



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

(1) **EC-TYPE EXAMINATION CERTIFICATE**

- (3) Number of the EC type examination certificate: **INERIS 05ATEX0028X**

- (4) Protective system or equipment:

**ELECTROMAGNETS SERIE 271D.....**

- (5) Manufacturer: **ATAM WINDINGS**

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

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

- (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 protective system or equipment 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 appendix II of the Directive.

The examinations and the tests are consigned in official report No P64182/05

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

- conformity with:

EN 50 281-1-1 of Septembre 1998 + A1

- 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 D

T85°C IP67 or T100°C IP67

Verneuil-en-Halatte, 2005 08 03



X. LEFEBVRE

Engineer at the Laboratory of Certification of ATEX  
Equipment



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

(13)

## ANNEX

(14)

EC TYPE EXAMINATION CERTIFICATE N° INERIS 05ATEX0028X

(15)

### DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

This metallic enclosure is intended to receive an electrical coil.  
The enclosure presents the degrees of protection IP67 according to the European standard EN 60 529.

### PARAMETERS RELATING TO THE SAFETY

Nominal voltages : 12, 24, 26, 48, 60, 110, 125 or 220 V (DC),

Nominal voltages : 24, 48, 110, 220 or 230 V (AC),

Frequency : 50 or 60Hz

Maximum Powers dissipated :

For T85°C : 6.5 W for electrical coil DC  
7 W for electrical coil AC with bridge diode.

For T100°C : 9.5 W for electrical coil DC  
11 W for electrical coil AC with bridge diode.


### MARKING

Marking must be readable and indelible; it must comprise the following indications:

#### ATAM WINDINGS

Via Archimede, 7  
20041 Agrate (MI)

271D... (\*)  
INERIS 05ATEX0028X  
(Serial number)  
(Year of construction)

 II 2 D

T(\*\*) IP67

DO NOT OPEN WHEN ENERGIZED

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

(\*\*) T85°C or T100°C according to the solenoid power.

The whole of marking can be carried out in the language of the country of use.

The protective apparatus or system must also carry the marking normally envisaged by the standards of construction which relate to it.

#### **ROUTINE EXAMINATIONS AND TESTS**

None.

#### **(16) DESCRIPTIVE DOCUMENTS**

The report is composed of the documents quoted hereafter, constituting the descriptive file of the apparatus, object of this certificate.

Certification file ATAM N°001 of 2005.05.03

This file signed on 2005.08.01 included 39 parts.

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

The free extremity of the enclosure supply cable must be connected either in a certified box suitable to the considered area or in safe area.

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

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

- Conformity to the European standard EN 50281-1-1.
- The whole of the provisions adopted by the manufacturer and described in the descriptive documents.



## ADDITION

(3) INERIS 05ATEX0028X/01

(4) SOLENOIDE TYPE 271D

(5) Made by Atam Windings

(15) PURPOSE OF THE ADDITION

- Introduction of the gas protection II 2 G, the type becomes 271GD
- Application of new standards :  
EN 60079-0 : 2006    EN 60079-1 : 2004  
EN 61241-0 : 2006    EN 61241-1 : 2004

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are modified as follows:

Maximal Powers dissipated :

For T85 °C / T6	:	6.5 W	for electrical power DC
		7 W	for electrical power AC with bridge diode.
For T100 °C / T5	:	9.5 W	for electrical power DC
		11 W	for electrical power AC with bridge diode.

MARKING

The marking is modified as follows:

ATAM WINDINGS  
Via Archimede, 7  
20041 Agrate (MI)  
271GD... (\*)  
INERIS 05ATEX0028X  
(Serial number)  
(Year of construction)  
 II 2 GD  
Ex d IIC T(\*\*)  
Ex tD A21 IP67 T(\*\*) °C

**WARNING** : DO NOT OPEN WHEN ENERGIZED

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

(\*\*) T6/T85 °C or T5/T100 °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 :

In accordance with clause 16.1 of the EN 60079-1 standard, each apparatus defined above has to have successfully passed, before delivery, an overpressure test of a period comprised between 10 and 60 seconds under 11 bar.

#### (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.3 du 2009.05.18 (9 rubrics) signed on 2009.05.18

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

The special conditions are completed as follows.

The values used for the maximum gap of construction are smaller than the values note on table 2 of EN60079-1.

#### (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 06 02



A handwritten signature in blue ink, appearing to read "T. Houeix".

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