TECHNICAL DOCUMENTATION

FEATURES

- Printed glass touch panel (image customizable through web application).
- 1, 2, 4 or 6 touch areas.
- 2 analog/digital inputs.
- Thermostat.
- Temperature sensor.
- 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).

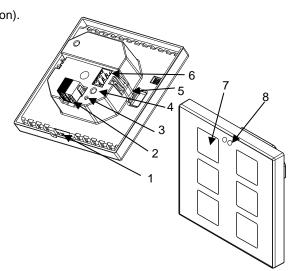


Figure 1: Flat X

 Temperature sensor 	KNX connector	Programming LED	Programming button
Fixing clips	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			
	Voltage (typical)		29VDC SELV		
KNX supply Max	Voltage range		2131VDC		
		Voltage	mA	mW	
	Maximum	29VDC (typical)	ZVI-F6 (17) ZVI-F4 (15.4) ZVI-F2 (11.4) ZVI-F1 (12.7)	ZVI-F6 (493) ZVI-F4 (446.6) ZVI-F2 (330.6) ZVI-F1 (368.3)	
	consumption	24VDC ¹	ZVI-F6 (20) ZVI-F4 (20) ZVI-F2 (15) ZVI-F1 (17.5)	ZVI-F6 (480) ZVI-F4 (480) ZVI-F2 (360) ZVI-F1 (420)	
	Connection ty	pe	Typical TP1 bus connector for 0.8	Typical TP1 bus connector for 0.80mm Ø rigid cable	
External power			Not required		
Operation ten	nperature		0°C +55°C		
Storage temp	erature		-20°C +55°C	-20°C +55°C	
Operation hu	midity		5 95%		
Storage humidity		5 95%			
Complementary characteristics		Class B	Class B		
Protection class		III			
Operation type		Continuous operation			
Device action type		Type 1			
Electrical stress period		Long			
Degree of pro	Degree of protection		IP20, clean environment	IP20, clean environment	
Installation	Installation		Flush mount on mechanism box.	Flush mount on mechanism box.	
Minimum clea			Not required		
	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 depending on their / the parameterization.			
Weight		92g			
PCB CTI index		175V			
Housing material		PC+ABS FR V0 halogen free	PC+ABS FR V0 halogen free		

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

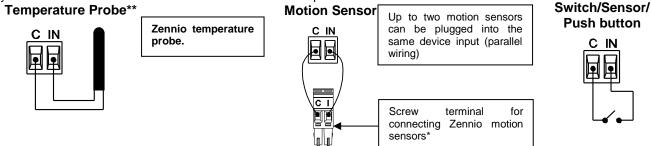
INPUTS SPECIFICATIONS AND CONNECTIONS		
CONCEPT	DESCRIPTION	
Number of inputs	2	
Inputs per common	2	
Operation voltage	+3.3VDC in the common	
Operation current	1mA @ 3.3VDC (per input)	
Switching type	Dry voltage contacts between input and common	
Connection method	Pluggable screw terminal block	
Cable cross-section	0.2-1.5mm² (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.

INTERNAL TEMPERATURE SENSOR SPECIFICATIONS		
CONCEPT	DESCRIPTION	
Measuring rango	-30 +90°C	
Temperature resolution	0.1°C	
NTC accuracy (@ 25°C)	±0.5°C	

INPUTS CONNECTION

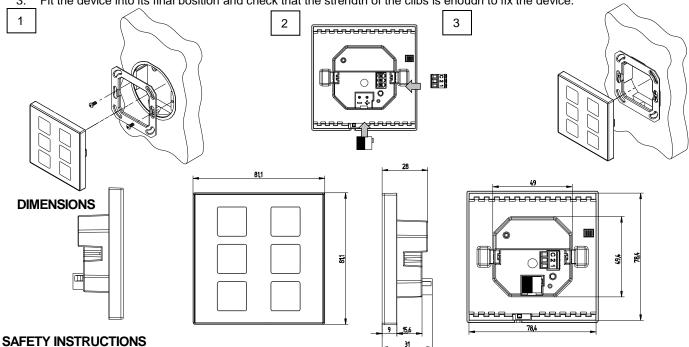
Any combination of the next accessories is allowed on the inputs:



- * In case of using ZN1IO-DETEC-P sensor, its micro switch number 2 must be in Type B position.
- ** May be a Zennio temperature probe or any NTC with known resistance values at three points in the range [-55, 150°C].
- *** To use a temperature probe as an internal sensor, please refer to the technical documentation of the product frame (sold separately).

INSTALLATION INSTRUCTIONS

- 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. Fit the device into its final position and check that the strenath of the clips is enough to fix the device.





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.