



- (2) Equipment and protective systems intended for use in potentially explosive atmospheres  
Directive 94/9/EC

## EC-TYPE EXAMINATION CERTIFICATE

(1) Number of the EC type examination certificate: INERIS 06ATEX0002X

(4) Equipment or protective system:

ELECTROMAGNETS SERIE 257GD.....

(5) Manufacturer: ATAM WINDINGS

(6) Address: Via Archimede, 7  
I - 20041 Agrate Brianza (MI)

(7) This equipment or protective system and any other acceptable alternative of this one are described in the annex of this certificate and the descriptive documents quoted in this annex.

(8) The INERIS, notified body and identified under number 0080, in accordance with article 9 of Council Directive 94/9/EC of the 23<sup>rd</sup> March 1994, certifies that this equipment or protective system fulfils the Essential of Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, described in annex II of the Directive.

The examinations and the tests are consigned in confidential report No P74389/06.

(9) The respect of the Essential Health and Safety Requirements is ensured by:

- conformity with:

EN 50 014	of	June	1997 + Amendments 1 et 2
EN 50 028	of	February	1987
EN 50 281-1-1	of	September	1998 + Amendment 1

- specific solutions adopted by the manufacturer to meet the Essential Health and Safety Requirements described in the descriptive documents.

- (10) Sign X, when it is placed following the Number of the EC type examination certificate, indicates that this equipment and protective system is subjected to the special conditions for safe use, mentioned in the annex of 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 the protective system will have to contain:

 II 2 GD

EEx m II T6, T5, T4

IP6X T85°C, T100°C, T135°C

Verneuil-en-Halatte, 2006 01 25

P. O  
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Project Manager at the ATEX  
Equipment Certification Laboratory



Director of the Certifying Body,  
By delegation  
B. PIQUETTE  
Deputy Manager of Certification

(13)

## ANNEX

(14)

### EC TYPE EXAMINATION CERTIFICATE N°INERIS 06ATEX0002X

(15)

#### DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

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 EN 60691 completely encapsulated, no repair is possible.

#### PARAMETERS RELATING TO THE SAFETY

Rated voltage	:	24, 48, 110, 220, 230 V <sub>a.c.</sub>
		24 V <sub>d.c.</sub>
Fréquency	:	50 Hz or 60 Hz,
Duty cycle	:	continuous
Maximum dissipated 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 WINDINGS  
I - 20041 Agrate Brianza (MI)
- 257GD.....
- INERIS 06ATEX0002X
- (Serial number)
- (Year of construction)
-  II 2 GD
- EEx m II T6, T5 or T4
- 
- « WARNING, ELECTROSTATIC DISCHARGE :  
CLEAN WITH WET CLOTH OR ANTISTATIC PRODUCT »

Marking may be carried out in the language of the country of use.

The protective system or equipment has also to carry the marking normally stipulated by its construction standards.

## ROUTINE EXAMINATIONS AND TESTS

Each equipment hardware defined above have to successfully passed the following individual tests before delivery :

- In accordance with the regulations of the § 7.1 of the standard EN 50028, a visual exam of the compound.
- In accordance with the regulations of the § 6.2.4 of the standard EN 50028, a dielectric strength of 1500 volts during one minute.
- In accordance with the regulations of the § 7.3 of the standard EN 50028, a verification of the electrical characteristics.

(16) DESCRIPTIVE DOCUMENTS

The descriptive documents quoted hereafter constitute the technical documentation of the equipment, subject of this certificate.

- Certification file n° ATAM002 dated on 2006.02.07

This file comprise 10 rubrics and is signed on 08th february 2006.

**(17) SPECIAL CONDITIONS FOR SAFE USE**

- 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.

The other conditions are stipulated on the instructions.

**(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS**

The respect of the Essential Health and Safety Requirements is ensured by:

- Conformity to the European standards EN 50 014, EN 50 028 and EN 50 281-1-1.
  - All provisions adopted by the manufacturer and defined in the descriptive documents.

## ADDITION

(3) INERIS 06ATEX0002X/01

(4) ELECTROMAGNETS TYPE 257GD

(5) Made by Atam Windings

(15) PURPOSE OF THE ADDITION

- Application of new standards :  
EN 60079-0 : 2006 EN 60079-18 : 2004  
EN 61241-0 : 2006 EN 61241-18 : 2004

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are unchanged.

MARKING

The marking is modified as follows:

ATAM WINDINGS  
Via Archimede, 7  
20041 Agrate (MI)  
257GD... (\*)  
INERIS 06ATEX0002X  
(Serial number)  
(Year of construction)  
 II 2 GD  
Ex mb IIC T(\*\*)  
Ex mD 21 T(\*\*)°C

WARNING : ELECTROSTATIC DISCHARGE:  
CLEAN WITH WET CLOTH OR ANTISTATIC PRODUCT

(\*) Type is completed by numbers and/or letters corresponding to manufacturing variation

(\*\*)T6/T85°C or T5/T100°C or T4/T135°C according to the solenoid power.

Marking may be carried out in the language of the country of use.

The protective system or equipment has also to carry the marking normally stipulated by its construction standards.

## **ROUTINE EXAMINATIONS AND TESTS**

Routine examinations and tests are modified as follows :

- Each apparatus defined above has to have successfully passed; before delivery:
    - In accordance with clause § 9.1 from the EN 60079-18 standard, a visual examination of encapsulation.
    - In accordance with clause § 9.2 from the EN 60079-18 standard, a dielectric strength of 1500 volts during at less one second.

(16) DESCRIPTIVE DOCUMENTS

The descriptive documents quoted hereafter constitute the technical documentation describing the modification of the equipment, subject of this present addition.

- Technical note N.4 (7 rubrics) dated and signed on 2009.06.09

**(17) SPECIAL CONDITIONS FOR SAFE USE**

The special conditions for safe use are unchanged.

**(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS**

The respect of the Essential Health and Safety Requirements is completed as follows:

- Conformity to the standards quoted in clause (15).
  - All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2009 07 07



Director of the Certifying Body,  
By delegation  
T. HOUEIX  
Certification Officer  
Certification Division