4120

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 FIDI 25.0003U**	Page 1 of 3	Certificate history:
Status:	**Current**	Issue No: 0	
Date of Issue:	2025-02-20		
Applicant:	**CORTEM S.p.A.** Via Aquileia 10 I - 34070 Villesse **Italy**		
Ex Component:	Empty enclosure for control and signalling equipment Series EJB-.. , EJBX.. , EJBT-.. and AQS-1		

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 enclosure 'db'; Protection by enclosure 'tb'**
Marking:	**Ex db I Mb** **Ex db IIB Gb** or **Ex db IIB+H2 Gb** **Ex tb IIIC Db**

Approved for issue on behalf of the IECEx Certification Body:

Marino Kelava

Fiditas d.o.o. ZAGREB

Position:

Certification Signatory

Signature:
(for printed version)

Marino Kelava

Date:
(for printed version)

2025-02-20

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 www.iecex.com or use of this QR Code.

Certificate issued by:

Fiditas Ltd
Slavka Tomerlina 44
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Croatia

Fiditas
explosion safety solutions

IECEx Certificate of Conformity

Certificate No.: **IECEx FIDI 25.0003U**

Date of issue: 2025-02-20

Issue No: 0

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

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 component 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 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2022 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

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 component listed has successfully met the examination and test requirements as recorded in:

Test Report:

HR/FIDI/ExTR25.0002/00

Quality Assessment Report:

IT/CES/QAR06.0002/18

IECEx Certificate of Conformity

Certificate No.: **IECEx FIDI 25.0003U**

Date of issue: 2025-02-20

Issue No: 0

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

The EJB-.. empty enclosures series have the body and the cover made in aluminium alloy (EJB and EJBT) or stainless steel (EJBX) and are in Ex db I (stainless steel only), Ex db IIB, Ex d IIB+H2 and Ex tb IIIC execution. The EJB-.. series is available in two executions:

- with external flange for series EJB-..;

- with internal flange for model AQS-1.

They can be equipped with control-signal operators series M-0.. certified as components with separate certificate (CESI 01 ATEX 025U / IECEx CES 14.0030U) and pilot lights Ex-d M-0487 (CESI 00 ATEX 060U / IECEx CES 11.0030U) mounted on the cover or on the enclosure wall and with circular or rectangular transparent tempered glass windows sealed on the cover.

Further description is given in the Annexe of this certificate.

SCHEDULE OF LIMITATIONS:

- The accessories used for cable entries and for closing unused openings shall be certified according to IEC 60079-0, IEC 60079-1 and IEC 60079-31. A minimum degree of protection IP66/67 shall be guaranteed according to IEC 60529 standard.

- The empty enclosures shall be used in the following ambient temperature range:

- from -20 °C up to +60 °C: all versions of empty enclosures for Group I (made in stainless steel only), Group IIB, IIB+H2 and Group IIIC;
- from -40 °C up to +60 °C: of empty enclosures EJBX-8 for Group I, Group IIB, IIB+H2 and Group IIIC
- from -40 °C up to +70 °C: all versions of empty enclosures for Group IIB, IIB+H2 and Group IIIC with polycarbonate pilot lights;
- from -60 °C up to +70 °C all versions of empty enclosures (types EJBX-8 excluded) for Group IIB, IIB+H2 and Group IIIC without polycarbonate pilot lights.
- from -60 °C up to +100 °C: all versions of empty enclosures (types EJB-01, AQS-1 and EJBX-8 excluded) for Group IIB and Group IIIC with or without glass windows sealed on the cover and without control-signal operators.

In all cases, if control-signal operators are installed, they must be suitable for the temperature assigned to the enclosure.

- Maximum service temperature of the empty enclosures:

- +100 °C for all versions of empty enclosures with control-signal operators and windows.
- +150 °C for empty enclosures of Group II and III, without control-signal operators and windows.

- The service temperature range of the components installed into the enclosures shall be taking into account.

- The minimum distance between flameproof flanged joint of the enclosure and external obstacle should be:

- 20 mm for IIB execution:
- 30 mm for IIB+H2

- 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 Groups IIB and IIB+H2 an area of at least 40% of each cross-sectional area remains free.

Annex:

IECExFIDI25.0003U Cortem enclosure Annex1-issue0.pdf

1. **Product description** (continued)

Gaskets between cover and body flanged joint and for all other accessories are made in silicon and they guarantee the protection degree IP66 while IP67 for enclosures without control-signal operators only.

The flanged joint between the body of EJB-.. empty enclosures series and the covers are fixed with quality A2-70 stainless steel screws.

The walls of the enclosures can be drilled and threaded with maximum size and maximum number of hubs as specified in the manufacturer documents annexed. Each enclosure is provided with internal and external earthing screw or bolt and an internal bottom plate for equipment mounting.

Rated ambient temperature range:

The empty enclosures shall be used in the following ambient temperature range:

- from -20°C up to +60°C: all versions of empty enclosures for Group I (made in stainless steel only), Group IIB, IIB+H2 and Group IIIC.
- from -40°C up to +60°C : for empty enclosures EJBX-8 for Groups I, Group IIB, IIB+H2 and Group IIIC
- from -40°C up to +70°C: all versions of empty enclosures for Group IIB, IIB+H2 and Group IIIC with polycarbonate pilot lights.
- from -60°C up to +70°C all versions of empty enclosures (types EJBX-8 excluded) for Group IIB, IIB+H2 and Group IIIC without polycarbonate pilot lights.
- from -60°C up to +100°C: all versions of empty enclosures (types EJB-01, AQS-1 and EJBX-8 excluded) for Group IIB and Group IIIC with or without glass windows sealed on the cover and without control-signal operators.

In all cases, if control-signal operators are installed, they must be suitable for the temperature assigned to the enclosure.

Ingress protection:

IP66 (with operators installed)
IP66/67 (without operators installed)

Caution and Warning label:

"Use screws of quality A2-70 with tensile strength of at least 700 N/mm2."
"Empty enclosure with component certificate"

For products complete with external coating in non-metallic material with a thickness:

- >0.2 mm for IIB+H2 execution or
- >2 mm for IIB execution.

"Warning – Potential electrostatic charging hazard – for cleaning use only a damp cloth"

Model identification:

Aluminium alloy enclosures		Stainless steel enclosures
EJB series	EJBT series	EJBX series
AQS-1	/	/
EJB-01	EJBT0	EJBX-01
/	/	EJBX-01B
EJB-1	EJBT1	EJBX-1
EJB-2	EJBT2	EJBX-2
/	EJBT2CB	/
/	EJBT2C	/
EJB-3	EJBT3	EJBX-3
EJB-3B	EJBT3B	EJBX-3B
EJB-4	EJBT4	EJBX-4
EJB-4B	EJBT4B	EJBX-4B
EJB-45	EJBT45	EJBX-45
EJB-45B	EJBT45B	EJBX-45B
EJB-48BA	/	/
EJB-5	EJBT5	EJBX-5
EJB-5B	EJBT5B	EJBX-5B
EJB-503	/	/
EJB-55	EJBT55	EJBX-55
EJB-55B	EJBT55B	EJBX-55B
EJB-55C	/	/
EJB-6	EJBT6	EJBX-6
EJB-6B	EJBT6B	EJBX-6B
EJB-6BB	/	/
EJB-7	/	EJBX-7
EJB-7B	/	/
/	/	EJBX-8
/	/	EJBX-8B
/	/	EJBX-8BB