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 INE 12.0023U**

Page 1 of 4

Certificate history:
Issue 2 (2018-01-30)
Issue 1 (2015-07-03)
Issue 0 (2012-07-03)

Status: **Current**

Issue No: 3

Date of Issue: 2022-01-06

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

Ex Component: Junction Boxes type GUA..., S... or EAHF...

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 or eb and tb**

Marking: Ex db IIC Gb or Ex eb IIC Gb
Ex tb IIIC Db IP66

Approved for issue on behalf of the IECEx Certification Body: **Thierry HOUEIX**

Position: **Ex Certification Officer**

Signature: (for printed version)

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

Date: **2022-01-06**

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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 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 60079-0:2011 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

IEC 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

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 Reports:

FR/INE/ExTR12.0020/02 FR/INE/ExTR12.0020/03

Quality Assessment Report:

IT/CES/QAR09.0003/14

IECEx Certificate of Conformity

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

These empty enclosures made in light alloy, stainless steel or cast iron consist in a body closed by a screwed lid.

The maximum number of apertures, their sizes and their positions are stipulated on the descriptive documents.

They get the degrees of protection IP66 in accordance with IEC 60529 standard.

SCHEDULE OF LIMITATIONS:

In accordance with IEC 60079-0, IEC 60079-7 and IEC 60079-31:

- The enclosures have been assessed and tested to be used for a range of operating/ambient temperatures from -60°C to +130°C.

In accordance with IEC 60079-1:

- The enclosures have been assessed and tested to be used for a minimum operating/ambient temperature down to -60°C. No maximum operating/ambient temperature defined due to the fact that these enclosures are provided only with threaded flameproof joints.

- For Group IIC, 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.

- The width of the flameproof joints is superior to that specified in the tables of the IEC 60079-1 standard.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Issue n°3 :

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

Issue n°2:

- Introduction of cast iron material
- Application of the new standards IEC 60079-1 : 2014 and IEC 60079-7 : 2015

Issue n°1:

- Introduction of the type of protection “Ex e” for gas application
- Application of the new standard IEC 60079-31:2013

Annex:

IECEx INE 12.0023U-03_Annex.pdf

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Certificate No.: IECEx INE 12.0023U

Issue No.: 3

Annex: IECEx INE 12.0023U-03_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

None.

MARKING

Marking has to be readable and indelible. In accordance with_D.3.8 of IEC 60079-1 the Ex component enclosure shall be permanently marked internally. It has to include the following indications:

- BARTEC FN (**)
- I – 20090 Trezzano sul Naviglio (MI)
- GUA… or S… or EAHF…**(*)**
- IECEx INE 12.0023U
- (Serial number)
- Ex db IIC Gb or Ex eb IIC Gb
- Ex tb IIIC Db IP66
- CABLE ENTRY : (Type and size)
- 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

The following routine apply only for “db” enclosures

For the light alloy version for ambient -20°C:

In accordance with clause 16.2 of the IEC 60079-1 standard, the equipment defined above is exempted of routine test in owing to the fact that it has undergone a static type test at 4 times the reference pressure under 34 bar.

For the light alloy version for ambient -60°C and for sizes 14, 24, 16, 26, 36, 17 and 27:

In accordance with clause 16.2 of the IEC 60079-1 standard, the equipment defined above is exempted of routine test in owing to the fact that it has undergone a static type test at 4 times the reference pressure under 55 bar.

For the light alloy version for ambient -60°C and for sizes 37, 47, 59, 69 and EAHF:

In accordance with clause 16.1 of the IEC 60079-1 standard, each pieces of equipment defined above has to have successfully passed, before delivery an overpressure test of a period comprised between 10 and 60 seconds under 20.7 bar.

For the stainless steel and cast-iron version for all sizes:

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

- 12.8 bar for operating temperature down to -20°C
- 20.7 bar for operating temperature down to -60°C