FEATURES

- Presence Detector through PIR technology with four adjustable-sensitivity sectors
- Lighting level sensor with human eye spectral sensitivity
- Built-in temperature, humidity and CO2 sensors
- CO2 controller
- Supports KNX Data Secure
- 2 analog/digital inputs
- 6 presence detector channels
- 2 constant light regulation channels
- Occupancy detection
- 10 logic functions
- Thermostat
- Total data saving on KNX bus failure
- Integrated KNX BCU (TP1-256)
- Dimensions Ø 84 x 47 mm
- Surface-mounted or flush-mounted
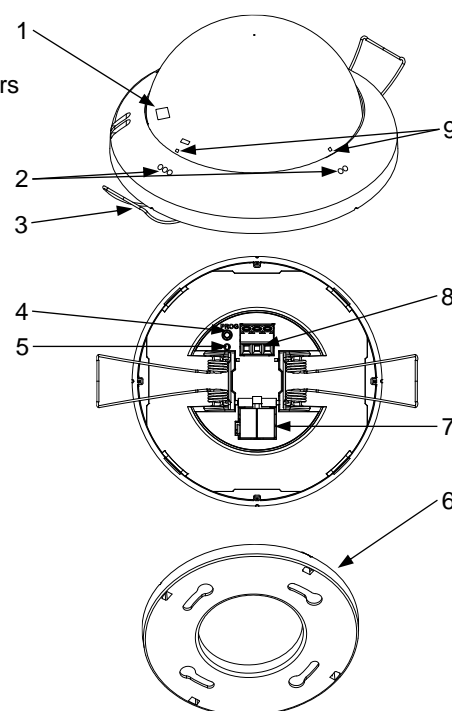- Conformity with the CE, UKCA directives (marks on the back side)

Figure 1: Presentia C MultiSensor

1. Temperature, humidity and CO2 sensor	2. Orientation marks	3. Retaining spring	4. Programming button	5. Programming LED
6. Base	7. KNX connector	8. Analogic/Digital inputs	9. 4x Detection notification LED	

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. In order to perform a KNX Secure factory reset, while the device is in safe mode, press the button for 10 seconds until the programming LED changes its state.

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	
Type of device			Electric operation control device	
KNX supply	Voltage (typical)		29 VDC SELV	
	Voltage range		21-31 VDC	
	Maximum consumption	Voltage	mA	mW
		29 VDC (typical)	8.4	243.6
		24 VDC[1]	10	240
	Connection type		Typical TP1 bus connector for 0.8 mm Ø rigid cable	
External power supply			Not required	
Operation temperature			0 .. +35 °C	
Storage temperature			-20 .. +55 °C	
Operation humidity			5 .. 95%	
Storage humidity			5 .. 95%	
Complementary characteristics			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			Data saving according to parameterization	
Response on KNX bus restart			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			66 g	
Housing material			PC/ABS FR V0 halogen free housing and HDPE lens.	

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

TEMPERATURE, HUMIDITY AND CO2 BUILT-IN SENSOR

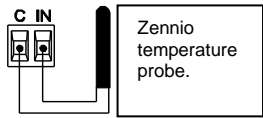| CONCEPT	DESCRIPTION
Temperature measurement range	-10 .. 60 °C
Temperature resolution / accuracy	0.1 °C / ±0.8 °C (@ 25 °C)
Humidity measurement range	0 .. 100% RH
Humidity response time	1 s
Humidity resolution / accuracy	1% / ±6% RH
Humidity drift	±0.25% per year in normal air
CO2 measurement range	400 - 2000 ppm
CO2 resolution / accuracy	10 ppm / ±50 ppm
CO2 drift	±5 ppm per five years

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	Screw terminal block (0.2 Nm max.)
Cable cross-section	0.5-1 mm² (IEC) / 26-16 AWG (UL)
Maximum cable length	30 m
NTC accuracy (@ 25 °C) [2]	±0.5 °C
Temperature resolution	0.1 °C
Maximum response time	10 ms

[2] For Zennio temperature probes.

h = 2.7 m / 4 m

h	2.7 m	4 m
$\varnothing_{m, tangential}$	30 m	25 m
$\varnothing_{m, radial}$	20 m	16 m
$\varnothing_{pr}$	10 m	10 m
$\varnothing_0$	6 m	6 m

$\varnothing_m$: Motion detection area. For radial movement, the motion detection area is lower than tangential one (see installation tips).
$\varnothing_{pr}$: Presence detection area (1 meter over the floor)
$\varnothing_0$: Maximum detection area (detection not affected by sensitivity configuration)

Figure 2. Presence and movement detection ranges

— Tangential motion detection*
---- Presence detection*
* h=2.7 m y sensitivity = 100%

Figure 3. Detection sectors

Figure 4. Illuminance sensor sensitivity

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

INPUTS CONNECTION

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

Temperature Probe*

Zennio temperature probe.

* Zennio temperature probe or any NTC with known resistance values at three points in the range [-55, 150 ºC].

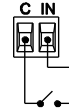⚠ Commons of different devices must not be connected together.

Motion Sensor

Up to two motion sensors can be plugged into the same device input (parallel wiring).
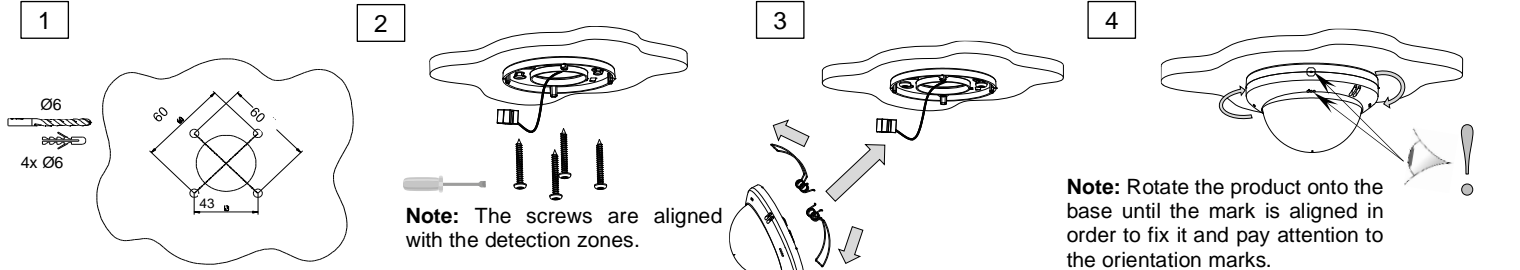
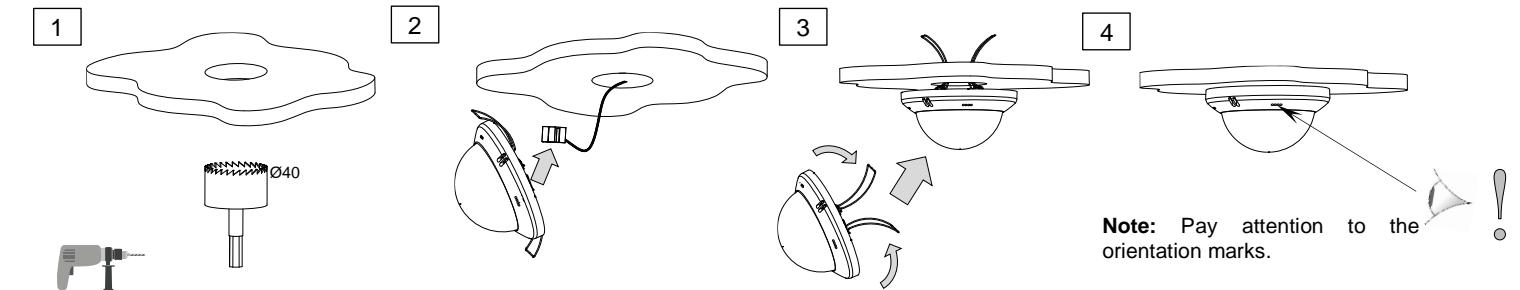Screw terminal for connecting Zennio motion sensors.

Switch/Sensor/ Push button

IMPORTANT:
The CO2 sensor requires the room to be ventilated once a week to ensure correct measurement.
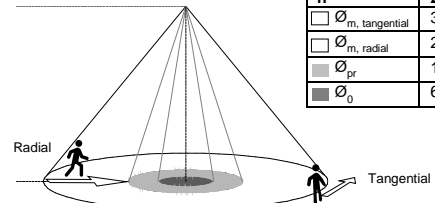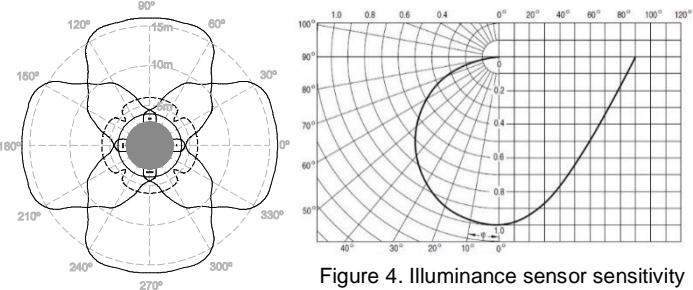
SURFACE-MOUNTED INSTALLATION

1

Ø6
4x Ø6
60
60
43

2

Note: The screws are aligned with the detection zones.

3

4

Note: Rotate the product onto the base until the mark is aligned in order to fix it and pay attention to the orientation marks.

FLUSH-MOUNTED INSTALLATION

1

Ø40

2

3

4

Note: Pay attention to the orientation marks.

⚠ 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 (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 https://zennio.com/licenses.