

# KNX motion sensor with 0/1/2 capacitive buttons for detection in corridors

### ZPDW0V2/ZPDW1V2/ZPDW2V2

### **TECHNICAL DOCUMENTATION**

#### **FEATURES**

- Motion Detector (PIR) with 2 adjustable-sensitivity sectors
- Available in the following colors: silver (RAL 9006), anthracite black (RAL 9004), white (RAL 9016) and gloss white (RAL 9003)
- Detection length of up to 10 m
- 0,1 or 2 touch areas with backlight
- Touch confirmation through acoustic feedback
- · Proximity and luminosity sensor
- 6 motion detection channels
- 10 logic functions
- Total data saving on KNX bus failure
- Integrated KNX BCU (TP1-256)
- Dimensions 55.5 x 55.5 x 39.7 mm
- Flush-mounted in back box with trim frame
- Conformity with the CE, UKCA, RCM directives (marks on the back side)

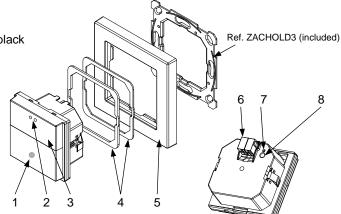


Figure 1: Presentia W0/W1/W2 v2

Detection notification LED	<ol><li>Luminosity and proximity sensor</li></ol>	<ol><li>Touch area</li></ol>	4. Levelling plates (1 and 1.5 mm)
5. Decorative frame*	6. KNX connector	7. Programming LED	8.Programming button

<sup>\*</sup> Sold separately.

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	DESCRIPTION			
Type of device		Electric operation control device	Electric operation control device			
Voltage (typical) Voltage range		29 VDC SELV				
			21-31 VDC	21-31 VDC		
KNX supply		Voltage	mA	mW		
	Maximum	29 VDC (typical)	ZPDW0V2 (5.1)	ZPDW0V2 (147.9)		
			ZPDW1V2 (7.2)	ZPDW1V2 (208.8)		
			ZPDW2V2 (7.2)	ZPDW2V2 (208.8)		
	consumption	24 VDC¹	ZPDW0V2 (10)	ZPDW0V2 (240)		
			ZPDW1V2 (10)	ZPDW1V2 (240)		
			ZPDW2V2 (10)	ZPDW2V2 (240)		
	Connection ty	pe		Typical TP1 bus connector for 0.8 mm Ø rigid cable		
External power supply		Not required				
Operation temperature		0 +45 °C <sup>2</sup>	0 +45 °C <sup>2</sup>			
Storage temperature		-20 +55 °C	-20 +55 °C			
Operation humidity		5 95%	5 95%			
Storage humidity		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 back box	Flush mount on back box			
Minimum clearances		Not required	Not required			
Response on KNX bus failure		Data saving according to param	Data saving according to parameterization			
Response on	Response on KNX bus restart			Data recovery according to parameterization		
				The programming LED indicates programming mode (red).		
Operation indicator			The motion sensor initialization, after powering up the device, is indicated			
			through the detection LED (red blinking).			
			The motion detections are indicated by a red flash (in case the LED is			
		enabled).	/			
Weight		71 g				
Housing material			PC UL94 V2 and PC+ABS UL94	PC UL94 V2 and PC+ABS UL94 V0 halogen free housing and HDPE lens		

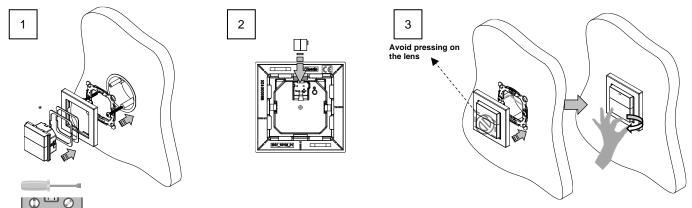
<sup>&</sup>lt;sup>1</sup> Maximum consumption in the worst-case scenario (KNX Fan-In model).

<sup>&</sup>lt;sup>2</sup> Temperatures over 35 °C could decrease the detection range

### INSTALLATION INSTRUCTIONS

- 1. Fix the metal plate into a square or round flush box using the screws from the box. Fit the device and the frame together. If necessary, insert the metallic levelling plate or plates (included) to ensure that the device has the desired depth.
- 2. Connect the KNX bus to the back of the device.
- 3. Fit the device and frame into their final position and check that the strength of the clips is enough to fix the device. Avoid pressing on the lens during this step in order to prevent accidental damages to the device. Finally, remove the protective plastic film from the lens.

To uninstall proceed the reverse way.



\* (Optional) Insert the metallic levelling plate/s so the frame stays at the desired level.

#### INSTALLATION ADVICES

- 1. Avoid the installation near high or low temperature air flows, and HVAC or heating equipment.
- 2. Avoid any objects or furniture (including transparent materials, such as glass) that might block direct visibility between the sensor and the detection and transit areas.
- 3. The detection sensitivity can be affected in the presence of large high-temperature surfaces, such as radiant floor.

# **MOTION DETECTOR FEATURES**

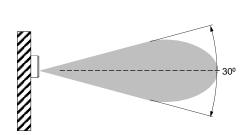


Figure 2: Detection angle (side view)

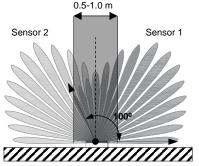


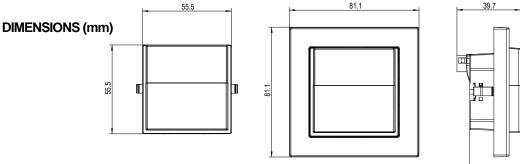
Figure 3: Detection sectors (upper view)

Maximum motion detection range = 10 m

For perpendicular movement to the sensor, the motion detection area is decreased (see external document: *installation tips*).

Each beam in Figure 3 represents an independent detection sector. Motion is detected whenever the moving object crosses from one sector to another. If the motion is perpendicular towards the sensor, the detection range may be reduced as it is more unlikely that the object crosses from one sector to another.

In particular, in the shaded zone the detection range for perpendicular or static movements (short movements) is appreciably smaller. See external document: installation tips.





### 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 <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 https://zennio.com/licenses.