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(2) Equipment and protection 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 01ATEX0060** 

(4) Protection system or equipment:

LIGHTING APPARATUS FOR FLUORESCENT LAMPS TYPE RMS-560-../PNL or RMS-560-..-PNL/LE-..

(The points are replaced by numbers and or number and 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/EC of the 23<sup>rd</sup> March 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°15896/01.

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

EN 50 014 of June 1997 + A1 and A2 EN 50 018 of August 1994 EN 50 019 of July 2000

- 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 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 protection system will have to contain:

**€**× II 2 G

EEx ed HC T6 or T5 or T4 or EEx e H T6 or T5

Verneuil-en-Halatte, 2001 12 28

X. LEFEBVRE

Engineer at the Laboratory of Certification of Materials ATEX

Director of the Certifying Body, By delegation B. PIQUETTE

Deputy manager of Certification



## (13) ANNEX

(14) EC TYPE EXAMINATION CERTIFICATE N° INERIS 01ATEX0060

#### (15) DESCRIPTION OF THE EQUIPMENT OR THE PROTECTION SYSTEM

The enclosure, made in two lengths, consists of a body and a cover fitted with tempered glass sealed.

This lighting apparatus, for one or two bi-pin fluorescent lamps, is fitted with one electronic ballast included in a flameproof enclosure.

The electronic ballast can be fitted inside or outside of the lighting apparatus. An emergency version is allowed with an electronic ballast and a sealed battery with an electronic control unit.

When the electronic ballast is outside of the lighting apparatus, it must be protected by one of well known type of protection, certified and suitable for considered using.

The lighting apparatus is fitted with the internal component indicated on the descriptive documents.

This equipment presents degrees of protection IP54 according to European standard EN 60 529.

#### PARAMETERS RELATING TO THE SAFETY

Maximum supply voltages : 12 at 220 V (DC) 24 at 240 V (AC) Frequencies :  $50/60~\mathrm{Hz} \pm 5\%$ 

#### This equipment is provided for the following lamps:

#### In emergency version:

Type RMS-560-03-PNL/LE-NP : 1 x 18 watts
Type RMS-560-01-PNL/LE-NP : 1 x 36 watts
Type RMS-560-03-PNL/LE-P : 1 x 18 watts
Type RMS-560-01-PNL/LE-P : 1 x 36 watts
Type RMS-560-04-PNL/LE-P : 2 x 18 watts
Type RMS-560-02-PNL/LE-P : 2 x 36 watts

#### MARKING

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

# A/ Lighting apparatus with internal electronic ballast and one microswitch

```
ITALSMEA
     Via per Cernusco, 15
     20060 BUSSERO (MI)
     ITALY
     RMS-560-../PNL or RMS-560-..-PNL/LE-.. (*)
     INERIS 01ATEX0060
      (Serial number)
      (year of construction)
     €∞ 11 2 G
     EEx ed IIC (**)
     T.Amb : (**)
      (nominal voltage and current)
   The points are
                      replaced by numbers or
                                                    number and letters
    corresponding to manufacturing variation.
(**) T6 with Tamb
                  : -20°C to 40°C
    T5 with Tamb : -20°C to 55°C
                    : -20°C to 60°C
    T4 with Tamb
On the internal flameproof enclosure :
     - the sign"d"
       DO NOT OPEN WHEN ENERGIZED
On the internal reflector :
      - DO NOT REMOVE WHEN ENERGIZED
```

# B/ Lighting apparatus with internal electronic ballast without microswitch

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

RMS-560-../PNL or RMS-560-..-PNL/LE-.. (*)
INERIS 01ATEX0060
(Serial number)
(year of construction)

Ex II 2 G
EEx ed IIC (**)
T.Amb: (**)
(nominal voltage and current)
DO NOT OPEN WHEN ENERGIZED
```

ITALSMEA

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The points are replaced by numbers or number and letters
    corresponding to manufacturing variation.
(**) T6 with Tamb : -20^{\circ}C to 40^{\circ}C
                    : -20°C to 55°C
     T5 with Tamb
                    : -20°C to 60°C
    T4 with Tamb
On the internal flameproof enclosure :
      - the sign"d"
      - DO NOT OPEN WHEN ENERGIZED
C/ Lighting apparatus with external electronic ballast and one
   microswitch
      ITALSMEA
      Via per Cernusco, 15
      20060 BUSSERO (MI)
      ITALY
      RMS-560-../PNL or RMS-560-..-PNL/LE-.. (*)
      INERIS 01ATEX0060
      (Serial number)
      (year of construction)
      €× 11 2 G
      EEx ed IIC (**)
                  (**)
      T.Amb
             (nominal voltage and current)
On the internal reflector:
      - DO NOT REMOVE WHEN ENERGIZED
    The points are replaced by numbers or number and letters
     corresponding to manufacturing variation.
(**) T6 with Tamb : -20^{\circ}C to 55°C T5 with Tamb : -20^{\circ}C to 60°C
D/ Lighting apparatus with external electronic ballast without
   microswitch
      ITALSMEA
      Via per Cernusco, 15
      20060 BUSSERO (MI)
      ITALY
      RMS-560-../PNL or RMS-560-..-PNL/LE-.. (*)
      INERIS 01ATEX0060
      (Serial number)
      (year of construction)
      ⟨€x⟩ II 2 G
      EEx e II (**)
             : (**)
      (nominal voltage and current)
      DO NOT OPEN WHEN ENERGIZED
```

- (\*) The points are replaced by numbers or number and letters corresponding to manufacturing variation.
- (\*\*) T6 with Tamb : -20°C to 55°C T5 with Tamb : -20°C to 60°C

The whole 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

According to 16.1 of standard EN 50 018, each example of the flameproof enclosure defined above must have successfully passed before delivery an overpressure test, of a period comprised between 10 and 60 secondes under 9,2 bar.

According to 7.1 of the EN 50 019 standard, each example of the increased safety part of the equipment must undergo a dielectric strength test, carried out in accordance with the supply voltage under 1500 volts.

#### (16) DESCRIPTIVE DOCUMENTS

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

Descriptive Notice TN-70-2001-01 of 2001.12.22 (10 pages)

Instructions notice rms 560-01E 22-12 (2 x 3 pages)

Plan n° C70200100 rev.0 of 2001.12.22

Plan n° C70200101 rev.0 of 2001.12.22

Plan n° C70200102 rev.0 of 2001.12.22

Plan n° C70200103 rev.0 of 2001.12.22

Plan n° C70200104 rev.0 of 2001.12.22

Plan n° C70200105 rev.0 of 2001.12.22

Plan n° C71200100 rev.0 of 2001.12.22

Plan n° C71200101 rev.0 of 2001.12.22

Those documents are signed on 2001.12.22

#### (17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions are defined in the instructions.

## (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, 50 018 and EN 50 019.
- the whole of the provisions adopted by the manufacturer and described in the descriptive documents.

#### **INERIS 01ATEX0060/01**

LIGTHING APPARATUS FOR FLUORESCENT LAMPS
TYPE RMS-560-../PNL or RMS-560-..-PNL/LE-..

#### Manufactured by ITALSMEA

## (15) - PURPOSE OF THE ADDITION

Mounting of lampholder type P-2227-41.

#### PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety stipulated by the basic certificate are unmodified.

#### MARKING

The marking defined in the basic certificate is unchanged.

#### ROUTINE EXAMINATIONS AND TESTS

The routine test and examinations stipulated by the basic certificate are unchanged.

#### (16) - DESCRIPTIVE DOCUMENTS

The document referred to below, constitutes the file describing the modification of the apparatus and forming the subject of the present addition.

Descriptive Note TN-70-2001-01 Add 1 rev.0 dated and signed on 2003.01.02 (3 pages)

### (17) - SPECIAL CONDITIONS FOR SAFE USE

The special conditions for safe use defined in the basic certificate are unchanged.

### (18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH

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

Verneuil-en-Halatte, 2003 10 21

OLM W

X. LEFEBVRE

Engineer at the Laboratory of Certification of Materials ATEX

Director of the Certifying Body,
By delegation
C. MICHOT
Certification Manager



#### **INERIS 01ATEX0060/02**

LIGTHING APPARATUS FOR FLUORESCENT LAMPS

TYPE RMS-560-../PNL or RMS-560-..-PNL/LE-..

### Manufactured by ITALSMEA

#### (15) - PURPOSE OF THE ADDITION

Lamp supplied by electronic ballast with adequate protection to prevent lamp cap overheating at the end of the lamp life (EOL).

#### PARAMETERS RELATING TO THE SAFETY

Suitable type test of the equipment was performed in accordance with clause H of the standard IEC60079-7:2004 CDV.

## MARKING

The marking defined in the basic certificate is unchanged.

#### ROUTINE EXAMINATIONS AND TESTS

The routine test and examinations stipulated by the basic certificate are unchanged.

#### (16) - DESCRIPTIVE DOCUMENTS

None.

#### (17) - SPECIAL CONDITIONS FOR SAFE USE

The special conditions for safe use defined in the basic certificate are unchanged.

## (18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH

The respect of the Essential Health and Safety Requirements defined in the basic certificate is completed by the specific test described above in paragraph (15).

Verneuil-en-Halatte, 2006 02 21

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X. LEFEBVRE

Engineer at the Laboratory of Certification of Materials ATEX

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

(3) INERIS 01ATEX0060/03

(4) LIGHTING APPARATUS FOR FLUORESCENT LAMPS TYPE RMS-560-...PNL or RMS-560-..-PNL/LE-..

(5) Made by ITALSMEA

### (15) PURPOSE OF THE ADDITION

Use of a specific feeding unit protected by Ex dq.

#### PARAMETERS RELATING TO THE SAFETY

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

#### **MARKING**

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

## Lighting apparatus with internal electronic ballast and with or without one microswitch

RMS-560-../PNL or RMS-560-..-PNL/LE-.. (\*)

**INERIS 01ATEX0060** 

(Serial number)

(year of construction)

€ | II 2 G

Ex edq IIC (\*\*)

T.Amb: (\*\*)

(nominal voltage and current)

- (\*) The points are replaced by numbers or number and letters corresponding to manufacturing variation.
- (\*\*) T6 with Tamb : -20°C to 40°C

T5 with Tamb

: -20°C to 55°C

T4 with Tamb

: -20°C to 60°C

On the internal feeding unit:

the sign"dg"

- WARNING THIS ENCLOSURE IS HERMETICALLY SEALED DO NOT OPEN
- DO NOT OPEN WHEN ENERGIZED

On the internal reflector: DO NOT REMOVE WHEN ENERGIZED

#### **ROUTINE EXAMINATIONS AND TESTS**

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

- According to 5.2.1 of standard EN 60 079-5, the feeding unit defined above is exempted of routine test in view of the fact that it has undergone a type test at 4 times the reference pressure.
- According to 5.2.2 of standard EN 60 079-5, the feeding unit material defined above must undergo an electric strength test of the filling material.

#### (16) DESCRIPTIVE DOCUMENTS

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

Descriptive Note TN-70-2001-01 Add 2 rev.0 dated and signed on 2006.10.12 (3 pages)

### (17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions defined in the basic certificate are unchanged.

#### (18) ESSENTIAL REQUIREMENTS OF SAFETY AND HEALTH

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

- Conformity to the European standards EN 60 079-0, EN 60 079-1, EN 60 079-5 and EN 60 079-7.
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2006 10 21

X. LEFEBVRE

Engineer at the Laboratory of Certification of Materials ATEX

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

Certification Deputy Manager

(3) INERIS 01ATEX0060/04

(4) LIGHTING APPARATUS FOR FLUORESCENT LAMPS TYPE RMS-560-...PNL or RMS-560-..-PNL/LE-..

(5) Made 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, 60079-7: 2007, 60076-5: 2007 IEC 60079-0: 2004, 60079-1: 2003, 60079-7: 2006, 60076-5: 2007

EN 61241-0 : 2006, 61241-1 : 2004, IEC 61241-0 : 2004, 61241-1 : 2004.

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

### PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety mentionned in the basic certificate and extensions 01 to 03 are unchanged.

#### **MARKING**

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

- <u>Lighting apparatus with internal electronic ballast and/or emergency control unit with or without microswitch</u>

ITALSMEA
Via Italia, 33
20060 GESSATE (MI)
ITALY
Ex II 2 GD or 2D

Ex de or Ex deq IIC T6 or T5 or T4 Ex tDA21 IP65 T85°C or T100°C or T135°C

T.Amb: (\*\*)

(\*\*) T6/T85°C with Tamb : -

-20°C to 40°C

T5/T100°C with Tamb :

-20°C to 55°C

T4/T135°C with Tamb

-20°C to 60°C

## Lighting apparatus with external electronic ballast and/or emergency control unit with microswitch

**ITALSMEA** Via Italia, 33 20060 GESSATE (MI) **ITALY** €x II 2 GD or 2D Ex de IIC T6 or T5 Ex tDA21 IP65 T85°C or T100°C

T.Amb: (\*\*)

(\*\*) T6/T85°C with Tamb -20°C to 55°C T5/T100°C with Tamb -20°C to 60°C

Lighting apparatus with external electronic ballast and/or emergency control unit without microswitch

**ITALSMEA** Via Italia, 33 20060 GESSATE (MI) **ITALY** €x II 2 GD or 2D Ex e II T6 or T5 Ex tDA21 IP65 T85°C or T100°C

T.Amb: (\*\*) (\*\*) T6/T85°C with Tamb

-20°C to 55°C

T5/T100°C with Tamb

-20°C to 60°C

#### **ROUTINE EXAMINATIONS AND TESTS**

The routine examinations and tests stipulated by the basic certificate and extensions 01 to 03 are unchanged.

#### (16) **DESCRIPTIVE DOCUMENTS**

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

Descriptive notice TN-70-2001-01 (6 pages) rev.1

dated and signed on 2007.04.12

Instruction notice (3 pages) rev.4

dated and signed on 2007.04.12

#### (17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions defined in the basic certificate and extensions 01 to 03 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 EN or IEC 60079-0, EN or IEC 60079-1, EN or IEC 60079-5, EN or IEC 60079-07 and/or EN or IEC 61241-0, EN or IEC 61241-1.
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2007 05 11

X. LEFEBVRE

Engineer at the Laboratory of Evaluation of Equipment ATEX

Director of the Certifying Body, By delegation

T. HOUEIX Certification Officer Certification Division