

PRODUCT DATASHEET

HQL LED FIL V 4000LM 24W 840 E27

HQL LED FIL V | LED replacement for HQL lamps in design-oriented outdoor applications



Areas of application

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

Product benefits

- Same design as traditional HQL lamps with frosted, ellipsoid full glass bulb
- Full use of reflector of existing luminaire thanks to 360 degree beam angle
- Saves up to 78 % energy when used as replacement for mercury vapor lamps (HQL)
- 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
- Surge protection: up to 2 kV (L-N)



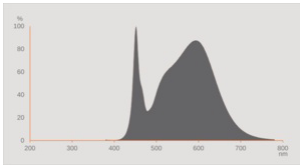
TECHNICAL DATA

Electrical data

| | |
|--|-------------|
| Nominal wattage | 24 W |
| Construction wattage | 24.00 W |
| Nominal voltage | 220...240 V |
| Claimed equiv. conventional lamp power | 80 W |
| Nominal current | 105 mA |
| Type of current | AC |
| Inrush current | 9.1 A |
| Operating frequency | 50/60 Hz |
| Mains frequency | 50/60 Hz |
| Max. lamp no. on circuit break. 10 A (B) | 3 |
| Max. lamp no. on circuit break. B10 A - CCG without compensation | 3 |
| Max. lamp no. on circuit break. B10 A - CCG with compensation | 6 |
| Max. lamp no. on circuit break. 16 A (B) | 5 |
| Max. lamp no. on circuit break. B16 A - CCG without compensation | 5 |
| Max. lamp no. on circuit break. B16 A - CCG with compensation | 9 |
| Total harmonic distortion | 19 % |
| Power factor λ | > 0.90 |

Photometrical data

| | |
|---|---------------------------|
| Luminous intensity | N/A |
| Luminous flux | 4000 lm |
| Nominal useful luminous flux 90° | 4000 lm |
| Luminous efficacy | 166 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 sdc _m |
| 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 | 217.00 mm |
| Diameter | 90.00 mm |
| Maximum diameter | 90 mm |
| Product weight | 210.00 g |

Temperatures & operating conditions

| | |
|--------------------------------------|--------------|
| Ambient temperature range | -20...+50 °C |
| Maximum temperature at tc test point | 80 °C |

Lifespan

| | |
|-------------------------------------|---------|
| Lifespan | 25000 h |
| Number of switching cycles | 100000 |
| Lumen maintenance at end of serv | 0.70 |
| Rated lamp survival factor at 6,000 | ≥ 0.90 |

Additional product data

| | |
|-----------------------------|--------|
| Base (standard designation) | E27 |
| Mercury content | 0.0 mg |

| | |
|----------------|--------------------------|
| Mercury-free | Yes |
| Product remark | Available from June 2023 |

Capabilities

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|----------|----|
| Dimmable | No |
|----------|----|

Certificates & Standards

| | |
|--|-----------------|
| Energy efficiency class | C 1) |
| Energy consumption | 24.00 kWh/1000h |
| Type of protection | IP65 |
| 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 | HQL LED FIL V 4 |
|-----------------|-----------------|

LOGISTICAL DATA

| | |
|------------------------------|--------------|
| Temperature range at storage | -20...+80 °C |
|------------------------------|--------------|

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) | E27 |
| 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 | 217.00 mm |
| Height | 90.00 mm |
| Width | 90.00 mm |








| | |
|--|------------|
| Chromaticity coordinate x | 0,38 |
| Chromaticity coordinate y | 0,38 |
| R9 Colour rendering index | >0 |
| Beam angle correspondence | SPHERE_360 |
| Survival factor | 0,9 |
| Displacement factor | 0.9 |
| LED light source replaces a fluorescent light source | No |
| EPREL ID | 1371166 |
| Model number | AC46353 |

Safety advice

- 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.
- Only suitable for temperatures of up to 50°C inside of the luminaire. Use in tight luminaires and luminaires with tight reflectors not recommended.

DOWNLOAD DATA

| DOWNLOAD DATA | |
|---|-------------------------------|
|  | User instruction |
|  | Declarations Of Conformity CE |
|  | IES file (IES) |
|  | LDT file (Eulumdat) |
|  | UGR file (UGR table) |
|  | Advertisements |
|  | Advertisements |
|  | Advertisements |
|  | Advertisements |

| DOWNLOAD DATA | |
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|  | Advertisements |
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LOGISTICAL DATA

| Product code | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4099854071836 | Folding box 1 | 112 mm x 112 mm x 248 mm | 294.00 g | 3.11 dm ³ |
| 4099854071843 | Shipping box 6 | 356 mm x 242 mm x 278 mm | 2195.00 g | 23.95 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.