



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: issue No.:

Certificate history:

Status:

Date of Issue: **2012-09-12** Page 1 of 4

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

Electrical Apparatus: **Intrinsically safe solenoids, models OWI-18/*; OWI/BT-18/* and OWI/M-18/***
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **Ex ia IIC T6 Ga**
Ex ia IIB T6 Ga
Ex ia IIA T5 Ga
Ex ia I Mb
Ex ib I Mb

Approved for issue on behalf of the IECEx
Certification Body:

Mirko Balaz

Position:

Head of IECEx CB

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

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



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

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011-06 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-26 : 2006 Edition: 2	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:
[IT/CES/ExTR12.0014/00](#)

Quality Assessment Report:
[IT/CES/QAR10.0003/01](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Intrinsically safe solenoids, models OWI-18/*; OWI/BT-18/* and OWI/M-18/* are the permanently mounted device powered by an intrinsically safe associated apparatus. These On-off solenoids are used for the command of directional and pressure control valves, operating in hazardous areas with explosive or flammable environment.

Electric input parameters:

Protection mode	Ex ia IIC T6 Ex ia I Ex ib I			Ex ia IIB T6 Ex ia I Ex ib I	Ex ia IIA T5 Ex ia I Ex ib I	Ex ia I Ex ib I
	Ci (equivalent capacity)	0			0	0
Li (equivalent inductance)	0			0	0	0
Ui (max voltage)	27 V	19,11 V	19,5 V	28 V	28 V	12,4 V
Ii (max current)	130 mA	360 mA	360 Ma	250 mA	396 mA	2200 mA
Pi (max power)	0,9 W	1,72 W	1,64 W	1,8 W	2,8 W	6,82 W
VN (working voltage)	12 ÷ 26 V			12 ÷ 26 V	12 ÷ 26 V	12 ÷ 26 V

CONDITIONS OF CERTIFICATION: NO

Empty box for conditions of certification.



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EQUIPMENT(continued):

Model Identification:

- Model OWI-18/* : Solenoid suitable for group II (IIC, IIB, IIA) and ambient temperature range from -20°C to +60°C.
- Model OWI/BT-18/* : Solenoid suitable for group II (IIC, IIB, IIA) and ambient temperature range from -40°C to +60°C.
- Model OWI/M -18/* : Solenoid suitable for mining (group I, Mb).

The following versions with the relevant model code are available:

Version	Model code	Description
Standard	OWI-18/6	On-off solenoids with DIN-43650 plastic connector, for surface plant
	OWI/BT-18/6	On-off solenoids with DIN-43650 plastic connector, for surface plant and low temperature -40°C
	OWI/M-18/6	On-off solenoids with DIN-43650 plastic connector, for mining
Standard with 3 pins metallic connector	OWI-18/H	On-off solenoids with MIL-C-26482 metallic connector, for surface plant
	OWI/BT-18/H	On-off solenoids with MIL-C-26482 metallic connector, for surface plant and low temperature -40°C
	OWI/M-18/H	On-off solenoids with MIL-C-26482 metallic connector, for mining
	OWI-18/M	On-off solenoids with MIL-C-5015 metallic connector, for surface plant
	OWI/BT-18/M	On-off solenoids with MIL-C-5015 metallic connector, for surface plant and low temperature -40°C
	OWI/M-18/M	On-off solenoids with MIL-C-5015 metallic connector, for mining
Standard with 7 pins metallic connector	OWI-18/S	On-off solenoids with 7 pins metallic connector , for surface plant
	OWI/BT-18/M	On-off solenoids with 7 pins metallic connector , for surface plant and low temperature -40°C
	OWI/M-18/S	On-off solenoids with 7 pins metallic connector, for mining