EU-TYPE EXAMINATION CERTIFICATE [1]



Equipment or Protective System intended for use [2] in Potentially Explosive Atmospheres Directive 2014/34/FU

- EU-Type Examination Certificate Number: CNEX 16 ATEX 0010 X Issue 0 [3]
- [4] Equipment or Protective System: LED explosion-proof light fittings model CZ0870d [5] Manufacturer: CZ Explosion-proof Electric Appliances Co., Ltd. [6] Address: No.1 Qixing Rd, Qixing Town, Nanhu District, Jiaxing, Zhejiang, P.R. China
- [7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] CNEX-Global B.V., Notified Body number 2614, in accordance with Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No. 150002.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with: [9]

EN 60079-0:2012+A11:2013	EN 60079-1:2014	EN 60079-7:2015
EN 60079-28:2015	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 equipment or protective system is subject to specific conditions for use specified in the schedule to this certificate.
- This EU Type examination certificate relates only to the design and construction of the specified [11] equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- The marking of the equipment or protective system shall include the following: [12]



 $\langle Ex \rangle$ II 2 G Ex db eb op is IIC T5/T4 Gb or Ex tb IIIC T95°C/T130°C Db

Certification officer: Wu Jianguo

Signature: Wir Jionguo

Date of issue: 2016-12-20

Certification Body: CNEX-Global B.V., Utrechtseweg 310, 6812 AR, Arnhem, the Netherlands

This certificate may only be reproduced in its entirety and without any change, including schedule

[13]

[14]

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[15] <u>Description of equipment:</u>

The LED explosion-proof light model CZ0870d is made of an aluminum enclosure with a toughened glass window and consists of a light and electronics compartment in type of explosion protection flameproof enclosure 'db' and a terminal enclosure in type of explosion protection increased safety 'eb'. If used in explosive dust environments, the enclosure can be regarded as having the type of explosion protection 'tb'. Cables can be connected through cable glands in the terminal enclosure.

Nomenclature for CZ 08 70 d / a b - LED cW:

CZ	=	Manufacturer abbreviation
08	=	Year of development
70	=	Light fitting specification code
d	=	Flame proof 'd'
а	=	Angle of luminous code (105=120°, 108=60°, 110=85°x135°, 112=40°)
b	=	Mounting arrangements (B=Bracket type lamp, C=Platform type lamp 90°,
		D=Platform type lamp 25°, E=Wall type lamp, F=Street lamp)

- LED = LED light source
- cW = Power (90 W, 120 W or 160 W)

Electrical Data:

Rated voltage : 110~250 Vac Rated power : 90 W, 120 W, 160 W Rated frequency : 50/60 Hz

Mounting Instructions:

See the Operating Instructions from the manufacturer.

Installation Instructions:

Only suitable certified increased safe cable glands and stopping plugs are to be used, suitable for the conditions of use, minimum IP66 rated and correctly installed. See the Operating Instructions from the manufacturer.

Routine Tests:

Each flameproof enclosure shall be tested conform EN 60079-1 cl. 16.1, with an overpressure maintained for minimum 10 seconds, as follows:

Ambient temperature range	Electronics compartment	Light source compartment
[°C]	[MPa]	[MPa]
$-20 \le Ta \le +40 / +55$	1.14	1.04
$-40 \le Ta \le +40 / +55$	1.26	1.46

Each increased safe terminal compartment shall be tested with a dielectric strength test conform EN 60079-7 cl. 7.1, with a voltage of 1500 Vac for minimum 60 seconds.

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[16] <u>Descriptive Documents:</u> Detailed in the Test Report Cover document. (ref. CQST/ExTR1601G001).

[17] <u>Specific Conditions for Use:</u>

The ambient temperature range is limited as follows:

-20 °C \leq Ta \leq +40 °C / +55 °C, or -40 °C \leq Ta \leq +40 °C / +55 °C.

Repair of the threaded joints must be made in compliance with the specifications provided by the manufacturer. Repairs must not be made only on the basis of values specified in table 4 of EN 60079-1.

The two fasteners screws on the lamp body shall only be replaced with the correct type, provided by the manufacturer. See the Operating Instructions from the manufacturer.

[18] Essential Health and Safety Requirements:

Concerning ESR this Schedule verifies compliance with the Annex III of 2014/34/EU directive only. The manufacturer's Declaration of Conformity declares compliance with other relevant requirements and Directives.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.

Additional Information:

The enclosure of the LED explosion-proof light model CZ0870d successfully passed the tests for the Ingress Protection level IP66 to EN 60529.