

TECHNICAL DOCUMENTATION

FEATURES

- 4.1" capacitive touch panel.
- Up to 7 free configurable pages and one more for settings.
- Built-in temperature, luminosity and proximity sensors.
- Clock functionality (subject to updating through devices with RTC or NTP client).
- 2 independent thermostats.
- 4 analog/digital inputs.
- Total data saving on KNX bus failure.
- Integrated KNX BCU.
- Dimensions 125 x 91 x 11.5mm.
- Flush mount on standard European, Italian, Australian and American mounting box.
- Conformity with the CE directives (CE-mark on the back side).

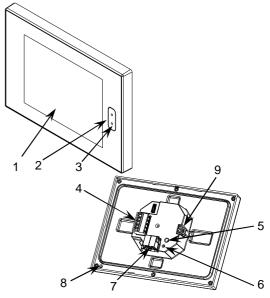


Figure 1: Z40

- 1. Touch display
- 2. Illuminated Home button
- 3. Luminosity and proximity sensors
- 4. Inputs connector

- 5. Programming button
- 6. Programming LED
- 7. KNX connector
- 8. Temperature sensor
- 9. Fixing clip

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	
KNX supply	Voltage (typical)		29VDC SELV		
	Voltage range		2131VDC		
	Maximum consumption	Voltage	mA	mW	
		29VDC (typical)	18.6	539.4	
		24VDC ¹	25	600	
	Connection type		Typical TP1 bus connector for 0.80mm Ø rigid cable		
External power supply			Not required	Not required	
Operation tem	nperature			0°C +55°C	
Storage temperature			-20°C +55°C		
Operation hur	nidity		5 95%	5 95%	
Storage humi	dity		5 95%	5 95%	
Complementary characteristics			Class B	Class B	
Protection class			III	III	
Operation type			Continuous operation	Continuous operation	
Device action type			Type 1	Type 1	
Electrical stress period			Long		
Degree of protection			IP20, clean environment	IP20, clean environment	
Installation			Flush mount on mechanism bo	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). Display allows visual functionality feedback.		
Weight			149g		
PCB CTI index			175V		
Housing mate	rial		PC+ABS FR V0 halogen free	PC+ABS FR V0 halogen free	

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

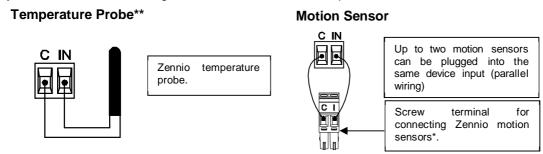
INPUTS SPECIFICATIONS AND CONNECTIONS			
CONCEPT	DESCRIPTION		
Number of inputs	4		
Inputs per common	4		
Operation voltage	+3.3VDC in the common		
Operation current	1mA @ 3.3VDC (per input)		
Switching type	Dry voltage contacts between input and common		
Connection method	Pluggable screw terminal block		
Cable cross-section	0.2-1mm ² (IEC) / 26-16AWG (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

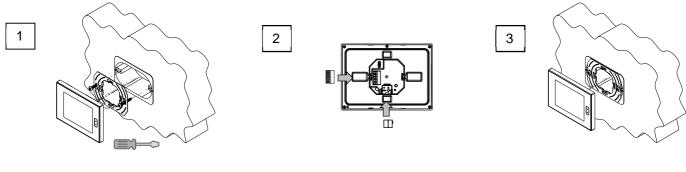
Any combination of the following accessories is allowed in the inputs:



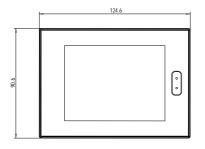
- * In case of using ZN1IO-DETEC-P sensor, its micro switch number 2 must be in Type B position.
- ** Zennio temperature probe or any NTC with known resistance values at three points in the range [-55, 150°C].

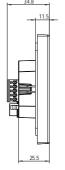
INSTALLATION INSTRUCTIONS

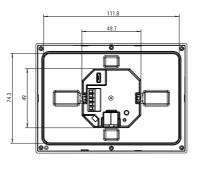
- Fix the metallic piece into a square or round flush box with the own screws of the box.
- Connect the KNX bus and the inputs terminal at the back of the device.
- Fit the device into its final position checking that clips strength is enough to fix the device.

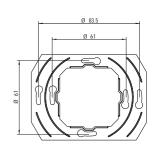


DIMENSIONS (mm)









Switch/Sensor/

Push button



/!\ SAFETY INSTRUCTIONS AND ADDITIONAL NOTES

- 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.