OAC-DT – MicroSet Dual Tech Line Voltage Ceiling Sensor

Overview
The Dual Technology sensor’s combination of Ultrasonic and Passive Infrared technologies offers the most complete sensing equipment available today. MicroSet self-adjusting Dual Technology sensors drastically simplify and reduce a contractor’s installation and adjustment time period.

Features
- MicroSet self-adjusting time delay and sensitivity
- Built-in light level sensor
- Units available for control of single or two separate loads
- Products tested to NEMA WD 7 - 2011 Occupancy Motion Sensors Standard
Specifications

**Technology**
- Passive Infrared (PIR) and Ultrasonic (US)

**Power Requirements**
- 120 to 347 VAC, 50/60 Hz - Neutral Required

- 120 VAC
  - Incandescent/Tungsten - 0 to 800W, 50/60 Hz
  - Motor Load: ¼ HP @ 125 VAC

- 230 VAC
  - Fluorescent/Ballast - 0 to 1200W, 50/60 Hz

- 277 VAC
  - Fluorescent/Ballast - 0 to 2700W, 50/60 Hz

- 347 VAC
  - Fluorescent/Ballast - 0 to 1500W, 50/60 Hz

**Time Delays**
- Self-adjustable, 15 seconds/test (10 minutes Auto), or Selectable 5, 15, 30 minutes

**Coverage**
- 2000 sq. ft.

**Light Level Sensing**
- 0 to 300 foot-candles

**Operating Environment**
- Temperature: 32°F - 104°F (0°C - 40°C)
- Relative humidity: 20% to 90%, non-condensing
- For indoor use only

**Housing**
- Durable, injection molded housing. Polycarbonate resin complies with UL 94V-0

**Size**
- 1.42”H x 4.5”W (36.068mm x 114.3mm)

**Mounting**
- Mounts directly to ceiling tile, to a 4” square box and round mud ring or to 4” octagon box

**LED Indicators**
- Red LED for PIR detection; Green LED for Ultrasonic detection

**Standards**
- FCC Compliant
- cULus Listed
- RoHS Compliant

Description/Operation

The MicroSet self-adjusting technology continuously monitors multiple sub-frequencies in the event that if a continuous Doppler shift occurs, such as those created by airflow from an air duct, the sensor will identify the noise as continuous and then block it out of view at a select sub-frequency. It will continue to monitor other sub-frequencies for human motion. This avoids false-activation, while still maintaining the high level of sensitivity that is necessary for sensing minor motion in a changing environment. Separate concurrent time delays for both Passive Infrared and Ultrasonic technologies avoid false activations or deactivations. In Automatic On Mode, the lights turn ON when a person enters the room. When enabled, the daylighting feature prevents lights from turning ON when the room is adequately illuminated by natural light.

Applications

- Classrooms
- Conference Rooms
- Office Spaces
- Common Areas
- Computer Rooms
- Break Rooms
- Hallways
- Other Indoor Office Spaces
Wiring Diagrams

Single Relay

AUTOMATIC MODE OPERATION:
1. WHEN SENSOR ACTIVATES LOAD TURNS ON.
2. LOAD TURNS OFF WHEN SENSOR TIMES OUT.

Dual Relay

AUTOMATIC MODE OPERATION:
1. WHEN SENSOR ACTIVATES, BOTH LOADS TURN ON.
2. LOADS TURN OFF WHEN SENSOR TIMES OUT.

Coverage

OAC-DT-2000-MV/DMV
2,000 sq. ft.
Technical Data

OAC-DT – MicroSet Dual Tech Line Voltage Ceiling Sensor

**Controls**

**D/P Switch Legend**

<table>
<thead>
<tr>
<th>D/P Switch</th>
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*Self-Adjusts to 10 min. user mode

**Ordering**

<table>
<thead>
<tr>
<th>Catalog #</th>
<th>Maximum Room Size</th>
<th>Field of View</th>
<th>Frequency</th>
<th>Features</th>
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</thead>
<tbody>
<tr>
<td>OAC-DT-2000-MV</td>
<td>2,000 sq. ft.</td>
<td>Two Way (360°)</td>
<td>32 kHz</td>
<td>w/ Daylight Sensor</td>
</tr>
<tr>
<td>OAC-DT-2000-DMV</td>
<td>2,000 sq. ft.</td>
<td>Two Way (360°)</td>
<td>32 kHz</td>
<td>Dual Relay w/ Daylight Sensor</td>
</tr>
</tbody>
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