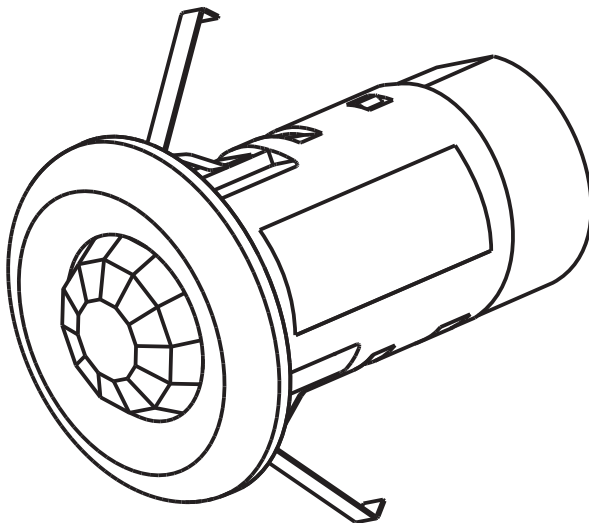


DALIcontrol™  **CLIPSAL**®

by **Schneider** Electric



DALI 360° PIR Occupancy Sensor

DCDALMS360



Installation Instructions

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1.0 Product Range

DCDALMS360

DALI 360° PIR Occupancy Sensor

2.0 Description

The DCDALMS360 Sensor is part of the DALIcontrol range and can only be connected to a DALI line.

The DCDALMS360 Sensor monitors its immediate environment. When connected to an operating DALI line, the Sensor detects any moving infrared source that comes into its 'field of view.' Whenever it detects movement of body heat within its range, it issues commands over the DALI line to control output devices.

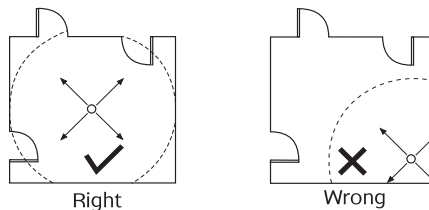
The DCDALMS360 Sensor includes an ambient light sensor that allows different behaviour in dark and light conditions. The light level required to change from light to dark is adjustable through the software interface.

3.0 Installation Procedure

3.1 Installation Location

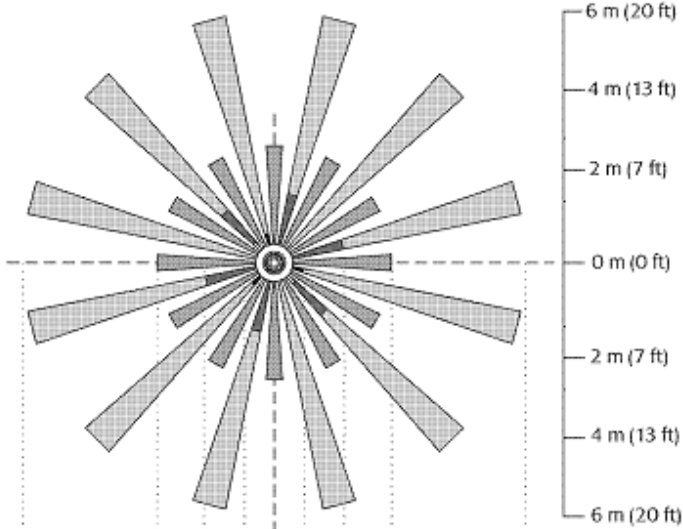
The DCDALM360 Series is for indoor use only and is designed to recess mount into the ceiling with the best location being in the centre of the room. It has a 360-degree field of view with typical detection coverage of 10 metres when mounted 2.4 metres above the floor.

Typical Room Plan Example:

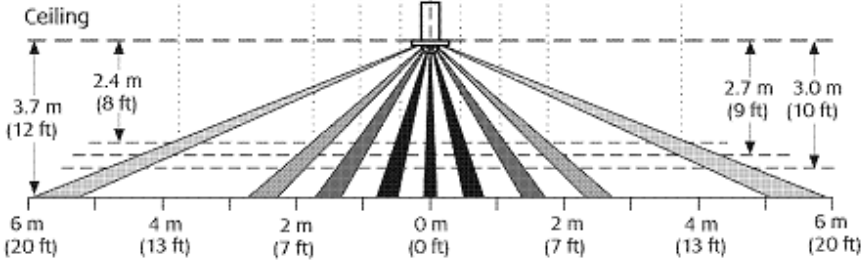


3.2 Field of View

Top View at 2.4 m Mounting Height



Side View



Disclaimer: The stated field of view is typical for full body movement and is subject to variations caused by the type and quantity of clothing worn, as well as variable background temperature characteristics and speed of movement.

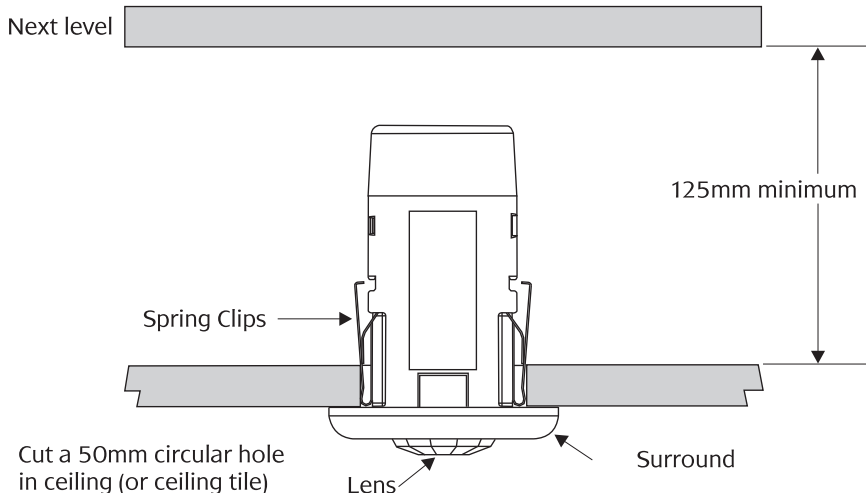
Rapid and large temperature changes may be detected even if they appear to be well beyond the field of view due to reflections off surfaces that are within the field of view.

3.3 Mounting Instructions

Step 1: Using a hole saw, cut a 50 mm (2 inch) circular hole in the ceiling (or ceiling tile).

Step 2: Press the outer ends of the spring clips towards the center of the unit and push the unit through the hole until it rests flat on the ceiling.

Note: Do not apply any pressure on the plastic Sensor lens, as this will damage the lens.



Special points to take note of are:

- Do not apply any pressure on the actual Sensor lens itself as this may damage the lens.
- When mounting in suspended ceilings there should be at least 125mm between the lower surface of the tile and the hard surface above.

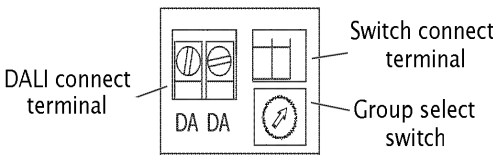
4.0 DALI Line Connections

The DCDALMS360 Sensor must never be connected to mains voltages.

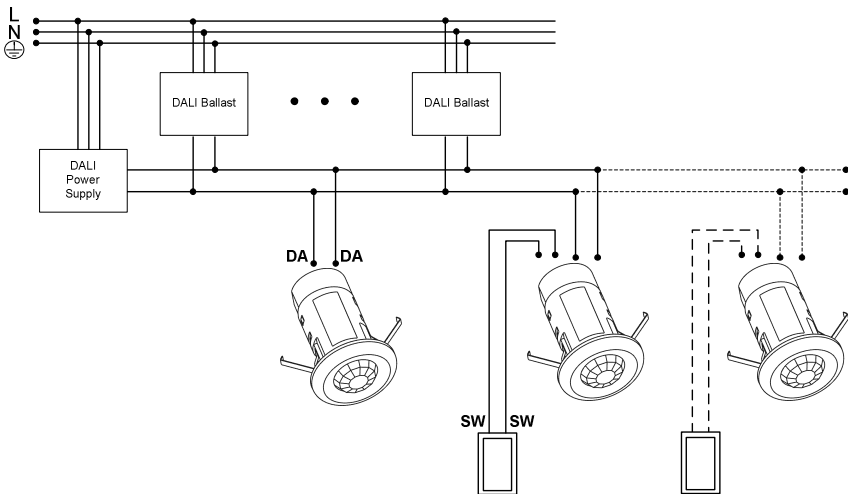
Installation of the DCDALMS360 Sensor requires connection to a DALI line. Connection should be made using 1- 1.5mm² two core mains rated flex. Do not use soldered connections as they are not reliable.

The DALI line Connection is not polarity sensitive, ‘DA’ is clearly marked on the rear of the DCDALMS360 Sensor unit with the terminal cover removed.

It is the responsibility of the installer to ensure that the unit is wired to conform to the DALI wiring standards and meet local electrical and building codes.



SW	GROUP	SW	GROUP
0	Broadcast	8	Group 7
1	Group 0	9	Group 8
2	Group 1	A	Group 9
3	Group 2	B	Group 10
4	Group 3	C	Group 11
5	Group 4	D	Group 12
6	Group 5	E	Group 13
7	Group 6	F	Group 14



4.2 Selecting the group

Using a small blade screw driver carefully rotate the group select switch to the desired position to allow the sensor to directly control lighting assigned to that selected DALI group.

On first installation, the sensor will default to the single group selected using the rotary switch. If the user wishes to edit the devices group associations, it must be done using the DALIcontrol commissioning wizard software DCCOM/1. Once the software is used, the rotary switch is disabled.

4.3 Connecting a switch

Using a small blade screw driver firmly depress the orange locking mechanisms (in a direction towards the lens) to allow insertion of a 1.5mm² solid core mains rated cable which has been stripped so that no greater than 6mm of copper is exposed. Release the locking mechanism and gently pull the mains flex to ensure a firm connection with no exposed copper. The cable between the DCDALMS360 sensor and the switch must not exceed 8m in length with a capacitance no more than 300pF. The switch used must be a 240V rated momentary type switch (bell press mechanism) and be volt free (i.e. not connected to any mains circuitry.)

5.0 DALI Power Requirements

The DCDALMS360 Sensor draws <8mA from the DALI line. When a suitable DALI power supply is connected, up to 20 devices may be connected to a single DALI line.

6.0 Power Surges and Short Circuit Conditions

6.1 DALI terminals

Care should be taken to ensure that DALI devices are not connected to mains voltage as this may result in damage to any connected DALI devices.

The DCDALMS360 Sensor has a RED visual warning light which will illuminate indicating a connection to abnormal input voltages beyond the DALI specified range. The warning light will remain on until the fault has been removed from the DALI terminal.

6.2 Switch Terminals

The switch input terminal is not protected against over voltage and must only be connected to voltage free mains rated switches using a solid core 1.5mm² mains rated flex to meet DALI standards.

7.0 Megger Testing

Megger testing must never be performed on any DALI line cabling or terminals as it may damage connected devices and cause unpredictable device behaviour.

8.0 Programming and Commissioning

The DCDALMS360 Sensor units must be programmed to set a unique identification number and mode of operation on the DALI line. This can be achieved using the DALIcontrol commissioning wizard DCCOM/1 available from DALIcontrol. Using software not provided by DALIcontrol may void any warranties applicable to the hardware.

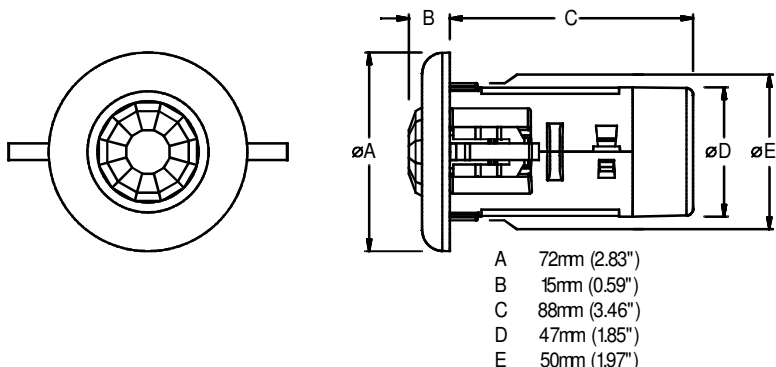
9.0 Product Specifications

9.1 Electrical Specifications

Catalogue No.	DCDALMS360
Operating voltage	9.5-22.5V DC
Maximum Abnormal voltage	277VAC
Operating current	<8mA
Operating temperature	0° to 45°C
Warm up period	Up to 1 minute for Sensor to stabilise
PIR rated detection field	Typically 10 metres diameter at 2.4 metres mounting height
Light level inhibit threshold	Continuous from 1 Lux to full sunlight
Mounting surface	Ceiling
Mounting height for rated detection field	2.4 metres
Maximum mounting height	3.7 metres
Minimum ceiling thickness	10mm
Dimensions – overall	72mm (W) x 103mm (L)
Weight	82g
Maximum number of DCDALM360 units per DALI line	20
Maximum cable length between switch and DCDALM360 unit	8m @ 300pF
DALI Connection	Screw terminal for 1- 1.5mm ² □ cable.
Switch connection (240V rated volt free momentary type)	Push terminal for 1.5mm ² □ cable.

Note: '□' Indicates cross sectional area.

9.2 Dimensions





10.0 Compliance Standards

DECLARATIONS OF CONFORMITY

The DCDALMS360 Sensor complies with the following standards:

European Standards

European Council	Standard	Title
European Committee for Standardisation 	EN 61347-2-11	Lamp control gear. Particular requirements for miscellaneous electronic circuits used with luminaires ⁷
	EN 61547	RFI Emissions Standard Specification for equipment for general lighting purposes. EMC immunity requirements RFI Emissions Standard
	EN 55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment

C-Tick Framework	Standard	Title
	AS/NZS 61347-2-11	Particular requirements for miscellaneous electronic circuits used with luminaires (IEC 61347-2-11:2001 MOD)

11.0 Two-Year Warranty

DCDALMS360 Sensor carries a two year warranty against manufacturing defects.

Warranty Information

We warrant this product for 2 years—for details visit:

www.schneider-electric.com.au/en/about-us/legal/terms-and-conditions.js

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MAR 2021-04-03