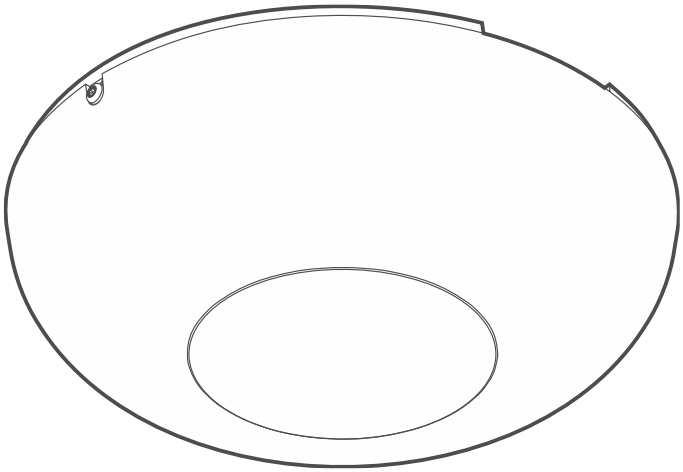
Bus ceiling PIR motion detector
with lighting feature (surface mount)

SLIM-S-PIR-LUNA BUS

Firmware version 1.00

EN



CE

slim-s-pir-luna_bus_en 04/26

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IMPORTANT

The device should be installed by qualified personnel.

Prior to installation, please read carefully this manual.

Changes, modifications or repairs not authorized by the manufacturer shall void your rights under the warranty.

Description of symbols on the device:

⎓ Direct current (DC).

CE The device meets the requirements of the applicable EU directives.

The device is designed for indoor installation.

The device must not be disposed of with other municipal waste. It should be disposed of in accordance with the existing rules for environment protection (the device was placed on the market after 13 August 2005).

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Please visit us at:
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The declaration of conformity may be consulted at www.satel.pl/ce

Signs in this manual

Caution – information on the safety of users, devices, etc.

Note – suggestion or additional information.

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The SLIM-S-PIR-LUNA BUS ceiling detector uses infrared to detect motion. It also provides a lighting feature. It is designed for mounting on the surface of the ceiling. The detector can be connected to the RS communication bus of a SATEL control panel that supports bus devices.

1. Features

- Motion detection using passive infrared sensor (PIR).
- Maximum coverage area (see Fig. 12):
  – ø 6 m / 28 m^2 – mounted at 2.4 m,
  – ø 10 m / 79 m^2 – mounted at 3.5 m.
- Adjustable detection sensitivity.
- Digital motion detection algorithm.
- Digital temperature compensation.
- RS communication bus.
- Programming settings via the RS bus.
- Firmware update via the RS bus.
- Built-in temperature sensor (measuring range: -10 °C...+55°C).
- Lighting feature implemented using LEDs.
- Possibility to control the lighting remotely.
- LED indicator.
- Supervision of motion detection system.
- Powered by 12 VDC (±15%).
- Supply voltage control.
- Tamper protection against enclosure opening and removal from mounting surface.
- Mounted on the surface of the ceiling.

2. Description

The detector will report alarm when the infrared sensor (PIR) detects motion.

Tamper protection

The detector will report tamper after enclosure opening / removal from the mounting surface. The detector reports tamper as long as it detects it.

Lighting feature

The light sources are 4 white LEDs. The way the lighting works depends on the system settings.

When the lighting is ON, the temperature data from the detector may be incorrect.

LED indicator

The LED indicator indicates:

- warm-up – flashing alternately different colors for about 30 seconds,
- alarm – ON in blue for 2 seconds,
- trouble – ON in blue for entire duration of the trouble.

Supervision features

In the event of the voltage drop below 9 V (±5%) for more than 2 seconds or the motion detection system failure, the detector will indicate a trouble. The trouble is indicated by turning on the LED indicator. The detector reports / indicates the trouble for the entire duration of its occurrence.

3. Electronics module

Do not remove the electronics board from the plastic cover to avoid damage to the components on the board.

1

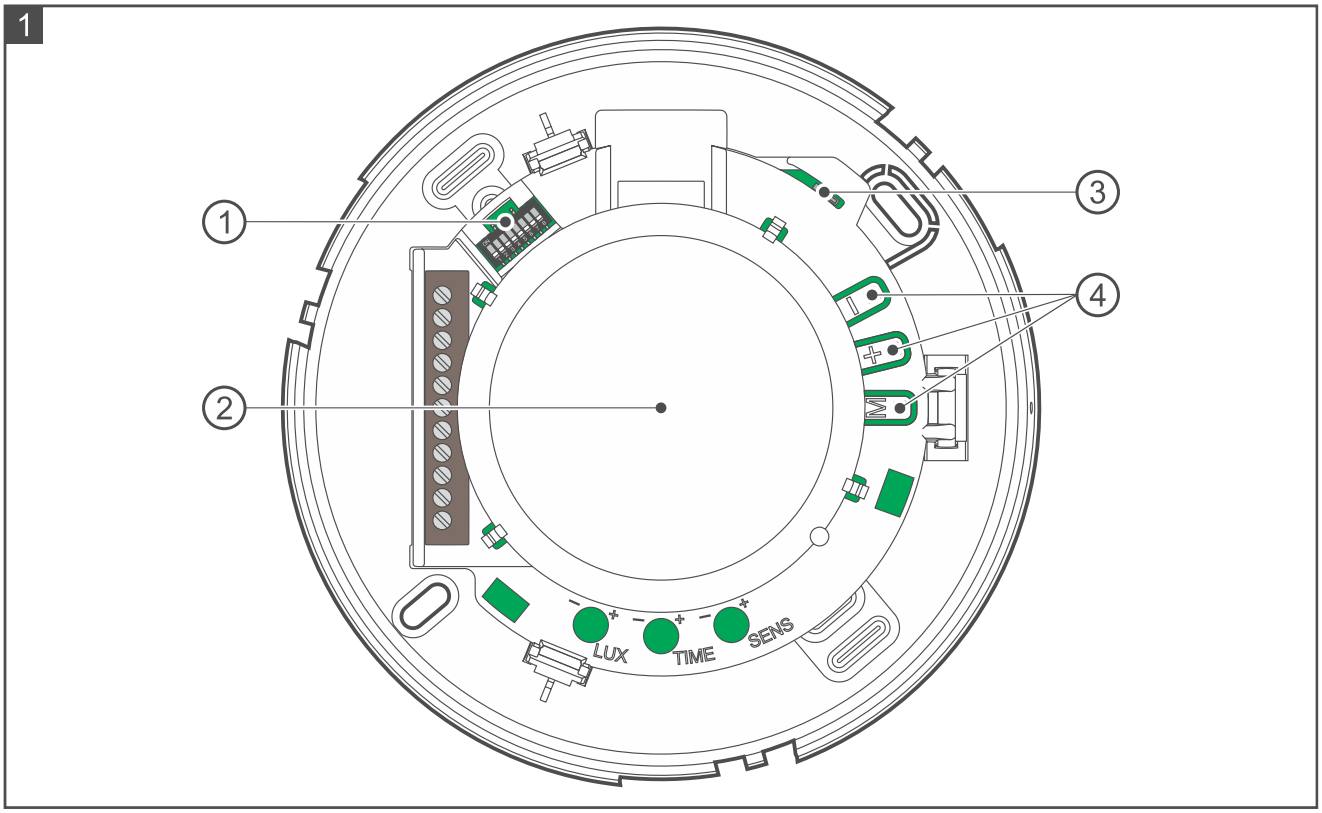


Figure 1 shows the inside of the detector after opening the enclosure.

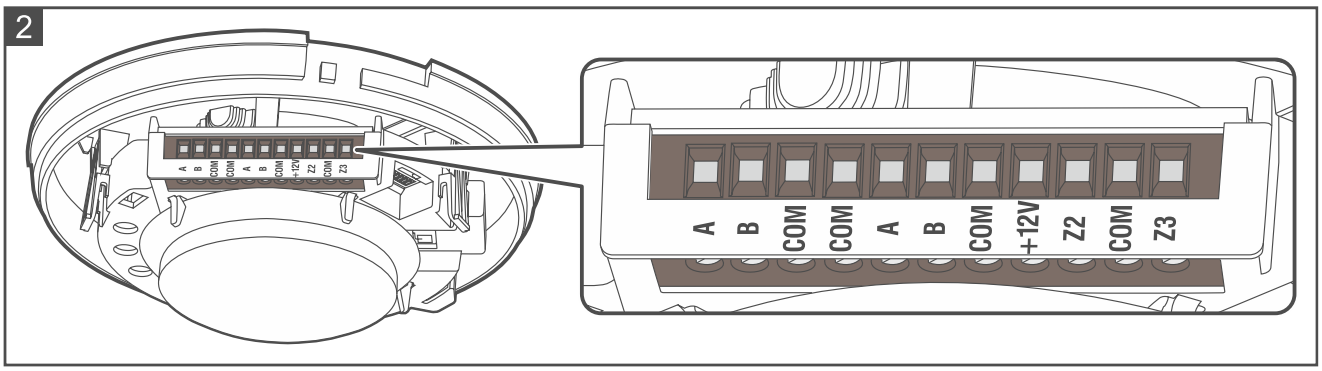
(1) tamper switch activated by cover removal.

(2) lens.

The PIR sensor (dual element pyrosensor), the LED indicator and the LEDs for lighting are under the lens. The tamper switch activated by removing the detector from the surface is on the other side of the electronics module.

Terminals

2

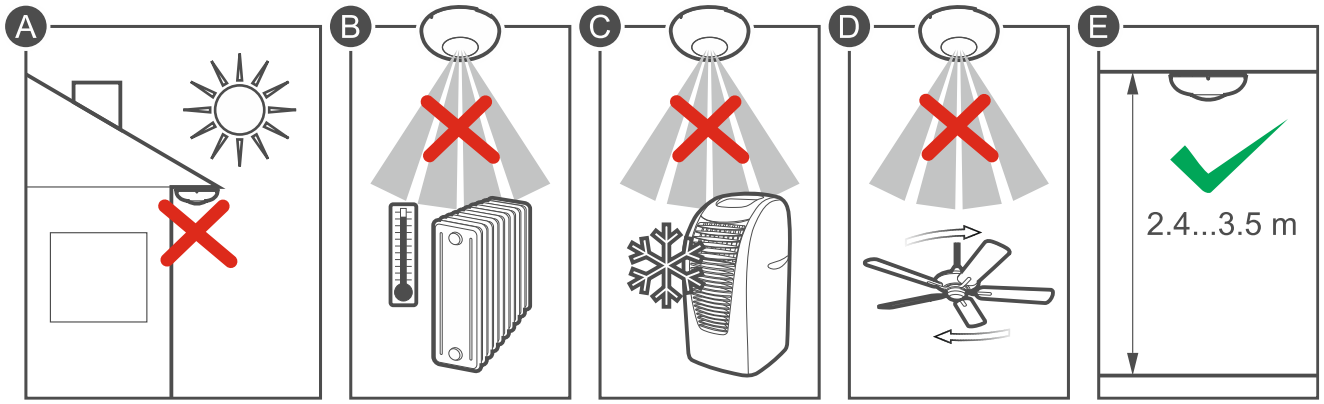


A, B - RS communication bus.
COM - common ground.
+12V - power input.
Z2 - terminal for future use.
Z3 - terminal for future use.

4. Installation

Disconnect power before making any electrical connections.

Tips for installation



- The detector should be installed indoors, in spaces with normal air humidity.
- Do not install the detector outdoors (A).
- Do not point the detector towards heat sources (B), air conditioners (C) or fans (D).
- No object should obstruct the detector's field of view.
- Install the detector on the surface of the ceiling, at a height of 2.4...3.5 m (E).

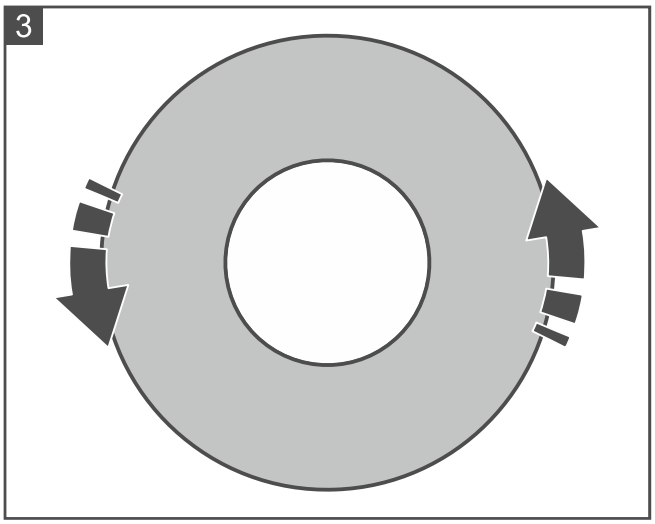
If you want to install the detector at a height other than the recommended, make sure the coverage area of the detector mounted at that height is optimal. The maximum coverage area of the detector mounted at a height of 4.5 m is ø 8 m [50 m²].

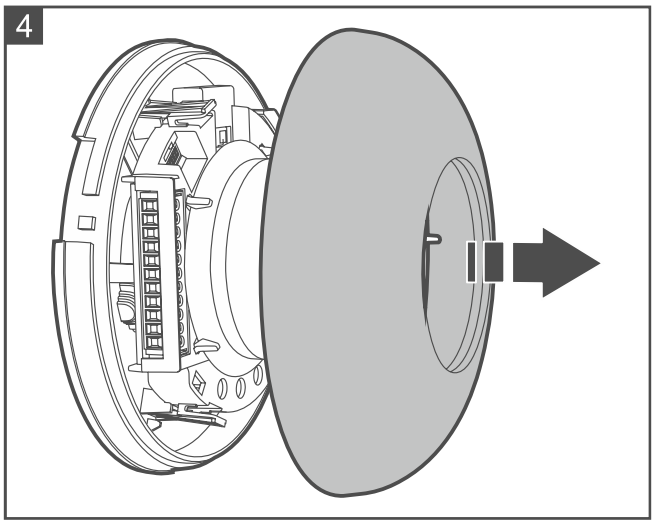
RS communication bus

- Use a UTP cable (unshielded twisted pair).
- The length of the bus must not exceed 1200 meters.
- If the device is connected at either end of the bus, place a 120 Ω ± 20% resistor between the A and B terminals.
- Connect the COM terminals of all devices on the bus with an additional wire.

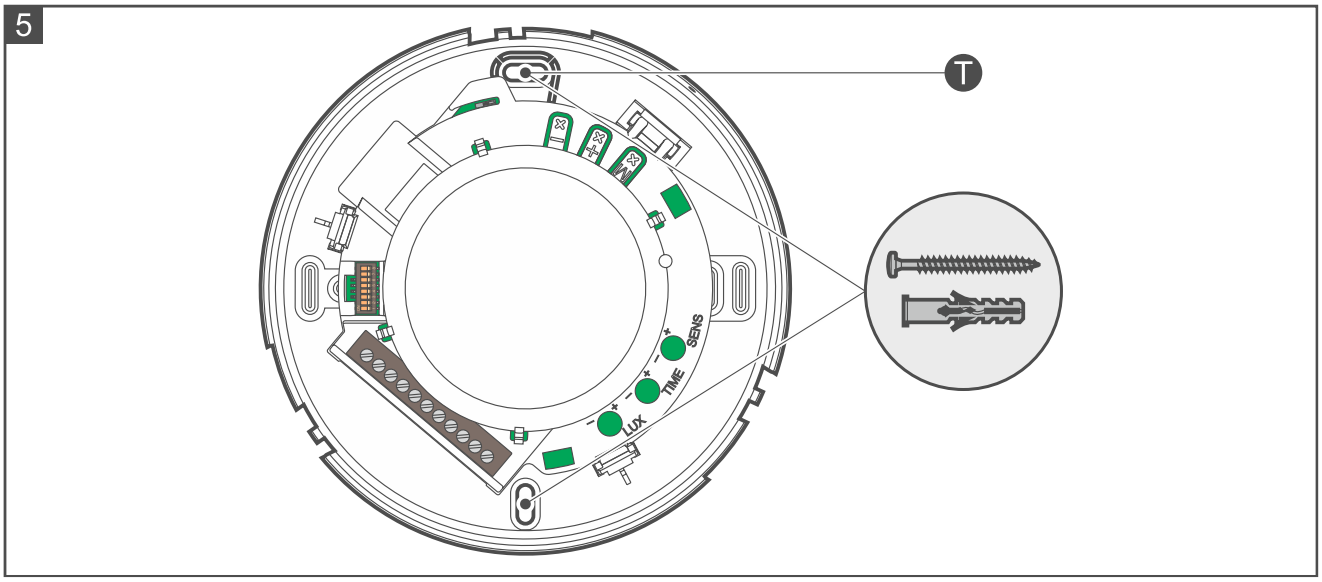
Mounting

1. Turn the enclosure cover counter-clockwise (Fig. 3) and remove it (Fig. 4).





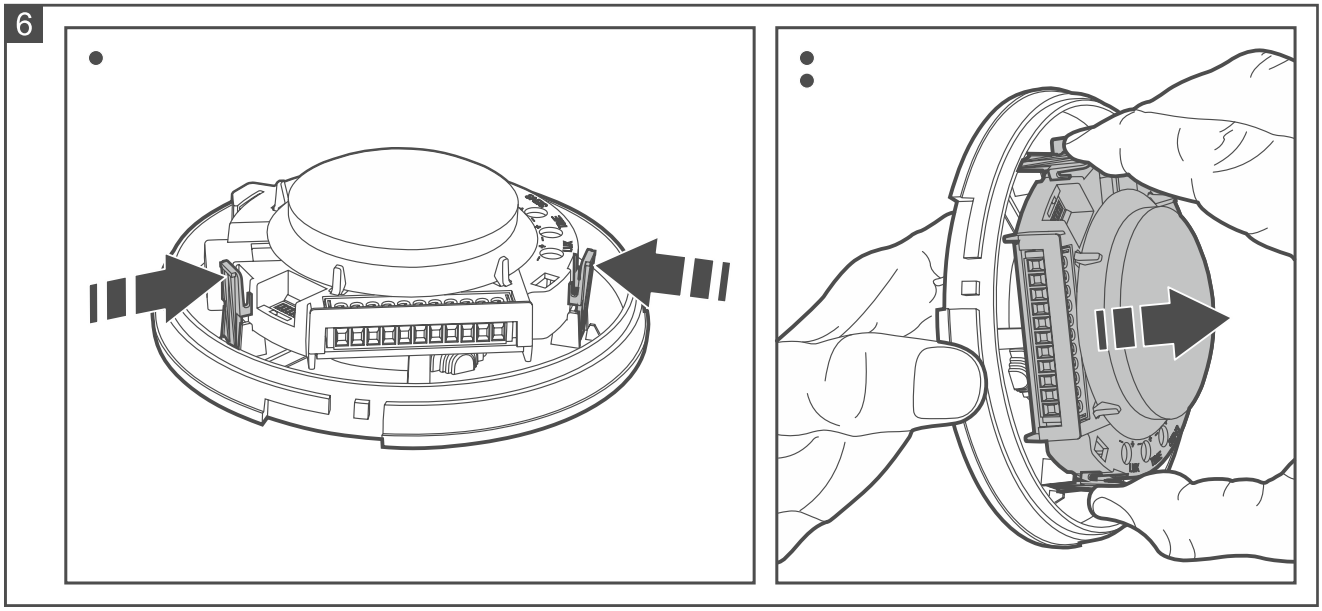
2. Place the enclosure base against the ceiling and mark the location of the mounting holes (Fig. 5).

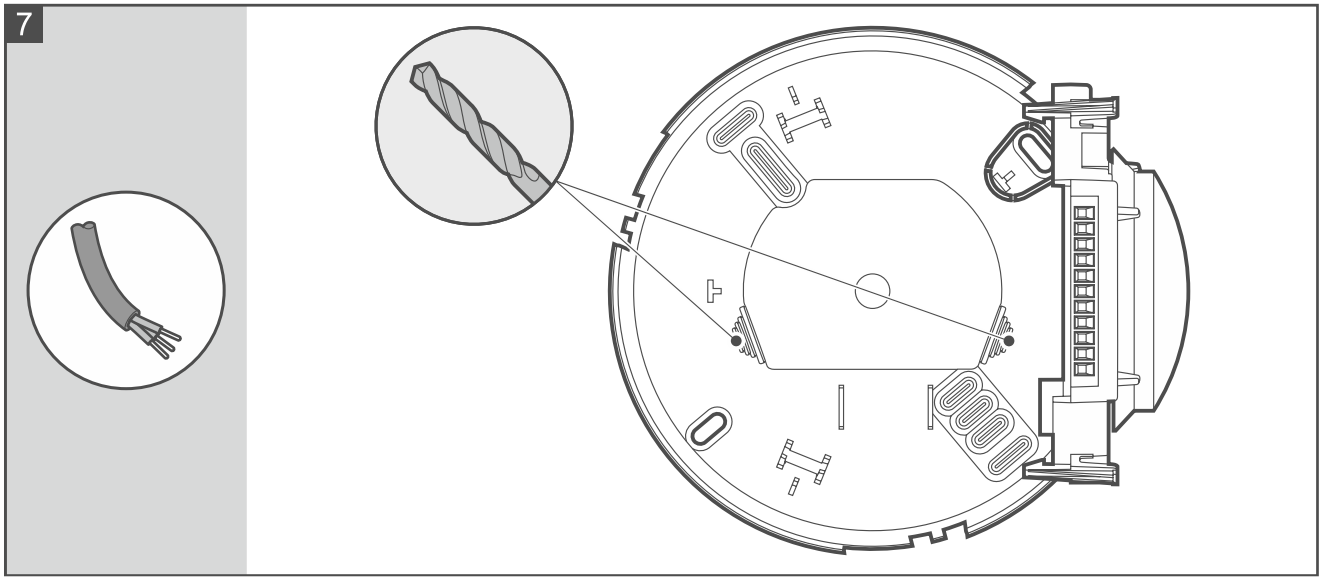


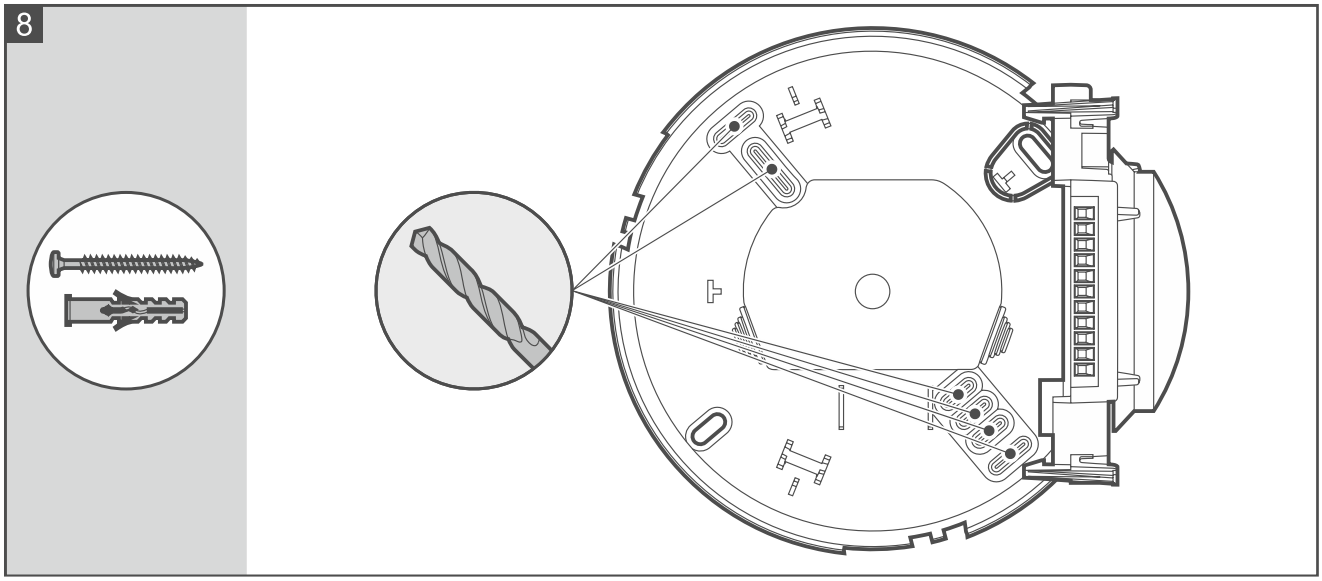
In order for the detector to detect removal from the surface, fasten the screw in the place marked as T in Fig. 5.

Figure 8 shows the places where additional mounting holes can be made. They are visible after you lift up the electronics module (see Fig. 6).

3. Drill the holes in the ceiling for wall plugs (anchors). The wall plugs provided with the detector are intended for concrete or brick. For other types of surface (drywall, styrofoam), use other appropriately selected wall plugs.
4. Press the catches and lift up the electronics module (Fig. 6).
5. Make the opening for a cable in the enclosure base (Fig. 7).
6. Run the cable inside the detector enclosure.
7. Secure the enclosure base to the ceiling with screws (Fig. 5 and 8).



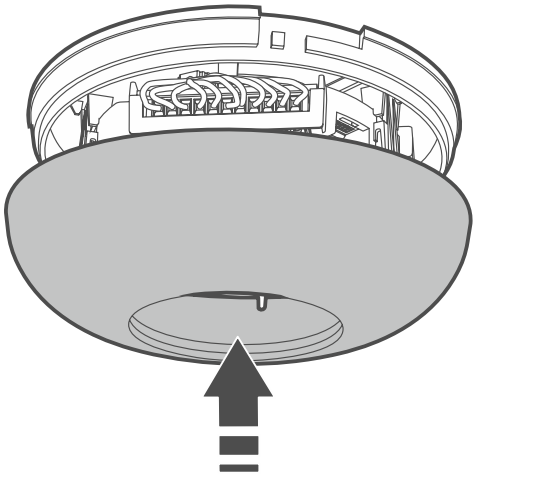




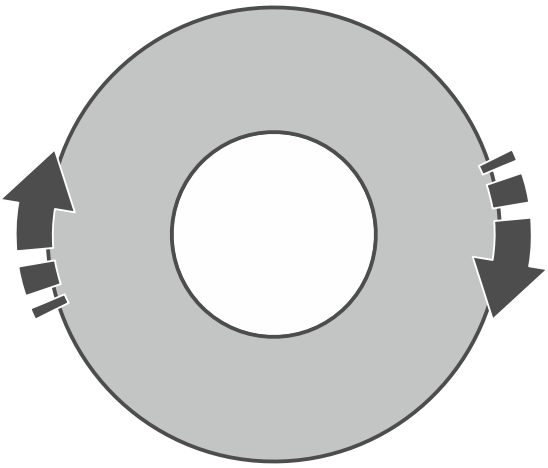
8. Screw the wires to the detector terminals.
9. Press the electronics module down onto the base to lock it in place.
10. Place the enclosure cover in the base (Fig. 9). Note the position of the cover locking screw holes.

11. Turn the cover clockwise until you feel resistance (Fig. 10).

9

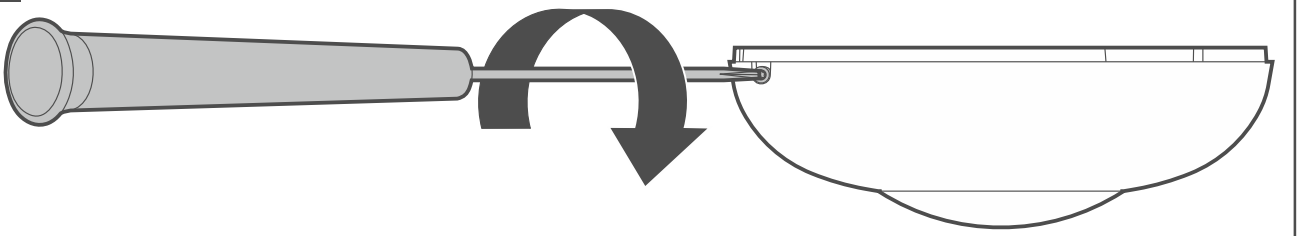


10



12. Lock the cover in place with a screw (Fig. 11). The screw is in the bag provided with the detector. Use a Torx T6H screwdriver.

11

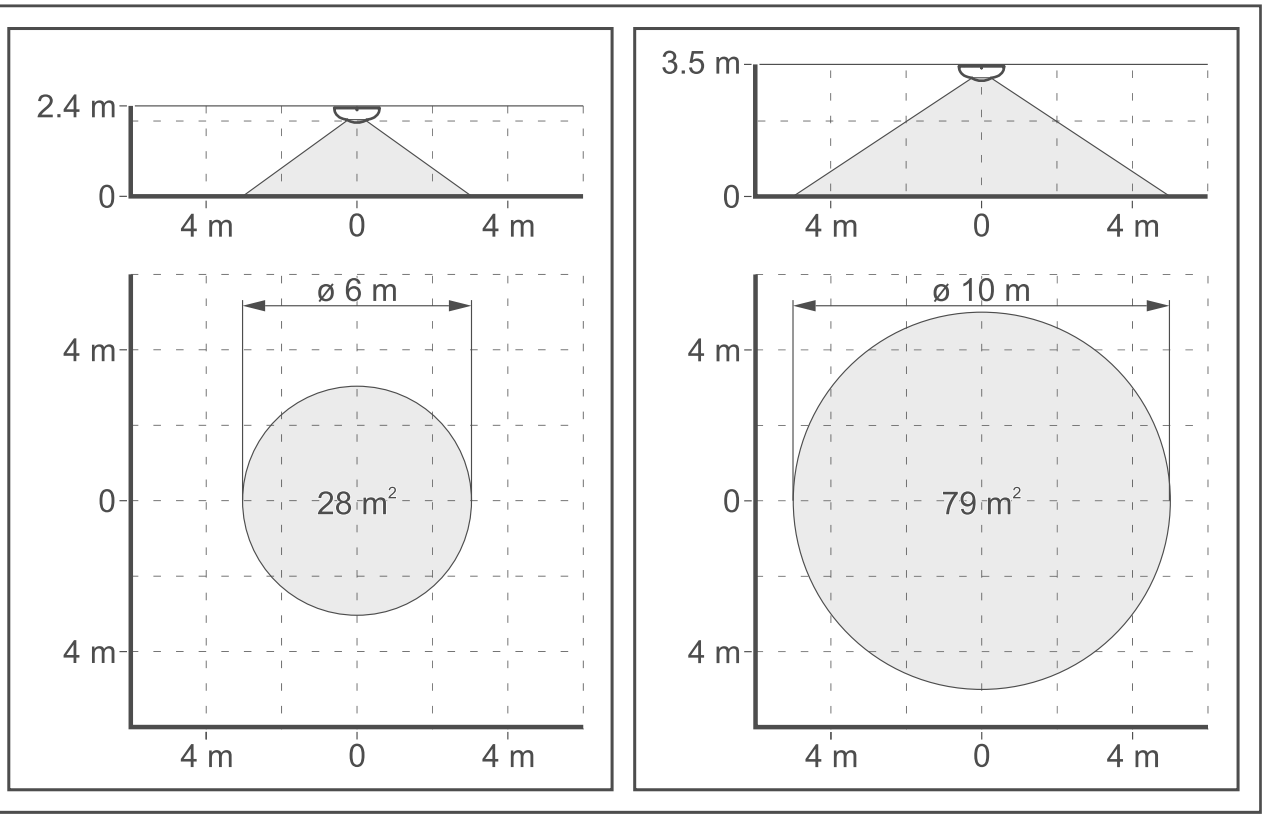


13. Power on the detector. The LED indicator will be flashing alternately different colors for 30 seconds to indicate the detector warm-up.
14. Add the detector to the system and program its settings (see the manual of the control panel to which the detector is connected).

5. Walk test

1. Check if moving within the detector coverage area will make the LED indicator turn ON. Figure 12 shows the maximum coverage area of the detector.
2. If necessary, change the detector sensitivity (see the manual of the control panel to which the detector is connected).

12



6. Specifications

Supply voltage ..... 12 VDC ±15%
Standby current consumption ..... 11 mA
Maximum current consumption ..... 65 mA
Detectable speed ..... 0.3...3 m/s
Alarm signaling period ..... 2 s
Warm-up period ..... 30 s
Recommended installation height ..... 2.4...3.5 m
Maximum coverage area
- mounted at 2.4 m ..... ø 6 m [28 m^2]
- mounted at 3.5 m ..... ø 10 m [79 m^2]

Security grade according to EN 50131-2-2 ..... Grade 2
Compliance with standards ..... EN 50131-1, EN 50131-2-2, EN 50130-4, EN 50130-5
Environmental class according to EN 50130-5 II
Operating temperature range ..... -10°C...+55°C
Maximum humidity ..... 93±3%
Dimensions ..... ø 120 x 37 mm
Weight ..... 115 g

5 year warranty from date of manufacture