

EE804A

Presence and motion detector
360°, surface-mounted

EE805A

Presence and motion detector
360°, flush-mounted

Safety instructions

Electrical equipment may only be installed and assembled by a qualified electrician in accordance with the relevant installation standards, regulations, directives and safety and accident prevention directives of the country.

Failure to comply with these installation instructions may result in damage to the device, fire or other hazards.

Due to its detection behaviour the device is not suitable for use in burglary detection or alarm systems.

These instructions are an integral component of the product and must be retained by the end user.

Design and layout of the device (Figure 1/2)

- (1) Connecting terminals
- (2) Mounting device locking screw
- (3) Release opening
- (4) Fastening grids
- (5) Detector lens
- (6) Response brightness potentiometer
- (7) Potentiometer delay time
- (8) Cover for potentiometer
- (9) Locking screw
- (10) Fixing springs
- (11) Strain relief with mounting device for cable ties
- (12) Cover for connection compartment

Function

Correct use

- automatic switching of electric loads depending on heat motion and ambient brightness
- EE804A: Surface-mounted installation or installation on mounting box according to DIN 49073
- EE805A: Cavity installation

Product characteristics

- Combination of presence and motion detector with enhanced detection sensitivity in the central presence-detection area
- Response brightness adjustable
- Delay time adjustable

Behaviour during operation

The motion detector detects heat motion caused by people, animals, or objects.

- will be switched on for the delay time if movements are detected in the detection area and the set response brightness is undershot. Each detected movement restarts the delay time.
- will be switched off if no additional movements are detected in the detection area and the set delay time has elapsed or the set response brightness is exceeded.

Information for electricians

Installation and electrical connection



DANGER!

Touching live parts can result in an electric shock!

An electric shock can be lethal!

Disconnect the connecting cables before working on the device and cover all live parts in the area!

Selecting installation location

The motion detector must be installed horizontally on the ceiling. It has a detection angle of 360°. The diameter of the detection area depends on the installation height. At an installation height of 2.5 m, the diameter at ground level is approx. 6 m. The diameter of the inner detection area with enhanced detection sensitivity is 4 m (figure 3).

At an installation height greater than 2.5 m, the detection area increases. At the same time, the detection sensitivity decreases.

Observe the motion orientation: a distinction is made between "direct approach" and "transverse motion". Motions transverse to the motion detector can be detected better than motions toward the motion detector (Fig. 4).

If used as a presence detector, the device must be installed so that areas with less motion activity (desk, seating area) are within the detection area (figure 3).

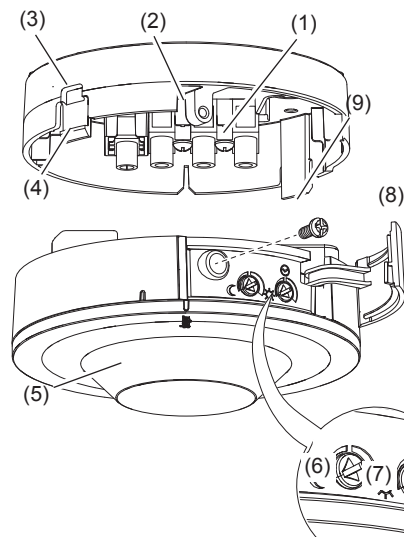
Avoid sources of interference in the detection area. Sources of interference, e.g. heating elements, ventilation systems, air conditioners and lamps that are cooling down can cause undesired switching (Fig. 5).

Select an installation location that is free of vibration. Vibrations can cause undesired switching.

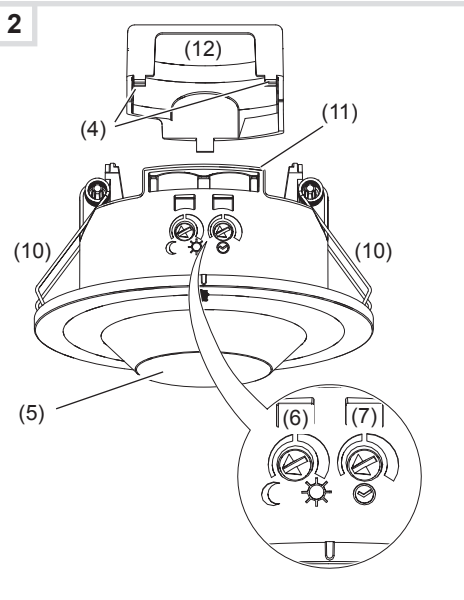
Connecting and installing the surface-mounted variant EE804A (figure 7)

- Run the connection cable through the insertion opening (13).
- Install device socket under the cover using the screw dowel set enclosed. Installation can be done on a flush-mounted box if available
- Connect device according to connection diagram (figure 6).
- Snap onto base
- Screw in locking screw (9).
- Configure settings.
- Close cover (8).

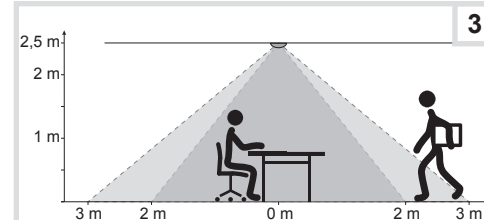
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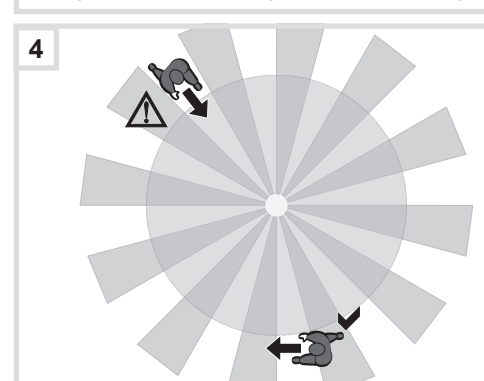
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Connecting and installing the flush-mounted variant EE805A (figure 8)

- Establish installation opening \varnothing 75 mm.
- Connect motion detector according to the connecting diagram (figure 6).
- Establish strain relief on the corresponding mounting devices (11) with cable ties.
- Attach cover (12).
- Configure settings.
- Insert the two fixing springs (10) through the installation opening while pressing upwards and allow them to spring back.


Commissioning

Testing the detection

In test mode, the motion detector works with maximum response brightness. If motion is detected, the load is switched for approx. 2 seconds. After approx. 20 cycles, the operating cycles decrease in order to protect the connected load.

- Set potentiometer response brightness (6) to  (right end stop) (figure 1/2).
 - Set potentiometer delay time (7) to minimal (left end stop) (figure 1/2).
The device is in test mode.
 - Carry out test by moving in the detection area.
- i** If the motion detector switches on without motion in the detection area, then sources of interference are present (see Installation location).

Setting the response brightness

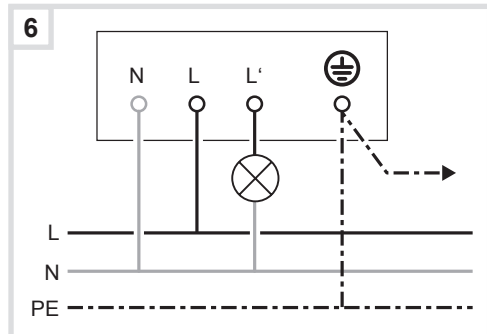
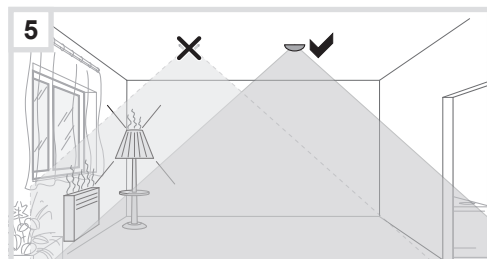
The response brightness is the brightness value saved in the motion detector; when this value is undershot the connected load is switched on if movements are detected. The brightness threshold can be set continuously between approx. 5 (☾) and 1000 Lux (, daytime operation/brightness-independent).

- i** To control the lighting in stairwells in accordance with EN12464-1, select the potentiometer setting > 150 Lux (e.g. factory setting, 200 Lux).
- Turn the response brightness potentiometer (6) to the desired position.

Set delay time

The delay time is the period of time set in the motion detector which is the shortest time that the lighting is switched on when the response brightness is undershot and motion is detected. On delivery, the delay time is set to approx. 3 minutes.

- Turn the delay time potentiometer (7) to the desired position.



Appendix

Technical data

Supply voltage	230V~, +10%/-15% 240V~, +6/-6%
Frequency	50/60Hz
Power consumption without load	0.3 W
Delay time, adjustable	
- Operation	5s - 30 min
- Test mode	2 s
- Factory setting	~ 3 min
Response brightness, adjustable	5 ... 1000 Lux
- Factory setting	200 Lux
Recommended installation height	2.5 m ... 3.5 m
maximum installation height	4 m
Detection area \varnothing motion (installation height 2.5 m)	~ 6 m
Detection area \varnothing presence (installation height 2.5 m.)	~ 4 m
Detection angle	360°
Closing contact with zero cross switching	10 A AC1, 230 V~
Upstream circuit breaker	10A
Incandescent and halogen lamps 230 V	2300 W
LED lamps/ Compact fluorescent lamps	20 x 20 W (400 W)
Ferromagnetic transformers	1500 VA
Electronic transformers	1500 W
Fluorescent lamps	
- parallel compensated	1000 W
- with electronic ballast	1000 W
Relative humidity (no condensation)	30°C, 95%
Operating temperature	-5 °C ... +45°C
Storage/transport temperature	-25 °C... +70 °C
Degree of protection	IP 21
Protection class	II
Impact resistance	IK 04
Dimensions EE804A (\varnothing x H)	100 x 50 mm
Dimensions EE805A (\varnothing x H)	90 x 61 mm
Connection cross-section	
- EE804A, screw terminals	1 mm ² ... 2.5 mm ²
- EE805A, plug-in terminals	1 mm ² ... 2.5 mm ²



Correct Disposal of this product (Waste Electrical & Electronic Equipment).

(Applicable in the European Union and other European countries with separate collection systems).

This marking shown on the product or its literature indicates that it should not be disposed with other household waste at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this device from other types of wastes. Recycle the device responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this device for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes of disposal.

