

HLL LED metallic linear light fitting  
for harsh & hazardous areas



# HLL-2-3L / HLL-4-5L / HLL-2-3L-D-EM / HLL-4-5L-D-EM linear light fittings

(Zone 1, 2, 21 und 22)



## A robust solution for lighting applications in hazardous areas

Eaton's Crouse-Hinds series HLL linear LED light fitting is constructed with an aluminium housing and high-impact resistant polycarbonate cover, providing extreme durability and reliability in Zone 1, 2, 21 and 22 hazardous areas.

The use of high-quality LED chips, coupled with our extensive experience in thermal management of electrical components in hazardous areas, ensures long service life of the HLL series. The extended temperature range of -40 °C to +55 °C allows these luminaires to be used in a wide range of ambient conditions where an explosive atmosphere is to be expected.

With its long service life, low maintenance requirements and low energy consumption, the HLL provides superior performance with a competitive payback versus traditional fluorescent fixtures. The luminaire series is also available as a single-battery emergency light fitting HLL-EM for ambient temperatures from -25 °C to +55 °C.

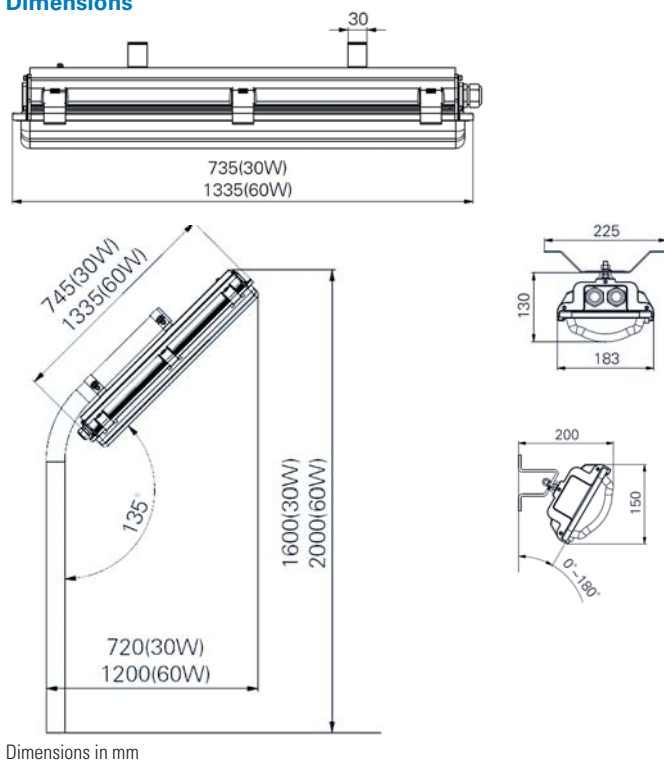
### Primary Applications

Designed for use in outdoor and indoor hazardous areas where moisture or corrosion may be a problem, such as offshore oil platforms, pharmaceutical and chemical plants, oil refineries and industrial locations.

### Design Features

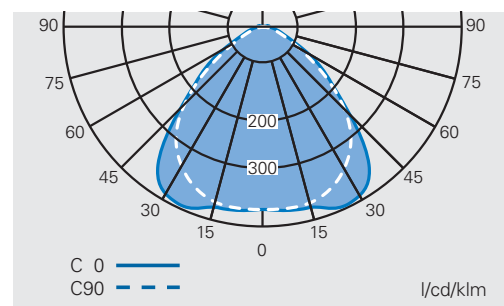
- Polycarbonate, 4J impact resistant lens
- Copper free aluminum housing for excellent corrosion resistance and heat transfer properties
- IP66 rating
- Suitable for Zone 1, 2, 21 and 22 hazardous areas
- Highest temperature class T6
- Ex-e technology for easy maintenance
- Operating ambient temperature: -40 °C (HLL-EM: -25 °C) up to +55 °C

### Dimensions

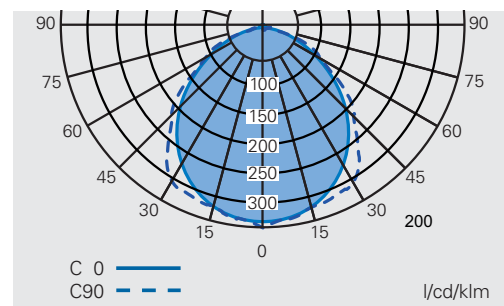


### Polar curve

#### HLL-2/HLL-2-EM



#### HLL-4/HLL4\_EM



# Technical data

## HLL linear LED



### Certifications and compliances HLL-2-3L-D

EC-Type Examination Certificate	CML 17ATEX3305X
IECEX Certificate of Conformity	IECEX CQM 16.0030X
Cert. acc. TR CU 012/2011 EAC <sup>1)</sup>	KZ.7500361.22.01.03210
Marking accd. to 2014/34/EU	⊕ II 2 G Ex eb mb op is IIC T6 Gb ⊕ II 2 D Ex tb op is IIIC T80 °C Db
Marking accd. to IECEx	Ex eb mb IIC T6 Gb Ex tb IIIC T80 °C Db
Permissible ambient temperature	-40 °C up to +55 °C
Degree of protection accd. to EN 60529	IP66

### HLL-4-5L-D

EC-Type Examination Certificate	CML 17ATEX3305X
IECEX Certificate of Conformity	IECEX CQM 16.0030X
Cert. acc. TR CU 012/2011 EAC <sup>1)</sup>	KZ.7500361.22.01.03210
Marking accd. to 2014/34/EU	⊕ II 2 G Ex eb mb op is IIC T6 Gb ⊕ II 2 D Ex tb op is IIIC T80 °C Db
Marking accd. to IECEx	Ex eb mb IIC T6 Gb Ex tb IIIC T80 °C Db
Permissible ambient temperature	-40 °C up to +55 °C
Degree of protection accd. to EN 60529	IP66

### LED System

Life expectancy LED module	L70 = 110,000 h at ta=25°C	L70 = 110,000 h at ta=25°C
CRI	> 70	> 70
Rated luminous flux of the luminaire (typical, ± 10 %)	2800 lm	5700 lm
Illuminance at measurement plane	comparable with luminaires for fluorescent lamps	comparable with luminaires for fluorescent lamps
Lamp/illuminant	30 W	60 W
Light colour	5700 K	5700 K

### Electrical Ratings

Rated voltage	110 V - 240 V AC 108 V - 250 V DC	110 V - 240 V AC 108 V - 250 V DC
Power consumption	30 W	60 W
Frequency	50 - 60 Hz	50 - 60 Hz
Power factor cos φ	≥ 0.9	≥ 0.9
Circuit	EVG	EVG
Protection class	I	I
Connecting terminals	L1, L2, L3, L, N, PE; max. 2 x 6 mm <sup>2</sup> per terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm <sup>2</sup> per terminal

### Fixture specifications

Dimensions (L x W x H)	735 x 183 x 130 mm	1335 x 183 x 130 mm
Weight	5 kg	10 kg
Enclosure material	Copper-free Aluminium	Copper-free Aluminium
Enclosure colour	Natural Aluminium / grey	Natural Aluminium / grey
Protective cover / protective bowl	Polycarbonate	Polycarbonate
Degree of protection accd. to EN 60529	IP66	IP66
Cable glands / gland plates / enclosure drilling	M25 x 1.5 thread <sup>2)</sup>	M25 x 1.5 thread <sup>2)</sup>

<sup>1)</sup> Please ask our sales representatives for the special order number

<sup>2)</sup> With dustcover if entry/thread is not closed

Delivery without fixing material and cable glands

Mounting accessories see Main catalogue Part 1 Capt. 2.16.

Cable glands see Main catalogue Part 2 Capt. 2.3



### Certifications and compliances HLL-2-3L-D-EM1

EC-Type Examination Certificate	CML 17ATEX3305X
IECEX Certificate of Conformity	IECEX CQM 16.0030X
Cert. acc. TR CU 012/2011 EAC <sup>1)</sup>	KZ.7500361.22.01.03210
Marking accd. to 2014/34/EU	⊕ II 2 G Ex eb ib mb op is IIC T6 Gb ⊕ II 2 D Ex tb op is IIIC T80 °C Db
Marking accd. to IECEx	Ex eb ib mb IIC T6 Gb Ex tb IIIC T80 °C Db
Permissible ambient temperature	-25 °C up to +55 °C
Degree of protection accd. to EN 60529	IP66

### HLL-4-5L-D-EM1

EC-Type Examination Certificate	CML 17ATEX3305X
IECEX Certificate of Conformity	IECEX CQM 16.0030X
Cert. acc. TR CU 012/2011 EAC <sup>1)</sup>	KZ.7500361.22.01.03210
Marking accd. to 2014/34/EU	⊕ II 2 G Ex eb ib mb op is IIC T6 Gb ⊕ II 2 D Ex tb op is IIIC T80 °C Db
Marking accd. to IECEx	Ex eb ib mb IIC T6 Gb Ex tb IIIC T80 °C Db
Permissible ambient temperature	-25 °C up to +55 °C
Degree of protection accd. to EN 60529	IP66

### LED System

Life expectancy LED module	L70 = 110,000 h at ta=25°C	L70 = 110,000 h at ta=25°C
CRI	> 70	> 70
Rated luminous flux of the luminaire (typical, ± 10 %)	2800 lm	5700 lm
Luminous flux in emergency operation 25%	700 lm	1425 lm
Illuminance at measurement plane	comparable with luminaires for fluorescent lamps	comparable with luminaires for fluorescent lamps
Lamp/illuminant	30 W	60 W
Light colour	5700 K	5700 K

### Electrical Ratings

Rated voltage	110 V - 240 V AC 108 V - 250 V DC	110 V - 240 V AC 108 V - 250 V DC
Power consumption	30 W	60 W
Frequency	50 - 60 Hz	50 - 60 Hz
Power factor cos φ	≥ 0.9	≥ 0.9
Circuit	EVG	EVG
Battery type	Ni-Cd 3 Ah	Ni-Cd 6 Ah
Rated emergency lighting duration	1,5 h (3h on request)	1,5 h (3h on request)
Protection class	I	I
Connecting terminals	L1, L2, L3, L, N, PE; max. 2 x 6 mm <sup>2</sup> per terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm <sup>2</sup> per terminal

### Fixture specifications

Dimensions (L x W x H)	735 x 183 x 130 mm	1335 x 183 x 130 mm
Weight	5 kg	10 kg
Enclosure material	Copper-free Aluminium	Copper-free Aluminium
Enclosure colour	Natural Aluminium / grey	Natural Aluminium / grey
Protective cover / protective bowl	Polycarbonate	Polycarbonate
Degree of protection accd. to EN 60529	IP66	IP66
Cable glands / gland plates / enclosure drilling	M25 x 1.5 thread <sup>2)</sup>	M25 x 1.5 thread <sup>2)</sup>

<sup>1)</sup> Please ask our sales representatives for the special order number

<sup>2)</sup> With dustcover if entry/thread is not closed

Delivery without fixing material and cable glands

Mounting accessories see Main catalogue Part 1 Capt. 2.16.

Cable glands see Main catalogue Part 2 Capt. 2.3

# Ordering details

HLL linear LED



HLL-2-3L-D



HLL-4-5L-D

## Ordering details

Type	Through wiring		Cable glands/threads	Order-No.
	single sided	twin sided		
<b>HLL</b>				
HLL-2-3L-D-1/6-225	X		2 x M25	<b>CCL1622403A</b>
HLL-2-3L-D-2/6-225		X	2-2 x M25	<b>CCL1622419A</b>
HLL-4-5L-D-1/6-225	X		2 x M25	<b>CCL1622787A</b>
HLL-4-5L-D-2/6-225		X	2-2 x M25	<b>CCL1622803A</b>

## Ordering details

HLL-2-3L-D-EM1

HLL-4-5L-D-EM1

Type	Through wiring		Cable glands/threads	Order-No.
	single sided	twin sided		
<b>HLL</b>				
HLL-2-3L-D-EM1-1/6-225	X		2 x M25	<b>CCL1622435A</b>
HLL-2-3L-D-EM1-2/6-225		X	2-2 x M25	<b>CCL1622451A</b>
HLL-4-5L-D-EM1-1/6-225	X		2 x M25	<b>CCL1622819A</b>
HLL-4-5L-D-EM1-2/6-225		X	2-2 x M25	<b>CCL1622835A</b>