

PRODUCT DATASHEET

HQL LED P 5400LM 41W 827 E40

HQL LED P | LED replacement for HQL lamps in demanding outdoor applications



Areas of application

- Streets
- Area lighting
- Pedestrian zones
- Parks
- Outdoor applications only in suitable luminaires

Product benefits

- Saves up to 78 % energy when used as replacement for mercury vapor lamps (HQL)
- 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: IP65
- High surge protection: up to 6 kV (L-N)



TECHNICAL DATA**Electrical data**

Nominal wattage	41 W
Construction wattage	41.00 W
Nominal voltage	220...240 V
Claimed equiv. conventional lamp power	125 W
Nominal current	190 mA
Type of current	AC
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp no. on circuit break. 10 A (B)	33
Max. lamp no. on circuit break. B10 A - CCG without compensation	26
Max. lamp no. on circuit break. B10 A - CCG with compensation	23
Max. lamp no. on circuit break. 16 A (B)	52
Max. lamp no. on circuit break. B16 A - CCG without compensation	42
Max. lamp no. on circuit break. B16 A - CCG with compensation	37
Total harmonic distortion	20 %
Power factor λ	> 0.90

Photometrical data

Luminous intensity	Not relevant
Luminous flux	5400 lm
Nominal useful luminous flux 90°	5400 lm
Luminous efficacy	131 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Warm White
Color temperature	2700 K
Color rendering index Ra	80
Light color	827
Standard deviation of color matching	≤6 sdcn
Rated LLMF at 6,000 h	0.80
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0.4



Light technical data

Beam angle	360 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s
Rated beam angle (half peak value)	360.00 °

Dimensions & Weight

Overall length	202.00 mm
Diameter	80.00 mm
Product weight	470.00 g

Temperatures & operating conditions

Ambient temperature range	-40...+60 °C
Maximum temperature at tc test point	105 °C

Lifespan

Lifespan	60000 h
Number of switching cycles	100000
Lumen maintenance at end of serv	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

Product remark	Available from June 2023
----------------	--------------------------

Capabilities

Dimmable	No
----------	----

Certificates & Standards

Energy efficiency class	E ¹⁾
Energy consumption	41.00 kWh/1000h
Type of protection	IP65
Standards	CE / EAC / UKCA
Photobiological safety group acc. to EN62778	RG0

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

Country-specific categorizations

Order reference	HQL LED P 5400L
-----------------	-----------------

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
Standby power	N/A
Networked standby power for CLS	N/A
Claim of equivalent power	No
Length	202.00 mm
Height	80.00 mm
Width	80.00 mm
Chromaticity coordinate x	0.458
Chromaticity coordinate y	0,410
R9 Colour rendering index	0.00
Beam angle correspondence	SPHERE_360

Survival factor	0.9
Displacement factor	0.9
LED light source replaces a fluorescent light source	No
EPREL ID	1157793
Model number	AC41495

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. If possible, please install the safety rope included in the package containing the lamp for the types 90 W lamps.
- Not suitable for operation with ignitors
- Operation on the capacitor can lead to a reduction of the power factor of the system.
- When installed horizontally, the t_c point of the lamp is located on the top side of the lamp.
- Use in tight luminaires and luminaires with tight reflectors not recommended.

DOWNLOAD DATA

Documents and certificates	
	User instruction
	Declarations Of Conformity CE
	Declarations Of Conformity UKCA
Photometric and lighting design files	
	IES file (IES)
	LDT file (Eulumdat)
	UGR file (UGR table)
	LDC typ polar
	Spectral power distribution

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854040764	Folding box 1	105 mm x 105 mm x 255 mm	536.00 g	2.81 dm ³
4099854040771	Shipping box 6	335 mm x 230 mm x 275 mm	3638.00 g	21.19 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.