# :hager



# **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.

# (GB)

(3)Release opening (4) Fastening grids (5)Detector lens

(6) Response brightness potentiometer

Design and layout of the device

Mounting device locking screw

- Potentiometer delay time (7)
- (8) Cover for potentiometer
- (9) Locking screw
- (10) Fixing springs

(Figure 1/2)

(2)

(1) Connecting terminals

- (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!

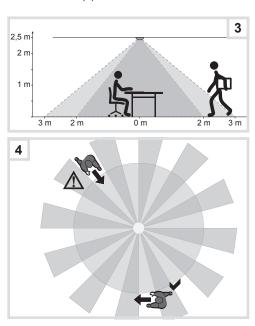
#### Selecting installation location

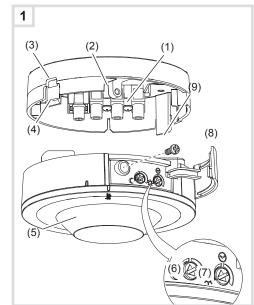
The motion detector must be installed horizontally on the ceiling. It has an detection angle of 360°. The diameter of the detection area depends on the installation height. At an installation height of 2.5 m, the diameter at ground level is approx. 6 m. The diameter of the inner detection area with enhanced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

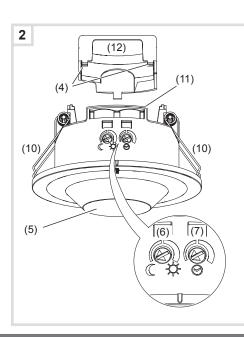
- At an installation height greater than 2.5 m, the detection area increases. At the same time, the detection sensitivity decreases.
- Observe the motion orientation: a distinction is made between "direct approach" and "transverse motion". Motions transverse to the motion detector can be detected better 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).







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

- Establish installation opening Ø 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 tright 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.

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

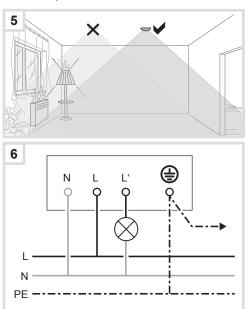
The response brightness is the brightness value saved in the motion detector; when this value is undershot the connected load is switched on if movements are detected. The brightness threshold can be set continuously between approx. 5 (() and 1000 Lux (), daytime operation/brightness-independent).

- 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.

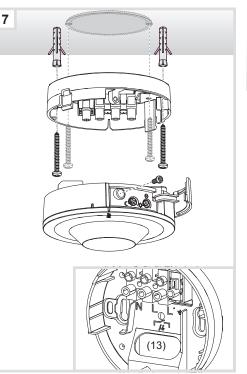
Turn the delay time potentiometer (7) to the desired position.

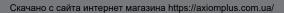


# Appendix

### Technical data Supply voltage

|  | 240V~, +6/-6%   |
|--|---|
| Frequency  | 50/60Hz   |
| Power consumption without loa  |   |
| Delay time, adjustable   | 0.0 11  |
| - Operation  | 5s - 30 min   |
| - Test mode  | 2 s   |
| <ul> <li>Factory setting</li> </ul>  | ~ 3 min   |
| Response brightness, adjustat  |   |
| - Factory setting  | 200 Lux   |
| Recommended installation hei   | •   |
| maximum installation height  | 4 m   |
| Detection area Ø motion  | . 6 m   |
| (installation height 2.5 m)  | ~ 6 m   |
| Detection area Ø presence<br>(installation height 2.5 m.)  | ~ 4 m   |
| Detection angle  | 360°  |
| Ũ  | 300   |
| Closing contact with<br>zero cross switching   | 10 A AC1, 230 V~  |
| Upstream circuit breaker   | 10A   |
| Incandescent and halogen lam   |   |
| incancescent and halogen fait  | nps 230 V 2300 W  |
| LED lamps/   | ips 230 V 2300 W  |
| •  | 20 x 20 W (400 W)   |
| LED lamps/   |   |
| LED lamps/<br>Compact fluorescent lamps  | 20 x 20 W (400 W)   |
| LED lamps/<br>Compact fluorescent lamps<br>Ferromagnetic transformers  | 20 x 20 W (400 W)<br>1500 VA  |
| LED lamps/<br>Compact fluorescent lamps<br>Ferromagnetic transformers<br>Electronic transformers<br>Fluorescent lamps<br>- parallel compensated  | 20 x 20 W (400 W)<br>1500 VA<br>1500 W<br>1000 W  |
| LED lamps/<br>Compact fluorescent lamps<br>Ferromagnetic transformers<br>Electronic transformers<br>Fluorescent lamps<br>- parallel compensated<br>- with electronic ballast   | 20 x 20 W (400 W)<br>1500 VA<br>1500 W<br>1000 W<br>1000 W  |
| LED lamps/<br>Compact fluorescent lamps<br>Ferromagnetic transformers<br>Electronic transformers<br>Fluorescent lamps<br>- parallel compensated  | 20 x 20 W (400 W)<br>1500 VA<br>1500 W<br>1000 W<br>1000 W<br>ation) 30°C, 95%  |
| LED lamps/<br>Compact fluorescent lamps<br>Ferromagnetic transformers<br>Electronic transformers<br>Fluorescent lamps<br>- parallel compensated<br>- with electronic ballast   | 20 x 20 W (400 W)<br>1500 VA<br>1500 W<br>1000 W<br>1000 W<br>1000 W<br>ation) 30°C, 95%<br>-5 °C +45°C   |
| LED lamps/<br>Compact fluorescent lamps<br>Ferromagnetic transformers<br>Electronic transformers<br>Fluorescent lamps<br>- parallel compensated<br>- with electronic ballast<br>Relative humidity (no condens  | 20 x 20 W (400 W)<br>1500 VA<br>1500 W<br>1000 W<br>1000 W<br>ation) 30°C, 95%<br>-5 °C +45°C   |
| LED lamps/<br>Compact fluorescent lamps<br>Ferromagnetic transformers<br>Electronic transformers<br>Fluorescent lamps<br>- parallel compensated<br>- with electronic ballast<br>Relative humidity (no condens<br>Operating temperature   | 20 x 20 W (400 W)<br>1500 VA<br>1500 W<br>1000 W<br>1000 W<br>ation) 30°C, 95%<br>-5 °C +45°C   |
| LED lamps/<br>Compact fluorescent lamps<br>Ferromagnetic transformers<br>Electronic transformers<br>Fluorescent lamps<br>- parallel compensated<br>- with electronic ballast<br>Relative humidity (no condens<br>Operating temperature<br>Storage/transport temperature  | 20 x 20 W (400 W)<br>1500 VA<br>1500 W<br>1000 W<br>1000 W<br>ation) 30°C, 95%<br>-5 °C +45°C<br>-25 °C +70 °C  |
| LED lamps/<br>Compact fluorescent lamps<br>Ferromagnetic transformers<br>Electronic transformers<br>Fluorescent lamps<br>- parallel compensated<br>- with electronic ballast<br>Relative humidity (no condens<br>Operating temperature<br>Storage/transport temperature<br>Degree of protection  | 20 x 20 W (400 W)<br>1500 VA<br>1500 W<br>1000 W<br>10  |
| LED lamps/<br>Compact fluorescent lamps<br>Ferromagnetic transformers<br>Electronic transformers<br>Fluorescent lamps<br>- parallel compensated<br>- with electronic ballast<br>Relative humidity (no condens<br>Operating temperature<br>Storage/transport temperature<br>Degree of protection<br>Protection class  | 20 x 20 W (400 W)<br>1500 VA<br>1500 W<br>1000 W<br>100 W<br>1                        |
| LED lamps/<br>Compact fluorescent lamps<br>Ferromagnetic transformers<br>Electronic transformers<br>Fluorescent lamps<br>- parallel compensated<br>- with electronic ballast<br>Relative humidity (no condens<br>Operating temperature<br>Storage/transport temperature<br>Degree of protection<br>Protection class<br>Impact resistance   | 20 x 20 W (400 W)<br>1500 VA<br>1500 W<br>1000 W<br>100                   |
| LED lamps/<br>Compact fluorescent lamps<br>Ferromagnetic transformers<br>Electronic transformers<br>Fluorescent lamps<br>- parallel compensated<br>- with electronic ballast<br>Relative humidity (no condens<br>Operating temperature<br>Storage/transport temperature<br>Degree of protection<br>Protection class<br>Impact resistance<br>Dimensions EE804A (Ø x H)                              | 20 x 20 W (400 W)<br>1500 VA<br>1500 W<br>1000 W<br>1000 W<br>1000 W<br>1000 W<br>1000 W<br>100 V<br>100 V<br>10 |
| LED lamps/<br>Compact fluorescent lamps<br>Ferromagnetic transformers<br>Electronic transformers<br>Fluorescent lamps<br>- parallel compensated<br>- with electronic ballast<br>Relative humidity (no condens<br>Operating temperature<br>Storage/transport temperature<br>Degree of protection<br>Protection class<br>Impact resistance<br>Dimensions EE804A (Ø x H)<br>Dimensions EE805A (Ø x H) | 20 x 20 W (400 W)<br>1500 VA<br>1500 W<br>1000 W<br>1000 W<br>1000 W<br>1000 W<br>1000 W<br>100 V<br>100 V<br>10 |







230V~. +10%/-15%

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.

