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DRM-05

Plafond with a microwave
motion sensor



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

Plafond with a microwave 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.

The sensor can detect movement through wooden, plasterboard, glass and plastic panels.

Functioning

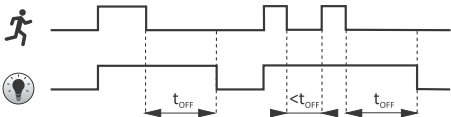
The sensor emits and receives 5.8 GHz high-frequency electromagnetic waves. The high-frequency waves penetrate the lampshade of the plafond and allow motion detection. The sensor detects changes in the reflection of the waves caused by the movement of an object within the detection area. The sensor detects the movement of an object to and from the sensor. Movement within the detection area causes the lighting to switch on automatically. From the moment of switching on, continuous movement causes permanent switching on of this lighting.

Only the absence of movement in the detection field triggers the lighting maintenance time. A renewed movement in the detection field and the disappearance of the detection field during the countdown triggers the hold time from the beginning. After the set time, the lighting is switched off automatically. The motion detector is equipped with an automatic twilight switch which prevents the controlled lighting from being switched on during the day. The detection status and readiness to switch on the lighting are only activated after dusk. The sensor activation time can be adjusted by the user via a potentiometer. In addition, it is possible to adjust the area of the detection field within a radius of 3÷9 m (for H= 2.5 m) and to adjust the switching time of the receiver within the range of 8 s÷12 min. Illumination activation is signalled by the illumination of a green LED.



The power of microwave radiation is relatively low and completely safe for humans and animals. Its value is below 10 mW. In comparison, a microwave oven and a mobile phone radiate with a power of approx. 1000 mW.

Diagram



Detection area (SENS)



The detection radius of the sensor can be adjusted from 3 m to 9 m (parameters given for a sensor mounted at a height of 2.5 m).

Turning the knob clockwise [+] increases the detection area, turning it counterclockwise [-] decreases the detection area.

Switch-on time (TIME)



The switch-on time of the receiver can be adjusted in the range from 8 sec to 12 min. Turning the knob clockwise [+] increases the switch-on time, turning it counterclockwise [-] decreases the switch-on time.

Twilight switch sensitivity (LUX)



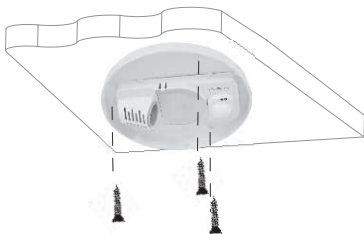
Sensitivity of the twilight switch can be adjusted in the range of 2÷2000 lx. Turning the knob towards the "moon" will switch the lighting on later, turning the knob towards the "sun" will switch it on earlier. To keep the sensor active throughout the whole day, turn the knob as far as possible towards the "sun".

Mounting

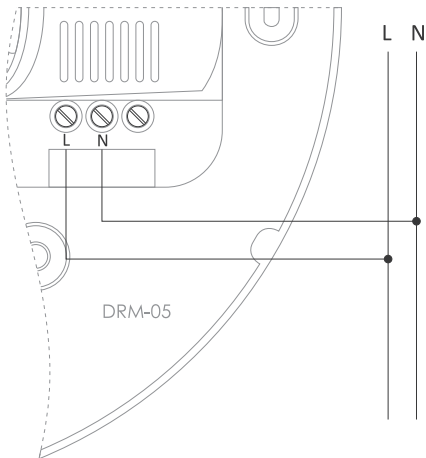
1. Disconnect the power supply.
2. Remove the lampshade and fix the plafond to the ground.
3. Connect the wires according to the wiring diagram.
4. Set the area of the detection field, the sensitivity of the twilight sensor and the activation time.
5. Install the lampshade.



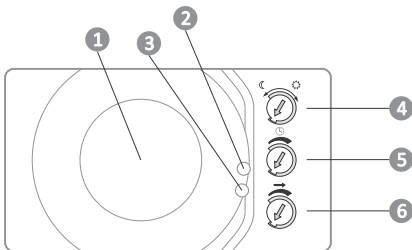
After activation the motion sensor is inactive for the first 10 seconds.



Wiring diagram



Description of device



- | | | | |
|----------|---|----------|---|
| 1 | motion sensor | 4 | sensitivity setting knob
twilight switch |
| 2 | twilight sensor | 5 | switching time
setting knob |
| 3 | LED signalling
switching-on the receiver | 6 | detection field range
setting knob |

Technical data

power supply	195÷265 V AC
maximum load current (AC-1)	0.1 A*
bulb type	E27 max. 25 W
frequency of microwaves radiation	5.8 GHz
radiation power	0.3 mW
motion detection	0.6÷1.5 m/s
detection area	360°
detection radius (adjustable)	3÷9 m
activation threshold (adjustable)	2÷2000 lx
switching time (adjustable)	8 s÷12 min.
activation delay	1 s
power consumption (standby)	0.9 W
terminal	1.5 mm ² screw terminals
tightening torque	0.3 Nm
working temperature	-25÷50°C
dimensions	ø280 mm, H= 100 mm
mounting	surface
mounting height	2.5÷3.5 m
hole spacing	170 mm
shade	HDPE material, milky-white
ingress protection	IP40

* Load of a resistive nature [AC-1].

For loads of a different nature (e.g. LED lighting), the maximum load current may be significantly lower.

More information:

www.fif.com.pl/en/content/24-wskazowki



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.

Compliance with standards

PN-EN 62368-1:2015-03

PN-EN 62479:2011

PN-ETSI EN 301 489-1 V2.1.1:2017-08

PN-ETSI EN 300 489-3 V1.6.1:2014-03

PN-ETSI EN 300 440-2 v.2.1.1: 2017-10