

INERIS

INSTITUT NATIONAL DE L'ENVIRONNEMENT
INDUSTRIEL ET DES RISQUES

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(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 03ATEX0060 X**

(4) Equipment or protective system:

TYPE EX310 SERVOMOTOR

(5) Manufacturer: **PARVEX SAS**

(6) Address: **8 av du Lac
F - 21000 DIJON**

(7) This equipment or protective system 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 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 appendix II of the Directive.

The examinations and the tests are consigned in official report No P47941/03.

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

- conformity with:

EN 50 014 of June 1997 + Amendment 1 and 2
EN 50 018 of November 2000 + Amendment 1
EN 50 281-1-1 of September 1998 + Amendement 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 G

EEx d IIB T4

ou

 II 2 GD

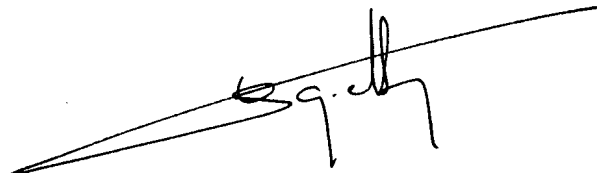
EEx d IIB T4 IP65 T135°C

Verneuil-en-Halatte, 2003 07 18



C. PETITFRERE

Engineer at the Laboratory for 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 03ATEX0060 X

(15)

DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

The servomotor casing comprises three slotted together parts held in place by pulling arms. The complete assembly is made out of stainless steel.

This casing essentially contains the active parts of an AC brush-less servomotor as well as two heat triggered fuses, a connector box and an (optional) brake.

The servomotor casing ensures IP64/65 level protection to EN 60529.

The connection to the outside electrical circuits is ensured via two metal cable entries of a certified type.

PARAMETERS RELATING TO THE SAFETY

Characteristics of the related servo-amplifiers:



Servo-amplifier supply voltage	230V single/three-phase	400V three-phase
DC supply voltage (V)	310 +10%	550 +10%
Motor electrical frequencies (Hz)	0 to 500	0 to 500
Permanent peak current on one phase (A)	7.5 max.	4 max.
Maximum peak current on one phase (A)	15 max.	8 max.
Permanent maximum motor power (W)	1900 max.	1800 max.

Characteristics of the two thermo-fuses:

Thermo-fuse triggering threshold: 130 degrees C +0/-5 degrees C.

MARKING

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

- PARVEX **SAS**
8 av du Lac
F - 21000 DIJON
- EX310
- INERIS 03ATEX0060 X
- (serial number)
- (Year of construction)
-  II 2 G EEx d IIB T4 IP64
- ou
-  II 2 GD EEx d IIB T4 IP65 T135°C
- DO NOT OPEN UNDER POWER

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

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

ROUTINE EXAMINATIONS AND TESTS

In compliance with sub-section 16.2 in EN 50 018, the casing on the equipment defined above is waived the requirement that it be subjected to individual testing given that it has been subjected to a type test at four times the reference pressure, or 26 bar.

(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 EX310 rév.A (15 pages) dated and signed on 26.06.2003
- Instruction Manual PVD 3559 F(17 pages) of june 2003 signed on 26.06.2003
- Drawing n°344488 rév.A dated and signed on 25.06.2003

(17) SPECIAL CONDITIONS FOR SAFE USE

In order to guarantee resistance to traction affecting the mounting screws used for the various parts of the explosion proof casing, the screw quality must be at least that defined in the description documents.

For use in dusty explosive environments, users must perform regular cleaning operations to avoid dust build ups.

(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 50 018 and EN 50 281-1-1.
- the whole of the provisions adopted by the manufacturer and described in the descriptive documents.