





QL Induction Lighting Systems

QL induction lighting is used for professional, general and special lighting applications because of its unmatched durability and high luminous efficacy with excellent light quality. QL offers a nearly maintenance free operation and superior energy saving. Induction lamps have an unique long performance life up to 100,000 hours because there is no use of electrodes in the bulb. The lifetime of the system is determined at 80,000 hours, which equals approximately 20 years based on 4000 burning hours per year.

The major features of QL lamp systems, and their related benefits for the user, are:

Benefits

- Easy installation
- Good color rendering (Ra > 80) and choice of color temperature
- Useful light immediately after switch on
- Easy to use as retrofit or in new construction applications
- Economic, environment-friendly lighting in situations with long burning hours
- Lowest maintenance costs

Features

- Dimmable to 50%
- Crisp white light with no color shift.
- Operates in hot and cold environments amalgam control.
- High lumen efficiency 85W QL features 6,200 initial lumens.
- Also available in 55 and 165 watts.

Application

Ideal for street lighting, bridges and tunnels, hazardous areas, cold storage warehouses and hard-to-reach applications.

Compliances and approvals

- Safety
 - IEC 62532, IEC 61347-1, IEC 62471
- Performance
 - IEC 62639 (in prep.), IEC 60929
- Quality standard ISO 9001
- Environmental management system ISO 14001
- Electromagnetic Compatibility EN 61000, EN 55015, EN 55022
- Vibration and (thermal)shocks IEC 60068





QL 85W Lamp

PRODUCT DATA

Product numberFull product name

Pieces/sleeve
Sleeves per box
Net weight
Cable length power coupler
Operating temperature
Safety approvals

Light Technical Characteristics

Chromaticity Coordinate X
Chromaticity Coordinate Y
RA
Luminous Flux System
Luminous Efficacy System
Luminous Efficacy Lamp
Luminance Average EL
RE.T.(NIOSH)
Damage Factor (Dfc)

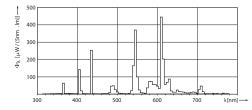
PHOTOMETRIC DATA

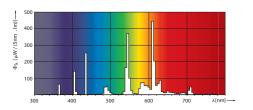
| QL08500130 | QL08500140 |
|-----------------------|-------------|
| QL Alu Base | QL Alu Base |
| 85W 830 | 85W 840 |
| 1 | |
| 6 | |
| 0.360 kg per piece | |
| 555 mm / 21.9 inch | |
| 40°C to +55°C ambient | |
| C-UL-US and CE | |

| 3000K* | 4000K |
|------------|------------|
| 444 | 392 |
| 404 | 385 |
| >80 | >80 |
| 6200 lm | 6200 lm |
| 73 lm/W | 73 lm/W |
| 86 lm/W | 86 lm/W |
| 7.5 cd/cm2 | 7.5 cd/cm2 |
| >24h | >24h |
| <0.6 | <0.6 |

^{*} Other color temperatures available upon request.

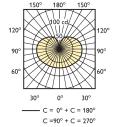
Spectral energy distribution



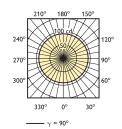


Typical Spectral energy distribution of QL 85W 3000K.

LIGHT DISTRIBUTION



Typical light distribution of QL 85W Azimuth angle



Typical light distribution of QL 85W,



GE08512001

0.580 kg per piece

152 x 76 x 41 mm

Cage clamp terminals

QL Generator 85W 100-120V

OL 85W Generator

PRODUCT DATA

Product number

Product description Pieces per box Net weight Dimensions (L x W x H) Connectors

Features

High reliability

GE08523001

0.580 kg per piece

152 x 76 x 41 mm

Cage clamp terminals

Instant hot and cold (re) start

QL Generator 85W 200-277V

Operates in hot and cold environments

Dimmable to 50%

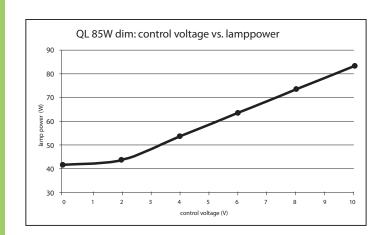
L 70 >70.000 hrs

Power Factor Correction and limited inrush current

Protection lamp end of life

Extended protection against mains faults and deviations

Dimming behavior



General Characteristics

Lifetime system

Efficiency

Cooling

Tcase

Storage

Operating temp.

Operating position

Safety approvals

EMC approvals

Electrical Characteristics

Input line freq.

Power Factor

CurrentTHD

Output Voltage

Switching freq.

Current nom.

Run-up/short

Dimming

80.000 hrs atTc=72°C

> 90%, max. load

convection, dependent on system set-up, heat sinking required

82°C max (72°C for full life)

-40°C to +85°C

-40°C to +55°C ambient

Universal

C-UL-US and CE

Complies with all international EMC requirements

45 - 66Hz

> 0.98

ANSI C82.11-2002

130 - 220 V _{ac}

 $2.67~\text{MHz} \pm 8\%$

Depending on lamp

 $< 1.8 \times I_{nor}$

EN60929, 1-10 V $_{dc}$ analog, 50-100% output power



QL 85W System

DIMENSIONAL DRAWING

Product dimensions

Overall length C (Max) Length gear C3 (Norm) Diameter D (Max) Height gear H (Norm) Cable length X (Norm)

SYSTEM DATA

General Characteristics

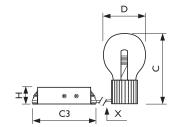
Operating Position Life System to 5% failures Life System to 10% failures Life System to 20% failures Life System to 50% failures

Electrical Characteristics

System Power
Operating Frequency
Ignition Time
Run-up time 70%
Re-ignition Time

Environmental Characteristics

182 mm / 7.16 inch 154 mm / 6.06 inch 110 mm / 4.33 inch 40.8 mm / 1.61 inch 555 mm / 21.85 inch



| Universal | | | |
|------------|--|--|--|
| 40,000 hr | | | |
| 60,000 hr | | | |
| 80,000 hr | | | |
| 100,000 hr | | | |

| 85 W | | | |
|-----------|--|--|--|
| 2.650 MHz | | | |
| 0.5 sec | | | |
| 10 min | | | |
| 0.5 sec | | | |
| | | | |

Mercury (Hg) Content 6.0 mg

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