



(2) **Equipment and protection 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 02ATEX0007 X**

(4) Protection apparatus or system:

ELECTROVALVE TYPE 01-311P-00-H0-F01002 or 01-311P-00-H0-F01003

(5) Manufacturer: **FLUID AUTOMATION SYSTEMS**

(6) Address: Route de l'Etraz 126
CH-1290
Versoix / Genève
Suisse

(7) This protection 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 23rd March 1994, certifies that this protection system or equipment fulfils the Essential of Health and Safety Requirements relating to the design and construction of equipment and protection 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 P39083/02.


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

- conformity with:

EN 50 014	of June	1997 + Amendments 1 and 2
EN 50 020	of August	1994
EN 50 0281-1-1	of September	1998
EN 50 284	of January	1999

- 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 protection 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 protection system will have to contain:

 II 1 GD

EEx ia IIC T6 or T4

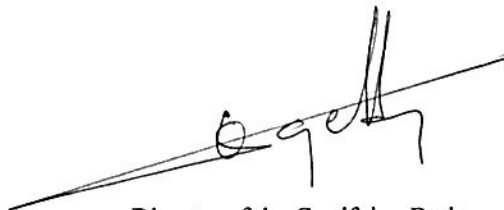
IP65 T85°C or T135°C

Verneuil-en-Halatte, the 2002 01 20

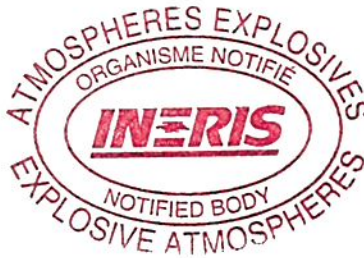


T. HOUEIX

Engineer at the Laboratory of Certification
of Materials ATEX



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



(13)

ANNEX

(14)

EC TYPE EXAMINATION CERTIFICATE N° INERIS 02ATEX0007 X

(15)

DESCRIPTION OF THE EQUIPMENT OR THE PROTECTION SYSTEM

The electrical solenoid type 01-311P-00-H0-F01002 or 01-311P-00-H0-F01003 is intended to the using of pneumatic and hydraulic apparatus.

It composed of a coil, with an electrical protection device.

The unit is coated in an insulating material enclosure.

Standard electro-valve 01-311P-00-H0-F01002 or 01-311P-00-H0-F01003 has a degree of protection IP65.

The connections with the external electric circuits are carried out by means of a connector.

PARAMETERS RELATING TO THE SAFETY

Maximum input characteristics to the terminals :

Electrovalve type 01-311P-00-H0-F01002 or F01003 12V

Reference of the terminals	Ui (V)	Ii (A)	Ri (Ω)	Ci (μ F)	Li (mH)
+ / -	16	0,33	280	0	0

Electrovalve type 01-311P-00-H0-F01002 or F01003 24V


Reference of the terminals	Ui (V)	Ii (A)	Ri (Ω)	Ci (μ F)	Li (mH)
+ / -	30	0,33	1150	0	0

MARKING

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

FLUID AUTOMATION SYSTEMS
 Route de l'Etraz 126
 CH-1290
 Versoix / Genève
 Suisse

01-311P-00-H0-F01002 ou 01-311P-00-H0-F01003 *
 INERIS 02ATEX0007 X
 (serial number)
 (Year of construction)

 II 1 GD
 EEx ia IIC T6 or T4**
 IP65 T85°C or T135°C
 Tamb : - 20°C to + ..°C**
 Ue = 16 V ; Ie = 0.33 A for the coil 12V
 Ue = 30 V ; Ie = 0.33 A for the coil 24V

(*) The points are replaced by a number or a letter define the mechanical variant of the apparatus

(**) The temperature class is define by the maximum using ambient temperature of the apparatus according the table below :

Maximum using ambient température range	Temperature Class	
	Tamb : - 20°C à + 40°C	T6
Tamb : - 20°C à + 60°C	T4	T135°C

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

The protection 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.

- Instructions notice (5 pages) signed on 10.01.2002
- Drawing N° H010.1000 rev. G of the 09.01.2002 signed on 10.01.2002

(17) SPECIAL CONDITIONS FOR SAFE USE

The output characteristics of the voltage source must be equal or inferior to the input characteristics defined in paragraph (15).

The special conditions for safe use are defined in the instructions notice of the apparatus.

(18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH

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

- conformity to the European standards EN 50 014, EN 50 020, EN 50 281-1-1 and EN 50 284.
- the whole of the provisions adopted by the manufacturer and described in the descriptive documents.

ADDITION

INERIS 02ATEX0007X/01

SOLENOID TYPE 01-311P-00-H0-F01002 or 01-311P-00-H0-F01003

Made by Fluid Automation Systems

(15) - PURPOSE OF THE ADDITION

Possible increasing of the nominal voltage of the solenoid to 30 volts dc.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety indicated in the basic certificate are modified as follow.

Solenoid type 01-311P-00-H0-F01002 or F01003 12V

Repères des bornes	Ui (V)	Ii (A)	Ri (Ω)	Ci (µF)	Li (mH)
+ / -	30	0,33	280	0	0

MARKING

The marking defined in the basic certificate is modified as follow.

Fluid Automation Systems
Route de l'Etraz 126
CH-1290
Versoix / Genève
Suisse

01-311P-00-H0-F01002 or 01-311P-00-H0-F01003 *



II 1GD

EEx ia IIC T6 or T4**

IP 65 T85°C or T135°C **
(serial number)

INERIS 02ATEX0007X

Tamb : - 20°C to + ..°C**

* The points are replaced by numbers or letters which defined the type of the apparatus.

** The temperature class is defined with the maximum using ambient temperature of the apparatus in accordance to the table as follow:

Maximum using ambient temperature range	Temperature Class	
Tamb : - 20°C to + 40°C	T6	T85°C
Tamb : - 20°C to + 60°C	T4	T135°C

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

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

ROUTINE EXAMINATIONS AND TESTS

The routine examination and tests stipulated by the basic certificate are unchanged.

(16) - DESCRIPTIVE DOCUMENTS

The document referred to below, constitute the file describing the modification of the apparatus and forming the subject of the present addition.

Instructions notice n°M010.1171 dated on 2004.05.04
 Drawing n°H010.1000 REV.h dated on 2004.05.03

These documents were signed on 04 may 2004

(17) - SPECIFIC PARAMETERS OF THE TYPES OF PROTECTION CONCERNED

Specific parameters for safe use defined in the basic certificate are unchanged.

(18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH

Requirements needed in the basic certificate are unchanged.

Verneuil-en-Halatte, 2004 05 10

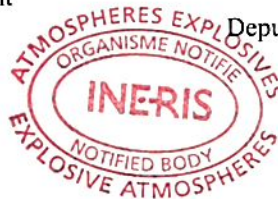


T. HOUEIX

Engineer at the Laboratory of ATEX Equipment
Certification



The Director of the Organization Certifier,
By delegation
B. PIQUETTE
Deputy manager of Certification



ADDITION

- (3) INERIS 02ATEX0007X/02
- (4) SOLENOID VALVE TYPE 01.....H012....
- (5) Made by Fluid Automation Systems S.A

(15) PURPOSE OF THE ADDITION

- Application of EN60079-0: 2009, EN60079-11: 2012 and EN60079-26: 2007 standards for solenoid valves variant 12 V and variant 24 V.
- Codification modification Electrovalve type 01-311P-00-H0 F01002 or 01-311P-00-H0 F01003 becomes Electrovalve type 01..... H012....

Dots are replaced by letters and numbers defining mechanical and electrical variants.

- Possible increasing of using ambient temperatures.

PARAMETERS RELATING TO THE SAFETY

For variant 12 V coil, the parameters relating to the safety are modified as follows:

Terminals reference	Ui (V)	Ii (A)	Ci (µF)	Li (µH)
+ / -	16 or 30	0.33 A	0	0

For variant 24 V coil, the parameters relating to the safety are unchanged.

MARKING

Marking is modified as follows:

FLUID AUTOMATION SYSTEMS SA
Route de l'Etraz, 126
CH-1290 Versoix/Genève
Switzerland
01..... H012... *
.. VDC ...W **
(serial number / week of construction)



II 1 GD

Ex ia IIC T6, T5 or T4 *** Ga

Ex ia IIIC T85°C, T100°C or T135°C *** Da

IP65

INERIS 02ATEX0007X

Tamb. = -20°C to +.. °C ***

Ui = ..V ; li = ...mA ****

Marking may be reduced to :



CH-1290 Versoix
SWITZERLAND

01..... H012... *

.. VDC ...W **

(serial number / week of construction)



II 1 GD

Ex ia IIC T6, T5 or T4 *** Ga

Ex ia IIIC T85°C, T100°C or T135°C *** Da

IP65

INERIS 02ATEX0007X

(*) Dots are replaced by numbers or letters defining mechanical variants of the apparatus.

(**) Coil power following 12 or 24 VDC versions and the models.

Voltage (**) (Vac/dc)	Coil resistor (Ω)	Power (**) (W)	Model
12	280	0.5	-
12	280	0.55	LED
24	1150	0.5	-
24	1150	0.72	LED

(***) The temperature class is defined according to the using ambient temperature of the device following the table below:

(****) The safety parameters are defined according to the maximum using ambient temperature and temperature class following the table below:

ROUTINE EXAMINATIONS AND TESTS

The routine examinations and tests are modified as follows:

Coil type		Temperature class		Ambient temperature range (***)	Safety parameters	
Voltage (**) (Vac/dc)	Coil resistor	Gas (***)	Dust (***)		Ui (****)	Ii (****)
Possible marking for electrovalves 12 Vac/dc and 24 Vac/dc						
12	280 Ω	T6	T85°C	-20°C to +55°C	16 V	330 mA
12	280 Ω	T5	T100°C	-20°C to +70°C	16 V	330 mA
12	280 Ω	T5	T100°C	-20°C to +50°C	30 V	330 mA
12	280 Ω	T4	T135°C	-20°C to +85°C	30 V	330 mA
24	1150 Ω	T6	T85°C	-20°C to +60°C	30 V	330 mA
24	1150 Ω	T5	T100°C	-20°C to +75°C	30 V	330 mA
24	1150 Ω	T4	T135°C	-20°C to +110°C	30 V	330 mA

(16) DESCRIPTIVE DOCUMENTS

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

Descriptive drawing H010.1000 revision i
 Instructions notice M010.1171 - En

dated on 2014.01.07
 dated on 2014.01.06

These documents were signed on 06 may 2014.

(17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions for safe use are modified as follows:

Potential electrostatic discharges, see instructions.

(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, 2014.06.16



The Chief Executive Officer of INERIS
By delegation
T. HOUEIX
Ex Certification Officer

