

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

ZPD-C30L Technical Documentation

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.

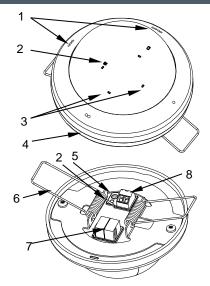


Figure 1. Presentia C

1. Orientation marks	2. Programming LED	3. 4x Detection notification LED	4 . Base
5. Programming button	6. Retaining spring	7 I/NV connector	8. Auxiliary Sensor Input
		7. KNX connector	(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.

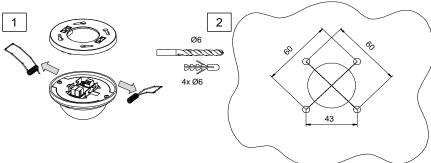
Programming LED: programming mode indicator (red). When the device enters into safe mode, it blinks (red) every half second. During the start-up (reset or after KNX bus failure) and if the device is not in safe mode, it emits a blue blinking sequence during the motion sensor initialization.

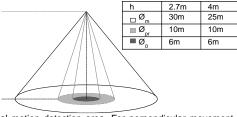
GENERAL SPECIFICATIONS						
CONCEPT			DESCRIPTION			
Type of device			Electric operation control device			
Voltage (typical)		al)	29VDC SELV			
KNX supply	Voltage range		2131VDC			
		Voltage	mA	mW		
	Maximum	29VDC (typical)	8.15	236.35		
	consumption	24VDC ⁽¹⁾	10	240		
	Connection type		Typical TP1 bus connector for rigid cable 0.80mm Ø			
External power supply			Not required			
Operation temperature			0°C to +35°C			
Storage temperature			-20°C to +55°C			
Operation humidity			5 to 95% RH (no condensation)			
Storage humidity			5 to 95% RH (no condensation)			
Complementary characteristics		eristics	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			Surface-mounted or flush-mounted.			
Minimum clearances			Not required			
Response on KNX bus failure		ailure	Data saving according to parameterization			
Response on KNX bus restart		estart	Data recovery according to parameterization			
Operation indicator			The programming LED indicates programming mode (red) or motion sensors initialization (blue blinking). The motion detection of each sector is indicated by a white flash.			
Weight			89.5g			
PCB CTI index			175V			
Housing material			PC/ABS FR V0 halogen free housing and HDPE lens.			
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⁽¹⁾ Maximum consumption in the worst case scenario (KNX Fan-In model)

SURFACE-MOUNTED INSTALLATION

- 1. Please remove the retaining springs.
- 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.





 \mathcal{O}_{m} : Tangential motion detection area. For perpendicular movement to the sensor, the motion detection area is decreased (see installation tips). \mathcal{O}_{m} : Presence detection area (1 meter over the floor)

h=2.7m / 4m

 \emptyset_0 : Maximum detection area (detection not affected by sensitivity parametrization)

Figure 2. Presence and movement detection ranges.

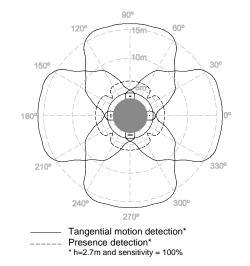
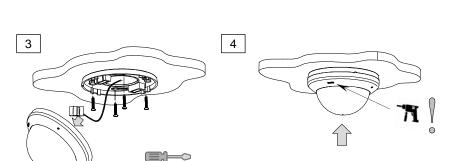
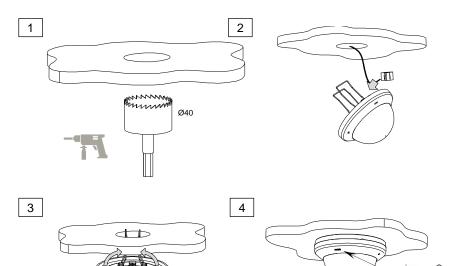


Figure 3. Detection sectors



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.



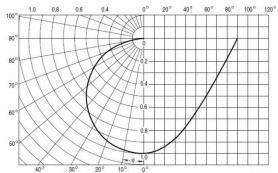


Figure 4. Illuminance sensor sensitivity.

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.



SAFETY INSTRUCTIONS

- 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.

