

## Motion detector with luminosity sensor for wall mounting

## ZPDW0VT TECHNICAL DOCUMENTATION

### **FEATURES**

- Motion Detector (PIR) with 2 adjustable-sensitivity sectors
- Detection length of up to 10 m
- · Lighting level sensor
- 6 motion detection channels
- Occupancy detection
- 10 logic functions
- Total data saving on KNX bus failure
- Integrated KNX BCU (TP1-256)
- Dimensions 55.5 x 55.5 x 40.0 mm
- · Flush-mounted in back box with trim frame
- Conformity with the CE, UKCA, RCM directives (marks on the back side)

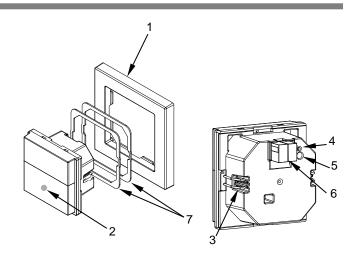


Figure 1: Presentia W0 vT

<ol> <li>Decorative frame*</li> </ol>	<ol><li>Detection notif</li></ol>	<ol><li>Fixing clip</li></ol>	
4. Programming LED	5. Programming button	<ol><li>KNX connector</li></ol>	7. Levelling plates (1 and 1.5 mm)

<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 :	SPECIFICATION	ONS				
CONCEPT		DESCRIPTION				
Type of device		Electric operation control device				
	Voltage (typical)		29 VDC SELV			
Voltage range		)	21-31 VDC			
KNX supply	Maximum consumption	Voltage	mA	mW		
		29 VDC (typical)	5.3	153.7		
	Consumption	24 VDC <sup>1</sup>	10	240		
	Connection type		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				
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				
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). 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				
PCB CTI index		175 V				
Housing mate	erial		PC FR V2 halogen free housing a	PC FR V2 halogen free housing and HDPE lens		

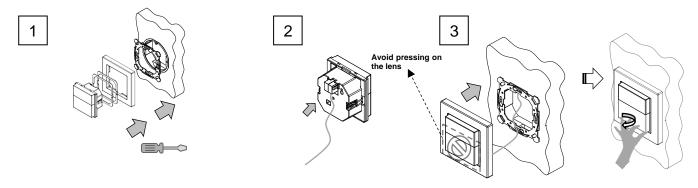
<sup>&</sup>lt;sup>1</sup> Maximum consumption in the worst-case scenario (KNX Fan-In model).

<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.



#### **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

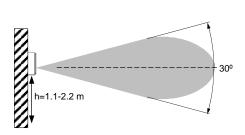


Figure 2: Detection angle (side view)

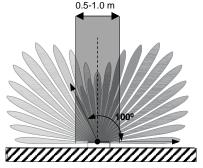


Figure 3: Detection sectors (upper view)

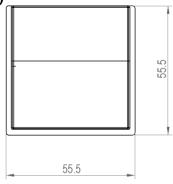
Maximum motion detection range = 10 m h=1.1-2.2 m and sensitivity = 100%

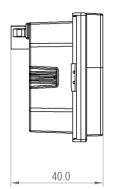
For perpendicular movement to the sensor, the motion detection area is decreased (see external document: *installation tips*).

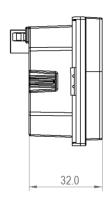
Each beam in Figure 3 represents an independent detection sector. Motion is detected whenever the moving object crosses from one sector to another. If the motion is perpendicular towards the sensor, the detection range may be reduced as it is more unlikely that the object crosses from one sector to another.

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

## **DIMENSIONS (mm)**









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