

Product Overview

The AX-OC-WMW range of occupancy sensors are designed for use in energy savings systems where the lighting loads are automatically controlled based on occupancy. There is an adjustable timer that switches off the load when the area is no longer occupied. The built-in daylight sensor aids additional energy savings in lighting control applications. The device will turn on the load only if the ambient light is below a preset level.

The unit is mounted on a single gang plate for easy installation.



Products Features

- 10.525GHz microwave sensor
- 20 metres detection range
- 230Vac and 24V versions available
- Excellent EMI immunity
- Built-in light sensor
- Touch switch to override the sensor (optional)

Product Specifications

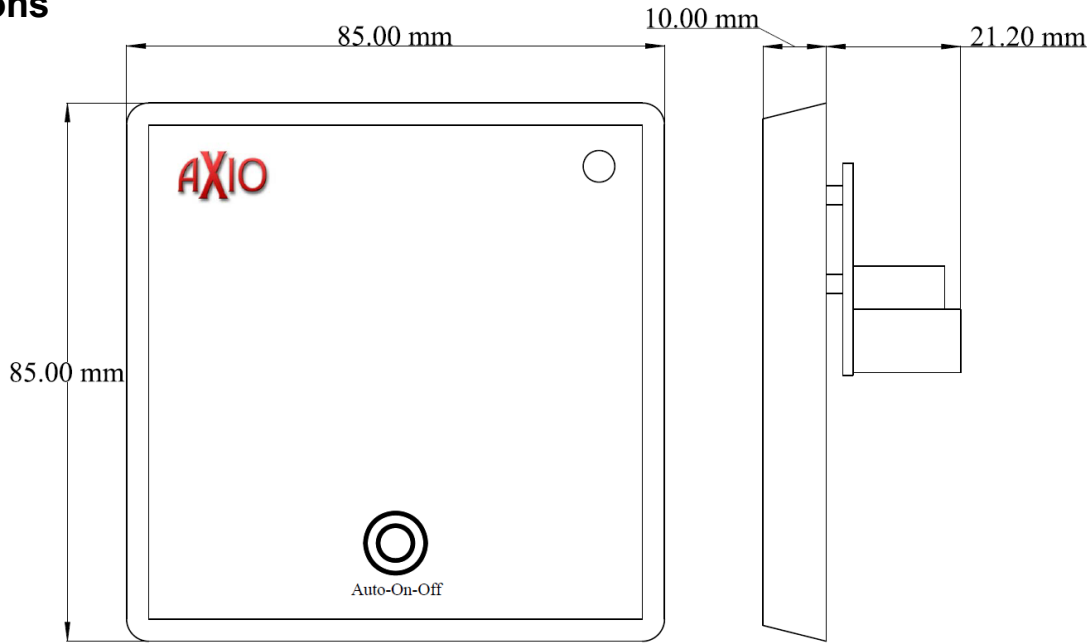
Power supply:	230 Vac \pm 10 % 230V versions 24 Vac/dc \pm 10 % for 24V versions
Power consumption:	1W maximum
Sensor type:	Microwave, 10.525 GHz
Antenna 3dB beam width:	Horizontal : 72° , Vertical: 36°
Detection range:	Up to 20m
Output:	Supply voltage for switched live versions. SPST for volt free versions
Terminals:	Rising clamp for 0.5-2.5mm ² cable
Contact rating:	6A @ 240Vac resistive
Timer adjustability :	10 secs to 12 mins
Daylight sensor lux threshold:	0-1000lux.(Can be disabled with jumper)
Ambient temperature range:	0°C to +50°C
Front plate material:	Flame retardant ABS
Dimensions:	85 x 85 x 35 mm
Backbox depth:	Minimum 26mm
Conformity:	EMC:2004/108/EC,LVD:2006/95/EC
Weight:	160gms
Country of origin:	UK

Product Order Codes

Switched live	Volt free	Description
AX-OC-WMW-24SL	AX-OC-WMW-24VF	Wall mount microwave occupancy sensor, 24V
AX-OC-WMW-230SL	AX-OC-WMW-230VF	Wall mount microwave occupancy sensor, 230V

Add –O for optional touch switch for overriding sensor

Dimensions



Installation

The AX-OC-WMW should be installed by a suitably qualified technician in conjunction with any guidelines for the equipment it is to be connected to and any local regulations.

Adhere to the following guidelines for the proper operation of the product.

- Switch off the power to the unit before performing any work on it.
- Do not position sensor on a vibrating surface.
- Site as far away as possible from metal objects.
- Do not exceed the rated loads. This could lead to contact welding.
- At maximum sensitivity, the unit may detect movements through thin walls or partitions. Reduce sensitivity if necessary

Operation

It uses doppler effect to find movements within its range. A 10.525GHz built-in transceiver transmits the high frequency electromagnetic wave and receives the signals reflected off objects in its path. Any movement will create frequency shifts in the received signal. This data is processed with help of a microcontroller to determine whether a movement is detected or not and control the connected load.

The 'LUX' preset sets the ambient light threshold below which the output will be ON when the sensor detects a motion. When movement stops, the device will turn off the output after a time period set by the 'TIMER' preset. Touch switch on the front side allows the user to override the sensor and manually turn on and off the output.

Unit will be in 'AUTO' mode when it is powered up. Touch the switch to override the sensors and turn ON the relay. Touch again to turn OFF the relay.

The LED will light up or blink when the unit detects motion or change status.

Blinking Green LED - Motion detected in AUTO mode. Relay is ON.

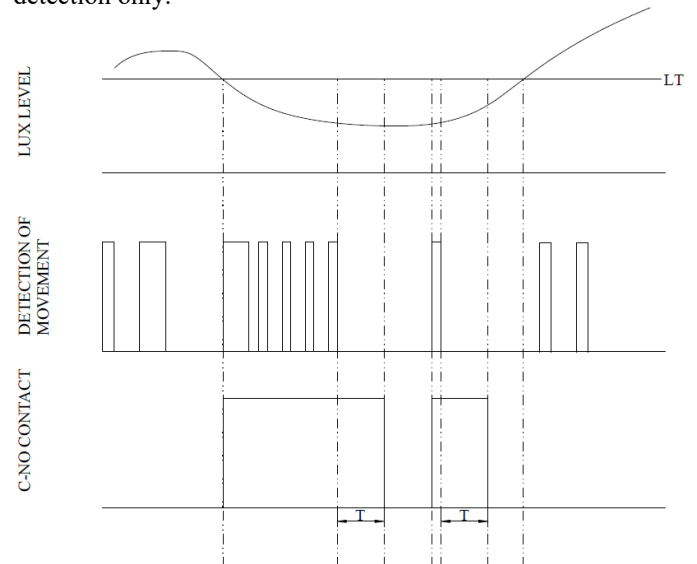
Blinking Red LED - Motion not detected in AUTO mode. Relay is OFF.

Constant green LED - (- O versions only) Relay is ON.

Constant Red LED - (- O versions only) Relay is OFF.

Alternating green and red - Sensor Error

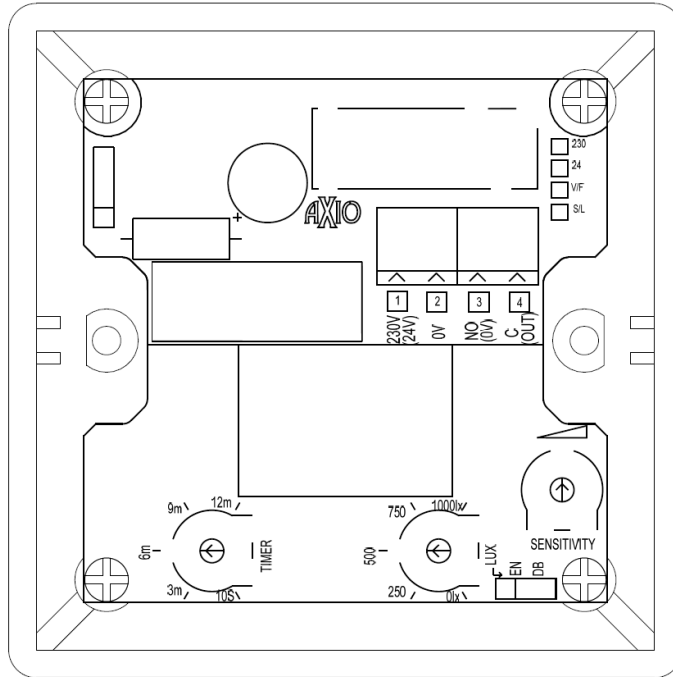
LUX sensor can be disabled using the onboard jumper. Once disabled, the unit will switch ON and OFF based on motion detection only.



LT - Lux threshold set by LUX preset

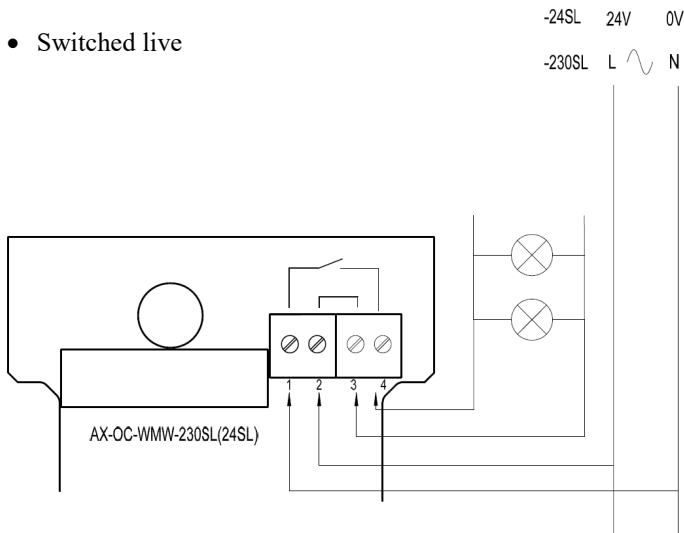
T - Timer period set by TIMER preset

Connections

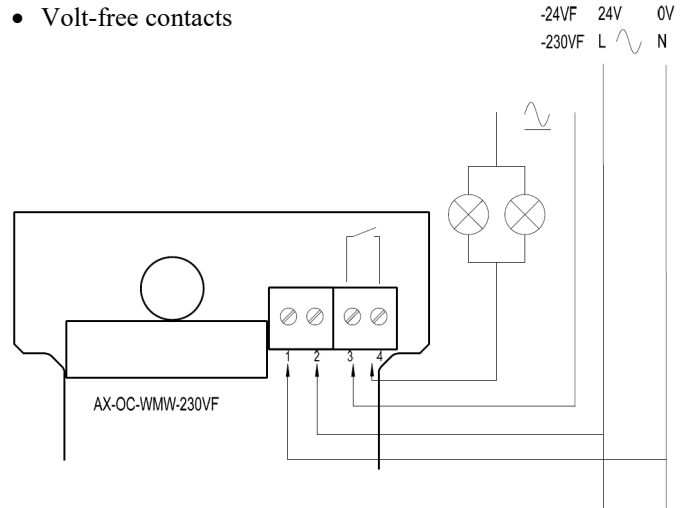


Typical Wiring Diagrams

- Switched live



- Volt-free contacts



Datasheet Contents

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