

# Capacitive touch switches with 1, 2, 4 and 6 buttons

### ZVIF1V2 / ZVIF2V2 / ZVIF4V2 / ZVIF6V2

### **TECHNICAL DOCUMENTATION**

#### **FEATURES**

- Printed glass touch panel (image customizable through web application)
- Available in the following colors: silver (RAL 9006), anthracite black (RAL 9004) and white (RAL 9016)
- 1, 2, 4 or 6 touch areas
- 2 analog/digital inputs
- Thermostat
- Built-in temperature sensor
- · Backlighting of touch areas to indicate status
- · Luminosity and proximity sensor
- · Total data saving on KNX bus failure
- Integrated KNX BCU (TP1-256)
- Dimensions 81.9 x 81.9 x 36.7 mm (it protrudes 9 mm from the wall)
- Flush mount on back box
- Conformity with the CE, UKCA, RCM directives (marks on the back side)

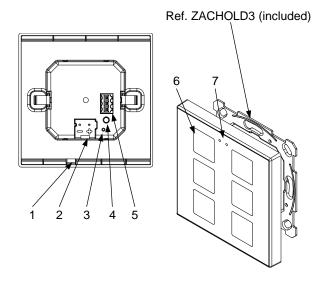


Figure 1: Flat 1/2/4/6 v2

Temperature sensor	<ol><li>KNX connector</li></ol>	3. Programming LED	4. Programming button
<ol><li>Inputs connector</li></ol>	6. Touch area	7. Luminosity and	d 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)		al)	29 VDC SELV	29 VDC SELV	
KNX supply	Voltage range		21-31 VDC		
		Voltage	mA	mW	
	Maximum	29 VDC (typical)	ZVIF6V2 (17.4)   ZVIF4V2 (16.2) ZVIF2V2 (12.2)   ZVIF1V2 (14.1)	ZVIF6V2 (504.6)   ZVIF4V2 (469.8) ZVIF2V2 (353.8)   ZVIF1V2 (408.9)	
	consumption	24 VDC¹	ZVIF6V2 (22.5)   ZVIF4V2 (20) ZVIF2V2 (15)   ZVIF1V2 (17.5)	ZVIF6V2 (540)   ZVIF4V2 (480) ZVIF2V2 (360)   ZVIF1V2 (420)	
	Connection ty	ре		Typical TP1 bus connector for 0.8 mm Ø rigid cable	
External power supply		Not required			
	Operation temperature		0 +55 °C		
Storage temp	Storage temperature		-20 +55 °C	-20 +55 °C	
Operation hu	midity		5 95%	5 95%	
Storage humidity		5 95%	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 protection		IP20, clean environment			
Installation			Flush mount on back box		
Minimum clea			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 depending on their parameterization.			
Weight		97 g			
Housing material		PC+ABS 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 (per input)	
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	

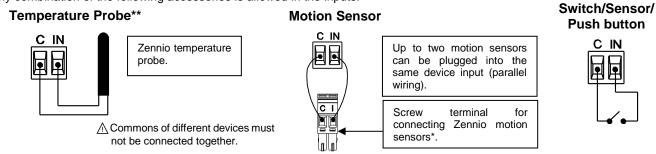
<sup>&</sup>lt;sup>2</sup> For Zennio temperature probes.

INTERNAL TEMPERATURE SENSOR SPECIFICATIONS		
CONCEPT	DESCRIPTION	
Measuring range	-30 +90 °C	
Temperature resolution	0.1 °C	
NTC accuracy (@ 25 °C) <sup>3</sup>	±0.5 °C	

<sup>&</sup>lt;sup>3</sup> The accuracy of the NTC sensor may be reduced in case of keeping the backlight status LEDs permanently on.

### INPUTS CONNECTION

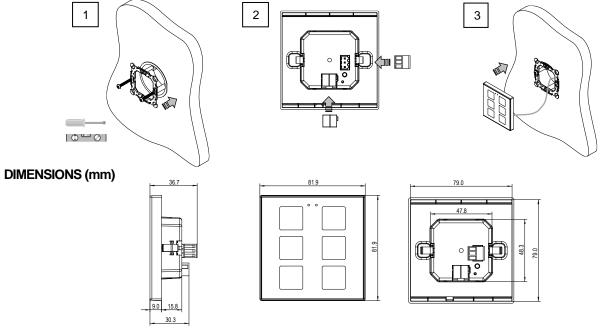
Any combination of the following accessories is allowed in the inputs:



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

### 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.
- 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 https://www.zennio.com/en/legal/weee-regulation.
- This device contains software subject to specific licences. For details, please refer to https://zennio.com/licenses.