



- (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 11ATEX0018X**

- (4) Equipment or protective system:

SOLENOID VALVE TYPE 800900-50-ED6 or 800900-50-SED6 or 800900-50-SEW6

- (5) Manufacturer: **AUTOMATISMES DU CENTRE EST (ACE)**

- (6) Address: **4 rue Nourrissat
F-21067 DIJON CEDEX**

- (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) INERIS, notified body and identified under number 0080, in accordance with article 9 of Council Directive 94/9/EC of the 23rd 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 report No 024668/11.

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

- conformity with:

EN 60079-0	:	2009	IEC 60079-0	:	2007
EN 60079-1	:	2007	IEC 60079-1	:	2007
EN 60079-7	:	2007	IEC 60079-7	:	2006
EN 60079-18	:	2009	IEC 60079-18	:	2009
EN 60079-31	:	2009	IEC 60079-31	:	2008
EN 13463-1	:	2009			
EN 13463-5	:	2003			

- 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:

 I M2 or  II 2 GD

Verneuil-en-Halatte, 2011.09.14



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

(13)

A N N E X

(14)

EC TYPE EXAMINATION CERTIFICATE N° INERIS 11ATEX0018X

(15)

DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

The enclosure of the solenoid valve type 800900-...-...., made in steel, stainless steel or in light alloy for the hydraulic valve, is constituted by a housing including an electrical coil protected by encapsulation in resin, and by a junction box, protected by flameproof or increased safety enclosure.

This equipment is also fitted with hydraulic valve, protected by constructional safety "c", intended to be inserted in hydraulic circuit.

The apparatus is also protected against dusts, protection mode "tb".

The solenoid valve may contain certified type closing cap or adapters.

Connection with the external electric circuits is ensured by cable entry of certified type.

The solenoid valve gets the degrees of protection IP66 according to EN/IEC 60529 standard.

PARAMETERS RELATING TO THE SAFETY

Nominal voltage in direct current : 24 Volt (dc)

Maximum power : 11.5 Watt

Maximum temperature of hydraulic fluid : 70°C

Table for temperature class

(1) SOLENOID TYPE	Direct voltage (Vdc)	(2) at T amb =40°C	(2) at T amb =50°C	(2) at T amb =60°C	(3) at T amb =40°C	(3) at T amb =50°C	(3) at T amb =60°C
50	24	T6	T5	T5	T85°C	T100°C	T100°C

MARKING

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

1-When fitted with hydraulic valve type ED6 or SED6 :

AUTOMATISMES DU CENTRE EST (ACE)



F-21000 DIJON

800900-50-ED6 or 800900-50-SED6

INERIS 11ATEX0018X

(Serial number)

(Year of construction)

 II2GD or  IM2

c Ex d mb I Mb or

c Ex d mb IIC T⁽²⁾ Gb or

c Ex e mb IIC T⁽²⁾ Gb

c Ex tb IIIC T⁽³⁾ Db IP66

T° amb.: from -25 to +40°C or +50°C or +60°C

T° cable : 80°C at T° amb.= 50°C or 90°C at T° amb.= 60°C

code of connection

Nominal voltage and maximum power

“WARNING : DO NOT OPEN WHEN ENERGIZED”

2-When fitted with hydraulic valve type SEW6 :

AUTOMATISMES DU CENTRE EST (ACE)


F-21000 DIJON

800900-50-SEW6

INERIS 11ATEX0018X

(Serial number)

(Year of construction)

 II 2 GD

c Ex d mb IIC T⁽²⁾ Gb or

c Ex e mb IIC T⁽²⁾ Gb

c Ex tb IIIC T⁽³⁾ Db IP66

T° amb.: from -25°C to +40°C or +50°C or +60°C

T° cable : 80°C at T° amb.= 50°C or 90°C at T° amb.= 60°C

code of connection

Nominal voltage and maximum power

“WARNING : DO NOT OPEN WHEN ENERGIZED”

See table here above for temperature class according to ambient temperature of use

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

- In accordance with clause 7.1 of the IEC/EN 60079-7 standard, , a test of dielectric strength on each of the different circuits of the connection units, performed according to the relevant standards with test voltage applied for one minute.
- In accordance with clause 9.1 from the IEC/EN 60079-18 standard, a visual examination of encapsulation.
- In accordance with clause 9.2 from the IEC/EN 60079-18 standard, a checking of the electric characteristics.

In accordance with clause 16.2 of the IEC/EN 60079-1 standard, the equipment defined above is exempted of routine test in owing to the fact that it has undergone a static type test at 4 times the reference pressure under 42.4 bar.

(16) DESCRIPTIVE DOCUMENTS

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

- | | |
|---|----------------------|
| - Descriptive note | signed on 2011.06.22 |
| - Instruction notice INS/E-050-720SED/06-11 | signed on 2011.06.22 |
| - Instruction notice INS/E-050-720SEW/06-11 | signed on 2011.06.22 |
| - Instruction notice INS/E-050-720ED/06-11 | signed on 2011.06.22 |
| - Drawing 800900-100 dated on 2011.04.05 | signed on 2011.06.22 |

(17) SPECIAL CONDITIONS FOR SAFE USE

An external fuse of a maximum 1.9A caliber must connected outside the solenoid.

In order to guarantee the tensile strength of the screws of the flameproof junction box, the yield stress of the screws must be at least equal to 700N/mm².

Length and gap of the flame path shall have in accordance with that defined in documents of the manufacturer.

Other conditions are stipulated in the instructions.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

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

- Conformity to the standards quoted in clause (9).
- All provisions adopted by the manufacturer and defined in the descriptive documents.