

Microwave Motion Sensor

HCO05S

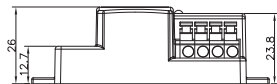
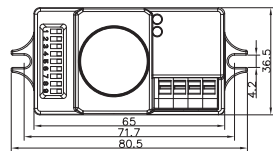
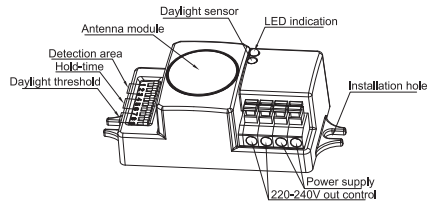
On/Off Control

1. Technical Specifications

Operation frequency	5.86GHz +/-75MHz
Operating voltage	220-240VAC 50/60Hz
Transmission power	< 0.2mW
Rated load	800W(resistive),400VA(capacitive)
Stand-by power	<0.5W
Warming-up	10s
Sensor principle	High Frequency (microwave)
Detection range	Max. L (Øx H) 12m x 6m
Daylight threshold	2lux ~ 50lux, disable
Sensitivity	10% / 30% / 50% / 75% / 100%
Hold-time	5s ~ 30min (selectable)
Detection angle	30°~150°
Operation temperature	Ta: -35°C ~ +70°C
IP Rating	IP20

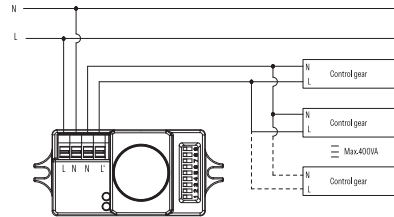
2. Installation

Mechanical Structure & Dimensions (mm)



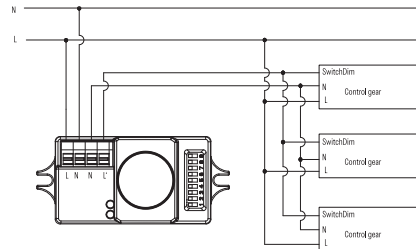
3. Wiring Diagram

To connect several standard control gear with 1 sensor (ON/OFF function), the wiring should be.



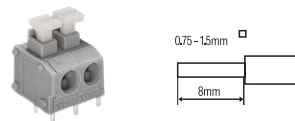
---This product should be installed by a qualified electrician.

With Tridonic switchDIM ballast / driver (Excel ballast/driver, corridor function), this sensor can also achieve tri-level dimming control:



---This product should be installed by a qualified electrician.

Wire Preparation



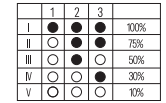
To make or release the wire from the terminal, use a screwdriver to push down the button.

4. Settings

Detection Range

This determines the effective range of the motion detector and is set by DIP switches at the sensor itself, refer to figure. Notethat reducing the sensitivity will also narrow the detection range.

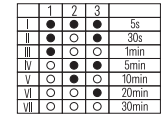
- I - 100%
- II - 75%
- III - 50%
- IV - 30%
- V - 10%



Hold Time

This determines the time the fitting remains at 100% level on motion detection and is set with DIP switches at the sensor itself, refer to figure. The walk test setting is useful when installing the fitting to establish correct operation and range.

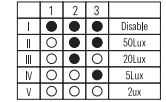
- I - 5s
- II - 30s
- III - 1min
- IV - 5min
- V - 10min
- VI - 20min
- VII - 30min



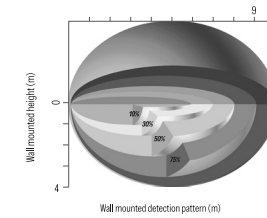
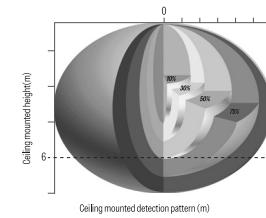
Daylight Threshold

This setting holds off the 100% light output should there sufficient daylight and is set using DIP switches at the sensor, refer to figure.

- I - Disable
- II - 50 Lux
- III - 20 Lux
- IV - 5 Lux
- V - 2 Lux



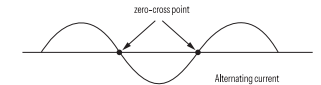
5. Detection Pattern



6. Functions

1. Zero-cross Relay Operation

Designed in the software, the sensor switches on/off the load right at the zero-cross point, to ensure the in-rush current is minimised, enabling the maximum life-time of the relay.



2. Loop-in and Loop-out Terminal

Double L N terminal makes it easy for wire loop-in and loop-out, and saves the cost of terminal block and assembly time.

3. Trouble Shooting

Malfunction Cause Remedy	Cause	Remedy
The load will not work	Incorrect light-control setting selected	Adjust setting
	Load faulty	Replace load
	Mains switch OFF	Switch ON
The load is always on	Continuous movement in the detection zone	Check zone setting
The load is on without any identifiable movement	The sensor is not mounted for reliably detecting movement	Securely mount enclosure
	Movement occurred, but not identified by the sensor (movement behind wall, movement of small object in immediate lamp vicinity etc.)	Check zone setting
The load will not work despite movement	Rapid movements are being suppressed to minimise functioning or the detection radius is too small	Check zone setting

7. Additional Information / Documents

- Regarding precautions for microwave sensor installation and operation, please kindly refer to www.hytronik.com/download->knowledge->Microwave Sensors - Precautions for Product Installation and Operation
- Regarding Hytronik standard guarantee policy, please refer to www.hytronik.com/download->knowledge->Hytronik Standard Guarantee Policy