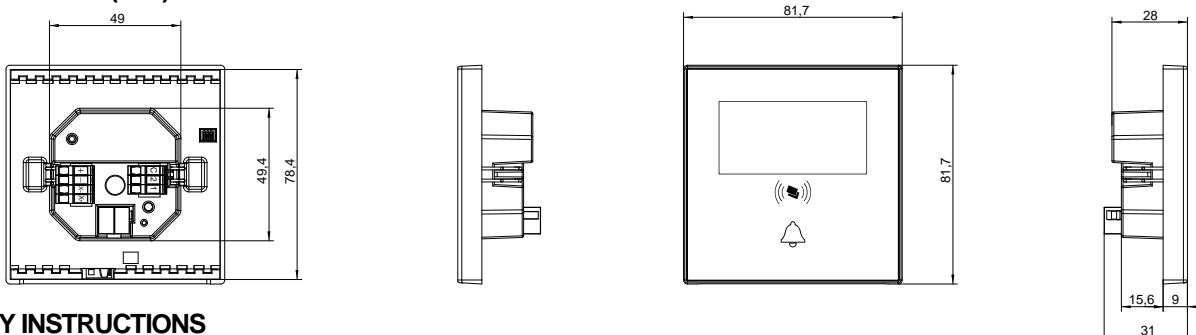
* In case of using ZN1IO-DETEC-P sensor, its micro switch number 2 must be in **Type B position**.

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

INSTALLATION INSTRUCTIONS



DIMENSIONS (mm)



SAFETY INSTRUCTIONS



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 <http://zennio.com/wEEE-regulation>.