



[1] **EU – TYPE EXAMINATION CERTIFICATE**

[2] Component Intended for use on/in an Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU.

[3] EU-Type Examination Certificate Number: **FIDI 25 ATEX 0001U**

Issue: **0**

[4] Product: **Empty enclosure for control and signalling equipment**

Type: **Series EJB-.. , EJBX.. , EJBT-.. and AQS-1**

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

[6] Address: **Via Aquileia 10, I - 34070 Villesse (GO) Italy**

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

[8] FIDITAS Ltd., Notified Body number 2829 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 product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II of the Directive.

The examination and test results are recorded in confidential Report No: **FIDI 25 CR 006**

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

EN IEC 60079-0:2018

EN 60079-1:2014

EN 60079-31:2014

except in respect of those requirements listed at item 18 of the Schedule.

[10] The sign 'U' is placed after the certificate number. It 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 EU-Type Examination Certificate relates only to the design, examination and test of the specified product in accordance with Annex III. Further requirements of the Directive apply to the manufacturing process and supply of this products. These are not covered by this certificate.

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



I M2 Ex db I Mb

II 2G Ex db IIB Gb or II 2G Ex db IIB+H2 Gb

II 2D Ex tb IIIC Db

Our ref.: 24.CRT.201

Date: 20.02.2025



Fiditas d.o.o.
ZAGREB

FIDITAS Ltd.
Certification department
Approved:

Marino Kelava
Marino Kelava, M.E.Eng.

[13] SCHEDULE**[14] EU - TYPE EXAMINATION CERTIFICATE No.: FIDI 25 ATEX 0001U****[15] Description of product**

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 type 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.

The enclosures can be also equipped with drain and breather valves ECD-2... (CESI 01 ATEX 081U, IECEx CES 14.0016U).

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



[16] Confidential Report No. FIDI 25 CR 006**[16.1] Routine testing**

The manufacturer shall carry out the routine overpressure test with the static method (clause 15.2.3.2 of EN 60079-1 standard), at:

- 12.3 bar on all EJB and EJBX enclosures for minimum ambient temperature until -20 °C.
- 14.9 bar on all EJB enclosures for minimum ambient temperature until -40 °C.
- 15.2 bar on EJBX enclosures up to size 7 for minimum ambient temperature until -40 °C.
- 15.5 bar EJBX-8 enclosures for minimum ambient temperature until -40 °C
- 16.4 bar on all EJB enclosures for minimum ambient temperature until -60 °C.
- 17.0 bar on all EJBX enclosures for minimum ambient temperature until -60 °C.

[17] Schedule of Limitations

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

[18] Essential Health and Safety Requirements

Covered by the conformity with harmonized standards listed under item 9.

[19] Drawings and Documents

Title:	Drawing No.:	Rev. level:	Date:
Technical note	A4-8493	0	11-09-2024
Drawing EJBX including sizes EJBX-8/8B/8BB	A3-8478	0	11-09-2024
Drawing EJB series and AQS model	A3-8491	0	11-09-2024
Safety, maintenance and mounting instructions	F-499	0	11-09-2024
Drawing internal and external screws	A4-4129	2	25-01-2013
Drawing cylindrical threads	A4-4951	2	11-09-2024
Drawing tapered threads	A4-4952	2	29-01-2013