



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 14.0056U**

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Certificate history:

Status: **Current**

Issue No: 1

[Issue 0 \(2014-12-12\)](#)

Date of Issue: 2020-12-09

Applicant: **COELBO**
Via S.Margherita, 83
I-20861 Brugherio (MB)
Italy

Ex Component: Enclosures series CCF... or CCV...

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 or IIB+H₂ or (H₂) Gb
Ex tb IIIC Db
IP65 or IP66

Approved for issue on behalf of the IECEx
Certification Body:

Thierry HOUËIX

Position:

Ex Certification Officer

Signature:
(for printed version)

Date:

2020-12-09

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:

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: **COELBO**
Via S.Margherita, 83
I-20861 Brugherio (MB)
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 Report:

[FR/INE/ExTR14.0069/01](#)

Quality Assessment Report:

[IT/CES/QAR10.0009/10](#)



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

Range of flameproof enclosures made in Aluminium light alloy with a window specified in manufacturer's descriptive documentation. These enclosures can be fitted with the command and signalling units covered by the certificate IECEx INE 14.0023U, with draining and breathing devices & bulkheads covered by the certificate IECEx INE 14.0045U. Other operators could be fitted on the enclosure if there are assessed by the IECEx ExCB/ExTL handling the end product evaluation.

These Ex components get the degree of protection IP66 or IP65 in accordance with IEC 60529.

SCHEDULE OF LIMITATIONS:

The enclosures with windows have been assessed for a maximum operating temperature at +180°C.

The non-transmission tests have been performed for a maximum ambient of +60°C.

The enclosures have been assessed for a minimum operating and ambient temperature of:

- -50°C for enclosures with gas group IIB+H₂ with internal volume lower or equals to 80 500 cm³;
- -40°C for enclosures with gas group IIB+H₂ with internal volume greater than 80 500 cm³;
- -50°C for enclosures with gas group (H₂) and dust group IIIC.

The dimensions of flameproof joints are different from the values specified in the tables of the IEC 60079-1 standard. For any repair, contact the manufacturer.

The enclosures have been tested on impact test at 7 J on the metallic parts and 4 J on the windows.

The content of the Ex component enclosure equipment may be placed in any arrangement provided that an area of at least 40% (for the Gas Group IIB+H₂) or 20% (for the Gas Group IIB) of each cross-sectional area remains free.

Maximum number of apertures, their maximum sizes and their positions are defined in the drawings N° 7115, 7121, 7122, 7123 and 7124.

The markings may be omitted if the enclosure 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:

Standard update

- IEC 60079-0 : 2017
- IEC 60079-1 : 2014
- IEC 60079-31 : 2013

Annex:

[IECEx INE 14.0056U-01_Annex.pdf](#)



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Issue No.: 01

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Annex: IECEx INE 14.0056U-01_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

None

MARKING

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

- COELBO
- I - 20861 Brugherio
- CCF... or CCV... (*)
- IECEx INE 14.0056U
- (Serial number)
- Ex db IIB or IIB+H₂ or (H₂) Gb
- Ex tb IIIC Db
- IP66 or IP65
- EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE
- CAUTION – USE FASTENERS WITH YIELD STRESS \geq 450 MPa.

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

ROUTINE EXAMINATIONS AND TESTS

Enclosures from 800cm³ to 4700cm³:

In accordance with clause 16.1 of the IEC 60079-1 standard, an overpressure test of a period comprised between 10 and 60 seconds under:
10.2 bar for -20°C.
13.4 bar for -50°C.

Enclosures from 4701cm³ to 17700cm³:

In accordance with clause 16.1 of the IEC 60079-1 standard, an overpressure test of a period comprised between 10 and 60 seconds under
11.6 bar for -20°C.
14.6 bar for -50°C.

Enclosures from 17701cm³ to 80500cm³:

In accordance with clause 16.1 of the IEC 60079-1 standard, an overpressure test of a period comprised between 10 and 60 seconds under
13.7 bar for -20°C.
16.7 bar for -50°C.

Enclosures from 80501cm³ to 161000cm³:

In accordance with clause 16.1 of the IEC 60079-1 standard, an overpressure test of a period comprised between 10 and 60 seconds under
15.6 bar for -20°C.
17.7 bar for -40°C and -50°C