

(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 01ATEX0072X**

(4) Protection apparatus or system:

LIGHTING FIXTURE TYPE EVA...

(The type is completed by numbers corresponding to manufacturing variation)

(5) Manufacturer: **APPARECCHIATURE ELETTRICHE DI SICUREZZA (A.E.S)**

(6) Address: **Circonvallazione per S. Angelo n°1
20098 S. Giuliano Milanese (MI)
ITALIE**

(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 23th March 1994, certifies that this protection system or equipment fulfills the Essential of Health and Safety Requirements relating to the design and construction of equipments 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° P35606/01

(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

- 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:

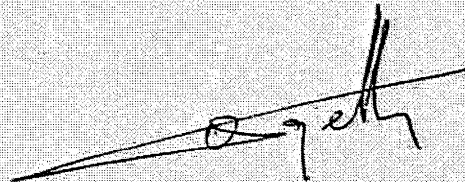
 II 2 G EEx d IIC T6 or EEx d IIC T3

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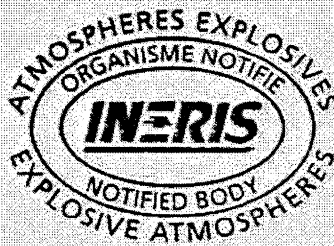


X. LEFEBVRE

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 01ATEX0072 X

(15)

DESCRIPTION OF THE EQUIPMENT OR THE PROTECTION SYSTEM

Lighting fixture type EVA... intended to contain various types of lamp defined below.

It consists of a gate lamp closed by a glass protection sphere.

PARAMETERS RELATING TO THE SAFETY

Maximum Supply voltage : 440 volts (AC) or 48 volts (DC)

Authorized Maximal powers and characteristics of the lamps :

See table below.

MARKING


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

A.E.S

Circonvallazione per S. Angelo n°1

20098 S. Giuliano Milanese (MI)

ITALIE

- EVA... (*)
- INERIS 01ATEX0072 X
- (Serial number)
- (year of construction)
-  II 2 G
- EEx d IIC T(**)
- T.cable : (***)
- DO NOT OPEN WHEN ENERGIZED
- AFTER DE ENERGIZING, WAIT 15 MINUTES BEFORE OPENING

(1) The type is completed by numbers corresponding to manufacturing variation.

(*) see table below

(**) see table below

(***) see table below

Type of Lighting fixture (*)	Type and power of the lamp	Temperature class (**)	Cable temperature (***)
EVA50	Fluorescent compact 15 watts	T6	N.C
	Incandescent 100 watts	T3	160°C
	Halogen 100 watts	T3	160°C
EVA100	Fluorescent compact 20 watts	T6	N.C
	Incandescent 150 watts	T3	190°C
	Halogen 150 watts	T3	190°C
	Mercury vapour 80 watts	T3	190°C
EVA200	Fluorescent compact 23 watts	T6	N.C
	Incandescent 200 watts	T3	210°C
	Halogen 200 watts	T3	210°C
	Mercury vapour 125 watts	T3	210°C
	Blended light 160 watts	T3	210°C
EVA300	Incandescent 300 watts	T3	200°C
	Mercury vapour 250 watts	T3	200°C
	Blended light 250 watts	T3	200°C

N.C = Not concerned

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 exemplar 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 secondes under 14,2 bar performed for flame-proof compartment.

(16) DESCRIPTIVE DOCUMENTS

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

- Technical Note (2 pages) signed on 30.10.2001
- Plan n°EVA50 page 1/2 rev.3 of 12.10.2001 signed on 30.10.2001
- Plan n°EVA50 page 2/2 rev.3 of 12.10.2001 signed on 30.10.2001
- Plan n°EVA100 page 1/2 rev.3 of 12.10.2001 signed on 30.10.2001
- Plan n°EVA100 page 2/2 rev.3 of 12.10.2001 signed on 30.10.2001
- Plan n°EVA200 page 1/2 rev.3 of 12.10.2001 signed on 30.10.2001
- Plan n°EVA300 page 2/2 rev.3 of 12.10.2001 signed on 30.10.2001
- Plan n°EVA300 page 2/2 rev.3 of 12.10.2001 signed on 30.10.2001

(17) SPECIAL CONDITIONS FOR SAFE USE

For the resistance to impact, the lighting fixture can insure a low protection, the user shall insure an supplementary protection in case of heavy mechanical risk.

For connection with the external electrical circuits, the user will have to choose an input of cable entry and a cable compatible with the maximum temperature indicated on the equipment.

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

ISTRUZIONI D'USO E INSTALLAZIONE

La A.E.S. s.a.s via per S. Angelo, 1 S. Giuliano Milanese (Mi) tel. 39.0298232740/029834794 fax 39.029834137 :

Garantisce che questo prodotto è costruito in accordo alle normative CENELEC EN 50014 ed EN 50018 con certificazione del prototipo presso il laboratorio INERIS in completo accordo alla direttiva ATEX 94/9/CE Art. 1.0.6.

ARMATURE ILLUMINANTI SERIE EVA

CARATTERISTICHE DI PROTEZIONE :

GRUPPO II CAT. 2 G

Materiale destinato a industrie di superficie con presenza di gas e vapori esplosivi.

EEx d II C

T3 per lampade a incandescenza, a vapori di mercurio, a luce miscelata, alogena

T6 per lampade fluorescenti

Istruzioni d'uso e installazione

Le armature illuminanti serie EVA in esecuzione EEx d IIC T3-T6 per lampade ad incandescenza o fluorescenti a risparmio di energia sono conformi alle Norme EN 50.014 - EN 50.018 con certificato INERIS. Le armature illuminanti devono essere installate in accordo alla Norma Europea EN 60079-14 (edizione in vigore).

Le operazioni di manutenzione devono essere effettuate in accordo alle prescrizioni della Norma Europea EN 60079-17 (edizione in vigore).

Collegamento :

L'entrata del cavo può avvenire mediante giunto di bloccaggio EYS 2 oppure con pressacavo per cavo armato e non. Svitare il portalamпада per collegare il cavo di alimentazione e utilizzare il morsetto di terra per il cavo giallo-verde. Fare attenzione a rimontare i distanziali in gomma silconica per non compromettere l'integrità del portalamпада in ceramica.

Solamente l'uso di lampade fluorescenti ammette cavo di alimentazione con isolamento in PVC.

Quando sono utilizzate altre lampade, si raccomanda di prestare particolare attenzione alla targa posta sulla lampada, indicante la temperatura d'esercizio.

In questo caso utilizzare solo cavi adatti alle alte temperature (cavi al silicone, con isolamento in fibra di vetro, con guaina in teflon). In tabella sono riportate le temperature di utilizzo dei cavi per tipo di lampada :

- EVA 50 160°
- EVA 100 190°
- EVA 200 210°
- EVA 300 200°

Installazione :

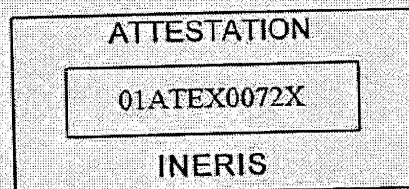
Dopo aver collegato i cavi e avvitato a fondo la lampadina, procedere al serraggio delle superfici filettate, avendo cura di utilizzare grasso al silicone. In ultimo avvitare il grano di bloccaggio contro lo svitamento accidentale.

Il riflettore e la gabbia possono essere installati anche con armatura in opera.

Il grado di protezione IP 65 è ottenuto mediante una guarnizione di tenuta "o ring". La guarnizione è sempre applicata dal costruttore durante la fase di montaggio, per la sua conservazione si raccomanda di controllare che non vi siano corpi estranei frapposti prima di procedere al serraggio.

Le armature sono fornite nelle seguenti esecuzioni :

- EVA installazione a sospensione
- EVC installazione a soffitto
- EVJ installazione a parete
- EVP portatile
- LPA segnalazione ostacoli, con globo rosso



30 OCT. 2001

ADDITION

- (3) **INERIS 01ATEX0072/01**
- (4) **LIGHTING FIXTURE TYPE EVA...**
- (5) **Made by APPARECCHIATURE ELETTRICHE DI SICUREZZA (A.E.S)**

(15) **PURPOSE OF THE ADDITION**

- Application of new standards: EN 60079-0: 2006 and EN 60079-1 : 2004.
- Possibility to used this lighting fixture in zone 21 or 22 in accordance with the standards EN 61241-0 : 2006 and EN 61241-1 : 2004.
- Modification of the type for the new applications.
- Using of a new resine for cementing window.
- Possibility to use the following new lamps :
 - Multiled of 9 watts for version EVA50 and EVC50.
 - Mini flash xenon 6J - 4.5 watts for version EVA50, up to EVA200.
 - Fluorescent 85 watts for version EVA 300.
- Additional external plastic glob ofor the version EVA50 only for using in zone 1 or 2.
- The thread of cable entry can be NPT.


PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are unchanged.

MARKING

The marking is modified as follow:

A- Light fixture without external plastic glob :

A.E.S
I - 20098 S.Guliano Milanese (MI)
EVA... or EVC.. (1)
INERIS 02ATEX0074
(Serial number)
(Year of construction)
 II 2 GD
Ex d IIC T(*)
Ex tD A21 IP65 T(*)
T.cable : (*)
Cable entry : see instructions

**WARNINGS : DO NOT OPEN WHEN ENERGIZED
DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT**

- (1) The type is completed by numbers and letter corresponding to manufacturing variations and by a letter corresponding with the type of cable entry.

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.

Type of Lighting fixture (*)	Type and power of the lamp	Temperature class (*)		Cable temperature (*)
		Gas	Dust	
EVA50 or EVC50	Fluorescent compact 15 watts	T6	T85°C	NC
	Miniflash exon 6J - 4.5 W	T6	T85°C	NC
	Multiled 9 W	T6	T85°C	NC
	Incandescent 100 watts	T3	T200°C	160°C
	Halogen 100 watts	T3	T200°C	160°C
EVA100	Fluorescent compact 20 watts	T6	T85°C	N.C
	Miniflash exon 6J - 4.5 W	T6	T85°C	NC
	Multiled 9 W	T6	T85°C	NC
	Incandescent 150 watts	T3	T200°C	190°C
	Halogen 150 watts	T3	T200°C	190°C
	Mercury vapour 80 watts	T3	T200°C	190°C
EVA200	Fluorescent compact 23 watts	T6	T85°C	NC
	Miniflash exon 6J - 4.5 W	T6	T85°C	NC
	Mercury vapour 125 watts	T3	T200°C	210°C
	Blended light 160 watts	T3	T200°C	210°C
	Incandescent 200 watts	T3	T200°C	210°C
	Halogen 200 watts	T3	T200°C	210°C
EVA300	Fluorescent 85 watts	T3	T200°C	200°C
	Incandescent 300 watts	T3	T200°C	200°C
	Mercury vapour 250 watts	T3	T200°C	200°C
	Blended light 250 watts	T3	T200°C	200°C

NC = no concerned

B- Light fixture with external plastic glob for type EVA50 or EVC50:

A.E.S


I - 20098 S.Guliano Milanese (MI)

EVA50. or EVC50.(1)

INERIS 02ATEX0074

(Serial number)

(Year of construction)

 II 2 G

Ex d IIC T6 or T3 (*)

Cable entry : see instructions

WARNINGS : DO NOT OPEN WHEN ENERGIZED

DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

POTENTIAL ELECTROSTATIC CHARGING - SEE INSTRUCTIONS

- (1) The type is completed by letters corresponding to manufacturing variations and corresponding with the type of cable entry.

Type of Lighting fixture (*)	Type and power of the lamp	Temperature class (*)	Cable temperature (*)
EVA50 or EVC50	Fluorescent compact 15 watts	T6	NC
	Miniflash exon 6J - 4.5 W	T6	NC
	Multiled 9 W	T6	NC
	Incandescent 100 watts	T3	160°C
	Halogen 100 watts	T3	160°C

ROUTINE EXAMINATIONS AND TESTS

The routine examinations and tests are modified as follow:

In accordance with clause 16.1 of the EN 60079-1 standard, each apparatus defined above, in light alloy version, has to have successfully passed before delivery an overpressure test of a period comprised between 10 and 60 seconds under 14.2 bar.

(16) DESCRIPTIVE DOCUMENTS

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

- Technical note n° NT/EVA/07 rev.0 of 2008.05.2008 (6 pages)
- Safety note n° rev xx of xx.xx.xx (1 page)
- Drawing n° EVA-50 rev.4 of 2009.10.26
- Drawing n° EVA-50/B rev.1 of 2009.10.26
- Drawing n° EVA-100 rev.4 of 2009.10.26
- Drawing n° EVA-200 rev.4 of 2009.10.26
- Drawing n° EVA-300 rev.4 of 2009.10.26
- Drawing n° EV rev.4 of 2009.10.26

These documents were signed on 2010 xx xx

(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 quoted on page 1, clause (15).
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2010 xx xx

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