

# PRODUCT DATASHEET HQL LED P 6000LM 41W 840 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)





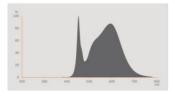
# **TECHNICAL DATA**

# Electrical data

Nominal wattage	41 W
Construction wattage	41.00 W
Nominal voltage	220240 V
Operating mode	CCG, AC Mains
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 $\lambda$	> 0.90

# Photometrical data

Luminous intensity	Not relevant
Luminous flux	6000 lm
Nominal useful luminous flux 90°	6000 lm
Luminous efficacy	146 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
Stroboscope effect metric (SVM)	0.4



# Light technical data

Beam angle	360 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

# **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 L70/B50 at 25 °C	60000 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**

#### Certificates & Standards

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

 $<sup>1) \ {\</sup>sf Energy \ efficiency \ class \ (EEC) \ on \ a \ scale \ of \ A \ (highest \ efficiency) \ to \ G \ (lowest \ efficiency)}$ 

# **Country-specific categorizations**

Color-tuneable light source

High luminance light source

Envelope

Order reference	HQL LED P 6000L	
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	

No

No

No No

SINGLE\_VALUE

Anti-glare shield
Correlated colour temperature type

Claim of equivalent power	No

Length	202.00 mm
Height	80.00 mm

Width	80.00 mm
Chromaticity coordinate x	0.382

Chromaticity coordinate y	0.380

R9 Colour rendering index	0.00

Beam angle correspondence	SPHERE_360
Survival factor	0.9

Survival factor	0.9
Displacement factor	0.9

LED light source replaces a fluorescent light source	Nο

EPREL ID	1157794
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Model number	AC41496
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#### 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<sub>C</sub> 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
PDF	User instruction
PDF	Declarations Of Conformity CE
PDF	Declarations Of Conformity UKCA
	Photometric and lighting design files
	IES file (IES)
	LDT file (Eulumdat)
<u></u>	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
4099854040788	Folding box 1	105 mm x 105 mm x 255 mm	536.00 g	2.81 dm³
4099854040795	Shipping box 6	335 mm x 230 mm x 275 mm	3638.00 g	21.19 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.