WARNING AND CAUTIONS

- **TO AVOID FIRE, SHOCK, OR DEATH: TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT THE POWER IS OFF BEFORE WIRING.**
- **TO AVOID FIRE, SHOCK, DEATH, OR DAMAGE TO PROPERTY, DO NOT CONNECT MORE THAN THE SPECIFIED LOAD IN EXCESS OF THE SPECIFIED RATING. CHECK YOUR LOAD RATINGS TO DETERMINE THE UNIT’S SUITABILITY FOR YOUR APPLICATION.**
- **IF YOU ARE NOT SURE ABOUT ANY PART OF THESE INSTRUCTIONS, CONSULT AN ELECTRICIAN.**

**FEATURES**
- Fixture or electrical box mounted Passive Infrared Occupancy Sensor
- Integrated Photocell
- Adjustable Time Delay
- Auto Calibration
- Pre-striped color coded wire leads
- 21" length (OEF-P-010V-MV) - 21" length (OEF-P-010V-347)
- Optional aisle mask
- 0-10V Dimming
- Partial OFF modes
- Adjustable PIR sensitivity
- Laddered daylighting configuration
- Visual LED indicators for easy troubleshooting
- 360° field-of-view for 20 ft. to 40 ft. High Bay mounting heights
- 360° field-of-view for 6 ft. to 20 ft. Low Bay mounting heights
- H.I.S. (High Inrush Stability) Technology
- Zero Crossing
- Robust Mechanical Latching Relays
- LED indicator light blinks when sensor detects motion, visible from long distance
- False Detection Filtering
- Rapid response to vehicles

**SPECIFICATIONS**

**CAT NO:** OEF-P-010V-010V-MV, OEF-P-010V-347

**Ratings:**
- OEF-P-010V-MV: 120-230-277V, 50/60Hz
- OEF-P-010V-347: 60Hz

**Load Rating (one hot leg, same phase only):**
- 800 W tungsten load @ 120 VAC
- 1200 W tungsten load @ 277 VAC
- 8A Electronic Ballast @ 120 VAC
- 5A Electronic Ballast @ 277 VAC
- 1500VA @ 347 VAC (Ballast only)

**Motor Load:** 1.4 HP

**Dimming Loads:**
- 0-10V Dimmable or LED drivers only
- 80 mA maximum (~40 LED drivers/ballasts @ 0.5 per)

**Minimum Load:** 1.0mA

**INSTALLATION**

**DESCRIPTION**

Eaton Lighting Solutions OEF High Bay Occupancy Sensors are specifically designed for high mounted areas such as warehouses, manufacturing and other high ceiling applications. The OEF installs directly to an industrial luminaire or an electrical junction box. It is a self-contained sensor and relay that detects motion using the passive infrared (PIR) to sense sources (such as a person entering a room) within its field-of-view (monitored space) and automatically switches lights ON. The controlled lights will remain ON until no motion is detected and the scheduled time delay has expired. The daylight sensor is sensitive to ambient light and has a threshold level that can be user-adjusted. The OEF is supplied with two interchangeable lens rings that allows the user to select between a 360° High Bay or Low Bay pattern and an aisle pattern with the included aisle mask. The Sensor’s High Bay lens and aisle lens is designed for 20 ft. to 40 ft. mounting heights for a symmetrical pattern which will provide coverage of 50’ to 60’ diameter (refer to Figure 3 and 4). The Low Bay lens is designed for 6 ft. to 20 ft. mounting heights for a symmetrical pattern which will provide coverage of 30’ to 50’ diameter (refer to Figure 5). The Sensor is sensitive to the heat emitted by the human body. In order to initially trigger the Sensor, the source of heat must move from one zone of detection to another.

Note that occupancy sensors respond to rapid changes in temperature, so care should be taken not to mount the device near a climate control source (i.e., radiators, air exchanges, and air conditioners). Hot or cold drafts will look like body motion to the device and will trigger it if the unit is mounted too close. Mount the Occupancy Sensor 6 ft. away from the heating or cooling ventilation source.

**INSTALLATION**

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- The OEF is equipped with two lens trim rings. The 360° High Bay lens (white color trim ring) and the 360° Low Bay lens (blue color trim ring) in the cavity. An aisle mask is optional as desired. Change the lens for use in aisle or Low Bay applications. See below for changing lens trimming.
- To change lens, turn trim ring so that the two indented dots line up and pull out by the finger tab (refer to Figure 6A).
- Remove the inner lock-nut from the threaded nipple and insert the wires and the trim ring for use in aisle or Low Bay applications. See below for changing lens trimming.

**NOTE:** Mounting nipple has a ‘snap’ feature for quick installation into round or ‘double-D’ holes, as well as a ‘keying’ mechanism to prevent rotation after installation in ‘double-D’ holes.

**WARNING: TO AVOID FIRE, SHOCK, OR DEATH:**

- Turn off power on the device and turn the PHOTO SETPOINT knob to OFF position for 5 seconds.

**NOTE:**
- Blue/LED indicates failed calibration due to ambient light falling below 5 lux during Auto Calibration.
- Failed calibration or significant change in light source like relamping requires re-calibration by resetting to factory default.
- If the calibration process does not successfully complete due to power outage, it will restart at the next power-on (if the knob is not in the OFF position).
- To disable photocell or cancel Auto Calibration turn the PHOTO SETPOINT knob to OFF position.
- The LED will be solid OFF during Auto Calibration.
- The CAL button will blink RED during Auto Calibration.

**FACTORY SETTINGS**

**CONFIGURATION**

- 120-230-277V
- 50/60Hz

**PIR Sensitivity**

- 70% of maximum

**Photocell Setpoint OFF**

- 0 lux

**Configuration Value**

- PIR Sensitivity
- Photocell Setpoint OFF

**Configuration Value**

- 70% of maximum

**Photocell Setpoint OFF**

- 0 lux

**FIELD OF VIEW**

- 360° High Bay
- 30° to 50° Low Bay
- 30° to 50° Aisle (refer to Figure 5).

**SENSOR RESPONSE**

- **Photocell Auto Calibration**
  - To enable photocell or alert Auto Calibration, turn the PHOTO SETPOINT knob from OFF position to any DDL setpoint (this can be done when power is removed). The LED will be solid GREEN and the lights will be forced ON for 24 hours indicating the device has entered Auto Calibration Mode.
  - After Auto Calibration is complete, the LED will resume normal operation. The device is now daylighting.
  - To re-enable factory default, power ON the device and turn the PHOTO SETPOINT knob to OFF position for 5 seconds.

**NOTE:**
- Red/BLUE LED indicates failed calibration due to ambient light falling below 5 lux during Auto Calibration.
- Failed calibration or significant change in light source like relamping requires re-calibration by resetting to factory default.
- If the calibration process does not successfully complete due to power outage, it will restart at the next power-up (if the knob is not in the OFF position).

**To disable photocell or cancel Auto Calibration turn the PHOTO SETPOINT knob to OFF position**

- The CAL button will blink RED during Auto Calibration.

**NOTE:** The LED can be adjusted by turning the PHOTO SETPOINT knob.

**OEF OFF TABLE**

<table>
<thead>
<tr>
<th>Configuration Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIR Sensitivity</td>
<td>70% of maximum</td>
</tr>
<tr>
<td>Photocell Setpoint OFF</td>
<td>0 lux</td>
</tr>
</tbody>
</table>

**LED INDICATORS**

- **RED:**
  - Blink 24 hr: Auto Calibration
- **GREEN:**
  - Blink 24 hr: Auto Calibration
  - Solid: Device Failure
- **BLUE:**
  - Blink 2 sec: Off Delay Time
  - Solid: Out Setting Change
  - Blink: Filled Calibration
- **YELLOW:**
  - Blink 10 sec: Power Time
  - Blink: Photocell Test Mode
**PHOTOCELL TEST MODE**

- Motion detection by the infrared sensor will reset T1 and T2.

**MODES OF OPERATION**

Select modes using the MODE knob.

- **MODE 1 - Doff, T2 = 0:**
  - Daylighting Dim to OFF - Partial OFF Disabled (T2 = 0)
  - Daylighting Dim to Min - Partial OFF Disabled (T2 = 0)
  - Daylighting Dim to Min - Partial OFF Enabled (T2 = 0 min)
  - Daylighting Dim to OFF - Partial OFF Enabled (T2 = 0 min)

- **MODE 2 - Dim, T2 = 0:**
  - Daylighting Dim to Min - Partial OFF Disabled (T2 = 0)
  - Daylighting Dim to Min - Partial OFF Enabled (T2 = 0 min)
  - Daylighting Dim to OFF - Partial OFF Disabled (T2 = 0)
  - Daylighting Dim to OFF - Partial OFF Enabled (T2 = 0 min)

- **MODE 3 - Doff, T2 = 60:**
  - Daylighting Dim to OFF - Partial OFF Disabled (T2 = 60 min)
  - Daylighting Dim to OFF - Partial OFF Enabled (T2 = 60 min)
  - Daylighting Dim to Min - Partial OFF Disabled (T2 = 60 min)
  - Daylighting Dim to Min - Partial OFF Enabled (T2 = 60 min)

- **MODE 4 - Dim, T2 = 60:**
  - Daylighting Dim to Min - Partial OFF Disabled (T2 = 60 min)
  - Daylighting Dim to Min - Partial OFF Enabled (T2 = 60 min)
  - Daylighting Dim to OFF - Partial OFF Disabled (T2 = 60 min)
  - Daylighting Dim to OFF - Partial OFF Enabled (T2 = 60 min)

- **MODE 5 - Doff, T2 = infinity:**
  - Daylighting Dim to OFF - Partial OFF Disabled (T2 = infinity sign)
  - Daylighting Dim to OFF - Partial OFF Enabled (T2 = infinity sign)

- **NOTE:** Motion detection by the infrared sensor will reset T1 and T2.

**CERTIFICATIONS**

All models meet all requirements and pass certification testing per UL 773A and CSA 22.2 No. 205.

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**LIMITED 5 YEAR WARRANTY AND EXCLUSIONS**

Eaton Lighting Solutions warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Eaton Lighting Solutions is free of defects in materials and workmanship under normal and proper use for five years from the purchase date. Eaton Lighting Solutions only obligation is to correct such defects by repair or replacement, at its option. For details visit [www.eaton.com/lighting] or call 1-800-553-3879. This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to five years. Eaton Lighting Solutions is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation. The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort, or otherwise.