

Purpose

The motion sensor is used for automatic and temporary switching on of lighting if a person or other object appears in places such as hallways, courtyards, driveways, garages, etc.

Functioning

The sensor detects the infrared radiation sources. It analyzes the parameters such as the size of the object, the amount of heat emitted and the speed of movement between sectors of detection. Movement in the detection area will automatically switch on the lighting. From this moment the light will stay on, as long as the sensor detects continuous movement. Only if there is no movement in the detection area triggers the lighting support time. Another movement in the detection area and its subsequent disappearance in the course of time measurement starts the support time from the beginning. The specific of operation allows using the DR-08 as a presence sensor. The motion sensor is equipped with a twilight sensor to prevent switching on the lighting turing the day. The detection status and the readiness to

switch on the lighting are only activated after dusk.

The activation time of the sensor can be adjusted by the user using a potentiometer.

Additionally, it is possible to adjust the detection field area in the range of $1\div 2$ m (for h= 2.5 $\div 3.0$ m) and receiver switching time adjustment in the range of 3 s $\div 9$ min.

Changes in temperature can affect the motion detection.

The motion sensor can work indoors and outdoors in places where it is not exposed to direct rain or snowfall and to the possibility of splashing the sensor housing and its electrical connection points with water or other liquid.

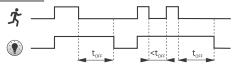
Avoid locations with large objects in the detection area such as trees that can be moved by the wind.

The minimum distance between the sensor and the light source is 60 cm.

Diagram

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Settings

The detection area (range)



The radius of sensor detection can be adjusted within the range of 0.6 m to 1.5 m (parameters specified for the sensor mounted at a height of 2.5+3.0 m). Turning the control knob right [+] increases the area of the detection, turning lef [-] reduces the area of the detector.

Switch-on time



The time of the receiver switching on can be adjus-ted within the range of 3 sec to 9 min. Turning the control knob right [+] increases the switching on time, turning left [-] reduces the switching on time.

The sensitivity of the twilight sensor

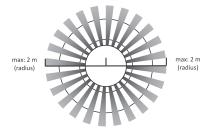


The sensitivity of the twilight sensor can be adjusted within the range of 3 lx to 2000 lx. Turning the control knob in the direction of the "moon" icon will switch the light later, turning it in the direction of the "sun" – will switch the light earlier. For the sensor to be active throughout the whole day, the control knob should be maximally turned in the direction of the "sun".

Detection area (ceiling mounting)



Installation height of the sensor



Detection angle range of the sensor

Mounting

- 1. Disconnect the power supply.
- 2. Make a mounting hole in the substrate/fit a ø60 mm flush-mounted box.
- 3.Undermine the hooks and remove the external cover of the sensor.
- 4. Connect the wires as shown in the diagram.
- 5.Insert the main body into the mounting hole/flush-mounted box and screw in place.
- 6.Set the area of the detection field, the sensitivity of the twilight automatic control unit and the switch-on time.
- 7. Assemble the external cover of the sensor.
- 8.Switch on the power supply to the sensor.

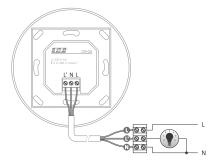
The sensor is inactive for the first 30 seconds after the power supply is switched on. During this time, the PIR system warms up.

Do not install the sensor in the immediate vicinity of heating, air-conditioning and lighting devices.

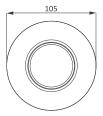
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If the motion sensor is installed too close to the switched light source, the system may be activated, which means that the sensor will automatically switch on and off the light source. It is necessary to move the sensor to an appropriate distance away from the light source.

Wiring diagram



Dimensions





Technical data

power supply 195÷265 V AC maximum load current (AC-1) 5 A twilight activation threshold 3÷2000 lx motion detection 0.6÷1.5 m/s switch-on time 3 s÷9 min. (±2 min.) horizontal detection area 360° vertical detection area 0° max radius of detection (T<24°C) 2 m sensor mounting height 2.5÷3.5 m power consumption standby 0.10 W 045W on 1.0 mm² screw terminals terminal tightening torque 0.25 Nm working temperature -10÷40°C dimensions external ø105 mm. h= 71.5 mm ø50 mm. h= 43 mm groove mounting hole ø51 mm screw spacing 79 mm mounting in flush-mounted box ø60 ingress protection IP20

Power table				
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tungsten	halogen	fluorescent	energy-saving	LED
1200 W	300 W	300 W	150 W	150 W

The above data are indicative and will heavily depend on the design of a specific receiver (that is especially important for LED bulbs, energy-saving lamps, electronic transformers and pulse power supply units), switching frequency and operating conditions.

For more information visit: www.fif.com.pl.

Warranty

The F&F products are covered by a warranty of the 24 months from the date of purchase. Effective only with proof of purchase. Contact your dealer or directly with us.

CE declaration

F&F Filipowski L.P. declares that the device is in conformity with the essential requirements of The Low Voltage Directive (LVD) 2014/35/EU and the Electromagnetic Compatibility (EMC) Directive 2014/30/UE.

The CE Declaration of Conformity, along with the references to the standards in relation to which conformity is declared, can be found at <u>www.fif.com.pl</u> on the product page.