



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 CML 23.0101X	Page 1 of 3	Certificate history:
Status:	Current	Issue No: 0	
Date of Issue:	2023-12-06		
Applicant:	CZ Electric Co., Ltd. No. 1 Qixing Road, Qixing Town, Nanhu District, Jiaxing, Zhejiang, 314002, China		
Equipment:	CZ6474 Explosion Proof Light Fittings		
Optional accessory:			
Type of Protection:	Flameproof Ex "d", Increased Safety Ex "e" and Dust Protection by Enclosure Ex "t"		
Marking:	CZ6474/235 and CZ6474/245 Explosion-proof light fittings Ex db eb IIC T6/T5 Gb (-40 °C); Ex db eb IIB+H2 Gb (-60 °C); Ex tb IIIC T80 °C /T95 °C Db -60 °C ≤Ta ≤+40 /+55 °C (IIB+H2) -40 °C ≤Ta ≤+40 /+55 °C (IIC) IP66	CZ6474/135 and CZ6474/145 Explosion-proof light fittings Ex db IIC T6/T5 Gb (-40 °C); Ex db IIB+H2 Gb (-60 °C); Ex tb IIIC T80 °C /T95 °C Db -60 °C ≤Ta ≤+40 /+55 °C (IIB+H2) -40 °C ≤Ta ≤+40 /+55 °C (IIC) IP66	CZ6474/111, CZ6474/121, CZ6474/131 Explosion-proof light fitting Ex db IIC T* Gb Ex tb IIIC T* °C Db -60 °C ≤Ta ≤+40 /+55 °C (IIB+H2) -40 °C ≤Ta ≤+40 /+55 °C (IIC) IP66

Approved for issue on behalf of the IECEx
Certification Body:

L A Brisk

Position:

Assistant Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

06 Dec 2023

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:

Eurofins E&E CML Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom





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Manufacturer: **CZ Electric Co., Ltd.**
No. 1 Qixing Road,
Qixing Town,
Nanhu District,
Jiaxing,
Zhejiang, 314002,
China

Manufacturing
locations: **CZ Electric Co., Ltd.**
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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 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-1:2014](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-31:2022](#) Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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:

[GB/CML/ExTR23.0276/00](#)

Quality Assessment Report:

[NO/PRE/QAR20.0008/03](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

See Annex for full description and Conditions of Manufacture.

SPECIFIC CONDITIONS OF USE: YES as shown below:

See Annex for Specific Conditions of Use.

Annex:

[IECEx CML 23.0101X Iss. 0 Certificate Annex.pdf](#)

Annexe to: IECEx CML 23.0101X Issue 0
Apparatus: CZ6474 Explosion Proof Light Fittings
Applicant: CZ Electric Co., Ltd



Description

CZ6474/135, CZ6474/145 Explosion-proof light fittings

A CZ6474/135 and CZ6474/145 series metallic explosion proof light fittings with a toughened glass light transmitting part. The light transmitted part is secured with epoxy to ensure degree of protection. The light fitting consists of two compartments, the electrical and lighting cavity, and the wiring cavity. The two compartments are secured together using a flameproof thread. The wiring cavity, located on the top of the light body can be fitted with multiple brackets to achieve various mounting orientations. All entries into the equipment are installed with suitably certified flameproof entry devices. An optional guard may also be added.

The joint board of electric and lighting cavity and wiring cavity are connected by a transition nut with flameproof thread.

CZ6474/111, CZ6474/121, CZ6474/131 Explosion-proof light fittings

The CZ6474/111 and CZ6474/131 Series explosion proof light fittings consist of a metallic enclosure with a threaded cover, with a flat toughened glass light transmitting part sealed with epoxy to ensure the degree of protection. The CZ6474/121 has a dome shaped light transmitting part. All entries into the equipment are installed with suitably certified flameproof entry devices.

U-shaped or flat-shaped PC mesh of different colours can be selected at the transparent parts outside the explosion-proof cavity.

CZ6474/235, CZ6474/245 Explosion-proof light fittings

The CZ6474/235, CZ6474/245 Series explosion proof light fittings with a toughened glass light transmitting part. The light transmitted part is secured with epoxy to ensure degree of protection, The lighting fixtures consist of two compartments, the increased safety wiring cavity and the electric and lighting cavity which are separated using an encapsulated bushing. All entries into the equipment are installed with suitably certified flameproof entry devices. The lighting fixtures have multiple bracket arrangements to allow for various mounting orientations. An optional guard may also be added.

Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.
- ii. The manufacturer shall ensure that all Ex-Components are installed in accordance with their schedule of limitations, the creepage and clearance requirements of IEC 60079-7,



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manufacturer's instructions and that the equipment markings are within the service temperature range and ratings of all the Ex-Components fitted

- iii. The routine dielectric strength test on the Increased safety (eb) CZ6474/235, CZ6474/245 Series with applied voltage shall be performed at $2U + 1,000V$ with a minimum value of $1,500V$ (U = maximum rated voltage of the lamp), between each circuit and earthed metal parts as per IEC 60079-7 Clause 7.1.
- iv. Each enclosure shall be subjected to a routine static overpressure test in accordance with EN/IEC 60079-1:2014, clause 16.1. The test shall be carried out for at least 10 seconds. There shall be no evidence of permanent damage or deformation, nor shall there be any leakage through the enclosure walls.

Test sample	Max. reference pressure		The relative pressure applied shall be	
	Electrical light source cavity	Wiring cavity	Electrical light source cavity	
CZ6474/235	769 kpa	/	1.5 times reference pressure	1200 kPa
CZ6474/245	972 kpa	/	1.5 times reference pressure	1500 kPa
CZ6474/135	903 kpa	771 kpa	1.5 times reference pressure	1400 kPa
CZ6474/145	890 kpa		1.5 times reference pressure	1400 kPa

- v. Only PURE52/AP13 can be used at $-60^{\circ}C$. When the WEVOPUR 512 FL is used, the equipment shall be marked for use at $-40^{\circ}C$ to $+130^{\circ}C$.

Specific Conditions of Use

The following conditions relate to safe installation and/or use of the equipment.

- i. 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.
- ii. Fasteners screws shall only be replaced with the correct type. Provided by the manufacturer.



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Components used which are covered by Ex Certificates issued to older editions of Standards

None



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