

# 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

#### Ex COMPONENT CERTIFICATE

Certificate No.:

**IECEX EUT 20.0023U** 

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Certificate history:

Status:

Current

Issue No: 0

Date of Issue:

2020-11-30

Applicant:

CORTEM S.p.A.

Via Aquileia n° 10 34070 Villesse (GO)

Italy

Ex Component:

Explosion proof Juncition boxes series EJBC

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection:

Flameproof, Tight dust

Marking:

II 2G Ex db IIC Gb

II 2D Ex to IIIC Db IP66/67

I M2 Ex db I Mb

Approved for issue on behalf of the IECEx Certification Body:

Dionisio Bucchieri

Position:

Head of IECEx CB

Signature:

(for printed version)

Date:

- 1. This certificate and schedule may only be reproduced in full.
- 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 Product Testing Italy S.r.l. Via Cuorgnė n.21 - 10156 Torino Italy



Product Testing



### **IECEx Certificate** of Conformity

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Date of issue:

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Manufacturer:

CORTEM S.p.A. Via Aquileia nº 10 34070 Villesse (GO)

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

Edition:2

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:

IT/EUT/ExTR20.0026/00

Quality Assessment Report:

IT/CES/QAR06.0002/14



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#### Ex Component(s) covered by this certificate is described below:

The empty boxes series EJBC are composed of a body and a cover fixed on it by means of screws.

Between body and cover there is a gasket for dust ingress protection (degree IP66/67). On the body's wall and on the cover there are variable NPT or ISO threaded holes for cable glands, stopping boxes, and other interface components for control and signalling. All boxes are provided with blind holes for their mounting.

The boxes can be also provided with glass windows.

The EJBC series are manufactured in copper free aluminium alloys EN AB 43000 or EN AB 44100 or EN AB 42000 according to UNI EN 1676. The EJBCX series are manufactured in stainless steel AISI 303, AISI 304, AISI 316, AISI 316L.

#### **SCHEDULE OF LIMITATIONS:**

The flameproof joints of the enclosures are not intended to be repaired.

The pressure in case of internal explosion doesn't exceed 12,7 bar.

The accessories used for cable entries and for closing unused openings shall be certified according to IEC 60079-0, EN 60079-1 and IEC 60079-31. A minimum degree of protection IP66/IP67 shall be guaranteed according to IEC 60529 standard.

Minimum ambient temperature:

- -40°C for all versions of empty enclosures with or without glass windows;
- -60°C for all versions of empty enclosures without glass windows;

Maximum service temperature of the empty enclosures:

- +100 °C for all versions of empty enclosures with or without glass windows;
- +150 °C for empty enclosures of group II and III, without glass windows.

According to IEC 60079-1 annex D, the content of the Ex component enclosure equipment may be placed in any arrangement, provided that:

for group I an area of at least 20% of each cross-sectional area remains free;

for group IIC an area of at least 40% of each cross-sectional area remains free.

#### Annex:

EJBC Comp COC ANNEX\_.pdf



#### **IECEx Certificate of Conformity**



EPT.20.REL.02/2013056 dated 2020-11-29

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Annex to certificate: IECEX EUT 20.0023 U ISSUE	nnex to certificate:	IECEx EUT 20.0023 U Issue
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#### **Product variants**

The characteristics of empty boxes series EJBC are codified according to the following schema:

EJBC-		
		Code of the series (EJBCX for the stainless-steel versions)
		SIZE: <b>45 - 5</b>
		HEIGH: BLANK for standard, B for low height
		Not relevant for explosion protection
	TR	Not relevant for explosion protection
		Not relevant for explosion protection

#### Warning label

For Equipment without standard painting: "Potential electrostatic charging hazards"

#### **Routine tests**

Overpressure tests at 19,1bar (for minimum T amb -60°C) or at 17,1 bar (for minimum T amb - 40°C), according to § 15.2.3.2 of EN/IEC 60079-1 standard, must be carried out on each enclosure.

<sup>&</sup>quot;Empty enclosure with component certificate".

<sup>&</sup>quot;Use screws of quality A2-70 with tensile strength of at least 700 N/mm2".