Zennio®

Capacitive touch panel with 1, 2, 4 and 6 buttons
ZVI-F1 / ZVI-F2 / ZVI-F4 / ZVI-F6

FEATURES

- Printed glass touch panel (image customizable through web application).

- 1, 2, 4 or 6 touch areas.

- 2 analog/digital inputs.

- Thermostat.

- Temperature sensor.

- Touch feedback through device vibration.

- Backlighting of touch areas to indicate statuses.

- Luminosity and proximity sensor.

- Total data saving on KNX bus failure.

- Integrated KNX BCU.

- Dimensions 81 x 81 x 28mm.

- Flush mount on mechanism box.

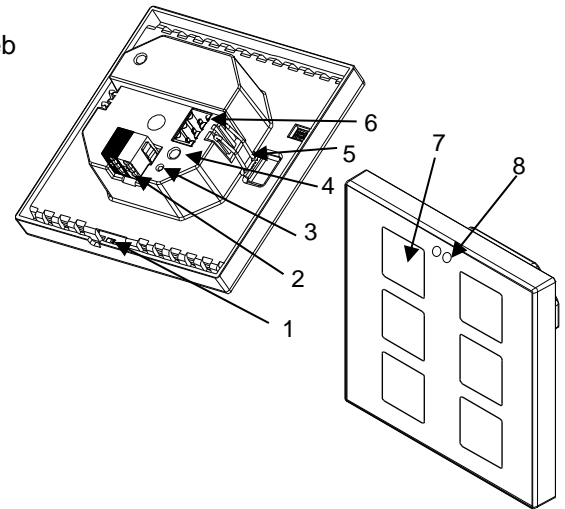- Conformity with the CE directives (CE-mark on the back side).

Figure 1. Flat 6

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	mW
		29VDC (typical)	16.9	490.1
		24VDC[1]	20	480
	Connection type		Typical bus connector TP1 for rigid cable 0.80mm Ø	
External power supply			Not required	
Operation temperature			+5ºC to +45ºC	
Storage temperature			-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 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 to indicate statuses, according to parameterization.	
Weight			92g	
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	1.0mA @ 3.3VDC (per input)
Impedance 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 (extendable 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

INTERNAL TEMPERATURE SENSOR SPECIFICATIONS

CONCEPT	DESCRIPTION
Measuring range	-10ºC to 50ºC
Resolution	0.1ºC
Sensor precision @25ºC	1%

INPUTS CONNECTION

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

Temperature Probe
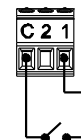
Zennio Temperature Probe
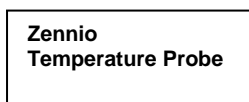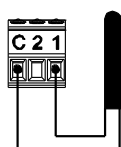
Motion Sensor
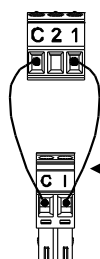
Up to two motion sensors can be plugged into the same device input (parallel wiring)

Motion sensor screw terminal.
Motion sensor references:
ZN1IO-DETEC-X
ZN1IO-DETEC-P[2]

Switch/Sensor/ Push button

(2) The micro switch number 2 in the ZN1IO-DETEC-P sensor **must be in Type B position** to work properly.

INSTALLATION INSTRUCTIONS

1. Please, fix the metal plate into a square or round flush box with 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.
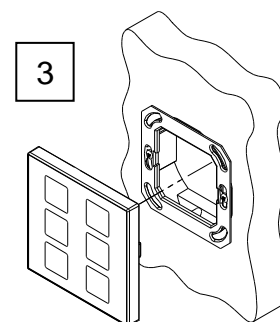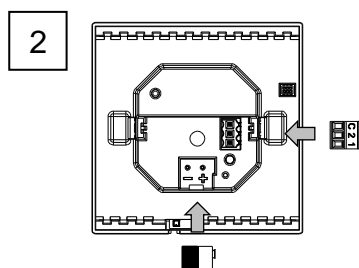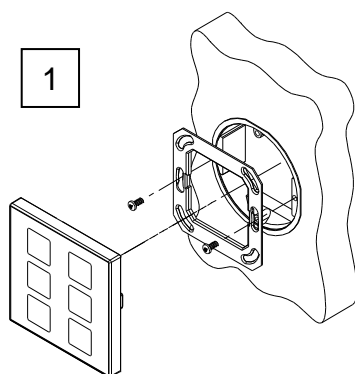
DIMENSIONS
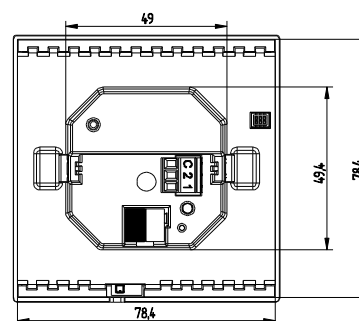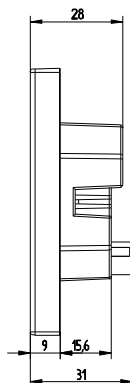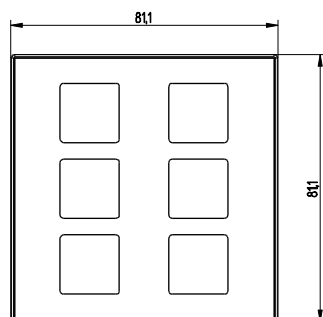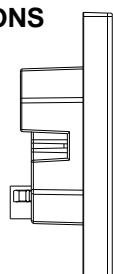
⚠ SAFETY INSTRUCTIONS

- 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.