



(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 07ATEX0043X**

(4) Equipment or protective system:

PUSH BUTTON TYPE PBA.AF.000...X

(5) Manufacturer:

APEM

(6) Address:

**55 avenue Edouard Herriot
BP 1
F - 82303 CAUSSADE**

(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 confidential report No P83061/07.

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

- conformity with:

EN 60079-0	:	July	2006	EN 60079-11	:	January	2007
EN 61241-0	:	December	2006	EN 61241-11	:	December	2006
EN 60079-26	:	December	2004	EN 50303	:	July	2000

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

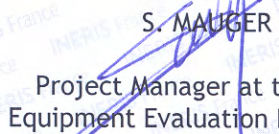
- (10) Sign X, when it is placed following the Number of the EC type examination certificate, indicates that this equipment and protective system is subjected to the special conditions for safe use, mentioned in the annex of this certificate.
- (11) This EC type examination certificate relates only to 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 1 G D ; IM1

Ex ia IIC T4 ; Ex ia I
Ex iaD 20 T135 °C

Verneuil-en-Halatte, 2007 11 15




S. 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 07ATEX0043X

(15)

DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

The pushbuttons type PBA.AF.000... X use a piezoelectric principle of detection or the support of the operator is directly converted into a tension which orders an electronic circuit. The series is declined in three versions or types of various forms which are as follows:

- Type: PBA.AF.000M...X with cast solid pipe.
- Type: PBA.AF.000L...X with shifted LED.
- Type: PBA.AF.000A...X with luminous ring

The envelope of these three versions of the material gets an IP66 protection.

PARAMETERS RELATING TO THE SAFETY

Input characteristics of the material :

On red wire connected to the located points J1 and J2 (detection part of supports):

Groups of use	Ui (V)	Ii (mA)	Pi (W)	Ci (nF)	Li (μH)
Group I	24V AC or DC	400	3.15	4.3	0
Group II	24V AC or DC	400	1.2	4.3	0

For the pushbuttons which have a lighting part, standard PBA.AF.000L...X with LED shifted and PBA.AF.000A...X with luminous ring, on the yellow wire connected to VLED compared to the blue wire GROUND:

Groups of use	Ui (V)	Ii (mA)	Pi (W)	Ci (nF)	Li (μH)
Group I	24V AC or DC	400	3.15	0	0
Group II	24V AC or DC	400	1.2	0	0

MARKING

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

APEM

F - 82303 CAUSSADE

PBA.AF.000...X

INERIS 07ATEX0043X

(Serial number)

(Year of construction)



II 1 G D ; I M1

Ex ia IIC T4 ; Ex ia M1

Ex iaD 20 T135°C

Marking may be carried out in the language of the country of use.

The material may carry the following reduced marking :

APEM PBA.AF.000...X ATEX Exi INERIS 07ATEX0043X *

* the third point is replaced by the letter M, L, or A following alternative ATEX, the other points represent a coding according to the different models (see card of coding).

The protective system or equipment has also to carry the marking normally stipulated by its construction standards.

ROUTINE EXAMINATIONS AND TESTS

None.

(16) DESCRIPTIVE DOCUMENTS

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

- Certification file N° DC001 (17 rubrics) index A dated and signed on 2007.10.30.

(17) SPECIAL CONDITIONS FOR SAFE USE

- The equipment is intended to be used in an operating temperature range from -40°C to +55°C.

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 European standards EN 60079-0, EN 60079-11, EN 61241-0, EN 61241-11, EN 60079-26 and EN 50303.
- All provisions adopted by the manufacturer and defined in the descriptive documents.

ADDITION

- (3) INERIS 07ATEX0043X/01
- (4) PUSH BUTTON TYPE PBA.AF.000...X
- (5) Made by APEM

(15) PURPOSE OF THE ADDITION

- Change of the ohmic value for the resistance R2
- Update of the certification file.

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are unchanged.

MARKING

The marking is unchanged.

ROUTINE EXAMINATIONS AND TESTS

None.

(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° DC001 (18 rubrics) index B

signed on 2009.11.18

(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 unchanged.

Verneuil-en-Halatte, 2009 12 08




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

ADDITION

(3) INERIS 07ATEX0043X/02

(4) PUSH BUTTON TYPE PBA.AF.000...X

(5) Made by APEM

(15) PURPOSE OF THE ADDITION

- Application of the European standards as follows:

EN 60079-0: 2009 - EN 60079-11: 2012 - EN 60079-26: 2007 - EN 50303: 2000.

- Update of the certification file DC001 (change card of coding, drawings, marking).

PARAMETERS RELATING TO THE SAFETY

The parameters relating to the safety are unchanged.

MARKING

The marking is modified as follows:

APEM

F - 82303 CAUSSADE

PBA..AF.....X*

INERIS 07ATEX0043X

(Serial number)

(Year of construction)

 II 1 G D ; I M1

Ex ia IIC T4 Ga ; Ex ia I Ma

Ex ia IIIC T135°C Da IP66

Marking may be carried out in the language of the country of use.

The material may carry the following reduced marking:

APEM PBA..AF.....X ATEX Exi INERIS 07ATEX0043X

* The dots are replaced by letters or figures, they represent a coding according to the different models (see card of coding in the certification file DC001).

The protective system or equipment has also to carry the marking normally stipulated by its construction standards.

ROUTINE EXAMINATIONS AND TESTS

None.

(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°DC001 (15 rubrics) index C

signed on 2012.09.18

(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 modified, it is ensured by :

- Conformity to the European standards listed in paragraph (15).
- All provisions adopted by the manufacturer and defined in the descriptive documents.

Verneuil-en-Halatte, 2012.12.04

Dominique CHARPENTIER
Certification Division
Manager



Chief Executive Officer,
By delegation
T. HOUEIX
Ex Certification Officer