

IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg



[1] TYPE EXAMINATION CERTIFICATE - Translation

[2] Equipment
of equipment-groups I and II, equipment-categories M2 and 2 plus 3

[3] Type examination certificate number **IBExU16ATEXB012** | Issue 0

[4] Product: **Plastic LED light fittings**
Type: KLL2 ***** ** * ** * *

[5] Manufacturer: Cooper Crouse Hinds GmbH

[6] Address: Neuer Weg-Nord 49
69412 Eberbach
GERMANY

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] IBExU Institut für Sicherheitstechnik GmbH certifies that this product has been found to comply with the essential health and safety requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in the confidential test report IB-16-3-093.

[9] Compliance with the essential health and safety requirements has been assured by compliance with: EN 60079-0:2012+A11:2013, EN 60079-7:2015 and EN 60079-31:2014 except in respect of those requirements listed at item [18] of the schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the specific conditions of use specified in the schedule to this certificate.

[11] This type examination certificate relates only to the design of the specified equipment and not to specific items of equipment subsequently manufactured or supplied.

[12] The marking of the product shall include the following:

II 3G Ex ec IIC T4 Gc

II 3D Ex tc IIIC T80°C Dc

-30 °C ≤ T_a ≤ +55 °C (maximum values)

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- Stamp -

Certificates without signature and stamp are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

Freiberg, 2016-08-18

[13] **Schedule**

[14] **Certificate number IBExU16ATEXB012 | Issue 0**

[15] **Description of product**

The Plastic LED light fittings type KLL2 ***** *** **** * is used to illuminate factories and stores in areas with potentially explosive atmospheres of zone 2 and 22. The luminaire consists of a polyester enclosure with fasteners made of stainless steel, a reflector with assembled LED boards, LED control gear and terminals, as well as a light-transmitting cover made of polycarbonate.

Technical data:

- Rated voltage: 220...240 V AC; 176...264 V DC
- Through-wiring / looping: up to 12 x $\geq 2.5 \text{ mm}^2$ (max. 4 x 16 A)

type	input power	ambient temperature range	
		max. 4 x 16 A	max. 3 x 8 A
KLL1 5L	31 W	-30 °C...+50 °C	-30 °C...+55 °C
KLL1 6L	46 W	-30 °C...+50 °C	-30 °C...+55 °C
KLL1 9L	61 W	-30 °C...+45 °C	-30 °C...+50 °C

Further details are mentioned in the manufacturer's documents and operating instructions which are part of this test report.

[16] **Test report**

The test results are recorded in the confidential test report IB-16-3-093 of 2016-08-18.

The test documents are part of the test report and they are listed there.

Summary of the test results

The Plastic LED light fittings type KLL2 ***** *** **** * fulfil the requirements of explosion protection for electrical equipment of Equipment Group II, Category 3G in type of protection increased safety "e" for Explosion Group IIC and temperature class T4, as well as Category 3D in type of protection dust ignition protection by enclosure "t" for Explosion Group IIIC and a maximum surface temperature of 80 °C.

Safety instructions

The plastic enclosure has to be protected against intense electrostatic charging processes. Cleaning is permitted only with a damp cloth.

[17] **Specific conditions of use**

None

[18] **Essential health and safety requirements**

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item [9], the following are considered relevant to this product, and conformity is demonstrated in the test report:

None

[19] **Drawings and Documents**

The documents are listed in the test report.

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