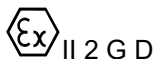




## EU Type Examination Certificate      CML 17ATEX1040X      Issue 0

- 1    Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2    Equipment      **CZ024\*\* Series Explosion-proof Controller**
- 3    Manufacturer    **CZ Explosion-proof Electric Appliances Co., Ltd**
- 4    Address          No.1 Qixing Rd,Qixing  
Town,Nanhu District, Jiaxing,  
Zhejiang.  
P.R. 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 60079-7:2015      EN 60079-11:2012  
EN 60079-1:2014      EN 60079-18:2014      EN 60079-31:2014
- 10   The equipment shall be marked with the following:



II 2 G D

Coding options for models with the range 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.



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## 11 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 IP64/65/646

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/..<br>Model | Dimension      |               |                |
|--------------------|----------------|---------------|----------------|
|                    | Length<br>(mm) | Width<br>(mm) | Height<br>(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<br>Ex ia IIC Ga | -40°C to +90°C    |
| Signal Lamp CZ0202-□□□□H | Ex db eb IIC Gb<br>Ex ia IIC Ga | -55°C to +90°C    |



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| Component Details                  | Code                        | Temperature Range |
|------------------------------------|-----------------------------|-------------------|
| 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<br>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 EU Type Examination Certificates/IECEX Certificates.

## 12 Certificate history and evaluation reports

| Issue | Date        | Associated report | Notes                       |
|-------|-------------|-------------------|-----------------------------|
| 0     | 26 Apr 2017 | R1555A/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 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.
- 13.2 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.
- 13.3 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 the technical data of this certificate.
- 13.4 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.
- 13.5 The maximum ambient, temperature class and assigned maximum surface temperature of the equipment is dependent on the model and maximum power dissipation. Hence, the



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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.

- 13.6 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.
- 13.7 When fitted with intrinsically safe devices and non-intrinsically safe devices the CZ0240 control stations shall have suitable wiring/partitions/separation distances.

#### **14 Special Conditions for Safe Use (Conditions of Certification)**

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

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

## Certificate Annex



**Certificate Number** CML 17ATEX1040X  
**Equipment** CZ0240/.. Series Explosion-proof Controllers  
**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                                   |
|---------------------|--------|------|---------------|---|
| 2CZ02040.000.001    | 1 to 5 | AC   | 25 Apr 2017   | CZ0240/* EXPLOSION-PROOF CONTROLLER     |
| 8CZ0205.015.000     | 1 of 1 | AA   | 25 Apr 2017   | TWO UNITS COVER (PANEL TYPE)            |
| 8CZ0205.016.001     | 1 of 1 | AA   | 25 Apr 2017   | BASE OF TWO UNITS (PANEL TYPE)          |
| 8CZ0240.001.001     | 1 of 1 | AA   | 25 Apr 2017   | ONE UNIT COVER                          |
| 8CZ0240.001.002     | 1 of 1 | AA   | 25 Apr 2017   | COVER OF ILLUMINATION SWITCH            |
| 8CZ0240.001.003     | 1 of 1 | AA   | 25 Apr 2017   | KNOB OF ILLUMINATION SWITCH             |
| 8CZ0240.002.001~002 | 1 of 1 | AA   | 25 Apr 2017   | ONE UNIT                                |
| 8CZ0240.002.005     | 1 of 1 | AA   | 25 Apr 2017   | EMBEDDED NUT                            |
| 8CZ0240.003.001     | 1 of 1 | AA   | 25 Apr 2017   | COVER OF TWO UNITS ONE HOLE             |
| 8CZ0240.003.002     | 1 of 1 | AA   | 25 Apr 2017   | COVER OF TWO UNITS TWO HOLES            |
| 8CZ0240.003.003     | 1 of 1 | AA   | 25 Apr 2017   | COVER OF TWO UNITS WITH METER           |
| 8CZ0240.004.001~002 | 1 of 1 | AA   | 25 Apr 2017   | TWO UNIT BASE                           |
| 8CZ0240.005.001     | 1 of 1 | AA   | 25 Apr 2017   | COVER OF THREE UNITS TWO HOLES          |
| 8CZ0240.005.002     | 1 of 1 | AA   | 25 Apr 2017   | COVER OF THREE UNITS THREE HOLES        |
| 8CZ0240.005.003     | 1 of 1 | AA   | 25 Apr 2017   | COVER THREE UNITS WITH METER            |
| 8CZ0240.006.001     | 1 of 1 | AA   | 25 Apr 2017   | BASE OF THREE UNITS                     |
| 8CZ0240.008.001     | 1 of 1 | AA   | 25 Apr 2017   | SEALING GASKET I                        |
| 8CZ0240.008.002     | 1 of 1 | AA   | 25 Apr 2017   | SEALING GASKET II                       |
| 8CZ0240.008.003     | 1 of 1 | AA   | 25 Apr 2017   | SEALING GASKET III                      |
| 8CZ0240.011.000     | 1 of 1 | AA   | 25 Apr 2017   | SEALING GASKET OF ILLUMINATION SWITCH V |
| 8CZ0240.012.001~003 | 1 of 1 | AA   | 25 Apr 2017   | BASE OF CZ02040/5                       |
| 8CZ0240.013.001     | 1 of 1 | AA   | 25 Apr 2017   | CZ0240/5 WITH COVER OF METER            |
| 8CZ0240.013.002     | 1 of 1 | AA   | 25 Apr 2017   | CZ0240/6 WITH METER COVER FOR ONE HOLE  |
| 8CZ0240.013.003     | 1 of 1 | AA   | 25 Apr 2017   | CZ0240/5 COVER FOR TWO HOLES            |
| 8CZ0240.013.004     | 1 of 1 | AA   | 25 Apr 2017   | CZ0240/6 COVER FOR TWO HOLES            |
| 8CZ0240.013.005     | 1 of 1 | AA   | 25 Apr 2017   | CZ0240/5 COVER FOR THREE HOLES          |
| 8CZ0240.014.000     | 1 of 1 | AA   | 25 Apr 2017   | SEALING GASKET CZ0240/5                 |
| 8CZ0240.015.001~003 | 1 of 1 | AA   | 25 Apr 2017   | BASE OF CZ0240/6                        |

## Certificate Annex



**Certificate Number** CML 17ATEX1040X  
**Equipment** CZ0240/.. Series Explosion-proof Controllers  
**Manufacturer** CZ EXPLOSION-PROOF ELECTRIC APPLIANCES Co., LTD

| Drawing No.         | Sheets | Rev. | Approved date | Title  |
|---------------------|--------|------|---------------|--|
| 8CZ0240.016.001     | 1 of 1 | AA   | 25 Apr 2017   | CZ0240/6 WITH METER COVER FOR ONE HOLE           |
| 8CZ0240.016.002     | 1 of 1 | AA   | 25 Apr 2017   | CZ0240/6 WITH METER COVER FOR TWO HOLES          |
| 8CZ0240.016.003     | 1 of 1 | AA   | 25 Apr 2017   | CZ0240/6 COVER FOR THREE HOLES                   |
| 8CZ0240.016.003.1   | 1 of 1 | AA   | 25 Apr 2017   | CZ0240/6 COVER FOR TWO HOLES                     |
| 8CZ0240.016.004     | 1 of 1 | AA   | 25 Apr 2017   | CZ0240/6 COVER FOR FOUR HOLES                    |
| 8CZ0240.017.000     | 1 of 1 | AA   | 25 Apr 2017   | SEALING GASKET CZ0240/6                          |
| 8CZ0240.018.000     | 1 of 1 | AA   | 25 Apr 2017   | CZ0205 COVER FOR TWO UNITS ONE HOLE (PANEL TYPE) |
| 8K4.005.000         | 1 of 1 | AC   | 25 Apr 2017   | PIN ROLL   |
| 8K4.007.000         | 1 of 1 | AC   | 25 Apr 2017   | 601 O RING                                       |
| 8K600.003.000       | 1 of 1 | AC   | 25 Apr 2017   | II ROTARY AXES                                   |
| 24036.001.000       | 1 of 1 | AA   | 25 Apr 2017   | 4036 EARTHING NUT                                |
| 54008.001~002.000   | 1 of 1 | AA   | 25 Apr 2017   | 4008.001~002.000 EARTHING DEVICE                 |
| 54008.003~005.000   | 1 of 1 | AA   | 25 Apr 2017   | 4008 EARTHING DEVICE                             |
| 54014.000.000       | 1 of 1 | AA   | 25 Apr 2017   | 4014 EARTHING DEVICE                             |
| 8CZ02040.021.001    | 1 of 1 | AA   | 25 Apr 2017   | CZ0240/4 With meter cover for one hole           |
| 8CZ02040.021.002    | 1 of 1 | AA   | 25 Apr 2017   | CZ0240/4 With meter cover for two hole           |
| 8CZ02040.021.003    | 1 of 1 | AA   | 25 Apr 2017   | CZ0240/4 With cover of meter                     |
| 8CZ0240.022.000     | 1 of 1 | AA   | 25 Apr 2017   | Sealing gasket CZ0240/4                          |
| 8CZ0240.020.001~003 | 1 of 1 | AA   | 25 Apr 2017   | Base of CZ0240/4                                 |
| 8200.001.~011.000   | 1 of 1 | AA   | 25 Apr 2017   | Model 200 Rubber Gasket                          |
| 8P1.001.000         | 1 of 1 | AC   | 25 Apr 2017   | P100.001 Machine tube                            |
| 54004.000.000       | 1 of 1 | AA   | 25 Apr 2017   | 4004 Connecting Device                           |
| 84004.002.000       | 1 of 1 | AA   | 25 Apr 2017   | 4004 Sealing washer                              |
| 84004.001.000       | 1 of 1 | AA   | 25 Apr 2017   | 4004 Coupling nut                                |