



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx INE 11.0027X issue No.:0 Certificate history:

Status: **Current**

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Applicant: **ARIET**
Via Monza, 13
I-20060 Bussero
Italy

Electrical Apparatus: **ENCLOSURES TYPE BOX...**
Optional accessory:

Type of Protection: **d and tb**

Marking: **Ex d IIB T6 or T4 Gb or Ex d IIC T6 or T4 Gb**
Ex tb IIIC T85°C or T135°C Db IP66

Approved for issue on behalf of the IECEx
Certification Body:

Thierry HOUEIX

Position:

Ex Certification Officer

Signature:
(for printed version)

Date:

2011-12-22



1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

INERIS
Institut National de l'Environnement Industriel
et des Risques
BP n2
Parc Technologique ALATA
F-60550 Verneuil-En-Halatte
France



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Manufacturer: **ARIET**
Via Monza, 13
I-20060 Bussero (MI)
Italy

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres -- Part 31: Equipment dust ignition protection by enclosure 't'

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:
[FR/INE/ExTR11.0028/00](#)

Quality Assessment Report:
[FR/INE/QAR11.0005/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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 IEC 60529.

CONDITIONS OF CERTIFICATION: YES as shown below:

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



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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 05 : 15 W
Enclosures type BOX 1A, BOX 1B, BOX 1C and BOX 1D : 10 W

Internal resistance:

Maximum supply voltage : 220 V
Maximum power dissipated : 10 W

These enclosures can be use in range of ambient temperatures from -20°C or -50°C to 40°C or 55°C.

MARKING

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

A - Enclosures for group IIB:

- ARIET
- I – 20060 Bussero
- BOX 1.(*)
- IECEX INE 11.0027X
- (Serial number)
- Ex d IIB T(**) Gb
- Ex tb IIIC T(**) Db IP66
- T.Cable : (**)
- ...°C < Tamb < ...°C (***)
- 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 3.

(***) Range of ambient temperature if different from -20°C to 40°C (see table on page 3).



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B - Enclosures for group IIC:

- ARIET
- I-20060 Bussero
- BOX 0.(*)
- IECEx INE 11.0027X
- (Serial number)
- 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 BOX 0S.

(**) See table on page 3.

(***) Range of ambient temperature if different from -20°C to 40°C (see table on page 3).



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Type of box (*)	Range of ambient temperatures	Explosive atmosphere concerned		Internal resistance	Cable temperature	Wait before opening
		GAS	Dust			
BOX 1A, BOX 1B, BOX 1C and BOX 1D	-20°C to 40°C or -50°C to 40°C	T6	T85°C	YES	NA	15 minutes
BOX 0A, BOX 0B	-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	T6	T85°C	NO	NA	15 minutes
BOX 0A, BOX 0B	-20°C to 40°C or -50°C to 40°C	T6	T85°C	NO	NA	15 minutes
BOX 0S	-20°C to 40°C or -50°C to 40°C	T6	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	T6	T85°C	YES	NA	15 minutes
BOX 0A, BOX 0B	-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	T6	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



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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 IEC 60079-1 standard, the equipment defined above is exempted from routine test due to the fact a static pressure test has been performed at 4 times the reference pressure under 28 bar.

For ambient down to -50°C:

In accordance with clause 16.1 of the 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 0A, BOX 0B, BOX 0S:

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