



- (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 13ATEX0039X**

- (4) Equipment or protective system:

THERMOSTAT TYPE T...

- (5) Manufacturer: **COELBO Srl**
(6) Address: **Via S.Margherita, 83
I-20861 Brugherio (MB)**

- (7) This equipment or protective system 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 of the 23rd March 1994, certifies that this equipment or protective system 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 annex II of the Directive.

The examinations and the tests are consigned in report No 026725/13.

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

- conformity with:

EN 60079-0 : 2009 / EN 60079-0 : 2012
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 X, when it is placed following the Number of the EC type examination certificate, indicates that this equipment and protective 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 protective system will have to contain:

 II 2 GD or I M2

Verneuil-en-Halatte, 2013.10.04




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

(13)

ANNEX

(14)

EC TYPE EXAMINATION CERTIFICATE N° INERIS 13ATEX0039X

(15)

DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

Thermostats series T.. consist of a flameproof enclosures including capillary bulb and thermoregulator elements. The enclosures are made in light alloy EN AB-44100 for using in groups IIB+H2 and IIIC. This equipment is also available in stainless steel AISI316L or brass OT58B for using in groups I, IIB+H2 and IIIC.

The enclosures get the degrees of protection IP65 in accordance with the IEC 60529 standard.

PARAMETERS RELATING TO THE SAFETY

Maximum supply voltage	:	250 Vac or 250 Vdc
Maximum intensity	:	16 A
Nominal frequency	:	50 / 60 Hz
Maximum dissipated power	:	7.7 W
Maximum temperature of the controllable fluid or gas	:	150°C


These enclosures are intended to be used in the following ranges of ambient temperature, in accordance with the temperature class:

- From -20°C to + 40°C for T6/T85°C.
- From -50°C to + 40°C for T6/T85°C.
- From -20°C to + 60°C for T5/T100°C.
- From -50°C to + 60°C for T5/T100°C

MARKING

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


A- Thermostats in stainless steel, brass or light alloy:

COELBO Srl
I-20861 Brugherio (MB)
T... (1)
INERIS 13ATEX0039X
(Serial number)
(Year of construction)
 II 2 GD
Ex d IIB+H2 T(2) Gb
Ex tb IIIC T(2) Db IP65
(2) ≤ Tamb ≤(2)
T.cable = 85° C (3)
Use only screws with minimum of quality A2-70

WARNING: DO NOT OPEN WHEN ENERGIZED

- (1) Type is completed by numbers and /or letters corresponding to manufacturing variations.
- (2) Indication of the temperature class and range of the ambient temperatures as specified in the parameters relative to the safety.
- (3) Indication only for Tamb ≥ +60° C

B- Thermostats in stainless steel or brass :

COELBO Srl
I-20861 Brugherio (MB)
T... (1)
INERIS 13ATEX0039X
(Serial number)
(Year of construction)
 II 2 GD or I M2
Ex d I Mb
Ex d IIB+H2 T(2) Gb
Ex tb IIIC T(2) Db IP65
(2) ≤ Tamb ≤(2)
T.cable = 85° C (3)
Use only screws with minimum of quality A2-70

WARNING: DO NOT OPEN WHEN ENERGIZED

- (1) Type is completed by numbers and /or letters corresponding to manufacturing variations.
- (2) Indication of the temperature class and range of the ambient temperatures as specified in the parameters relative to the safety.
- (3) Indication only for Tamb ≥ +60° C

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

In accordance with clause 16.1 of EN 60079 -1 standard, each tube with welding must have successfully passed before delivery, an overpressure test, of a period comprised between 10 and 60 seconds under:

- 8.7 bar for ambient temperature down to -20° C
- 13.3 bar for ambient temperature down to -50° C

In accordance with clause 16.1 of EN 60079-1 standard, the equipment fitted with a tube without welding must have successfully passed before delivery, an overpressure test, of a period comprised between 10 and 60 seconds under 13.3 bar for ambient temperature down to -50° C

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 23.2 bar for ambient temperature down to -20° C.

(16) DESCRIPTIVE DOCUMENTS

The descriptive document quoted hereafter constitutes the technical documentation of the equipment, subject of this certificate.

Certification file COELBO 27 rev.3 (10 rubrics)

dated and signed on 2013.09.20

(17) SPECIAL CONDITIONS FOR SAFE USE

- The gap and diametrical clearances are less than the values specified in the tables of the standard EN 60079-1.
- The width of the flamepath joints is superior to those specified in tables of EN 60079-1 standard.

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.