

# 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 INE 13.0085U

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Certificate history:

Status:

Current

Issue No: 1

Issue 0 (2019-02-19)

Date of Issue:

2021-12-22

Applicant:

BARTEC F.N. S.R.L.

Via M. Pagano, 3

I - 20090 Trezzano sul Naviglio (MI)

Italy

Ex Component:

Empty Enclosures type EJC\*\*

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 IIC Gb Ex tb IIIC Db IP66

The complete marking is specified in Annex.

Approved for issue on behalf of the IECEx Certification Body:

Position:

Date:

Signature:

(for printed version)

Thierry HOUEIX

Ex Certification Officer

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

2021-12-22

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.

The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

INERIS
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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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 60079-0:2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

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/ExTR13.0085/00 FR/INE/ExTR13.0085/01

Quality Assessment Report:

IT/CES/QAR09.0003/14



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

Empty metallic enclosures made in aluminium alloy, stainless steel, carbon steel or cast iron of different sizes.

These enclosures can have a blind cover or provided of a glass window directly sealed on the cover or screwed on it.

The enclosures can be fitted with tubes 3" 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:**

- The enclosures without window have been assessed and tested to be used in the minimum operating/ambient temperatures of -60°C.
- The enclosures with windows have been assessed and tested to be used in the range of the operating temperatures from -60°C to + 130°C for enclosures type EJC08 and EJC14 and from -20°C to +130°C for enclosures EJC21 to EJC63.
- During the installation, the user will take into consideration that the windows of the enclosures underwent only a shock corresponding to an energy of a low risk at 2J.
- The glass window resist to a thermal choc test at 180°C.
- The cover must be fixed with screws in stainless steel AISI 304 or 316 with quality higher or equal to A2-70 or A4-70 in accordance with the requirements of the manufacturer.

### Additional schedule of limitations when protected by "Ex db":

- The non-transmission tests have been performed for a maximum ambient temperature of +60°C.
- The flameproof joints and gaps have different values from those specified in the tables of the IEC 60079-1 standard, for any repair to contact the manufacturer.
- Maximum number of apertures, their maximum sizes and their positions are defined in the drawings listed in the certification file DOSSIER 14-232 rev 0
- 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.
- In accordance with the clause D.3.8 of the IEC 60079-1 standard, the marking may be omitted by the manufacturer when the Ex component manufacturer is also intended to be the holder of the equipment certificate.



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

For the issue n°01:

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

### Annex:

IECEx INE 13.0085U-01\_Annex.pdf



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Annex: IECEx INE 13.0085U-01\_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 (1)
- I 20090 Trezzano Sul Naviglio (MI)
- EJC\*\* (2)
- IECEx INE 13.0085U
- (Serial number)
- Ex db IIC Gb
- Ex tb IIIC Db
- IP66
- WARNING: EMPTY ENCLOSURE WITH EX COMPONENT CERTIFICATE
- (1) Optional Brands "BARTEC FEAM" or "BARTEC NASP" can be added in the marking with the sentence "manufactured by BARTEC FN"
- (2) The type is completed by numbers and/or letters in accordance with the manufacturing variations.

### **ROUTINE EXAMINATIONS AND TESTS**

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

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

- 11.6 bar for enclosures type EJC08 and EJC14 (with or without windows).
- 14.9 bar for enclosures from type EJC21 to EJC51(with or without windows).
- 13.5 bar for enclosures type EJC 61 and EJC63 (with or without windows).

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

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

- 14.9 bar for enclosures type EJC08 and EJC14 (with or without windows).
- 16.7 bar for enclosures from type EJC21 to EJC51 (without windows).
- 17.4 bar for enclosures type EJC61 and EJC63 (without windows).

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

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

- 16.5 bar for enclosures type EJC08 and EJC14 (with or without windows).
- 17.9 bar for enclosures from type EJC21 to EJC51 (without windows).
- 18.8 bar for enclosures type EJC61 and EJC63 (without windows).

#### For conduit tube 3":

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