



(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 03ATEX0122**

(4) Protective system or equipment:

**BOXES TYPE XAW-P.. or XAW-G.. or XAW-S.. or XAW-F..**

(5) Manufacturer: **TECHNOR ATEX**

(6) Address: **ZA Les Montagnes  
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 23<sup>rd</sup> 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 P57378/03.


(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 em II or ed IIC or emd IIC T6 to T4


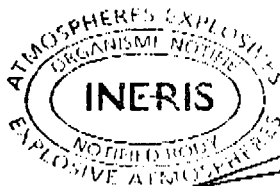
IP65 or IP66 T85°C to T135°C

Verneuil-en-Halatte, 2003 12 31



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 03ATEX0122**

(15) **DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM**

Metallic or plastic boxes of different sizes fitted with control, signal and measurement elements. Elements are defined by the descriptive documents.

The enclosures are IP65 according to EN 60529 in normal manufacturing and IP66 in special manufacturing.

The connection to external electrical circuit is ensured by certified type of cable glands of certified type.

### **PARAMETERS RELATING TO THE SAFETY**

#### Terminals:

- Maximal voltage : 660V according to the model,
- Current density : 3,5A/mm<sup>2</sup> for terminal ≤ 10mm<sup>2</sup>  
: 3A/mm<sup>2</sup> for 16mm<sup>2</sup> ≤ terminal ≤ 25mm<sup>2</sup>  
: 2,8A/mm<sup>2</sup> for terminal ≤ 35mm<sup>2</sup>  
limitée à 360A.

#### Lights with transformers:

- Maximal voltage : 500V/8V,
- Maximal current : 0,2A
- Maximal power of lamp : 1,2W
- Led + thermal diffuser 8V : 0,6W

#### Direct lights:

- Maximal voltage : 400V,
- Maximal current : 0,016A
- Maximal power of incandescent lamp : 2W
- Maximal power of neon lamp : 1,5W
- Led + thermal diffuser 6 to 48V : 0,6W

#### Switches:


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

#### Amperemeters:

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

**MARKING**

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

- TECHNOR ATEX
- ZA Les Montagnes
- F - 16430 CHAMPNIERS
- XAW-P.. or XAW-G.. or XAW-S.. or XAW-F..
- INERIS 03ATEX0122
- (serial number)
- (year of construction)
-  II 2 GD
- EEx e II or em II or ed or emd IIC T6 to T4 IP65 or IP66 T85°C to T135°C
- DO NOT OPEN WHILE ENERGIZED
- PREVENT FROM DUST DEPOSITS

**Boxes with switches:**

- EEx ed IIC T6 T85°C Tamb: -20°C, +60°C
- Nominal voltage and current

**Boxes with direct lights:**

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

**Boxes with lights with transformers:**

- EEx e II T6 T85°C Tamb: -20°C, +50°C
- EEx e II T5 T100°C Tamb: -20°C, +60°C
- Led + thermal diffuser 8V: 0,6W
- Or
- EEx e II T4 T135°C Tamb: -20°C, +60°C
- Incandescent or neon lamp 500V/8V: 1,2W

**Boxes with amperemeters C48D:**

- EEx em II T6 T85°C Tamb: -20°C, +50°C
- Un: 250V
- In: 1A Ith: 50A Idyn: 163A
- In: 5A Ith: 250A Idyn: 813A

**Boxes with terminals:**

- 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
- Nominal voltage and current

Boxes with terminals, switches:

- EEx ed IIC T6 T85°C Tamb: -20°C, +60°C
- Terminals Un: 500V In: 10A
- Nominal voltage and current

Boxes with switches, lights type led with transformator or direct :

- EEx ed IIC T6 T85°C Tamb: -20°C, +50°C
- EEx ed IIC T5 T100°C Tamb: -20°C, +60°C
- Led + thermal diffuser 6 to 48V: 0,6W
- Led with transformator + thermal diffuser 8V: 0,6W
- Nominal voltage and current

Boxes with switches, incandescent or neon lamps with transformators, incandescent or neon direct lamps:

- EEx ed IIC T4 T135°C Tamb: -20°C, +60°C
- Incandescent or neon direct lamps 6 to 400V: 2W
- Incandescent or neon lamps with transformator 500V/8V: 1,2W
- Nominal voltage and current

Boxes with terminals, lights type led with transformator or direct:

- EEx e II T6 T85°C Tamb: -20°C, +50°C
- EEx e II T5 T100°C Tamb: -20°C, +60°C
- Led + thermal diffuser 6 to 48V: 0,6W
- Led with transformator + thermal diffuser 8V: 0,6W
- Terminals Un: 500V In: 10A

Boxes with terminals, incandescent or neon lamps with transformators, incandescent or neon direct lamps:

- EEx e II T4 T135°C Tamb: -20°C, +60°C
- Incandescent or neon direct lamps 6 to 400V: 2W
- Incandescent or neon lamps with transformator 500V/8V: 1,2W
- Terminals Un: 500V In: 10A

Boxes with terminals, switches, lights type led with transformator or direct:

- EEx ed IIC T6 T85°C Tamb: -20°C, +50°C
- EEx ed IIC T5 T100°C Tamb: -20°C, +60°C
- Led + thermal diffuser 6 to 48V: 0,6W
- Led with transformator + thermal diffuser 8V: 0,6W
- Terminals Un: 500V In: 10A
- Nominal voltage and current

Boxes with terminals, switches, incandescent or neon lamps with transformators, incandescent or neon direct lamps:

- EEx ed IIC T4 T135°C Tamb: -20°C, +60°C
- Incandescent or neon direct lamps 6 to 400V: 2W
- Incandescent or neon lamps with transformator 500V/8V: 1,2W
- Terminals Un: 500V In: 10A
- Nominal voltage and current

Boxes with amperemeters, switches :

- EEx emd IIC T6 T85°C Tamb: -20°C, +50°C
- Un: 250V
- In: 1A Ith: 50A Idyn: 163A
- In: 5A Ith: 250A Idyn: 813A
- Nominal voltage and current

Boxes with amperemeters, terminals, switches :

- EEx emd IIC T6 T85°C Tamb: -20°C, +50°C
- Un: 250V
- In: 1A Ith: 50A Idyn: 163A
- In: 5A Ith: 250A Idyn: 813A
- Terminals Un: 500V In: 10A
- Nominal voltage and current

Boxes with amperemeters, lights type led with transformator or direct:

- EEx em II T6 T85°C Tamb: -20°C, +50°C
- Un: 250V
- In: 1A Ith: 50A Idyn: 163A
- In: 5A Ith: 250A Idyn: 813A
- Led + thermal diffuser 6 to 48V: 0,6W
- Led with transformator + thermal diffuser 8V: 0,6W

Boxes with amperemeters, incandescent or neon lamps with transformators, incandescent or neon direct lamps:

- EEx em II T4 T135°C Tamb: -20°C, +50°C
- Un: 250V
- In: 1A Ith: 50A Idyn: 163A
- In: 5A Ith: 250A Idyn: 813A
- Incandescent or neon direct lamps 6 to 400V: 2W
- Incandescent or neon lamps with transformator 500V/8V: 1,2W

Boxes with amperemeters, terminals, lights type led with transformator or direct:

- EEx em II T6 T85°C Tamb: -20°C, +50°C
- Un: 250V
- In: 1A Ith: 50A Idyn: 163A
- In: 5A Ith: 250A Idyn: 813A
- Led + thermal diffuser 6 to 48V: 0,6W
- Led with transformator + thermal diffuser 8V: 0,6W
- Terminals Un: 500V In: 10A

Boxes with amperemeters, terminals, incandescent or neon lamps with transformators, incandescent or neon direct lamps:

- EEx em II T4 T135°C Tamb: -20°C, +50°C
- Un: 250V
- In: 1A Ith: 50A Idyn: 163A
- In: 5A Ith: 250A Idyn: 813A
- Incandescent or neon direct lamps 6 to 400V: 2W
- Incandescent or neon lamps with transformator 500V/8V: 1,2W
- Terminals Un: 500V In: 10A

Boxes with amperemeters, switches, lights type led with transformator or direct:

- EEX emd IIC T6 T85°C Tamb: -20°C, +50°C
- Un: 250V
- In: 1A Ith: 50A Idyn: 163A
- In: 5A Ith: 250A Idyn: 813A
- Led + thermal diffuser 6 to 48V: 0,6W
- Led with transformator + thermal diffuser 8V: 0,6W
- Nominal voltage and current

Boxes with amperemeters, switches, incandescent or neon lamps with transformators, incandescent or neon direct lamps :

- EEX emd IIC T4 T135°C Tamb: -20°C, +50°C
- Un: 250V
- In: 1A Ith: 50A Idyn: 163A
- In: 5A Ith: 250A Idyn: 813A
- Incandescent or neon direct lamps 6 to 400V: 2W
- Incandescent or neon lamps with transformator 500V/8V: 1,2W
- Nominal voltage and current

Boxes with ampèremètres, terminals, switches, lights type led with transformator or direct:

- EEX emd IIC T6 T85°C Tamb: -20°C, +50°C
- Un: 250V
- In: 1A Ith: 50A Idyn: 163A
- In: 5A Ith: 250A Idyn: 813A
- Led + thermal diffuser 6 to 48V: 0,6W
- Led with transformator + thermal diffuser 8V: 0,6W
- Terminals Un: 500V In: 10A
- Nominal voltage and current

Boxes with amperemeters, terminals, switches, incandescent or neon lamps with transformators, incandescent or neon direct lamps:

- EEX emd IIC T4 T135°C Tamb: -20°C, +50°C
- Un: 250V
- In: 1A Ith: 50A Idyn: 163A
- In: 5A Ith: 250A Idyn: 813A
- Incandescent or neon direct lamps 6 to 400V: 2W
- Incandescent or neon lamps with transformator 500V/8V: 1,2W
- Terminals Un: 500V In: 10A
- 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**

In accordance with 7.1 of standard EN 50 019, each sample of the increased safety part of the equipment must undergo a dielectric strength test, carried out in accordance with 6.1 of standard EN 50 019.

The tests for each already certified apparatus corresponds to the conditions indicated in the corresponding certificates.

**(16) DESCRIPTIVE DOCUMENTS**

The report is composed of the document quoted hereafter, constituting the descriptive file of the apparatus, object of this certificate.

- Certification file N° TN024A04 issue.1 dated on 2003.01.13 and signed on 2003.05.27

This file including 15 items (22 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, EN 50028 and EN 50281-1-1.
- the whole of the provisions adopted by the manufacturer and described in the descriptive documents.



## ADDITION

(3) INERIS 03ATEX0122/01

(4) BOXES TYPE XAW-P... ou XAW-G... ou XAW-S... ou XAW-F... ou XAW-E...

(5) Made by TECHNOR ATEX

(15) PURPOSE OF THE ADDITION

- Addition of new type XAW-E... with modification of the plastic materials of the enclosure.
- Application of the new standards EN 60079-0 : 2006, EN 60079-1 : 2004, EN 60079-7 : 2003, EN 60079-18 : 2004, EN 61241-0 : 2006 and EN 61241-1 : 2004.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are unchanged.

MARKING

The marking is modified as follows:

TECHNOR ATEX


F-16430 CHAMPNIERS

XAW-P... ou XAW-G... ou XAW-S... ou XAW-F... ou XAW-E...

(serial number)

(year of construction)

INERIS 03ATEX0122

 II 2 GD

Ex e II or Ex e mb II or Ex d e IIC or Ex d e mb IIC T6 to T4 (\*)

Ex tD A21 IP65 or IP66 T85°C to T135°C (\*\*)

*Nominal voltage and current*

WARNINGS:

DO NOT OPEN WHILE ENERGIZED

PREVENT FROM DUST DEPOSITS

(\*) The marking of one or several types of protection, the subdivision gas and the temperature classification are defined according to the components implanted inside the box and according to the range of ambient temperature: see table 1 below.

(\*\*) The temperature classification is defined according to the components implanted inside the box and according to the range of ambient temperature: see table 2 below.

**Table 1 :** marking of one or several types of protection, subdivision gas and temperature classification for explosive atmosphere type gas

Component (***)	Marking						Temperature classification according to ambient temperature		
		d e	e mb	e	IIC	II	-20°C < Ta < +40°C	-20°C < Ta < +50°C	-20°C < Ta < +60°C
Switch 6A	Ex	x			x		T6	T6	T6
Switch 16A	Ex	x			x		T6	T6	T5
Light	Ex		x			x	T6	T6	T6
Ammeter	Ex		x			x	T6	T6	
Terminal	Ex			x		x	T6	T5	T4

**Table 2 :** marking and temperature classification for explosive atmosphere type dust

Component (***)	Marking	Temperature classification according to ambient temperature		
		-20°C < Ta < +40°C	-20°C < Ta < +50°C	-20°C < Ta < +60°C
Switch 6A	Ex tD A21 IP65 or IP66	T85°C	T85°C	T85°C
Switch 16A		T85°C	T85°C	T100°C
Light		T85°C	T85°C	T85°C
Ammeter		T85°C	T85°C	
Terminal		T85°C	T100°C	T135°C

(\*\*\*) The various certified components that can be fitted in the box are defined in the descriptive documents.

The additional markings imposed by the components also apply.

For an assembly within the same box of various components indicated above the temperature classification is determined by taking into account the maximal dissipated power and the range of the ambient temperatures of use of each component.

The boxes can be used for the connecting of intrinsic safety circuits.

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**

The routine examinations and tests are modified as follows:

In accordance with 7.1 of standard EN 60079-7, each sample of the increased safety part of the equipment must undergo a dielectric strength test.

The tests for each already certified apparatus corresponds to the conditions indicated in the corresponding certificates.

(16) DESCRIPTIVE DOCUMENTS

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

- |   |                                |
|---|--------------------------------|
| - Certification file TN095A04 Rev.1 (2 pages) | dated and signed on 2008.12.12 |
| - Descriptive note XAW115A12 Rev. 1 (2 pages) | dated and signed on 2008.12.12 |
| - Drawing XAW115Q01 Rev. 1                    | dated and signed on 2008.12.12 |
| - List XAW115Q07 Rev. 1                       | dated and signed on 2008.12.12 |
| - Instruction note TN098A12                   | dated and signed on 2008.12.12 |

(17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions for safe use are unchanged.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

The respect of the Essential Health and Safety Requirements is completed as follows:

- Conformity to the standards indicated on paragraph 15.
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2009 04 02



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