

# PRODUCT DATASHEET

## HB SEN P 87W 840 110DEG IP65

HIGH BAY SENSOR GEN 4 | High-bay luminaires in IP65 with high frequency sensor



PERFOR-  
MANCE  
CLASS

### Areas of application

- Replacement for high bay luminaires with mercury vapor or metal halide lamps
- Warehouses
- Logistics halls
- Industry
- High ceiling (e.g. in shopping malls, airports, commercial buildings, lobbies)

### Product benefits

- Multiple adjustments of sensor range, daylight detection and hold time
- High luminous efficacy
- Energy savings of up to 64 % compared to conventional high bay luminaires
- 5 years guarantee
- Suitable for use in dusty and damp locations thanks to high IP rating

### Product features

- High frequency sensor for daylight and motion detection
- Different luminous flux and beam angle for mounting heights of ~ 6 m to 10 m in 4000 K



---

## TECHNICAL DATA

### Electrical data

|                                                             |               |
|-------------------------------------------------------------|---------------|
| Nominal wattage                                             | 87.00 W       |
| Nominal voltage                                             | 220...240 V   |
| Mains frequency                                             | 50...60 Hz    |
| Nominal current                                             | 400 mA        |
| Inrush current                                              | 44 A          |
| Inrush current time $T_{h50}$                               | 380 $\mu$ s   |
| Max. number of luminaires per miniature circuit breaker B16 | 5             |
| Max. number of luminaires per miniature circuit breaker C10 | 5             |
| Max. number of luminaires per miniature circuit breaker C16 | 8             |
| Power factor $\lambda$                                      | > 0.95        |
| Total harmonic distortion                                   | < 20 %        |
| Protection class                                            | I             |
| Operating mode                                              | Mains voltage |

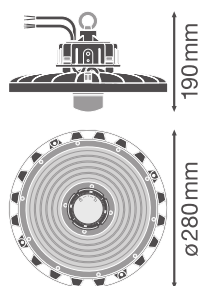
### Photometrical data

|                                      |                      |
|--------------------------------------|----------------------|
| Luminous flux                        | 13000 lm             |
| Luminous efficacy                    | 150 lm/W             |
| Color temperature                    | 4000 K               |
| Light color (designation)            | Cool White           |
| Color rendering index Ra             | $\geq 80$            |
| Standard deviation of color matching | < 5 sdc <sub>m</sub> |
| Low flicker                          | Yes                  |
| Beam angle                           | 110 °                |
| UGR                                  | $\leq 29$            |

HB SEN P 87W 840 110DEG IP65



|                |           |
|----------------|-----------|
| Diameter       | 280.00 mm |
| Height         | 190.00 mm |
| Product weight | 2242.00 g |
| Cable length   | 1500 mm   |



HB Sensor\_Line drawing with  
dimensions\_Update

## Materials & Colors

|                                            |                    |
|--------------------------------------------|--------------------|
| Product color                              | Black              |
| Housing color                              | Black              |
| Body material                              | Aluminum           |
| Cover material                             | Polycarbonate (PC) |
| Glow Wire Test according to IEC 60695-2-12 | 850 °C             |
| Mercury content                            | 0.0 mg             |

### Application & Mounting

|                                        |                   |
|----------------------------------------|-------------------|
| Ambient temperature range              | -20...+50 °C      |
| Temperature range at storage           | -40...+70 °C      |
| Type of connection                     | Cables            |
| Type of protection                     | IP65              |
| Protection class IK (shock resistance) | IK08              |
| Dimmable                               | No                |
| Mounting type                          | Surface/Suspended |
| Mounting location                      | Ceiling / Wall    |
| Application environment                | Indoor            |
| With light source                      | Yes               |
| Replaceable light source               | No                |

### Lifespan

|                            |                       |
|----------------------------|-----------------------|
| Lifespan L70/B50 at 25 °C  | 80000 h <sup>1)</sup> |
| Lifespan L80/B10 at 25 °C  | 50000 h <sup>1)</sup> |
| Lifespan L80/B50 at 25 °C  | 50000 h               |
| Lifespan L90/B10 at 25 °C  | 35000 h               |
| Number of switching cycles | 200000                |

<sup>1)</sup> t[h]: L70 / B50 @ 25 °C (Ta), t[h]: L80 / B10 @ 25 °C (Ta), t[h]: L90 / B10 @ 25 °C (Ta)

### Control gear

|                             |        |
|-----------------------------|--------|
| ECG - Output ripple current | < 10 % |
|-----------------------------|--------|

### Sensor

|                                  |                |
|----------------------------------|----------------|
| Type of sensor                   | Motion / Light |
| Sensor technology                | Microwave      |
| Sensor detection angle           | < 150 °        |
| Sensor controlled switching time | 30s...10 min   |

|                                        |          |
|----------------------------------------|----------|
| Detection range of motion sensor       | 6...15 m |
| Detection threshold of daylight sensor | 100 lx   |

### Certificates & Standards

|                                                      |                                      |
|------------------------------------------------------|--------------------------------------|
| Standards                                            | CE / CB / ENEC / TÜV SÜD / EAC / EPD |
| Luminaire with limited surface temperature, "D sign" | Yes                                  |
| Ball shot safe                                       | No                                   |
| EPD                                                  | LEDV-00024-V01.01-EN                 |
| Replaceable light source (EPREL)                     | Not replaceable                      |

### EQUIPMENT / ACCESSORIES

- Sensor, mounting hook and mounting bracket included
- Reflectors, refractors and remote control available as separate accessory

### DOWNLOAD DATA

| Documents and certificates                                                         |                                        | Document name                         |
|------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------|
|  | User instruction / safety instructions | HIGHBAY SENSOR                        |
|  | Legal information                      | LS Insert HB Sensor P                 |
|  | Legal information                      | Legal insert HB SEN P                 |
|  | Legal information                      | Informationstext 18 Abs 4 ElektroG    |
|  | Declarations of conformity             | EC Declaration HB SEN P               |
|  | Declarations of conformity UKCA        | HB SEN P 840 IP65                     |
|  | Certificates                           | ENEC Certificate HB P and HB Sensor P |
| Photometric and lighting design files                                              |                                        | Document name                         |
|  | IES file (IES)                         | HB SEN P 87W 840 110DEG IP65          |
|  | LDT file (Eulumdat)                    | HB SEN P 87W 840 110DEG IP65          |

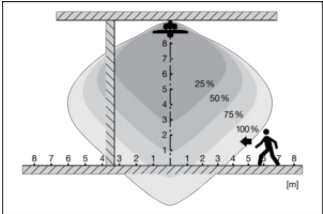
| Photometric and lighting design files                                              |                                     | Document name                                |
|------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------|
|   | ULD file (DIALux)                   | HB SEN P 87W 840 110DEG IP65                 |
|   | ROLF file (RELUX)                   | HB SEN P 87W 840 110DEG IP65                 |
|   | UGR file (UGR table)                | HB SEN P 87W 840 110DEG IP65                 |
|   | Light distribution curve type cone  | HB SEN P 87W 840 110DEG IP65                 |
|   | Light distribution curve type polar | HB SEN P 87W 840 110DEG IP65                 |
| CAD/BIM files                                                                      |                                     | Document name                                |
|   | BIM Revit 3D                        | HB G4                                        |
|   | CAD STEP 3D                         | HB G4 SEN 87W                                |
| Tender texts                                                                       |                                     | Document name                                |
|  | Tender documents                    | HIGH BAY SENSOR GEN 4 87W 840 110DEG IP65-EN |

LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume    |
|---------------|------------------------------|--------------------------------------|--------------|-----------|
| 4058075603257 | Shipping box<br>1            | 328 mm x 328 mm x 171 mm             | 2838.00 g    | 18.40 dm³ |

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

ADDITIONAL CATALOG INFORMATION



References / Links

– For Guarantee see [www.ledvance.com/guarantee](http://www.ledvance.com/guarantee)

---

## DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.