

Ceiling PIR Detector (311)

The 311 Ceiling PIR Detector is a compact unit that provides energy-saving functions in a DALI system. It contains these sensors:

- Passive infrared detector (PIR)
- Infrared receiver

As a presence detector, the unit can turn the lights on when a room is occupied, and off when the room is unoccupied.

The 311 is fully compatible with Helvar's lighting system design and control software: Designer, and Toolbox.

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Key Features

- The PIR sensor detects movement within detection range, allowing load control in response to changes in room occupancy.
- IP55 and cold environment (–30 °C) versions available. Order codes:
 - 311P: IP55 version;
 - 311M: IP55 and –30 °C version.
- Status LEDs flash red to indicate the following:



Installation

All versions of the Detector can be mounted into a ceiling or wall void, or onto a solid surface using a back box.

The standard version (311) can be mounted onto Helvar's SBB-A back box, whereas the 311P and 311M versions need to be mounted onto Helvar's fully sealed SBB-P back box to maintain the IP rating.

When mounting the 311P and 311M versions, the supplied silicone gasket must always be used.

For information on how to install the Ceiling PIR Detector, see the *Installation Guide*.

Detection Pattern







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Technical Data

Connections

External power / DALI:

Cable rating:

Power

DALI supply input: DALI consumption:

Sensors

Presence detector:

Infrared receiver:

Removable connector block; Wire size: 0.5 mm² - 1.5 mm² solid or stranded All cables must be mains rated.

Max. length: 300 m @ 1.5 mm²

13 V to 22.5 V 15 mA

68 mm

PIR: Passive infrared presence detector For remote control commands. Note: Adjust sensitivity using Designer or Toolbox (not by remote control unit).

Mechanical data

Mounting hole diameter: Bezel diameter: Material (casing): Finish / Colour: Weight: IP code:

76 mm Flame-retardant ABS Matt / White RAL 9003 58 g 311: IP40 311P*: IP55 311M*: IP55 * Only when the supplied gasket is used and the unit is mounted onto Helvar's SBB-P back box or flush in a ceiling.

Operating conditions

Ambient temperature:	311 & 311P: 0 °C to +35 °C 311M: -30 °C to +35 °C Note: The temperature difference between the detection target and the background must be at least 4 °C.	
Relative humidity:	Max. 90 %, noncondensing	
Storage temperature:	311 & 311P: -10 °C to +70 °C 311M: -30 °C to +70 °C	
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.

Version information

Software version:	6.08
Hardware version:	Rev. 2

Connections



Dimensions (mm)





