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# Schema di certificazione



## CERTIFICATE



#### SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE

[2] Equipment or Protective System intended for use in potentially explosive atmospheres Directive 2014/34/EU

Supplementary EU-Type Examination Certificate number: [3]

#### **CESI 02 ATEX 014X / 11**

[4] Product:

Solenoids (standard types) OA-\*; OAB-\*; OZA-A\*; OZA-T\*; OZAB-A\*; MZA-A-\*; MZAB-A-\*; OA/O-\*; OAB/O-\*; OA/WP-\*; OAB/WP-\*; OAB/O/WP-\* (others types available)

Manufacturer: [5] ATOS S.p.A.

[6] Address: Via alla Piana, 57 – 21018 Sesto Calende (VA) - Italy

This supplementary certificate extends EC-Type Examination Certificate CESI 02 ATEX [7] 014X to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

[8] CESI, notified body n. 0722 in accordance with Article 17 of the Directive 2014/34/EU of the Parliament and Council of 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report n. EX-B9020226.

Compliance with the Essential Health and Safety Requirements has been assured by [9] compliance with:

#### EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-31:2014

except in respect of those requirements listed at item 18 of the Schedule.

If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

This EU-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. 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 protective system shall include the following:

Ex db IIC T6, T4, T3 Gb

II 2 D Ex tb IIIC T85°C, T135°C, T200°C Db

This certificate may only be reproduced in its entirety and without any change, schedule included.

Date 15.10.2019 - Translation issued the 15.10.2019

Prepared Vito Giampietro li Vito

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Verified Mirko Balaz

Approved Roberto Piccin

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Testing & Certification Division Business Area Certification

> sponsabile Piccin)

ATEX B6003477-2-EN

#### [14] SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 014X / 11

#### [15] Description of the variation to the product

<u>Variation 1.1:</u> The explosion proof solenoids, originally assessed in compliance with EN 60079-0:2012/A11:2013 and EN 60079-1: 2007 have been re-assessed on the basis of the standard EN IEC 60079-0: 2018 and EN 60079-1:2014.

<u>Variation 1.2:</u> Ex marking concerning the flameproof enclosure protection type has been updated to "db" for EPL Gb, according to latest edition of standard EN 60079-1:2014. Ex marking on the nameplate has been updated.

<u>Variation 1.3:</u> Integration of explosion proof solenoid with position transducer type E-THA-\* certified separately by CESI 02 ATEX 015X. The solenoid, where position transducer is integrated as accessory are called OZA-T-\*; OZAX-T-\*; OZAXS-T-\*; OZAXW-T-\* as better described in the technical documentation.

#### Description of equipment

The explosion proof solenoids in subject are used to drive direction control, flow control and pressure control valves. In the following are summarized the models and the relevant description.

The following version with the relevant model code is available:

Standard version:

OA-\*, OZA-A-\*, MZA-A-\*, OZA-T-\* (with inductive sensor type E-THA-\* integrated)

Standard version, T.Amb. -60°C:

OAB-\*, OZAB-A-\*, MZAB-A-\*

Standard version, horizontal cable entrance:

OA/O-\*, OZA-A-\*/O, MZA-A-\*/O

Standard version, horizontal cable entrance, T.Amb. -60°C:

OAB/O-\*, OZAB-A-\*/O, MZAB-A-\*/O

Standard version, with protect manual override:

OA/WP-\*, OZA-A-\*/WP

Standard version, with protect manual override, T.Amb. -60°C:

OAB/WP-\*, OZAB-A-\*/WP

Standard version, with protect manual override, horizontal cable entrance:

OA/O/WP-\*, OZA-A-\*/O/WP

Standard version, with protect manual override, horizontal cable entrance, T.Amb. -60°C:

OAB/O/WP-\*, OZAB-A-\*/O/WP

Stainless steel version:

OAX/WP-\*, OAKX/WP-\*; OZAX-A-\*/WP; MZAX-A-\* OZAX-T-\* (with inductive sensor type E-THA-\* integrated)

Stainless steel version T.Amb. -60°C:

OABX/WP-\*, OABKX/WP-\*; OZABX-A-\*/WP; MZABX-A-\*

#### [14] SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 014X / 11

Stainless steel version with horizontal cable entrance: OAX/O/WP-\*, OAKX/O/WP-\*; OZAX-A-\*/O/WP; MZAX-A-\*/O

Stainless steel version with horizontal cable entrance T.Amb. -60°C: OABX/O/WP-\*, OABKX/O/WP-\*; OZABX-A-\*/O/WP; MZABX-A-\*/O

External stainless-steel version with standard internal parts: **OAXS/WP-\***, **OAXS/WP-\***, **OZAXS-A-\*/WP**, **MZAXS-A**, **OZAXS-T-\*** (with inductive sensor type E-THA-\* integrated)

External stainless steel version with standard internal parts, T.Amb. -60°C: OABXS/WP-\*, OABKXS/WP-\*, OZABXS-A-\*/WP, MZABXS-A-\*

External stainless-steel version with standard internal parts, horizontal cable entrance: OAXS/O/WP-\*, OAKXS/O/WP-\*, OZAXS-A-\*/O/WP, MZAXS-A-\*/O

External stainless steel version with standard internal parts, horizontal cable entrance, T.Amb. -60°C: OABXS/O/WP-\*, OZABXS-A-\*/O/WP, MZABXS-A-\*/O

Internal stainless-steel version, external standard:

OAXW/WP-\*, OAKXW/WP-\*, OZAXW-A-\*/WP, MZAXW-A, OZAXW-T-\* (with inductive sensor type E-THA-\* integrated)

Internal stainless steel version, external standard, T.Amb. -60°C: OABXW/WP-\*, OZABXW-A-\*/WP, MZABXW-A-\*

Internal stainless-steel version, external standard, horizontal cable entrance: OAXW/O/WP-\*, OAKXW/O/WP-\*, OZAXW-A-\*/O/WP, MZAXW-A-\*/O

Internal stainless steel version, external standard, horizontal cable entrance, T.Amb. -60°C: OABXW/O/WP-\*, OABKXW/O/WP-\*, OZABXW-A-\*/O/WP, MZABXW-A-\*/O

Low power version 3,5W:

OA/3-\*, OA/3/O-\*, OA/3/WP-\*, OA/3/O/WP-\*, OAX/3/WP-X, OAX/3/O/WP-X, OAXS/3/WP-\*, OAXS/3/O/WP-\*, OAXW/3/O/WP-\*

Low power version 3,5W, T.Amb. -60°C:

OAB/3-\*, OAB/3/O-\*, OAB/3/WP-\*, OAB/3/O/WP-\*, OABX/3/WP-X, OABX/3/O/WP-X, OABXS/3/WP-\*, OABXX/3/O/WP-\*, OABXW/3/O/WP-\*

#### **Electrical characteristics**

All electrical characteristics remain unchanged, are shown below:

Rated voltage:

12 / 220 Vdc, 12 / 240 Vac (depending of the models)

Rated power:

3,5 / 35 W (depending of the models)

Ambient temperature range:

from  $-60^{\circ}$ C /  $-40^{\circ}$ C to  $+40^{\circ}$  /  $+45^{\circ}$ C /  $+50^{\circ}$ C /  $+55^{\circ}$ C /  $+60^{\circ}$ C /  $+70^{\circ}$ C

Degree of protection:

IP 66/67 (EN 60529)

#### [14] SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 014X / 11

Relation between the max ambient temperature, temperature class, surface temperature, connecting cable temperature:

Solenoid type	T amb.  Max ambient temperature (°C)	Connecting cable temperature (°C)	Temperature class surface temperatur	
0.4.04./0	OAX/WP, OAX/3/WP	70	90	T4 / T135°C
OA, OA/3, OA/O, OA/3/O, OA/WP, OA/3/WP, OA/O/WP, OA/3/O/WP	OAX/O/WP, OAX/3/O/WP OAXS/WP, OAXS/3/WP OAXS/O/WP, OAXS/3/O/WP OAXW/WP, OAXW/3/WP OAXW/O/WP, OAXW/3/O/WP	45	-	T6 / T85°C
	OAKX/WP	70	130	
	OAKX/O/WP	60	120	T3 / 200°C
	OAKXS/WP	50	110	
	OAKXS/O/WP OAKXW/WP OAKXW/O/WP	45	100	T4 / T135°C
	OZAX-A/WP	70	120	T2 (2000C
OZA-A	OZAX-A/O/WP	55	110	T3 / 200°C
OZA-A/O	OZAXS-A/WP	45	95	
OZA-A/WP OZA-A/O/WP	OZAXS-A/O/WP OZAXW-A/WP OZAXW-A/O/WP	40	90	T4 / T135°C
M7A A	MZAX-A, MZAX-A/O,	70	120	T3 / 200°C
MZA-A	MZAXS-A, MZAXS-A/O,	45	90	T4 / T135°C
MZA-A/O	MZAXW-A, MZAXW-A/O	55	110	T3 / 200°C
074 T	OZAV T OZAVE T OZAVV T	70	120	T3 / T200 °C
OZA-T	OZAX-T, OZAXS-T, OZAXW-T	40	90	T4 / T135 °C
Solenoid type (for Min T.Amb -60°C)		T amb. Max ambient temperature (°C)	Connecting cable temperature (°C)	Temperature class surface temperatur
	OABX/WP, OABX/3/WP	70	90	T4 / T135°C
OAB, OAB/3, OAB/O, OAB/3/O, OAB/WP, OAB/3/WP, OAB/O/WP, OAB/3/O/WP	OABX/O/WP, OABX/3/O/WP OABXS/WP, OABXS/3/WP OABXS/O/WP, OABXS/3/O/WP OABXW/WP, OABXW/3/WP OABXW/O/WP, OABXW/3/O/WP	45	-	T6/T85°C
	OABKX/WP	70	130	
	OABKX/O/WP	60	120	T3 / 200°C
	OABKXS/WP	50	110	1
	OABKXS/O/WP OABKXW/WP OABKXW/O/WP	45	100	T4 / T135°C
	OZABX-A/WP	70	120	T2 /2000C
OZAB-A	OZABX-A/O/WP	55	110	T3 / 200°C
OZAB-A/O	OZABXS-A/WP	45	95	
OZAB-A/WP OZAB-A/O/WP	OZABXS-A/O/WP OZABXW-A/WP OZABXW-A/O/WP	40	90	T4 / T135°C
	MZABX-A, MZABX-A/O,	70	120	T3 / 200°C
MZAB-A MZAB-A/O	MZABXS-A, MZABXS-A/O,	45	90	T4 / T135°C

Detailed characteristics of each solenoid model are reported in the descriptive documents annexed to the certificate.

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#### [14] SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 014X / 11

#### Marking

The equipment shall be marked as follows:



II 2G Ex db HC T6, T4, T3 Gb



II 2D Ex th IIIC T 85°C, T 135°C, T200°C Db

#### 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 EN 60529 standard.

#### Warning label

"Warning - do not open when energized"

"For the correct selection of connecting cable temperatures see safety instructions"

#### [16] Report n. EX-B9020226

#### Routine tests

Solenoids in subject are exempted from overpressure routine test since they have been submitted, with the static method and positive result, to an overpressure test at a pressure corresponding to 4 times reference pressure related to an ambient temperature of -40 °C or -60°C (function of the model).

The actuators are submitted to an individual overpressure test to verify the functionally suitability at the rated operating pressure.

#### [17] Special conditions for safe use

- The flame paths are specified in the manufacturer drawings. For information regarding the dimensions of the flameproof joints the manufacturer shall be contacted.
- The characteristics of the connecting cables and of the accessories used for cable entries shall be suitable for the use in the ambient/operating temperature of the solenoid. For the selection of the operating temperature of the cable depending on the model of the solenoid and the relevant installation and / or operation temperatures, refer to the Safety Instructions provided by the Manufacturer.
- Use screws property class A4-70 UNI 5931 with yield stress ≥ 450MPa.
- Information relating to use, installation, repair and maintenance of the equipment are included within the safety instructions.

#### [18] Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements has been assured by compliance to the following standards:

EN IEC 60079-0:2018

Explosive atmospheres - Part 0: Equipment - General requirements;

EN 60079-1: 2014

Explosive atmospheres – Part 1: Equipment protection by flameproof enclosure "d";

EN 60079-31: 2014

Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t".

## **CESI**

[13] Schedule

#### [14] SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 014X / 11

F101	Descriptive decuments (prot FV P00	20251)		
[19]	Descriptive documents (prot. EX-B90	· ·	J-4-J	25.00.2010
	- Technical Note No. SAS-555-D/1 (2 p	<del>-</del> ·	dated	25.09.2019
	- Drawing No. 6-MZA-230000-I	Rev.2	dated	02.10.2019
	- Drawing No. 6-MZAX-230000-I	Rev.2	dated	07.10.2019
	- Drawing No. 6-MZAXS-230000-I	Rev.2	dated	07.10.2019
	- Drawing No. 6-MZAXW-230000-I	Rev.2	dated	07.10.2019
	- Drawing No. 6-MZAB-100000-I	Rev.1	dated	07.10.2019
	- Drawing No. 6-MZABX-100000-I	Rev.1	dated	07.10.2019
	- Drawing No. 6-MZABXW-100000-I	Rev.1	dated	07.10.2019
	- Drawing No. 6-OA-220000-I	Rev.2	dated	02.10.2019
	- Drawing No. 6-OAX-220000-I	Rev.2	dated	07.10.2019
	- Drawing No. 6-OAXS-220000-I	Rev.2	dated	07.10.2019
	- Drawing No. 6-OAXW-220000-I	Rev.2	dated	07.10.2019
	- Drawing No. 6-OZA-220000-I	Rev.2	dated	03.10.2019
	- Drawing No. 6-OZAT-220000-I	Rev.0	dated	08.10.2019
	- Drawing No. 6-OZATX-220000-I	Rev.0	dated	08.10.2019
	- Drawing No. 6-OZATXS-220000-I	Rev.0	dated	08.10.2019
	- Drawing No. 6-OZATXW-220000-I	Rev.0	dated	08.10.2019
	- Drawing No. 6-OA-220100-I	Rev.1	dated	08.10.2019
	- Drawing No. 6-OAX-220100-I	Rev.1	dated	08.10.2019
	- Drawing No. 6-OA-221500-I	Rev.3	dated	03.10.2019
	- Drawing No. 6-OA-223000-I	Rev.2	dated	02.10.2019
	- Drawing No. 6-OAX-223000-I	Rev.2	dated	07.10.2019
	- Drawing No. 6-OAXW-223000-I	Rev.2	dated	07.10.2019
	- Drawing No. 6-OAB-100000-I	Rev.1	dated	07.10.2019
	- Drawing No. 6-OABX-100000-I	Rev.1	dated	07.10.2019
	- Drawing No. 6-OABXS-100000-I	Rev.1	dated	07.10.2019
	- Drawing No. 6-OZAB-100000-I	Rev.1	dated	07.10.2019
	- Drawing No. 6-OZABX-100000-I	Rev.1	dated	07.10.2019
	- Drawing No. 6-OZABXS-100000-I	Rev.1	dated	07.10.2019
	- Drawing No. 6-OZABXW-100000-I	Rev.1	dated	07.10.2019
	- Drawing No. 6-OAB-103000-I	Rev.1	dated	07.10.2019
	- Drawing No. 6-OABX-103000-I	Rev.1	dated	07.10.2019
	- Drawing No. 6-OABXS-103000-I	Rev.1	dated	07.10.2019
	- Drawing No. 6-OABXW-103000-I	Rev.1	dated	07.10.2019
	- Drawing No. 6-OZAX-120000-I	Rev.2	dated	07.10.2019
	- Drawing No. 6-OZAXW-120000-I	Rev.2	dated	07.10.2019
	- Drawing No. 6-OAB-100050-I	Rev.3	dated	08.10.2019
	- Safety Instructions No. TT-291-D/4 (1.	5 pg.)	dated	25.09.2019
	- EU Declaration of Conformity No. TT	186/9	dated	25.09.2019

One copy of all documents is kept in CESI files.



#### [14] SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 014X / 11

Certificate history

Issue N°	Issue Date	Summary description of variation
11	15/10/2019	Updating standards EN IEC 60079-0:2018, EN 60079-1:2014, protection type "db", Integration of explosion proof solenoid with position transducer type E-THA-*.
10	30/01/2015	Updating standards EN 60079-0:2012/A11:2013, EN 60079-31:2014, multi-certification nameplate, T.amb.: -60°C, constructive variants.
09	15/03/2012	Standard updating
08	19/06/2009	Reduced power
07	16/09/2009	Solenoids models OZA-A; MZA-A
06	04/06/2008	Solenoids models XS* and XW*
05	07/09/2007	Constructive variations, new electrical characteristics.
04	16/02/2007	Constructive variants for horizontal entries.
03	07/02/2007	Constructive variant for low temperature -40°C.
02	12/02/2005	Constructive variations, new electrical characteristics, new models OAX/WP-*, OZAX-A */WP, MZAX-A-* e OAKX/WP*
01	14/06/2003	Constructive variations.
00	27/02/2002	First Issue of the Certificate



## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

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Certificate No.:	IECEx CES 10.0010X	Page 1 of 4	Certificate history:
Status:	Current	Issue No: 3	Issue 2 (2015-01-29) Issue 1 (2012-09-10) Issue 0 (2010-09-14)
Date of Issue:	2019-10-21		
Applicant:	ATOS S.p.A. via alla Piana, 57 I - 21018 Sesto Calende (VA) Italy		
Equipment:	Explosion proof solenoid, series OA-*; OO-*; OA/WP-*; OAB/WP-*; OA/O/WP-*; OA	DAB-*; OZA-A*; OZA-T*; OZAB-A*; MZA-A-*; N AB/O/WP-*	IZAB-A-*; OA/O-*; OAB/
Optional accessory:			
Type of Protection:	Flameproof enclosures 'd'; Dust ignition	protection 't'	
Marking:	Ex db IIC T6 or T4 or T3 Gb		
	Ex tb IIIC T85°C or T135°C or T200°C Db		
	IP 66/67		
Approved for issue of Certification Body:	on behalf of the IECEx	Mirko Balaz	
Position:		Head of IECEx CB	
Signature:			
(for printed version)			
Date:			
			具網際具
2. This certificate is	nd schedule may only be reproduced in full. s not transferable and remains the property of t	the issuing body.	
3. The Status and a	authenticity of this certificate may be verified by	y visiting www.iecex.com or use of this QR Code	

Certificate issued by:

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





Certificate No.: IECEx CES 10.0010X Page 2 of 4

Date of issue: 2019-10-21 Issue No: 3

Manufacturer: ATOS S.p.A.

via alla Piana, 57

I - 21018 Sesto Calende (VA)

Italy

Additional manufacturing locations:

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 equipment 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 60079-0:2017** Explosive atmospheres - Part 0: Equipment - General requirements Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t" Edition:2

This Certificate **does not** indicate compliance with 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 Reports:

Quality Assessment Report:

IT/CES/QAR10.0003/09



Certificate No.: IECEx CES 10.0010X Page 3 of 4

Date of issue: 2019-10-21 Issue No: 3

#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

Explosion proof solenoids series OA-\*; OAB-\*; OZA-A\*; OZA-T\*; OZAB-A\*; MZAB-A-\*; MZAB-A-\*; OA/O-\*; OAB/O-\*; OAB/WP-\*; OA/O/WP-\*; OAB/O/WP-\*.

The explosion proof solenoids in subject are used to drive direction control, flow control and pressure control valves.

#### **Electrical characteristics**

Rated voltage: 12 / 220 Vdc , 12/ 240 Vac (depending of the models).

Rated power: 3,5 / 35 W (depending of the models).

Ambient temperature range: from -60°C / -40°C to +  $40^{\circ}$  / +45°C / +  $50^{\circ}$ C / +55°C /+60°C / +  $70^{\circ}$ C (depending of the model).

Degree of protection: IP 66/67 (IEC 60529).

Details concerning version, model code, short description, min and max T amb, constructional materials, cable temperature, temperature class, surface temperatures and power supply are mentioned in Annexe.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

- The flame paths 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.
- Use screws property class A4-70 UNI 5931 with yield stress ≥ 450MPa.



Certificate No.: IECEx CES 10.0010X Page 4 of 4

Date of issue: 2019-10-21 Issue No: 3

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

#### Variation 3.1:

The explosion proof solenoids, originally assessed in compliance with IEC 60079-0: 2011 and IEC 60079-1: 2007 have been re-assessed on the basis of the standard IEC 60079-0: 2017,  $7^{th}$  edition and IEC 60079-1:2014,  $7^{th}$  edition.

#### Variation 3.2:

Ex marking concerning the flameproof enclosure protection type has been updated to "db" for EPL Gb, according to latest edition of standard IEC 60079-1:2014, 7<sup>th</sup> edition. Ex marking on the nameplate has been updated.

#### Variation 3.3:

Integration of explosion proof solenoid with position transducer type E-THA-\* certified separately by IECEx CES 12.0006X with type of protection "db" and "tb".

The solenoid, where position transducer is integrated as accessory is called OZA\*-T\*:

OZA-T\*: composed by standard materials and E-THA\*-\* transducer

OZAX-T\*: composed by full stainless steel materials and E-THA\*-\* transducer

OZAXS-T\*: composed by external stainless steel materials and E-THA\*-\* transducer

OZAXW-T\*: composed by internal stainless steel materials and E-THA\*-\* transducer

The integration of the explosion proof inductive transducer devices in the solenoid enclosure does not introduce new flameproof joint. Each enclosure maintains its own flameproof joints.

The implementation of the new solenoid models with the inductive transducers ETHA-4/\* provides a modification of the IP joint in the area of the coupling between both enclosures: An O-ring gasket interposed between the shell of the solenoid and the cap of the transducer, replaces the O-ring gasket used on the rotor shaft of the solenoid (used when it is not coupled to the transducer).

The temperature class of the solenoid takes into account the temperature class of the position transducer coupled.

The solenoid models with integrated the inductive transducer maintain the same technical characteristics and supply power than the same solenoid models without the transducer device.

#### Annex:

IECExCES10.0010X Issue 3 ANNEXE - ATOS solenoids.pdf





Prot: B9020746

IECEx CES 10.0010X Issue No.3 of 2019-10-21 Annex to certificate:

Applicant: ATOS S.p.A.

Via alla Piana, 57 – 21018 Sesto Calende (Varese) - Italy

**Electrical Apparatus:** Explosion proof solenoids series OA-\*; OAB-\*; OZA-A\*; OZA-T\*; OZAB-

A\*; MZA-A-\*; MZAB-A-\*; OA/O-\*; OAB/O-\*; OA/WP-\*; OAB/WP-\*;

OA/O/WP-\*; OAB/O/WP-\*

(standard version, see product information for complete model types)

#### **Description of equipment**

The explosion proof solenoids in subject are used to drive direction control, flow control and pressure control valves. In the following are summarized the models and the relevant description.

#### Version, model code and short description

Version	Code	Description
	OA-*	on-off solenoid
	OA/3-*	on-off solenoid - power 3,5 W
Standard	OZA-A-*	proportional solenoid without position transducer
	MZA-A-*	proportional solenoid without position transducer and without manual override
	OZA-T	proportional solenoid with position transducer
Standard	OAB-*	on-off solenoid for Amb.T -60°C
Standard	OAB/3-*	on-off solenoid -power 3,5 W for Amb.T -60°C
Temp. Amb.	OZAB-A-*	proportional solenoid without position transducer for Amb.T -60°C
-60°C	MZAB-A-*	proportional solenoid without position transducer and without manual override for Amb.T - 60°C
	OA/WP-*	on-off solenoid with protected manual override
with protected	OA/3/WP-*	on-off solenoid with protected manual override - power 3,5W
manual override	OZA-A-*/WP	proportional solenoid without position transducer and with protected manual override
with protected	OAB/WP-*	on-off solenoid with protected manual override for Amb.T -60°C
manual override	OAB/3/WP-*	on-off solenoid with protected manual override - power 3,5 W for Amb.T -60°C
Temp. Amb. -60°C	OZAB-A-*/WP	proportional solenoid without position transducer and with protected manual override for Amb.T -60°C
	OA/O-*	on-off solenoid with horizontal cable output
	OA/3/O-*	on-off solenoid with horizontal cable output - power 3,5 W
	OA/O/WP-*	on-off solenoid with protected manual override and horizontal cable output
with horizontal	OA/3/O/WP-*	on-off solenoid with protected manual override, horizontal cable output - power 3,5 W
cable output	OZA-A-*/O	proportional solenoid without position transducer and with horizontal cable output
ouble output	OZA-A-*/O/WP	proportional solenoid without position transducer, with protected manual override and horizontal cable output
	MZA-A-*/O	proportional solenoid without position transducer, without manual override and with horizontal output cable
	OAB/O-*	on-off solenoid with horizontal cable output for Amb.T -60°C
	OAB/3/O-*	on-off solenoid with horizontal cable output - power 3,5 W for Amb.T -60°C
	OAB/O/WP-*	on-off solenoid with protected manual override and horizontal cable output for Amb.T - 60°C
with horizontal cable output	OAB/3/O/WP-*	on-off solenoid with protected manual override, horizontal cable output - power 3,5 W for Amb.T -60°C
Temp. Amb.	OZAB-A-*/O	proportional solenoid without position transducer and with horizontal cable output for Amb.T -60°C
-60°C	OZAB-A-*/O/WP	proportional solenoid without position transducer, with protected manual override and horizontal cable output for Amb.T -60°C
	MZAB-A-*/O	proportional solenoid without position transducer, without manual override and with horizontal output cable for Amb.T -60°C
	OAX/WP-*	stainless steel on-off solenoid – power 8W
	OAX/3/WP-*	stainless steel on-off solenoid – power 3,5W
	OAKX/WP-*	stainless steel on-off solenoid – power 25W
stainless steel	OZAX-A-*/WP	stainless steel proportional solenoid without position transducer
Stanness steel	MZAX-A-*	stainless steel proportional solenoid without position transducer and without manual override
	OZAX-T-*	stainless steel proportional solenoid without position transducer and without manual override
stainless steel	OABX/WP-*	stainless steel on-off solenoid – power 8W for Amb.T -60°C
	OABX/3/WP-*	Stainless steel on-off solenoid — power 3,5W for Amb. I -60°C
Temp. Amb.	OABX/3/WP-* OABKX/WP-*	stainless steel on-off solenoid – power 3,5W for Amb.T -60°C stainless steel on-off solenoid – power 25W for Amb.T -60°C Stainless steel proportional solenoid without position transducer for Amb.T -60°C





Prot: B9020746

IECEx CES 10.0010X Issue No.3 of 2019-10-21 Annex to certificate:

Applicant: ATOS S.p.A.

Via alla Piana, 57 – 21018 Sesto Calende (Varese) - Italy

Explosion proof solenoids series OA-\*; OAB-\*; OZA-A\*; OZA-T\*; OZAB-**Electrical Apparatus:** 

A\*; MZA-A-\*; MZAB-A-\*; OA/O-\*; OAB/O-\*; OA/WP-\*; OAB/WP-\*; OA/O/WP-\*; OAB/O/WP-\*

(standard version, see product information for complete model types)

	147.4 D.Y. 6. ±	Stainless steel proportional solenoid without position transducer and without manual
	MZABX-A-*	override for Amb.T -60°C
	OAX/O/WP-*	Stainless steel on-off solenoid – power 8W with horizontal cable output
	OAX/3/O/WP-*	Stainless steel on-off solenoid – power 3,5W with horizontal cable output
Stainless steel	OAKX/O/WP-*	stainless steel on-off solenoid – power 25W with horizontal cable output
with horizontal cable output	OZAX-A-*/O/WP	Stainless steel proportional solenoid without position transducer and horizontal cable output
	MZAX-A-*/O	Stainless steel proportional solenoid without position transducer, without manual override and with horizontal cable output
Stainless steel	OABX/O/WP-*	Stainless steel on-off solenoid – power 8W with horizontal cable output for Amb.T -60°C
with horizontal	OABX/3/O/WP-*	Stainless steel on-off solenoid – power 3,5W with horizontal cable output for Amb.T -60°C
cable output	OABKX/O/WP-*	stainless steel on-off solenoid – power 25W with horizontal cable output for Amb.T -60°C
Temp. Amb. -60°C	MZABX-A-*/O	Stainless steel proportional solenoid without position transducer, without manual override and with horizontal cable output for Amb.T -60°C.
	OAXS/WP-*	External stainless steel and internal standard on-off solenoid – power 8W
	OAXS/3/WP-*	External stainless steel and internal standard on-off solenoid – power 3,5W
	OAKXS/WP-*	External stainless steel and internal standard on-off solenoid – power 25W
External stainless steel.	OZAXS-A-*/WP	External stainless steel and internal standard proportional solenoid without position transducer
internal standard	MZAXS-A-*	External stainless steel and internal standard proportional solenoid without position transducer and without manual override
	OZAXS-T-*	External stainless steel and internal standard proportional solenoid with position transducer and without manual override
	OABXS/WP-*	External stainless steel and internal standard on-off solenoid – power 8W for Amb.T - 60°C
External stainless steel.	OABXS/3/WP-*	External stainless steel and internal standard on-off solenoid – power 3,5W for Amb.T - 60°C
internal standard	OABKXS/WP-*	External stainless steel and internal standard on-off solenoid – power 25W for Amb.T - 60°C
Temp. Amb. -60°C	OZABXS-A-*/WP	External stainless steel and internal standard proportional solenoid without position transducer for Amb.T -60°C
	MZABXS-A-*	External stainless steel and internal standard proportional solenoid without position transducer and without manual override for Amb.T -60°C
	OAXS/O/WP-*	External stainless steel and internal standard on-off solenoid – power 8W with horizontal cable output
External	OAXS/3/O/WP-*	External stainless steel and internal standard on-off solenoid – power 3,5W with horizontal cable output
stainless steel, internal standard	OAKXS/O/WP-*	external stainless steel and internal standard on-off solenoid – power 25W with horizontal cable output
with horizontal cable output	OZAXS-A-*/O/WP	external stainless steel and internal standard proportional solenoid without position transducer and with horizontal cable output
	MZAXS-A-*/O	external stainless steel and internal standard proportional solenoid without position transducer and without manual override and with horizontal cable output
External	OABXS/O/WP-*	External stainless steel and internal standard on-off solenoid – power 8W with horizontal cable output for Amb.T -60°C
stainless steel, internal standard	OABXS/3/O/WP-*	External stainless steel and internal standard on-off solenoid – power 3,5W with horizontal cable output for Amb.T -60°C
with horizontal cable output	OABKXS/O/WP-*	external stainless steel and internal standard on-off solenoid – power 25W with horizontal cable output for Amb.T -60°C
Temp. Amb.	OZABXS-A- */O/WP	external stainless steel and internal standard proportional solenoid without position transducer and with horizontal cable output for Amb.T -60°C
-60°C	MZABXS-A-*/O	external stainless steel and internal standard proportional solenoid without position transducer and without manual override and with horizontal cable output for Amb.T -60°C
	OAXW/WP-*	Internal stainless steel and external standard on-off solenoid – power 8W
	OAXW/3/WP-*	Internal stainless steel and external standard on-off solenoid – power 3,5W
Internal stainless	OAKXW/WP-*	Internal stainless steel and external standard on-off solenoid – power 25W
steel, external standard	OZAXW-A-*/WP	internal stainless steel and external standard proportional solenoid without position transducer
Standard	MZAXW-A-*	internal stainless steel and external standard proportional solenoid without position transducer and without manual override





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Applicant: ATOS S.p.A.

Via alla Piana, 57 – 21018 Sesto Calende (Varese) - Italy

**Electrical Apparatus:** Explosion proof solenoids series OA-\*; OAB-\*; OZA-A\*; OZA-T\*; OZAB-

A\*; MZA-A-\*; MZAB-A-\*; OA/O-\*; OAB/O-\*; OA/WP-\*; OAB/WP-\*;

OA/O/WP-\*; OAB/O/WP-\*

(standard version, see product information for complete model types)

	OZAXW-T-*	internal stainless steel and external standard proportional solenoid with position transducer and without manual override			
	OABXW/WP-*	Internal stainless steel and external standard on-off solenoid – power 8W for Amb.T - 60°C			
Internal stainless steel, external	OABXW/3/WP-*	Internal stainless steel and external standard on-off solenoid – power 3,5W for Amb.T - 60°C			
standard	OABKXW/WP-*	Internal stainless steel and external standard on-off solenoid – power 25W for Amb.T - 60°C			
Temp. Amb. -60°C	OZABXW-A-*/WP	internal stainless steel and external standard proportional solenoid without position transducer for Amb.T -60°C			
	MZABXW-A-*	internal stainless steel and external standard proportional solenoid without position transducer and without manual override for Amb.T -60°C			
	OAXW/O/WP-*	internal stainless steel and external standard on-off solenoid – power 8W with horizontal cable output			
Internal stainless	OAXW/3/O/WP-*	Internal stainless steel and external standard on-off solenoid – power 3,5W with horizontal cable output			
steel, external standard with	OAKXW/O/WP-*	Internal stainless steel and external standard on-off solenoid – power 25W with horizontal cable output			
horizontal cable output	OZAXW-A-*/O/WP	Internal stainless steel and external standard proportional solenoid without position transducer and with horizontal cable output			
	MZAXW-A-*/O	Internal stainless steel and external standard proportional solenoid without position transducer and without manual override and with horizontal cable output			
Internal stainless	OABXW/O/WP-*	internal stainless steel and external standard on-off solenoid – power 8W with horizontal cable output for Amb.T -60°C			
steel, external standard with	OABXW/3/O/WP-*	Internal stainless steel and external standard on-off solenoid – power 3,5W with horizontal cable output for Amb.T -60°C			
horizontal cable output	OABKXW/O/WP-*	Internal stainless steel and external standard on-off solenoid – power 25W with horizontal cable output for Amb.T -60°C			
Temp. Amb.	OZABXW-A- */O/WP	Internal stainless steel and external standard proportional solenoid without position transducer and with horizontal cable output for Amb.T -60°C			
-60°C	MZABXW-A-*/O	Internal stainless steel and external standard proportional solenoid without position transducer and without manual override and with horizontal cable output for Amb.T -60°C			

#### **Electrical characteristics**

Rated voltage: 12 / 220 Vdc, 12/240 Vac (depending of the models)

Rated power: 3,5 / 35 W (depending of the models)

Ambient temperature range:

from  $-60^{\circ}$ C /  $-40^{\circ}$ C to  $+40^{\circ}$  /  $+45^{\circ}$ C /  $+50^{\circ}$ C /  $+55^{\circ}$ C /  $+60^{\circ}$ C /  $+70^{\circ}$ C (depending of the model)

Degree of protection: IP 66/67 (IEC 60529)

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

Solenoid typ	T amb. Max ambient temperature (°C)	Connecting cable temperature (°C)	Temperature class / surface temperature	
OA, OA/3,	OAX/WP, OAX/3/WP	70	90	T4 / T135°C
OA/O, OA/3/O, OA/WP, OA/3/WP, OA/O/WP, OA/3/O/WP	OAX/O/WP, OAX/3/O/WP OAXS/WP, OAXS/3/WP OAXS/O/WP, OAXS/3/O/WP OAXW/WP, OAXW/3/WP OAXW/O/WP, OAXW/3/O/WP	45	-	T6 / T85°C
	OAKX/WP	70	130	
-	OAKX/O/WP	60	120	T3 / 200°C
	OAKXS/WP	50	110	





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**Electrical Apparatus:** Explosion proof solenoids series OA-\*; OAB-\*; OZA-A\*; OZA-T\*; OZAB-

A\*; MZA-A-\*; MZAB-A-\*; OA/O-\*; OAB/O-\*; OA/WP-\*; OAB/WP-\*;

OA/O/WP-\*; OAB/O/WP-\*

(standard version, see product information for complete model types)

OAKXW/O/WP  OZAX-A/WP  OZA-A  OZA-A/O/WP  OZA-A/O  OZA-A/O  OZAXS-A/WP  OZAXS-A/WP  OZAXS-A/WP  OZAXS-A/WP  OZAXS-A/WP  OZAXS-A/O/WP	T4 / T135°C T3 / 200°C	
OAKXW/O/WP         OZAX-A/WP         70         120           OZA-A         OZAX-A/O/WP         55         110           OZA-A/O         OZAXS-A/WP         45         95           OZA-A/WP         OZAXS-A/O/WP         40         90		
OZAX-A/WP 70 120 OZA-A OZAX-A/O/WP 55 110 OZA-A/O OZAXS-A/WP 45 95 OZA-A/WP OZAXS-A/O/WP OZA-A/O/WP OZAXW-A/WP 40 90	T3 / 200°C	
OZA-A         OZAX-A/O/WP         55         110           OZA-A/O         OZAXS-A/WP         45         95           OZA-A/WP         OZAXS-A/O/WP         40         90	T3 / 200°C	
OZA-A         OZAX-A/O/WP         55         110           OZA-A/O         OZAXS-A/WP         45         95           OZA-A/WP         OZAXS-A/O/WP         0ZAXS-A/O/WP         40         90	10 / 200 0	
OZA-A/WP OZAXS-A/O/WP OZAXW-A/WP 40 90		
OZA-A/O/WP OZAXW-A/WP 40 90		
OZA-A/O/WP	T4 / T135°C	
	14/1135 0	
MZA-A MZAX-A, MZAX-A/O, 70 120 120 120 120 120 120 120 120 120 12	T3 / 200°C	
MZA-A/O MZAXS-A, MZAXS-A/O, 45 90 T	T4 / T135°C	
MZA-A/O MZAXW-A, MZAXW-A/O 55 110	T3 / 200°C	
OZA T OZAV T OZAVO T OZAVO T OZAVO T	「3 / T200 °C	
OZA-T OZAXS-T, OZAXW-T $\frac{70}{40}$ $\frac{120}{90}$ T	Γ4 / T135 °C	
T amb. Connecting		
May ambient   cable   Lett	nperature class	
Solenoid type (for Min T.Amb -60°C)    Max ambient   Cable   temperature   temperature	/ surface	
(°C) (°C) t	emperature	
	T4 / T135°C	
OARY/OAMP OARY/2/OAMP		
UAB, UAB/3, OARVS/MID OARVS/2/MID		
UAB/O, UAB/3/O, OARVS/OAMP	T6 / T85°C	
OAB/WP, OAB/3/WP, OABXS/3/O/WP 45		
OAB/O/WP, OAB/W/OAWP		
OAB/3/O/WP OABXW/O/WP,		
OABXW/3/O/WP		
OABKX/WP 70 130		
	T3 / 200°C	
OABKXS/WP 50 110	, =	
OABKXS/O/WP		
	T4 / T135°C	
OABKXW/O/WP	,	
O7ARY_A/WP 70 120	<b>T</b> 2 / 2222	
OZAB-A OZABX-A/O/WP 55 110	T3 / 200°C	
OZAB-A/O OZABXS-A/WP 45 95		
07AR-A/MP	T4 / T40500	
OZAB-A/O/WP OZABXW-A/WP 40 90	T4 / T135°C	
OZABXW-A/O/WP		
MZABX-A, MZABX-A/O, 70 120	T3 / 200°C	
$M/\Delta B_{-}\Delta$	T4 / T135°C	
	T3 / 200°C	

#### **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"

## ТАМОЖЕННЫЙ СОЮЗ



### GEPTHORKAT GOOTBETGTBAR

№ TC RU C-IT. ГБ08. В.01784

Серия RU

№ 0408158

**ОРГАН ПО СЕРТИФИКАЦИИ** ВЗРЫВОЗАЩИЩЕННОГО ОБОРУДОВАНИЯ ЗАКРЫТОГО АКЦИОНЕРНОГО ОБЩЕСТВА ТЕХНИЧЕСКИХ ИЗМЕРЕНИЙ, БЕЗОПАСНОСТИ И РАЗРАБОТОК (ОС ВО ЗАО ТИБР). Адрес места нахождения органа по сертификации: 301668, Россия, Тульская область, город Новомосковск, улица Орджоникидзе, 8; 301760; Россия, Тульская область, город Донской, улица Горноспасательная, дом 1, строение А. Телефон/факс: 8 (495) 280-16-56, адрес электронной почты: pmv@tiber.ru. Регистрационный номер RA.RU.11ГБ08, дата регистрации аттестата аккредитации органа по сертификации 01.04.2016. Орган по аккредитации, выдавший аттестат аккредитации - Федеральная служба по аккредитации (Росаккредитация)

ЗАЯВИТЕЛЬ ОБЩЕСТВО С ОГРАНИЧЕННОЙ ОТВЕТСТВЕННОСТЬЮ «ХЭЛПЭКС»

ОГРН 1097746296251. Место нахождения, в том числе фактический адрес: 125635, город Москва, улица Ангарская, дом 10, Россия. Телефон: +7495 7073366, факс: +7495 7073199.

Адрес электронной почты: отсутствует

ИЗГОТОВИТЕЛЬ

Atos spa

Место нахождения, в том числе фактический адрес:

VIA ALLA PIANA 57, SESTO CALENDE, VA21018, Италия

продукция

Клапаны соленоидные типов OA\*-..., OZA\*-..., MZA\*-A-..., изготовленные в соответствии с «Directive 94/9/EC».

Серийный выпуск.

код тн вэд тс

8481 80 599 0

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ Технического регламента Таможенного союза

«О безопасности оборудования для работы во взрывоопасных средах» (ТР ТС 012/2011)

**СЕРТИФИКАТ ВЫДАН НА ОСНОВАНИИ** Протокола испытаний № 843/836-Ех от 04.03.2015 Испытательная лаборатория взрывозащищенного оборудования Закрытого акционерного общества Испытательный Центр Технических Измерений, Безопасности и Разработок, регистрационного номера аттестата аккредитации РОСС RU.0001.21ГБ08 от 15.06.2011 по 15.06.2016. Акта анализа состояния производства изготовителя № 836/АСП от 06.02.2015. Технической документации изготовителя.

срок действия с

06.06.2016

по 24.03.2020

**ВКЛЮЧИТЕЛЬНО** 

TIBER

Руководитель (уполномоченное мицо) органа по сертификации

(подпись

Д.С.Подсевалов

(инициалы, фамилия)

M.H 5077746700 84.RU.111608

Эксперт (эксперт-аудитор)
(эксперты (эксперты-аудиторы))

(подпись)

М.В. Пономарев

(инициалы, фамилия)

#### ПРИЛОЖЕНИЕ

К СЕРТИФИКАТУ СООТВЕТСТВИЯ № TC RU C-IT.ГБ08.В.01784

Серия RU № 0286318

1. Назначение и область применения.

Клапаны соленоидные типов OA\*-..., OZA\*-..., MZA\*-A-... (далее по тексту клапаны) предназначены для использования в качестве элемента регулирования потоков для гидравлических и пневматических систем.

Блоки подготовки воздуха предназначены для подготовки воздуха для пневматических систем.

Клапаны, соленоиды и блоки подготовки воздуха предназначены для применения во взрывоопасных зонах в соответствии с присвоенной маркировкой взрывозащиты.

2. Описание конструкции и средств обеспечения взрывозащиты.

Клапаны представляют собой трубопроводную арматуру с электромагнитным приводом. Электромагнитный привод размещен во взрывонепроницаемой оболочке с установленным кабельным вводом питания (управления). Детали взрывонепроницаемых оболочек выполнены из стали.

Взрывозащита обеспечена соответствием оборудования требованиям ГОСТ Р МЭК 60079-0-2011, ГОСТ IEC 60079-1-2011, ГОСТ Р МЭК 60079-31-2010.

3. Специальные условия применения (если в маркировке взрывозащиты указан знак «Х»).

- 3.1. Комплектующие электротехнические изделия, входящие в состав гидромуфт и преобразователей должны иметь действующие сертификаты соответствия на соответствие требованиям ТР ТС 012/2011 «О безопасности оборудования для работы во взрывоопасных средах», при комплектации гидромуфт данными электротехническими изделиями требуется выполнять все специальные условия указанные в сертификатах соответствия на данные изделия и руководствах по эксплуатации;
- 3.2. При монтаже и эксплуатации гидромуфт и преобразователей необходимо выполнять специальные условия на взрывозащищенные компоненты в составе гидромуфт и преобразователей, они должны быть изложенные в руководстве по эксплуатации.
- 3.3. Выполнение работ разрешается только после отключения изделия и панели управления от источника электрического питания и цепи управления во избежание непредвиденной подачи энергии.
- 3.4. Предел текучести крепежных деталей должен соответствовать значениям, указанным в исполнительном чертеже и спецификациях изделия.
- 3.5. При использовании при отрицательных температурах следует принять меры защиты от полного замораживания рабочей жидкости. Следует принять меры исключающие пуск при замораживании рабочей жидкости до твердого состояния.

4. Маркировка.

Маркировка, наносимая на оборудование, должна включать следующие данные:

- 4.1. Наименование предприятия-изготовителя или его зарегистрированный товарный знак;
- 4.2. Обозначение типа оборудования:
- 4.3. Порядковый номер оборудования по системе нумерации предприятия-изготовителя;
- 4.4. Наименование или знак органа по сертификации и номер сертификата соответствия;
- 4.5. Маркировку взрывозащиты для взрывоопасных газовых сред:

1 Ex d IIC «T6, T4, T3» Gb X

Ex th IIIC «T85°C, T135°C, T200°C» Db X

4.6. Предупредительные надписи;

"Внимание - не открывайте при подаче питания"

"Для правильного выбора соединительного кабеля см. инструкции по технике безопасности"

- 4.7. Единый знак ЕАС обращения продукции на рынке государств членов Таможенного союза;
- 4.8. Специальный знак Ех взрывобезопасности (приложение 2 к ТР ТС 012/2011);
- 4.9. Другие данные, которые должен отразить изготовитель, если это требуется технической документацией (температура окружающей среды, степень защиты оболочки и т.д.).



Руководитель (уполномоченное мицо) органа по сертификации

Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы))

(подпись)

(подпись)

Д.С.Подсевалов (инициалы, фамилия)

М.В. Пономарев (инициалы, фамилия)

#### ПРИЛОЖЕНИЕ

#### К СЕРТИФИКАТУ СООТВЕТСТВИЯ № TC RU C-IT.ГБ08.В.01784

Серия RU № 0286319

delaks			
5.	Основные	технические	данные.

- 5.1. . Степень защиты по ГОСТ 14254
   IP66/IP67

   5.2. . Электропитание, В
   12÷220

   5.3. . Мощность, Вт
   8÷35
- 5.4.. Температуры окружающей среды, соединительного кабеля и температурный класс

Тип соленоида	Температуры окружающей среды, °С	Температура соединяющего кабеля, °С	Температурный класс/ тах температура поверхности
для min температурі	ы окружающей среды минус 40°	C	
OA*	70	90	T4
UA :	45	I I I I I I I I I I I I I I I I I I I	T6
	70	120	T3
07.4 %	55	110	13
OZA*	45	95	T4
	40	90	T4
	70	120	T3
MZA*-A	45	90	T4
	55	110	T3
для min температура	ы окружающей среды минус 60°	C	
	70	90	T4
OA*	45		T6
	70	130	TO
074*	60	120	T3
OZA*	50	110	T 4
	45	100	T4
	70	120	T3
MZA*-A	45	90	T4
	55	110	T3

Неэлектрические параметры клапанов и блоков подготовки воздуха не относятся к обеспечению взрывозащиты и указаны в эксплуатационной документации.

При внесении изготовителем в конструкцию и (или) техническую документацию, подтверждающую соответствие оборудования и (или) Ех-компонента требованиям ТР, изменений, влияющих на показатели взрывобезопасности оборудования, он должен предоставить в ОС ВО ЗАО ТИБР, описание изменений, техническую документацию (чертежи средств обеспечения взрывозащиты) с внесенными изменениями и образец для проведения дополнительных испытаний, если ОС ВО ЗАО ТИБР посчитает недостаточным проведение только экспертизы технической документации с внесенными изменениями для принятия решения о соответствии оборудования и (или) Ех-компонента ТР ТС 012/2011 с внесенными изменениями.

Руководитель (уполномоченное лицо) органа по сертификации

Эксперт (эксперт-аудитор)

(nonninos)

Д.С.Подсевалов (инициалы, фамилия)

М.В. Пономарев







# Government of India Ministry of Commerce & Industry Petroleum & Explosives Safety Organisation (PESO) 5th Floor, A-Block, CGO Complex, Seminary Hills, Nagpur - 440006

E-mail: explosives@explosives.gov.in Phone/Fax No: 0712 -2510248, Fax-

2510577

Approval No: A/P/HQ/KA/104/5507 (P391133)

Dated: 20/03/2017

To.

ATOS S.p.A, Via alla Piana,57 I-21018 Sesto Calendene(VA), 24 MAR 2019

**Sub**: Approval of Flame Proof Type Electrical Equipments under Petroleum Rules 2002- Regarding. Sir(s),

Please refer to your letter No. NA dated 15/02/2017 on the subject.

The following Ex electrical equipment(s) manufactured by you according to IEC -60079-0-2011, IEC 60079-1: 2007, standards and covered under ATOS S.p.A. Test reports mentioned below is/are approved for use in **Zone 1** of Gas IIC hazardous areas coming under the the Petroleum Rules, 2002 administered by this Organization.

6-	Description	Safety	Equipment reference Number	Test Agency			Drawing
Sr. No		Protection		Name	Certificate No.	Certificate Date	no
1	Solenoid coil OAX-OAXS- OAKX-OAKXS-OABX- OABKX-OABXS	Exd IIC T6, T4 or T3 Gb	P391133/1	ATOS S.p.A.	IECEx CES 10.0010X issue 2	29/01/2015	as per test report

This Approval is granted subject to observance of the following conditions:-

- 1)The design and construction of the equipment shall be strictly in accordance with description, condition and drawings as mentioned in the ATOS S.p.A. Test Reports referred to above.
- 2)The equipment shall be used only with approved type of accessories and associated apparatus.
- 3)Each equipment shall be marked either by raised lettering cast integrally or by plate attached permanently to the main structure to indicate conspicuously:-
  - (a) Name of the manufacturer
  - (b) Name and number by which the equipment is identified.
  - (c) Number & date of the test report of the ATOS S.p.A. applicable to the equipment.
  - (d) Equipment reference number of this letter by which use of apparatus is approved.
  - (e) Protection level.
- 4) A certificate to the effect that the equipment has been manufactured strictly in accordance with the drawing referred to in the ATOS S.p.A. Test report and is identical with the one tested and certified at ATOS S.p.A. shall be furnished with each equipment.
- 5) The customer shall be supplied with a copy of this letter, an extract of the conditions and maintenence schedule, if any, recommended by ATOS S.p.A. in their test reports and copy of instructions booklet detailing operation & maintenance of the equipment so as to maintain its Flame Proof characterestics.
- 6) The After sales service and maintanance of subject equipment shall be looked after by your representative Satyam Hydraulics, No 192, Pushkar industrial Estste, Phase 1 G.I.D.C Vatva, Ahmedabad 382445

This approval also covers the permissible variations as approved under the ATOS S.p.A. test reports referred above. This approval is liable to be cancelled if any of the conditions of the approval is violated or not complied with . The approval may also be amended or withdrawn at any time, if considered necessary in the interest of safety.

The field performance report from actual users/your customers of the subject equipment may please be collected

and furnished to this office for verification and record on annual basis.

The Approval is Valid upto 31/12/2021

Yours faithfully,

(K Srinivasa Rao)
Controller of Explosives
For Chief Controller of Explosives
Nagpur

Copy to :

1. Jt. Chief Controller of Explosives, South Circle Office, CHENNAI

2.M/s. ATOS S.p.a, PlotNo, 6/1 1 st floor, 6/1, 1st floor, Jyothi Nagar Chikkabettahalli, , Vidyaranyapura Post,, Chikkabettahalli, Bangalore North, Taluka: Bangalore North, District: BANGALORE(Urban), State: Karnataka, PIN: 560097

for Chief Controller of Explosives

(For more information regarding status, fees and other details please visit our website http://peso.gov.in)

Note:- Please submit the revalidation application one month before the date of Expiry of approval otherwise approval will be treated as cancelled and a fresh application for approval will be considered for the approval.