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 14.0023U**

Certificate history:
Issue 0 (2014-05-13)

Status: **Current**

Issue No: 1

Date of Issue: 2020-12-09

Applicant: **COELBO**
Via Santa Margherita, 83
20861 Brugherio (MB)
Italy

Ex Component: Command and Signaling units type RS/RX

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: **Ex db and tb**

Marking: Ex db I Mb
Ex db IIC or IIB+H2 or IIB 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)

Digitally signed by Thierry HOUEIX

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

INERIS
controlling risks for sustainable development

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Date of issue: 2020-12-09 Issue No: 1

Manufacturer: **COELBO**
Via Santa Margherita, 83
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/ExTR14.0020/01

Quality Assessment Report:

IT/CES/QAR10.0009/10

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

The command unit is made in the following way: body made either in chrome/nickel plated brass (CW614N) or stainless steel (AISI 316L), ring made in chrome/nickel plated brass (CW614N), stainless steel (AISI 316L) or polycarbonate and a command shaft in stainless steel (AISI 316L).
Signaling units, on the contrary, are provided with no command shaft and are complete with a tempered glass sealed with sealing resin.
Command and signaling units provide versions of different controls among which knobs, pushbuttons, key commands, mushroom's buttons, rotary release, key release, etc.
These Ex components get the degrees of protection IP66 in accordance with IEC 60529.

SCHEDULE OF LIMITATIONS:

The Ex component is intended to be used in an ambient temperature range from -60°C or -50°C to +80°C.
The Ex component is intended to be used in an service temperatures range from:

- -60°C to +180°C for component without cemented joint,
- -60°C to +180°C for component with SARATOGA resin,
- -50°C to +180°C for component with SYSTEM SIL 400 resin.

The non-transmission tests have been performed for a maximum ambient temperature of +80°C.
The widths of the flameproof joints are greater than those specified in tables of IEC 60079-1 standard.
These components shall be fitted on enclosures in accordance the following maximum volumes:

- Maximum volume for Group IIB+H2: 160.6 dm^3
- Maximum volume for Group IIC: 62.9 dm^3

The components with width of cylindrical joints less than 26 mm shall be fitted on enclosures with a maximum volume of 2 dm^3.
The overpressure type tests have been performed at 20 bar. And the impact test performed at 7 J.
For group I, the user will take into consideration that the Ex component underwent only a shock corresponding to an energy of a low risk, and the non-metallic parts haven't been submitted to resistance to chemical agents tests.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
For the issue 01:

- Update of technical documentation
- Application of standard IEC 60079-0: 2017, IEC 60079-1: 2014, IEC 60079-31: 2013.

Annex:

IECEx INE 14.0023U-01_Annex.pdf

IECEx Certificate of Conformity

Certificate No.: IECEx INE 14.0023U

Issue No.: 01

Annex: IECEx INE 14.0023U-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
- 20861 Brugherio (MB) - ITALY
- RX*** - RS***
- IECEx INE 14.0023U
- (Batch Number)
- Ex db I Mb
- Ex db IIC or IIB+H2 or IIB Gb
- Ex tb IIIC Db
- IP66

The marking can be reduced as follows:

- COELBO
- RX*** - RS***
- IECEx INE 14.0023U
- Ex db / tb
- IP66

(*) The type is completed by a letter and numbers in accordance with the manufacturer instructions.

ROUTINE EXAMINATIONS AND TESTS

In accordance with clause 16.2 of the IEC 60079-1 standard, the operators are exempted of routine test due to the fact it has undergone a static type test under 20 bar.