

## 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 14.0007U		Issue No: 1	Certificate history: Issue No. 1 (2016-04-01)	
Status:	Current		Page 1 of 4	Issue No. 0 (2014-03-17)	
Date of Issue:	2016-04-01				
Applicant:	<b>THERMO ENGINEERING S.r.I</b> Via Giuseppina, 19 I - 26030 Malagnino (CR) <b>Italy</b>				
Equipment: Optional accessory:	Connection Head type TE-00041				
Type of Protection:	db and tb				
Marking:	Ex db IIC Gb Ex tb IIIC Db IP66				
Approved for issue on behalf of th Certification Body:	ne IECEx	Thierry HOUEIX			
Position:		Ex Certification Office	r		
Signature: (for printed version)					
Date:					
<ol> <li>This certificate and schedule may only be reproduced in full.</li> <li>This certificate is not transferable and remains the property of the issuing body.</li> <li>The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.</li> </ol>					
Certificate issued by:					
11					

Institut National de l'Environnement Industriel et des Risques BP n2 Parc Technologique ALATA F-60550 Verneuil-En-Halatte France





Issue No: 1

Page 2 of 4

Certificate No:	IECEX INE 14.0007U
Date of Issue:	2016-04-01
Manufacturer:	THERMO ENGINEERING S.r.I Via Giuseppina, 19 I - 26030 Malagnino (CR) 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 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"	
IEC 60079-31 : 2013 Edition:2	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/ExTR14.0007/01

Quality Assessment Report:

FR/INE/QAR11.0009/04



Certificate No:

IECEx INE 14.0007U

Issue No: 1

Date of Issue:

2016-04-01

Page 3 of 4

Schedule

#### EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

This connection head is made in stainless steel. This Ex component gets the degree of protection IP66 in accordance with IEC 60529.

This connection head can be fitted with the adaptors defined in the drawing TE-00041 C and/or the plugs defined in the drawing TE-00041 D.

CONDITIONS OF CERTIFICATION: NO



Certificate No:

IECEx INE 14.0007U

Date of Issue:

2016-04-01

Issue No: 1

Page 4 of 4

#### DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1:

- changing of the minimum ambient temperature from -50°C to -60°C;

- update from the IEC 60079-1:2007 to the IEC 60079-1:2014 standard; - update from the IEC 60079-31:2008 to the IEC 60079-31:2013 standard;

Annex:

IECEx INE 14.0007U-01\_Annex.pdf



Certificate No .:

IECEx INE 14.0007U

Issue No.: 1 Page 1 of 1

### Annexe: IECEx INE 14.0007U-01\_Annex.pdf

## MARKING

Marking has to be readable and indelible. In accordance with D.3.8 of IEC 60079-1 the Ex component enclosure shall be permanently marked internally. It has to include the following indications:

- THERMO ENGINEERING S.r.I
  - I 26030 Malagnino (CR)
- TE-00041
- IECEx INE 14.0007U
- Ex db IIC Gb
- Ex tb IIIC Db IP66
- Cable entry : See instructions
- EMPTY ENCLOSURE WITH EX COMPONENT CERTIFICATE

## **SCHEDULE OF LIMITATIONS:**

- The width of the flameproof joints is greater than the values specified in tables of IEC 60079-1 standard.
- This housing is to accommodate a terminal block or head mounted transmitter 43 mm in diameter that can be mounted using M4x0,7 screws as indicated in the manufacturers documents.

### In accordance with D.3.10 of IEC 60079-1:

- The content of the Ex component enclosure may be placed in any arrangement provided that an area of at last 40% of each cross-sectional area remains free.
- The maximum number of entries, their size and their positions are stipulated in the instructions.
- The ambient temperature and operating temperature ranges of the Ex component are:
  - -40°C to 200°C when it is fitted with O-Ring in Viton.
  - -60°C to 200°C when it is fitted with O-Ring in Silicone.

## **ROUTINE EXAMINATIONS AND TESTS**

In accordance with clause 16.2 of the IEC 60079-1 standard, the Ex component defined above is exempted from routine test due to the fact that a static pressure test has been performed for -60°C at 4 times the reference pressure under 46.7 bar.