



INERIS

- (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 04ATEX0097X**

- (4) Equipment or protective system:

SERVOMOTOR TYPE EX420 or EX430

- (5) Manufacturer: **SSD 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 P59524/04.

- (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 50 018 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

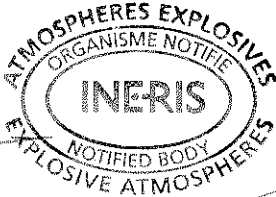
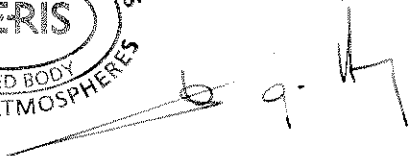
or

 II 2 GD

EEx d IIB T4 IP65 T135°C

Verneuil-en-Halatte, 2004 11 26


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 04ATEX0097X

(15) DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

The servomotor enclosure comprises two slotted together parts held in place by screws. The complete assembly is made out of stainless steel.

This enclosure essentially contains the active parts of an AC brushless servomotor as well as two heat triggered fuses, a connection box and an (optional) brake.

The servomotor enclosure ensures IP64/65 level protection according to EN 60034-5.

The connection to the outside electrical circuits is ensured via two metallic 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) | 14 max. | 8 max. |
| Maximum peak current on one phase (A) | 28 max. | 16 max. |
| Permanent maximum motor power (W) | 3400 max. | 3400 max. |

Characteristics of the two thermo-fuses:

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

MARKING

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

- SSD PARVEX SAS
- 8 av du Lac
- F - 21000 DIJON
- EX420 or EX430
- INERIS 04ATEX0097X
- (serial number)
- (Year of construction)
-  II 2 G EEx d IIB T4 IP64
- or
-  II 2 GD EEx d IIB T4 IP65 T135°C
- T°cable : 85°C
- DO NOT OPEN WHEN ENERGIZED

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

According to 16.2 of standard EN 50 018, the apparatus defined above is exempted of routine test in view of the fact that it has undergone a static type test at 4 times the reference pressure under 26,4 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 EX420/430 (15 pages) dated on 2004.11.16 and signed on 2004.11.17
- Instruction Manual PVD 3566-12/2004 (18 pages) dated on signed on 2004.11.17
- Drawing n°344620 issue A dated on 2004.11.04 and signed on 2004.11.17

(17) SPECIAL CONDITIONS FOR SAFE USE

The mounting screws of the different parts of the flameproof enclosure must have a quality class superior or equal to 8.8.

For use in dusty explosive atmospheres, user must perform regular cleaning operations to avoid dust deposits.

(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.