



# 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](http://www.iecex.com)

### Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx INE 13.0083U**

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Certificate history:

Status: **Current**

Issue No: 4

Issue 3 (2020-07-06)

Issue 2 (2016-05-23)

Issue 1 (2014-12-05)

Issue 0 (2014-03-17)

Date of Issue: 2021-12-20

Applicant: **BARTEC F.N. S.R.L.**  
Via M. Pagano, 3  
I - 20090 Trezzano sul Naviglio (MI)  
**Italy**

Ex Component: Enclosures type EJB..

*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: **db and tb**

Marking: Ex db IIB+H2 Gb  
Ex tb IIIC Db IP66

Approved for issue on behalf of the IECEx  
Certification Body:

Position:

Signature:  
(for printed version)

Date:

**Thierry HOUEIX**



**Ex Certification Officer**

Signé électroniquement  
Digitally signed by  
Thierry HOUEIX  
Ex Certification Officer  
Délégué Certification

**2021-12-20**

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Institut National de l'Environnement Industriel et des Risques  
BP n2 / Parc Technologique ALATA  
F-60550 Verneuil-en-Halatte  
France



controlling risks |  
for sustainable development



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Date of issue: 2021-12-20

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Manufacturer: **BARTEC F.N. S.R.L.**  
Via M. Pagano, 3  
I - 20090 Trezzano sul Naviglio (MI)  
**Italy**

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 Reports:

[FR/INE/ExTR13.0083/03](#)

[FR/INE/ExTR13.0083/04](#)

Quality Assessment Report:

[IT/CES/QAR09.0003/14](#)



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

Metallic enclosures of different sizes made in aluminum, stainless steel, carbon steel or cast iron for Group IIB+H2 and IIIC.

These enclosures can have a blind cover or provided with a glass window or GUBW cover windows.

The enclosures can be fitted with tubes (maximum diameter 3" and maximum length 200 mm) in order to assembly two flameproof enclosures separated by a certified sealing fitting in accordance with the drawing specified in the descriptive documents.

These Ex components get the degrees of protection IP66 in accordance with IEC 60529.

## SCHEDULE OF LIMITATIONS:

- For enclosure without GUBW cover:
  - Ambient temperature = -60°C to +80°C
  - Operating temperature
    - Without windows = -60°C to +200°C
    - With windows = -60°C to +120°C
- For enclosure with GUBW cover:
  - Ambient temperature
    - Over size 31 = -20°C to +80°C
    - Up to size 31 = -60°C to +80°C
  - Operating temperature
    - Over size 31 = -20°C to +120°C
    - Up to size 31 = -60°C to +120°C
- The non-transmission tests have been performed for a maximum ambient temperature of +80°C.
- The screws used for the assembly of the various parts of explosion-proof enclosures must be of quality higher or equal to 450 MPa, or 600 MPa for version XL at ambient temperature lower than -20°C.
- The width of the flameproof joints is superior to those specified in tables of IEC 60079-1 standard. For any repair, contact the manufacturer.
- During the installation, the user will take into consideration that the windows of the enclosures EJB underwent only a shock corresponding to an energy of a low risk at 2J (not applicable for GUBW windows).
- The content of the Ex component enclosure equipment may be placed in any arrangement provided that an area of at least 40% of each cross-sectional area remains free to permit unimpeded gas flow and, therefore, unrestricted development of an explosion.



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## **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

### Purpose of the Issue n°4:

- Change of the name and address of the applicant and manufacturer
- Update of the marking plates

### Purpose of the Issue n°3:

- Added possibility to drill bottom of enclosures.
- Added possibility to mount GUB cover with window (GUBW) on EJB cover.
- Added version XL (stainless steel light version).
- Standardized materials of screws for coupling covers.
- Update of standard IEC 60079-0:2017.
- Update of manufacturer document.

### Purpose of the Issue n°2:

- Application of the standard IEC 60079-1:2014.
- Modification of the hearthing system.
- Possibility of manufacturing the faces of enclosures to have a flat part for a better installation of the cable glands.

### Purpose of the Issue 1:

- Extension of the maximum ambient temperature from +60°C to +80°C
- Application of the standard IEC 60079-31:2013

## **Annex:**

[IECEX INE 13.0083U-04\\_Annex.pdf](#)



# IECEX Certificate of Conformity

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Annex: IECEx INE 13.0083U-04\_Annex.pdf

## **PARAMETERS RELATING TO THE SAFETY**

None

## **MARKING**

Marking has to be readable and indelible; it has to include the following indications:

- BARTEC FN (\*\*)
- I – 20090 Trezzano Sul Naviglio
- EJB\*\*\*
- IECEx INE 13.0083U
- (Serial number)
- Ex db IIB+H2 Gb
- Ex tb IIIC Db
- IP66
- EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE.

(\*) The type is completed by numbers and/or letters in accordance with the manufacturing variations.

(\*\*) Optional Brands "BARTEC FEAM" or "BARTEC NASP" can be added in the marking with the sentence "manufactured by BARTEC FN"

## **ROUTINE EXAMINATIONS AND TESTS**

Each component defined above has to have successfully passed the following individual tests before delivery

### For using at ambient temperature down to -20°C:

In accordance with clause 16.1 of the IEC 60079-1 standard each apparatus defined above has to have successfully passed, before delivery, an overpressure test of a period comprised between 10 and 60 seconds under:

- 9.9 bar for enclosures with internal volume  $\leq 12 \text{ dm}^3$ .
- 11.9 bar for enclosures with internal volume  $13 \text{ dm}^3 \leq V \leq 45 \text{ dm}^3$ .
- 13.2 bar for enclosures with internal volume  $46 \text{ dm}^3 \leq V \leq 175 \text{ dm}^3$ .

### For using at ambient temperature down to -40°C:

In accordance with clause 16.1 of the IEC 60079-1 standard each apparatus defined above has to have successfully passed, before delivery, an overpressure test of a period comprised between 10 and 60 seconds under:

- 12.5 bar for enclosures with internal volume  $\leq 12 \text{ dm}^3$ .
- 15.3 bar for enclosures with internal volume  $13 \text{ dm}^3 \leq V \leq 45 \text{ dm}^3$ .
- 15.9 bar for enclosures with internal volume  $46 \text{ dm}^3 \leq V \leq 175 \text{ dm}^3$ .

### For using at ambient temperature down to -60°C:

In accordance with clause 16.1 of the IEC 60079-1 standard each apparatus defined above has to have successfully passed, before delivery, an overpressure test of a period comprised between 10 and 60 seconds under:

- 15 bar for enclosures with internal volume  $\leq 12 \text{ dm}^3$ .
- 16.2 bar for enclosures with internal volume  $13 \text{ dm}^3 \leq V \leq 45 \text{ dm}^3$ .
- 16.8 bar for enclosures with internal volume  $46 \text{ dm}^3 \leq V \leq 175 \text{ dm}^3$ .

### For conduit tube 3":

In accordance with clause 16.1 of the IEC 60079-1 standard each apparatus defined above has to have successfully passed, before delivery, an overpressure test of a period comprised between 10 and 60 seconds under 22 bar.