



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

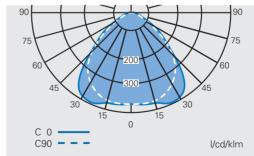
Designed for use in outdoor and indoor hazardous areas where moisture or corrosion may be a problem, such as offshore oil platforms, pharmaceutical and chemical plants, oil refineries and industrial locatoins

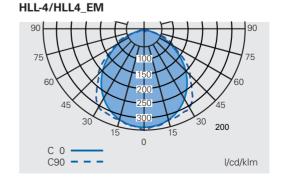
Design Features

- 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

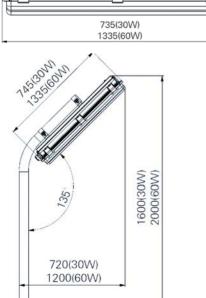
Polar curve

HLL-2/HLL-2-EM





Dimensions





Dimensions in mm

Technical data

HLL linear LED





Certifications and compliances HLL-2-3L-D

| ш | .L-4-5L-I | ٦. |
|---|-----------|----|
| п | .L-4-3L-I | , |

| EC-Type Examination Certificate | CML 17ATEX3305X | CML 17ATEX3305X |
|--|---|---|
| IECEx Certificate of Conformity | IECEx CQM 16.0030X | IECEx CQM 16.0030X |
| 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 GbII 2 D Ex tb op is IIIC T80 °C Db | II 2 G Ex db eb ib mb op is IIC T6 GbII 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 |
| | 100 1 200 1 20 | 100 7 200 7 20 |
| 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 ² per terminal | L1, L2, L3, L, N, PE; max. 2 x 6 mm² 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

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

²⁾ With dustcover if entry/thread is not closed





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

| HI | .L-4-5 | L-D- | EM1 |
|----|--------|------|-----|
|----|--------|------|-----|

| EC-Type Examination Certificate | CML 17ATEX3305X | CML 17ATEX3305X |
|--|---|---|
| IECEx Certificate of Conformity | IECEx CQM 16.0030X | IECEx CQM 16.0030X |
| 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 GbII 2 D Ex tb op is IIIC T80 °C Db | II 2 G Ex db eb ib mb op is IIC T6 GbII 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 | I | I |
| 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

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 | Χ | 2 x M25 | CCL1622403A |
| HLL-2-3L-D-2/6-225 | X | 2-2 x M25 | CCL1622419A |
| HLL-4-5L-D-1/6-225 | X | 2 x M25 | CCL1622787A |
| HLL-4-5L-D-2/6-225 | X | 2-2 x M25 | CCL1622803A |

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 | X | 2 x M25 | CCL1622435A |
| HLL-2-3L-D-EM1-2/6-225 | X | 2-2 x M25 | CCL1622451A |
| HLL-4-5L-D-EM1-1/6-225 | X | 2 x M25 | CCL1622819A |
| HLL-4-5L-D-EM1-2/6-225 | X | 2-2 x M25 | CCL1622835A |



Eaton's Crouse-Hinds Business

The safety you rely on.

See the complete offering of Hazardous and Industrial Products at www.crouse-hinds.de.

U.S. (Global Headquarters): **Eaton's Crouse-Hinds Business**

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 crousehindsanz@eaton.com

China

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

Great Britain

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

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

Canada

Toll Free +1-800-265-0502 Fax +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

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

Middle East (Dubai)

Phone +971-4-427-2522 / 2500 Fax +971-4-429-8521 CHMEsales@Eaton.com

The Netherlands

Phone +31-10-2452145 Fax +31-10-2452121 CHRD_mail@Eaton.com

Norway

Phone +47-32-244600 Fax +47-32-244646 CHLloffice@eaton.com

Singapore:

Phone +65-6645-9888 Fax +65-6297-4819 CHSI-Sales@Eaton.com

Turkey

Phone +90-216-464-20-20 Fax +90-216-464-20-10 infoEGTurkey@eaton.com

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

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

© 2020 Eaton Corporation All Rights Reserved Printed in Germany Publication No. BR 300 8000 October 2020

Changes to the products, to the information contained in this document, and to prices are reserved; so are errors and omissions. Only order confirmations and technical documentation by Eaton is binding. Photos and pictures also do not warrant a specific layout or functionality. Their use in whatever form is subject to prior approval by Eaton. The same applies to Trademarks (especially Eaton, Moeller, and Cutler-Hammer). The Terms and Conditions of Eaton apply, as referenced on Eaton Internet pages and Eaton order confirmations.



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

Eaton is a registered trademark.

All other trademarks are property of their respective owners

