

CESI

CERTIFICATE



CESI S.p.A.

[1] EC-TYPE EXAMINATION CERTIFICATE

[2] Component intended for use on/in equipment or protective system intended for use in potentially explosive atmospheres
Directive 94/9/EC

[3] EC-Type Examination Certificate number:

CESI 15 ATEX 066 U

[4] Component: Empty enclosures
Series EJBE-... and EJBXE-...

[5] Manufacturer: **CORTEM S.p.A.**

[6] Address: Via Aquileia, 10 – 34070 Villesse (Gorizia) - Italy

[7] This component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] CESI, notified body n. 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of components intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in confidential report n. B5027716.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0: 2012 EN 60079-1: 2007 EN 60079-7: 2007 EN 60079-31: 2014

[10] The sign "U" placed after the certificate number indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

[11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified component in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

[12] The marking of the component shall include the following:

**Ex II 2GD Ex de IIB+H2 Gb
Ex tb IIIC Db**

This certificate may only be reproduced in its entirety and without any change, schedule included.

Date 18 December 2015 - Translation issued the 18th December 2015

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CEST S.p.A.
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Il Responsabile

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Schema di certificazione

ATEX CESI



PRD N. 018B
Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

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Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 15 ATEX 066 U**

[15] **Description of component**

The empty enclosures in execution Ex de series EJBE-.. and EJBXE-.. are systems composed by an Ex d flameproof enclosure and an Ex e increased safety enclosure, equipped with pilot lights, pushbuttons, handles. The empty enclosures in execution Ex de series EJBE-.. is composed by the Ex d enclosure type EJB made in cast aluminium alloy and the Ex e enclosure CTB made in stainless steel sheet.

The empty enclosures in execution Ex de series EJBXE-.. is composed by the Ex d enclosure type EJBX made in stainless steel blended and welded and the Ex e enclosure CTB made in stainless steel sheet;

On the common face between the Ex d enclosure and the Ex e enclosure a plane gasket makes the IP protection level. Inside the enclosures on the common face the connections are made by means of sealed bushings or conductor bushings.

Ex d enclosure type EJB & EJBX can be equipped with operators series M-0 mounted on walls or cover and windows made in tempered glass sealed with silicon resin.

Model identification:

EJBE -

			Code of the series
			Size: 3, 4, 5, 6
			Model: - B
			other particular description (if required)

EJBXE -

			Code of the series (stainless steel)
			Size: 3, 4, 5, 6
			Model: - B
			other particular description (if required)

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Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 15 ATEX 066 U

Enclosures model and materials:

Type	
Aluminium alloy	Stainless steel
EJBE-3	EJBXE-3
EJBE-3B	EJBXE-3B
EJBE-4	EJBXE-4
EJBE-4B	EJBXE-4B
EJBE-5	EJBXE-5
EJBE-5B	EJBXE-5B
EJBE-6	EJBXE-6
EJBE-6B	EJBXE-6B

Service temperature range:

From -40°C to +80°C: all versions of enclosures.

From -50°C to +80°C: all versions of enclosures without polycarbonate pilot light.

Degree of protection (IEC 60529): IP 66

Warning label:

"Empty enclosure with component certificate".

"Use screws of quality A2-70 according UNI 7323 with tensile strength of at least 700 N/mm²" (for Ex d enclosure)

[16] Report n. EX-B5027716

Routine tests

The routine overpressure test shall be carried out on EJB enclosure with the static method (paragraph 15.1.3.1 of IEC 60079-1 standard), at:

- 13.7 bar on all EJBE and EJBXE Ex d enclosures for minimum ambient temperature until -50 °C;
- 11.9 bar on EJBE and EJBXE Ex d enclosures size 3+5 for minimum ambient temperature until -20 °C;
- 11.5 bar on EJBE and EJBXE Ex d enclosures size 6 for minimum ambient temperature until -20 °C.

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Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 15 ATEX 066 U**

Descriptive documents (prot. EX-B5027719)

- n. A4-6244 Technical Note (3 sheets)	Rev.0 dated	19.06.2014
- n. F-407 Safety, maintenance and mounting instructions (9 sheets)	Rev. 0 dated	19.06.2014
- n. 0182 Example of declaration of conformity		
- n. A3-6243 (10 sheets)	Rev. 0 dated	19.06.2014
- n. Datasheets of materials (7 sheets)	Rev. 0 dated	23.06.2008

One copy of all documents is kept in CESI files.

[17] **Schedule of limitations**

Service temperature range of the empty enclosures:

- From -40°C to +80°C: all versions of enclosures with polycarbonate pilot light;
- From -50°C to +80°C: all versions of enclosures without polycarbonate pilot light.

Furthermore the flame non-transmission tests for EJBE and EJBXE Ex d enclosures have been performed for a maximum ambient temperature: 60°C.

According to EN 60079-1 annex D, the content of the Ex component enclosure equipment may be placed in any arrangement, provided that into EJBE (EJBXE) Ex d enclosures for group IIB+H₂ an area of at least 40% of each cross-sectional area remains free.

The Ex d enclosure of this equipment has been tested with the flanged joint at 30mm from a solid object.

The accessories used for cable entries and for closing unused openings shall be certified according to EN 60079-0, EN 60079-7, EN 60079-31 standards on Ex e enclosure and according to EN 60079-0, EN 60079-1, EN 60079-31 on Ex d enclosure. A minimum degree of protection IP66 shall be guaranteed according to IEC 60529 standard.

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

The Essential Health and Safety Requirements are assured by compliance to the following standards:

- EN 60079-0: 2012 – General requirements
- EN 60079-1: 2007 – Equipment protection by flameproof enclosures 'd'
- EN 60079-7: 2007 – Equipment protection by increased safety 'e'
- EN 60079-31: 2014 – Equipment dust ignition protection by enclosure 't'