



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
- Manufacturer
 Address
 CZ Explosion-proof Electric Appliances Co., Ltd
 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 60079-11:2014
 EN 60079-13:2014
 EN 60079-31:2014
- 10 The equipment shall be marked with the following:

⟨Ex⟩_{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 IIC 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.





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.

	Dimension			
CZ0240/ Model	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
This certificate shall only be copied	2 of 4	Version: 9.0 Approval: Approved





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 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





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 SWTICH
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	CZ02405 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 NumberCML 17ATEX1040XEquipmentCZ0240/.. Series Explosion-proof ControllersManufacturerCZ 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