CEAG Products

CROUSE-HINDS SERIES

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

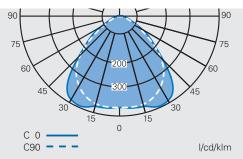
Designed for use in outdoor and indoor hazardous areas where moisture or corrosion may be a problem, such as offshore oil platforms, pharmaceutical and chemical plants, oil refineries and industrial locatoins

Design Features

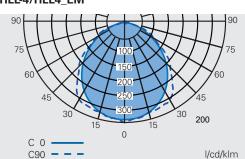
- Polycarbonate, 4J impact resistant lens
- Copper free aluminum housing for excellent corrosion resistance and heat transfer properties
- IP66 rating
- Suitable for Zone 1, 2, 21 and 22 hazardous areas
- Highest temperature class T6
- Ex-e technology for easy maintenance
- Operating ambient temperature: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

Polar curve

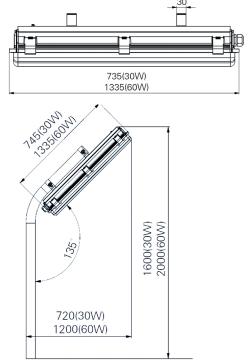
HLL-2/HLL-2-EM







Dimensions



Dimensions in mm

Technical data

HLL linear LED





Certifications and compliances	HLL-2-3L-D	HLL-4-5L-D
EC-Type Examination Certificate	CML 17ATEX3305X	CML 17ATEX3305X
IECEx Certificate of Conformity	IECEx NEP 19.0003X	IECEx NEP 19.0003X
Cert. acc. TR CU 012/2011 EAC ¹⁾	KZ.7500361.22.01.03210	KZ.7500361.22.01.03210
Marking accd. to 2014/34/EU (with safety switch)	☺ II 2 G Ex db eb ib mb op is IIC T6 Gb ☺ II 2 D Ex tb op is IIIC T80 °C Db	 W II 2 G Ex db eb ib mb op is IIC T6 Gb W II 2 D Ex tb op is IIIC T80 °C Db
Marking accd. to IECEx (with safety switch)	Ex db eb ib mb IIC T6 Gb Ex tb IIIC T80 °C Db	Ex db eb ib mb IIC T6 Gb Ex tb IIIC T80 °C Db
Permissible ambient temperature	-40 °C up to +55 °C	-40 °C up to +55 °C
Degree of protection accd. to EN 60529	IP66	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	110 V - 240 V AC
;	108 V - 250 V DC	108 V - 250 V DC
Power consumption	30 W	60 W
Frequency	50 - 60 Hz	50 - 60 Hz
Power factor $\cos \phi$	≥ 0.9	≥ 0.9
Circuit	EVG	EVG
Protection class		
Connecting terminals	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² 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 Auminium / grey	Natural Auminium / 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 ²⁾	M25 x 1.5 thread ²⁾

¹⁾ Please ask our sales representatives for the special order number

²⁾ With dustcover if entry/thread is not closed

Delivery without fixing material and cable glands

Mounting accesssories see Main catalogue Part 1 Capt. 2.16. Cable glands see Main catalogue Part 2 Capt. 2.3

Technical data

HLL linear LED





Certifications and compliances	HLL-2-3L-D-EM1	HLL-4-5L-D-EM1
EC-Type Examination Certificate	CML 17ATEX3305X	CML 17ATEX3305X
IECEx Certificate of Conformity	IECEx NEP 19.0003X	IECEx NEP 19.0003X
Cert. acc. TR CU 012/2011 EAC 1)	KZ.7500361.22.01.03210	KZ.7500361.22.01.03210
Marking accd. to 2014/34/EU (with safety switch)	ⓑ II 2 G Ex db eb ib mb op is IIC T6 Gb ⓒ II 2 D Ex tb op is IIIC T80 °C Db	๎๎๎๎๛ II 2 G Ex db eb ib mb op is IIC T6 Gb ๎๎๛ II 2 D Ex tb op is IIIC T80 °C Db
Marking accd. to IECEx (with safety switch)	Ex db eb ib mb IIC T6 Gb Ex tb IIIC T80 °C Db	Ex db eb ib mb IIC T6 Gb Ex tb IIIC T80 °C Db
Permissible ambient temperature	-25 °C up to +55 °C	-25 °C up to +55 °C
Degree of protection accd. to EN 60529	IP66	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	1	
Connecting terminals	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² 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 Auminium / grey	Natural Auminium / 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 ²⁾	M25 x 1.5 thread ²⁾

¹⁾ Please ask our sales representatives for the special order number

 $^{\mbox{\tiny 2)}}$ With dustcover if entry/thread is not closed

Delivery without fixing material and cable glands

Mounting accesssories see Main catalogue Part 1 Capt. 2.16. Cable glands see Main catalogue Part 2 Capt. 2.3

Ordering details HLL linear LED





Ordering details

HLL-2-3L-D

HLL-4-5L-D

Туре	Through wiring single sided twin sided	Cable glands/threads	Order-No.
HLL			
HLL-2-3L-D-1/6-225	Х	2 x M25	CCL1622403UA
HLL-2-3L-D-2/6-225	Х	2-2 x M25	CCL1622419UA
HLL-4-5L-D-1/6-225	Х	2 x M25	CCL1622787UA
HLL-4-5L-D-2/6-225	Х	2-2 x M25	CCL1622803UA

Ordering details

HLL-2-3L-D-EM1

HLL-4-5L-D-EM1

Туре	Through wiring single sided twin sided	Cable glands/threads	Order-No.
HLL			
HLL-2-3L-D-EM1-1/6-225	Х	2 x M25	CCL1622435UA
HLL-2-3L-D-EM1-2/6-225	Х	2-2 x M25	CCL1622451UA
HLL-4-5L-D-EM1-1/6-225	Х	2 x M25	CCL1622819UA
HLL-4-5L-D-EM1-2/6-225	Х	2-2 x M25	CCL1622835UA



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1201 Wolf Street Syracuse, NY 13208

(866) 764-5454 FAX: (315) 477-5179 FAX Orders Only: (866) 653-0640

CrouseCustomerCTR@Eaton.com

For more information:

If further assistance is required, please contact an authorized Eaton Distributor, Sales Office, or Customer Service Department.

Australia

Phone +61-2-8787-2777 Fax +61-2-9609-2342

China Phone +86-21-2899-3600 Fax +86-21-2899-4055 ECHsales@eaton.com

crousehindsanz@eaton.com

Great Britain

Phone +44-247-630-89 30 Fax +44-247-630-10 27 sales5@eaton.com

India

Phone +91-124-4683888 +91-124-4683899 Fax cchindia@eaton.com

Canada

Fax

Toll Free +1-800-265-0502 +1-800-263-9504 Fax orders only: +1-866-653-0645

Korea

Phone +82-2-3484-6783 Fax +82-2-3484-6778 CCHK-sales@ cooperindustries.com

Mexico/Latin America/

Caribbean Phone +52-555-804-4000 Fax +52-555-804-4020 mxmercadotecnia@ cooperindustries.com

Spain

Phone +34-9-37362710 Fax +34-9-37835055 sales.CCH.es@ cooperindustries.com

Middle East (Dubai) Phone +971-4-427-2522 / 2500 +971-4-429-8521 Fax CHMEsales@Eaton.com

Russia Phone +7-495 510-24-27 Fax +7-495 510-24-28 info@cooper.ru.com www.cooper-russia.ru

The Netherlands

Norway

Singapore:

Turkey

Fax

Phone +31-10-2452145 Fax +31-10-2452121

CHRD_mail@Eaton.com

Phone +47-32-244600

CHLloffice@eaton.com

Phone +65-6645-9888

Fax +65-6297-4819

CHSI-Sales@Eaton.com

Phone +90-216-464-20-20

Fax +90-216-464-20-10

infoEGTurkey@eaton.com

+47-32-244646

Eaton

Cooper Crouse-Hinds GmbH Neuer Weg - Nord 49 D-69412 Eberbach

Phone +49 (0) 6271/806-500 Fax +49 (0) 6271/806-476 E-mail info-ex@eaton.com Internet www.crouse-hinds.de



Eaton 1000 Eaton Boulevard Cleveland, OH 44122 United States Eaton.com

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Eaton's Crouse-Hinds Business 1201 Wolf Street Syracuse, NY 13208 (866) 764-5454 CrouseCustomerCTR@Eaton.com

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