GE Lighting Controls

GE Aware™

PIR High Bay Fixture Mounted Line Voltage Occupancy Sensor

HB-12

Overview

The HB series occupancy sensor is specifically designed for applications such as warehouses, distribution centers, and other high ceiling areas. This product can be easily installed directly on a fluorescent fixture. With well-developed PIR sensor technology and circuit design, the sensor achieves high sensitivity and low false-trip occurrence. It comes with 360° high bay and low bay lenses as well as shields for end of aisle use. For indoor use only.

Operation

The HB series sensor is a fixture mount, line voltage, Passive Infrared (PIR) motion sensing lighting control, used for energy savings and convenience.

PIR Technology

The sensor’s segmented lens divides the field of view into sensor zones, and detects the changes in temperature that are created when a person, or part of a person as small as a hand, passes into or out of a sensor zone. The -SR model allows the control of one load with one occupancy sensor switch and the -DR can control two loads.

Dual load operation (-DR models)

The HB-12-DR can control two loads but always maintains one load on. This is for applications where minimum light levels must be maintained. When motion is detected both loads are energized for full lighting output. When no motion is detected and the time delay has elapsed, one load will shut off leaving the other load on. In the next on/off cycle the opposite load will shut off minimizing impact to lamp life due to switching.

Daylight Feature

The daylight feature (-D models) can provide additional energy savings for facilities with windows or skylights. For -SR-D models, the lights will remain off (or turn off if already on) if the photocell measures sufficient light at the floor. The lights will turn back on when the light level reaches the minimum setpoint. For the -DR-D models, the daylight feature will prevent both loads from turning on at the same time when sufficient light is detected, but will always maintain one load energized. The daylight mode and occupancy sensing modes can be used together to maximize savings. When sufficient light is detected, daylight control will turn off (-SR) or minimize (-DR) light levels regardless of occupancy. When insufficient light is detected, then the sensor will operate like a standard occupancy sensor.

Specifications

Technology:

Passive Infrared (PIR)

Power Requirements:

Input (per load):

• 120 - 277VAC 60Hz

Max Load:

• 800VA @ 120VAC 60Hz

• 1200VA @ 277VAC 60Hz

Time Delays:

Selectable 10 s to 30 min.

Mounting Height:

• Up to 40 ft.

• Optional low bay lens provided for heights 20 ft. and below.

Operating Environment:

• Temperature:

14° F – 160° F (-10° C – 60° C)

• Relative Humidity:

20 to 90% non-condensing

Size:

4" x 4" x 2.16" (102.6mm x 102.6mm x 55mm)

Warranty:

5 years

Features:

• Front dip switch for time delay and sensitivity control.

• Photocell option (-D) for daylight harvesting.

• Single or Dual relay option.

• 360° coverage pattern.

Ordering

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Rating</th>
<th>Loads</th>
<th>Daylight Option</th>
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<td>HB-12-SR</td>
<td>120/277 VAC</td>
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<td>no</td>
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<td>64132</td>
<td>HB-12-SR-D</td>
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<td>120/277 VAC</td>
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</table>
Wiring Diagram (consult sensor instruction sheet for other wiring options)

**HB-12-SR-XX**

**HB-12-DR-XX**

**Coverage**

- **High bay lens coverage**
- **Low bay lens coverage**

* Coverage testing performed at nominal room temperature.

**Settings**

<table>
<thead>
<tr>
<th>DIP switch settings (↓: off, ↑: on)</th>
<th>Sensitivity</th>
<th>Delay Time</th>
<th>Sensor Logic</th>
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**Sensor factory pre-sets:**