



INERIS

INSTITUT NATIONAL DE L'ENVIRONNEMENT
INDUSTRIEL ET DES RISQUES

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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 02ATEX0074**

(4) Protection system or equipment :

ACOUSTIC SIREN TYPE ETH 12 MD

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

(6) Address: **Circonvallazione per S. Angelo n°1
20098 S. Giuliano Milanese (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 23rd 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°P39367/02.

(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 November 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 d IIC T6

Verneuil-en-Halatte, 2002 12 10



C. PETITFRERE

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 02ATEX0074

(15)

DESCRIPTION OF THE EQUIPMENT OR THE PROTECTION SYSTEM


The enclosure made in alluminium alloy consists of a body closed by a cover fitted

PARAMETERS RELATING TO THE SAFETY

Maximum supply voltage : 230 V (AC or DC)
Mamimum dissipated power : 12 W

MARKING

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

- A.E.S
Via per S. Angelo, 1
S. Giuliano Mi
ITALY
- ETH 12 MD
- INERIS 02ATEX0074
- (Serial number)
- (year of construction)
-  II 2 G
- EEx d IIC T6
- DO NOT OPEN WHEN ENERGIZED

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 material defined above must have successfully passed before delivery an overpressure test, of a period comprised between 10 and 60 secondes under 11,9 bar.

(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 note (2 pages) | signed on 2002.10.26 |
| - Instruction note (1 page) | signed on 2002.10.26 |
| - Drawing n° ETH 12 of 2001.06.14 | signed on 2002.10.26 |
| - Drawing n° ETH 12/1 of 2001.06.14 | signed on 2002.10.26 |
| - Drawing n° ETH 12/2 of 2001.06.14 | signed on 2002.10.26 |
| - Drawing n° ETH 12/3 of 2002.01.17 | signed on 2002.10.26 |
| - Drawing n° ETH 12/4 of 2002.01.17 | signed on 2002.10.26 |
| - Drawing n° ETH 12/5 of 2002.10.10 | signed on 2002.10.26 |

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

ADDITION

(3) **INERIS 02ATEX0074/01**

(4) **ACOUSTIC SIREN TYPE ETH 12 MD-**

(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 use this siren in zone 21 or 22 in accordance with the standards EN 61241-0: 2006 and EN 61241-1: 2004.
- Possibility to make the enclosure in cast iron or stainless steel.
- Exemption of the routine test for the version cast iron and stainless steel.
- Possibility to use at ambient temperature 55°C.
- The external trumpet can be made in ABS chromium plastic.
- 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.E.S


I - 20098 S.Guliano Milanese (MI)

ETH12MD-. (1)

INERIS 02ATEX0074

(Serial number)

(Year of construction)

 II 2 GD

Ex d IIC T6

Ex tD A21 IP65 T85°C

T.Amb : -20°C to 55°C

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 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.

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 11.9 bar.

In accordance with clause 16.2 of the EN 60079-1 standard, the equipment defined above, in stainless steel and cast-iron version, is exempted of routine test in owing to the fact that it has undergone a static type test at 4 times the reference pressure under 31.6 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/ETH/09 rev.0 of 2009.06.25 (3 pages) signed on 2009.12.29
- Safety note n° SN/ETH/09 rev.1 of 2009.06.25 (1 page) signed on 2009.12.29
- Drawing n° ETH 12 rev.4 of 2010.10.23 signed on 2010.03.23
- Drawing n° ETH MD rev.4 of 2009.10.26 signed on 2009.12.29

(17) SPECIAL CONDITIONS FOR SAFE USE

None.

(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 05 28



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

ADDITION

- (3) INERIS 02ATEX0074X/02
- (4) ACOUSTIC SIREN TYPE ETH 12MD
- (5) Made by APPARECCHIATURE ELETTRICHE DI SICUREZZA (A.E.S)

(15) PURPOSE OF THE ADDITION

Application of the standards:

- EN 60079-0 : 2009 IEC 60079-0 : 2007
- EN 60079-1 : 2007 IEC 60079-1 : 2007
- EN 60079-31 : 2009 IEC 60079-31 : 2008 + corrigendum 2009.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are unchanged.

MARKING

The marking is modified as follows:

A.E.S


I - 20098 S. Guliano Milanese (MI)

ETH12MD-.(1)

INERIS 02ATEX0074X

(Serial number)

(Year of construction)

 II 2 GD

Ex d IIC T6 Gb

Ex tb IIIC T85°C Db IP65

T.Amb : -20°C to +55°C

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 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.

ROUTINE EXAMINATIONS AND TESTS

The routine examinations and tests 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.

- Technical note n°NT/ETH/12 rev 0 (3 pages) dated on 2012.02.02
- Safety note n°SN/ETH/12 rev 2 (1 page) dated on 2012.02.02
- Drawing n°ETH 12 rev 4 dated on 2012.02.02

(17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions for safe use are modified as follow:

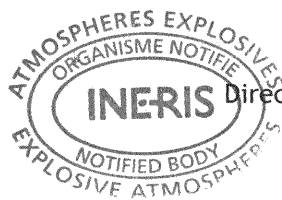
The widths of the flameproof joints are superior than the values specified in the tables of the standard EN/IEC 60079-1.

(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, 2012.04.19




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