IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg

EU-TYPE EXAMINATION CERTIFICATE - Translation [1]

[2] Equipment or protective systems intended for use in potentially explosive atmospheres. Directive 2014/34/EU



EU-type examination certificate number IBExU16ATEX1147 | Issue 0 [3]

[4] Product: Plastic LED light fittings

Type: KLL1 ******* ***

[5]

Manufacturer: Cooper Crouse Hinds GmbH

Address: [6]

Neuer Weg-Nord 49 69412 Eberbach

GERMANY

- This product and any acceptable variation thereto is specified in the schedule to this certificate and the [7] documents therein referred to.
- IBEXU Institut für Sicherheitstechnik GmbH. Notified Body number 0637 in accordance with Article 17 [8] of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 the Directive.

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 60079-1:2014, EN 60079-5:2015, EN 60079-7:2015, EN 60079-11:2012, EN 60079-18:2015, EN 60079-28:2015 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.
- This EU-type examination certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- [12] The marking of the product shall include one of the following depending on the used components:

(x) II 2G Ex eb mb op is q IIC T4 Gb (Ex) II 2G Ex db eb mb op is g IIC T4 Gb (Ex) II 2G Ex eb ib mb op is q IIC T4 Gb (Ex) II 2G Ex db eb ib mb op is q IIC T4 Gb (£x) II 2D Ex op is the IIIC T80 °C Db -30 °C up to +55 °C (maximum values)

IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 09599 Freiberg, GERMANY

By order

Dipl.-Ing. [FH] Henker

elle Explosiones cur Institut für Sicherheitstechnik SeaNI.

(Notified Body number 0637)

+ 49 (0) 37 31 / 38 05 0 Tel: Fax: +49 (0) 37 31 / 38 05 10

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

Freiberg, 2016-08-18

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[13] Schedule

[14] Certificate number IBExU16ATEX1147 | Issue 0

[15] Description of product

The Plastic LED light fittings linear luminaire type KLL1 ******* *** * is used to illuminate factory shops and stores. It is suitable for the operation in hazardous areas of zone 1 and 21.

The luminaire consists of the polyester enclosure with fasteners made of stainless steel, the reflector with the assembled LED boards, terminals and LED control gear as well as a light-transmitting cover made of polycarbonate.

Technical data:

- Rated voltage:

220...250 V AC (50...60 Hz) or 176...275 V DC

Through wiring/looping:

up to $12 \times 2.5 \text{ mm}^2 \text{ (max. } 4 \times 16 \text{ A)}$

type	input power	ambient temperature range	
		max. 4 x 16 A	max. 3 x 8 A
KLL1 5L	34 W	-30 °C+50 °C	-30 °C+55 °C
KLL1 6L	47 W	-30 °C+50 °C	-30 °C+55 °C
KLL1 9L	65 W	-30 °C+45 °C	-30 °C+50 °C
KLL1 5L V-CG-S	37 W	-30 °C+40 °C	-
KLL1 6L V-CG-S	51 W	-30 °C+40 °C	•
KLL1 9L V-CG-S	68 W	-	-30 °C+40 °C
KLL1 5L J	37 W	-30 °C+50 °C	-
KLL1 6L J	51 W	-30 °C+45 °C	-
KLL1 9L J	68 W		-30 °C+40 °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 KLL1 ******** *** * fulfils the requirements of explosion protection for Equipment Group II, Category 2G and 2D, type of protection Increased safety "e" in combination with encapsulation "m", powder filling "q" as well as flameproof enclosure "d" and intrinsic safety "i" and protection of equipment and transmission systems using optical radiation "op is" as well as protection by enclosure "tb" in combination with protection of equipment and transmission systems using optical radiation "op is".

Safety Instructions

The plastic enclosure is to protect against intense electrostatic charging processes.

Cleaning is permitted only with a damp cloth.

[17] Specific conditions of use

None

Page 2/3 IBExU16ATEX1147 | 0

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[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.

IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 09599 Freiberg, GERMANY

By order

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Freiberg, 2016-08-18