Installation and Instruction Manual

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HIR23/D2/H

Wiring Diagram

PIR Motion Sensor

1. Technical Specifications

Sensor Model	PIR detection
HIR23/D2/H	Installation height : 15m (forklift) 12m (person) Detection range (Ø) : 24m
Lux reading range	< 1000 lux
Detection angle	360°
Operating voltage	9.5~22.5VDC
Consumption DALI BUS current	Max. 10 mA(no LED) Max. 12 mA(with LED)
Identify device	Red LED flashes 15S
Warming-up	5s
Operation temperature	Ta: -20°C ~ +50°C
IP rating	IP20

2. Installation

Wire Preparation



Pluggable screw terminal. It is recommended to make connections to the terminal before fitting to the sensor.

7**-**8mm

1.200 metres (total) max. for 1mm² CSA (Ta = 50 $^\circ\mathrm{C}$) 2. 300 metres (total) max. for 1.5mm² CSA (Ta = 50 °C)



Mechanical Structure & Dimensions







1. Ceiling (drill hole Ø 66-68mm).				
2. Carefully prise off the Back Caps.				
Make connections to the pluggable terminal blocks.				
4. Secure the cables with screws for better stability (provide high back caps HA08 option) .				
5. Fit detection blind (if required) and desired lens.				
6. Fit desired lens, clip fascia to body.				
7. Bend back springs and Insert into ceiling.				

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------This product should be installed by a qualified electrician.

Note: HIR23/D2/H 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.

3. Detection Pattern & Optional Accessories

HIR23/D2/H (High-bay)								
	HIR23/D2/H: High-bay lens detection pattern for <u>forklift</u> @ Ta = 20°C (Recommended ceiling mount installation height <u>10m-15m</u>)							
A: Tangential movement	B: Radial movement	Mount height	Tangential (A)	Radial (B)				
		10m	max $380m^2$ (Ø = 22m)	$max 201m^2 (Ø = 16m)$				
h = max.15m	h = max.15m	11m	$max 452m^2 (\emptyset = 24m)$	$\max 201 \text{m}^2 (\emptyset = 16 \text{m})$				
A A	Summan and States	12m	max $452m^2$ (Ø = 24m)	$max 201m^2 (Ø = 16m)$				
antital most 24mil	B B B B B B B B B B B B B B B B B B B	13m	$max 452m^2 (\emptyset = 24m)$	$\max 177 m^2 (\emptyset = 15m)$				
· ~ ~ 3108	, 4 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	14m	max $452m^2$ (Ø = 24m)	$max 133m^2 (Ø = 13m)$				
insensitive sensitive	insensitive sensitive	15m	$max 452m^2 (\emptyset = 24m)$	$max 113m^2 (\emptyset = 12m)$				

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HIR23/D2/H: High-bay lens detection pattern for single person @ Ta = 20°C (Recommended ceiling mount installation height 2.5m-12m)

A: Tangential movement	B: Radial movement	Mount height	Tangential (A)	Radial (B)
	h = max,12m	2.5m	max $50m^2$ (Ø = 8m)	$max 7m^2 (\emptyset = 3m)$
h = max.12m		6m	$max 104m^2 (Ø = 11.5m)$	$\max 7m^2 (\emptyset = 3m)$
KAA John	and a strain in the strain in	8m	$max 154m^2 (Ø = 14m)$	$\max 7m^2 (\emptyset = 3m)$
Tangatiai mat 25	L. Patial mat	10m	$max 227m^2 (Ø = 17m)$	$\max 7m^2 (\emptyset = 3m)$
		11m	$max 269m^2 (\emptyset = 18.5m)$	$\max 7m^2 (\emptyset = 3m)$
insensitive sensitive	insensitive sensitive	12m	max $314m^2$ (Ø = 20m)	$\max 7m^2 (\emptyset = 3m)$

Optional Accessory --- Ceiling/Surface Metal Mount Box: HA09/W, HA09/B, HA09/G





*Note: Optional Accessory HA09 & HA08 can not be uesd together.

Optional Accessory --- Blind Insert for Blocking Certain Detection Angles Valid Range Valid Range

Blind Option 1 --- Aisle Detection



Blind Option 2 --- 180° Detection

Big and small silicon gasket used to make IP54 degree protection (mounted into HA09 housing for ceiling mount) Small silicon water-proof gasket dimension(size:mm) Big silicon water-proof gasket dimension(size:mm) 10 0 42 0 00Θ 8 0 0 n

4. 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 \rightarrow knowledge \rightarrow Hytronik Standard Guarantee Policy

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