



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 11.0033U** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2011-11-10

Applicant:

Equipment: **Explosion-proof potentiometer module Type CZ0203...**

Optional accessory:

Type of Protection: **Flameproof enclosures "d", Increased safety "e"**

Marking: **Ex de II C Gb**

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 11.0033U**

Page 2 of 3

Date of issue: 2011-11-10

Issue No: 0

Manufacturer:

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 60079-0:2007-10 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:5

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

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/ExTR11.0038/00](#)

Quality Assessment Report:

[CN/CQM/QAR08.0001/01](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx CQM 11.0033U**

Page 3 of 3

Date of issue: 2011-11-10

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Description of equipment

The CZ0203 series explosion-proof potentiometer module is an Ex component, which is installed inside a suitably certified enclosure.

Schedule of limitations

1. Rating: 200V, 0.1W.
2. The CZ0203 series explosion-proof potentiometer module shall be installed inside an explosion-proof enclosure suitable for the environment.
3. The service temperature specified by the manufacturer is from -55°C to +85°C.

SPECIFIC CONDITIONS OF USE: NO



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Certificate No.: **IECEx CQM 11.0033U**

Page 1 of 4

Certificate history:

Status: **Current**

Issue No: 1

[Issue 0 \(2011-11-10\)](#)

Date of Issue: 2017-03-21

Applicant:

Equipment: **Explosion-proof control module Type CZ0203...**

Optional accessory:

Type of Protection: **Flameproof enclosures "d", Increased safety "e"**

Marking: **Ex db eb IIC Gb**

Approved for issue on behalf of the IECEx
Certification Body:

Ji Xiaodong

Position:

General Manager

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: 100048
China





IECEx Certificate of Conformity

Certificate No.: **IECEx CQM 11.0033U**

Page 2 of 4

Date of issue: 2017-03-21

Issue No: 1

Manufacturer:

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 60079-7:2015 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:

[CN/CQM/ExTR11.0038/01](#)

Quality Assessment Report:

[CN/CQM/QAR08.0001/06](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx CQM 11.0033U**

Page 3 of 4

Date of issue: 2017-03-21

Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Description of equipment

The CZ0203 explosion-proof control module has the type of protection “db” and “eb”. The terminals for wiring are protected by type “eb”. The enclosure which is made by plastic is protected by type “db”. Different electronic components can be installed inside the enclosure. Each CZ0203 can only contain one type of electronic component. The installation method of CZ0203 is divided into two types: board front and board back. Type board front is used to install with rail, type board back is used to install behind panel.

Rating and nomenclature see as in attachment.

Schedule of limitations for Ex components:

1. The flameproof joints are not intended to be repaired.
2. CZ0203 explosion-proof control module with type of protection “db eb” must be installed into a suitably certified enclosure with IP54 at least. When the control modules are installed in an enclosure of the type of protection increased safety in compliance with IEC 60079-7, the clearance and creepage distances according to section 4.3 and 4.4 and Table 2 must be fulfilled.
3. Rated ambient temperature range:
CZ0203-□□□/□L: $-40^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$; CZ0203-□□□/□H: $-55^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$
4. Rated service temperature range:
CZ0203-□□□/□L: -40°C to $+90^{\circ}\text{C}$; CZ0203-□□□/□H: -55°C to $+90^{\circ}\text{C}$

SPECIFIC CONDITIONS OF USE: NO



IECEx Certificate of Conformity

Certificate No.: **IECEx CQM 11.0033U**

Page 4 of 4

Date of issue: 2017-03-21

Issue No: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

1. The standards are updated to IEC 60079-0: 2011, IEC 60079-1: 2014 and IEC 60079-7:2015.
2. The marking is changed from Ex d e IIC Gb into Ex db eb IIC Gb.
3. The service temperature is from -40°C/-55°C to +90°C.
4. The material of the covers and shells is changed from PBT:4306G30 into PBT:4308G30. A new type of material APET PURE52/AP13 for cementing is used when the minimum ambient temperature is -55°C.
5. Name of product is changed to Explosion-proof control module.
6. New types of electronic components inside the enclosure were added.

Annex:

[Attachment to CoC 11.0033U issue 1.pdf](#)



Attachment to Certificate

IECEX CQM 11.0033U issue 1

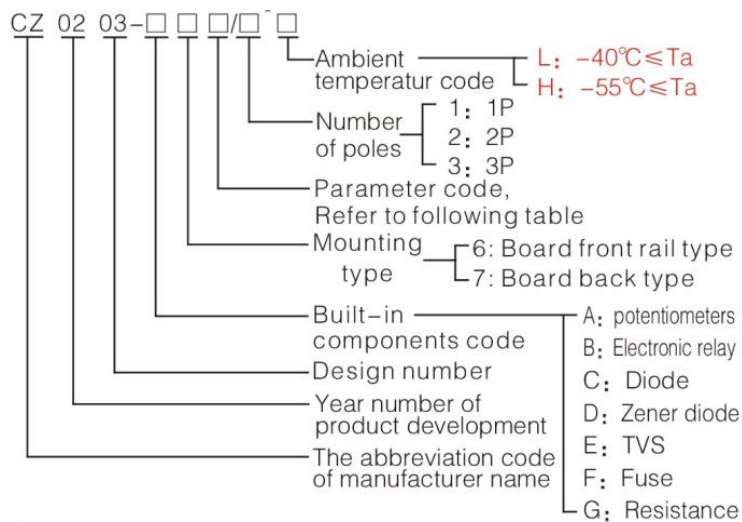


Applicant: CZ EXPLOSION-PROOF ELECTRIC APPLIANCES Co., LTD.

Electrical equipment: Explosion-proof control module CZ0203

Description of equipment:

Nomenclature:



Optional components can be installed inside the enclosure.

Type of component	Rating
Potentiometer	Rated voltage: Max. 200V DC Power rating: Max. 0.1W.
Electronic relay	Switch voltage/current: 250VAC /5A, 30VDC /5A Coil voltage: 5V DC, 6V DC, 9V DC, 12V DC, 18V DC, 24V DC
Diode	Rated voltage: Max 250V AC/DC Rated power : Max 1.5W
Zener diode	Zener voltage: 5.1V~51V AC/DC Dissipation power: Max 5W
Transient Voltage Suppressor(TVS)	Voltage: Max 250V AC DC Dissipation power: Max 5W
Fuse	Rated voltage: 250V AC /300V DC Rated current: 0.5~16A
Resistance	Rated voltage: Max 250V AC DC resistance range: 0.1Ω ~33MΩ Power Rating: Max 1W



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Certificate No.: **IECEx CQM 13.0018X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2013-07-11

Applicant: **CZ EXPLOSION-PROOF ELECTRIC APPLIANCES Co., LTD**
No.1 Qixing Rd, Qixing Town, Nanhu District, Jiaxing City, Zhejiang, P.R. China
China

Equipment: **Explosion-proof electric for panel mounting**

Optional accessory:

Type of Protection: **Ex "d" "e" "t"**

Marking: **Ex d e IIC T6 Gb IP66 -40°C ≤ Ta ≤ +50°C**
Ex tb III C T80°C Db IP66 -40°C ≤ Ta ≤ +50°C

Approved for issue on behalf of the IECEx
Certification Body:

Zhang Wei

Position:

President

Signature:
(for printed version)

Date:

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No. 33 Zengguang Road, Haidian District
Beijing City, Postal code: 100048
China





IECEx Certificate of Conformity

Certificate No.: **IECEx CQM 13.0018X**

Page 2 of 3

Date of issue: 2013-07-11

Issue No: 0

Manufacturer: **CZ EXPLOSION-PROOF ELECTRIC APPLIANCES Co., LTD**
No.1 Qixing Rd, Qixing Town, Nanhu District, Jiaxing City, Zhejiang, P.R. China
China

Additional
manufacturing
locations:

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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 60079-1:2007-04 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/ExTR13.0021/00](#)

Quality Assessment Report:

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



IECEx Certificate of Conformity

Certificate No.: **IECEx CQM 13.0018X**

Page 3 of 3

Date of issue: 2013-07-11

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Description of equipment

The CZ02 explosion-proof electric for panel mounting is of type of protection "de" and "tb".

The enclosure of this product composes of protective housing and operation head type P /K /L which is certified Ex component.

The material of the housing is plastic. The cable gland is integrated with enclosure.

Certified different Ex component is mounted inside the enclosure and they constitute 4 models of explosion-proof electric modules for panel mounting.

Technical data

Product and Model	Rated electric values	Ex component mounted into
CZ0201 Explosion-proof switch module for panel mounting	250VAC/16A, 110VDC/1A	CZ 0201 Explosion-proof switch module
CZ0202 Explosion-proof signal lamp module for panel mounting	12VAC/DC ~ 250VAC/DC, 200 ~ 400VAC	CZ0202 Explosion-proof signal lamp module
CZ0203 Explosion-proof potentiometer module for panel mounting	Power rating: 0.1W, Max. input voltage: 200VDC or power rating, whichever is smaller	CZ0212 Explosion-proof signal lamp with button module
CZ0212 Explosion-proof signal lamp with button module for panel mounting	For button: 250VAC /10A, 24VDC /1AFor signal lamp:12VAC/DC ~ 250V AC/DC	CZ0212 Explosion-proof signal lamp with button module

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The cable glands do not provide sufficient clamping and the user must provide effective clamping of the cable to ensure that pulling and twisting is not transmitted to the terminations.
2. The CZ02 explosion-proof electric for panel mounting should be installed in place to avoid the risk of mechanical impact.
3. Warning: potential electrostatic charge hazard, see instructions.



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INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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Certificate No.: **IECEx CML 17.0025X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2017-05-22

Applicant: **CZ EXPLOSION-PROOF ELECTRIC APPLIANCES CO.,LTD.**
No.1 Qixing Rd, Qixing Town, Nanhu District, Jiaxing, Zhejiang, P.R
China

Equipment: **CZ0240/** Series of Explosion-proof Controllers**

Optional accessory:

Type of Protection: **Flameproof "db", Increased Safety "eb", Intrinsic Safety "ia or ib", Encapsulation "mb", Dust Protection "tb"**

Marking: Ex eb ## T* Gb and Ex tb IIIC T**°C Db (## dependant on parts fitted).
Ta = -40°C upto +55°C

See certificate annex for full description and Conditions of manufacture

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 17.0025X**

Page 2 of 3

Date of issue: 2017-05-22

Issue No: 0

Manufacturer: **CZ EXPLOSION-PROOF ELECTRIC APPLIANCES CO.,LTD.**
No.1 Qixing Rd, Qixing Town, Nanhu District, Jiaxing, Zhejiang, P.R
China

Additional
manufacturing
locations:

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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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

IEC 60079-18:2014 Explosive atmospheres – Part 18: Equipment protection by encapsulation "m"
Edition:4.0

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:

[GB/CML/ExTR17.0039/00](#)

Quality Assessment Report:

[CN/CQM/QAR08.0001/06](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx CML 17.0025X**

Page 3 of 3

Date of issue: 2017-05-22

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The series CZ0240 Explosion-proof Controller is used for the control of processes and operations in hazardous locations zone 1/21 and/or Zone 2/22.

See Annex for full description

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. For type of protection "ia" the supply must be from a suitably certified and rated safety barrier.

Annex:

[Certificate Annex IECEx CML 17.0025X Issue 0.pdf](#)

Annexe to: IECEx CML 17.0025X Issue 0

Applicant: CZ EXPLOSION-PROOF ELECTRIC APPLIANCES Co., LTD

Apparatus: CZ0240/.. Series Explosion-proof Controllers



Product Description

The series CZ0240 Explosion-proof Controller is used for the control of processes and operations in hazardous locations zone 1 and/or zone 2. The enclosure is manufactured from plastic with type of protection “eb” and “tb” with each enclosure comprising a base and cover secured by four bolts. There are eight types of enclosure with different dimensions: CZ0240/1; CZ0240/2; CZ0240/3; CZ0240/4; CZ0240/51; CZ0240/5; CZ0240/6; CZ0240/9.

The CZ0240/01, CZ0240/2 and CZ0240/03 may be connected by coupling nuts to form an integrity structure.

The CZ0240/4, CZ0240/5 and CZ0240/6 may be connected by coupling nuts to form an integrity structure.

Depending on the devices fitted to the enclosure the Explosion-proof Controller assembly may achieve up ingress protection ratings of IP66/67/64.

The controllers have a maximum rated voltage of 500V with a maximum current of 16A; the rated current is subject to the Ex components utilised.

CZ0240/.. Model	Dimension		
	Length (mm)	Width (mm)	Height (mm)
CZ0240/1	95	86	76
CZ0240/2	135	86	76
CZ0240/3	175	86	76
CZ0240/4	135	100	76
CZ0240/5	175	100	76
CZ0240/51	95	86	76
CZ0240/6	215	100	76
CZ0240/9	160	96	76



Ex Components permitted to be fitted:

The Ex components listed below may be installed inside or on the cover of the CZ0240/** series.

Component Details	Code	Temperature Range
Switch CZ0201-□□□□□L	Ex db eb IIC Gb	-40°C to +90°C
Switch CZ0201-□□□□□H	Ex db eb IIC Gb	-55°C to +90°C
Signal Lamp CZ0202-□□□□L	Ex db eb IIC Gb Ex ia IIC Ga	-40°C to +90°C
Signal Lamp CZ0202-□□□□H	Ex db eb IIC Gb Ex ia IIC Ga	-55°C to +90°C
Potentiometer CZ0203-□□□/□L	Ex db eb IIC Gb	-40°C to +90°C
Potentiometer CZ0203-□□□/□H	Ex db eb IIC Gb	-55°C to +90°C
Voltmeter and mA Ammeter CZ0205	Ex e mb IIC Gb	-40°C to +95°C
Ammeter CZ0205	Ex e IIC Gb	-40°C to +95°C
Lamp/Button CZ0212-□□□□□L	Ex db eb IIC Gb	-40°C to +90°C
Lamp/Button CZ0212-□□□□□H	Ex db eb IIC Gb	-55°C to +90°C
Lamp/Button CZ0212-□□□□0H	Ex ia IIC Ga	-55°C to +90°C
Fuses CZ0804	Ex eb mb IIC Gb	-40°C to +55°C
Operator Heads CZ_P_K_L_	Ex e IIC Gb Ex e IIIC Dc	-40°C to +65°C
Terminal Block UK 1.5N, 5N, 3N, 5N	Ex eb IIC	-60°C to +110°C

The built-in and add-on components are of a technical standard that complies with the specifications listed in this certificate they have suitable operating conditions and have suitable IECEx Certificates.

Marking

Coding options for models with the rang include:

Ex eb IIC T* Gb Ex db eb IIC T* Gb Ex db eb ia IIC T*Gb Ex db eb ia mb IIC Gb
 Ex eb mb IIC T* Gb Ex eb ia IIC T* Gb Ex eb ia mb IIC T* Gb Ex db eb mb IIC T* Gb
 Ex tb IIIC T80°C/T95°C Db

Ta:-40°C up to +55°C

Note: Protection concept symbols and the maximum/minimum ambient applied depend on the parts installed. The limits of the ambient range are shown here. Refer to Conditions of Manufacture for further details

* T-classes T6 or T5 and assigned maximum surface temperature T80°C or T95°C are dependent on the enclosure, the equipment fitted and the power dissipation, as well as the upper ambient temperature assigned.

Conditions of Manufacture

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

- i. The manufacturer shall carry out a dielectric strength test in accordance with, IEC 60079-7:2015 Ed 5 clause 6.1 on all pre-wired junction boxes, considering the rated voltage of each unit.
- ii. The total dissipated power of the enclosure shall be calculated in accordance with IEC 60079-7:2015 Ed 5 Annex E.2, and shall not exceed the maximum power rating defined in the technical data of this certificate.
- iii. The CZ0240 Control Stations covered by this certificate incorporate previously certified devices. It is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform CML of any modification of the devices that may impinge upon the explosion safety.
- iv. The manufacturer shall modify the marking to include additional protection concept letters and to select the gas group, ambient temperature and Ingress Protection rating that are appropriate to the combination of devices that are fitted.
- v. The maximum ambient, temperature class and assigned maximum surface temperature of the equipment is dependent on the model and maximum power dissipation. Hence, the maximum ambient, temperature class and assigned maximum surface temperature shall be marked in accordance with the 'Maximum Power Dissipation' table in the technical data of this certificate.



- vi. The marked ambient temperature range assigned to the equipment shall not exceed the ambient/service temperature range of any previously certified parts installed. All previously certified parts shall be used within their defined maximum ambient or service temperature limits.
- vii. When fitted with intrinsically safe devices and non-intrinsically safe devices the CZ0240 control stations shall have suitable wiring/partitions/separation distances.

Conditions of certification

- i. For type of protection “ia” the supply must be from a suitably certified and rated safety barrier.



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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Certificate No.: **IECEx CML 17.0025X** Page 1 of 4 [Certificate history:](#)
Status: **Current** Issue No: 1 [Issue 0 \(2017-05-22\)](#)
Date of Issue: 2019-06-20
Applicant: **CZ Explosion-proof Electric Appliances Co., Ltd.**
No. 1 Qixing Rd, Qixing Town, Nanghu District, Jiaxing, Zhejiang
China
Equipment: **CZ0240 Series Explosion-proof Controllers**
Optional accessory:
Type of Protection: **Flameproof "db", Increased Safety "eb", Intrinsic Safety "ia or ib", Encapsulation "mb", Dust Ignition "tb"**
Marking: Ex db eb ia mb IIC T6/T5 Gb
Ex tb IIIC T80°C/T95°C Db
Ta= -40°C to +55°C
Note: Protection concepts, temperature class, maximum surface temperature and ambient temperature depends on the components used. Refer to description.

Approved for issue on behalf of the IECEx
Certification Body:

R C Marshall

Position:

Certification Officer

Signature:
(for printed version)

Date:

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Certificate issued by:

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





IECEx Certificate of Conformity

Certificate No.: **IECEx CML 17.0025X**

Page 2 of 4

Date of issue: 2019-06-20

Issue No: 1

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

Additional
manufacturing
locations:

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

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

IEC 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"
Edition:4.1

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

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 Reports:

[GB/CML/ExTR17.0039/00](#)

[GB/CML/ExTR19.0076/00](#)

Quality Assessment Report:

[CN/CQM/QAR08.0001/06](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx CML 17.0025X**

Page 3 of 4

Date of issue: 2019-06-20

Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The series CZ0240 Explosion-proof Controller is used for the control of processes and operations in hazardous locations zone 1/21 and/or Zone 2/22. The enclosure is manufactured from plastic with type of protection "eb" and "tb" with each enclosure comprising a base and cover secured by four bolts.

Refer to Annex for full description and conditions of manufacture.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to Annex for specific conditions of use.



IECEx Certificate of Conformity

Certificate No.: **IECEx CML 17.0025X**

Page 4 of 4

Date of issue: 2019-06-20

Issue No: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above) **Issue 1**

This issue introduces the following changes:

1. Following appropriate reassessment to the latest technical knowledge, the standards previously assessed to have been replaced by the latest edition available.
2. Correction of typographical errors.

Annex:

[IECEx CML 17.0025X Iss. 1 Certificate Annex.pdf](#)

Annexe to: IECEx CML 17.0025X Iss. 1
Applicant: CZ Explosion-proof Electric Appliances Co., Ltd.
Apparatus: CZ0240 Series Explosion-proof Controllers



Product Description

The series CZ0240 Explosion-proof Controller is used for the control of processes and operations in hazardous locations zone 1/21 and/or Zone 2/22. The enclosure is manufactured from plastic with type of protection “eb” and “tb” with each enclosure comprising a base and cover secured by four bolts.

There are eight types of enclosure with different dimensions: CZ0240/1; CZ0240/2; CZ0240/3; CZ0240/4; CZ0240/51; CZ0240/5; CZ0240/6; CZ0240/9.

The CZ0240/01, CZ0240/2 and CZ0240/03 may be connected by coupling nuts to form an integrity structure forming models CZ0240/4, CZ0240/5 and CZ0240/6.

The CZ0240/4, CZ0240/5 and CZ0240/6 may be connected by coupling nuts to form an integrity structure.

Depending on the devices fitted to the enclosure the Explosion-proof Controller assembly may achieve up ingress protection ratings of IP66/65/64.

The controllers have a maximum rated voltage of 500V with a maximum current of 16A; the rated current is subject to the Ex components utilised.

CZ0240/.. Model	Dimension		
	Length (mm)	Width (mm)	Height (mm)
CZ0240/1	95	86	76
CZ0240/2	135	86	76
CZ0240/3	175	86	76
CZ0240/4	135	100	76
CZ0240/5	175	100	76
CZ0240/51	95	86	76
CZ0240/6	215	100	76
CZ0240/9	160	96	76



The Ex components listed below may be installed inside or on the cover of the CZ0240/** series.

Component Details	Code	Temperature Range
Switch CZ0201-□□□□□L	Ex db eb IIC Gb	-40°C to +90°C
Switch CZ0201-□□□□□H	Ex db eb IIC Gb	-55°C to +90°C
Signal Lamp CZ0202-□□□□L	Ex db eb IIC Gb Ex ia IIC Ga	-40°C to +90°C
Signal Lamp CZ0202-□□□□H	Ex db eb IIC Gb Ex ia IIC Ga	-55°C to +90°C
Potentiometer CZ0203-□□□/□L	Ex db eb IIC Gb	-40°C to +90°C
Potentiometer CZ0203-□□□/□H	Ex db eb IIC Gb	-55°C to +90°C
Voltmeter and mA Ammeter CZ0205	Ex e mb IIC Gb	-40°C to +95°C
Ammeter CZ0205	Ex e IIC Gb	-40°C to +95°C
Lamp/Button CZ0212-□□□□□L	Ex db eb IIC Gb	-40°C to +90°C
Lamp/Button CZ0212-□□□□□H	Ex db eb IIC Gb	-55°C to +90°C
Lamp/Button CZ0212-□□□□0H	Ex ia IIC Ga	-55°C to +90°C
Fuses CZ0804	Ex eb mb IIC Gb	-40°C to +55°C
CZ4000 Series Operators Heads	Ex eb IIC Gb Ex tb IIIC Db	-55°C to +65°C
Terminal Block UK 1.5N, 5N, 3N, 5N	Ex eb IIC	-60°C to +110°C

The built-in and add-on components are of a technical standard that complies with the specifications listed in this certificate they have suitable operating conditions and have suitable EU Type Examination Certificates/IECEx Certificates.

Conditions of Manufacture

The following are conditions of manufacture:

- i. Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- ii. The manufacturer shall carry out a dielectric strength test in accordance with, EN 60079-7:2015 / IEC 60079-7:2015 Ed 5 clause 6.1 on all pre-wired junction boxes, considering the rated voltage of each unit.
- iii. The total dissipated power of the enclosure shall be calculated in accordance with EN 60079-7:2015 / IEC 60079-7:2015 Ed 5 Annex E.2 and shall not exceed the maximum power rating defined in CML report R1555A/00.
- iv. The CZ0240 Control Stations covered by this certificate incorporate previously certified devices. It is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform CML of any modification of the devices that may impinge upon the explosion safety.
- v. The manufacturer shall modify the marking to include additional protection concept letters and to select the gas group, ambient temperature and Ingress Protection rating that are appropriate to the combination of devices that are fitted.
- vi. The maximum ambient, temperature class and assigned maximum surface temperature of the equipment is dependent on the model and maximum power dissipation. Hence, the maximum ambient, temperature class and assigned maximum surface temperature shall be marked in accordance with the 'Maximum Power Dissipation' table in this certificate.
- vii. The marked ambient temperature range assigned to the equipment shall not exceed the ambient/service temperature range of any previously certified parts installed. All previously certified parts shall be used within their defined maximum ambient or service temperature limits.
- viii. When fitted with intrinsically safe devices and non-intrinsically safe devices the CZ0240 control stations shall have suitable wiring/partitions/separation distances.

Specific Conditions of Use

The following relate to the safe use of the product:

- i. For type of protection "ia" the supply must be from a suitably certified and rated safety barrier.



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 17.0025X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 2 [Issue 1 \(2019-06-20\)](#)
Date of Issue: 2019-12-04 [Issue 0 \(2017-05-22\)](#)
Applicant: **CZ Electric Co., Ltd.**
No. 1 Qixing Road,
Qixing Town,
Nanhu District,
Jiaxing,
Zhejiang, 314002,
China
Equipment: **CZ0240 Series Explosion-proof Controllers**
Optional accessory:
Type of Protection: **Flameproof "db", Increased Safety "eb", Intrinsic Safety "ia", Encapsulation "mb", Dust Ignition "tb"**
Marking: Ex db eb ia mb IIC T6/T5 Gb
Ex tb IIC T80°C/T95°C Db
Ta: -40°C to +55°C
Note: Protection concepts, temperature class, maximum surface temperature and ambient temperature depends on the components used. Refer to description.

Approved for issue on behalf of the IECEx
Certification Body:

R C Marshall

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:

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





IECEx Certificate of Conformity

Certificate No.: **IECEx CML 17.0025X**

Page 2 of 4

Date of issue: 2019-12-04

Issue No: 2

Manufacturer: **CZ Electric Co., Ltd.**
No. 1 Qixing Road,
Qixing Town,
Nanhu District,
Jiaxing,
Zhejiang, 314002,
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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

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

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

IEC 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"
Edition:4.1

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

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 Reports:

[GB/CML/ExTR17.0039/00](#)

[GB/CML/ExTR19.0076/00](#)

[GB/CML/ExTR19.0222/00](#)

Quality Assessment Report:

[CN/CQM/QAR08.0001/06](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx CML 17.0025X**

Page 3 of 4

Date of issue: 2019-12-04

Issue No: 2

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The CZ0240 Series Explosion-proof Controller is used for the control of processes and operations in hazardous locations zone 1/21 and/or Zone 2/22. The enclosure is manufactured from plastic with type of protection "eb" and "tb" with each enclosure comprising a base and cover secured by four bolts.

Refer to Annex for full description and conditions of manufacture.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to Annex for specific conditions of use.



IECEx Certificate of Conformity

Certificate No.: **IECEx CML 17.0025X**

Page 4 of 4

Date of issue: 2019-12-04

Issue No: 2

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1

This issue introduces the following changes:

1. Following appropriate reassessment to the latest technical knowledge, the standards previously assessed to have been replaced by the latest edition available.
2. Correction of typographical errors.

Issue 2

This issue introduces the following change:

1. Change of applicant's and manufacturer's company name from CZ Explosion-proof Electric Appliances Co., Ltd. to CZ Electric Co., Ltd.

Annex:

[IECEx CML 17.0025X Iss. 2 Certificate Annex_1.pdf](#)

Annexe to: IECEx CML 17.0025X Issue 2
Applicant: CZ Electric Co., Ltd.
Apparatus: CZ0240 Series Explosion-proof
Controllers



Product Description

The CZ0240 Series Explosion-proof Controller is used for the control of processes and operations in hazardous locations zone 1/21 and/or Zone 2/22. The enclosure is manufactured from plastic with type of protection “eb” and “tb” with each enclosure comprising a base and cover secured by four bolts.

There are eight types of enclosure with different dimensions: CZ0240/1; CZ0240/2; CZ0240/3; CZ0240/4; CZ0240/51; CZ0240/5; CZ0240/6; CZ0240/9.

The CZ0240/01, CZ0240/2 and CZ0240/03 may be connected by coupling nuts to form an integrity structure forming models CZ0240/4, CZ0240/5 and CZ0240/6.

The CZ0240/4, CZ0240/5 and CZ0240/6 may be connected by coupling nuts to form an integrity structure.

Depending on the devices fitted to the enclosure the Explosion-proof Controller assembly may achieve up ingress protection ratings of IP66/65/64.

The controllers have a maximum rated voltage of 500V with a maximum current of 16A; the rated current is subject to the Ex components utilised.

CZ0240/.. Model	Dimension		
	Length (mm)	Width (mm)	Height (mm)
CZ0240/1	95	86	76
CZ0240/2	135	86	76
CZ0240/3	175	86	76
CZ0240/4	135	100	76
CZ0240/5	175	100	76
CZ0240/51	95	86	76
CZ0240/6	215	100	76
CZ0240/9	160	96	76



The Ex components listed below may be installed inside or on the cover of the CZ0240/** series.

Component Details	Code	Temperature Range
Switch CZ0201-□□□□□L	Ex db eb IIC Gb	-40°C to +90°C
Switch CZ0201-□□□□□H	Ex db eb IIC Gb	-55°C to +90°C
Signal Lamp CZ0202-□□□□L	Ex db eb IIC Gb Ex ia IIC Ga	-40°C to +90°C
Signal Lamp CZ0202-□□□□H	Ex db eb IIC Gb Ex ia IIC Ga	-55°C to +90°C
Potentiometer CZ0203-□□□/□L	Ex db eb IIC Gb	-40°C to +90°C
Potentiometer CZ0203-□□□/□H	Ex db eb IIC Gb	-55°C to +90°C
Voltmeter and mA Ammeter CZ0205	Ex e mb IIC Gb	-40°C to +95°C
Ammeter CZ0205	Ex e IIC Gb	-40°C to +95°C
Lamp/Button CZ0212-□□□□□L	Ex db eb IIC Gb	-40°C to +90°C
Lamp/Button CZ0212-□□□□□H	Ex db eb IIC Gb	-55°C to +90°C
Lamp/Button CZ0212-□□□□0H	Ex ia IIC Ga	-55°C to +90°C
Fuses CZ0804	Ex eb mb IIC Gb	-40°C to +55°C
CZ4000 Series Operators Heads	Ex eb IIC Gb Ex tb IIIC Db	-55°C to +65°C
Terminal Block UK 1.5N, 5N, 3N, 5N	Ex eb IIC	-60°C to +110°C

The built-in and add-on components are of a technical standard that complies with the specifications listed in this certificate they have suitable operating conditions and have suitable EU Type Examination Certificates/IECEX Certificates.

Conditions of Manufacture

The following are conditions of manufacture:

- i. Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- ii. The manufacturer shall carry out a dielectric strength test in accordance with, EN 60079-7:2015 / IEC 60079-7:2015 Ed 5 clause 6.1 on all pre-wired junction boxes, considering the rated voltage of each unit.
- iii. The total dissipated power of the enclosure shall be calculated in accordance with EN 60079-7:2015 / IEC 60079-7:2015 Ed 5 Annex E.2 and shall not exceed the maximum power rating defined in CML report R1555A/00.
- iv. The CZ0240 Control Stations covered by this certificate incorporate previously certified devices. It is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform CML of any modification of the devices that may impinge upon the explosion safety.
- v. The manufacturer shall modify the marking to include additional protection concept letters and to select the gas group, ambient temperature and Ingress Protection rating that are appropriate to the combination of devices that are fitted.
- vi. The maximum ambient, temperature class and assigned maximum surface temperature of the equipment is dependent on the model and maximum power dissipation. Hence, the maximum ambient, temperature class and assigned maximum surface temperature shall be marked in accordance with the 'Maximum Power Dissipation' table in this certificate.
- vii. The marked ambient temperature range assigned to the equipment shall not exceed the ambient/service temperature range of any previously certified parts installed. All previously certified parts shall be used within their defined maximum ambient or service temperature limits.
- viii. When fitted with intrinsically safe devices and non-intrinsically safe devices the CZ0240 control stations shall have suitable wiring/partitions/separation distances.

Specific Conditions of Use

The following relate to the safe use of the product:

- i. For type of protection "ia" the supply must be from a suitably certified and rated safety barrier.



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 09.0005** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2009-08-27

Applicant:

Equipment: **Full plastic explosion-proof controller CZ0240 ...**

Optional accessory:

Type of Protection: **Ex "d", Ex "e", Ex "tD"**

Marking: Ex de IIC T6 / Ex tD A21 IP66 T80°C or
Ex e II T6 / Ex tD A21 IP66 T80°C
-40°C ≤ Ta ≤ +40°C

Approved for issue on behalf of the IECEx
Certification Body:

Zhang Wei

Position:

General Manager

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:

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 09.0005**

Page 2 of 3

Date of issue: 2009-08-27

Issue No: 0

Manufacturer:

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 60079-0:2004 Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
Edition:4.0

IEC 60079-1:2003 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:5

IEC 60079-7:2001 Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety 'e'
Edition:3

IEC 61241-0:2004 Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
Edition:1

IEC 61241-1:2004 Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"
Edition: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:

[CN/CQM/ExTR09.0005/00](#)

Quality Assessment Report:

[CN/CQM/QAR08.0001/00](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx CQM 09.0005**

Page 3 of 3

Date of issue: 2009-08-27

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Description of equipment

This product is of combined type Ex d and Ex e . It also fulfills the requirements of the type Ex tD. It is mainly comprised of cover and base, which are made of plastic. Explosion-proof switch module, explosion-proof signal lamp module and explosion-proof ammeter module, which are certified as Ex compenent, can be installed inside of it. Operation head can be installed on the cover. The product can be marked as type Ex e /Ex tD, if only explosion-proof ammeter module is installed inside.

Rating

Max: AC250V, 16A for switch and signal lamp circuit, 15A for ammeter circuit

SPECIFIC CONDITIONS OF USE: NO