

# Polycarbonate Capacitive switch button of 70x70 with 1/2/4/6 buttons and customizable icons

## **ZVIT70X1 / ZVIT70X2 / ZVIT70X4 / ZVIT70X6**

## **TECHNICAL DOCUMENTATION**

#### **FEATURES**

- Customizable polycarbonate surface with 1/2/4/6 touch areas with backlight
- Available colour, please refer to: <a href="https://www.zennio.com/finishes">https://www.zennio.com/finishes</a>
- Supports KNX Data Secure
- 2 analog/digital inputs
- Thermostat
- Touch confirmation through acoustic feedback
- Temperature, proximity and luminosity sensors
- Total data saving on KNX bus failure
- Integrated KNX BCU (TP1-256)
- Dimensions 70.5 x 70.5 x 22.6 mm
- Flush mount on back box
- Conformity with the CE, RCM directives (marks on the back side)

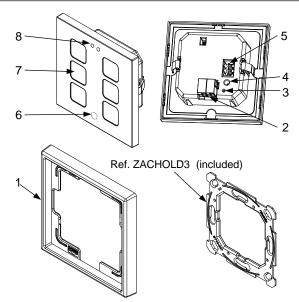


Figure 1: Tecla 70 X6

Decorative frame (sold separately)	<ol><li>KNX connector</li></ol>	<ol><li>Programming LED</li></ol>	4. Programming button
5. Inputs	<ol><li>Temperature probe</li></ol>	7. Touch area	<ol><li>Luminosity and proximity sensor</li></ol>

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. In order to perform a KNX Secure factory reset, while the device is in safe mode, press the button for 10 seconds until the programming LED changes its state.

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.

CONCEPT			DESCRIPTION	DESCRIPTION		
Type of device			Electric operation control device			
Voltage (typical)		1)	29 VDC SELV			
Voltag  KNX supply Maxim	Voltage range	,	21-31 VDC			
		Voltage	mA mW			
		29 VDC (typical)	ZVIT70X6 (9.8) ZVIT70X4 (8.3) ZVIT70X2 (6.6)	ZVIT70X6 (284.2) ZVIT70X4 (240.7) ZVIT70X2 (191.4)		
	Maximum consumption		ZVIT70X1 (6.3)	ZVIT70X1 (182.7)		
		24 VDC¹	ZVIT70X6 (12.5) ZVIT70X4 (10) ZVIT70X2 (10) ZVIT70X1 (10)	ZVIT70X6 (300) ZVIT70X4 (240) ZVIT70X2 (240) ZVIT70X1 (240)		
	Connection typ	pe	Typical TP1 bus connector for 0.8 mm Ø rigio	d cable		
External power supply			Not required			
Operation temperature			0 +55 °C			
Storage temperature			-20 +55 °C			
Operation humidity			5 95%			
Storage humidity			5 95%			
Complementary characteristics			Class B			
Protection class			III			
Operation type			Continuous operation	Continuous operation		
Device action type			Type 1			
Electrical stress period			Long			
Degree of protection			IP20, clean environment			
Installation			Flush mount on back 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	Data recovery according to parameterization		
Operation indicator			The programming LED indicates programm areas depending on their parameterization.	The programming LED indicates programming mode (red). Backlighting of touch areas depending on their parameterization.		
Weight			146 g	146 g		
Housing material			PC (front part) / PC+ABS (rear part) FR V0 h	PC (front part) / PC+ABS (rear part) FR V0 halogen free		

<sup>&</sup>lt;sup>1</sup> Maximum consumption in the worst-case scenario (KNX Fan-In model).

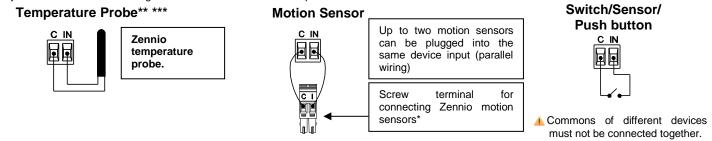
INPUTS SPECIFICATIONS AND CONNECTIONS			
CONCEPT	DESCRIPTION		
Number of inputs	2		
Inputs per common	2		
Operation voltage	3.3 VDC in the common		
Operation current	1 mA @ 3.3 VDC		
Switching type	Dry voltage contacts between input and common		
Connection method	Pluggable screw terminal block (0.2 Nm max.)		
Cable cross-section	0.2-1.5 mm <sup>2</sup> (IEC) / 28-14 AWG (UL)		
Maximum cable length	30 m		
NTC accuracy (@ 25 °C) <sup>2</sup>	±0.5 °C		
Temperature resolution	0.1 °C		
Maximum response time	10 ms		

<sup>&</sup>lt;sup>2</sup> For Zennio temperature probes.

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

#### INPUTS CONNECTION

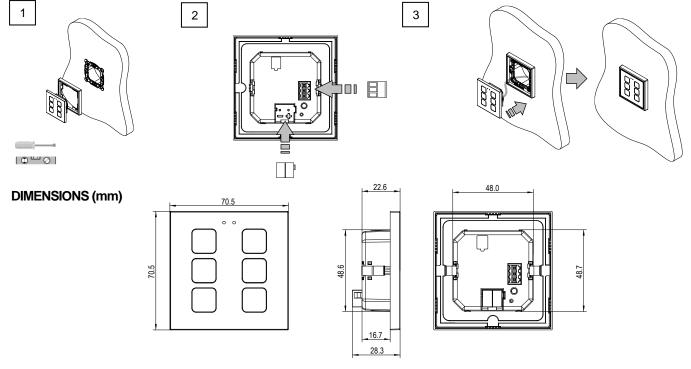
Any combination of the following accessories is allowed on the inputs:



- \* 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 installed in the frame, a proper thermal transfer must be ensured, for example, by installing it in the small internal notch of the Zennio decorative frame (sold separately).

### **INSTALLATION INSTRUCTIONS**

- 1. Fix the metal plate into a square or round back box by using the screws from the box, checking that it is levelled. Place the device in the frame.
- 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.





## 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.
- In order to improve the lifespan of the LED indicators, parameterising constant lighting is not recommended.
- The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at <a href="https://www.zennio.com/en/legal/weee-regulation">https://www.zennio.com/en/legal/weee-regulation</a>.
- This device contains software subject to specific licences. For details, please refer to <a href="https://zennio.com/licenses">https://zennio.com/licenses</a>.