

85W Induction 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 lighting systems have a unique long performance life up to 100,000 hours because there is no use of electrodes in the induction system. In many cases the systems lifetime is determined at 60,000 hours, which equals approximately 15 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 12,000 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 55015, EN 55022
- **Vibration and (thermal)shocks**
IEC 60068

QL 85W Lamp



PRODUCT DATA

Product number

Full product name

Pieces/sleeve

Sleeves per box

Net weight

Light Technical Characteristics

Chromaticity Coordinate X

Chromaticity Coordinate Y

RA

Luminous Flux System

Luminous Efficacy

Luminance Average EL

PE.T.(NIOSH)

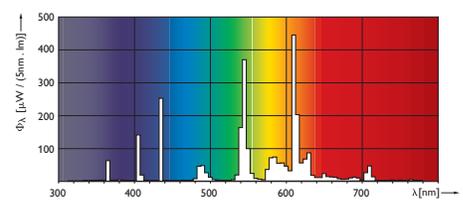
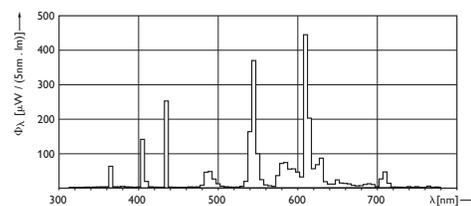
Damage Factor (Dfc)

QL08500027	QL08500030	QL08500040	QL08500050
QL Twist Base	QL Twist Base	QL Twist Base	QL Twist Base
85W 827	85W 830	85W 840	85W 850
1			
6			
0.137 kg per piece			

2700K	3000K	4000K	5000K
476	444	392	346
417	404	385	359
>80	>80	>80	>80
6100 lm	6200 lm	6200 lm	6100 lm
72 lm/W	73 lm/W	73 lm/W	72 lm/W
7.0 cd/cm ²	7.5 cd/cm ²	7.5 cd/cm ²	7.0 cd/cm ²
>24h	>24h	>24h	>24h
<0.6	<0.6	<0.6	<0.6

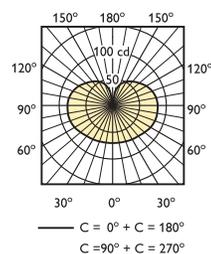
PHOTOMETRIC DATA

Spectral energy distribution

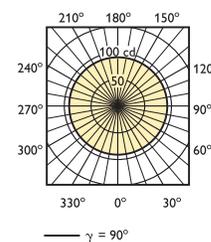


Typical Spectral energy distribution of QL 85W 3000K.

LIGHT DISTRIBUTION



Typical light distribution of QL 85W



Typical light distribution of QL 85W, Azimuth angle

QL 85W Power coupler

PRODUCT DATA

Product number

Product description

Pieces per box

Net weight

Characteristics

Storage temperature

Operating temperature

Operating Position

Safety approvals

EMC approvals

Cable length

Connectors

Net Weight

PC08500000

QL Power Coupler 85W

6

0.200 kg per piece

-40°C to +85°C

-40°C to +55°C ambient

Universal

C-UL-US and CE

Complies with all international EMC requirements

555 mm / 21.9 inch

N/A

0,200 kg per piece



For detailed information and guiding concerning the development of appropriate luminaire designs please visit our website www.qlcompany.com; "Information for Original Equipment" (OEM Guide).

Specifications subject to change without notice.



QL 85W Generator



PRODUCT DATA

Product number

Product description

Pieces per box

Net weight

Dimmable

Product number

Product description

Pieces per box

Net weight

Features

General Characteristics

Lifetime system

Efficiency

Cooling

Tcase

Storage

Operating temp.

Operating position

Safety approvals

EMC approvals

Electrical Characteristics

Input line freq.

Power Factor

Current THD

Output Voltage

Switching freq.

Current nom.

Run-up/short

Ignition

Dimming

Product Dimensions

Dimensions (L x W x H)

Connectors

GE08523000

QL Generator 85W 200-277V

6

0.580 kg per piece

GE08512000

QL Generator 85W 100-120V

6

0.580 kg per piece

GE08523001

QL Generator 85W 200-277V

6

0.580 kg per piece

GE08512001

QL Generator 85W 100-120V

6

0.580 kg per piece

High Reliability

Instant hot and cold (re)start

Operates in hot and cold environments

Dimmable to 50%

L 70 >70.000 hrs

Power Factor Correction included

Limited inrush current

Output Power Stabilized

Protections

- Open/short output

- Thermal

- Lamp end of life

Extended protection against mains faults and deviations

100.000 hrs at Tc=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

> 0.92

ANSI C82.11-2002

130 - 220 V_{ac}

2.67 MHz ± 8%

Depending on lamp

< 1.8 x I_{nom}

1.2 kVp

EN60929, 1-10 V_{dc} analog

50-100% output power

152 x 76 x 41 mm / 6.0 x 3.0 x 1.6 inch

Cage clamp terminals

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)

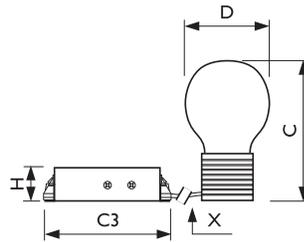
180.5 mm / 7.11 inch

154 mm / 6.06 inch

111 mm / 4.37 inch

40.8 mm / 1.61 inch

555 mm / 21.85 inch



SYSTEM DATA

General Characteristics

Operating Position

Universal

Life System to 5% failures

40,000 hr

Life System to 10% failures

60,000 hr

Life System to 20% failures

80,000 hr

Life System to 50% failures

100,000 hr

Electrical Characteristics

System Power

85 W

Watts

85 W

Operating Frequency

2.650 MHz

Ignition Time

0.5 sec

Run-up time 70%

10 min

Re-ignition Time

0.5 sec

Environmental Characteristics

Mercury (Hg) Content 5.0 mg