IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx INE 13.0053X	issue No.:0	Certificate history:
Status:	**Current**		
Date of Issue:	**2013-10-14**	Page 1 of 3	

Applicant: **COELBO S.r.l.**
Via Santa Margherita, 83
I – 20861 Brugherio (MB)
Italy

Electrical Apparatus: **Thermostats series T...**
Optional accessory:

Type of Protection: **d and tb**

Marking: Ex d I Mb
Ex d IIB+H2 T6 or T5 Gb
Ex tb IIIC T85°C or T100°C Db

Approved for issue on behalf of the IECEx Certification Body: Thierry HOUEIX

Position: Ex Certification Officer

Signature:
(for printed version)

Date: 2013-10-14

ATMOSPHERES EXPLOSIVES Certifié IECEx INERIS IECEx Certified EXPLOSIVE ATMOSPHERES

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 the Official IECEx Website.

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

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Certificate No.: IECEx INE 13.0053X

Date of Issue: **2013-10-14** Issue No.: **0**

Manufacturer: **COELBO S.r.l.**
Via Santa Margherita, 83
I – 20861 Brugherio (MB)
Italy

Additional Manufacturing location (s):

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 electrical apparatus 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 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*This Certificate **does not** indicate compliance with electrical 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/ExTR13.0051/00

Quality Assessment Report:

IT/CES/QAR10.0009/03

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Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

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.

CONDITIONS OF CERTIFICATION: YES as shown below:

The gaps and diametrical clearances of the different flamepath are less than the values specified in the tables of the IEC 60079-1 standard.
The width of the flamepath joints is superior than the values specified in the tables of IEC 60079-1 standard.

Annex: IECEx INE 13.0053X_Annex.pdf

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Annexe: IECEx INE 13.0053X_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

Maximum supply voltage	:	250 Vac or 250 Vdc
Maximum intensity	:	16 A
Maximum dissipated power	:	7.7 W
Nominal frequency	:	50/60Hz

Maximum temperature of the controllable fluid or gas: 150°C

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

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

- COELBO Srl
- I – 20861 Brugherio (MB)
- T... **(1)**
- IECEx INE 13.0053X
- (Serial number)
- 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 temperature class and range of ambient temperatures as specified in the parameters relating to the safety.

(3) Indication only for Tamb +60°C

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B- Thermostats in stainless steel or brass versions:

- COELBO Srl
- I – 20861 Brugherio (MB)
- T... **(1)**
- IECEx INE 13.0053X
- (Serial number)
- 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 temperatutre class and range of ambient temperature as specified in the parameters relating to the safety.

(3) Indication only for Tamb +60°C.

ROUTINE EXAMINATIONS AND TESTS

In accordance with clause 16.1 of IEC 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 IEC 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 IEC 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.