

## PRODUCT DATASHEET

### HQI HIGHBAY 400 120 ° 140 W/4000 K E40

HQI LED HIGHBAY | LED replacement for HID lamps for high-bay luminaires



#### Areas of application

- LED alternative for applications requiring a high luminous flux
- Industrial and storage facilities
- Outdoor applications only in suitable luminaires

#### Product benefits

- Direct replacement for traditional HQI and NAV lamps thanks to CCG and ignitor compatibility
- Energy savings of up to 68 % when replacing traditional HQI lamps
- Effective thermal management for wide operating temperature range
- Low maintenance costs thanks to long lifetime
- Instant 100 % light, no warm-up time

#### Product features

- Type of protection: IP40
- High surge protection: up to 4 kV (L-N)



## TECHNICAL DATA

### Electrical data

|                                                          |                                                                              |
|----------------------------------------------------------|------------------------------------------------------------------------------|
| Nominal wattage                                          | 140 W                                                                        |
| Construction wattage                                     | 140.00 W                                                                     |
| Nominal voltage                                          | 110 V                                                                        |
| Operating mode                                           | Conventional control gear (CCG), Conventional control gear (CCG) and ignitor |
| Claimed equiv. conventional lamp power                   | 400 W                                                                        |
| Nominal current                                          | 3.6 A                                                                        |
| Type of current                                          | AC                                                                           |
| Inrush current                                           | 50 A                                                                         |
| Operating frequency                                      | 50 Hz                                                                        |
| Mains frequency                                          | 50 Hz                                                                        |
| Max. lamp number on MCB B10 A                            | 11                                                                           |
| Max. lamp number on MCB B10 A - CCG without compensation | 11                                                                           |
| Max. lamp number on MCB B10 A - CCG with compensation    | 3                                                                            |
| Max. lamp number on MCB B16 A                            | 18                                                                           |
| Max. lamp number on MCB B16 A - CCG without compensation | 18                                                                           |
| Max. lamp number on MCB B16 A - CCG with compensation    | 5                                                                            |
| Total harmonic distortion                                | < 80 %                                                                       |
| Power factor $\lambda$                                   | 0.70                                                                         |

### Photometrical data

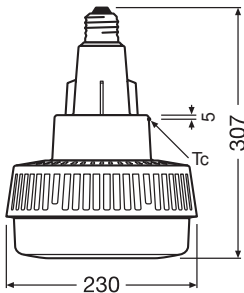
|                                         |            |
|-----------------------------------------|------------|
| Luminous flux                           | 20000 lm   |
| Nominal useful luminous flux 90°        | 20000 lm   |
| Luminous efficacy                       | 142 lm/W   |
| Lumen main.fact.at end of nom.life time | 0.70       |
| Light color (designation)               | Cool White |
| Color temperature                       | 4000 K     |
| Color rendering index Ra                | ≥80        |
| Light color                             | 840        |
| Standard deviation of color matching    | ≤6 sdcn    |
| Rated LLMF at 6,000 h                   | 0.80       |

### Light technical data

|            |       |
|------------|-------|
| Beam angle | 120 ° |
|------------|-------|

|                     |          |
|---------------------|----------|
| Warm-up time (60 %) | ◁ 0.50 s |
| Starting time       | < 0.5 s  |

Dimensions & Weight



|                  |           |
|------------------|-----------|
| Overall length   | 307.00 mm |
| Diameter         | 230 mm    |
| Maximum diameter | 230 mm    |
| Product weight   | 1150.00 g |

Temperatures & operating conditions

|                                      |              |
|--------------------------------------|--------------|
| Ambient temperature range            | -20...+50 °C |
| Maximum temperature at tc test point | 75 °C        |

Lifespan

|                                              |        |
|----------------------------------------------|--------|
| Number of switching cycles                   | 100000 |
| Lumen maintenance at end of service lifetime | 0.70   |
| Rated lamp survival factor at 6,000 h        | ≥ 0.90 |

Additional product data

|                             |        |
|-----------------------------|--------|
| Base (standard designation) | E40    |
| Mercury content             | 0.0 mg |
| Mercury-free                | Yes    |

Capabilities

|          |    |
|----------|----|
| Dimmable | No |
|----------|----|

Certificates & Standards

|                         |                  |
|-------------------------|------------------|
| Energy efficiency class | A+ <sup>1)</sup> |
|-------------------------|------------------|

|                                              |                  |
|----------------------------------------------|------------------|
| Energy consumption                           | 140.00 kWh/1000h |
| Type of protection                           | IP40             |
| Standards                                    | CE               |
| Photobiological safety group acc. to EN62778 | RG1              |

1) Energy efficiency class (EEC) on a scale of A++ (highest efficiency) to E (lowest efficiency)

### Country-specific categorizations

|                 |                 |
|-----------------|-----------------|
| Order reference | HQILEDH20000 14 |
|-----------------|-----------------|

### Energy labelling regulation data acc EU 2019/2015

|                                                     |           |
|-----------------------------------------------------|-----------|
| Light source cap-type (or other electric interface) | E40       |
| Length                                              | 307.00 mm |
| Height                                              | 230 mm    |
| Width                                               | 230 mm    |

### EQUIPMENT / ACCESSORIES

- Safety sling for lamp included

### Safety advice

- The bulb may be larger and heavier than the replaced bulb. Before installation it must be checked, if the luminaire and especially the holder is capable of carrying the weight of the lamp.
- Safety sling has to be installed.
- To ensure full light efficiency and product lifetime, it is recommended to detach any glass or cover of the luminaire.
- Only suitable for temperatures of up to 50 °C inside of the luminaire.
- Not suitable for operation with 230 V line voltage or electronic control gear.

### DOWNLOAD DATA

| Documents and certificates                                                         |                                        | Document name                        |
|------------------------------------------------------------------------------------|----------------------------------------|--------------------------------------|
|  | User instruction / safety instructions | HQI LED Highbay                      |
| Photometric and lighting design files                                              |                                        | Document name                        |
|  | IES file (IES)                         | AC18723_HQILEDH20000 140W840 110V E4 |
|  | LDT file (Eulumdat)                    | AC18723_HQILEDH20000 140W840 110V E4 |

| Photometric and lighting design files                                            |                                     | Document name                        |
|----------------------------------------------------------------------------------|-------------------------------------|--------------------------------------|
|  | Light distribution curve type polar | AC18723_HQILEDH20000 140W840 110V E4 |
|  | Light distribution curve type polar | AC18723 HQILEDH20000 140W840 110V E4 |

LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume    |
|---------------|------------------------------|--------------------------------------|--------------|-----------|
| 4058075284746 | Folding box<br>1             | 247 mm x 247 mm x 333 mm             | 1371.00 g    | 20.32 dm³ |
| 4058075284753 | Shipping box<br>4            | 515 mm x 515 mm x 355 mm             | 6161.00 g    | 94.15 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.

DISCLAIMER

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