



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx CES 15.0018U issue No.: 0 Certificate history:

Status: Current

Date of Issue: 2015-11-20 Page 1 of 3

Applicant: **CORTEM S.p.A.**  
Via Aquileia, 10  
I - 34070 Villesse (Gorizia)  
Italy

Electrical Apparatus: Empty enclosure, Series EJBEx- and EJBXE-  
Optional accessory:

Type of Protection: Flameproof enclosures 'd'; Increased safety 'e'; Dust ignition protection 't'

Marking: Ex d e IIB+H2 Gb  
Ex tb IIIC Db  
IP66

Approved for issue on behalf of the IECEx  
Certification Body:

Mirko Balaz

Position:

Head of IECEx CB

Signature:  
(for printed version)

Date:

20-11-2015

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 the Official IECEx Website.

Certificate issued by:

**CESI**  
Centro Elettrotecnico  
Sperimentale Italiano S.p.A.  
Via Rubattino 54  
20134 Milano  
Italy

**CESI**

**CESI** S.p.A.

Testing & Certification Division  
Business Area Certification

Il Responsabile

(Roberto Piccini)



# IECEx Certificate of Conformity

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Manufacturer: **CORTEM S.p.A.**  
Via Aquileia, 10  
I - 34070 Villesse (Gorizia)  
Italy

Additional Manufacturing location  
(s):

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 electrical apparatus 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:

<b>IEC 60079-0 : 2011</b> Edition: 6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2007-04</b> Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-31 : 2013</b> Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
<b>IEC 60079-7 : 2006-07</b> Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical 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:  
IT/CES/ExTR14.0037/00

Quality Assessment Report:  
IT/CES/QAR06.0002/09



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The empty enclosures in execution Ex de series EJBE-.. and EJBXE-.. are systems (panels) composed by an Ex d flameproof enclosure and an Ex e increased safety enclosure.

The 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 type CTB made in stainless steel sheet.

The 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 type CTB made in stainless steel sheet. The Ex d enclosure can be equipped with operators, pushbuttons and pilot lights series M-0.. with separate IECEX CoC.

The cover of Ex e enclosure is fixed to the body with 4, 6 or 8 anti loosening screw. Between body and cover a silicon gasket guarantee the protection degree IP66.

The empty enclosures series EJBE-... and EJBXE-... characteristics and a Schedule of Limitations are further described in the Annexe of this certificate.

**CONDITIONS OF CERTIFICATION: NO**



# IECEX Certificate of Conformity



Prot: B5026651

**Annex to certificate:**  
**Applicant:**

**IECEX CES 15.0018U Issue No.:0 of 2015-11-20**  
**CORTEM S.p.A.**  
**Via Aquileia 10, I - 34070 Villesse (GO), Italy**  
**Electrical Apparatus: Empty enclosure, series EJBE-. and EJBXE-.**

### General product information:

The empty enclosures in execution Ex de series EJBE-.. and EJBXE-.. are systems (panels) composed by an Ex d flameproof enclosure and an Ex e increased safety enclosure.

The 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 type CTB made in stainless steel sheet.

The 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 type CTB made in stainless steel sheet.

The Ex d enclosure can be equipped with operators, pushbuttons and pilot lights series M-0.. with separate IECEX CoC.

The cover of Ex e enclosure is fixed to the body with 4, 6 or 8 anti loosening screw. Between body and cover a silicon gasket guarantee the protection degree IP66.

The walls of the boxes can be drilled and taped with maximum size and maximum number of holes as specified in the manufacturer documents. The cable glands or plugs, with separate IECEX certificate, are mounted on the gland plate of the Ex e enclosure using locknut and gasket. Each enclosure is provided with internal and external earthing screw or bolt.

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.

On the Ex d enclosures can be mounted inspection glass windows. Glass windows, included in the Ex d enclosure, are made in tempered glass sealed with silicon resin.

All fixing screws, external/internal earth screws are made in stainless steel class A2 or A4 - R 700N/mm<sup>2</sup>.

PAD B5026651 (2172664) - USO RISERVATO

### Model Identification:

EJBE -

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



# IECEX Certificate of Conformity



Prot: B5026651

Annex to certificate:

IECEX CES 15.0018U Issue No.:0 of 2015-11-20

Applicant:

CORTEM S.p.A.

Via Aquileia 10, I - 34070 Villesse (GO), Italy

Electrical Apparatus:

Empty enclosure, series EJBE- and EJBXE-

Model Identification (follows):

EJBXE -

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

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/mm<sup>2</sup>" (for Ex d enclosure)



## IECEX Certificate of Conformity

**CESI**

Prot: B5026651

**Annex to certificate:**

**IECEX CES 15.0018U Issue No.:0 of 2015-11-20**

**Applicant:**

**CORTEM S.p.A.**

**Electrical Apparatus:**

**Via Aquileia 10, I - 34070 Villesse (GO), Italy  
Empty enclosure, series EJBE- and EJBXE-**

### "Scheduled of Limitations" for Ex Components:

- 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 has been performed for a maximum ambient temperature: 60°C.
- According to IEC 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+H<sub>2</sub> 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 IEC 60079-0, IEC 60079-7, IEC 60079-31 standards on Ex e enclosure and according to IEC 60079-0, IEC 60079-1, IEC 60079-31 on Ex d enclosure. A minimum degree of protection IP66 shall be guaranteed according to IEC 60529 standard.