



(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 03ATEX0006**

(4) Protective system or equipment:

INCREASED SAFETY ENCLOSURE TYPE DE1-WH... and DE1-GW...
(The point are replaced by letters corresponding to manufacturing variation)

(5) Manufacturer: **TECHNOR ATEX**

(6) Address: **ZA Les Montagnes
BP 3
F - 16430 CHAMPNIERS**

(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 23rd 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 P49349/03.


(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 50 019	of July	2000
EN 50 028	of February	1987
EN 50281-1-1	of September	1998 + Amendment 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:

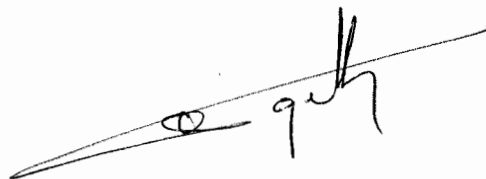
 II 2 GD EEx e II or ed IIC or em II or emd IIC T6 to T4 IP65-66 T85°C to T135°C

Verneuil-en-Halatte, 2003 05 28



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 03ATEX00060006

(15)

DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

Metallic box which can be fitted by increased safety terminals, direct pilot lights, transformer pilot lights, ammeters, and increased safety and flameproof contacts.

The connection to external electrical circuits is insured by certified cable glands.

PARAMETERS RELATING TO THE SAFETY

Terminals:

- Maximum voltage : 750V depending of type,
- Maximum current : 3,5A/mm² for terminals ≤ 10 mm²
: 3A/mm² for 16mm² ≤ terminals ≤ 25mm²
: 2A/mm² for 35mm² ≤ terminals ≤ 240mm²
limited to 360A.

Transformer pilot lights:

- Maximum voltage : 500V/6V,
- Maximum current : 0,2A
- Maximum power with incand lamp : 1,2W

Direct pilot lights:

- Maximum voltage : 250V,
- Maximum current : 0,025A
- Maximum power with incand lamp : 6W
- Maximum power with neon lamp : 1,5W

Contacts:

- Maximum voltage : 500V,
- Maximum current : 10A

Ammeters:


- 2 values of current : 1 and 5 A
- In both cases $I_{th} = 50I_n$ and $I_{dyn} = 1,3 \times 125I_n$

Bus bars:

- Maximum voltage : 660V,
- Maximum current : 600A

MARKING

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

- TECHNOR ATEX
- ZA Les Montagnes
BP 3
F - 16430 CHAMPNIERS
- DEL-WH... And DEL-GW...
- INERIS 03ATEX0006
- (serial number)
- (year of construction)
-  II 2 GD IP 65or IP66
- DO NOT OPEN WHILE ENERGIZED
- AVOID DUST DEPOSITS

Enclosures with contacts:

- EEx ed IIC T6 T85°C
- EEx ed IIC T5 T100°C Tamb: -20°C, +50°C
- EEx ed IIC T4 T135°C Tamb: -20°C, +60°C
- Nominal voltage and current

Enclosures with direct pilot lights:

- EEx e II T4 T135°C
- Nominal voltage and current

Or

- EEx e II T6 T85°C
- EEx e II T5 T100°C Tamb: -20°C, +50°C
- EEx e II T4 T135°C Tamb: -20°C, +60°C
- Led + thermal diffuser 6 to 48V: 0,6W

Enclosures with transformer pilot lights:

- EEx e II T6 T85°C
- EEx e II T5 T100°C Tamb: -20°C, +50°C
- EEx e II T4 T135°C Tamb: -20°C, +60°C
- Led + thermal diffuser 8V: 0,6W

Or

- EEx e II T4 T135°C
- Incandescent lamp 6V: 1,2W

Enclosures with ammeters type C48D:

- EEx em II T6
- EEx em II T5 T100°C Tamb: -20°C, +50°C
- EEx em II T4 T135°C Tamb: -20°C, +60°C
- Un: 250V
- In: 1A Ith: 50A Idyn: 163A
- In: 5A Ith: 250A Idyn: 813A

Enclosures with ammeters and contacts:

- EEx emd IIC T6
- EEx emd IIC T5 T100°C Tamb: -20°C, +50°C
- EEx emd IIC T4 T135°C Tamb: -20°C, +60°C

- Un: 250V
- In: 1A Ith: 50A Idyn: 163A
- In: 5A Ith: 250A Idyn: 813A
- Nominal voltage and current

Enclosures with terminals:

- EEx e II T6
- EEx e II T5 T100°C Tamb: -20°C, +50°C
- EEx e II T4 T135°C Tamb: -20°C, +60°C

- Nominal voltage and current

Enclosures with bus bars:

- EEx e II T4 T135°C

- Nominal voltage and current

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

Each above described apparatus, must be successfull with dielectric strenght test in accordance with § 6.1 of EN 50 019.
The tests of allready certified components notice from the conditions indicated in corresponding certificates.

(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 N° TN057A04 issue.1 dated on 2003.01.13 and signed on 2003.05.27
- This file including 7 items (11 pages).

(17) SPECIAL CONDITIONS FOR SAFE USE

None.

(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 50014, EN 50018, EN 50019, EN50028 and EN 50281-1-1.
- the whole of the provisions adopted by the manufacturer and described in the descriptive documents.