

PRODUCT DATASHEET

HID LED HIGHBAY UNIVERSAL PERFORMANCE 25000 LM 160W 840 E40

HID LED HIGHBAY UNIVERSAL PERFORMANCE | LED replacement for HID lamps for high-bay luminaires



PERFOR-
MANCE
CLASS

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 HID lamps thanks to CCG and ignitor compatibility
- Operation on AC mains for highest energy efficiency possible
- 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

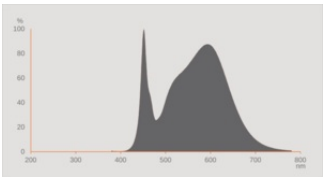
Electrical data

| | |
|--|------------------------|
| Nominal wattage | 160 W |
| Construction wattage | 160.00 W |
| Nominal voltage | 220...240 V |
| Operating mode | CCG, AC Mains, ignitor |
| Claimed equiv. conventional lamp power | 400 W |
| Nominal current | 750 mA |
| Type of current | AC |
| Inrush current | 5.2 A |
| Operating frequency | 50/60 Hz |
| Mains frequency | 50/60 Hz |
| Max. lamp number on MCB B10 A | 8 |
| Max. lamp number on MCB B10 A - CCG without compensation | 7 |
| Max. lamp number on MCB B10 A - CCG with compensation | 6 |
| Max. lamp number on MCB B16 A | 12 |
| Max. lamp number on MCB B16 A - CCG without compensation | 11 |
| Max. lamp number on MCB B16 A - CCG with compensation | 10 |
| Total harmonic distortion | 20 % |
| Power factor λ | > 0.90 |
| Surge capability (L-N) | 4 kV |

Photometrical data

| | |
|---|------------|
| Luminous intensity | 11771 cd |
| Luminous flux | 25000 lm |
| Nominal useful luminous flux 90° | 25000 lm |
| Luminous efficacy | 156 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 peak intensity | 11771 cd |
| Rated LLMF at 6,000 h | 0.80 |

| | |
|---------------------------------|-----|
| Flickering metric (Pst LM) | 1 |
| Stroboscope effect metric (SVM) | 0,4 |



EPREL data spectral diagram PROF
LEDr 4000K

Light technical data

| | |
|---------------------|----------|
| Beam angle | 100 ° |
| Warm-up time (60 %) | < 0.50 s |
| Starting time | < 0.5 s |

Dimensions & Weight



| | |
|----------------|-----------|
| Overall length | 263.00 mm |
| Diameter | 250.00 mm |
| Product weight | 1330.00 g |

Temperatures & operating conditions

| | |
|--------------------------------------|----------------------------|
| Ambient temperature range | -40...+50 °C ¹⁾ |
| Maximum temperature at tc test point | 80 °C |

1) Temperature surrounding the lamp - for enclosed luminaires: temperature inside of the luminaire

Lifespan

| | |
|--|---------|
| Lifespan L70/B50 at 25 °C | 50000 h |
| 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 | D ¹⁾ |
| Energy consumption | 160.00 kWh/1000h |
| Type of protection | IP40 |
| Standards | CE / EAC / UKCA |
| Photobiological safety group acc. to EN62778 | RG1 |

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

Country-specific categorizations

| | |
|-----------------|-----------------|
| Order reference | HID LED HB UN P |
|-----------------|-----------------|

LOGISTICAL DATA

| | |
|------------------------------|--------------|
| Temperature range at storage | -40...+80 °C |
|------------------------------|--------------|

Energy labelling regulation data acc EU 2019/2015

| | |
|---|--------------|
| Lighting technology used | LED |
| Non-directional or directional | DLS |
| 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 |
| Standby power | 0.00 W |
| Claim of equivalent power | No |

| | |
|--|-----------------|
| Length | 263.00 mm |
| Height | 250.00 mm |
| Width | 250.00 mm |
| Chromaticity coordinate x | 0.382 |
| Chromaticity coordinate y | 0.38 |
| R9 Colour rendering index | 1 |
| Beam angle correspondence | WIDE_CONE_120 |
| Survival factor | 0,90 |
| Displacement factor | 0.9 |
| LED light source replaces a fluorescent light source | No |
| EPREL ID | 1160651 |
| Model number | AC41486,AC41486 |





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 electronic control gear.
- All electrical connections must be made by a qualified person.

DOWNLOAD DATA

| | Documents and certificates | Document name |
|--|--|---------------------------------------|
|  | User instruction / safety instructions | HID LED HIGHBAY UNIVERSAL |
|  | Legal information | Informationstext 18 Abs 4 ElektroG |
|  | Declarations of conformity | CE Declaration HID LED HB UN Ledvance |
|  | Declarations of conformity UKCA | HID LED HIGHBAY UN |

| Photometric and lighting design files | | Document name |
|--|-------------------------------------|--|
|  | IES file (IES) | HID LED HB 160W-840 230VUN E40 |
|  | LDT file (Eulumdat) | HID LED HB 160W 840 230VUN E40 |
|  | UGR file (UGR table) | HID LED HB 160W-840 230VUN E40 |
|  | Light distribution curve type cone | HID LED HB 160W-840 230VUN E40 |
|  | Light distribution curve type polar | HID LED HB 160W-840 230VUN E40 |
|  | Spectral power distribution | EPREL data spectral diagram PROF LEDr 4000K |
| Tender texts | | Document name |
|  | Tender documents | HID LED Highbay Universal P 25000 LM 160W 840 E40-en |

LOGISTICAL DATA

| Product code | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4058075780422 | Folding box 1 | 255 mm x 255 mm x 320 mm | 1650.00 g | 20.81 dm ³ |
| 4058075780439 | Shipping box 4 | 530 mm x 530 mm x 348 mm | 8274.00 g | 97.75 dm ³ |

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.