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iscrizione CCIAA 00793580150

Registro Imprese di Milano
Sezione Ordinaria
N. R.E.A. 429222
P.I. IT00793580150

Schema di certificazione CESI-ATEX

Il CESI è stato autorizzato dal governo italiano ad operare quale organismo di certificazione di apparecchi e sistemi destinati a essere utilizzati in atmosfera potenzialmente esplosiva con D.M. 1/3/1983, D.M. 19/6/1990, D.M. 20/7/1998 e D.M. 27/9/2000

CERTIFICATE

EC-TYPE EXAMINATION CERTIFICATE

[1]

[2] **Equipment or Protective System intended for use in potentially explosive atmospheres Directive 94/9/EC**

[3] EC-Type Examination Certificate number:

CESI 02 ATEX 014

[4] Equipment: Explosion proof solenoid type OA-..; OZA-.-.; MZA-A-.

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

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

[7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] CESI, notified body n. 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, 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-A2/005935.

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

EN 50014: 1997 + A1..A2 EN 50018: 2000

[10] 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.

[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 protective system shall include the following:

Ex II 2 G EEx d IIC T6, T4, T3

Date 27 February 2002 – Translation issued the [SB1]27 February 2002

Prepared	**Verified**	**Approved**
Enrico Radaelli	Damiano Cavanna	Ulisse Colombo

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[13] **Schedule**

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 014**

[15] **Description of equipment**

The explosion proof solenoids subject of this certificate are use to drive direction control, flow control and pressure control valves; they are identified by a code as follows:

OA - ..

- explosion proof ON/OFF solenoid
- options supply voltage

OZA - .- .

- explosion proof proportional solenoid
- **A**: for open loop application,
  T: for closed loop application with position transducer type ETHA-4/*
- option supply voltage for type **A**

MZA -A - .

- explosion proof proportional solenoid without manual operation
- options supply voltage

Electrical characteristics

Solenoid type OA- ..

- Rated voltage supply :	12 ÷220 Vdc ;	12 ÷220 Vca
- Rated power:	8 W	8 W
- Frequency:		50/60 Hz

Prot. A2/005945 P: 4 + 13
Keywords 13010R 21635I 48010M 54250O 66540E

Solenoid type OZA- .-.. and type MZA- .-..

- Rated voltage supply: 12 Vdc ; 24 Vdc
- Input current max: 2.5 A; 1.1 A
- Rated power max: 35 W

Power limitation is achievied by means of electronic regulator feeding the solenoid with a current of 2500 mA for the type OZA-A-12DC and MZA-A-12DC and with a current of 1100 mA for the type OZA-A-24DC and MZA-A-24DC.
The supply of the solenoid type OZA-T is made by means of electronic regulator type E-ME-T-0*H (ATOS).

Temperature classes and temperature on the supply cables related to the ambient temperature.

type	ambient temperature max.	temperature class	operating temperature of the cables
OA	70 °C	T4	≥ 90 °C
OA	45 °C	T6	--
OZA-A	70 °C	T3	≥ 120 °C
OZA-A	40 °C	T4	≥ 90 °C
MZA-A	70 °C	T3	≥ 120 °C
MZA-A	40 °C	T4	≥ 90 °C
OZA-T	70 °C	T3	≥ 120 °C
OZA-T	40 °C	T4	≥ 90 °C

A label shall be provided on the outside of the electrical apparatus as a guide for the selection of the cable by the user (par. 16.8 of EN 50014 Standard).

Installation conditions

The accessories used for cable entries shall be suitable for the indicated cables temperature and shall be certified according to EN 50014 and EN 50018 Standards.

If cylindrical threads are used, the coupling between the cable gland and the terminal box shall be provided by block to prevent loosing.

[13] **Schedule**

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 014**

[16] **Report n.**
CESI nr. EX-A2/005935.

Routine tests
The manufacturer shall carry out the routine tests prescribed at paragraph 24 of the EN 50014 Standard.
The manufacturer is exempted from the overpressure test since the solenoids in subject have been submitted to an overpressure test at 33 bar, corresponding to four times the reference pressure.
The actuators are submitted to an individual overpressure test to verify the functionally suitability at the rated operating pressure.

Descriptive documents (prot. EX-A2/005938)

- n. SAS-211-D/1	(4 pg.)	dated	15.01.2002
- n. t189	(4 pg.)	dated	15.01.2002
- n. 6-OA-201000-I Rev. 6		dated	10.01.2002
- n. 6-OZA-101000-I Rev. 6		dated	10.01.2002
- n. 6-MZA-220000-I Rev. 1		dated	10.01.2002
- n. 6-OA-201051-I Rev. 1		dated	10.01.2002
- n. t186		dated	10.01.2002

One copy of all documents is kept in CESI files.

[17] **Special conditions for safe use**
None.

[18] **Essential Health and Safety Requirements**
Assured by compliance to the Standards indicated at page 1.

EXTENSION n. 01/03

to EC-Type Examination Certificate CESI 02ATEX014

Equipment: Explosion proof solenoid type OA-..; OZA-.-.; MZA-A-.

Manufacturer: ATOS S.p.A.

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

Admitted variation
New models named **OA/WP-*** and **OZA-A-*/WP** and constructional modifications.
* = options supply voltage

The constructional modifications are specified in the descriptive documents annexed to this extension.

Report n. EX-A2/005935

Descriptive documents (prot. EX-A3/021451)

- n. SAS-262-D/0	(pg. 2)	dated	28.05.2003
- n. 6-OA-201000-I Rev. 7		dated	09.05.2003
- n. 6-OZA-101000-I Rev.7		dated	12.05.2003
- n. 6-MZA-220000-I Rev.2		dated	12.05.2003
- n. 6-OZA-102000-I Rev.1		dated	25.03.2003
- n. 6-OA-202000-I Rev.1		dated	25.03.2003

One copy of all documents is kept in CESI files.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 02ATEX014.

date 14 June 2003 - translation issued the 14th June 2003

prepared CERT – Enrico Radaelli

verified CERT – Mirko Balaz

approved CERT – Ulisse Colombo

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Prot. A3/021454 P: 2
Keywords 13010R 21635I 48010M 54250O 66540E

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EXTENSION n. 02/05

to EC-Type Examination Certificate CESI 02ATEX 014

Equipment: Explosion proof solenoid series OA-; OZA; MZA-A

Manufacturer: ATOS S.p.A.

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

Admitted variation
Constructional modifications, new electrical characteristics, new models named **OAX/WP-***, **OAKX/WP-***, **OZAX-A-*/WP** e **MZAX-A-***, (* = options supply voltage).

The admitted variation are specified in the descriptive documents annexed to the extension and are mainly related to:
- little cable to keep the back cover on the solenoid type OA/WP-* e OZA-A-*/WP;
- new coil supplied with 48Vdc for the solenoid type OA-* e OA/WP-*;
- new material (stainless steel) for solenoid type OA/WP-* , OZA-A-*/WP e MZA-A-* with the insertion of letter "**X**" in the code (**OAX/WP-*** , **OZAX-A-*/WP** e **MZAX-A-***);
- new coil types for solenoid OAX/WP* with the insertion of letter "**K**" in the code (**OAKX/WP***).

Electrical characteristics

Solenoid type OA-48 DC and OA/WP-48DC

- Rated voltage supply :	48 Vdc
- Rated power:	8 W

Solenoid type OAKX/WP-*

- Rated voltage supply :	12 ÷220 Vdc ;	12 ÷240 Vca
- Rated power:	25 W	25 W
- Frequency:		50/60 Hz

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 02 ATEX 014.

date 12 February 2005 - translation issued the 12 February 2005

prepared CERT – Enrico Radaelli

verified CERT – Damiano Cavanna

approved CERT – Ulisse Colombo

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EXTENSION n. 02/05

to EC-Type Examination Certificate CESI 02 ATEX 014

Temperature classes and temperature on the supply cables related to the ambient temperature for the new types OAKX/WP.*

type	ambient temperature max.	temperature class	operating temperature of the cables
OAKX/WP-*	70 °C	T3	≥ 130 °C
	60 °C	T3	≥ 120 °C
	50 °C	T3	≥ 110 °C
	40 °C	T4	≥ 100 °C

Installation conditions
The solenoids shall be installed on a metallic block with a minimum volume of 0,2 dm^3 for each valve.

Report n. EX-A5005177

Descriptive documents (prot. EX A5005181)

- n. SAS-064-D/0	(pg. 4)	dated	11.02.2005
- n. t189/2	(pg. 5)	dated	11.02.2005
- n. 6-OA-202000-I Rev. 3		dated	01.12.2004
- n. 6-OZA-102000-I Rev.3		dated	01.12.2004
- n. 6-OZAX-102000-I Rev.3		dated	01.12.2004
- n. 6-OAX-202000-I Rev. 3		dated	01.12.2004
- n. 6-MZAX-220000-I Rev.1		dated	03.08.2004
- n. T-665/BT-I Rev.2		dated	11.02.2005
- n. t186-1		dated	11.02.2005

One copy of all documents is kept in CESI files.

EXTENSION n. 03/07

to EC-Type Examination Certificate CESI 02ATEX014

Equipment: Explosion proof solenoid series OA-; OZA; MZA-A

Manufacturer: **ATOS S.p.A.**

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

Admitted variation
Constructional modifications:
materials for enclosure suitable to be used at a minimum ambient temperature up to –40°C.
The admitted variation are specified in the descriptive documents annexed to the extension.

Installation conditions
The characteristic of the cables and of the accessories used for cable entries shall be suitable to be used in the range of the ambient/operating temperature of the transducer.

Report n. EX-A7013683.

Routine tests
The manufacturer shall carry out the routine tests prescribed at par. 24 of the EN 50014 standard and at par. 16 of the EN 50018 standard. Solenoids in subject are exempted from overpressure routine test since they have been submitted, with the static method and favourable result, to an overpressure test at a pressure corresponding to 4 times the reference pressure related to an ambient temperature of –40 °C.

Descriptive documents (prot. EX-A7013706)

- n. SAS-312-D/1		dated	02.02.2007
- n. 6-OA-201000-I Rev.9		dated	02.02.2007
- n. 6-OA-202000-I Rev.5		dated	02.02.2007
- n. 6-OZA-101000-I Rev.9		dated	02.02.2007
- n. 6-OZA-102000-I Rev.5		dated	02.02.2007
- n. 6-MZA-220000-I Rev.4		dated	02.02.2007
- n. 6-MZAX-220000-I Rev.3		dated	01.02.2007
- n. 6-OAX-202000-I Rev.5		dated	01.02.2007
- n. 6-OZAX-102000-I Rev.5		dated	01.02.2007
- n. 6-OA-201051-I Rev.4		dated	01.02.2007
- n. T-665/BT-I Rev. 5		dated	01.02.2007
- n. TT189/3	(pg. 5)	dated	30.01.2007

One copy of all documents is kept in CESI files.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 02ATEX014.

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date 07 February 2007 - translation issued the 07th February 2007

prepared Enrico Radaelli

verified Mirko Balaz

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approved Fiorenzo Bregani

Prot. A7013704 P: 1

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EXTENSION n. 04/07

to EC-Type Examination Certificate CESI 02ATEX014

Equipment: Explosion proof solenoid series OA-; OZA; MZA-A

Manufacturer: **ATOS S.p.A.**

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

Admitted variation
Constructional modifications: horizontal cable entry instead of vertical cable entry. This constructional version is identified by the letter "O" in the identification code as specified in the descriptive documents annexed to the extension.

Installation conditions
The characteristic of the cables and of the accessories used for cable entries shall be suitable to be used in the range of the ambient/operating temperature of the transducer.

Report n. EX-A7016227.

Routine tests
The manufacturer shall carry out the routine tests prescribed at par. 24 of the EN 50014 standard and at par. 16 of the EN 50018 standard. Solenoids in subject are exempted from overpressure routine test since they have been submitted, with the static method and favourable result, to an overpressure test at a pressure corresponding to 4 times the reference pressure related to an ambient temperature of –40 °C.

Descriptive documents (prot. EX-A7016232)

- n. SAS-413-D/O	(pg.2)	dated	12.02.2007
- n. 6-OA-201100-I Rev.1		dated	15.02.2007
- n. 6-OA-202100-I Rev.1		dated	15.02.2007
- n. 6-OZA-101100-I Rev.1		dated	14.02.2007
- n. 6-OZA-102100-I Rev.1		dated	14.02.2007
- n. 6-MZA-220100-I Rev.1		dated	15.02.2007
- n. 6-MZAX-220100-I Rev.1		dated	15.02.2007
- n. 6-OAX-202100-I Rev.1		dated	14.02.2007
- n. 6-OZAX-102100-I Rev.1		dated	14.02.2007
- n. 6-OA-201051-I Rev.6		dated	15.02.2007
- n. T-665/BT-I Rev. 7		dated	15.02.2007
- n. TT189/4	(pg. 5)	dated	12.02.2007

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date 16 February 2007 - translation issued the 16th February 2007

prepared Enrico Radaelli

verified Mirko Balaz

approved Fiorenzo Bregani

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Prot. A7016231 P: 1

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EXTENSION n. 05/07

to EC-Type Examination Certificate CESI 02 ATEX 014

Equipment: Explosion proof solenoid series OA-; OZA; MZA-A-

Manufacturer: **ATOS S.p.A.**

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

Admitted variation

- Constructional modifications and updating of the documentation for conformity to **EN60079-0 (2006)**, **EN60079-1 (2004)** Standards.
- Change of the code for the types **OA/*/*-220**, **OAX/*/WP-220** and **OAKX/*/WP-220** in the new code **OA/*/*-230**, **OAX/*/WP-230** and **OAKX/*/WP-230.**

Marking

The equipment shall be marked as follows:

II 2G Ex d IIC T6 *or* **T4** *or* **T3**

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 02 ATEX 014.

date 7 September 2007 - translation issued the 7th September 2007

prepared Enrico Radaelli

verified Mirko Balaz

approved Fiorenzo Bregani

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"Area Tecnica Certificazione"
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EXTENSION n. 05/07

to EC-Type Examination Certificate CESI 02 ATEX 014

Identification and description of equipment
The explosion proof solenoids subject of this certificate are use to drive direction control, flow control and pressure control valves.

In the following table are resumed the types of the series and the relevant description.

Model	Description
OA-*	on-off solenoid
OA/WP-*	on-off solenoid with protected manual override
OA/O-*	on-off solenoid with horizontal cable output
OA/O/WP-*	on-off solenoid with protected manual override and with horizontal cable output
OAX/WP-*	stainless steel on-off solenoid with protected manual override
OAKX/WP-*	stainless steel on-off solenoid with protected manual override (power 25 W)
OAX/O/WP-*	stainless steel on-off solenoid with protected manual override and with horizontal cable output
OAKX/O/WP-*	stainless steel on-off solenoid with protected manual override and with horizontal cable output (power 25 W)
OZA-A-*	proportional solenoid without position transducer
OZA-T	proportional solenoid with position transducer
OZA-A-*/WP	proportional solenoid without position transducer and with protected manual override
OZA-A-*/O	proportional solenoid without position transducer and with horizontal cable output
OZA-A-*/O/WP	proportional solenoid without position transducer, with horizontal cable output and with protected manual override
OZAX-A-*/WP	stainless steel proportional solenoid without position transducer and with protected manual override
OZAX-A-*/O/WP	stainless steel proportional solenoid without position transducer, with horizontal cable output and with protected manual override
MZA-A-*	proportional solenoid without position transducer and without manual override
MZA-A-*/O	proportional solenoid without position transducer, without manual override and with horizontal cable output
MZAX-A-*	stainless steel proportional solenoid without position transducer and without manual override
MZAX-A-*/O	stainless steel proportional solenoid without position transducer, without manual override and with horizontal cable output

* Rated supply voltage

EXTENSION n. 05/07

to EC-Type Examination Certificate CESI 02 ATEX 014

Electrical characteristics

Solenoid type OA-		
- Rated voltage supply:	12 ÷220 Vdc	12 ÷240 Vca
- Rated power:	8 W	8 W
- Frequency:		50/60 Hz
Solenoid type OAKX -		
- Rated voltage supply:	12 ÷220 Vdc	12 ÷240 Vca
- Rated power:	25 W	25 W
- Frequency:		50/60 Hz
Solenoid type OZA-.. and type MZA-A-.		
- Rated voltage supply:	12 Vdc	24 Vdc
- Input current max:	2.5 A;	1.1 A
- Rated power max:	35 W	35 W

Power limitation is achieved by means of electronic regulator feeding the solenoid with a current of 2500 mA for the type OZA-A-12DC and MZA-A-12DC and with a current of 1100 mA for the type OZA-A-24DC and MZA-A-24DC.
The supply of the solenoid type OZA-T is made by means of electronic regulator type E-ME-T-0*H (ATOS).

For each type detailed electrical characteristics are reported in the descriptive documents annexed to the certificate.

Ambient temperature
The solenoids in subject are suitable to operate with a minimum ambient temperature of – 40°C.

Temperature classes and temperature on the supply cables related to the maximum ambient temperature

type	ambient temperature max.	temperature class	operating temperature of the cables
OA; OA/O; OA/WP; OA/O/WP; OAX/WP; OAX/O/WP	70 °C	T4	≥ 90 °C
	45 °C	T6	--
OAKX/WP; OAKX/O/WP	70 °C	T3	≥ 130 °C
	60 °C	T3	≥ 120 °C
	50 °C	T3	≥ 110 °C
	40° C	T4	≥ 100 °C
OZA-A; OZA-A /O; OZA-A /WP; OZA-A /O/WP; OZAX-A/WP; OZAX-A/O/WP	70 °C	T3	≥ 120 °C
	40 °C	T4	≥ 90 °C
MZA-A ; MZA-A/O; MZAX-A; MZAX-A/O	70 °C	T3	≥ 120 °C
	40 °C	T4	≥ 90 °C
OZA-T	70 °C	T3	≥ 120 °C
	40 °C	T4	≥ 90 °C

A label shall be provided on the outside of the electrical apparatus as a guide for the selection of the cable by the user (par. 16.5 of EN 60079-0 Standard).

EXTENSION n. 05/07

to EC-Type Examination Certificate CESI 02 ATEX 014

Installation conditions

- The solenoids shall be installed on a metallic base with a volume of minimum 0.2 dm^3 for each valve.
- The characteristics of the cables and of the accessories used for cable entries shall be suitable for the use in the ambient/operating temperature of the solenoid. The accessories used for cable entries shall be certified according to EN60079-0 and EN60079-1 Standards.
- If cylindrical threads are used, the coupling between the cable gland and the enclosure shall be provided by block to prevent loosing.

Report n. EX-A7023245

Routine tests

The manufacturer shall carried out the routine tests prescribed at par. 27 of EN60079-0 Standard and at par. 16 of EN60079-0 Standard.

Solenoids in subject are exempted from overpressure routine test since they have been submitted, with the static method and favourable result, to an overpressure test at a pressure corresponding to 4 times the reference pressure related to an ambient temperature of –40 °C. The actuators are submitted to an individual overpressure test to verify the functionally suitability at the rated operating pressure.

Descriptive documents (prot. EX-A7023261)

- n. SAS-422-D/0	(pg. 2)	dated	29.08.2007
- n. TT189/5	(pg. 5)	dated	30.08.2007
- n. 6-OA-201000-I Rev.10		dated	05.09.2007
- n. 6-OA-201100-I Rev.2		dated	06.09.2007
- n. 6-OA-202000-I Rev.6		dated	05.09.2007
- n. 6-OA-202100-I Rev.2		dated	06.09.2007
- n. 6-OAX-202000-I Rev.6		dated	05.09.2007
- n. 6-OAX-202100-I Rev.2		dated	05.09.2007
- n. 6-OZA-101000-I Rev.10		dated	05.09.2007
- n. 6-OZA-101100-I Rev.2		dated	06.09.2007
- n. 6-OZA-102000-I Rev.6		dated	05.09.2007
- n. 6-OZA-102100-I Rev.2		dated	06.09.2007
- n. 6-OZAX-102000-I Rev.6		dated	05.09.2007
- n. 6-OZAX-102100-I Rev.2		dated	06.09.2007
- n. 6-MZA-220000-I Rev.5		dated	05.09.2007
- n. 6-MZA-220100-I Rev.2		dated	06.09.2007
- n. 6-MZAX-220000-I Rev.4		dated	05.09.2007
- n. 6-MZAX-220100-I Rev.2		dated	06.09.2007
- n. 6-OA-201051-I Rev.8		dated	06.09.2007
- n. T-665/BT-I Rev.8		dated	30.08.2007
- Declaration of conformity TT186/3		dated	30.08.2007

One copy of all documents is kept in CESI files.

Essential Health and Safety Requirements

The Essential Health and Safety Requirements are assured by compliance to the following standards:

- EN 60079-0: 2006 – Electrical apparatus for explosive gas atmosphere -General requirements.
- EN 60079-1: 2004 – Flameproof enclosure "d".

EXTENSION n. 06/08

to EC-Type Examination Certificate CESI 02 ATEX 014

Equipment: Explosion proof solenoid series OA-; OZA; MZA-A-

Manufacturer: **ATOS S.p.A.**

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

Admitted variation

- New types ***XS...** and ***XW...** :

*XS version	*XW version
OA**XS**/WP-*	OA**XW**/WP-*\
OA**XS**/O/WP-*/	OA**XW**/O/WP-*/
OAK**XS**/WP-*	OAK**XW**/WP-*
OAK**XS**/O/WP-*/	OAK**XW**/O/WP-*/
OZA**XS**-A/WP-*	OZA**XW**-A/WP-*
OZA**XS**-A-*/O/WP	OZA**XW**-A-*/O/WP
MZA**XS**-A-* MZA**XS**-A-*/O	MZA**XW**-A-* MZA**XW**-A-*/O

All detailed constructional modifications for types ***XS...** ed ***XW...** are reported in the descriptive documents annexed to the certificate.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 02 ATEX 014.

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date 4 June 2008 - translation issued the 4th June 2008

prepared Maurizio Toninelli

verified Mirko Balaz

approved Fiorenzo Bregani

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Divisione Energia
"Area Tecnica Certificazione"
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P.I. IT00793580150

EXTENSION n. 06/08

to EC-Type Examination Certificate CESI 02 ATEX 014

Marking
The equipment shall be marked as follows:

 **II 2G Ex d IIC T6** *or* **T4** *or* **T3**

Electrical characteristics
Electrical characteristics are unchanged.

Ambient temperature
The solenoids in subject are suitable to operate with a minimum ambient temperature of – 40°C.

Temperature classes and temperature on the supply cables related to the maximum ambient temperature

Type		Maximum ambient temperature	Cables operating temperature	Temperature class
OA OA/O OA/WP OA/O/WP	OAX/WP OAX/O/WP OAXS/WP OAXS/O/WP OAXW/WP OAXW/O/WP	70	90	T4
		45	-	T6
-	OAKX/WP OAKX/O/WP OAKXS/WP OAKXS/O/WP OAKXW/WP OAKXW/O/WP	70	130	T3
		60	120	
		50	110	
		40	100	T4
OZA-A OZA-A/O OZA-A/WP OZA-A/O/WP	OZAX-A/WP OZAX-A/O/WP OZAXS-A/WP OZAXS-A/O/WP OZAXW-A/WP OZAXW-A/O/WP	70	120	T3
		40	90	T4
MZA-A MZA-A/O	MZAX-A, MZAX-A/O, MZAXS-A, MZAXS-A/O, MZAXW-A, MZAXW-A/O	70	120	T3
		40	90	T4
OZA-T	-	70	120	T3

A label shall be provided on the outside of the electrical apparatus as a guide for the selection of the cable by the user (par. 16.5 of EN 60079-0 Standard).

Report n. EX-A8016227

EXTENSION n. 06/08

to EC-Type Examination Certificate CESI 02 ATEX 014

Routine tests

The manufacturer shall carried out the routine tests prescribed at par. 27 of EN60079-0 Standard and at par. 16 of EN60079-0 Standard.

Solenoids in subject are exempted from overpressure routine test since they have been submitted, with the static method and favourable result, to an overpressure test at a pressure corresponding to 4 times the reference pressure related to an ambient temperature of –40 °C. The actuators are submitted to an individual overpressure test to verify the functionally suitability at the rated operating pressure.

Descriptive documents (prot. EX-A8016230)

- n. SAS-426-D/0	(pg. 2)	dated	20.06.2007
- n. TT189/6	(pg. 8)	dated	11.04.2008
- n. 6-OAXS-202000-I Rev.1		dated	10.04.2008
- n. 6-OAXW-202000-I Rev.1		dated	10.04.2008
- n. 6-OAXS-202100-I Rev.0		dated	10.04.2008
- n. 6-OAXW-202100-I Rev.0		dated	10.04.2008
- n. 6-OZAXS-102000-I Rev.0		dated	10.04.2008
- n. 6-OZAXW-102000-I Rev.0		dated	10.04.2008
- n. 6-OZAXS-102100-I Rev.0		dated	10.04.2008
- n. 6-OZAXW-102100-I Rev.0		dated	10.04.2008
- n. 6-MZAXS-220000-I Rev.0		dated	10.04.2008
- n. 6-MZAXW-220000-I Rev.0		dated	10.04.2008
- n. 6-MZAXS-220100-I Rev.0		dated	10.04.2008
- n. 6-MZAXW-220100-I Rev.0		dated	10.04.2008
- n. 6-OA-201051-I Rev.9		dated	10.04.2008
- n. T-665/BT-I Rev.9		dated	10.04.2008
- Declaration of conformity TT186/4		dated	10.04.2008

One copy of all documents is kept in CESI files.

Essential Health and Safety Requirements

The Essential Health and Safety Requirements are assured by compliance to the following standards:

- EN 60079-0: 2006 – Electrical apparatus for explosive gas atmosphere - General requirements.
- EN 60079-1: 2004 – Flameproof enclosure "d".

EXTENSION n. 07/09

to EC-Type Examination Certificate CESI 02 ATEX 014

Equipment: Explosion proof solenoid series OA-; OZA; MZA-A-

Manufacturer: **ATOS S.p.A.**

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

Admitted variation

- Adding protection for dust (group II, category 1D).

Marking

The equipment shall be marked as follows:

II 2GD Ex d IIC T6 *or* T4 *or* T3, Ex tD A21 IP67 T85°C *or* T135°C *or* T200°C

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 02 ATEX 014.

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date 19 June 2009 - translation issued the 19th June 2009

prepared Maurizio Toninelli

verified Mirko Balaz

approved Fiorenzo Bregani

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EXTENSION n. 07/09

to EC-Type Examination Certificate CESI 02 ATEX 014

Electrical characteristics
Electrical characteristics are unchanged.

Ambient temperature
The solenoids in subject are suitable to operate with a minimum ambient temperature of – 40°C.

Temperature classes / Maximum surface temperature and temperature on the supply cables related to the maximum ambient temperature

Type		*Maximum ambient temperature*	*Cables operating temperature*	*Temperature class / Maximum surface temperature*
OA OA/O OA/WP OA/O/WP	OAX/WP OAX/O/WP OAXS/WP OAXS/O/WP OAXW/WP OAXW/O/WP	70	90	T4 / T135°C
		45	-	T6 / T85°C
-	OAKX/WP OAKX/O/WP OAKXS/WP OAKXS/O/WP OAKXW/WP OAKXW/O/WP	70	130	T3 / T200°C
		60	120	
		50	110	
		40	100	T4 / T135°C
OZA-A OZA-A/O OZA-A/WP OZA-A/O/WP	OZAX-A/WP OZAX-A/O/WP OZAXS-A/WP OZAXS-A/O/WP OZAXW-A/WP OZAXW-A/O/WP	70	120	T3 / T200°C
		40	90	T4 / T135°C
MZA-A MZA-A/O	MZAX-A, MZAX-A/O, MZAXS-A, MZAXS-A/O, MZAXW-A, MZAXW-A/O	70	120	T3 / T200°C
		40	90	T4 / T135°C
OZA-T	-	70	120	T3 / T200°C

A label shall be provided on the outside of the electrical apparatus as a guide for the selection of the cable by the user (par. 16.5 of EN 60079-0 Standard and par.14.7 of EN 61241-0 Standard).

Report n. EX-A9018124

EXTENSION n. 07/09

to EC-Type Examination Certificate CESI 02 ATEX 014

Routine tests

The manufacturer shall carried out the routine tests prescribed at par. 27 of EN60079-0 Standard, at par. 16 of EN60079-0 Standard and at par. 24 of EN61241.0 standard.

Solenoids in subject are exempted from overpressure routine test since they have been submitted, with the static method and favourable result, to an overpressure test at a pressure corresponding to 4 times the reference pressure related to an ambient temperature of –40 °C. The actuators are submitted to an individual overpressure test to verify the functionally suitability at the rated operating pressure.

Descriptive documents (prot. EX-A9018143)

- n. SAS-435-D/0	(pages 2)	dated	16.10.2008
- n. TT189/7	(pages 9)	dated	20.10.2008
- n. 6-OAXS-220000-I Rev.0		dated	21.10.2008
- n. 6-OAXW-220000-I Rev.0		dated	21.10.2008
- n. 6-OAX-220000-I Rev.0		dated	21.10.2008
- n. 6-OA-220000-I Rev.0		dated	21.10.2008
- n. 6-OZAXS-120000-I Rev.0		dated	21.10.2008
- n. 6-OZAXW-120000-I Rev.0		dated	21.10.2008
- n. 6-OZAX-120000-I Rev.0		dated	21.10.2008
- n. 6-OZA-220000-I Rev.0		dated	21.10.2008
- n. 6-MZA-230000-I Rev.0		dated	21.10.2008
- n. 6-MZAX-230000-I Rev.0		dated	21.10.2008
- n. 6-MZAXW-230000-I Rev.0		dated	21.10.2008
- n. 6-MZAXS-230000-I Rev.0		dated	21.10.2008
- n. 6-OA-221500-I Rev.1		dated	21.10.2008
- n. 6-OA-220050-I Rev.0		dated	21.10.2008
- Declaration of Conformity TT186/5		dated	20.10.2008

One copy of all documents is kept in CESI files.

Essential Health and Safety Requirements

The Essential Health and Safety Requirements are assured by compliance to the following standards:

- EN 60079-0: 2006 - Electrical apparatus for explosive gas atmospheres - Part 0: general requirements.
- EN 60079-1: 2007 - Explosive atmosphere - Part 1: equipment protection by explosion proof "d".
- EN 61241-0: 2006 - Electrical apparatus for use in the presence of combustible dust - Part 0: general requirements.
- EN 61241-1: 2004 - Electrical apparatus for use in the presence of combustible dust - Part 1: protection by enclosures "tD".

EXTENSION n. 08/09

to EC-Type Examination Certificate CESI 02 ATEX 014

Equipment: Explosion proof solenoid series OA-; OZA; MZA-A-

Manufacturer: **ATOS S.p.A.**

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

Admitted variation

- Adding models OA/3*, OAX/3*, OAXS/3* and OAXW/3* with maximum power limit to 3,5W

Marking

The equipment shall be marked as follows:

II 2GD Ex d IIC T6 *or* **T4** *or* **T3, Ex tD A21 IP67 T85°C** *or* **T135°C** *or* **T200°C**

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 02 ATEX 014.

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date 06 July 2009 - translation issued the 06th July 2009

prepared Maurizio Toninelli

verified Mirko Balaz

approved Fiorenzo Bregani

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EXTENSION n. 08/09

to EC-Type Examination Certificate CESI 02 ATEX 014

Electrical characteristics
Pmax = 3,5W

All others electrical characteristics are unchanged.

Ambient temperature
The solenoids in subject are suitable to operate with a minimum ambient temperature of – 40°C.

Temperature classes / Maximum surface temperature and temperature on the supply cables related to the maximum ambient temperature

Type		Maximum ambient temperature	Cables operating temperature	Temperature class / Maximum surface temperature
OA/3 OA/3/O OA/3/WP OA/3/O/WP	OAX/3/WP OAX/3/O/WP OAXS/3/WP OAXS/3/O/WP OAXW/3/WP OAXW/3/O/WP	70	90	T4 / T135°C
		45	-	T6 / T85°C

A label shall be provided on the outside of the electrical apparatus as a guide for the selection of the cable by the user (par. 16.5 of EN 60079-0 Standard and par.14.7 of EN 61241-0 Standard).

Report n. EX-A9018144

Routine tests
The manufacturer shall carried out the routine tests prescribed at par. 27 of EN60079-0 Standard, at par. 16 of EN60079-0 Standard and at par. 24 of EN61241.0 standard.
Solenoids in subject are exempted from overpressure routine test since they have been submitted, with the static method and favourable result, to an overpressure test at a pressure corresponding to 4 times the reference pressure related to an ambient temperature of –40 °C. The actuators are submitted to an individual overpressure test to verify the functionally suitability at the rated operating pressure.

EXTENSION n. 08/09

to EC-Type Examination Certificate CESI 02 ATEX 014

Descriptive documents (prot. EX-A9018149)

- n. SAS-464-D/0	(pages 3)	dated	27.05.2009
- n. TT189/8	(pages 10)	dated	28.05.2009
- n. 6-OA-223000-I Rev.0		dated	03.06.2009
- n. 6-OAX-223000-I Rev.0		dated	03.06.2009
- n. 6-OAXS-223000-I Rev.0		dated	03.06.2009
- n. 6-OAXW-223000-I Rev.0		dated	03.06.2009
- Declaration of conformity TT186/6		dated	03.06.2009

One copy of all documents is kept in CESI files.

Essential Health and Safety Requirements

The Essential Health and Safety Requirements are assured by compliance to the following standards:

- EN 60079-0: 2006 - Electrical apparatus for explosive gas atmospheres - Part 0: general requirements.
- EN 60079-1: 2007 - Explosive atmosphere - Part 1: equipment protection by explosion proof "d".
- EN 61241-0: 2006 - Electrical apparatus for use in the presence of combustible dust - Part 0: general requirements.
- EN 61241-1: 2004 - Electrical apparatus for use in the presence of combustible dust - Part 1: protection by enclosures "tD".

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EXTENSION n. 09/12

to EC-Type Examination Certificate CESI 02ATEX014

Equipment: Explosion proof solenoid series OA-; OZA; MZA-A-

Manufacturer: **ATOS S.p.A.**

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

Admitted variation

- Standard EN 60079-0: 2009, EN 60079-1:2007, EN 60079-31:2009 upgrade.

Marking

The equipment shall be marked as follows:

II 2G Ex d IIC T6, T4, T3 Gb
II 2D Ex tb IIIC T85°C, T135°C, T200°C Db IP67

Temperature class and/or maximum surface temperature is related to ambient temperature range:
Tamb : -40°C / +40°C/+45°C/+50°C /+60°C/+70°C.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 02ATEX014.

Date 15th March 2012 - translation issued the 15th March 2012

prepared	verified	approved
M. T.	Mirko Balaz	Fiorenzo Bregani

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EXTENSION n. 09/12

to EC-Type Examination Certificate CESI 02ATEX014

Electrical characteristics

All electrical characteristics are unchanged.

Temperature classes / Maximum surface temperature and temperature on the supply cables related to the maximum ambient temperature

Solenoid type		**T amb.** *Max ambient temperature* (°C)	*Connecting cable temperature* (°C)	*Temperature class*
OA, OA/3, OA/O, OA/3/O, OA/WP, OA/3/WP, OA/O/WP,OA/3/O/WP	OAX/WP, OAX/3/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	70	90	T4
		45	-	T6
-	OAKX/WP OAKX/O/WP OAKXS/WP OAKXS/O/WP OAKXW/WP OAKXW/O/WP	70	130	T3
		60	120	
		50	110	
		40	100	T4
OZA-A OZA-A/O OZA-A/WP OZA-A/O/WP	OZAX-A/WP OZAX-A/O/WP OZAXS-A/WP OZAXS-A/O/WP OZAXW-A/WP OZAXW-A/O/WP	70	120	T3
		40	90	T4
MZA-A MZA-A/O	MZAX-A, MZAX-A/O, MZAXS-A, MZAXS-A/O, MZAXW-A, MZAXW-A/O	70	120	T3
		40	90	T4
OZA-T	-	70	120	T3
		40	90	T4

A label shall be provided on the outside of the electrical apparatus as a guide for cable selection by the user (par. 16.5 of EN 60079-0 Standard).

The characteristics of the cables and of the accessories used for cable entries shall be suitable for the use in the ambient/operating temperature of the solenoid. The accessories used for cable entries shall be certified separately and suitable for the installation hazardous area.

Routine test

The manufacturer shall carried out the routine tests prescribed at clause 27 of EN60079-0 Standard, at clause 16 of EN60079-0 Standard and clause. 6 of EN60079-31 standard.

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

EXTENSION n. 09/12

to EC-Type Examination Certificate CESI 02ATEX014

Report n. EX-B2008533

Descriptive documents (prot. EX-B2008549)

- n. SAS-526-D/0	(pages 2)	dated	14.02.2012
- n. TT189/9	(pages 10)	dated	15.02.2012
- n. 6-OA-220050-I		dated	15.02.2012
- n. 6-OA-223050-I		dated	15.02.2012
- Declaration of conformity TT186/7		dated	15.02.2012

One copy of all documents is kept in CESI files.

Essential Health and Safety Requirements

The Essential Health and Safety Requirements are assured by compliance to the following standards:

- EN 60079-0: 2009 - Electrical apparatus for explosive atmospheres - Part 0: general requirements.
- EN 60079-1: 2007 - Explosive atmosphere - Part 1: equipment protection by explosion proof "d".
- EN 60079-31: 2009 - Electrical apparatus for use in the presence of combustible dust - Part 31: protection by enclosures "t"

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EXTENSION n. 10/15

to EC-Type Examination Certificate CESI 02ATEX014X

Equipment: Explosion proof solenoid series OA-*;OAB-*; OZA-A*; OZAB-A*; MZA-A-*; MZAB-A-*

Manufacturer: **ATOS S.p.A.**

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

Admitted variation

- Updating to **EN60079-0 (2012)** and **EN60079-31 (2014)** standards.
- Constructional modifications.
- New models suitable for minimum Tamb – 60°C.
- Updating nameplate for multi-certification ATEX / IEC EX /...
- Updating of the documentation.

The details of the admitted variations are specified in the descriptive documents annexed to this extension.

Marking

The equipment shall be marked as follows:

II 2G Ex d IIC T6, T4, T3 Gb

II 2D Ex tb IIIC T85°C, T135°C, T200°C Db IP66/67

The temperature class and/or the maximum surface temperature are function of the ambient temperature:
Tamb: -60°C/-40°C / +40°C/+45°C/+50°C /+55°C/+60°C/+70°C.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 02ATEX014X.

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Date 30 January 2015 - Translation issued the 30 January 2015

Prepared	**Verified**	**Approved**
Enrico Radaelli	Mirko Balaz	Fiorenzo Bregani

CESI S.p.A. Testing & Certification Division Business Area Certification Il Responsabile Fiorenzo Bregani

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EXTENSION n. 10/15

to EC-Type Examination Certificate CESI 02ATEX014X

Description and identification of the equipment
Beginning from this extension solenoids suitable for installation with minimum Tamb of -60°C are introduced.
These new models are differentiated from those previously certified, suitable for minimum Tamb -40 ° C, introducing the letter "B" in the code.

Electrical characteristics
All electrical characteristics remain unchanged.
The characteristics for each model are detailed in the descriptive documents annexed to the certificate.

Temperature class / Maximum surface temperature and operating temperature of the supply cables related to the maximum ambient temperature.

Solenoid type (minimum Tamb -40°C)		Max Tamb temperature (°C)	Connecting cable temperature (°C)	Temperature Class / Surface Temperature
OA, OA/3, OA/O, OA/3/O, OA/WP, OA/3/WP, OA/O/WP, OA/3/O/WP	OAX/WP, OAX/3/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	70	90	T4 / T135°C
		45	-	T6 / T85°C
-	OAKX/WP OAKX/O/WP OAKXS/WP OAKXS/O/WP OAKXW/WP OAKXW/O/WP	70	130	T3 / T200°C
		60	120	
		50	110	
		45	100	T4 / T135°C
OZA-A OZA-A/O OZA-A/WP OZA-A/O/WP	OZAX-A/WP OZAX-A/O/WP OZAXS-A/WP OZAXS-A/O/WP OZAXW-A/WP OZAXW-A/O/WP	70	120	T3 / T200°C
		55	110	
		45	95	T4 / T135°C
		40	90	
MZA-A MZA-A/O	MZAX-A, MZAX-A/O, MZAXS-A, MZAXS-A/O, MZAXW-A, MZAXW-A/O	70	120	T3 / T200°C
		45	90	T4 / T135°C
		55	110	T3 / T200°C

(follows)

EXTENSION n. 10/15

to EC-Type Examination Certificate CESI 02ATEX014X

(follows)

Temperature class / Maximum surface temperature and operating temperature of the supply cables related to the maximum ambient temperature.

Solenoid type (minimum Tamb -60°C)		Max Tamb temperature (°C)	Connecting cable temperature (°C)	Temperature Class / Surface Temperature
OAB, OAB/3, OAB/O, OAB/3/O, OAB/WP, OAB/3/WP, OAB/O/WP, OAB/3/O/WP	OABX/WP, OABX/3/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	70	90	T4 / T135°C
		45	-	T6 / T85°C
-	OABKX/WP OABKX/O/WP OABKXS/WP OABKXS/O/WP OABKXW/WP OABKXW/O/WP	70	130	T3 / T200°C
		60	120	
		50	110	
		45	100	T4 / T135°C
OZAB-A OZAB-A/O OZAB-A/WP OZAB-A/O/WP	OZABX-A/WP OZABX-A/O/WP OZABXS-A/WP OZABXS-A/O/WP OZABXW-A/WP OZABXW-A/O/WP	70	120	T3 / T200°C
		55	110	
		45	95	T4 / T135°C
		40	90	
MZAB-A MZAB-A/O	MZABX-A, MZABX-A/O, MZABXS-A, MZABXS-A/O, MZABXW-A, MZABXW-A/O	70	120	T3 / T200°C
		45	90	T4 / T135°C
		55	110	T3 / T200°C

The characteristics of the cables and of the accessories used for cable entries shall be suitable for the use in the ambient/operating temperature of the solenoid. The accessories used for cable entries shall be certified separately and suitable for the installation hazardous area.

Report n. EX-B5002589.

Routine test

The manufacturer shall carried out the routine tests prescribed at clause 27 of EN 60079-0 Standard and at clause 16 of EN 60079-1 Standard.

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.

EXTENSION n. 10/15

to EC-Type Examination Certificate CESI 02ATEX014X

Descriptive documents (prot. EX-B5002605)

- Technical Note n. SAS-555-D/0	(pg. 4)	dated	03.12.2014
- Safety Instructions n. TT291-2	(pg. 14)	dated	03.12.2014
- n. 6 -OAB-100050- I rev. 2		dated	13.10.2014
- n. 6 -OA-220000-I rev. 1		dated	14.05.2014
- n. 6 -OAB-100000-I		dated	14.05.2014
- n. 6 -OA-223000-I rev. 1		dated	20.05.2014
- n. 6 -OAB-103000- I		dated	20.05.2014
- n. 6 -OZA-220000- I rev. 1		dated	20.05.2014
- n. 6 -OZAB-100000- I		dated	20.05.2014
- n. 6 -MZA-230000- I rev. 1		dated	20.05.2014
- n. 6 -MZAB-100000- I		dated	20.05.2014
- n. 6 -OAX-220000- I rev. 1		dated	18.06.2014
- n. 6 -OABX-100000- I		dated	18.06.2014
- n. 6 -OAX-223000- I rev. 1		dated	18.06.2014
- n. 6 -OABX-103000- I		dated	18.06.2014
- n. 6 -OZAX-120000- I rev. 1		dated	18.06.2014
- n. 6 -OZABX-100000- I		dated	18.06.2014
- n. 6 -MZAX-230000- I rev. 1		dated	18.06.2014
- n. 6 -MZABX-100000- I		dated	18.06.2014
- n. 6 -OAXS-220000- I rev. 1		dated	19.06.2014
- n. 6 -OABXS-100000- I		dated	18.06.2014
- n. 6 -OAXS-223000- I rev. 1		dated	19.06.2014
- n. 6 -OABXS-103000- I		dated	18.06.2014
- n. 6 -OZAXS-120000- I rev. 1		dated	19.06.2014
- n. 6 -OZABXS-100000- I		dated	18.06.2014
- n. 6 -MZAXS-230000- I rev. 1		dated	19.06.2014
- n. 6 -MZABXS-100000- I		dated	18.06.2014
- n. 6 -OAXW-220000- I.. rev. 1		dated	19.06.2014
- n. 6 -OABXW-100000- I		dated	18.06.2014
- n. 6 -OAXW-223000- I rev. 1		dated	19.06.2014
- n. 6 -OABXW-103000- I		dated	18.06.2014
- n. 6 -OZAXW-120000- I rev. 1		dated	19.06.2014
- n. 6 -OZABXW-100000- I		dated	18.06.2014
- n. 6 -MZAXW-230000- I rev. 1		dated	19.06.2014
- n. 6 -MZABXW-100000- I		dated	18.06.2014
- n. 6 -OA-220100- I		dated	26.05.2014
- n. 6 -OAB-100100- I		dated	21.05.2014
- n. 6 -OAX-220100- I		dated	04.12.2014
- n. 6 -OABX-100100- I		dated	18.06.2014
- n. 6 -OA-221500- I rev. 2		dated	20.05.2014
- Declaration of conformity nr TT186/8 *(fac simile)*		dated	03.12.2014

One copy of all documents is kept in CESI files.

EXTENSION n. 10/15

to EC-Type Examination Certificate CESI 02ATEX014X

Special conditions for safe use (X)

Beginning from this extension the "X" suffix is added to the CESI 02ATEX014 certificate numbert and it becomes ***CESI 02ATEX014X*** *for the insertion of the following special condition for safe use:*

- The flamepaths 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.

- Information relating to use, installation, repair and maintenance of the equipment are included within the safety instructions.

Essential Health and Safety Requirements

The Essential Health and Safety Requirements are assured by compliance to the following standards:

- EN 60079-0: 2012 – Explosive atmospheres - Equipment - General requirements.
- EN 60079-1: 2007 – Explosive atmospheres - Equipment protection by flameproof enclosures "d".
- CEI EN 60079-1: 2008 (annex 1) – Explosive atmospheres – Equipment protection by flameproof enclosures "d".
- EN 60079-31: 2014 – Explosive atmospheres – Equipment dust ignition protection by enclosures "t".

CESI

EXTENSION n. 10/15

to EC-Type Examination Certificate CESI 02ATEX014X

Equipment: Explosion proof solenoid series OA-*;OAB-*; OZA-A*; OZAB-A*; MZA-A-*; MZAB-A-*

Manufacturer: **ATOS S.p.A.**

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

Admitted variation

- Updating to **EN60079-0 (2012)** and **EN60079-31 (2014)** standards.
- Constructional modifications.
- New models suitable for minimum Tamb – 60°C.
- Updating nameplate for multi-certification ATEX / IEC EX /...
- Updating of the documentation.

The details of the admitted variations are specified in the descriptive documents annexed to this extension.

Marking

The equipment shall be marked as follows:

II 2G Ex d IIC T6, T4, T3 Gb

II 2D Ex tb IIIC T85°C, T135°C, T200°C Db IP66/67

The temperature class and/or the maximum surface temperature are function of the ambient temperature:
Tamb: -60°C/-40°C / +40°C/+45°C/+50°C /+55°C/+60°C/+70°C.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 02ATEX014X.

This document may only be reproduced in its entirety and without any change.

Date 30 January 2015 - Translation issued the 30 January 2015

Prepared	**Verified**	**Approved**
Enrico Radaelli	Mirko Balaz	Fiorenzo Bregani

CESI S.p.A.
Testing & Certification Division
Business Area Certification
Il Responsabile
Fiorenzo Bregani

CESI S.p.A.
Via Rubattino 54
I-20134 Milano - Italy
Tel: +39 02 21251
Fax: +39 02 21255440
e-mail: info@cesi.it
www.cesi.it

Capitale sociale € 8.550.000 interamente versato
C.F. e numero iscrizione Reg. Imprese di Milano 00793580150
P.I. IT00793580150
N. R.E.A. 429222

EXTENSION n. 10/15

to EC-Type Examination Certificate CESI 02ATEX014X

Description and identification of the equipment
Beginning from this extension solenoids suitable for installation with minimum Tamb of -60°C are introduced.
These new models are differentiated from those previously certified, suitable for minimum Tamb -40 ° C, introducing the letter "B" in the code.

Electrical characteristics
All electrical characteristics remain unchanged.
The characteristics for each model are detailed in the descriptive documents annexed to the certificate.

Temperature class / Maximum surface temperature and operating temperature of the supply cables related to the maximum ambient temperature.

Solenoid type (minimum Tamb -40°C)		Max Tamb temperature (°C)	Connecting cable temperature (°C)	Temperature Class / Surface Temperature
OA, OA/3, OA/O, OA/3/O, OA/WP, OA/3/WP, OA/O/WP, OA/3/O/WP	OAX/WP, OAX/3/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	70	90	T4 / T135°C
		45	-	T6 / T85°C
-	OAKX/WP OAKX/O/WP OAKXS/WP OAKXS/O/WP OAKXW/WP OAKXW/O/WP	70	130	T3 / T200°C
		60	120	
		50	110	
		45	100	T4 / T135°C
OZA-A OZA-A/O OZA-A/WP OZA-A/O/WP	OZAX-A/WP OZAX-A/O/WP OZAXS-A/WP OZAXS-A/O/WP OZAXW-A/WP OZAXW-A/O/WP	70	120	T3 / T200°C
		55	110	
		45	95	T4 / T135°C
		40	90	
MZA-A MZA-A/O	MZAX-A, MZAX-A/O, MZAXS-A, MZAXS-A/O, MZAXW-A, MZAXW-A/O	70	120	T3 / T200°C
		45	90	T4 / T135°C
		55	110	T3 / T200°C

(follows)

EXTENSION n. 10/15

to EC-Type Examination Certificate CESI 02ATEX014X

(follows)

Temperature class / Maximum surface temperature and operating temperature of the supply cables related to the maximum ambient temperature.

Solenoid type (minimum Tamb -60°C)		Max Tamb temperature (°C)	Connecting cable temperature (°C)	Temperature Class / Surface Temperature
OAB, OAB/3, OAB/O, OAB/3/O, OAB/WP, OAB/3/WP, OAB/O/WP, OAB/3/O/WP	OABX/WP, OABX/3/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	70	90	T4 / T135°C
		45	-	T6 / T85°C
-	OABKX/WP OABKX/O/WP OABKXS/WP OABKXS/O/WP OABKXW/WP OABKXW/O/WP	70	130	T3 / T200°C
		60	120	
		50	110	
		45	100	T4 / T135°C
OZAB-A OZAB-A/O OZAB-A/WP OZAB-A/O/WP	OZABX-A/WP OZABX-A/O/WP OZABXS-A/WP OZABXS-A/O/WP OZABXW-A/WP OZABXW-A/O/WP	70	120	T3 / T200°C
		55	110	
		45	95	T4 / T135°C
		40	90	
MZAB-A MZAB-A/O	MZABX-A, MZABX-A/O, MZABXS-A, MZABXS-A/O, MZABXW-A, MZABXW-A/O	70	120	T3 / T200°C
		45	90	T4 / T135°C
		55	110	T3 / T200°C

The characteristics of the cables and of the accessories used for cable entries shall be suitable for the use in the ambient/operating temperature of the solenoid. The accessories used for cable entries shall be certified separately and suitable for the installation hazardous area.

Report n. EX-B5002589.

Routine test

The manufacturer shall carried out the routine tests prescribed at clause 27 of EN 60079-0 Standard and at clause 16 of EN 60079-1 Standard.

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.

EXTENSION n. 10/15

to EC-Type Examination Certificate CESI 02ATEX014X

Descriptive documents (prot. EX-B5002605)

- Technical Note n. SAS-555-D/0	(pg. 4)	dated 03.12.2014
- Safety Instructions n. TT291-2	(pg. 14)	dated 03.12.2014
- n. 6 -OAB-100050- I rev. 2		dated 13.10.2014
- n. 6 -OA-220000-I rev. 1		dated 14.05.2014
- n. 6 -OAB-100000-I		dated 14.05.2014
- n. 6 -OA-223000-I rev. 1		dated 20.05.2014
- n. 6 -OAB-103000- I		dated 20.05.2014
- n. 6 -OZA-220000- I rev. 1		dated 20.05.2014
- n. 6 -OZAB-100000- I		dated 20.05.2014
- n. 6 -MZA-230000- I rev. 1		dated 20.05.2014
- n. 6 -MZAB-100000- I		dated 20.05.2014
- n. 6 -OAX-220000- I rev. 1		dated 18.06.2014
- n. 6 -OABX-100000- I		dated 18.06.2014
- n. 6 -OAX-223000- I rev. 1		dated 18.06.2014
- n. 6 -OABX-103000- I		dated 18.06.2014
- n. 6 -OZAX-120000- I rev. 1		dated 18.06.2014
- n. 6 -OZABX-100000- I		dated 18.06.2014
- n. 6 -MZAX-230000- I rev. 1		dated 18.06.2014
- n. 6 -MZABX-100000- I		dated 18.06.2014
- n. 6 -OAXS-220000- I rev. 1		dated 19.06.2014
- n. 6 -OABXS-100000- I		dated 18.06.2014
- n. 6 -OAXS-223000- I rev. 1		dated 19.06.2014
- n. 6 -OABXS-103000- I		dated 18.06.2014
- n. 6 -OZAXS-120000- I rev. 1		dated 19.06.2014
- n. 6 -OZABXS-100000- I		dated 18.06.2014
- n. 6 -MZAXS-230000- I rev. 1		dated 19.06.2014
- n. 6 -MZABXS-100000- I		dated 18.06.2014
- n. 6 -OAXW-220000- I.. rev. 1		dated 19.06.2014
- n. 6 -OABXW-100000- I		dated 18.06.2014
- n. 6 -OAXW-223000- I rev. 1		dated 19.06.2014
- n. 6 -OABXW-103000- I		dated 18.06.2014
- n. 6 -OZAXW-120000- I rev. 1		dated 19.06.2014
- n. 6 -OZABXW-100000- I		dated 18.06.2014
- n. 6 -MZAXW-230000- I rev. 1		dated 19.06.2014
- n. 6 -MZABXW-100000- I		dated 18.06.2014
- n. 6 -OA-220100- I		dated 26.05.2014
- n. 6 -OAB-100100- I		dated 21.05.2014
- n. 6 -OAX-220100- I		dated 04.12.2014
- n. 6 -OABX-100100- I		dated 18.06.2014
- n. 6 -OA-221500- I rev. 2		dated 20.05.2014
- Declaration of conformity nr TT186/8 *(fac simile)*		dated 03.12.2014

One copy of all documents is kept in CESI files.

EXTENSION n. 10/15

to EC-Type Examination Certificate CESI 02ATEX014X

Special conditions for safe use (X)
Beginning from this extension the "X" suffix is added to the CESI 02ATEX014 certificate numbert and it becomes ***CESI 02ATEX014X*** *for the insertion of the following special condition for safe use:*

- The flamepaths 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.

- Information relating to use, installation, repair and maintenance of the equipment are included within the safety instructions.

Essential Health and Safety Requirements
The Essential Health and Safety Requirements are assured by compliance to the following standards:
- EN 60079-0: 2012 – Explosive atmospheres - Equipment - General requirements.
- EN 60079-1: 2007 – Explosive atmospheres - Equipment protection by flameproof enclosures "d".
- CEI EN 60079-1: 2008 (annex 1) – Explosive atmospheres – Equipment protection by flameproof enclosures "d".
- EN 60079-31: 2014 – Explosive atmospheres – Equipment dust ignition protection by enclosures "t".

CESI

protocollo	firma
B5002605	Modelli
allegato al certificato	**data**
CESI 02 ATEX 014 X	30/01/2015

Dichiarazione di conformità
Declaration of conformity

TT186/8
Atos spa

fac simile

La Ditta / *The Company*

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

Dichiara con la presente la conformità al Prodotto / *herewith declares conformity of the Products*

Prodotto *Product*	Tipo / *Type*	
SOLENOIDI ANTIDEFLAGRANTI *EXPLOSION-PROOF SOLENOIDS*	OA-*, OA/O-*, OA/WP-*, OA/O/WP-*, OA/3-*, OA/3/O-*, OA/3/WP-*, OA/3/O/WP*, OZA-A-*, MZA-A-*, OZA-A-*/O, MZA-A-*/O, OZA-A-*/WP, OZA-A-*/O/WP, OAX/WP-*, OAKX/WP-*, OAX/O/WP-*, OAKX/O/WP-*,OAX/3/WP-*, OAX/3/O/WP-*,OZAX-A-*/WP, MZAX-A-*, OZAX-A-*/O/WP, MZAX-A-*/O, OAXS/WP-*, OAKXS/WP-*, OAXS/O/WP-*, OAKXS/O/WP-*, OAXS/3/WP-*, OAXS/3/O/WP-*, OZAXS-A-*/WP, MZAXS-A-*, OZAXS-A-*/O/WP, MZAXS-A-*/O,OAXW/WP-*, OAKXW/WP-*, OAXW/O/WP*, OAKXW/O/WP-*, OAXW/3/WP-*, OAXW/3/O/WP-*, OZAXW-A-*/WP, MZAXW-A-*, OZAXW-A-*/O/WP, MZAXW-A-*/O	OAB-*, OAB/O-*, OAB/WP-*, OAB/O/WP-*, OAB/3-*, OAB/3/O-*, OAB/3/WP-*, OAB/3/O/WP-*,OZAB-A-*, MZAB-A-*, OZAB-A-*/O, MZAB-A-*/O, OZAB-A-*/WP, OZAB-A-*/O/WP OABX/WP-*, OABKX/WP-*, OABX/O/WP-*, OABKX/O/WP-*,OABX/3/WP-*, OABX/3/O/WP-*, OZABX-A-*/WP, MZABX-A-*, OZABX-A-*/O/WP, MZABX-A-*/O, OABXS/WP-*, OABKXS/WP-*, OABXS/O/WP-*, OABKXS/O/WP-*, OABXS/3/WP-*, OABXS/3/O/WP-*, OZABXS-A-*/WP, MZABXS-A-*, OZABXS-A-*/O/WP, MZABXS-A-*/O, OABXW/WP-*, OABKXW/WP-*, OABXW/O/WP-*, OABKXW/O/WP-*, OABXW/3/WP-*, OABXW/3/O/WP-*, OZABXW-A-*/WP, MZABXW-A-*, OZABXW-A-*/O/WP, MZABXW-A-*/O

* = Tensione di alimentazione nominale / *Nominal supply voltage*

Modo di protezione / *Protection mode*

Ex II 2 G Ex d IIC T6, T4, T3 Gb

Ex II 2 D Ex tb IIIC T85°C, T135°C, T200°C Db **IP66/67**

Tamb = -40°C ÷ +45°C or Tamb = -40°C ÷ +70°C or Tamb = -60°C ÷ +45°C Tamb = -60°C ÷ +70°C

Certificato / *Certificate* **CESI 02 ATEX 014 X**
In accordo alle norme sottostanti / *in accordance with the below applicable regulations*
Direttive CEE applicabili / *applicable EC Directive*

2004/108/CE **94/9/CE**

In quanto conforme alle Norme Europee Armonizzate / *As in accordance to the European Armonized Standards*

EN 61000-6-1	X	**EN 60079-0** (2012)	X		
EN 61000-6-3	X	**EN 60079-1** (2007)	X	**EN 60079-31** (2014)	X

Organismo Notificato / *Notified body* **n° 0722**

Notifica / *Notification* **CESI 02 ATEX 034Q**

Data/*Date*: 03.12.2014 Firma/*Signature*: .....