High-Bay Presence/Absence Detector (317)

The 317 High-Bay PIR Presence/Absence Detector, in conjunction with a Helvar lighting control system, provides automatic control of lighting loads in buildings and interior spaces with high ceilings. The 317 is typically installed in warehouses and factories, and it is used in other applications where mounting heights are too high for standard sensors.

The 317 is compatible with Helvar’s lighting systems and configuration software, Designer™ and Digidim Toolbox™: once connected to a Helvar DALI network and lighting control system, the software automatically detects the unit, which can then be programmed with the required functions.

Features and Connections

- Controls lighting loads based on presence/absence detection
- For mounting on high ceilings
- Fitted into ceiling tiles (or false ceiling), or surface mounted
- Clip-on masks to customise the detection area
- Simple connection and integration into a Helvar DALI control network
- Programmable in Designer™ and Digidim Toolbox™
- Sensitivity can be adjusted by remote control handset

Detection area

A lower mounting height will decrease the overall size of the detection zone.

Detection area masking

Two adaptable clip-on shielding masks are supplied with the 317. Each can cover half of the sensor lens. Lateral or radial strips can be cut out of the masks to customise the detection area.

Aisles / corridors

Cut the mask to make two lateral masks.
This leaves a straight section of the lens uncovered.
The slots you cut out approximate to these levels of sensor coverage:

<table>
<thead>
<tr>
<th>Slot number</th>
<th>Masking shield: approx. % coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>45 %</td>
</tr>
<tr>
<td>2</td>
<td>30 %</td>
</tr>
<tr>
<td>3</td>
<td>20 %</td>
</tr>
<tr>
<td>4</td>
<td>10 %</td>
</tr>
</tbody>
</table>

Narrow areas

Cut semicircles out of the mask to make two radial masks.
This leaves a circular section of the lens uncovered.
The ‘diameter numbers’ of the semicircles you cut out approximate to these levels of sensor coverage:

<table>
<thead>
<tr>
<th>Diameter number</th>
<th>Masking shield: approx. % coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>90 %</td>
</tr>
<tr>
<td>2</td>
<td>65 %</td>
</tr>
<tr>
<td>3</td>
<td>45 %</td>
</tr>
<tr>
<td>4</td>
<td>35 %</td>
</tr>
<tr>
<td>5</td>
<td>20 %</td>
</tr>
</tbody>
</table>
## Technical Data

### Connections

**DALI:**
- Removable connector block
- Wire size: 0.5 mm² – 1.5 mm²
- Solid, flexible or stranded
- Cable rating: All cables must be mains rated

**Power**
- **DALI supply input:** 13 V to 22.5 V
- **DALI consumption:** 20 mA

### Sensors

- **Presence detector:** PIR: Passive infrared presence detector
- **Infrared receiver:** For remote control commands

### Remote control functions

- **Remote control handset:** Helvar 303 remote control
- **Use the Helvar 303 to:**
  - recall lighting scenes 1–4;
  - adjust light levels;
  - store current level;
  - install preset levels for scenes 1–4.
  
  **Note:** Adjust sensitivity using Designer, or DIGIDIM Toolbox (and not by remote control unit)

- **Range:** 5 m – 15 m

### Mechanical data

- **Mounting hole diameter:** 68 mm
- **Bezel diameter:** 88 mm
- **Recommended clearance depth (incl. 50 mm for cabling):**
  - 80 mm [without protective cover];
  - 100 mm [with protective cover]
- **Material (casing):** Flame retardant ABS and PC/ABS
- **Finish:** Matte
- **Colour:** White
- **Weight:** 120 g
- **IP code:** IP40 without gasket; IP65 with gasket
- **Gasket:** Silicone ingress protection gasket (not compatible with surface mount box SBB-A)
- **Masks:** 2 adaptable masks included, each covering half of the sensor lens.

### Operating conditions

- **Ambient temperature:** 0 °C to +35 °C
- **Relative humidity:** Max. 90 %, non-condensing
- **Storage temperature:** −10 °C to +70 °C

### Dimensions (mm)

- **Protective cover:**
  - Ø 88
  - 58
- **Surface back box SBB-A**
  - Note: order the SBB-A surface mount box separately.

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**Conformity and standards**

- **EMC emission:** EN 61000–6–1
- **EMC immunity:** EN 61000–6–3
- **Safety:** EN 60730–1
- **Environment:** Complies with WEEE and RoHS directives