

PRODUCT DATASHEET HQL LED HIGHBAY 400 117 ° 140 W/4000 K E40

HQL 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

- Energy savings of up to 65 % when replacing mercury vapor lamps (HQL)
- Effective thermal management for wide operating temperature range
- Low maintenance costs thanks to long lifetime
- Instant 100 % light, no warm-up time

Product features

- Replacement for HQL: Suitable for operation with conventional control gear (CCG) for HQL or 230 V mains
- Replacement for other HID: Suitable for operation with line voltage without control gear
- Power factor: 0.9





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

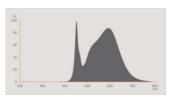
TECHNICAL DATA

Electrical data

| Nominal wattage | 140 W |
|--|----------|
| Construction wattage | 140.00 W |
| Nominal voltage | 220240 V |
| Claimed equiv. conventional lamp power | 400 W |
| Nominal current | 650 mA |
| Type of current | AC |
| Inrush current | 23 A |
| Operating frequency | 50/60 Hz |
| Mains frequency | 50/60 Hz |
| Max. lamp no. on circuit break. 10 A (B) | 5 |
| Max. lamp no. on circuit break. 16 A (B) | 8 |
| Total harmonic distortion | < 25 % |
| Power factor λ | > 0.90 |

Photometrical data

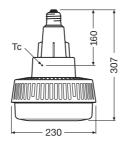
| Luminous flux | 20000 lm |
|---|------------|
| Nominal useful luminous flux 90° | 20000 lm |
| Luminous efficacy | 142 lm/W |
| Lumen main.fact.at end of nom.life time | 0.70 |
| Light color (designation) | Cool White |
| Color temperature | 4000 K |
| Color rendering index Ra | 80 |
| Light color | 840 |
| Standard deviation of color matching | ≤6 sdcm |
| Rated LLMF at 6,000 h | 0.80 |
| Flickering metric (Pst LM) | 1.0 |
| Stroboscope effect metric (SVM) | 0.4 |



Light technical data

| Beam angle | 117 ° |
|------------------------------------|----------|
| Warm-up time (60 %) | < 0.50 s |
| Starting time | < 0.5 s |
| Rated beam angle (half peak value) | 117.00 ° |

Dimensions & Weight



| Overall length | 310.00 mm |
|------------------|-----------|
| Diameter | 229.00 mm |
| Maximum diameter | 230 mm |
| Product weight | 1070.00 g |

Temperatures & operating conditions

| Ambient temperature range | -20+50 °C |
|--------------------------------------|-----------|
| Maximum temperature at tc test point | 100 °C |

Lifespan

| Nominal lamp life time | 50000 h |
|-------------------------------------|---------|
| Number of switching cycles | 100000 |
| Lumen maintenance at end of serv | 0.70 |
| Rated lamp survival factor at 6,000 | 0.90 |

Additional product data

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

Capabilities

| Dimmable | No |
|--|------------------|
| Certificates & Standards | |
| Energy efficiency class | D |
| Energy consumption | 140.00 kWh/1000h |
| Type of protection | IP40 |
| Standards | CE / EAC |
| Photobiological safety group acc. to EN62778 | RG1 |
| Country-specific categorizations | |
| Order reference | HQLEDHB20000 14 |
| Energy labellling regulation data acc EU 2019/2015 | |
| Lighting technology used | LED |
| Non-directional or directional | NDLS |
| Mains or non-mains | MLS |
| Light source cap-type (or other electric interface) | E40 |
| Connected light source (CLS) | No |
| Color-tuneable light source | No |
| Envelope | No |
| High luminance light source | No |
| Anti-glare shield | No |
| Correlated colour temperature type | SINGLE_VALUE |
| Claim of equivalent power | No |
| Length | 310.00 mm |
| Height | 229.00 mm |
| Width | 229.00 mm |
| Chromaticity coordinate x | 0.381 |
| Chromaticity coordinate y | 0.379 |
| Beam angle | SPHERE_360 |
| Survival factor | 0.90 |
| Displacement factor | 0.90 |
| LED light source replaces a fluorescent light source | |
| LED light source replaces a fluorescent light source | not applicable |

AC35214

EQUIPMENT / ACCESSORIES

Model number

- 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.
- Only suitable for temperatures of up to 50°C inside of the luminaire.
- Not suitable for operation with ignitors
- Operation on the capacitor can lead to a reduction of the power factor of the system.
- To ensure full light efficiency and product lifetime, it is recommended to detach any glass or cover of the luminaire.

DOWNLOAD DATA

| | DOWNLOAD DATA | |
|-----|-------------------------------------|--|
| PDF | User instruction HQL LED Highbay | |

LOGISTICAL DATA

| Product code | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4058075612617 | Folding box 1 | 247 mm x 247 mm x 333 mm | 1291.00 g | 20.32 dm ³ |
| 4058075612624 | Shipping box 4 | 515 mm x 515 mm x 355 mm | 5841.00 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.