



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx CNEX 17.0001X** Page 1 of 4 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2017-01-22

Applicant: **CZ Explosion-proof Electric Appliances Co, Ltd**
No.1 Qixing Rd, Qixing Town, Nanhu District, Jiaxing, Zhejiang
China

Equipment: **LED explosion-proof light fittings model CZ0870d**

Optional accessory:

Type of Protection: **Ex db, eb, op is, tb**

Marking: **Ex db eb op is IIC T5/T4 Gb**
Ex tb III C T95°C/T130°C Db

Approved for issue on behalf of the IECEx
Certification Body:

Wu Jianguo

Position:

Certification Officer

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

CNEX-Global B.V.
Utrechtseweg 310
6812AR, Arnhem
Netherlands





IECEx Certificate of Conformity

Certificate No.: **IECEx CNEX 17.0001X**

Page 2 of 4

Date of issue: 2017-01-22

Issue No: 0

Manufacturer: **CZ Explosion-proof Electric Appliances Co, Ltd**
No.1 Qixing Rd, Qixing Town, Nanhu District, Jiaxing, Zhejiang
China

Additional
manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-28:2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[NL/CNEX/ExTR17.0001/00](#)

Quality Assessment Report:

[CN/CQM/QAR08.0001/05](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx CNEX 17.0001X**

Page 3 of 4

Date of issue: 2017-01-22

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

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'.

See the Annex for further details.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The ambient temperature range is limited as follows:

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



IECEx Certificate of Conformity

Certificate No.: **IECEx CNEX 17.0001X**

Page 4 of 4

Date of issue: 2017-01-22

Issue No: 0

Additional information:

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.

Annex:

[P150002-CCA Annex 01 to IECEx CoC.pdf](#)



Annex 01 to Certificate IECEx CNEX 17.0001X

Equipment or Protective System: LED Explosion-proof Light Fittings
model CZ0870d/□□-LED □W

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

Address: No.1 Qixing Rd, Qixing Town, Nanhu District, Jiaxing,
Zhejiang, P.R. China

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'
a = 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 [°C] | Electronics compartment [MPa] | Light source compartment [MPa] |
|-----------------------------------|----------------------------------|-----------------------------------|
| -20 ≤ Ta ≤ +40 / +55 | 1.14 | 1.04 |
| -40 ≤ Ta ≤ +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.

Descriptive Documents:

Detailed in the Test Report Cover document. (ref. CQST/ExTR1601G001).

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

This Annex may only be reproduced in its entirety and without any change



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx CQM 13.0025X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2013-08-16

Applicant: **CZ Explosion-proof Electric Appliances Co., Ltd.**
No.1 Qixing Rd, Qixing Town, Nanhu District, Jiaxing, Zhejiang, 314002
China

Equipment: **Explosion-proof light fittings CZ0871, 2,3 or 4/...**

Optional accessory:

Type of Protection: **Flameproof enclosure "d", Increased safety "e", Protection by enclosure "t"**

Marking: **Ex d e II CT3/T4/T5/T6 Gb, Ex tb III C T195°C/T130°C/T95°C/T80°C Db IP66**

Approved for issue on behalf of the IECEx
Certification Body:

Zhang Wei

Position:

President

Signature:
(for printed version)

Date:

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Certificate issued by:

China Quality Mark Certification Group Co., Ltd.
No. 33 Zengguang Road, Haidian District
Beijing City, Postal code: 100037
China





IECEx Certificate of Conformity

Certificate No.: **IECEx CQM 13.0025X**

Page 2 of 3

Date of issue: 2013-08-16

Issue No: 0

Manufacturer: **CZ Explosion-proof Electric Appliances Co., Ltd.**
No.1 Qixing Rd, Qixing Town, Nanhu District, Jiaxing, Zhejiang, 314002
China

Additional
manufacturing
locations:

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Edition:6.0

IEC 60079-1:2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:6

IEC 60079-31:2008 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
Edition:1

IEC 60079-7:2006-07 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:4

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[CN/CQM/ExTR13.0028/00](#)

Quality Assessment Report:

[CN/CQM/QAR08.0001/02](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx CQM 13.0025X**

Page 3 of 3

Date of issue: 2013-08-16

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Description of equipment

1. This certificate covers the following types:

CZ0871/2□-□□W, CZ0872/2□-□□W, CZ0873/□□-□□W, CZ0874/□□-□□W.

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 plug cable into the mouth of the junction box is equipped

3. Details of model, rating and Temperature Code see as in attachment.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Service ambient temperature: -20°C to +40°C /+55°C, -40°C to +40°C /+55°C

2. When application, the earthing is well.

3. When assembly, operation and maintenance, the operator should follow the requirements of IEC 60079-14:2007 Explosive atmospheres - Part 14: Electrical installations design, selection and erection, beside of the CZ087□ Series Explosion-proof light fittings Instruction.

4. Explosion-proof lights on a non-charged opening the lid and close the switch to turn lamps must cool for 15 minutes

Annex:

[Attachment to CoC.pdf](#)



Attachment to CoC

IECEX CQM 13.0025/00



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

No.1 Qixing Rd, Qixing Town, Nanhu District, Jiaxing, Zhejiang

Electrical equipment: Explosion-proof light fittings

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

General product information:

1. This report covers the following types:

CZ0871/2□-□□W, CZ0872/2□-□□W, CZ0873/□□-□□W, CZ0874/□□-□□W.

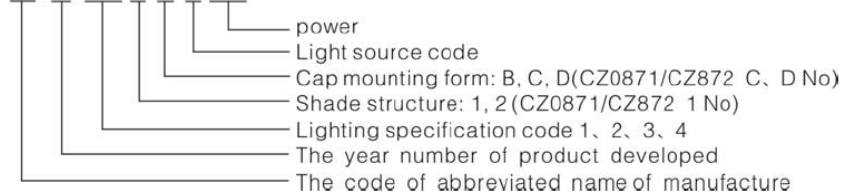
24V AC/DC, 110V AC, 220V AC, 100V~240V AC, 240V AC,

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

50Hz, 60Hz, 50/60Hz.

Model and implication of product:

CZ 08 7 □ / □ □ - □ □ □



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 |



Attachment to CoC

IECEX CQM 13.0025/00



2 Table for model, rating and temperature class

| No. | Type of production | Rated voltage | Ambient temperature/ Temperature group | |
|-----|------------------------|---|---|--------|
| | | | Ta≤40℃ | Ta≤55℃ |
| 1 | CZ0871/2B-JN45W | 220~240V AC 50/60Hz | T6 | / |
| 2 | CZ0871/2B-JN65W | 220~240V AC 50/60Hz | T6 | / |
| 3 | CZ0871/2B-QL50W | 220~240V AC 50/60Hz | T6 | T5 |
| 4 | CZ0871/2B-QL85W | 220~240V AC 50/60Hz | T6 | T5 |
| 5 | CZ0871/2B-B200W | 220 AC 50Hz | T4 | / |
| 6 | CZ0871/2B-B300W | 220 AC 50Hz | T4 | / |
| 7 | CZ0871/2B-Z125W | 220 AC 50Hz | T4 | / |
| 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 | T6 | 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 | T6 | T5 |
| 17 | CZ0872/2B-QL135W | 220~240V AC 50/60Hz | T5 | T4 |
| 18 | CZ0872/2B-QL165W | 220~240V AC 50/60Hz | T5 | T4 |
| 19 | CZ0872/2B-B500W | 220V AC 50Hz | T4 | / |
| 20 | CZ0872/2B-Z500W | 220V AC 50Hz | T3 | / |
| 21 | CZ0872/2B-G400W | 220V AC, 230V AC, 240V AC, 230V/240 AC, 220V/230V/240V AC 50Hz | T3 | / |
| 22 | CZ0872/2B-J250W | 220V AC, 230V AC, 240V AC, 230V/240 AC, 220V/230V/240V AC 50Hz | T5 | T4 |
| 23 | CZ0872/2B-J400W | 220V AC, 230V AC, 240V AC, 230V/240 AC,220V/230V/240V AC 50Hz | T4 | / |
| 24 | CZ0872/2B-N150W | 220V AC, 230V AC, 240V AC, 230V/240 AC, 20V/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 | / |
| 27 | CZ0873/1B(C,D)-LED30W | 100V~240V AC 50/60Hz | T6 | T6 |
| 28 | CZ0873/2 B(C,D)-ZDB | 24V AC/DC,110V AC, 220V AC, 230V AC, 240V AC 50/60Hz Max10W | T6 | T6 |
| 29 | CZ0873/2 B(C,D)-ZDL | 24V AC/DC, 110V AC, 220V AC, 230V AC, 240V AC 50/60Hz Max10W | T6 | T6 |
| 30 | CZ0873/2 B(C,D)-JD | 24V AC/DC,110V AC, 220V AC, 230V AC, 240V AC 50/60Hz Max10W | T6 | T6 |
| 31 | CZ0873/2 B(C,D)-TD | 24V AC/DC, 110V AC, 220V AC, 230V AC, 240V AC 50/60Hz Max10W | T6 | T6 |
| 32 | CZ0873/2 B(C,D)-LED25W | 100V~240V AC 50/60Hz | T6 | T6 |
| 33 | CZ0873 /2 B(C,D)-QL50W | 220~240V AC 50/60Hz | T6 | T6 |
| 34 | CZ0873 /2 B(C,D)-JN45W | 220~240V AC 50/60Hz | T6 | / |
| 35 | CZ0873 /2 B(C,D)-JN65W | 220~240V AC 50/60Hz | T6 | / |



Attachment to CoC

IECEX CQM 13.0025/00



| | | | | |
|----|-------------------------|--|----|----|
| 36 | CZ0873 /2 B(C,D)- J70W | 220V AC, 230V AC, 240V AC, 230V/240 AC, 220V/230V/240V AC 50Hz | T6 | 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 AC 50Hz | 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 | T6 | T6 |
| 42 | CZ0874/1 B(C,D)-LED60W | 100V~240V AC 50/60Hz | T6 | T6 |
| 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 | T4 |
| 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 | T4 |
| 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 | T6 | 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 | T5 | T4 |
| 54 | CZ0872/2B-G250W | 220V AC, 230V AC, 240V AC, 230V/240 AC, 220V/230V/240V AC 60Hz | T3 | / |
| 55 | CZ0872/2B-J250W | 220V AC, 230V AC, 240V AC, 230V/240 AC, 220V/230V/240V AC 60Hz | T4 | T4 |
| 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 | T4 | / |
| 59 | CZ0873 /2 B(C,D)- J70W | 220V AC, 230V AC, 240V AC, 230V/240 AC, 220V/230V/240V AC 60Hz | T6 | T5 |
| 60 | CZ0873 /2 B(C,D)- J100W | 220V AC, 230V AC, 240V AC, 230V/240 AC, 220V/230V/240V AC 60Hz | 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 |



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Certificate No.: **IECEx CML 16.0113X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2017-01-06

Applicant: **CZ Explosion-proof Electric Appliances Co. Ltd**
No. 1 Qixing Road
Qixing Town
Nanhu District
Jiaxing
Zhejiang 314002 China
China

Equipment: **CZ0878d Series Explosion-proof floodlight light fittings**

Optional accessory:

Type of Protection: **Flameproof, increased safety, optical, dust**

Marking: Ex db eb op is IIB T* Gb
Ex tb op is III C T*°C Db - See Annex for details of temperature classes
(-20°C ≤ Ta ≤ +40°C/+55°C)

Approved for issue on behalf of the IECEx
Certification Body:

H M Amos MIET

Position:

Technical Manager

Signature:
(for printed version)

Date:

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Certificate issued by:

Certification Management Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom





IECEx Certificate of Conformity

Certificate No.: **IECEx CML 16.0113X**

Page 2 of 3

Date of issue: 2017-01-06

Issue No: 0

Manufacturer: **CZ Explosion-proof Electric Appliances Co. Ltd**
No. 1 Qixing Road
Qixing Town
Nanhu District
Jiaxing
Zhejiang 314002 China
China

Additional
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locations:

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Edition:7.0

IEC 60079-28:2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

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[GB/CML/ExTR16.0151/00](#)

Quality Assessment Report:

[CN/CQM/QAR08.0001/05](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx CML 16.0113X**

Page 3 of 3

Date of issue: 2017-01-06

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

CZ0878d Series Explosion-proof floodlight light fittings

See Annex for full description and Conditions of Manufacture

SPECIFIC CONDITIONS OF USE: YES as shown below:

See Annex for Conditions of Certification

Annex:

[Annex IECEx CML 16.0113X Iss 0.pdf](#)

Annexe to: IECEx CML 16.0113X Issue 0
Applicant: CZ Explosion-proof Electric Appliances Co. Ltd.
Apparatus: CZ0878d Series Explosion-proof floodlight light fittings



Product Description

The CZ0878d Series Explosion-proof floodlight light fittings are a range of flameproof and dust tight luminaires for use in IIA and IIB Zone 1 and Zone 2 explosive gas atmospheres, and Zone 21 and Zone 22 ignitable dust atmospheres.

There are two types of enclosure. The first type houses metal halide, high pressure sodium, or electromagnetic energy saving lamps. The second type houses an LED array. Both types are manufactured from cast aluminium alloy (ADC12) and comprise a lamp body with integral increased safety terminal chamber and cover, lamp cover with cemented window, and in the first type of enclosure, a removable side cover designed to facilitate easy lamp replacement.

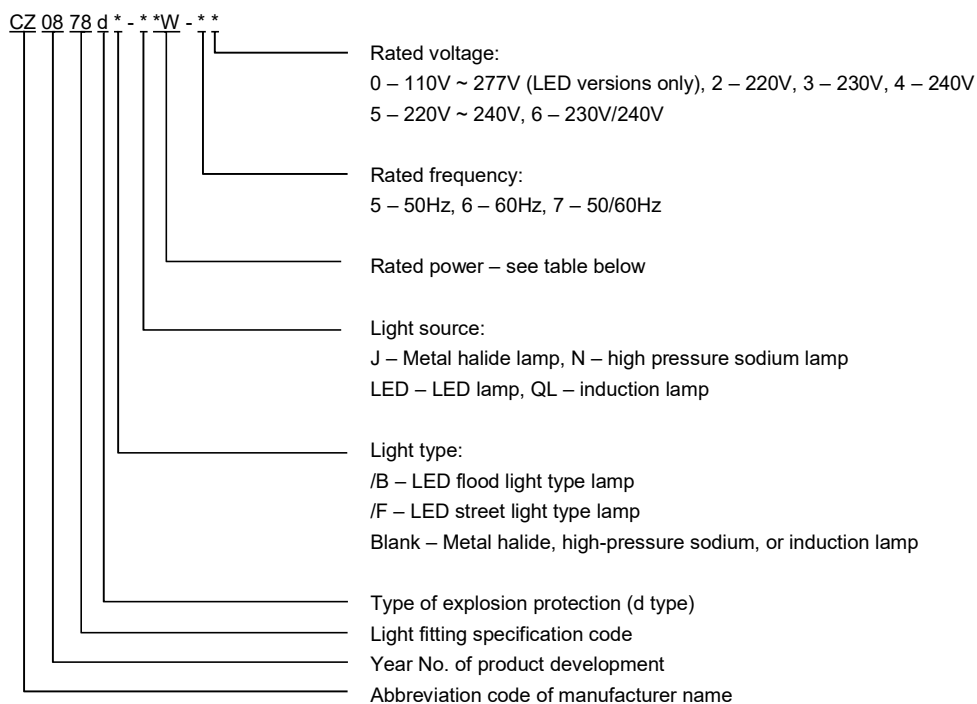
The main enclosure chamber houses the lamp, reflector, ballast, and other electrical components. A bushing assembly is installed between the main chamber and the terminal chamber which houses a previously certified terminal block. The terminal chamber has two threaded holes for the fitting of appropriately certified cable glands.

All covers are fitted with sealing gaskets to maintain the necessary ingress protection.

LED versions may either be supplied for use with a mounting bracket for floodlight operation, or for use with a pole for street lamp operation.



The various lamp and power options are defined by the part number as follows:



The following power ratings are available:

| Lamp type | Power (W) |
|--------------------------|-----------|
| J – Metal halide | 250 |
| | 400 |
| N – high pressure sodium | 250 |
| | 400 |
| QL – induction lamp | 85 |
| LED – LED | 120 |
| | 160 |
| | 200 |

The temperature class and ambient temperature range of each model is given by the following table:

| Product type code | Explosive gas atmosphere | | Explosive dust atmosphere | |
|---------------------|-----------------------------|-----------------------------|----------------------------------|-----------------------------|
| | Temperature class | | Maximum surface temperature (°C) | |
| | -20°C≤T _a ≤+40°C | -20°C≤T _a ≤+55°C | -20°C≤T _a ≤+40°C | -20°C≤T _a ≤+55°C |
| CZ0878d-J250W-** | T3 | T3 | 150 | 165 |
| CZ0878d-J400W-** | T3 | n/a | 195 | n/a |
| CZ0878d-N250W-** | T3 | T3 | 150 | 165 |
| CZ0878d-N400W-** | T3 | n/a | 185 | n/a |
| CZ0878d-QL85W-** | T5 | T4 | 85 | 100 |
| CZ0878d*-LED120W-** | T5 | T4 | 90 | 105 |
| CZ0878d*-LED160W-** | T5 | T4 | 90 | 105 |
| CZ0878d*-LED200W-** | T5 | T4 | 90 | 105 |

Conditions of manufacture

The following are conditions of manufacture

- The manufacturer shall perform an overpressure test on all units manufactured. The test shall be carried out for at least 10 seconds as required by IEC 60079-1:2014, clause 15.2.3. The enclosure shall be tested at a pressure of 1000kPa. Empty enclosures may be used for the tests, but the bushing shall be in place for testing. There shall be no permanent deformation or damage to the enclosures and no leakage through the bushing cement.
- The manufacturer shall perform a dielectric strength test on all units manufactured in accordance with IEC 60079-7:2015, clause 7.1 at the following voltages:
 - For LED versions, 1554Vrms (+5%, -0%)
 - All other versions 1550Vrms (+5%, -0%)

The test voltage shall be applied for a minimum of 60 seconds and no breakdown shall occur. Alternatively, the test shall be carried out at 1.2 times the test voltage and maintained for a minimum of 100ms.

Conditions of Certification

- The equipment incorporates flamepaths whose length is greater than the minimum stated in Table 2 of IEC 60079-1:2014. As this is the case, the flameproof joints are not intended to be repaired.
- 400W versions shall be used in a maximum ambient temperature of +40°C only.

- iii. The internal and external earth connections shall be securely connected. The protective conductor shall have a minimum cross sectional area equal to or greater than that of the phase conductors
- iv. Only cable glands and blanking elements complying with IEC/EN60079-0, IEC 60079-7, and IEC 60079-31 with type of protection Ex e IIC Gb and Ex tb IIIC Db and ingress protection IP66 shall be used for connecting to the terminal enclosure.
- v. External cabling may reach a temperature of 16K above ambient for LED versions and 27K above ambient for metal halide and high-pressure sodium types. Appropriate cable and entry devices shall to selected.
- vi. The equipment must be installed in low impact risk locations only.
- vii. The fasteners securing the cover to the enclosure have a property class of A2-70
- viii. Observe the following warnings:
 - “After de-energizing, delay 30 minutes before opening”, “Do not open when an explosive atmosphere is present”,
 - Dust applications only - “Potential electrostatic charging hazard – see instructions”.