IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg

[1] **EU-TYPE EXAMINATION CERTIFICATE** - Translation

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



- [3] EU-type examination certificate number IBExU19ATEX1087 | Issue 1
- [4] Product:

Helmet light

Type: KS-7620-MC II and KS-7630-MC II

[5] Manufacturer:

KSE-Lights GmbH

[6] Address:

Thüngenfeld 8 58256 Ennepetal

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, notified body number 0637 in accordance with Article 17 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-22-3-0168.

- [9] Compliance with the essential health and safety requirements has been assured by compliance with: EN IEC 60079-0:2018 EN 60079-11:2012 EN 60079-28:2015 EN 60079-35-1:2011 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 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 the following:

□ I M1 Ex ia op is I + H2 Ma EN 60079-35-1

-15 °C ≤ T_a ≤ +50 °C

or:

😉 II 1G Ex ia op is IIC T2 Ga

-15 °C ≤ T_a ≤ +60 °C

IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 09599 Freiberg, GERMANY

By order

Dipl.-Ing. K. Willamowski

(motified body number 0637)

*Kenn-Nr.

Tel: +49 (0) 37 31 / 38 05 0 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, 2022-12-16

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[13]

Schedule

[14]

Certificate number IBExU19ATEX1087 | Issue 1

[15] Description of product

The helmet light type KS-7620-MC II and KS-7630-MC II is a LED light that is intended for use in potentially explosive atmospheres of zone 0 as well as in mines susceptible to firedamp. The light is equipped with one LED light source and is powered by an integrated rechargeable Lithium ion battery. Depending on the model there are 2 or 3 different illumination modes that can be activated one after another by pressing the power button multiple times. The helmet light is implemented in type of protection intrinsic safety "ia" and inherently safe optical radiation "op is". Charging of the battery is performed outside of the explosion hazard area using a special charging device.

Technical data:

- Ambient temperature:

-15 °C...+50 °C (T4)

-15 °C...+60 °C (T2)

Battery:

2x Lithium ion cell type UR18500F (typ. 2x 1700 mAh)

Nominal voltage:

3.7 V

- Nominal current:

400 mA or 500 mA

Associated charging device:

type KS-5330-M

o Input:

110 ...265 V AC; 150 mA

o Output:

6 V DC; 450 mA...600 mA

Safety instructions:

Charging of the helmet light is only permitted outside of the explosion hazard area with the associated charging device at an ambient temperature of 0 °C...+35 °C.

Variation compared to issue 0 of this certificate:

Variation 1

Conformity with current standard EN IEC 60079-0:2018

[16] Test report

The test results are recorded in the confidential test report IB-22-3-0168 of 2022-12-14. The test documents are part of the test report and they are listed there.

Summary of the test results

The helmet light type KS-7620-MC II and KS-7630-MC II complies with the requirements of explosion protection for equipment of Group I, Category M1, as well as Group II, Category 1G, in type of protection intrinsic safety "i" and inherently safe optical radiation "op is" for explosion group I + H2 as well as IIC, temperature class T4 or T2.

[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

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[19] Drawings and Documents

The documents are listed in the test report.

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