[1] # EU-TYPE EXAMINATION CERTIFICATE

[2] **Component intended for use in potentially explosive atmospheres**
Directive 2014/34/EU – Annex III

[3] Certificate Number: **EPT 16 ATEX 2404 U** **Issue 2**

[4] Component: **Explosion proof (flash) Buzzer**

Series: **CZ1208/□-□7□, ATEX-EPL-BZ**

[5] Manufacturer: **CZ EXPLOSION-PROOF ELECTRICAL APLLIANCES CO.,LTD**

[6] Address: No.1 Qixing road, qixing town, Nanhu district, Jiaxing, Zhejian., P.R. China

[7] This component and its accepted variations are specified in the annex to this Certificate.

[8] Eurofins Product Testing Italy S.r.l., Notified Body n. 0477 in accordance with Article 21 of the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II of the Directive.
The examination and test results are recorded in the confidential Report N° EPT.18.REL.01/55635.

[9] Compliance with the essential health and safety requirements is assured through the verification of them and by compliance with the standards:

EN 60079-0:2012+A11:2013; EN 60079-1:2014; EN 60079-7:2015; EN 60079-11:2012; EN 60079-18:2015; EN 60079-31:2014

[10] The symbol "U" placed after the certificate's number indicates that this certificate must not be understood as a certificate for equipment or protective systems.
This certificate may be used as a basis for a certificate for the equipment or protective system.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design, the exam and the tests of the specified component.
Further requirements of the Directive 2014/34/EU apply to the manufacture and supply of this component. These requirements are not object of this Certificate.

[12] The component shall include the sign Ⓔx and the following string:

		Operating temperature
CZ1208/2-□7□	**II 2G Ex eb ib mb IIC Gb** **II 2D Ex ib tb IIIC Db**	**-40°C …+90°C**
CZ1208/1-□7□	**II 2G Ex db eb ib mb IIC Gb** **II 2D Ex ib tb IIIC Db**	**-55°C …+90°C**

Place and date of issue:
Torino, 2018-06-14

Dionisio Bucchieri
Directive Responsible

Paolo Trisoglio
Managing Director

Eurofins Product Testing Italy
eurofins
Notified Body N. 0477

ACCREDIA
L'ENTE ITALIANO DI ACCREDITAMENTO

PRD N° 119B
Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

This Certificate has 5 pages and it is reproducible only in its entirely. Conditions of validity are reported below.

[13] [14] **ANNEX**
EU-TYPE EXAMINATION CERTIFICATE N. EPT 16 ATEX 2404 U Issue 2

[15] **Component description**

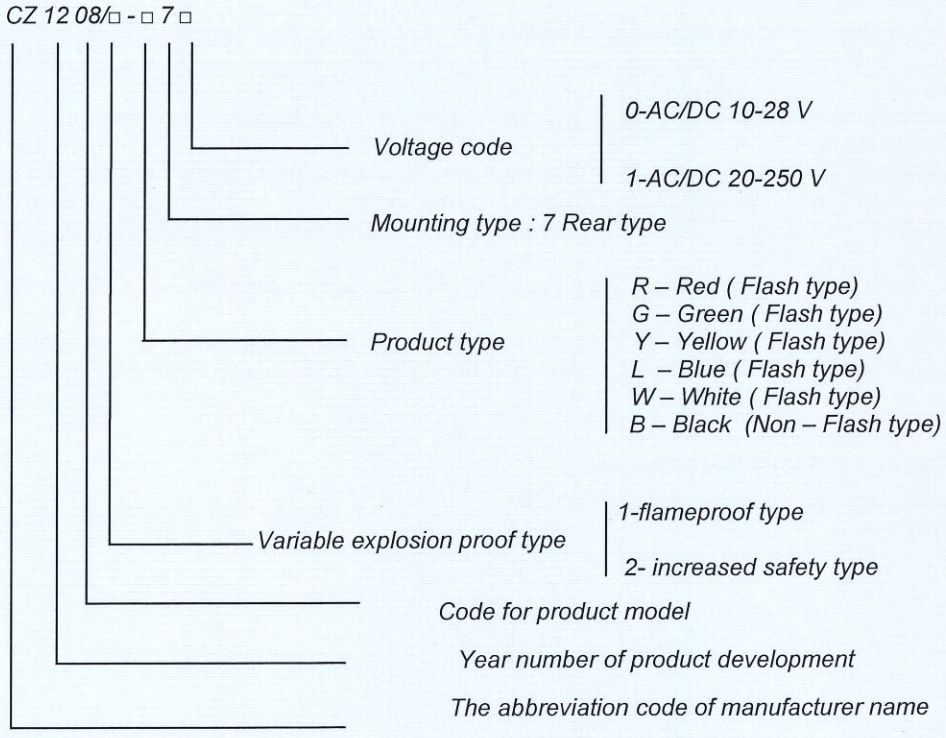
The CZ 1208/□-□7□ explosion proof (flash) buzzer is a component that can be partially introduced in a wall or door of an explosion proof apparatus to produce, when the supply voltage is provided, an acoustic and visual warning.

The component is made up of a body that can be metallic (CZ 1208/1-□7□) or plastic (CZ 1208/2-□7□) within wich are contained the electronic components that are immersed into the casting compound. In the rear part of the component the terminals are accessible for the electrical connection while in the front a buzzer and four LEDs are present.

The model CZ 1208/2-□7□ can be used in increased safety enclosures while the CZ 1208/1-□7□ model can also be used in flameproof enclosures.

The protection of the component is obtained using combined types of protection; it is Ex db when associated with a flameproof enclosure and has an Ex mb type of protection with reference to the protection of the encapsulated electronic components while the exposed electronic components are protected by Ex ib type of protection; the terminals have an increased safey Ex eb type of protection. With reference to the protection against the flammable dust the component is partially protected with a type of protection Ex tb (in conjunction with the enclosure where it will be installed) and partially with a type of protection Ex ib (externally exposed components).

Identification code



Rated voltage: 10~28 Vac for CZ1208/□-□70, 20~250 Vac or dc for CZ1208/□-□71

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Warning label

Not present

Routine tests

Dielectric tests according to clause 7.1 of IEC 60079-7 and clause 9.2 of IEC 60079-18:The test voltage is 500 Vac 1 min for 1208/□-□70 (alternatively 580 Vac 10s) and 1500 Vac 1 min for 1208/□-□71 (alternatively 1780 Vac 10s) between the supply terminals and external metallic body.

Visual inspections according to and clause 9.1 of IEC 60079-18.

[16] **Assessment Report n° EPT.18.REL.01/55635**

This EU-Type Examination Certificate is released after the positive result of the conformity assessment of the Council Directive 2014/34/EU and to harmonized technical standards listed in this Certificate; performed by the Notified Body Eurofins Product Testing Italy S.r.l., and reported in the Assessment Report cited above.

[17] **Schedule of limitations**

- The final equipment where the buzzer is installed in must protect the electrical connections of the component through a certified enclosure according to EN 60079-7 or EN 60079-1 in accordance with the model of the buzzer.
- In order to guarantee the IP degree of the component, the wall of the enclosure where it's installed shall be plane and smooth.
- The permitted service temperature is included between -55°C and +90°C for CZ1208/1-□7□ model and between -40°C and +90°C for CZ1208/2-□7□ model; when used in an ambient with a temperature not greater than +55°C for CZ1208/1-□7□ and +50°C for CZ1208/2-□7□ the limit for the maximum service temperature is respected.
- In the version of the component with metallic body the earth protection must be managed in the final equipment.
- When the component is used in a flameproof enclosure the requirements for the minimum number of engaged threads and the protection against unscrewing must be managed in the final equipment.

[18] **Essential Health and Safety Requirements**

Assured by compliance with harmonized standards.

[13] [14] **ANNEX**
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[19] **Descriptive documents**

The component object of this Certificate is described by the following documents.
Scheduled documents are indicated with the symbol " ✓ ". They cannot be modified without the explicit authorization of the Notified Body.

Title	Drawing n.	Rev.	Date	Scheduled
*Product instructions of CZ 1208/□-□7□ series explosion-proof (flash) buzzer	PS-CZ1208-002		2017-01-02	✓
*Operating instructions of CZ 1208/□-□7□ series explosion-proof (flash) buzzer	CZ1208-SP-17.01-02		2017-01-02	✓
*CZ 1208/1-□7□ series explosion-proof (flash) buzzer	2CZ1208.001.000	AB	2017-01-02	✓
*CZ 1208/2-□7□ series explosion-proof (flash) buzzer	2CZ1208.002.000	AB	2017-01-02	✓
*CZ 1208/□ intrinsically safe output module	5CZ1208.004～000.05	AB	2017-01-02	✓
*CZ 1208-□□0 Electric schematic diagram	5CZ1208.007.000.	AB	2017-01-02	✓
*CZ1208-□□1 electrical schematic diagram	5CZ1208.008.000	AB	2017-01-02	✓
CZ 1208□7□ transparent cover	8CZ1208.001.000.001.0～5	AB	2017-01-02	✓
CZ 1208 gasket	8CZ1208.000.002	AA	2015/05/29	✓
*CZ 1208/ terminal fabricated section	8CZ1208.000.005	AB	2017-01-02	✓
*CZ 1208 terminal cover	8CZ1208.000.006	AB	2017-01-02	✓
*CZ 120 locknut	8CZ1208.000.008	AB	2017-01-02	✓
*CZ 1208 Nameplate	8CZ1208.000.0011	AB	2017-01-02	✓
S07E0123 sealing ring	8CZ1208.000.013	AA	2015/05/29	✓
*CZ 1208/1 Body	8CZ1208.000.0016	AB	2017-01-02	✓
*CZ 1208/1 Binding Post	8CZ1208.000.0017	AB	2 17-01-0	✓
*CZ 1208/2 Body	8CZ1208.000.0021	AB	2017-01-02	✓
kpeg260w specification	/	/	/	✓
kpeg260w schematic diagram	/	/	/	✓
kpeg260w pcb layout	/	/	/	✓

* New or modified document in respect to the old version of the certificate

[13] [14] **ANNEX**
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[20] **Terms and conditions**

The product liability rests with the Manufacturer, his representative or, in the absence of a representative, with the importer, in accordance with the General Product Safety Directive 2001/95/EC.

The following conditions may render this certificate invalid:

- changes in the design or construction of the product;
- changes or amendments to the 2014/34/EU Directive;
- changes or amendments in the standards which form the basis for documenting compliance with the essential requirements of the 2014/34/EU Directive.

[21] **Certificate History**

Issue	Description	Issue date
0	First emission	2016-03-15
1	Addition of the new model CZ1208/1-□7□ with type of protection Ex db with a new type of encapsulating resin. Changes in the old model (now called CZ1208/2-□7) related mainly to the enclosure material (plastic instead that aluminum). Change of some components in the circuit; *This version of the certificate overcomes and replaces the issue 0*	2018-06-13
2	Correction of typing errors. *This version of the certificate overcomes and replaces the issue 1*	2018-06-14

EU Type Examination Certificate CML 16ATEX1337X Issue 0

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

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

3 Manufacturer **CZ Explosion-proof Electric Appliances Co. Ltd.**

4 Address No. 1 Qixing Road, Qixing
Town, Nanhu District, Jiaxing,
Zhejiang, 314002, China

5 The equipment is specified in the description of this certificate and the documents to which it refers.

6 Certification Management Limited, Unit 1 Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK, Notified Body Number 2503, 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 equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.

8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN 60079-0:2012:A11:2013, Corr3 | EN 60079-1:2014 | EN 60079-7:2015
EN 60079-31:2014 | EN 60079-28:2015

10 The equipment shall be marked with the following:

II 2 G D

Ex db eb op is IIB T* Gb

Ex tb op is IIIC T*°C Db

-20°C ≤ Ta ≤ +40°C/+55°C

H M Amos MIET
Technical Manager

11 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.

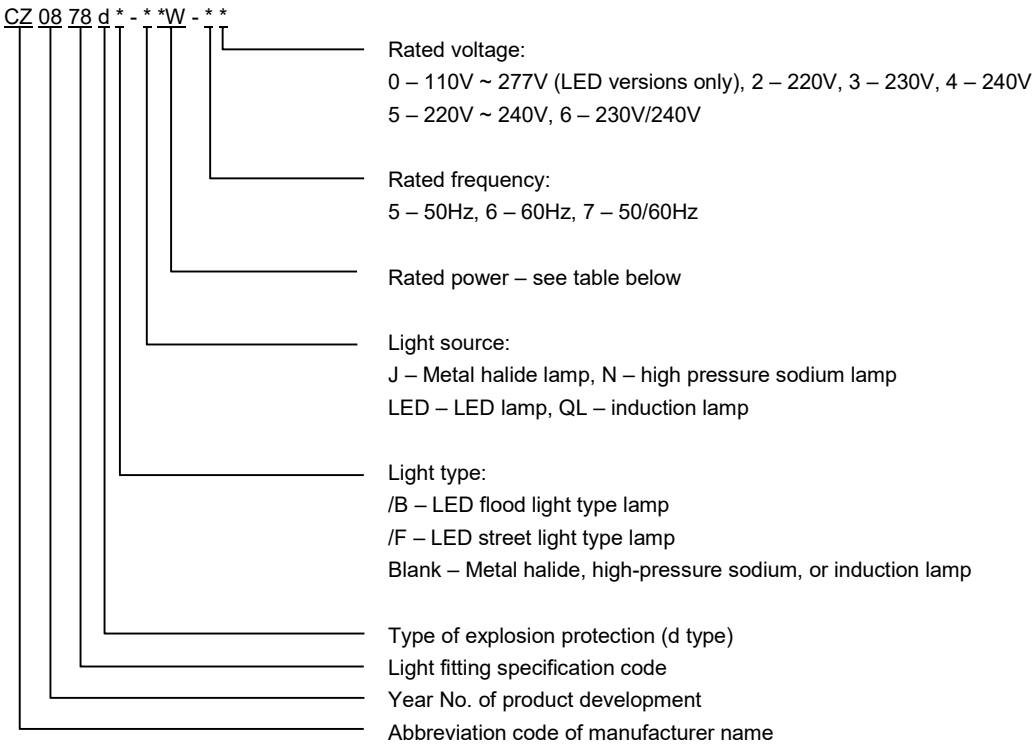
There are two types of enclosure. The first type houses metal halide, high pressure sodium, or electromagnetic energy saving lamps. The second type houses an LED array. Both types are manufactured from cast aluminium alloy (ADC12) and comprise a lamp body with integral increased safety terminal chamber 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)	
	$-20°C \leq T_a \leq +40°C$	$-20°C \leq T_a \leq +55°C$	$-20°C \leq T_a \leq +40°C$	$-20°C \leq T_a \leq +55°C$
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

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	01/11/2016	R1377A/00	Issue of prime certificate

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of manufacture

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

13.1 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/EN 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.

13.2 The manufacturer shall perform a dielectric strength test on all units manufactured in accordance with IEC/EN60079-7:2015, 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.

14 Special Conditions for Safe Use (Conditions of Certification)

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

14.1 The equipment incorporates flamepaths whose length is greater than the minimum stated in Table 2 of IEC/EN 60079-1:2014. As this is the case, the flameproof joints are not intended to be repaired.

14.2 400W versions shall be used in a maximum ambient temperature of +40°C only.

14.3 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

14.4 Only cable glands and blanking elements complying with IEC/EN60079-0, IEC/EN60079-7, and IEC/EN60079-31 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.

14.5 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.

14.6 The equipment must be installed in low impact risk locations only.

14.7 The fasteners securing the cover to the enclosure have a property class of A2-70

14.8 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”.

Certificate Annex

Certificate Number CML 16ATEX1337X

Equipment CZ0878d Series Explosion-proof floodlight light fittings

Manufacturer CZ Explosion-proof Electric Appliances Co. Ltd.

The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
2CZ0878d.001.000	1 of 1	AA	01/11/2016	CZ0878d Explosion-proof floodlight light fittings
2CZ0878d.002.000	1 of 1	AA	01/11/2016	CZ0878d-QL Explosion-proof floodlight light fittings
2CZ0878d/LED.001.000	1 to 2	AA	01/11/2016	CZ0878d-LED Explosion-proof floodlight light fittings
5CZ0878d.001.000	1 of 1	AA	01/11/2016	CZ0878d Series circuit diagram
5CZ0878d.002.000	1 of 1	AA	01/11/2016	CZ0878d Series ballast configuration tables
5CZ0878d.000.003	1 of 1	AA	01/11/2016	CZ0878d Lamp cover suite
8CZ0878d.000.001	1 of 1	AA	01/11/2016	CZ0878d Enclosure of lamp
8CZ0878d/LED.000.001	1 of 1	AA	01/11/2016	CZ0878d Enclosure of lamp
8CZ0878d.000.002	1 of 1	AA	01/11/2016	CZ0878d Lamp cover
8CZ0878d.000.003	1 of 1	AA	01/11/2016	CZ0878d Side cover
8CZ0878d.000.004	1 of 1	AA	01/11/2016	CZ0878d Junction box cover
8CZ0878d.000.005	1 of 1	AA	01/11/2016	CZ0878d Toughened glass
8CZ0878d.000.011	1 of 1	AA	01/11/2016	CZ0878d Side cover sealing ring
8CZ0878d.000.012	1 of 1	AA	01/11/2016	CZ0878d Junction box sealing ring
8CZ0878d.000.017	1 of 1	AA	01/11/2016	CZ0878d Sealing ring
8CZ0878d.000.018	1 of 1	AA	01/11/2016	CZ0878d Nameplate
8CZ0878d/LED.000.010	1 of 1	AA	01/11/2016	CZ0878d Nameplate
8CZ0878d.000.024	1 of 1	AA	01/11/2016	CZ0878d Ø12 x 2 O rings
5CZ0871.000.001 M16	1 of 1	AA	01/11/2016	Transition nut assembly