



(2) Equipment and protective 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 11ATEX0057X
- (4) Equipment or protective system:

ENCLOSURES TYPE BOX...

(5) Manufacturer:

ARIET

(6) Address:

Via Monza, 13

I - 20060 Bussero (MI)

- (7) This equipment or protective system 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) 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 equipment or protective system fulfils the Essential of Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, described in annex II of the Directive.

The examinations and the tests are consigned in report No 025308/11.

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

- 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 protective 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 protective system will have to contain:



Verneuil-en-Halatte, 2011.12.19



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

(13)

ANNEX

(14) EC TYPE EXAMINATION CERTIFICATE N°INERIS 11ATEX0057X

(15) DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

These enclosures made in light alloy consist of a body closed by a lid fixed by screws. Enclosures type BOX 1A, BOX 1B, BOX 1C and BOX 1D are intended for group IIB. Enclosures type BOX 0A, BOX 0B and BOX 0S are intended for group IIC. In option they can be fitted with an internal heating resistance.

These enclosures get the degrees of protection IP 66 in accordance with EN/IEC 60529 standard.

PARAMETERS RELATING TO THE SAFETY

Maximum supply voltage

: 750 V

Maximum dissipated powers:

Enclosures type BOX 0A and BOX 0B

5 W

Enclosures type BOX 0S

: 15 W

Enclosures type BOX 1A, BOX 1B, BOX 1C and BOX 1D : 10 W

40.144

Internal resistance:

Maximum supply voltage

: 220 V

Maximum power dissipated

: 10 W

These enclosures can be use in range of ambient temperatures from -20 $^{\circ}$ C or -50 $^{\circ}$ C to 40 $^{\circ}$ C or 55 $^{\circ}$ C.

MARKING

Marking has to be readable and indelible; it has to include the following indications:

A - Enclosures for group IIB:

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BOX 1.(*)

INERIS 11ATEX0057X

(Serial number)

(Year of construction)

Ex d IIB T(**) Gb

Ex tb IIIC T(**) Db IP66

...°C < Tamb < ...°C (***)

T.Cable: (**)

CABLE ENTRY: SEE INSTRUCTIONS.

WARNINGS:

DO NOT OPEN WHEN ENERGIZED

AFTER DE-ENERGIZING, DELAY (**) MINUTES BEFORE OPENING

USE SCREWS HAVING MINIMUM QUALITY A2 CLASS 70

- (*) One of the following types: BOX 1A, BOX 1B, BOX 1C or BOX1D.
- (**) See table on page 5.
- (***) Range of temperature ambient if different from -20°C to 40°C (see table page 5).

B - Enclosures for group IIC:

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BOX 0.(*)

INERIS 11ATEX0057X

(Serial number)

(Year of construction)

Ex d IIC T(**) Gb

Ex tb IIIC T(**) Db IP66

...°C < Tamb < ...°C (***)

T.Cable: (**)

CABLE ENTRY: SEE INSTRUCTIONS.

WARNINGS:

DO NOT OPEN WHEN ENERGIZED

AFTER DE-ENERGIZING, DELAY (**) MINUTES BEFORE OPENING

USE SCREWS HAVING MINIMUM QUALITY A2 CLASS 70

- (*) One of the following types: BOX 0A, BOX 0B or 0S.
- (**) See table on page 5.
- (***) Range of temperature ambient if different from -20°C to 40°C (see table page 5).

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 box (*)	Range of ambient temperature	Explosive atmosphere concerned		Internal resistance	Cable temperature	Wait before opening
		GAS	Dust	Para Mary		
BOX 1A, BOX 1B, BOX 1C and BOX 1D	-20°C to 40°C or -50°C to 40°C	Т6	T85°C	YES	NA	15 Minutes
BOX OA, BOX OB	-20°C to 40°C or -50°C to 40°C	T4	T135°C	YES	NA	15 Minutes
BOX 0S	-20°C to 40°C or -50°C to 40°C	T4	T135°C	YES	NA	15 Minutes
BOX 1A, BOX 1B, BOX 1C and BOX 1D	-20°C to 40°C or -50°C to 40°C	Т6	T85°C	NO	NA	15 Minutes
BOX 0A, BOX 0B	-20°C to 40°C or -50°C to 40°C	Т6	T85°C	ИО	NA	15 Minutes
BOX OS	-20°C to 40°C or -50°C to 40°C	Т6	T85°C	NO	NA	50 Minutes
BOX 1A, BOX 1B, BOX 1C and BOX 1D	-20°C to 55°C or -50°C to 55°C	Т6	T85°C	YES	NA	15 Minutes
BOX OA, BOX OB	-20°C to 55°C or -50°C to 55°C	T4	T135°C	YES	95°C	15 Minutes
BOX 0S	-20°C to 55°C or -50°C to 55°C	T4	T135°C	YES	95°C	15 Minutes
BOX 1A, BOX 1B, BOX 1C and BOX 1D	-20°C to 55°C or -50°C to 55°C	Т6	T85°C	NO	NA	15 Minutes
BOX 0A, BOX 0B	-20°C to 55°C or -50°C to 55°C	T6	T85°C	NO	NA	15 Minutes
BOX 0S	-20°C to 55°C or -50°C to 55°C	T6	T85°C	NO	95°C	50 Minutes

ROUTINE EXAMINATIONS AND TESTS

Enclosures type BOX 1A, BOX 1B, BOX 1C and BOX1D:

For ambient down to -20°C:

In accordance with clause 16.2 of the EN/IEC 60079-1 standard, the equipment defined above is exempted from routine test due to the fact that they have undergone a static pressure type test at 4 times the reference pressure under 28 bar.

For ambient down to -50°C:

In accordance with clause 16.1 of the EN/IEC 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 16.1 bar.

Enclosures type BOX OA, BOX OB, BOX OS:

In accordance with clause 16.2 of the EN/IEC 60079-1 standard, the equipment defined above is exempted from routine test due to the fact that they have undergone a static pressure type test at 4 times the reference pressure under 42.8 bar.

(16) DESCRIPTIVE DOCUMENTS

The descriptive document quoted hereafter constitutes the technical documentation of the equipment, subject of this certificate.

Certification file BOX/DC/IECEx/ATEX rev.0 (5 rubrics) dated and signed on 2011.11.24

(17) SPECIAL CONDITIONS FOR SAFE USEE

- The gap and diametric clearance of the different flamepath joints are less than the values specified in the tables of the EN/IEC 60079-1 standard.
- The width of the different flameproof joints is superior to that specified in tables of EN/IEC 60079-1 standard.

The other conditions are stipulated in the instructions.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

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

- Conformity to the standards quoted in clause (9).
- All provisions adopted by the manufacturer and defined in the descriptive documents.