



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 CES 12.0006X** issue No.:1
 Status: **Current**
 Date of Issue: **2015-07-13** Page 1 of 4

Certificate history:
 Issue No. 1 (2015-7-13)
 Issue No. 0 (2012-5-7)

Applicant: **ATOS S.p.A.**
 Via alla Piana, 57
 I - 21018 Sesto Calende (VA)
 Italy

Electrical Apparatus: **Explosion proof inductive transducers, type ETHA-4/.**
 Optional accessory:

Type of Protection: **Flameproof enclosures 'd'; Dust ignition protection by enclosure "t"**

Marking: **Ex d IIC T6 or T5 or T4 Gb
 Ex tb IIIC T85°C or T100°C or T135°C Db
 IP66/67**

Approved for issue on behalf of the IECEX Certification Body: **Mirko Balaz**

Position: **Head of IECEX CB**

Signature: *(for printed version)*

Mirko Balaz
 13-7-2015

Date:

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:

CESI
 Centro Elettrotecnico
 Sperimentale Italiano S.p.A.
 Via Rubattino 54
 20134 Milano
 Italy

CESI

CESI S.p.A.

Testing & Certification Division
 Business Area Certification
 II/Responsabile

(Roberto Piccin)

PAD_B5018113 (2129914) - USO AZIENDALE

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(Roberto Piccin)



IECEX Certificate of Conformity

Certificate No.: IECEx CES 12.0006X

Date of Issue: 2015-07-13

Issue No.: 1

Page 2 of 4

Manufacturer: **ATOS S.p.A.**
Via alla Piana, 57
I - 21018 Sesto Calende (VA)
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 : 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:

IT/CES/ExTR12.0002/00

IT/CES/ExTR12.0002/01

Quality Assessment Report:

IT/CES/QAR10.0003/04



IECEx Certificate of Conformity

Certificate No.: IECEx CES 12.0006X

Date of Issue: 2015-07-13

Issue No.: 1

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The inductive transducers type ETHA-4/* are used separately for detect a position or coupling with explosion proof solenoids type OZA-T for detect the positions of the spools of directional or flow control proportional valves.

Electrical characteristics:

- Supply voltage: ± 15 VDC stabilized
- Max current consumption: 28 mA
- Max power consumption: < 1 W
- Ambient temperature range: from -40°C to $+40^{\circ}\text{C}$, and from -40°C to $+70^{\circ}\text{C}$.
- Degree of protection: IP 66/67 (IEC 60529).

For further information see Annex.

CONDITIONS OF CERTIFICATION: YES as shown below:

- The flamepaths are specified in the manufacturer drawings. For information regarding the dimensions of the flameproof joints the manufacturer shall be contacted.
- For the selection of connecting cable with operating temperature suitable for the installation conditions of equipment refer to the manufacturer safety instruction.
- The conditions of the installation of the equipment are included within the safety instructions. For a safe use these assembling instructions are to be followed precisely.



IECEx Certificate of Conformity

Certificate No.: IECEx CES 12.0006X

Date of Issue: 2015-07-13

Issue No.: 1

Page 4 of 4

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

Variation 1.1

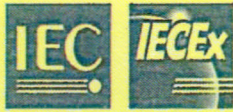
The explosion proof inductive transducer, originally assessed in compliance with IEC 60079-0: 2007, IEC 60079-1: 2007 and IEC 60079-31:2008 have been re-assessed on the basis of the standard IEC 60079-0 : 2011 6th edition and IEC 60079-31:2013 2nd edition.

Variation 1.2

Name plate modification. Dimensions and contents are being revised to allow the multi-certification of the solenoid.

Variation 1.3

Identification code updating. The identification codes of the equipment have been revised in order to use the same code for all certification scheme.



Prot: B5018113

Annex to certificate: IECEx CES 12.0006X Issue No.1 of 2015-07-13

Applicant: ATOS S.p.A.
via alla Piana, 57; I - 21018 Sesto Calende (VA), Italy

Electrical Apparatus: Explosion proof inductive transducers, type ETHA-4/.

Description of equipment

The inductive transducers type ETHA-4/* are used separately for detect a position or coupling with explosion proof solenoids type OZA-T for detect the positions of the spools of directional or flow control proportional valves. The following versions with the relevant model code are available:

Table with 2 columns: Model code, Description. Rows include ETHA-4 /1, ETHA-4 /2, ETHA-4 /4, ETHA-4 /8, and ETHA-4 /C with their respective descriptions.

Max. ambient temperature, temperature class, surface temperature, connecting cable temperature

Table with 5 columns: Model, Max ambient temperature, Temperature class, Surface temperature, Connecting cable temperature. Rows show specifications for ETHA-4/ models with footnotes [1] and [2].

[1] Coupled to mechanical parts that not influencing the temperature class.
[2] Coupled to proportional transducer type OZA-T subject of a separate certification.

Cable entries

The cable entry devices used on the enclosure shall be suitably certified according to the applicable standards. For the equipment with dust protection 'tb' the accessories used for cable entries and for unused holes shall guarantee the degree of protection IP66/67 according to IEC 60529 standard.

Warning label

"Warning - do not open when energized"
"For the correct selection of connecting cable temperatures see safety instructions"

PAD B5018113 (2129913) - USO AZIENDALE

The Company

ATOS s.p.a.
21018 Sesto Calende / Italia
via alla Piana 57

fac simile

Hereby declares the conformity to IECEx scheme, of the Products

Prodotto / Product	Tipo / Type
TRASDUTTORE INDUTTIVO INDUCTIVE TRANSDUCER	ETHA-4/*

Protection mode

Ex d IIC T6, T5, T4 Gb
Ex tb IIIC T85°C, T100°C, T135°C Db
IP66/67

IECEx certificate n°.

IECEx CES 12.0006X

In accordance with the following IEC standards

IEC 60079-0 / 2011 (6th ed.)

IEC 60079-31 / 2013 (2nd ed.)

IEC 60079-1 / 2007 (6th ed.)

CESI

protocollo

B5010845

allegato al documento

B5010840