## Product Description

HIR23/D2 stand-alone PIR & daylight sensors have been certified as DALI-2 input device with main purpose to incorporate into DALI-2 application controller/master. It is ideal for typical indoor applications such as office, classroom, healthcare and other commercial areas.

HIR23/D2/W

## Hardware Features

2-in-1: PIR motion sensor + Daylight sensor

IP20/IP65 ceiling/surface mount box available as accessory

Various PIR lens and blind inserts options

User-friendly design for installation

High bay version available (up to 15m in height)

5-year warranty

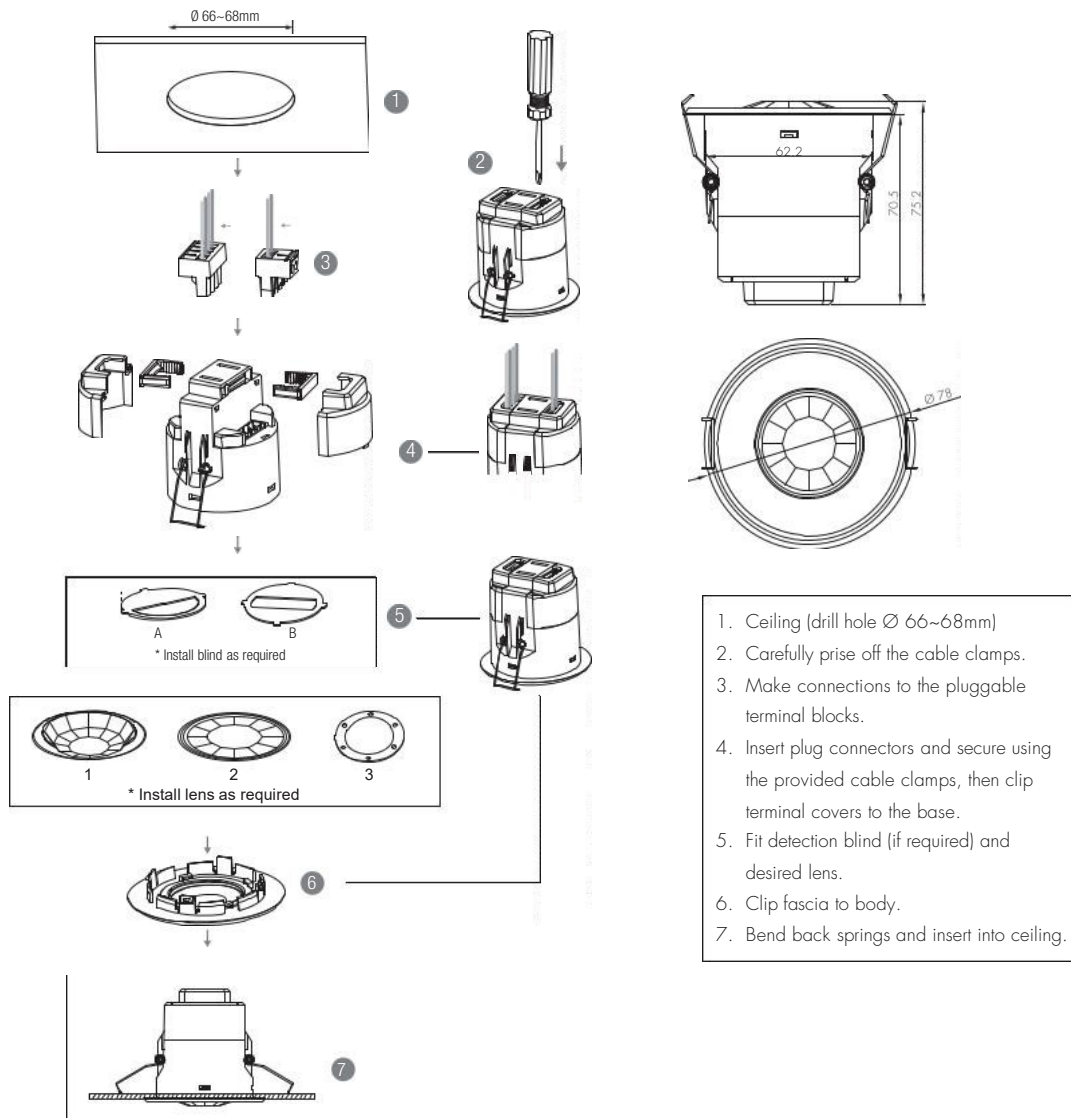Compliant to standard IEC62386_101,103,303,304

## Technical Specifications

| Sensor Data | |
|---|---|
| Sensor Model | PIR detection |
| HIR23/D2/W | Installation Height : 6m<br>Detection Range(∅) :18m |
| Lux reading range | < 1000 lux |
| Detection angle | 360° |

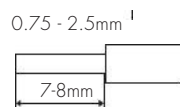| Input & Output Characteristics | |
|---|---|
| Operating voltage | 9.5~22.5VDC |
| Consumption DALI BUS current | Max. 10 mA(no LED)<br>Max. 12 mA(with LED) |
| Identify device | Red LED flashes 15S |
| Warming-up | 5s |

| Safety & EMC | |
|---|---|
| EMC standard (EMC) | EN55015, EN61000, EN61547 |
| DALI | IEC60386-101, 103, 303, 304 |
| RED | EN300328, EN301489-1/-17 |
| Certification | CE , REACH, UKCA, RCM, ROHS compliance |

| Environment | |
|---|---|
| Operation temperature | Ta: -20°C ~ +50°C |
| IP rating | IP20 |

## Mechanical Structure & Dimensions

Ø 66~68mm

62.2

70.5

75.2

Ø 78

A  B

* Install blind as required

1  2  3

* Install lens as required

1. Ceiling (drill hole Ø 66~68mm)
2. Carefully prise off the cable clamps.
3. Make connections to the pluggable terminal blocks.
4. Insert plug connectors and secure using the provided cable clamps, then clip terminal covers to the base.
5. Fit detection blind (if required) and desired lens.
6. Clip fascia to body.
7. Bend back springs and insert into ceiling.

## Wire Preparation

0.75 - 2.5mm²

7-8mm

Pluggable screw terminal. It is recommended to make connections to the terminal before fitting to the sensor.
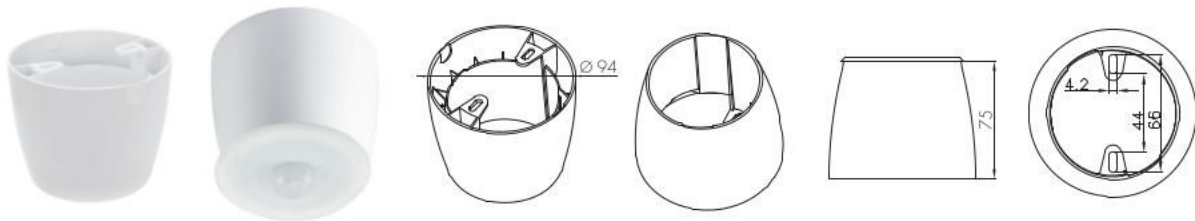
## 3. HIR23/D2/W (Wide range Low-bay)

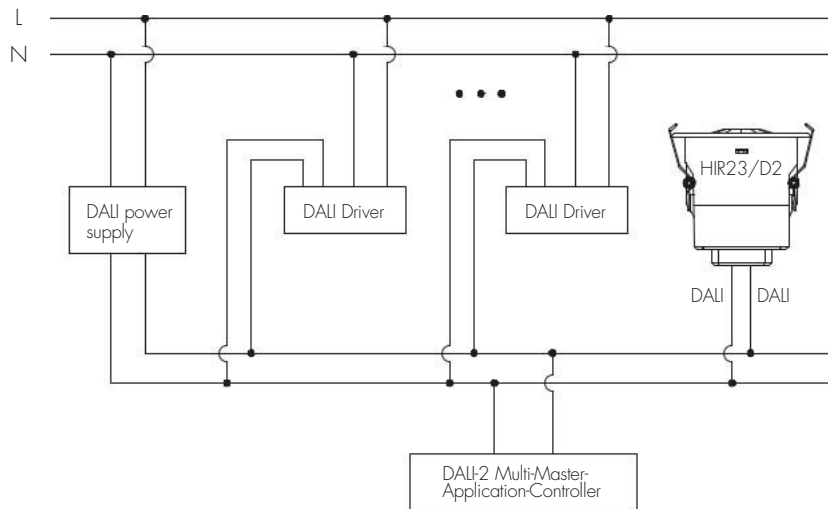**HIR23/D2/W**: Low-bay convex lens detection pattern for **single person** @ Ta = 20°C

(Recommended ceiling mount installation height **2.5m-6m**)

| A: Tangential movement | B: Radial movement | Mount height | Tangential (A) | Radial (B) |
|---|---|---|---|---|
| | | 2.5m | max 254m² (∅ = 18m) | max 28m² (∅ = 6m) |
| | | 3m | max 254m² (∅ = 18m) | max 28m² (∅ = 6m) |
| | | 4m | max 154m² (∅ = 14m) | max 28m² (∅ = 6m) |
| | | 5m | max 113m² (∅ = 12m) | max 28m² (∅ = 6m) |
| | | 6m | max 79m² (∅ = 10m) | max 13m² (∅ = 4m) |

h = max.6m
Tangential: max. 18m
insensitive — sensitive

h = max.6m
Radial: max. 6m
insensitive — sensitive

Optional Accessory --- Ceiling/Surface Mount Box: HA03

∅ 94

75

4.2
44
66

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Wiring Diagram



Note: HIR23/D2 has been used as DALI-2 input device to only report DALI instance(light sensor instance and motion sensor instance) to DALI-2 application controller, who is the "main brain" to process the data communication between input devices and the control gear and assign different function.

## Additional Information / Documents

1. Regarding precautions for PIR Sensors installation and operation, please kindly refer to
   www.hytronik.com/download ->knowledge ->PIR Sensors - Precautions for Product Installation and Operation

2. Data sheet is subject to change without notice. Please always refer to the most recent release on
   www.hytronik.com/products/Motion Sensors ->Stand-alone Sensors

3. Regarding Hytronik standard guarantee policy, please refer to
   www.hytronik.com/download ->knowledge ->Hytronik Standard Guarantee Policy