Zennio®

Access Controller with display
ZVIIWACDV2

FEATURES

- Room access control through NFC technology access cards (Mifare DESFIRE EV1 and Classic).

- 3 touch areas.

- Encrypted serial communication with Securel (ZIO-SEC) within the safe 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.

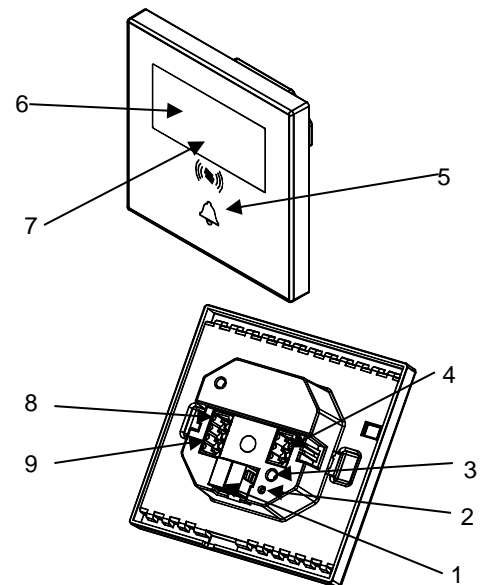- Conformity with CE directives (CE-mark on the back side).

Figure 1. IWAC Display v2

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

Programming button: short button press to set programming mode. If this button is held while plugging the device into the KNX bus, it enters into 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)	3.03		87.87
		24VDC[1]	10		240
	Bus connection		Typical bus connector TP1 for rigid cable 0.80mm ø		
External power supply			24VDC. Maximum consumption: 60mA		
Operation temperature			from 5ºC to +45ºC		
Storage temperature			from -20ºC to +55ºC		
Operation humidity			5 to 95% RH (no condensation)		
Storage humidity			5 to 95% RH (no condensation)		
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 in 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			Programming LED indicates programming mode (red). The display indicates the number of the room.		
Weight			86g		
PCB CTI index			175V		
Housing material			PC+ABS FR V0 halogen free		

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

EXTERNAL POWER SUPPLY SPECIFICATIONS AND CONNECTIONS

CONCEPT	DESCRIPTION
Voltage range	24VDC
Current range	60mA
Connection method	Cable screw terminal
Cable cross-section	0.5mm² to 1.5mm² (26-14AWG)

INPUT SPECIFICATIONS AND CONNECTIONS

| CONCEPT	DESCRIPTION
Number of inputs	2
Inputs per common	2
Operation voltage	+3.3VDC in the common
Operation current	1.0mA @ 3.3VDC (per input)
Impendace per input	Approx. 3.3kΩ
Switching type	Dry voltage contacts between input and common
Connection method	Pluggable screw terminal block
Maximum cable length	30m
NTC probe length	1.5m (up to 30m)
NTC accuracy (@ 25ºC)	±0.5ºC
Temperature resolution	0.1ºC
Cable cross-section	0.5mm² to 1.5mm² (26-14AWG)
Maximum response time	10ms

POWER SUPPLY / COMMUNICATION CONNECTION DIAGRAM
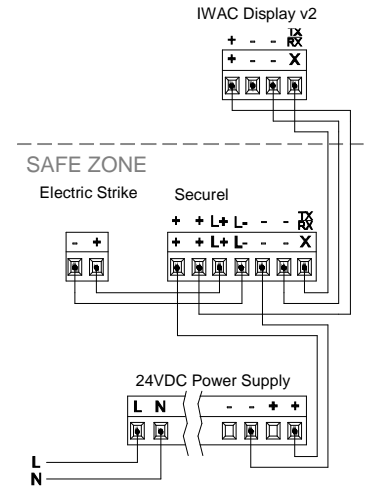
Important: The auxiliary 24VDC power must remain connected to the device during downloads through the KNX bus.

Any combination of the next **accessories** is allowed in the inputs:

Temperature Probe
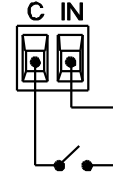

Zennio temperature probe.
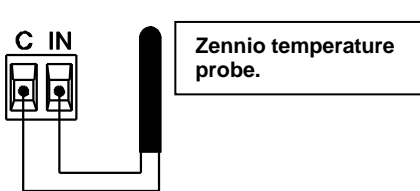
Motion Sensor

Up to two motion sensors can be plugged into the same device input (parallel wiring)
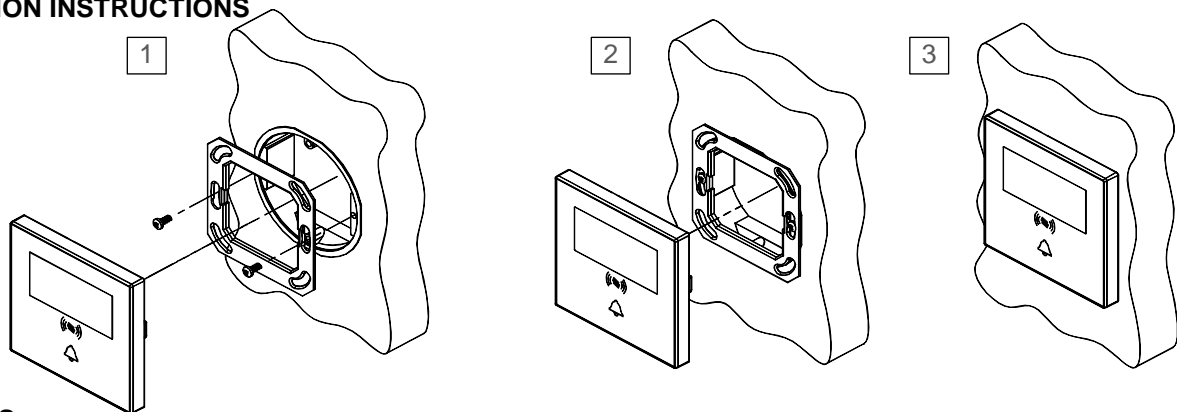
Motion sensor screw terminal.
Motion sensor references:
ZN1IO-DETEC-P[3]
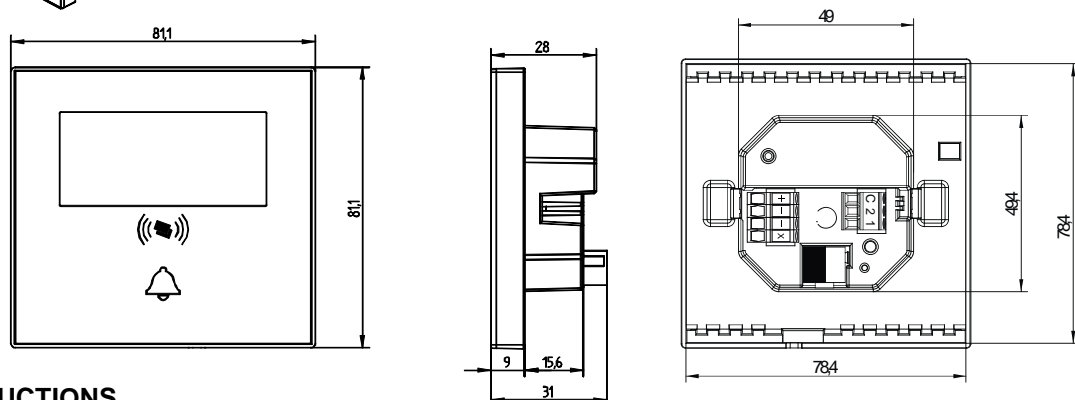ZN1IO-DETEC-X

Switch/Sensor/Push button

[3] The micro switch number 2 in the ZN1IO-DETEC-P **must be in Type B position** to work properly.

INSTALLATION INSTRUCTIONS

DIMENSIONS

⚠ 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 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.