

Capacitive touch panel with 5 buttons and 2.4" display

ZVI-FD TECHNICAL DOCUMENTATION

FEATURES

- Customizable printed glass with 5 touch areas with backlight.
- 2.4" OLED display (128x64 pixels).
- 2 analog/digital inputs.
- Thermostat.
- Clock functionality (subject to updating through devices with RTC or NTP client).
- Temperature sensor.
- Luminosity and proximity sensor.
- Total data saving on KNX bus failure.
- Integrated KNX BCU.
- Dimensions 81 x 81 x 28 mm (9 mm outside the wall).
- Flush mounted on mounting box.
- Conformity with the CE directives (CE-mark on the back side).

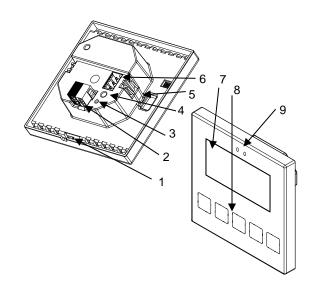


Figure 1: Flat Display

1. Temperature sensor	2. KNX connector		Programming LED	Programming button
5. Fixing clips	6. Inputs connector	7. Display	8. Touch area	9. 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	Electric operation control device			
Voltage (typical)		29VDC SELV				
KNX supply	Voltage range		2131VDC	2131VDC		
	N4	Voltage	mA	mW		
	Maximum consumption	29VDC (typical)	12.8	371.5		
	Consumption	24VDC ¹	17.5	420		
	Connection type		Typical TP1 bus connector for 0.80mm Ø rigid cable			
External power	er supply		Not required	Not required		
Operation ten	nperature		0°C +55°C	0°C +55°C		
Storage temperature		-20°C +55°C	-20°C +55°C			
Operation hu	Operation humidity		5 95%	5 95%		
Storage humidity		5 95%	5 95%			
Complementary characteristics		Class B				
Protection class		III	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	Response on KNX bus restart		Data recovery according to parame	Data recovery according to parameterization		
Operation indicator		The programming LED indicates p touch areas and display depending	The programming LED indicates programming mode (red). Backlighting of touch areas and display depending on their / the parameterization.			
Weight			95g			
PCB CTI index		175V				
Housing mate	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)

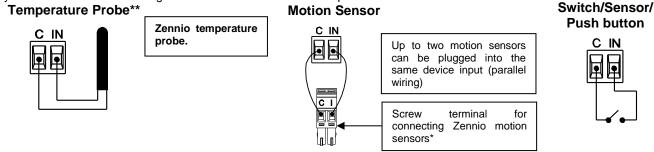
INPUTS SPECIFICATIONS AND CONNECTIONS		
CONCEPT	DESCRIPTION	
Number of inputs	2	
Inputs per common	2	
Operation voltage	+3.3VDC in the common	
Operation current	1mA @ 3.3VDC (per input)	
Switching type	Dry voltage contacts between input and common	
Connection method	Pluggable screw terminal block	
Cable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

TEMPERATURE SENSOR SPECIFICATIONS		
CONCEPT	DESCRIPTION	
Measuring range	-10 +50°C	
Temperature resolution	0.1°C	
NTC accuracy (@ 25°C)	1%	

INPUTS CONNECTION

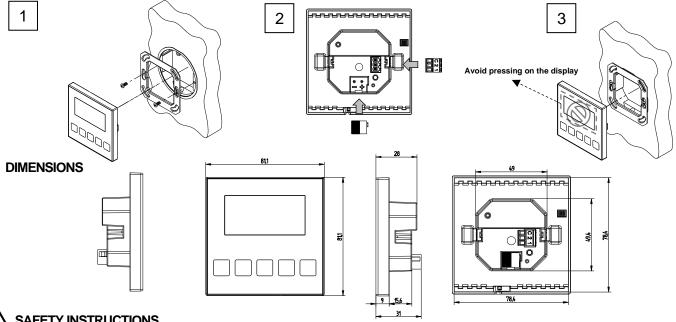
Any combination of the following **accessories** is allowed in the inputs:



- * 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

- 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.
- Fit the device into its final position and check that the strength of the clips is enough to fix the device. Avoid pressing on the display during this step, in order to prevent accidental damages to 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.
- This device contains software subject to specific licences. For details, please refer to http://zennio.com/licenses.