

# MCRN-023 MICROWAVE MOTION DETECTOR

## APPLICATION AREA

The MCRN-023 microwave motion detector is designed for automatic switching of lighting circuits supplied from electric networks with the voltage of 230 V (IT) when motion is detected within the area covered by the detector surveillance.

## APPLICATION CONDITIONS

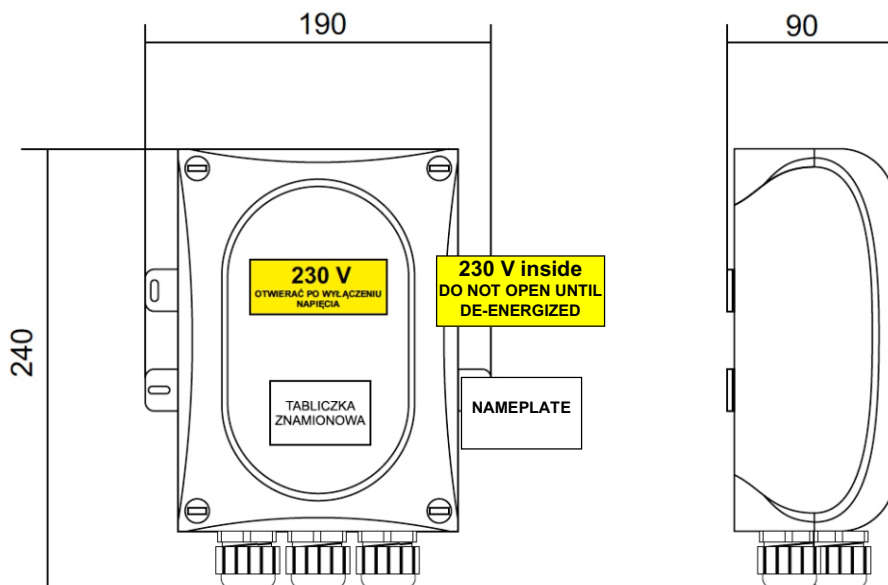
The device is suitable for working areas of underground operations without the hazard of methane explosion and the ones with the 'a' degree of methane explosion hazard as well as with the 'A' class of coal dust explosion hazard.

## OPERATION PRINCIPLE

The MCRN-023 microwave motion detector is an active device, where an integrated measuring module emits high frequency (5.6 GHz) electromagnetic waves and receives echoed signals reflected from the surroundings. The sensor detects any deviations of the echo cause by even slightest movements within the supervised area. Detection of motion entails triggering of an auxiliary contactor which, subsequently, switches the lighting circuit on. The electric circuitries of the motion detector are encapsulated in the enclosure that enables IP54 degree of protection and made of shock-resistant polycarbonate, self-extinguishing are insensitive to temperature fluctuations.

## TECHNICAL PARAMETERS

Rated power voltage:	230 VAC, 50 Hz
Rated current:	10 A
Cross-section of connecting conductors:	1.5 ÷ 4 mm <sup>2</sup>
Angle of motion detection:	360°
Adjustment of lighting duration	from 5 sec. to 30 min.
Adjustment of the detector range:	from 2 m to 10 (circle diameter)
Network type:	IT
Index of Protection for the enclosure:	IP 54
Overall dimensions (H x W x D)	240 x 190 x 90 mm
Weight	~2.5 kg



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