

- (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 06ATEX0046**

- (4) Equipment or protective system:

IMMERSION HEATER TYPE TP.ADF

- (5) Manufacturer:

ACIM JOUANIN

- (6) Address:

**650, rue Vulcain
F - 27017 EVREUX**

- (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) 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 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 confidential report No P84013/06.

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

- conformity with:

EN 60079-0 of July 2006
EN 60079-1 of March 2004

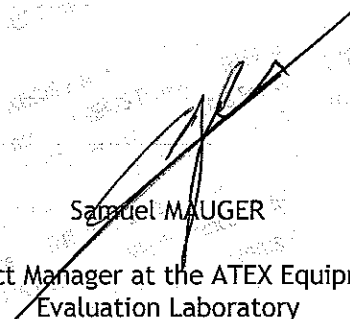
- specific solutions adopted by the manufacturer to meet the Essential Health and Safety Requirements described in the descriptive documents.

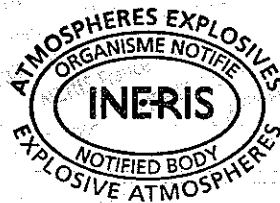
- (10) Sign X, when it is placed following the Number of the EC type examination certificate, indicates that this equipment and protective system is subjected to the special conditions for safe use, mentioned in the annex of this certificate.
- (11) This EC type examination certificate relates only to 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:


 II 2 G

Ex d IIC T6 to T1

Verneuil-en-Halatte, 2007-05-29


Samuel MAUGER
Project Manager at the ATEX Equipment
Evaluation Laboratory




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

(13)

ANNEX

(14)

EC TYPE EXAMINATION CERTIFICATE N° INERIS 06ATEX0046

(15)

DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

The immersion heater consists in a terminal box fitted with a resistance heating devices.

The terminal box is fitted with a thermostat connected to a thermal probe located near the resistance heating, and with a thermal fuse.

The terminal box gets the protection degrees IP65 according to the European standard EN 60 529.

PARAMETERS RELATING TO THE SAFETY

Maximum supply voltage : 400 V

Maximum power dissipated : 27 kW

Characteristic of the thermal fuse :

For Class T6 : $\leq 75^{\circ}\text{C}$

For Class T5 : $\leq 90^{\circ}\text{C}$

For Class T4 : $\leq 120^{\circ}\text{C}$

For Class T3 : $\leq 175^{\circ}\text{C}$

For Class T2 : $\leq 275^{\circ}\text{C}$

For Class T1 : $\leq 420^{\circ}\text{C}$

MARKING

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

ACIM JOUANIN


F - 27017 EVREUX

TP.ADF

INERIS 06ATEX0046

(Serial number)

(Year of construction)

 II 2 G

Ex d IIC T6 or T5 or T4 or T3 or T2 or T1

WARNING :

DO NOT OPEN WHEN ENERGIZED

DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

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

Each equipment defined above have to successfully passed the following individual tests before delivery :

In accordance with clause 16.1 of the EN 60079-1 standard, an overpressure test of a period comprised between 10 and 60 seconds under 12.9 bar.

(16) DESCRIPTIVE DOCUMENTS

The descriptive documents quoted hereafter constitute the technical documentation of the equipment, subject of this certificate.

Certification file n° BE LIST-014 rev. 2 of 2007.05.16 (15 items) dated and signed on 2007.05.16.

(17) SPECIAL CONDITIONS FOR SAFE USE

The special conditions are stipulated on the instructions.

(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS

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

- Conformity to the European standards EN 60079-0 and EN 60079-1.
- All provisions adopted by the manufacturer and defined in the descriptive documents.