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

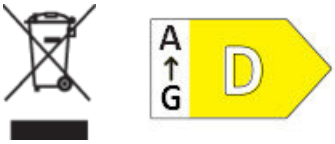
- LED alternative for applications requiring a high luminous flux
- Industrial and storage facilities
- Outdoor applications only in suitable luminaires

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)

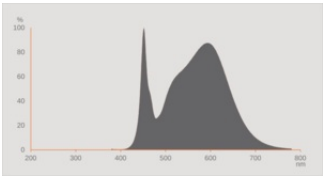
TECHNICAL DATA

Electrical data

Nominal wattage	140 W
Construction wattage	140.00 W
Nominal voltage	220…240 V
Operating mode	AC, Conventional control gear (CCG)
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 number on MCB B10 A	5
Max. lamp number on MCB B16 A	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

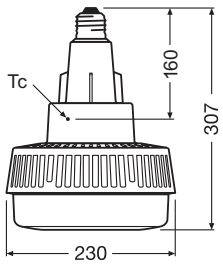


EPREL data spectral diagram PROF LEDr 4000K

Light technical data

Beam angle	117 °
Warm-up time (60 %)	‹ 0.50 s
Starting time	< 0.5 s

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

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

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 labelling 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 correspondence	SPHERE_360

Survival factor	0.90
Displacement factor	0.90
LED light source replaces a fluorescent light source	No
EPREL ID	567214
Model number	AC35214

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

	Documents and certificates	Document name
PDF	User instruction / safety instructions	HQL LED Highbay

	Photometric and lighting design files	Document name
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 4000K

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 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.