

# PRODUCT DATASHEET HQL LED 3000 lm 23 W/4000 K E27

HQL LED PRO | LED replacement for HID lamps for outdoor application



### 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	23 W
Construction wattage	23.00 W
Nominal voltage	220240 V
Operating mode	Conventional control gear (CCG), Line voltage
Claimed equiv. conventional lamp power	50 W
Nominal current	110 mA
Type of current	AC
Inrush current	3,1 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	56
Max. lamp number on MCB B10 A - CCG without compensation	56
Max. lamp number on MCB B16 A	90
Max. lamp number on MCB B16 A - CCG without compensation	90
Total harmonic distortion	20 %
Power factor $\lambda$	0.90

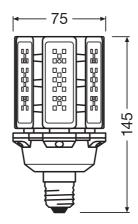
# Photometrical data

Luminous flux	3000 lm
Nominal useful luminous flux 90°	3000 lm
Luminous efficacy	130 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

# Light technical data

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

# Dimensions & Weight



Overall length	145.00 mm
Diameter	75,0 mm
Maximum diameter	75 mm
Product weight	410.00 g

# Temperatures & operating conditions

Ambient temperature range	-20+60 °C
Maximum temperature at tc test point	93 °C

# Lifespan

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)	E27
Mercury content	0.0 mg
Mercury-free	Yes
Design / version	Clear

# Capabilities

Dimmable	No

# Certificates & Standards

Energy efficiency class	A++ 1)
Energy consumption	23.00 kWh/1000h
Type of protection	IP65
Standards	CE
Photobiological safety group acc. to EN62778	RG1

<sup>1)</sup> Energy efficiency class (EEC) on a scale of A++ (highest efficiency) to E (lowest efficiency)

### Country-specific categorizations

Order reference	HQLLED3000 23W/

### LOGISTICAL DATA

Temperature range at storage	-20+80 °C

### Energy labelling regulation data acc EU 2019/2015

Light source cap-type (or other electric interface)	E27
Length	145.00 mm
Height	75,0 mm
Width	75,0 mm

### 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  $t_{\text{C}}$  point of the lamp is located on the top side of the lamp.
- Use in tight luminaires and luminaires with tight reflectors not recommended.
- All electrical connections must be made by a qualified person.

### **DOWNLOAD DATA**

	Documents and certificates	Document name
PDF	User instruction / safety instructions	HQL LED PRO
PDF	Declarations of conformity	CE Declaration of Conformity HQL

Photometric and lighting design files	Document name
IES file (IES)	AC21050_HQLLED3000 23W 230V PROE27
LDT file (Eulumdat)	AC21050_HQLLED3000 23W 230V PROE27
Light distribution curve type polar	HQLLED3000 23W 840 230V PRO E27 FS1OSRAM

### LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075124783	Folding box 1	82 mm x 82 mm x 176 mm	469.00 g	1.18 dm <sup>3</sup>
4058075124790	Shipping box 6	266 mm x 183 mm x 209 mm	3057.00 g	10.17 dm <sup>3</sup>

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.