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 11.0034X	issue No.:0	Certificate history:
Status:	**Current**		
Date of Issue:	**2012-02-14**	Page 1 of 3	

Applicant: **F.E.A.M S.r.l**
Via Mario Pagano, 3
I - 20090 Trezzano sul Naviglio (MI)
Italy

Electrical Apparatus: **Control and signalling units type EFG6, EFG10, EFG12 or EFSC218***
Optional accessory:

Type of Protection: **d and tb**

Marking: Ex d IIB T6 or T5 Gb
Ex tb IIIC T85°C or T100°C Db IP66

Approved for issue on behalf of the IECEx Certification Body: Thierry Houeix

Position: Ex Certification Officer

Signature:
(for printed version)

Date: 2012-02-14

ATMOSPHERES EXPLOSIVES Certifié IECEx INERIS IECEx Certified EXPLOSIVE ATMOSPHERES

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.

Certificate issued by:

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

INERIS

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Certificate No.: IECEx INE 11.0034X

Date of Issue: **2012-02-14** Issue No.: **0**

Manufacturer: **F.E.A.M S.r.l**
Via Mario Pagano, 3
I - 200090 Trezzano Sul Naviglio (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/ExTR11.0032/00

Quality Assessment Report:

IT/CES/QAR09.0003/01

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Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

These control and signalling units made in light alloy can be fitted with control auxiliaries, push buttons, pilot lights and measuring instruments.
The cover is fixed by screws, different versions are intended and specified on the descriptive documents
The enclosures gets the degrees of protection IP66 in accordance with IEC 60529.

CONDITIONS OF CERTIFICATION: YES as shown below:

The gap and diametrical clearance of the different flamepath are less than the values specified in the table of the IEC 60079-1 standard.
The width of the flameproof joint is superior to these specified in tables of IEC 60079-1 standard.
During the installation, of the equipment fitted with pilot lights, the user will take into consideration that the equipment underwent only an impact test corresponding to an energy of a low risk.

Annexe: IECEx INE 11.0034X_Annex.pdf

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PARAMETERS RELATING TO THE SAFETY

Characteristic of the signal lamps

Incandescent lamp

Maximum supply voltage	:	240 V
Maximum power incandescent lamp	:	3 W

LED Lamp

Maximum supply voltage	:	240 V
Maximum power LED lamp	:	1 W

Neon Lamp

Maximum supply voltage	:	400 V
Maximum power Neon lamp	:	1 W

Control and signalling units type EFG6, EFG10 and EFG12

Maximum supply voltage	:	600 V

Maximum intensity:

Push button	:	10 A
Switch	:	16 A

Control and signalling units type EFSC218*

Maximum supply voltage	:	660 V
Maximum intensity	:	63 A

These control and signaling units can be use in the following range ambient temperatures:

- -20°C +40°C or -20°C +60°C.
- -60°C +40°C or -60°C +60°C.

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MARKING

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

Control and signalling units for ambient 40°C

- F.E.A.M S.r.l
- I – 20090 Pantigliate (MI)
- EF...**(*)**
- IECEx INE 11.0034X
- (Serial number)
- Ex d IIB T6 Gb
- Ex tb IIIC T85°C Db
- IP66
- ...°C < Tamb < ...°C **(**)**
- CABLE ENTRY : (type and size).
- **WARNINGS:**
- DO NOT OPEN WHEN ENERGIZED
- AFTER DE-ENERGIZING, DELAY 11 MINUTES BEFORE OPENING

(*) One of the following types: EFG6, or EFG120, or EFG12 or EFSC218*
The asterisk is replaced by a number and letter corresponding to manufacturing variation.
(**) Range of temperature ambient is diffrent from -20°C to 40°C.

Control and signalling units for ambient 60°C

- F.E.A.M S.r.l
- I – 20090 Pantigliate (MI)
- EF...**(*)**
- IECEx INE 11.0034X
- (Serial number)
- Ex d IIB T5 Gb
- Ex tb IIIC T100°C Db
- IP66
- ...°C < Tamb < ...°C **(**)**
- T.Cable : 90°C
- CABLE ENTRY : (type and size).
- **WARNINGS:**
- DO NOT OPEN WHEN ENERGIZED
- AFTER DE-ENERGIZING, DELAY 11 MINUTES BEFORE OPENING

(*) One of the following types: EFG6, or EFG120, or EFG12 or EFSC218*
The asterisk is replaced by a number and letter corresponding to manufacturing variation.
(**) Range of temperature ambient is diffrent from -20°C to 40°C.

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ROUTINE EXAMINATIONS AND TESTS

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:

- 9.2 bar for ambient down to -20°C
- 14.9 bar for ambient down to -60°C