



- (2) **Component intended to be incorporate into equipment or protective system intended for use in explosive atmospheres
Directive 94/9/EC**

(1) **EC-TYPE EXAMINATION CERTIFICATE**

- (3) Number of the EC type examination certificate: **INERIS 14ATEX9005U**

- (4) Component:

ENCLOSURES TYPE CCF... or CCV...

- (5) Manufacturer: **COELBO srl**

- (6) Address: **Via Santa Margherita 83
I-20861 Brugherio (MB)**

- (7) This component and any other acceptable alternative of this one are described in the annex of this certificate and the descriptive documents quoted in this annex.

- (8) INERIS, notified body and identified under number 0080, in accordance with article 9 of Council Directive 94/9/EC 23rd March 1994, and accredited by COFRAC under number 5-0045 for certification of products and services (scope of accreditation available on the website www.cofrac.fr), certifies that this component fulfils the Essential of Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, described in appendix II of the Directive.

The rules of certification are available on the website www.ineris.fr.

The examinations and the tests are consigned in report No 028428/14.


- (9) The respect of the Essential Health and Safety Requirements is ensured by:

- conformity with:

EN 60079-0 : 2012/A11:2013
EN 60079-1 : 2007
EN 60079-31 : 2009

- specific solutions adopted by the manufacturer to meet the Essential Health and Safety Requirements described in the descriptive documents.

- (10) Sign U, when it is placed following the Number of the EC type examination certificate, indicates this one should not be wrongly considered as an EC type examination certificate delivered for equipment or protective system. This partial certification may be used as a basis for the certification of equipment or protective system.
- (11) This EC type examination certificate relates only to the design, examination and tests of the specified component in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system, these are not covered by this certificate.
- (12) The marking of the component will have to contain:

 II 2 GD

Verneuil-en-Halatte, 2014.12.11



The Chief Executive Officer of INERIS
By delegation
T. HOUeix
Ex Certification Officer

(13)

ANNEX

(14)

EC TYPE EXAMINATION CERTIFICATE N° INERIS 14ATEX9005U

(15) DESCRIPTION OF COMPONENT

Range of flameproof enclosures made in Aluminium light alloy EN AB/AC 43100 AlSi10.

These enclosures can be fitted with the command and signaling units covered by the certificate INERIS 14ATEX9009U and window specified in manufacturer's descriptive documentation.

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

MARKING

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

COELBO srl

I-20861 Brugherio (MB)

CCF... or CCV... (*)

INERIS 14ATEX9005U

(Serial number)

(Year of construction)

⊕ Ex II 2 GD

Ex d IIB or IIB+H₂ or II(H₂) Gb

Ex tb IIIC Db IP66 or IP65

WARNINGS: EMPTY ENCLOSURE WITH Ex COMPONENT CERTIFICATE.

(*) Type is completed by numbers and /or letters corresponding to manufacturing variations.

Marking may be carried out in the language of the country of use.

The component has also to carry the marking normally stipulated by its construction standards.

ROUTINE EXAMINATIONS AND TESTS

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

Enclosures from 800cm³ to 4700cm³:

In accordance with clause 16.1 of the EN 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 EN 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 EN 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 160600cm³:

In accordance with clause 16.1 of the EN 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

(16) DESCRIPTIVE DOCUMENTS

The descriptive documents quoted hereafter constitute the technical documentation of the component, subject of this certificate.

- Certification file COELBO 34 rev.1 of 2014.11.28 (27 rubrics) signed on 2014.11.28

(17) SCHEDULE OF LIMITATION

The enclosures have been assessed to be used for an operating temperature range from -50°C to $+180^{\circ}\text{C}$.

The non transmission tests have been performed for a maximum ambient of $+60^{\circ}\text{C}$.

For group IIB+H₂, the minimum ambient temperatures are:

- -50°C for enclosures except 16, 16A and 16B versions;
- -40°C for enclosures 16, 16A and 16B versions.

The versions 16, 16A, 16B are allowed for Hydrogen, II(H₂), with minimum ambient temperature of -50°C .

The width of the flameproof joints is greater than the values specified in the tables of EN 60079-1 standard.

The enclosures have been tested on impact test at 7J on the metallic parts and 4J 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% of each cross-sectional area remains free.

The cover and the body shall be fixed by stainless steel screws quality A2-70 or better.

The other conditions are stipulated in the instructions.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

The respect of the Essential Health and Safety Requirements is ensured by:

- Conformity to the standards quoted in clause (9).
- All provisions adopted by the manufacturer and defined in the descriptive documents.