



INSTITUT NATIONAL DE L'ENVIRONNEMENT INDUSTRIEL ET DES RISQUES

Parc Technologique ALATA B.P. N° 2 - 60550 Verneuil-en-Halatte - France Tél. : {33} 03 44 55 66 77 - Fax : {33] 03 44 55 67 04 E-mail : iners@iners.fr

(2) Equipment and protection systems intended for use in potentially explosive atmospheres
Directive 94/9/CE

(1) EC-TYPE EXAMINATION CERTIFICATE

(3) Number of the EC type examination certificate:

INERIS 00ATEX0021 X

(4) Protection apparatus or system:

ENCLOSURE TYPE EJB...

(The type is completed by numbers and/or letters corresponding to manufacturing variation)

(5) Manufacturer:

ITALSMEA

(6) Address:

Via per Cernusco, 15 20060 BUSSERO (MI)

ITALY

- (7) This protection system or equipment and any other acceptable alternative of this one are described in the annex of this certificate and the descriptive documents quoted in this annex.
- (8) The INERIS, notified body and identified under number 0080, in accordance with article 9 of Council Directive 94/9/CE 23 the Mars 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 N°15443/00.

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

EN 50 014 of June 1997 EN 50 018 of August 1994 EN 50 020 of August 1994 EN 50 281-1-1 of September 1998

- 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 refers only to the design and the construction of the apparatus or protection system specified. If necessary, other requirements of this Directive will be imposed on the manufacture and the supply of this apparatus or protection system.
- (12) The marking of the equipment or the protection system will have to contain:

€x II 2 GD

EEx d IIB T6 or T5 or T4 or EEx d [ia] IIB T6 or EEx d [ib] IIB T6

Verneuil-en-Halatte, 2000 11 15

X. LEFEBVRE

Engineer at the Laboratory of Certification of Materials ATEX

The Director of the Organisation Certified, By delegation

B. PIQUETTE

Deputy manager of Certification



(13)

ANNEX

(14) EC TYPE EXAMINATION CERTIFICATE N° INERIS 00ATEX0021 X

(15) DESCRIPTION OF THE EQUIPMENT OR THE PROTECTION SYSTEM

Metallic enclosures of different sizes intended to contain equipment defined in technical note. These enclosures can be fitted with any control auxiliaries and lighting.

These enclosures can be fitted with drain and/or breather devices types ECR-1 and ECR-2. The cover can be move with hinges fixed on the body.

Enclosures present a degree of protection IP65 according to European standard EN 60 529.

Enclosures can be fitted with IS elements and None IS elements or only with IS elements. Different elements of intrinsic safety are defined in technical note and are of a certified type.

When boxes contain both IS and None IS elements, they are fitted with internal thermal probe.

Enclosures in EEx d variation, can be used at an ambient temperature lower than $-20\,^{\circ}\text{C}$, $(-30\,^{\circ}\text{C maxi})$.

Enclosures in EEx d[ia] or d[ib] variation, can be used at an ambient temperature lower than -20°C, (-25°C maxi).

PARAMETERS RELATING TO THE SAFETY

For using in ambient temperatures inferior to -20°C (-30°C maxi), the manufacturing is previewed by the manufacturer under his responsibility.

Type test have been performed under ambient temperatures required by standards

Supply voltage

: from 12 to 440 V(DC) or

from 24 to 690 V(AC)

Frequency

50 / 60 Hz

Power of lamps fitting with signal lamps

- 5 watts for incandescent lamps with T4 temperature class

- 1 watt for LED

Power of anti moisture resistance :250W

Thermal probe characteristic :

Limit of release : 50 °C ± 5°C.

Maximum dissipated powers:

EEx d enclosure for an ambient temperature of 40°C

| | Dissipated maximum power (W) according temperature class | | | | |
|--------------|--|-----|-----|-----------|--|
| Box Type | Т6 | T5 | T4 | I max (A) | |
| EJB 2; 3; 3A | 30 | 40 | 60 | 50 | |
| EJB 4;5 | 50 | 65 | 100 | 100 | |
| EJB 6 | 100 | 130 | 190 | 180 | |
| EJB 8;9 | 180 | 230 | 350 | 260 | |
| EJB 10; 11 | 225 | 315 | 400 | 350 | |
| EJB 12 | 300 | 380 | 450 | 350 | |
| EJB 13 | 350 | 430 | 500 | 800 | |
| EJB 13A | 400 | 480 | 530 | 800 | |

EEx d enclosure for an ambient temperature of 50°C

| | Dissipated maximum power (W) according temperature class | | | | |
|--------------|--|-----|-----|-----------|--|
| Box Type | Т6 | T5 | T4 | I max (A) | |
| EJB 2; 3; 3A | 20 | 30 | 45 | 50 | |
| EJB 4;5 | 35 | 45 | 75 | 100 | |
| EJB 6 | 75 | 95 | 140 | 180 | |
| EJB 8;9 | 135 | 170 | 260 | 260 | |
| EJB 10;11 | 165 | 235 | 300 | 350 | |
| EJB 12 | 225 | 285 | 335 | 350 | |
| EJB 13 | 260 | 320 | 375 | 800 | |
| EJB 13A | 300 | 360 | 395 | 800 | |

EEx d enclosure for an ambient temperature of 55°C

| | Dissipated maximum power (W) according temperature class | | | | |
|--------------|--|-----|-----|-----------|--|
| Box Type | Т6 | T5 | T4 | I max (A) | |
| EJB 2; 3; 3A | 15 | 25 | 35 | 50 | |
| EJB 4;5 | 30 | 40 | 60 | 100 | |
| EJB 6 | 60 | 80 | 115 | 180 | |
| EJB 8;9 | 110 | 140 | 210 | 260 | |
| EJB 10; 11 | 135 | 190 | 240 | 350 | |
| EJB 12 | 180 | 230 | 270 | 350 | |
| EJB 13 | 210 | 260 | 300 | 800 | |
| EJB 13A | 240 | 290 | 320 | 800 | |

EEx d enclosure containing only terminals

| Terminal Section | Maximum Intensity (A) | Maximum number of terminals | Terminal Section | Maximum Intensity (A) | Maximum number of terminals |
|---------------------|--------------------------|-----------------------------------|---------------------|--------------------------|-----------------------------------|
| 2,5 mm ² | 16 A | (*) | 50 mm ² | 125 A | (*) |
| 4 mm ² | 25 A | (*) | 70 mm ² | 160 A | (*) |
| 6 mm ² | 32 A | (*) | 95 mm ² | 200 A | (*) |
| 10 mm ² | 40 A | (*) | 120 mm ² | 250 A | (*) |
| 16 mm ² | 63 A | (*) | 185 mm ² | 315 A | (*) |
| 25 mm ² | 80 A | (*) | 240 mm ² | 400 A | (*) |
| 35 mm ² | 100 A | (*) | | | (*) |

(*) The maximum permitted number of terminals is a function of the maximum dissipated power in the enclosure; the powers are the suitable ones in tables above for EEx d variations.

EEx d [ia] or [ib] enclosure for an ambient temperature of 40°C

| | Power (W) | Maximum number of IS elements |
|--------------|-----------|-------------------------------|
| Box type | Class T6 | |
| EJB 2; 3; 3A | 25 | 4 |
| EJB 4;5 | 30 | 6 |
| EJB 6 | 50 | 8 |
| EJB 8;9 | 80 | 8 |
| EJB 10; 11 | 140 | 10 |
| ЕЈВ 12 | 200 | 12 |
| EJB 13 | 260 | 20 |
| EJB 13A | 360 | 20 |

MARKING

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

A) Enclosure without intrinsic safety element :

- ITALSMEA

Via per Cernusco,15 20060 BUSSERO (MI) ITALY

- EJB ... (1)
- INERIS 00ATEX0021 X
- (Serial number, if any)
- (year of construction)
- _ 🕸 II 2 GD
- EEx d IIB (*)
- T.Amb : (**)
- (***)
- (****)
- DO NOT OPEN WHEN ENERGIZED

(1) Type is completed by numbers and/or letters corresponding to manufacturing variation.

for use in explosive gas atmospheres

```
(*)    T6 or T5 or T4
(**)    -30°C to 40°C or -30°C to 50°C or -30°C to 55°C
(****)T.cable : 90°C for temperature class T4
```

for use in explosive dust atmospheres

```
(*) T85°C or T100°C or T135°C

(**) -30°C to 40°C or -30°C to 50°C or -30°C to 55°C

(***) IP65

(****) T.cable: 90°C for T135°C
```

B) Enclosures with intrinsic safety elements:

- ITALSMEA

```
Via per Cernusco,15
20060 BUSSERO (MI)
ITALY
```

```
- EJB ... (1)
```

- INERIS 00ATEX0021 X
- (Serial number, if any)
- (year of construction)
- . (€x) II 2 GD
- EEx d [*] IIB (**)
- (***)
- DO NOT OPEN WHEN ENERGIZED
- (1) Type is completed by numbers and/or letters corresponding to manufacturing variation.

for use in explosive gas atmospheres

```
(*) [ia] or [ib] (**) T6
```

for use in explosive dust atmospheres

```
(*) [ia] or [ib]
(**) T85°C
(***) IP65
```

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

Each example of the equipment hardware defined above must have successfully passed before delivery an overpressure test in accordance with section 16.1 of standard EN 50 018, of a period comprised between 10 and 60 seconds under:

- 11,5 bar for EJB2 to EJB 12
- 9 bar for EJB 13 and EJB 13A.

(16) DESCRIPTIVE DOCUMENTS

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

- Official report N°15443/00 of the 2000.11.13
- Descriptive Notice TN-10-2000-01 (28 pages) signed on 2000.10.18
- Instruction Notice (5 pages) signed on 2000.10.18
- Plan n° C10200000 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C10200001 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C10200002 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C10200003 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C10200004 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C10200005 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C11200001 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C11200002 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C11200003 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C11200004 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C11200005 Rev 0 of 2000.02.02 signed on 2000.02.02
- Plan n° C11200006 Rev 0 of 2000.02.02 signed on 2000.02.02

(17) SPECIAL CONDITIONS FOR SAFE USE

The yield stress of the fastener elements of each part the flame proof casing must be at least equal to 780 N/mm2.

Enclosures EEx d variations are intended to be used in an ambient temperatures range of -30°C to 55°C.

Enclosures EEx d [ia] or EEx d [ib] variations are intended to be used in an ambient temperatures range of -25°C to 40°C.

User shall connect on intrinsic safety terminals only elements which maximum characteristics shall be below or equal to characteristics defined in technical note.

The interconnection of external circuit to this material shall be in accordance with intrinsic safety.

Enclosures containing None IS and IS shall be fitted with an internal probe switching off enclosure when thermal probe is at his rate i.e. $50^{\circ}\text{C}\pm\ 5^{\circ}\text{C}$.

For use in potentially explosive atmospheres due to combustible dust:

- The surface of joint flanged gap between cover and body shall be covered with grease, for example silicone and cable entries shall be of a degree of protection at least IP6X.
- User shall perform a regular cleaning of enclosure to limit dust layers on enclosure sides.

These special conditions are defined in instruction notice.

(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, EN 50 020 and EN 50 281-1-1
- the whole of the provisions adopted by the manufacturer and described in the descriptive documents.

INERIS 00ATEX0021 X / 01

ENCLOSURE TYPE EJB ...

Manufactured by ITALSMEA

(15) - PURPOSE OF THE ADDITION

Mounting of a cover fitted with a glass window.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are modified as followed:

Enclosures EEx d for an ambient temperature : 40°C

| Box Type | | pated maximum power ing to temperature c | |
|------------|-----|---|-----|
| | T6 | Т5 | Т4 |
| EJB 2-3-3A | 24 | 34 | 54 |
| EJB 4-5 | 40 | 55 | 90 |
| EJB 6 | 80 | 110 | 171 |
| EJB 8-9 | 144 | 195 | 315 |
| EJB 10-11 | 180 | 268 | 360 |
| EJB 12 | 240 | 323 | 405 |
| EJB 13 | 280 | 365 | 450 |
| EJB 13A | 320 | 408 | 477 |

Enclosures EEx d for an ambient temperature: 50°C

| Box type | | eated maximum power ng to temperature c | |
|------------|-----|--|-----|
| | Т6 | T5 | T4 |
| EJB 2-3-3A | 16 | 25 | 40 |
| EJB 4-5 | 28 | 38 | 67 |
| EJB 6 | 60 | 80 | 126 |
| EJB 8-9 | 108 | 144 | 234 |
| EJB 10-11 | 132 | 200 | 270 |
| EJB 12 | 180 | 242 | 301 |
| EJB 13 | 208 | 272 | 337 |
| EJB 13A | 240 | 306 | 355 |

Enclosures EEx d for an ambient temperature: 55°C

| Type box | | ated maximum power (ng to temperature cl | |
|------------|-----|--|-----|
| | Т6 | Т5 | T4 |
| EJB 2-3-3A | 12 | 21 | 31 |
| EJB 4-5 | 24 | 34 | 54 |
| EJB 6 | 48 | 68 | 103 |
| EJB 8-9 | 88 | 119 | 189 |
| EJB 10-11 | 108 | 161 | 216 |
| EJB 12 | 144 | 195 | 243 |
| EJB 13 | 168 | 221 | 270 |
| EJB 13A | 192 | 246 | 288 |

MARKING

The marking defined in the basic certificate is unchanged.

ROUTINE EXAMINATIONS AND TESTS

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

(16) - DESCRIPTIVE DOCUMENTS

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

- Technical notice TN-10-2000-01 (8 sheets) dated of 2000 10 18 rev.n°1 dated of 2002 01 23
- Plan C10200006 dated and signed of 2002 02 13

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

The special condition for safe use defined in the basic certificate is modified as follows:

The yield stress of the fastener elements of each part the flame proof casing must be at least equal to 450 N/mm2.

(18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH

The respect of the Essential Health and Safety Requirements is unchanged.

Verneuil-en-Halatte, 2002 02 24

X. LEFEBVRE

Engineer at the Laboratory of Certification of Materials ATEX

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



INERIS 00ATEX0021 X / 02

ENCLOSURE TYPE EJB ...

Manufactured by ITALSMEA

(15) - PURPOSE OF THE ADDITION

Specific construction for group IIB $+\mathrm{H}_2$. As a variation, modification of minimal ambient temperature up to-35°C.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety indicated in the basic certificate are unchanged.

For using in ambient temperatures inferior to -20°C (-35°C maxi), the manufacturing is previewed by the manufacturer under his responsibility.

Enclosures in EEx d variation, can be used at an ambient temperature lower than -20°C, (-35°C maxi).

Enclosures in EEx d[ia] or d[ib] variation, can be used at an ambient temperature lower than -20°C, (-25°C maxi).

MARKING

The marking defined in the basic certificate is modified as follows: A) $\underline{\text{Enclosure without intrinsic safety element}}$:

- €x 11 2 GD
- Ex d IIB+H₂ (*)
- T.Amb: (**)

for use in explosive gas atmospheres

- (*) T6 or T5 or T4
- (**) -35°C to 40°C or -35°C to 50°C or -35°C to 55°C
- B) Enclosure with intrinsic safety element :
- €x II 2 GD
- Ex d [*]IIB+H₂ (**
- T.Amb :-25°C to 40°C

for use in explosive gas atmospheres

- [*] [ia] or [ib]
- (**) T6

ROUTINE EXAMINATIONS AND TESTS

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

(16) - DESCRIPTIVE DOCUMENTS

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

- Technical notice TN-11-2002-01 Rev 0 (28 sheets) dated and signed of 2002 02 28.
- Plans C11200200 to C11200204 dated and signed of 2002 02 27
- Plans C11200206 to C11200211 dated and signed of 2002 02 27

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

The special condition for safe use defined in the basic certificate and the extension 01 are unchanged.

(18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH

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

- conformity to the standards IEC60079-0, IEC60079-1, 11, IEC61241-1-1.
- the whole of the provisions adopted by the manufacturer and described in the descriptive documents.

Verneuil-en-Halatte, 2002 12 24

X. LEFEBVRE

Materials ATEX

Engineer at the Laboratory of Certification Phisme NO.

Director of the Certifying Body, By delegation

B. PIQUETTE

eputy manager of Certification

INERIS 00ATEX0021 X / 03

ENCLOSURE TYPE EJB ...

Manufactured by ITALSMEA

(15) - PURPOSE OF THE ADDITION

As a variation: Maximum supply voltage up to 20 kV Manufacturing for use in class T3

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are modified as followed:

The unit fitted with windows are not intended for a temperature class T3.

The values of dissipated power in the unit for class T3 are increased of 15% versus the values indicated in the basic certificate for T4 temperature class for each relevant range of ambient temperature. from 12 to 440 V(DC) or

Supply voltage from 24 to 20kV (AC)

MARKING

The marking defined in the basic certificate is modified as follows:

- A) Enclosure without intrinsic safety element :
 - ⟨€x⟩ II 2 GD
- Ex d IIB+H₂ (*) or EEx d IIB(*)
- (**) - T.Amb :
- T.cable : 90° C for T135 $^{\circ}$ C (T4) or 120 $^{\circ}$ C for T200 $^{\circ}$ C(T3)

for use in explosive gas atmospheres

- T6 or T5 or T4 or T3 (*)
- -35°C to 40°C or -35°C to 50°C or -35°C to 55°C

for use in explosive dust atmospheres

- T85°C or T100°C or T135°C or T200°C (*)
- -35°C to 40°C or -35°C to 50°C or -35°C to 55°C
- (***) IP 65
- (****) T.cable : 90° C for T135 $^{\circ}$ C or 120 $^{\circ}$ C for T200 $^{\circ}$ C

ROUTINE EXAMINATIONS AND TESTS

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

(16) - DESCRIPTIVE DOCUMENTS

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

- Instructions (4 pages) rev.2 dated on of 2004 09 09

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

The special condition for safe use defined in the basic certificate and the extension 01 and 02 are unchanged.

(18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH

The respect of the Essential Health and Safety Requirements defined in the basic certificate and the extension 0 1 and 02 is unchanged.

Verneuil-en-Halatte, 2004 09 09

X. LEFEBVRE

Engineer at the Laboratory of Certification of

Materials ATEX

Director of the Certifying Body,

By delegation

B. PIQUETTE

Oc Deputy manager of Certification

INERIS 00ATEX0021 X / 04

ENCLOSURE TYPE EJB ...

Manufactured by ITALSMEA

(15) - PURPOSE OF THE ADDITION

As a variation:

Manufacturing for use in a range of ambient temperature of $-50\,^{\circ}\text{C}$ to $+~55\,^{\circ}\text{C}$

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety defined in the basic certificate and extensions 01 to 03 are not modified.

For an use under a minimum ambient temperature between -20°C and -50°C , specific type tests have been performed under -50°C .

MARKING

The marking defined in the basic certificate and extensions 01 to 03 is modified as follows:

- T.Amb: (**)

for use in explosive gas atmospheres and for use in explosive dust atmospheres $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

(**) -50°C to 40°C or -50°C to 50°C or -50°C to 55°C or -20°C to 50°C or -20°C to 55°C

This indication mandatory is the range of ambient temperature differs from $-20\,^{\circ}\text{C}/+40\,^{\circ}\text{C}$

ROUTINE TESTS AND EXAMINATIONS

The routine verifications and tests stipulated by the basic certificate are modified as follows:

For an use under a minimum ambient temperature between $-20\,^{\circ}\text{C}$ and $-50\,^{\circ}\text{C}$, the routine test prescribed by the basic certificate and defined by EN 50 018 is to be performed under the value of 17 bar.

(16) - DESCRIPTIVE DOCUMENTS

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

- Descriptive Notice TN-10-2000-01 (10 pages) rev 1 dated and signed of 2004 09 14
- Instruction Rev3(4 pages) rev 3 dated and signed of 2004 09 14

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

The special condition for safe use defined in the basic certificate and the extensions 01 to 03 are unchanged.

Enclosures EEx d variations are intended to be used in an ambient temperatures range of -50°C to 55°C .

Enclosures EEx d [ia] or EEx d [ib] variations are intended to be used in an ambient temperatures range of -25°C to 40°C . For lower temperature, a special variation is defined.

These special conditions are defined in instruction notice.

(18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH

The respect of the Essential Health and Safety Requirements defined in the basic certificate and the extensions is unchanged.

VE ATMOSP

Verneuil-en-Halatte, 2004 11 11

X. LEFEBVRE

Engineer at the Laboratory of Certification of Materials ATEX

Arrector of the Certifying Body, By delegation

B. PIQUETTE

Deputy manager of Certification

(3) INERIS 00ATEX0021X/05

(4) ENCLOSURE TYPE EJB...

(5) Manufactured by ITALSMEA

(15) PURPOSE OF THE ADDITION

As a variation:

Up dating of descriptive documents.

Application of new standards:

EN 60079-0: 2006, 60079-1: 2004, 60079-11: 2007, EN 61241-0: 2006, 61241-1: 2004, 61241-11: 2006, IEC 60079-0: 2004, 60079-1: 2003, 60079-11: 2006, IEC 61241-0: 2004, 61241-1: 2004, 61241-11: 2005.

New address: Via Italia, 33 - 20060 GESSATE (MI) - ITALY

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety defined in the basic certificate and extensions 01 to 04 are not modified.

MARKING

The marking defined in the basic certificate and extensions 01 to 04 is modified as follows:

A) Enclosure without intrinsic safety element:

ITALSMEA Via Italia, 33 20060 GESSATE (MI) ITALY $\stackrel{\textstyle \longleftarrow}{\text{Ex}}$ II 2 GD Ex d IIB (*) or Ex d IIB+H $_2$ (*) Ex tDA21 IP65 or 66 or 67 (*) T.Amb: (**) T.cable: 90°C for T135°C (T4) or 110°C for T200°C(T3)

for use in explosive gas atmospheres

(*) T6 or T5 or T4 or T3

(**) -50°C to 40°C or -50°C to 50°C or -50°C to 55°C or -20°C to 40°C or -20°C to 50°C or -20°C to 55°C

for use in explosive dust atmospheres

(*) T85°C or T100°C or T135°C or T200°C

(**) -50°C to 40°C or -50°C to 50°C or -50°C to 55°C or

-20°C to 40°C or -20°C to 50°C or -20°C to 55°C

B) Enclosure with intrinsic safety element "ia":

ITALSMEA
Via Italia, 33
20060 GESSATE (MI)
ITALY

Ex II 2 (1) GD

Ex d [ia] IIB or IIB + H_2 T6 Ex tD [iaD] or [ia] A21 IP65 or 66 or 67 T85°C (*) T.Amb :-25°C to 40°C or T.Amb :-50°C to 40°C

C) Enclosure with intrinsic safety element "ia" or "ib":

ITALSMEA
Via Italia, 33
20060 GESSATE (MI)
ITALY

Ex II 2 (2) GD

Ex d [ia] or [ib] or [ia/ib] IIB or IIB+H $_2$ T6 Ex tD [iaD] or [ibD] or [iaD/ibD] or [ia] or [ib] or [ia/ib] A21 IP65 or 66 or 67 T85 $^{\circ}$ C (*) T.Amb :-25 $^{\circ}$ C to 40 $^{\circ}$ C or T.Amb :-50 $^{\circ}$ C to 40 $^{\circ}$ C

ROUTINE TESTS AND EXAMINATIONS

The routine verifications and tests stipulated by the basic certificate and extensions 01 to 04 are not modified.

(16) <u>DESCRIPTIVE DOCUMENTS</u>

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

- Descriptive Notice TN-10-2000-01 (10 pages) rev 2 dated and signed of 2007 03 12.
- Instruction (4 pages) rev 5 dated and signed of 2007 03 12.

(17) SPECIFIC PARAMETERS OF THE TYPES OF PROTECTION CONCERNED

The special conditions defined in the basic certificate and the extensions 01 to 03 are modified as follows:

Enclosures Ex d variations are intended to be used in an ambient temperatures range of -50° C to 55° C.

Enclosures Ex d [ia] or Ex d [ib] or Ex tD [iaD] or Ex tD [ibD] variations are intended to be used in an ambient temperatures range of -25°C to 40°C. For lower temperature, a special variation is defined.

These special conditions are defined in instruction notice.

(18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH

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

- Conformity to the standards EN or IEC 60079-0, EN or IEC 60079-1, EN or IEC 60079-11, EN or IEC 61241-0, EN or IEC 61241-1, EN or IEC 61241-11.
- The whole of the provisions adopted by the manufacturer and described in the descriptive documents.

Verneuil-en-Halatte, 2007 03 13

INERIS EXPLOS INGANISMENOTIFICATION OF ATMOSPHERE

X. LEFEBVRE

Engineer at the Laboratory of Evaluation of Equipment ATEX

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

Certification Division