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DR-07

Motion sensor (PIR),
ceiling



Do not dispose of this device in the trash along with other waste!

According to the Law on Waste, electro coming from households free of charge and can give any amount to up to that end point of collection, as well as to store the occasion of the purchase of new equipment (in accordance with the principle of old-for-new, regardless of brand). Electro thrown in the trash or abandoned in nature, pose a threat to the environment and human health.



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-07 as a presence sensor.** The motion sensor is equipped with a twilight sensor to prevent switching on the lighting during 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÷4 m (for $h = 2.5 \div 3.5$ m) and receiver switching time adjustment in the range of 3 s÷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.

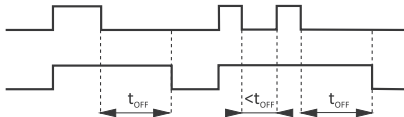


Avoid locations with large objects in the detection area such as trees that can be moved by the wind.



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

Diagram



The detection area (range)



The radius of sensor detection can be adjusted within the range of 1 m to 4 m (parameters specified for the sensor mounted at a height of 2.5÷3.5 m).

Turning the control knob right [+] increases the area of the detection, turning left [-] reduces the area of the detector.

Switch-on time



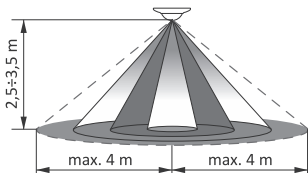
The time of the receiver switching on can be adjusted within the range of 3 sec to 9 min. Turning the control knob right [+] increases the switching on time, turning left [-] reduces the switching on time.

The sensitivity of the twilight sensor

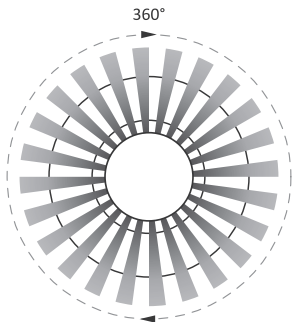


The sensitivity of the twilight sensor can be adjusted within the range of 10 lx to 2000 lx. Turning the control knob in the direction of the „moon“ icon will switch the light later, turning it in the direction of the „sun“ – will switch the light earlier. For the sensor to be active throughout the whole day, the control knob should be maximally turned in the direction of the „sun“.

Detection area (ceiling mounting)



Installation height of the sensor and adjustable range of the sensor's detection field



Adjustable sensor angle range

Mounting

1. Disconnect the power supply.
 2. Make a mounting hole in the ground.
 3. Unscrew the external casing of the sensor with your hand.
 4. Connect wires as shown in the diagram.
 5. Insert the body in the mounting hole and screw it to the ground.
 6. Set the area of the detection field, the sensitivity of the twilight automatic control unit and the switching time.
 7. Assemble the external cover of the sensor.
 8. Switch on the sensor's power supply.
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The sensor is inactive for the first 30 seconds after the power supply is switched on. During this time, the PIR system warms up.

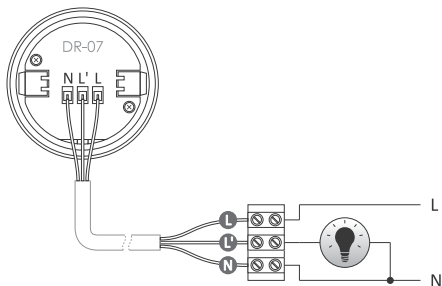


Do not install the sensor in the immediate vicinity of heating, air-conditioning and lighting devices.

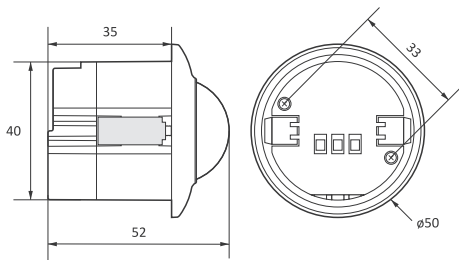


If the motion sensor is installed too close to the switched light source, the system may be activated, which means that the sensor will automatically switch on and off the light source. It is necessary to move the sensor to an appropriate distance away from the light source.

Wiring diagram








Dimensions



Technical data

power supply	195÷265 V AC
maximum load current (AC-1)	1.5 A
twilight activation threshold	10÷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)	4 m
sensor mounting height	2.5÷3.5 m
power consumption	
standby	0.10 W
on	0.45 W
terminal	1.0 mm ² screw terminals
tightening torque	0.25 Nm
working temperature	-10÷40°C
dimensions	
external	ø50 mm, h= 52 mm
groove	ø39 mm, h= 35 mm
mounting hole	ø40 mm
screw spacing	33 mm
mounting	surface
ingress protection	IP20

Power table

				
tungsten	halogen	fluorescent	energy-saving	LED
300 W	100 W	100 W	50 W	50 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 www.fif.com.pl on the product page.