

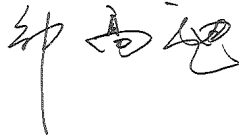

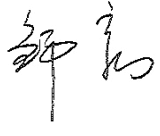

SPECIFICATION

Product Name: Dry Contact Motion Sensor

Model No.: MC030S E1

Issue Date: Oct 21st, 2020

CUSTOMER APPROVED

PRODUCT DIRECTOR APPROVED	SALES CHECKED	R&D CHECKED	PREPARED
			

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1. Features



- Compact size design, can be built-in most of light fixtures.
- Sensor parameters can be easily adjustable by DIP switches.
- Terminal design for both in and off connection, easy to be connected. Output is dry contact

2. Parameter

Input	Operating Voltage Range	198-264V AC, 50Hz/60Hz
	DC Input Voltage	N/A
	Rated Voltage	220-240V AC, 50Hz/60Hz
	No-load Power	N/A
	Stand-by Power	≤0.5W
	Surge Test	L--N: 1kV
Output	Working Mode	ON/OFF function
	Type of Load	Dry contact
	Load Capacity	400W(Inductive) ; 800W(Resistive)
	Current of Load	N/A
	Max. Surge Capacity	30A (50% Ipeak, twidth =500uS, 230Vac full load, cold start); 60A (50% Ipeak, twidth =200uS, 230Vac, full load, cold start)
Dim Interface	1-10V Dimming	N/A
	Synchronous Control	N/A
	High Low-level	N/A
	PWM Control	N/A
Sensor Parameters	Operating Frequency	5.8 GHz ±75 MHz, ISM Band.
	Transmitting power	1mW Max.
	Hold time	5S/30S/90S/3min/20min/30min(set via 3 DIP switch)
	Stand-by DIM Level	N/A
	Stand-by Period	N/A
	Detection Area	100%/75%/50%/25%/10%(set via 3 DIP switch)
	Daylight Sensor	2lux/10lux/25lux/50lux/Disable (set via 3 DIP switch) (Ambient diffusion status)
	Daylight on/off	N/A

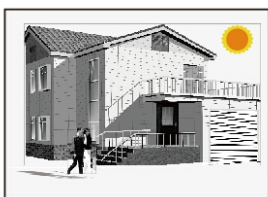
	Detecting Radius	4-6m (mounting height 3m)
	Mounting Height	6m Max
	Detecting Angle	150°
Wireless Module	Operating Frequency	N/A
	Transmitting power	N/A
	Transmitting distance	N/A
	Modulation mode	N/A
	Number of coding	N/A
Operating Environment	Operating Temperature	-20℃...+60℃
	Storage Temperature	-40℃...+80℃ Humidity: 10%-95% (Non-condensing)
Certificate Standards	Safety standards	EN61058-1, EN61058-1-2
	EMC standards	EN300440, EN301489-1, EN55015, EN61547, EN61000-3-2 EN61000-3-3, EN62479
	Environmental Requirement	Compliant to RoHS
	Certificate	CE
Others	Wiring	Press-in Type Terminals, wire diameter:0.75-1.5mm ²
	IP Rating	IP20
	Protection Class	Class II
	Installation	Built-in
	Dimension	77*36*25.6mm
	Package	Bubble bag+Clapboard + Carton(K=A)
	Net Weight	41.0g
	Lifetime	5 years warranty@Ta 230V full load

Note

1. "N/A" means not available.
2. Detection area is effected on volume of motion object and motion speed. The detection area is tested by a 165cm height person and walking speed is 0.5m/s.

2. Function

On/OFF Function



- ① With sufficient ambient light, the light will not be switched on even if with motion signal.

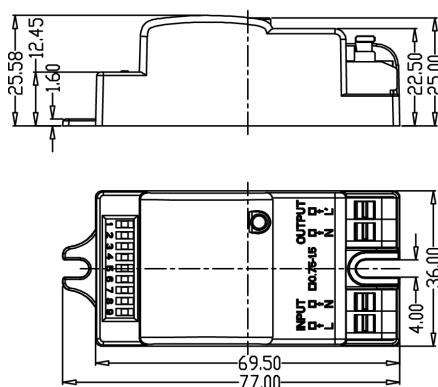


- ② With insufficient ambient light, the sensor switches on the light when motion is detected.

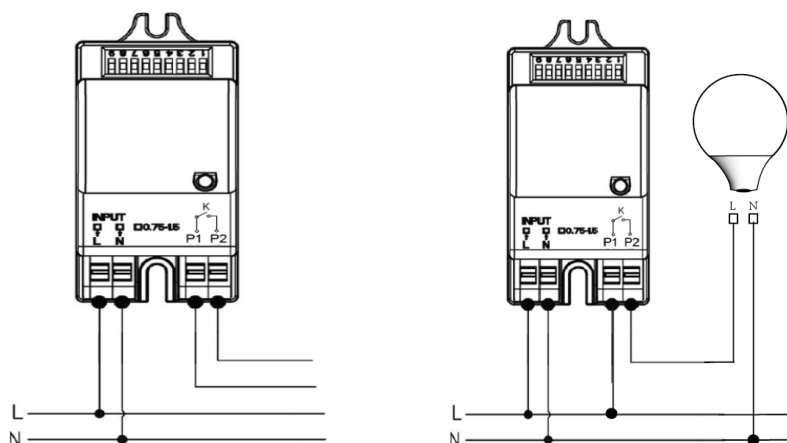


- ③ After elapse of hold time, the sensor switches off the light when no motion is detected.

4. Dimension (mm)



5. Wiring



This product is powered by AC220-240V. The dry contact part is not energized, Open and closed function, the dry contact output can be connected to AC or DC.

*The sensor is designed to connect one load only. Connect more than one loads may damage the sensor.

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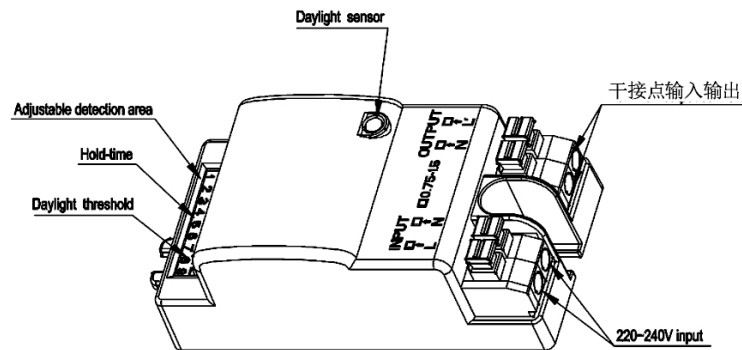
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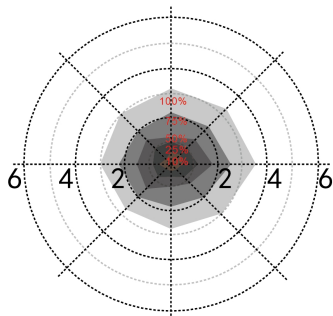
6. Structure



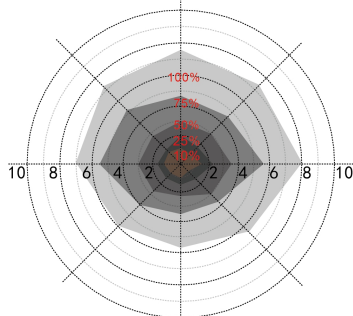
7. Radiation Pattern

Ceiling mounting

Ceiling mounted height: 3m
Sensitivity: 100%/75%/50%/25%/10%

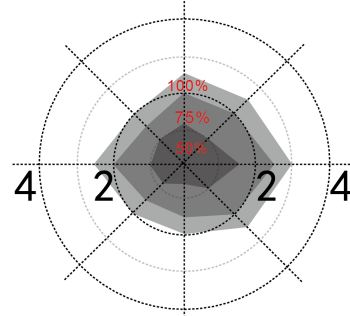


Normal moving (Speed:1m/s)

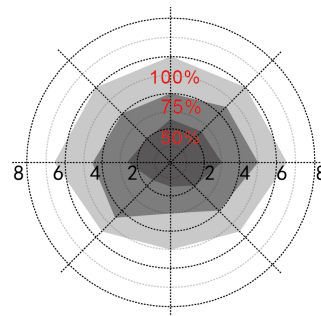


Slow moving (Speed 0.3m/s)

Ceiling mounted height: 6m(*)
Sensitivity:100%/75%/50%



Normal moving (Speed:1m/s)



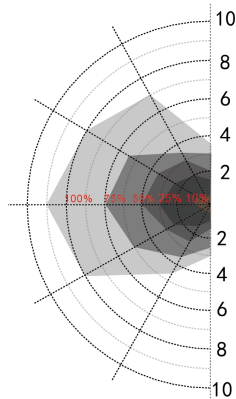
Slow moving (Speed: 0.3m/s)

*50%,75%,100% detection sensitivity is workable when installed at 6m mounting height. Only 10%,25% sensitivity is not able to detect motion signal.

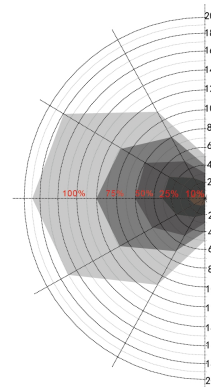
Wall mounting:

Wall mounted height: 2m

Sensitivity: 100%/75%/50%/25%/10%



Normal moving (Speed: 1m/s)



Slow moving (Speed 0.3m/s)

8. DIP Switch Setting

Detection Area (Sensitivity)

	1	2	3	
I	ON	ON	ON	100%
II	-	ON	ON	75%
III	ON	-	ON	50%
IV	-	-	ON	25%
V	-	-	-	10%

Hold Time

	4	5	6	
I	ON	ON	ON	5S
II	-	ON	ON	30S
III	ON	-	ON	90S
IV	-	-	ON	3min
V	ON	ON	-	20min
VI	-	-	-	30min

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Daylight Threshold

	6	7	8	
I	ON	ON	ON	2Lux
II	ON	ON	-	10Lux
III	-	ON	-	25Lux
IV	ON	-	-	50Lux
V	-	-	-	Disable*

*Disable means the daylight sensor does not work. The sensor will turn on light once motion is detected regardless of ambient light level.

9. Initialization

After power on, the sensor automatically turns on light at 100% brightness. During the initialization, the sensor is not able to detect movement.

10. Factory Setting

Detection area: 100%, Hold Time: 5S, Daylight Sensor: Disable

11. Application Notice

- 1) Be sure to power off before adjusting DIP switch setting.
- 2) The microwave cannot pass through the metal, so the sensor cannot be installed in closed or semi-closed metal lamps and lanterns. Make sure there are no metal or glass above the sensor.