

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: IECEx INE 15.0053X

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Certificate history:

Status: Current

Issue No: 1

Issue 0 (2016-03-14)

Date of Issue: 2022-02-01

Applicant: ATAM S.p.A

via Archimede, 7

I- 20864 Agrate Brianza (MB)

Italy

Equipment: Electromagnets 257GD....

Optional accessory:

Type of Protection: mb

Marking: Ex mb IIC T4...T6 Gb

Ex mb IIIC T135°C...T85°C Db

Ex mb I Mb

Approved for issue on behalf of the IECEx Certification Body:

Position:

Signature: (for printed version)

Date:

Thierry HOUEIX

Ex/Certification Officer

Signé électroniquement Digitally signed by Thierry HOUEIX Ex Certification Officer Délégué Certification

2022-02-01

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 www.iecex.com or use of this QR Code.



Certificate issued by:

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



controlling risks for sustainable development



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Date of issue: 2022-02-01 Issue No: 1

Manufacturer: ATAM S.p.A

via Archimede. 7

I- 20864 Agrate Brianza (MB)

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 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"

Edition:4.1

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:

FR/INE/ExTR15.0058/00 FR/INE/ExTR15.0058/01

Quality Assessment Report:

IT/CES/QAR15.0002/06



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The electromagnets series 257 are encapsulated electrical solenoids suitable to drive mechanical valves used to control and regulate fluids and gases.

The solenoids must be used with the suitable mechanical pilot and valve, that has not been evaluated.

The coils shall be used for internal fixed installation and is provided with permanently connected multicore cable.

The coils have an internal non-resettable thermal link conform to IEC 60691 completely encapsulated, no repair is possible.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The permanently connected unterminated supply cables must be mechanically protected against the risk of damage due to the mechanical stress.

The connector blocks must be located out of hazardous area or be protected by a standardized mode of protection.

For an apparatus with interdependent cable, the user will have to connect the end of the cable either out of hazardous area or in an enclosure protected by a mode of protection recognized and adapted to the zone considered.

For gassy mines using, the apparatus shall be installed in location with low risk of mechanical danger or protected by guards or protective covers suitable to withstand an impact of 20J.

A fuse corresponding to the rated current of the electromagnet (max. 3 x Irat according to IEC 60127) shall be connected in series to each solenoid as short-circuit protections. The rated voltage of the fuse shall be the same as or higher than the maximum value of the nominal voltage (Un + 10%) specified for the magnet. The breaking capacity of the fuse link shall be the same or higher than the maximum short-circuit current excepted to occur at the place of installation (usually 1500 A)

Potential danger of electrostatic discharges: do not rub, clean only with a damp cloth.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Application of IEC 60079-0:2017 (Ed. 7) standard and IEC 60079-18:2017 (Ed. 4.1) standard

- Update of descriptive documents

Annex:

IECEx INE 15.0053X-01_Annex.pdf



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Annex: IECEx INE 15.0053X-01_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

Rated voltage : 24, 48, 110, 220, 230 Va.c.

24 Vd.c.

Frequency : 50 Hz or 60 Hz, Duty cycle : continuous

Maximum power : T4 (5.3 W); T5 (4.8 W)

T6 (3.2 W)

MARKING

Marking has to be readable and indelible; it has to include the following indications:

- ATAM S.p.A
- I 20864 Agrate Brianza (MB)
- 257GD.....
- (Serial Number)
- IECEx INE 15.0053X
- Ex mb IIC T6...T4 Gb
- Ex mb IIIC T85°C....T135°C Db
- Ex I mb Mb
- (Rated voltage)
- (Maximum power)
- WARNING: ELECTROSTATIC DISCHARGE CLEAN WITH DAMP CLOTH OR ANTISTATIC PRODUCTS

Following reduced marking can be used:

- ATAM S.p.A
- 257GD......
- IECEx INE 15.0053X
- Ex mb IIC T6...T4 Gb
- Ex mb IIIC T85°C....T135°C Db
- Ex I mb Mb
- (Rated voltage)
- (Maximum power)
- WARNING: ELECTROSTATIC DISCHARGE CLEAN WITH DAMP CLOTH OR ANTISTATIC PRODUCTS

ROUTINE EXAMINATIONS AND TESTS

Each apparatus defined above has to have successfully passed; before delivery:

- In accordance with clause 9.1 from the IEC 60079-18 standard, a visual examination of encapsulation.
- In accordance with clause 9.2 from the IEC 60079-18 standard, a dielectric strength test of 1500 Vac while 1 second for a voltage supply greater than 90 V.
- In accordance with clause 9.2 from the IEC 60079-18 standard, a dielectric strength test of 500 Vac while 1 second for a voltage supply equal or less than 90 V.