HVAC Occupancy Sensor

OS-363 GENERAL

The OS-363 is a ceiling mount 360° occupancy sensor designed for automatic ventilation control of HVAC system. This sensor provides a changeover (form C) output for fan coil controller to activate/deactivate the operation of fan coil automatically.

DESCRIPTION



INSTALLATION & WIRING

Installation

- 1. Open the cover the loosening the screw. Bend the clip and remove the PCB module.
- 2. Lead the cable into the unit base and mount the base on the ceiling.
- 3. Replace the PCB module. Connect the cable to the corresponding terminals according to the following instructions.

Wiring



Installation Instructions

- NC-COM-NO: Output for ON-OFF control of fan coil operation.
- 24 V: Power supply (non-polarity)
- 4. Replace the front cover and then walk test can be conducted.

WALK TEST

Apply power supply and give 25 seconds for sensor to warm up. The LED will blink (long and short) during warm up period. Ensure the jumper head connectors of ON & OFF delays are placed at "A" position (shortest time). After the warm up expires, walk across the detection zones (invisible) at normal speed. The LED will lit whenever sensor detects the motion. *Note: The LED will blink if any jumper head connector is not properly placed.*

OPERATION

Operation Diagram

A. Standby

After warm up time expires, the sensor enters into standby mode. Sensor will check whether both delays are properly set. If not, the LED will blink to indicate.

B. Relay ON Delay

Relay ON delay is the time given to sensor to verify true occupancy before activating the fan coil. Any further detection during ON delay will NOT reset the timer.

C. 1-minute Waiting

When Relay ON delay expires, the sensor enters into the 1-minute waiting time. If no further detection within 1 minute, sensor will return to standby mode. If any detection occurs, then signal output will be activated and Relay OFF delay will be started.

D. Relay OFF Delay

Relay OFF delay is the time of signal output lasts. Every detection during this period will reset the timer.



ON / OFF DELAY

The ON and OFF delays are designed to provide smarter energy management of HVAC system. ON delay is the time given to the sensor to certify the occupancy, before it activates the fan coil controller. OFF delay is the time that fan coil is operating. Both ON and OFF delays can be easily set by placing the jumper head on the corresponding pins as following.

	А	В	С	D	E	F
ON	0 sec.	10 sec.	30 sec.	1 min.	5 min.	10 min.
OFF	10 sec.	1 min.	5 min.	10 min.	20 min.	30 min.



SPECIFICATIONS

Infrared sensor Dual element	
Power supply 24 \pm 2 V AC/DC	
Detection range Height x 2.5 at 25°C	
Output format Form C, 30 VDC, 0.2A max	х.
Current drain5 mA @24 VAC	
Mounting height 2.4~4.2 m	
Detectable speed 0.1~3.0 m/sec.	
RFI immunity Av. 20 V/m (10~1,000 MH	z)
Temperature20°C ~ 60°C (-4°F ~ 140°I	F)
Humidity 95% RH max.	
Dimensions 110 (Dia.) x 44 (H) mm	

058-36308-000 OS-363 I/M, Eng. 2K4-07 V1.1

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DETECTION PATTERN



Side view



Mount height	2.4m	3.0m	3.6m	4.2m
Coverage(Dia.)	6.0m	7.5m	9.0m	10.5m