

- (2) **Equipment and protective systems intended for use in potentially explosive atmospheres
Directive 94/9/EC**

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

- (3) Number of the EC type examination certificate: **INERIS 02ATEX0094 X**

- (4) Protective system or equipment :

THERMOSTAT TYPE T...

(The points are replaced by number and letter corresponding to manufacturing variation)

- (5) Manufacturer: **COELBO**
(6) Address: **Via Margherita, 8 3
20047 Brugherio (MI)
ITALY**

- (7) This protection system or equipment 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) The INERIS, notified body and identified under number 0080, in accordance with article 9 of Council Directive 94/9/EC of the 23rd March 1994, certifies that this protection system or equipment fulfils the Essential of Health and Safety Requirements relating to the design and construction of equipment and protection systems intended for use in potentially explosive atmospheres, described in appendix II of the Directive.

The examinations and the tests are consigned in official report N°P45144/02.

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


- conformity with:

EN 50 014 of June 1997 + A1 and A2
EN 50 018 of November 2000
EN 50281-1-1 of September 1998 + A1

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

- (10) Sign X, when it is placed following the Number of the EC type examination certificate, indicates that this equipment and protection system is subjected to the special conditions for safe use, mentioned in the annex of this certificate.

- (11) This EC type examination certificate relates only to the design, examination and tests of the specified equipment or protective system 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 equipment or the protection system will have to contain:

 II 2 GD

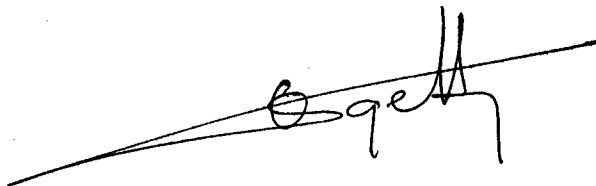
EEx d IIB + H₂ T6 or T5
IP65 T85°C or T100°C

Verneuil-en-Halatte, 2002 12 20



X. LEFEBVRE

Engineer at the Laboratory of Certification of ATEX
Equipment



Director of the Certifying Body,
By delegation
B. PIQUETTE
Deputy manager of Certification



(13)

ANNEX

(14)

EC TYPE EXAMINATION CERTIFICATE N° INERIS 02ATEX0094 X

(15) **DESCRIPTION OF THE EQUIPMENT OR THE PROTECTION SYSTEM**

The enclosure made in light alloy consists of a body closed by a cover fixed by screws. This thermostat fitted with a tube in brass is intended to control the temperature of gaz or fluid.

This enclosure presents the degrees of protection IP65 according to European standard EN 60 529.

PARAMETERS RELATING TO THE SAFETY

Maximum supply voltage	:	400 Vac or 250 Vdc
Rated current	:	10 A
Maximum frequency	:	60 Hz
Maximum power dissipated	:	3 W
Maximum temperature of gaz or fluid	:	150°C


MARKING

Marking must be readable and indelible; it must comprise the following indications:

A- Thermostat used in an ambient temperature 40°C :

COELBO
20047 Brugherio (MI)
ITALY

T... (a)
INERIS 02ATEX0094 X
(Serial number)
(Year of construction)

 II 2 GD
EEx d IIB + H₂ T6
T.max gaz or fluid : 150°C
IP65 T85°C

DO NOT OPEN WHEN ENERGIZED

B- Thermostat used in an ambient temperature 60°C :

COELBO
20047 Brugherio (MI)
ITALY

T...**(a)**
INERIS 02ATEX0094 X
(Serial number)
(Year of construction)

Ex II 2 GD
EEx d IIB + H₂ T5
T.max gaz or fluid : 150°C
IP65 T100°C
T.amb : -20°C to 60°C

DO NOT OPEN WHEN ENERGIZED

- (a)** The points are replaced by number and letter corresponding to manufacturing variation.

The whole marking can be carried out in the language of the country of use.

The protection apparatus or system must also carry the marking normally envisaged by the standards of construction which relate to it.

ROUTINE EXAMINATIONS AND TESTS

According to 16.2 of standard EN 50 018, the apparatus fitted with a tube without welding is exempted of routine test in view of the fact that it has undergone a static type test at 4 times the reference pressure under 30 bar.

According to 16.1 of standard EN 50 018, each example of the tube with welding defined above must have successfully passed before delivery an overpressure test, of a period comprised between 10 and 60 secondes under 20 bar.

(16) DESCRIPTIVE DOCUMENTS

The technical report is composed of the documents quoted hereafter, constituting the descriptive file of the apparatus, object of this certificate.

- | | |
|--|----------------------|
| - Safety note (2 pages - italian version)) | signed on 2002.10.21 |
| - Safety note (2 pages - english version)) | signed on 2002.10.21 |
| - Drawing n° 4451/2 rev.2 | signed on 2002.11.22 |
| - Drawing n° 4452/2 rev.2 | signed on 2002.11.22 |
| - Drawing n° 4453/2 rev.2 | signed on 2002.11.22 |
| - Drawing n° 4454/2 rev.2 | signed on 2002.11.22 |
| - Drawing n° 4455/2 rev.2 | signed on 2002.11.22 |
| - Drawing n° 4456/2 rev.2 | signed on 2002.11.22 |
| - Drawing n° 4458/2 rev.2 | signed on 2002.11.22 |
| - Drawing n° 4459 | signed on 2002.07.16 |
| - Drawing n° 4920 | signed on 2002.11.22 |

(17) SPECIAL CONDITIONS FOR SAFE USE

- The maximum gas or fluid controlled temperature must not exceed 150°C.
- The screws used for the assembly of the cover must be of quality higher or equal to A2 class 70.
- When the thermostat is used in ambient temperature of 60°C the user must choose a cable and a gasket suitable with the temperature of 85°C.
- The surface of the different joints shall be covered with grease, for example silicone and cable entries shall be of a degree of protection at least IP65.

For use in potentially explosive atmospheres due to combustible dust:

- User shall perform a regular cleaning of material to limit dust layers on the material sides.

The special conditions are defined in the instructions.

(18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH

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

- conformity to the European standards EN 50 014, 50 018 and EN 50 281-1-1.
- the whole of the provisions adopted by the manufacturer and described in the descriptive documents.

ADDITION

(3) INERIS 02ATEX0094X/01

(4) THERMOSTAT Type T...

(5) Made by COELBO

(15) **PURPOSE OF THE ADDITION**

- Application of new standards EN 60079-0 : 2006, EN 60079-1 : 2004, EN 61241-0 : 2006 and EN 61241-1 : 2004.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are unchanged.

MARKING

The marking is modified as follows:

A - Thermostat used in ambient temperature 40 °C

COELBO


1 - 20047 Brugherio (MI)

T...(*)

INERIS 02ATEX0094X

(Serial number)

(Year of construction)

 II 2 GD

Ex d IIB + H2 T6

Ex tD A21 IP65 T85 °C

T.max gas or fluid : 150 °C

WARNING : DO NOT OPEN WHEN ENERGIZED

(*) The points are replaced by number and letter corresponding to manufacturing variation.

B - Thermostat used in ambient temperature 60 °C

COELBO


I - 20047 Brugherio (MI)

T...(*)

INERIS 02ATEX0094X

(Serial number)

(Year of construction)

 II 2 GD

Ex d IIB + H2 T5

Ex tD A21 IP65 T100 °C

T.amb: -20 °C to 60 °C

T.max gas or fluid : 150 °C

T.cable : 85 °C

WARNING : DO NOT OPEN WHEN ENERGIZED

(*) The points are replaced by number and letter corresponding to manufacturing variation.

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

The protective system or equipment has also to carry the marking normally stipulated by its construction standards.

ROUTINE EXAMINATIONS AND TESTS

The routine examinations and tests are modified as follows :

- In accordance with clause 16.1 of the EN 60079-1 standard, each tube with welding to have successfully passed the following individual tests before delivery an overpressure test of a period comprised between 10 and 60 seconds under 20 bar.
- In accordance with clause 16.2 of the EN 60079-1 standard, the equipment fitted with a tube without welding, 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 30 bar

(16) DESCRIPTIVE DOCUMENTS

The descriptive document quoted hereafter constitutes the technical documentation describing the modification of the equipment, subject of this present addition.

- Technical file n° COELBO 14 rev. 0 of 2007.11.30 signed on 2007.11.30

(17) * SPECIAL CONDITIONS FOR SAFE USE

The special conditions are modified as follows :

- The surface of the different joints shall be covered only with a silicone grease.
- The thickness of the dust layers on the equipment sides should be less than to 5 mm.

(18) **ESSENTIAL SAFETY AND HEALTH REQUIREMENTS**

The respect of the Essential Health and Safety Requirements is completed as follows:


- Conformity to the standards EN 60 079-0, EN 60 079-1, EN 61241-0 and EN 61241-1.
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2007 12 06


S. MAJGER

Project Manager at the ATEX
Equipment Evaluation Laboratory




Director of the Certifying Body,
By delegation
T. HOUEIX
Certification Officer
Certification Division