• Zennio

Presence detector with luminosity sensor for ceiling mounting - detection area of 30m diameter

ZPDC30LV2

TECHNICAL DOCUMENTATION

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Presentia C v2

FEATURES Presence Detector through PIR technology with four adjustable-sensitivity sectors. Lighting level sensor with human eye spectral sensitivity.

- 6 presence detector channels.
- 2 constant light regulation channels.
- Occupancy detection.
- 10 logic functions.
- Total data saving on KNX bus failure.
- Integrated KNX BCU.
- Dimensions Ø85 x 47mm.
- Surface-mounted or flush-mounted.
- Conformity with the CE directives (CE-mark on the back side).

Figure 1: Presentia C v2

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1. Orientation marks	2. Programming LED	3. 4x Detection notification LED	4. Base
5. Programming button	6. Retaining spring	7. KNX connector	 Auxiliary Sensor Input (Without use)

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.

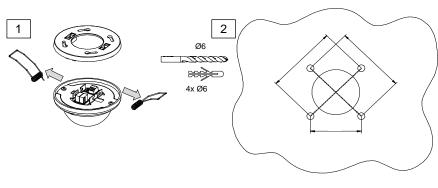
Programming LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. During the start-up (reset or after KNX bus failure) and if the device is not in safe mode, it emits a red flash following a blue blinking sequence during the motion sensor initialization.

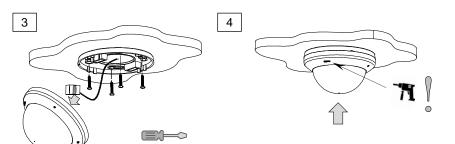
GENERAL SPECIFICATIONS						
CONCEPT		DESCRIPTION	DESCRIPTION			
Type of device		Electric operation control devi	Electric operation control device			
Voltage (typical)		29VDC SELV				
Vo KNX supply Ma	Voltage range		2131VDC	2131VDC		
	Maximum consumption	Voltage	mA	mW		
		29VDC (typical)	7	203		
		24VDC ¹	10	240		
Connectio		ре	Typical TP1 bus connector fo	Typical TP1 bus connector for 0.80mm Ø rigid cable		
External power supply		Not required				
Operation temperature		0°C +35°C	0°C +35°C			
Storage temperature		-20°C +55°C				
Operation humidity		5 95% (No condens.)	5 95% (No condens.)			
Storage humidity		5 95% (No condens.)	5 95% (No condens.)			
Complementary characteristics		Class B	Class B			
Protection class						
Operation type		Continuous operation	Continuous operation			
Device action type		Type 1	Type 1			
Electrical stress period		Long	Long			
Degree of protection		IP20, clean environment	IP20, clean environment			
Installation		Surface-mounted or flush-mou	Surface-mounted or flush-mounted.			
Minimum clearances		Not required				
Response on KNX bus failure		Data saving according to para	Data saving according to parameterization			
Response on	KNX bus restar	t		Data recovery according to parameterization		
				The programming LED indicates programming mode (red) or motion		
Operation indicator				sensors initialization (blue blinking).		
			The motion detection of each sector is indicated by a white flash.			
Weight		90g				
PCB CTI index		175V				
Housing material			PC/ABS FR V0 halogen free h	PC/ABS FR V0 halogen free housing and HDPE lens.		

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

SURFACE-MOUNTED INSTALLATION

- 1. Please remove the retaining springs.
- 2. Drill four holes (Ø6mm) on the ceiling forming a 43mm-side square shape and insert plugs.
- 3. Anchor the base by using screws. Recover the wiring and connect it.
- 4. Fix the device to the base. Pay attention to the orientation marks.





FLUSH-MOUNTED INSTALLATION

- 1. Make a Ø40mm hole on the ceiling.
- 2. Recover the wiring and connect it to the device.
- 3. Insert the device into the ceiling hole and allow the retaining springs to close.
- 4. Fix it and pay attention to the orientation marks.

h=2.7m / 4m □ Ø_m 30m 25m □ Ø_{pr} 10m 10m ■ Ø₀ 6m 6m

 $Ø_m$: Tangential motion detection area. For perpendicular movement to the sensor, the motion detection area is decreased (see installation tips). $Ø_{pr}$: Presence detection area (1 meter over the floor) $Ø_0$: Maximum detection area (detection not affected by sensitivity parametrization)

Figure 2. Presence and movement detection ranges.

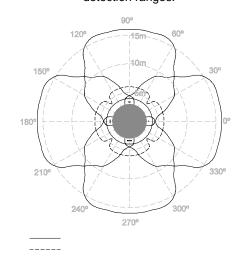
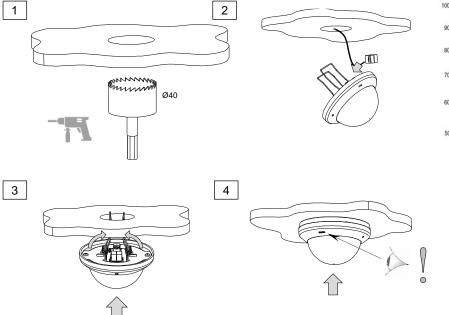


Figure 3. Detection sectors



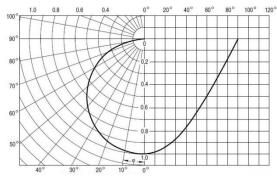


Figure 4. Illuminance sensor sensitivity.

Important: All the ranges have been verified for heights of 2.7 and 4 meters. In case of differents heights, those ranges will be altered.

- 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 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.