User Guide
Presence detector / presence sensor / motion detector
Flush mounting for wall and ceiling
2VDC Version

Performance features
- Presence detector for living areas, motor vehicle (camper or caravan) or Solar off-grid systems
- 12VDC Supply voltage
- Large detection range
- Low energy consumption

Typical areas of application
- Presence detection in living spaces for light and heating control
- Digital input home automation
- Switching of lamps, fans or heaters

1 Introduction
Before you start installing the presence detector/presence sensor and putting the device into operation, please read these operating instructions through to the end, especially the section on safety instructions.

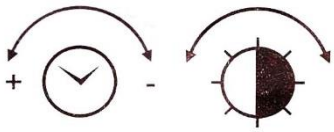
2 Product description
Motion and presence detector for indoor applications for automatic control and switching of heaters and fans, lighting or home automation functions.
Settings for brightness and switch-on time can be made via controller.
The special feature of this presence sensor is that it is operated with low voltage and can therefore be integrated into existing automotive or automation systems. Also, there is no danger of electric shock due to the DC voltage.
Application: Switching of lamps, fans, digital input of a home automation
e.g. 1-Wire 8-fold digital input 12-24V (Art. No.: 11216)

3 Technical Data

Operating voltage:	12 V= (+/-10%)
Current consumption:	>1mA in standby, max. 30mA active
Output:	positive switching, 12V, 50W inductive, 100W ohmic
Application:	switching of lamps, fans, digital input home automation e.g. 1-Wire 8-fold digital input 12-24V (Art. No.: 11216)
Sensivity:	adjustable 5 - 500 Lux (+/-20%)
Detection range:	5 – 8m / please see illustration below / 5 at 140°, 3 – 4m
Delay/switching time:	approx.ca. 16 - 360 seconds
Temperature range:	-20°C to +50°C
Dimensions:	87 x 87 x 34 mm (WxHxD)
Installation depth:	24mm
Hole opening:	75mm diameter

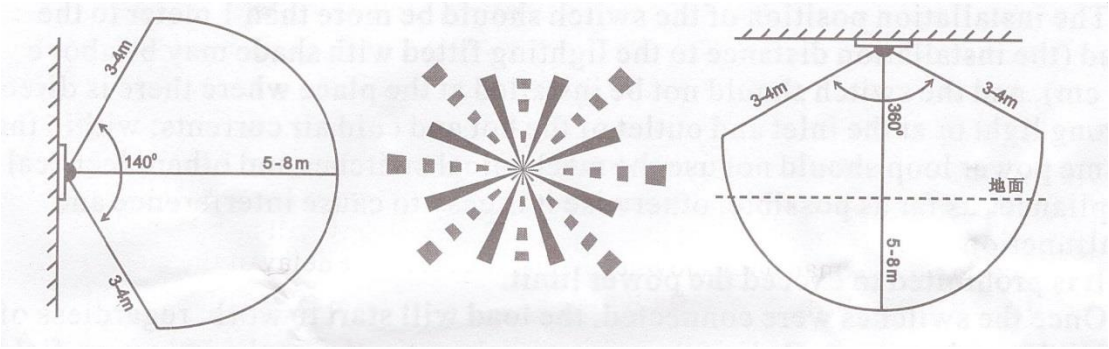
4 Setting

Time, left:	Setting controller for the running time after activation (+ = about 16 seconds, - = about 360 seconds)
Brightness, right:	Photosensitivity (left: brighter, right: darkness)

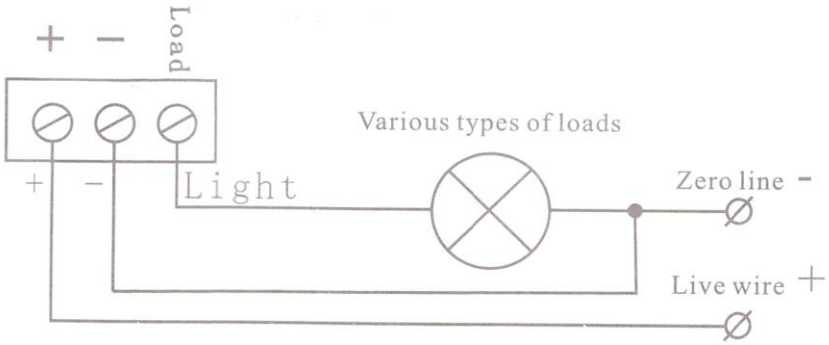


Note: The controllers have a setting range of 180°. Please turn the knobs with feeling.

5 Detection range (graphics)



6 Connection



7 Conformity

EN 50090-2-2
EN 61000-4-2, ESD
EN 61000-4-3, HF
EN 61000-4-4, Burst
EN 61000-4-5, Surge
EN 61000-6-1, interference immunity
EN 61000-6-3, interference radiation
RoHS

8 Operating conditions

The module may only be operated at the voltages and ambient conditions specified for it. The device can be operated in any position. The device is intended for use in dry and dust-free rooms. If condensation forms, wait at least 2 hours for the device to acclimatise.
Do not operate the module in an environment where flammable gases, vapors or dust are present or could be present.

9 Assembly

The module may only be operated at the voltages and ambient conditions specified for it.
The device is intended for stationary mounting.

10 Disposal information

Do not dispose of the device in household waste! Electronic devices must be disposed of in accordance with the Directive on Waste Electrical and Electronic Equipment on local Dispose of at collection points for old electronic equipment!

11 Safety instructions

When using products that come into contact with electrical voltage, the valid VDE regulations must be observed, especially VDE 0100, VDE 0550/0551, VDE 0700, VDE 0711 and VDE 0860

- During final works and wiring works power has to be de-connected.
- Before opening the device, always unplug and make sure that the unit is disconnected from the mains.
- Components, modules or devices may only be put into service if they are mounted in a contact proof housing. During installation they must not have power applied.
- Tools may only be used on devices, components or assemblies when it is certain that the devices are disconnected from the power supply and electrical charges stored in the components inside the device have been discharged.
- Live cables or wires to which the device or an assembly is connected, must always be tested for insulation faults or breaks.
- If an error is detected in the supply line, the device must be immediately taken out of operation until the faulty cable has been replaced.
- When using components or modules it is absolutely necessary to comply with the requirements set out in the accompanying description specifications for electrical quantities.
- If the available description is not clear to the non-commercial end-user what the applicable electrical characteristics for a part or assembly are, how to connect an external circuit, which external components or additional devices can be connected or which values these external components may have, a qualified electrician must be consulted.
- It must be examined generally before the commissioning of a device, whether this device or module is basically suitable for the application in which it is to be used.
- In case of doubt, consultation with experts or the manufacturer of the components used is absolutely necessary.
- For operational and connection errors outside of our control, we assume no liability of any kind for any resulting damage.
- Kits should be returned without their housing when not functional with an exact error description and the accompanying instructions. Without an error description it is not possible to repair the device. For time-consuming assembly or disassembly of cases charges will be invoiced.
- During installation and handling of components which later have mains potential on their parts, the relevant VDE regulations must be observed.
- Devices that are to be operated at a voltage greater than 35 VDC / 12mA, may only be connected by a qualified electrician and put into operation.
- Commissioning may only be realized if the circuit is built into a contact proof housing.
- If measurements with an open housing are unavoidable, for safety reasons an isolating transformer must be installed upstream or a suitable power supply can be used.
- After installing the required tests according to DGUV / regulation 3 (German statutory accident insurance, https://en.wikipedia.org/wiki/German_Statutory_Accident_Insurance) must be carried out.

12 Warranty

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