

# PIR 180° IP65 MOTION SENSOR

## MCR-09

USER MANUAL

exta

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### NOTE

Read this User Manual carefully before connecting and operating the device. The device must be installed by a qualified electrician. Connect this product to a single-phase power system according to applicable standards. See this Manual for the wiring instructions. The activities related to the installation, connection and adjustment should be performed by qualified electricians, familiar with the User Manual and functions of the device. Do not open or otherwise disassemble the product enclosure; otherwise the product warranty will be void and an electrocution hazard may occur. Prior to installing and wiring this product, make sure that the wiring to be connected is not live. The conditions and methods of transport, storage and operation of this product may affect its performance. Do not install the products if any of its components are missing, the product is damaged or deformed in any way. If any malfunctions are found, consult the manufacturer. The manufacturer is not liable for any damage resulting from improper installation or operation of the device. Any repairs or modifications made independently will void the warranty. Since the technical data are subject to constant modifications, the Manufacturer reserves the right to change the product characteristics and introduce other design solutions for the device.

### DESCRIPTION

The MCR-09 hermetic motion sensor is designed for automatic light control or for controlling any other electric receiver. Its design is based on a state of the art infrared (PIR) motion detector system. The device detects motion in the monitored area within the radius of ca. 12 m, within 180° around the sensor. The design of the device enables its installation outside the building. The field of detection can be adjusted by adequately setting the sensor head. The condition of external light intensity is additionally verified during operation. If the device detects motion and the light intensity level is below the setting value, the sensor will turn the light on and start to count the preset time, after which the light will be automatically turned off. Thanks to its versatile design, the sensor can be used to control the lighting of communication routes, gardens, warehouses, toilets, halls, as well as other facilities.

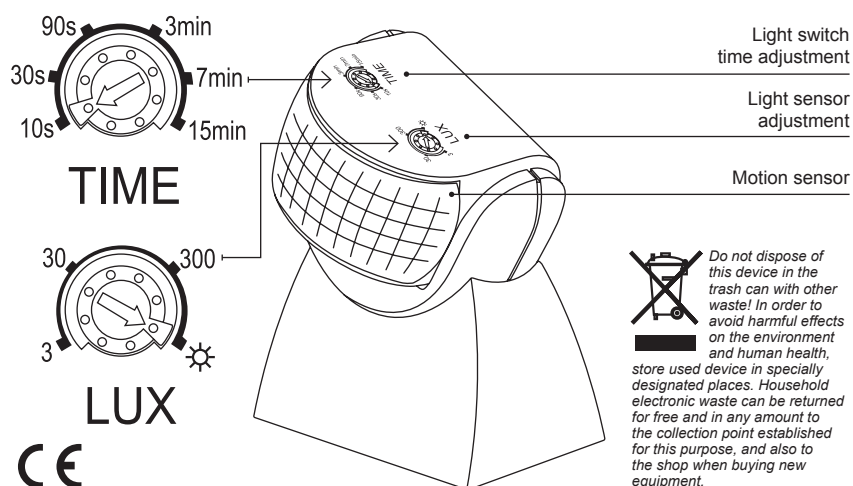
### FEATURES

- Detection angle: 180°.
- Surface mounting, with flush-mounted connection cables going into the sensor housing.
- Hermetic sensor housing: IP65.
- Detection area can be adjusted by rotating the sensor head.
- Large detection area up to 12 m.

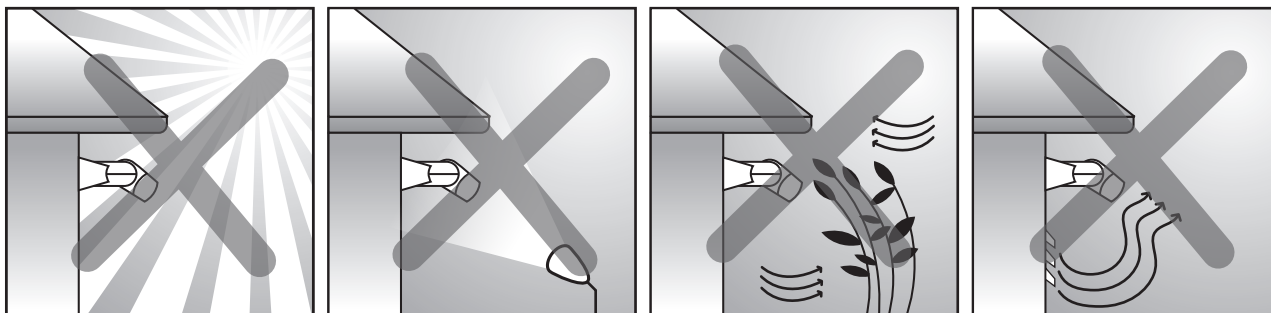
### TECHNICAL DATA

Power supply voltage:	230 V AC
Voltage frequency:	50 Hz
Motion detection angle:	180°
Maximum effective zone:	12 m (selectable)
Time to turn on the lighting:	3 s ÷ 15 min
Time measurement accuracy:	depending on the setting: for 10 s: ±3 s, for 15 min: ±2 min
Scope of light sensor settings:	3 ÷ 2000 lux
Acceptable load:	Traditional bulbs: 1200 W Fluorescent tubes: 300 W LEDs: 60 W
Power consumption:	<0,5 W
Installation height:	1,8 ÷ 2,5 m
Operating temperature:	-20 ÷ +40 °C
Permissible humidity:	< 93% RH
Dimensions:	200 x 52 mm
Weight:	0,79 kg

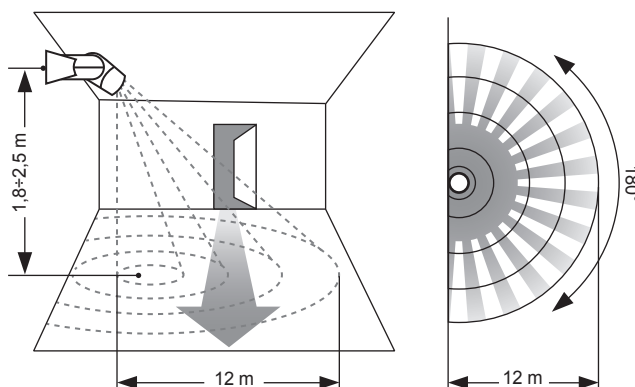
### APPEARANCE



## NOTES

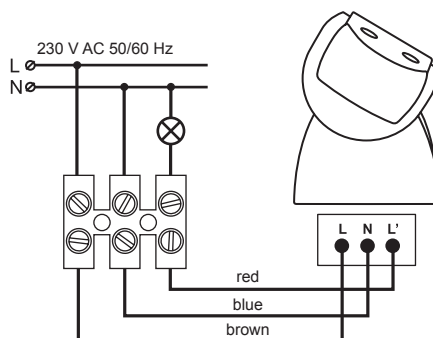


- Since the device analyzes changes in infrared radiation caused by thermal changes occurring in the monitored area to detect motion, it should not be installed:
  - opposite light-reflecting surfaces, such as mirrors,
  - in the vicinity of heat sources, such as radiators, fireplaces, air conditioners, high-power lamps, etc.,
  - in the vicinity of objects which can be moved by gusts of wind, such as curtains, tall plants, bushes, etc.
- The device should be installed at ca. 1.8÷2.5 m from the ground. Then, the monitored area will be ca. 12 m in diameter.
- Motion detection heading towards the sensor is less effective. The sensor operates better when detection is performed by crossing the infrared line parallel to the sensor, as illustrated in the schematic.



## INSTALLATION & CONNECTION

1. Select the device installation site.
2. Disconnect the power supply circuit with a fuse, circuit breaker or switch disconnecter connected to an appropriate circuit.
3. Check the de-energized condition on the power supply cables by means of the appropriate instrument.
4. Install the device in its ultimate position. Take off the rear part, fastening the sensor, and lead the connection cables through the bushings. Next, using the installation brackets, mount the sensor's installation plate on the wall.
5. Connect the cables in line with the connection diagram.
6. Set and adjust the sensor. Firstly, select the light on time using the "TIME" potentiometer. Next, use the "LUX" potentiometer to set the light intensity threshold to activate the sensor. Testing the device, check if the sensor is set according to nominal operation conditions or modify the settings.
7. Select the sensor's detection area. To set it, point the sensor in the right direction.
8. Specify the supply voltage. The device automatically adapts to the operating conditions. The device will be ready to work after about 30-40 seconds.



## RELAY CAPACITY



**LED 60 W**

## WARRANTY CARD

24-month commercial warranty  
granted by the manufacturer

1. ZAMEL Sp. z o.o. grants a 24-month warranty for the goods it sells.
2. The warranty granted by ZAMEL Sp. z o.o. does not cover:
  - a) mechanical damage caused by transport, loading/unloading or other circumstances,
  - b) any damage resulting from improper installation or use of the goods sold by ZAMEL Sp. z o.o.,
  - c) any damage resulting from any modifications made by the BUYER or any third party to the sold goods or to the equipment required for the proper functioning of the sold goods,
  - d) damage caused by any force majeure event or another fortuitous event beyond any reasonable control of ZAMEL Sp. z o.o.
3. The BUYER shall report all warranty claims in writing at the point of sale or to ZAMEL Sp. z o.o.
4. ZAMEL Sp. z o.o. will examine each warranty claim as regulated by the applicable provisions of the Polish law.
5. The form of warranty claim resolution, i.e. replacement, repair or refund of the price of purchase, shall be decided upon by ZAMEL Sp. z o.o.
6. This warranty does not exclude, limit or suspend any rights of the BUYER arising from the statutory or regulatory laws concerning implied warranty for defects of sold goods.

Seller's stamp and signature with date of sale