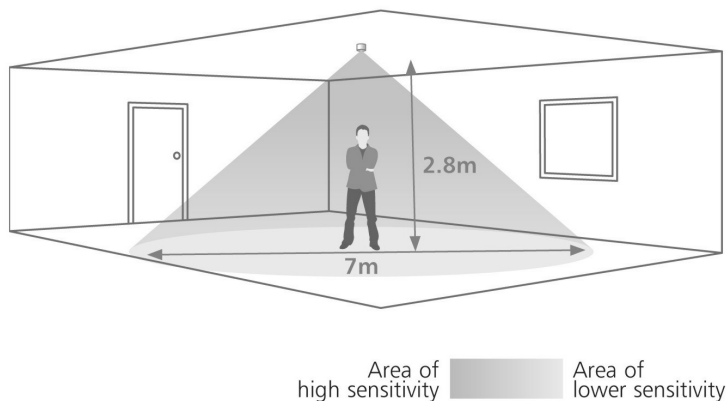


## Detection Pattern



## Specification

### Load

#### Normally closed contact

2 Amp maximum  
Minimum load 100mA

#### Normally open contact

6 Amp fluorescent lighting and resistive  
3 Amp compact fluorescent lighting  
3 Amp low energy lighting  
3 Amp low voltage lighting (switch primary of transformer)  
Fluorescent lighting (max 6 fittings recommended)  
For fluorescent lighting total power factor correction capacitance must not exceed 40µF.  
3 Amp fans and ventilation equipment  
Switch SON lighting loads via a contactor  
Minimum load 100mA

### Supply voltage

220-240 Volts AC 50 Hz

### Time out period

Adjustable 10s to 30m

### Light level

Light to dark

### Terminal capacity

2.5 mm<sup>2</sup>

### Material

Flame retardant ABS

### Rated impulse voltage

2500V

### Purpose

Sensing control

### Construction

Independent, flush mounted, electronic

### Type of action

Type 1.B action

### Pollution

Degree 2

### Software

Class A

### Temperature

-10°C to 35°C

### Compliance

EMC-2014/30/EU  
LVD-2014/35/EU



## Part Numbers

EBDSPiR-VFC  
DBB

Ceiling mounted presence detector voltage free output contact  
Surface mounting back box

### IMPORTANT NOTICE!

This device should be installed by a qualified electrician in accordance with the latest edition of the IEE wiring regulations.



CP Electronics - a business unit of  
Legrand Electric Limited  
Brent Crescent, London NW10 7XR UK  
Tel: +44 (0)333 900 0671  
Fax: +44 (0)333 900 0674

A brand of **legrand**  
www.cpelectronics.co.uk  
enquiry@cpelectronics.co.uk

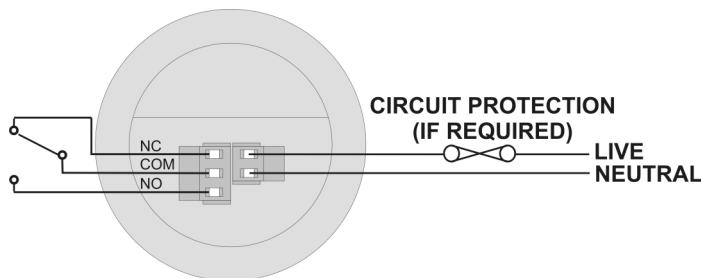
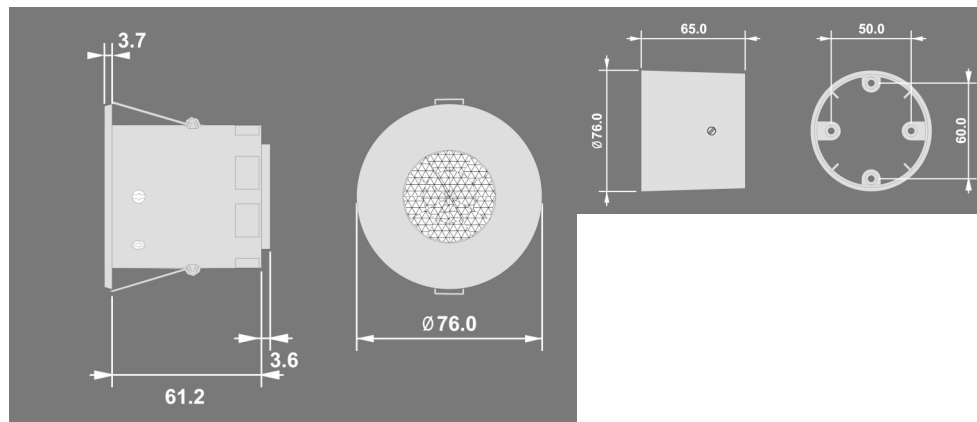
Ref #WD234 Issue 4

## Product Guide



## EBDSPiR-VFC

### Ceiling Presence Detector



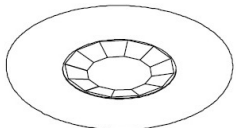
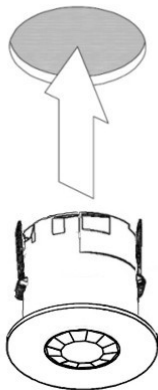
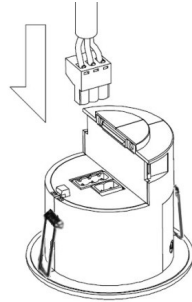
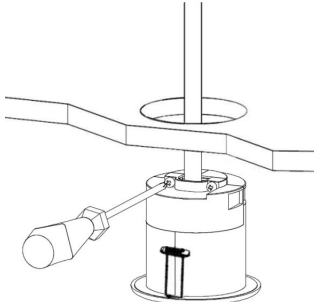
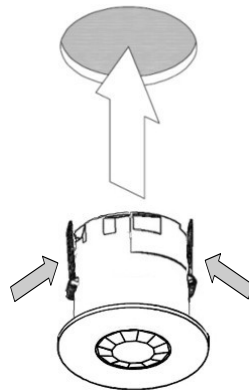
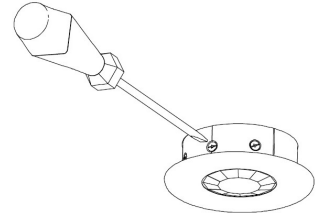
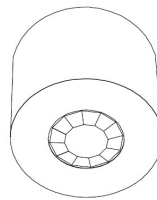
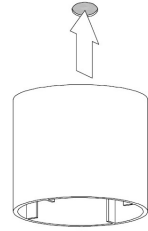
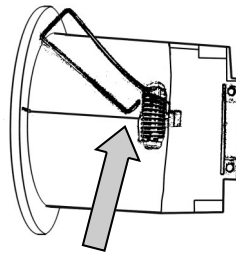
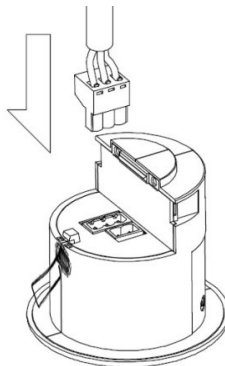
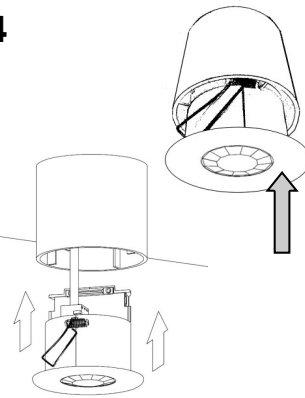
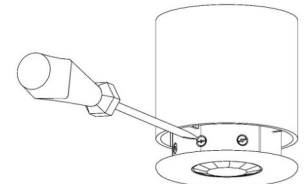
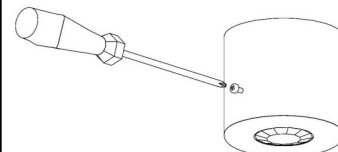
## Overview

The EBDSPiR series of presence detector switches are designed to provide automatic control of lighting, heating or ventilation loads. They detect movement using a PIR sensor and turn the load on. When an area is no longer occupied the load will switch off after an adjustable time out period.

An optional adjustable internal light sensor provides additional energy saving in lighting applications. When an area is occupied lighting is only switched on when the level of natural light is below a preset level.

When the unit is first powered up the PIR sensor will always detect immediately regardless of whether the room is occupied.

This unit has a mains voltage power supply and provides an isolated voltage free contact output.

<b>FLUSH FIXING</b>  <i>Warning - be careful bending springs when mounting unit.</i> 	<b>1</b> Hole Ø64mm 	<b>2</b> 	<b>3</b> 	<b>4</b> 	<b>5</b> 
<b>SURFACE FIXING</b> 	<b>1</b> 50mm or 60mm fixing centres 	<b>2</b>  Pull out spring tab and rotate spring arm as shown	<b>3</b> 	<b>4</b> 	<b>5</b>  <b>6</b> 

## Installation

- The detector should be sited so that the occupants of the room fall inside the detection pattern shown overleaf, at a recommended height of 2.8m on the ceiling. Note that the lower the sensor is installed the smaller the detection range will be, subject to the parameters shown on the diagram.
- Avoid direct sunlight entering the sensor.
- Do not site within 1m of forced air heating or ventilation.
- Do not site within 1m of any lighting.
- Do not fix to a vibrating surface.
- Wire the product using the connector using the diagram on the front page.
- Mount using one of the two options above.

- For lux enabled products, set the LUX level to maximum and the time to minimum.
- Power the unit up—the load should come on immediately.
- Vacate the room or remain very still and wait for the load to switch off (should take no more than 2 minutes).
- Check that the load switches on when movement is detected.
- To set the final LUX level wait until the level of natural daylight is just enough that lighting is required. Starting with the LUX control fully clockwise (at minimum), very slowly turn the control anti-clockwise until the lights come on. Note that when the LUX control is at maximum then the lights will **always** come on with occupancy.
- Set the time required.

## Fault Finding

### LOAD DOES NOT COME ON LIGHTS DO NOT GO OFF

Check to see if the live supply to the circuit is good.  
If the supply and wiring are good, for lux enabled versions, check the LUX level setting. Increase the LUX level setting to allow the controller to turn on at higher ambient natural light level.

If the detection range is smaller than expected, check the diagram above. Rotating the sensor slightly may improve the range.

Ensure that the area is left unoccupied for longer than the selected timer setting.

Make sure that the sensor is not adjacent to circulating air, heaters or lamps.