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

# (I) EC-TYPE EXAMINATION CERTIFICATE

(3) Number of the EC type examination certificate:

INERIS 02ATEX0090 X

(4) Protection system or equipment:

#### **ENCLOSURE TYPE EMH9.2\*\***

(The points are replaced by number and letter corresponding to manufacturing variation)

(5) Manufacturer:

**NUOVA ASP** 

(6) Address:

Via de Gasperi, 26 20090 Pantigliate (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°P45465/02.

- (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 EN 50281-1-1 of September 1998 + A1

- 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:



EEx d IIC T6 or EEx d IIC T5 IP66 T85°C or T100°C

Verneuil-en-Halatte, 2002 12 05

C. PETITFRERE

Engineer at the Laboratory of Certification of Materials ATEX

Director of the Certifying Body, By delegation

B. PIQUETTE

Deputy manager of Certification



 $\mathbf{A} \mathbf{N} \mathbf{N} \mathbf{E} \mathbf{X}$ 

(14) EC TYPE EXAMINATION CERTIFICATE N° INERIS 02ATEX0090 X

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

The enclosure made in alluminium alloy consists of a body closed by a cover fitted with a glass window. This enclosure is intented to contain differents measuring instruments.

This enclosure can be fitted with a condensation water drain.

This enclosure presents the degrees of protection IP66 according to European standard EN 60 529.

#### PARAMETERS RELATING TO THE SAFETY

Analogic measuring instruments :

Maximum supply voltage : 600 V (AC or DC)

Rated current : 5 A

Digital measuring instruments:

Maximum supply voltage : 110 V (AC) or 230 V (DC)

<u>Twilight relay</u>

Maximum supply voltage : 230 V (AC)

Rated current : 16 A

Mamimum dissipated power : See table below

#### MARKING

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

- NUOVA ASP ITALY
- EMH9.2\*\* (a)
- INERIS 02ATEX0090 X
- (Serial number)
- (year of construction)
- ⟨Ex⟩ II 2 GD
- EEx d IIC T IP66 T
- T.Amb

(c) (d)

(b)

- T.Câble
- (e)
- DO NOT OPEN WHEN ENERGIZED
- AFTER DE-ENERGIZED WAIT 15 MINUTES BEFORE OPENING
- (a) The points are replaced by number and letter corresponding to manufacturing variation.

Maximum	Ambient temperature range (d)	Concerne atm	Cable	
dissipated power		Gas (b)	Dust (c)	temperature (e)
10 W	-20°C to 52°C	Т6	T85°C	None
16 W	-20°C to 40°C	Т6	T85°C	None
16 W	-20°C to 52°C	Т5	T100°C	75°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 material defined above must have successfully passed before delivery an overpressure test, of a period comprised between 10 and 60 secondes under 11,5 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 NT-214/ATEX rev.0 of 2002.10.16 (5 pages)
- Instructions IU-214-ATEX F.1 DI 1 (1 page) rev.0 of 2002.10.16
- Drawing n° PNC-214-ATEX folio 1 of 2002.10.16
- Drawing n° PNC-214-ATEX folio 2 of 2002.10.16
- Drawing n° PNC-214-ATEX folio 3 of 2002.10.16

These documents are signed on 2002.12.02

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

- For the resistance to impact, the apparatus can insure a low protection, the user shall insure an supplementary protection in case of heavy mechanical risk.
- All the certified elements fitting the equipment, in particular the cables entries, could be put on the market until June 30 2003. The equipment put on the market after this date will be equipped with elements in conformity with Directive 94/9/EC.

For use in potentially explosive atmospheres due to combustible dust:

- The surface of the different joints 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 material to limit dust layers on the material sides.

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

**INERIS 02ATEX0090X/01** (3)

**ENCLOSURE TYPE EMH9.2...** (4)

Made by NUOVA ASP (5)

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

- Application of new standards

EN 60079-0 : 2006 EN 61241-0 : 2006 EN 60079-1 : 2004 EN 61241-1 : 2004

# PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are unchanged.

# **MARKING**

The marking is modified as follows:

**NUOVA ASP** 

1 - 20090 Pantigliat

EMH9.2...(1)

INERIS 02ATEX0090X

(Serial number)

(Year of construction)

⟨£x⟩ || 2 GD

Ex d IIC T(\*)

Ex tD A21 IP66 T(\*)

T.amb

: (\*)

T. cable

: (\*)

WARNINGS: DO NOT OPEN WHEN ENERGIZED

AFTER DE-ENERGIZED WAIT 15 MINUTES BEFORE OPENING

- (1) The points are replaced by numbers or letters according to the manufacturing variations.
- (\*) See table below.

Markey	Ambient temperature range	Temperature class		Cable
Maximum power dissipated	Ambient temperature range	Gas	Dust	temperature
10 W	-20°C to 52°C	Т6	T85°C	None
16 W	-20°C to 40°C	T6	T85°C	None
16 W	-20°C to 52°C	Т5	T100°C	75°C

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 clause 16.1 of the EN 60079-1 standard each apparatus defined above has to have successfully passed, before delivery, an overpressure test of a period comprised between 10 and 60 seconds under 11.5 bar.

#### (16) DESCRIPTIVE DOCUMENTS

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

Certification file n°214 rev.1 of 2008.12.03 (3 rubrics)

signed on 2008.12.03

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

The special conditions for safe use are modified as follows:

During the installation, the user will take into consideration that the equipment underwent only a shock corresponding to an energy of a low risk.

# (18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

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

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

Verneuil-en-Halatte, 2008 12 17



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

(3) INERIS 02ATEX0090X/02

(4) **ENCLOSURE TYPE EMH9.2...** 

(5) Made by NUOVA ASP

#### (15)PURPOSE OF THE ADDITION

- Increase of the ambient temperature from 52°C to 55°C.
- Possibility to used cable entries with threaded in accordance with EN 10226-2.
- Application of the standard EN 60079-1: 2007.

# PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are unchanged.

#### MARKING

The marking is modified as follows:

**NUOVA ASP** 

I - 20090 PANTIGLIATE

EMH9.2...(1)

INERIS 02ATEX0090X

(Serial number)

(Year of construction)

⟨Ex⟩ II 2 GD

Ex d IIC T(\*)

Ex tD A21 IP66 T(\*)

T.amb

T. cable

WARNINGS: DO NOT OPEN WHEN ENERGIZED

AFTER DE-ENERGIZED WAIT 15 MINUTES BEFORE OPENING

- (1) The points are replaced by numbers or letters according to the manufacturing variations.
- (\*) See table below.

Maximum power	Ambient temperature range	Temperature class		Cable
dissipated		Gas	Dust	temperature
10 W	-20°C to 55°C	T6	T85°C	None
16 W	-20°C to 40°C	T6	T85°C	None
16 W	-20°C to 55°C	T5	T100°C	80°C

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 document quoted hereafter constitutes the technical documentation describing the modifications of the equipment, subject of this present addition.

Certification file n°214 rev.2 of 2011.03.28 (3 rubrics)

signed on 2011.03.28

# (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 by the conformity to EN 60079-1: 2007.

Verneuil-en-Halatte, 2011,07.28

Director of the Certifying Body By delegation

T. HOUEIX

Certification Officer Certification Division

(3) INERIS 02ATEX0090X/03

(4) ENCLOSURE TYPE EMH9.2\*\*

(5) Made by NUOVA ASP

# (15) PURPOSE OF THE ADDITION

- The enclosure EMH9.2\*\* is replaced by the new model type EMH9\*.

This new model is made in aluminum alloy or stainless steel and constituted by a body closed with a cover fixed by four screws with minimum quality A2-70 or A4-70.

The cover is provided with a glass window. This enclosure is intended to contain mainly electrical and/or electronic equipment as analogical or digital measuring instruments, the internal equipment is listed in the technical note.

This enclosure can be fitted with all Ex components TUV11ATEX092528U, TUV 12ATEX104523U or EXA 13ATEX0009U, except the drain valve, which is only allowed for dust application.

The enclosure gets the degrees of protection IP66 in accordance with EN/IEC 60529 standard.

- Application of following standards:

#### PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety for the new model are:

Maximum dissipated powers:

- 11 W for classes T6 or T85°C with ambient 60°C.
- 16 W for classes T6 or 85°C with ambient 40°C.

This enclosure is intended to be used in range of ambient temperatures from -20 $^{\circ}$ C, -40 $^{\circ}$ C, -60 $^{\circ}$ C to +40 $^{\circ}$ C, or +60 $^{\circ}$ C.

### MARKING

The marking for the new model is:

**NUOVA ASP** 

I - 20090 Pantigliate (MI)

EMH9\* (\*)

**INERIS 02TEX0090X** 

€x II 2 GD

(Serial number)

(Year of Constrcution)

Ex d IIC T6 Gb

Ex tb IIIC T85°C Db IP66

T.amb: (\*\*)

T.Cable: 85°C (\*\*\*)

Cable entries: (type and size)

#### **WARNINGS:**

- DO NOT OPEN WHEN ENERGIZED.
- DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.
- (\*) Type is completed by number corresponding to the manufacturer variations.
- (\*\*) One of the following range of ambient temperatures as stipulated in the parameters relating to the safety in accordance with the maximum dissipated.
- (\*\*\*) Temperature cable only for ambient 60°C.

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 tests for the new model are:

In accordance with clause 16.1 of the EN/IEC 60079-1 standard, each equipment defined above has to have successfully passed, before delivery, an overpressure test of a period comprised between 10 and 60 seconds under:

- 13.2 bar for ambient temperature down to -20°C.
- 19.2 bar for ambient temperature down to -40°C.
- 21.4 bar for ambient temperature down to -60°C.

# (16) DESCRIPTIVE DOCUMENTS

The descriptive document quoted hereafter constitutes the technical documentation describing the modifications of the equipment, subject of this present addition.

Certification file n° 13-416 (4 rubrics) rev. of 2014.02-15

signed on 2014.02-15

# (17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions for safe use for the new model are:

The width of the flameproof joints is superior to that specified in the tables of IEC 60079-0 standard.

# (18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

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

- Conformity to the standard quoted in clause (15).
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2014.09.17

INERIS

NOTIFIED BODY

The Chief Executive Officer of INERIS

By delegation

T. HOUEIX

Ex Certification Officer

(3) INERIS 02ATEX0069X/02

(4) ENCLOSURE TYPE EMH9.2\*\*

(5) Made by FEAM

#### (15) PURPOSE OF THE ADDITION

- The enclosure EMH9.2\*\* is replaced by the new model type EMH9\*S.

This new model is made in aluminum alloy or stainless steel and constituted by a body closed with a cover fixed by four screws with minimum quality A2-70 or A4-70.

The cover is provided with a glass window. This enclosure is intended to contain mainly electrical and/or electronic equipment as analogical or digital measuring instruments, the internal equipment is listed in the technical note.

This enclosure can be fitted with all Ex components TUV11ATEX092528U, TUV 12ATEX104523U or EXA 13ATEX0009U, except the drain valve, which is only allowed for dust application.

The enclosure gets the degrees of protection IP66 in accordance with EN/IEC 60529 standard.

- Application of following standards:

# PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety for the new model are:

Maximum dissipated powers:

- 11 W for classes T6 or T85°C with ambient 60°C.
- 16 W for classes T6 or T85°C with ambient 40°C.

This enclosure is intended to be used in range of ambient temperatures from -20 $^{\circ}$ C, -40 $^{\circ}$ C, -60 $^{\circ}$ C to +40 $^{\circ}$ C, or +60 $^{\circ}$ C.

INERIS is accredited by COFRAC under number 5-0045 for certification of products and services (scope of accreditation available on the website <a href="https://www.cofrac.fr">www.cofrac.fr</a>).

Only the entire document may be reprinted. (IM1339AF 04/03/2014)

#### MARKING

The marking for the new model is:

**FEAM** 

I - 20090 Trezzano sul Naviglio (MI)

EMH9\* (\*)

**INERIS 02TEX0069X** 

Œx II 2 GD

(Serial number)

(Year of Construction)

Ex d IIC T6 Gb

Ex tb IIIC T85°C Db IP66

T.amb: (\*\*)

T.Cable: 85°C (\*\*\*)

Cable entries: (type and size)

#### **WARNINGS:**

- DO NOT OPEN WHEN ENERGIZED.
- DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.
- (\*) Type is completed by number corresponding to the manufacturer variations.
- (\*\*) One of the following as stipulated in the parameters relating to the safety in accordance with the maximum dissipated.
- (\*\*\*) Temperature cable only for ambient 60°C.

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 tests for the new model are:

In accordance with clause 16.1 of the EN/IEC 60079-1 standard, each equipment defined above has to have successfully passed, before delivery, an overpressure test of a period comprised between 10 and 60 seconds under:

- 13.2 bar for ambient temperature down to -20°C.
- 19.2 bar for ambient temperature down to -40°C.
- 21.4 bar for ambient temperature down to -60°C.

# (16) DESCRIPTIVE DOCUMENTS

The descriptive document quoted hereafter constitutes the technical documentation describing the modifications of the equipment, subject of this present addition.

Certification file n°13-416 (4 rubrics) rev.0 of 2014,02-15

signed on 2014.02-15

# (17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions for safe use for the new modele are:

The width of the flameproof joints is superior to that specified in the tables of IEC 60079-0 standard.

# (18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

The respect of the Essential Health and Safety Requirements is:

- Conformity to the standard quoted in clause (15).
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2014.09.17

The Chief Executive Officer of INERIS

By delegation

T. HOUEIX

Ex Certification Officer