(1) EC TYPE-EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere **Directive 94/9/EC**
- (3) EC Type-Examination Certificate Number

TÜV 14 ATEX 7580 X

(4) Equipment: Explosion-proof light fittings

CZ0871/2----W CZ0872/2----W CZ0873/2----W CZ0874/2----W CZ0874/1-----W

(5) Manufacturer: CZ Explosion-proof Electric Appliances Co., Ltd.

(6) Address: No.1 Qixing Rd. Qixing Town, Nanhu District, Jiaxing, Zhejiang

China

- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Zertifizierungsstelle for ex-protected products of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies this equipment 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 atmosphere, given in Annex II to the Directive. The examination and test results are recorded in the confidential report 557/Ex580.00/14
- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN 60079-0: 2012 EN 60079-1:2007 EN 60079-7:2007 EN 60079-31:2009

except the requirements, which are listed under item (18).

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EC-Type-Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:

 $\langle \epsilon_x \rangle$

II 2 GD Ex d e IIC Tx Gb, Ex tb IIC Tx Db (Tx see table below)

TÜV Rheimland ExNB for explosion protected equipment

Cologne, 2014-10-22

Dipl.-Ing. Klauspeter Graffi

This EC-Type-Examination Certificate without signature and stamp shall not be valid.

This EC-Type-Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the TUV Rheinland Notified Body of TÜV Rheinland Industrie Service GmbH, Am Grauen Stein 51105 Köln

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(13)

Annex to

(14) EC-Type Examination Certificate TÜV 14 ATEX 7580 X

(15) Description of equipment

15.1 Equipment and type:

Explosion-proof light fittings

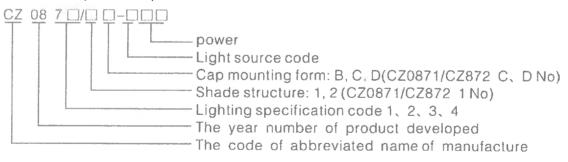
Type: CZ0871/2a-aaW, CZ0872/2a-aaW, CZ0873/2a-aaW, CZ0874/2a-aaW, CZ0873/1a-aaW, CZ0874/1a-aaW

15.2 Description

General product information

1. This report covers the following types: CZ0871/2□-□□W, CZ0872/2□-□□W, CZ0873/□□-□□W, CZ0874/□□-□□W. 24V AC/DC, 110V AC, 220V AC, 100V~240V AC, 240V AC, 230 V AC, 240V AC, 220V~240V AC, 230V/240V AC, 220V/230V/240V AC 50Hz, 60Hz, 50/60Hz.

Modle and implication of product:



Light source code:

| J-Metal halide lamps | N-High-pressure sodium lamps | G-High-pressure mercury lamps |
|----------------------|------------------------------------|--|
| QL-Induction lamps | B-Incandescent lamps | JN-Compact Fluorescent |
| LED-LED lamps | Z-Self-Ballasted mercury lamps | TD-LED warning light tower |
| JD-Warning lamps | ZDL-LED Aviation Obstruction Light | ZDB-Xenon strobe pulse aviation obstruction lights |

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For more details of the different type of Explosion-proof light fittings, see the table below:

| roi ilic | ne details of the differe | The type of Explosion-proof light fittings, see the table | | | |
|----------|---------------------------|--|---------|---|--|
| No. | Type of production | /pe of production Rated voltage | | Ambient temperature/ Temperature group | |
| | | | Ta≤40°C | Ta≤55°C | |
| 1 | CZ0871/2B-JN45W | 220~240V AC 50/60Hz | Т6 | / | |
| 2 | CZ0871/2B-JN65W | 220~240V AC 50/60Hz | Т6 | 1 | |
| 3 | CZ0871/2B-QL50W | 220~240V AC 50/60Hz | T6 | T5 | |
| 4 | CZ0871/2B-QL85W | 220~240V AC 50/60Hz | Т6 | T5 | |
| 5 | CZ0871/2B-B200W | 220 AC 50Hz | T4 | / | |
| 6 | CZ0871/2B-B300W | 220 AC 50Hz | T4 | 1 | |
| 7 | CZ0871/2B-Z125W | 220 AC 50Hz | T4 | 1 | |
| 8 | CZ0871/2B-Z160W | 220 AC 50Hz | T4 | / | |
| 9 | CZ0871/2B-G50W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T4 | T4 | |
| 10 | CZ0871/2B-G80W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T4 | T4 | |
| 11 | CZ0871/2B-G125W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T4 | T4 | |
| 12 | CZ0871/2B-J70W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | Т6 | T5 | |
| 13 | CZ0871/2B-J100W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T5 | T4 | |
| 14 | CZ0871/2B-J150W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T5 | T4 | |
| 15 | CZ0871/2B-N70W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T6 | T5 | |
| 16 | CZ0871/2B-N100W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | Т6 | T5 | |
| 17 | CZ0872/2B-QL135W | 220~240V AC 50/60Hz | Т5 | T4 | |
| 18 | CZ0872/2B-QL165W | 220~240V AC 50/60Hz | T5 | T4 | |
| 19 | CZ0872/2B-B500W | 220V AC 50Hz | T4 | 1 | |
| 20 | CZ0872/2B-Z500W | 220V AC 50Hz | Т3 | 1 | |
| 21 | CZ0872/2B-G400W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | ТЗ | 1 | |

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| 22 | CZ0872/2B-J250W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | Т5 | T4 |
|----|----------------------------|--|----|----|
| 23 | CZ0872/2B-J400W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T4 | 1 |
| 24 | CZ0872/2B-N150W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T4 | T4 |
| 25 | CZ0872/2B-N250W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T5 | T4 |
| 26 | CZ0872/2B-N400W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T4 | 1 |
| 27 | CZ0873/1B(C,D)- LED30W | 100V∼240V AC50/60Hz | Т6 | Т6 |
| 28 | CZ0873/2 B(C,D)- ZDB | 24V AC/DC、110V AC、220V AC、230V AC、 240V AC 50/60Hz Max10W | Т6 | Т6 |
| 29 | CZ0873/2 B(C,D)- ZDL | 24V AC/DC、110V AC、220V AC、230V AC、 240V AC 50/60Hz Max10W | Т6 | Т6 |
| 30 | CZ0873/2 B(C,D)- JD | 24V AC/DC,110V AC, 220V AC, 230V AC, 240V AC 50/60Hz Max10W | Т6 | Т6 |
| 31 | CZ0873/2 B(C,D)- TD | 24V AC/DC、110V AC、220V AC、230V AC、 240V AC 50/60Hz Max10W | Т6 | Т6 |
| 32 | CZ0873/2 B(C,D)- LED25W | 100V∼240V AC 50/60Hz | T6 | Т6 |
| 33 | CZ0873 /2 B(C,D)- QL50W | 220~240V AC 50/60Hz | Т6 | Т6 |
| 34 | CZ0873 /2 B(C,D)- JN45W | 220~240V AC 50/60Hz | Т6 | 1 |
| 35 | CZ0873 /2 B(C,D)- JN65W | 220~240V AC 50/60Hz | Т6 | 1 |
| 36 | CZ0873 /2 B(C,D)- J70W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | Т6 | T5 |
| 37 | CZ0873 /2 B(C,D)- J100W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T4 | T4 |
| 38 | CZ0873 /2 B(C,D)- J150W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC50Hz | T4 | T4 |
| 39 | CZ0873 /2 B(C,D)- N70W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T5 | T4 |
| 40 | CZ0873 /2 B(C,D)- N100W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T5 | T4 |
| 41 | CZ0874/1 B(C,D)- LED45W | 100V∼240V AC 50/60Hz | Т6 | T6 |
| 42 | CZ0874/1 B(C,D)- LED60W | 100V∼240V AC 50/60Hz | Т6 | T6 |

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| 43 | CZ0874 /2 B(C,D)- J250W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T4 | T4 |
|----|----------------------------|--|------------|----|
| 44 | CZ0874 /2 B(C,D)- N150W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T4 | Т4 |
| 45 | CZ0874 /2 B(C,D)- N250W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 50Hz | T4 | T4 |
| 46 | CZ0871/2B-G50W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T4 | Т4 |
| 47 | CZ0871/2B-G80W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T4 | T4 |
| 48 | CZ0871/2B-G125W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T4 | T4 |
| 49 | CZ0871/2B-J70W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | Т6 | T5 |
| 50 | CZ0871/2B-J100W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T4 | T4 |
| 51 | CZ0871/2B-J150W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T4 | T4 |
| 52 | CZ0871/2B-N70W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T5 | T4 |
| 53 | CZ0871/2B-N100W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T 5 | T4 |
| 54 | CZ0872/2B-G250W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | Т3 | 1 |
| 55 | CZ0872/2B-J250W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T4 | Т4 |
| 56 | CZ0872/2B-N150W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T4 | T4 |
| 57 | CZ0872/2B-N250W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T5 | T4 |
| 58 | CZ0872/2B-N400W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T 4 | 1 |
| 59 | CZ0873 /2 B(C,D)- J70W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | Т6 | T5 |
| 60 | CZ0873 /2 B(C,D)- J100W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC60Hz | T4 | T4 |
| 61 | CZ0873 /2 B(C,D)- J150W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T4 | T4 |
| 62 | CZ0873 /2 B(C,D)- N70W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T5 | T4 |



| 63 | CZ0873 /2 B(C,D)- N100W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T5 | T4 |
|----|----------------------------|--|----|----|
| 64 | CZ0874 /2 B(C,D)- J250W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T4 | T4 |
| 65 | CZ0874 /2 B(C,D)- N150W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T4 | T4 |
| 66 | CZ0874 /2 B(C,D)- N250W | 220V AC、230V AC、240V AC、230V/240 AC、 220V/230V/240V AC 60Hz | T4 | T4 |

Note: 1) The sample types of temperature test: see clause 26.5.1 of EN60079-0:2012.

 The sample types of other tests are: CZ0871/2B-B200W, CZ0872/2B-B500W, CZ0873/2B-JN45W, CZ0874/2B-N150W, CZ0873/1B-LED30W, CZ0874/1B-LED45W.

2. Structure of production

The explosion-proof lights cast aluminum alloy the flameproof body and increased safety terminal box, transition nut with explosion-proof threaded connection between the two, the transition nut through connecting wires and the cast and seal.

Explosion-proof lamp housing made of aluminum alloy die-casting molding, surface coating of pure epoxy resin powder; glass with tempered glass, with tight the Medallions glass collar card and adhesive as one of the composition of the glass package. Threaded flameproof joints between the glass kit and transition nut and light body. Junction box located in the side of the lamp body, built-in cage wiring terminals (Ex e II C Gb), easy wiring. Cable entries and empty plug cable into the mouth of the junction box is equipped with the ATEX and IECEx certificate, used in conjunction with proof mark of 1 II 2GD Ex e 1 C Gb IP66/ Ex tb 2 C Db IP66.

Exposed fasteners made of 304 stainless steel. Explosion-proof lights on a non-charged opening the lid and close the switch to turn lamps must cool for 15 minutes! "Logo, glass kits and light body and junction box cover and junction box body with seals, sealing ring made of silicone rubber SR, seals and glass kit and junction box cover with adhesive to prevent off on their own to ensure the protection class IP66. For the details of certified Ex component, refer to the table below:

| Production | Marking | Certificate No. |
|--|--------------|--|
| The miniature spring MSDB 2.5 terminal | Exe II, Exel | IECEx PTB 08.0048U PTB 08 ATEX 1075 U |



3. Explosion-proof light fittings Photos:



CZ0871/2 -- -- W



CZ0872/2 -- DW



CZ0873/2 -- U



CZ0874/2 -- UW



CZ0873/1 -- -- W



CZ0874/1 -- D W

15.3 Technical Data

Rated voltage

24V AC/DC, 110V AC, 220V AC, 100V~240V AC, 240V AC,

230 V AC, 240V AC, 220V~240V AC, 230V/240V AC,

220V/230V/240V AC

Ambient temperature range -20°C ≤Ta≤ +40°C/55°C

-40°C ≤Ta≤ +40°C/55°C

List of certified equipment and components

| Equipment/ component | Туре | Ex-marking | No. of certificate | IP code |
|--|------|------------|--|---------|
| The miniature spring MSDB 2.5 terminal | Ex e | | IECEX PTB 08.0048U PTB 08 ATEX 1075 U | |

This EC-Type-Examination Certificate without signature and stamp shall not be valid.

This EC-Type-Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the TÜV Rheinland Notified Body of TÜV Rheinland Industrie Service GmbH, Am Grauen Stein 51105 Köln

Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114





(16)Test-Report No.

557/Ex580.00/14

Parts of the device, which already fulfil the requirements for the category, were not approved and assessed by TÜV Rheinland Industrie Service.

The applicability and assembly of mechanical and electrical parts and components were assessed and approved by TÜV Rheinland Industrie Service with respect to the requirements of explosion protection.

(17)Special Conditions for safe use

- 1. Service ambient temperature: -20°C to +40°C /+55°C, -40°C to +40°C /+55°C
- The earthing connected to the equipment shall be verified after installation to make sure it is proper connected.
- 3. When assembly, operation and maintenance, the operator should follow the requirements of EN 60079-14 Explosive atmospheres - Part 14: Electrical installations design, selection and erection, beside of the CZ087 Series Explosion-proof light fittings Instruction.
- Repair and overhaul shall comply with EN 60079-19.
- 5. These series products shall be used with certified ATEX cable entries and stopping plug, the cable entries and stopping plug Ex-mark is & II 2GD Ex e IIC Gb IP66, Ex tb III C Db
- 6. Do not open when energized! Must cool down for 15 minutes before open the light fittings!

(18)**Basic Safety and Health Requirements**

Covered by afore mentioned standard

TÜV Rheinland ExNB für explosion protected equipment

Cologne, 2014-10-22

