

QL 85W Induction Lighting System

# The most sustainable lighting solution





# **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 number** Full 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

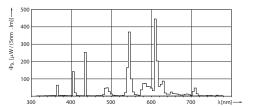


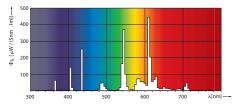
QL08500130	QL08500140
QL Alu Base	QL Alu Base
85W 830	85W 840
1	
6	
0.360 kg per piece	
555 mm / 21.9 inch	
40°C to +55°C ambient	
C-UL-US and CE	

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 and a stress of the		

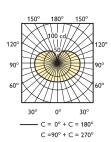
\* Other color temperatures available upon request.

#### Spectral energy distribution

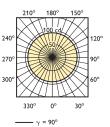




Typical Spectral energy distribution of QL 85W 3000K.



Typical light distribution of QL 85W Azimuth angle



Typical light distribution of QL 85W,

LIGHT DISTRIBUTION



# QL 85W Generator

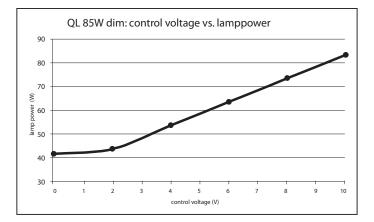
#### **PRODUCT DATA**

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

#### Features

GE08523001	GE08512001
QL Generator 85W 200-277V	QL Generator 85W 100-120V
6	6
0.580 kg per piece	0.580 kg per piece
152 x 76 x 41 mm	152 x 76 x 41 mm
Cage clamp terminals	Cage clamp terminals

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 and limited inrush current	
Protection lamp end of life	
Extended protection against mains faults and deviations	



### **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 Dimming

45 - 66Hz	
> 0.98	
ANSI C82.11-2002	
130 - 220 V <sub>ac</sub>	
2.67 MHz ± 8%	
Depending on lamp	
< 1.8 x l <sub>nom</sub>	
EN60929, 1-10 V <sub>dc</sub> analog, 50-100% output power	

# Dimming behavior



# 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

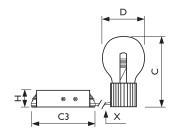
Operating Position Life System to 5% failures Life System to 10% failures Life System to 20% failures

#### **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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