

CESI

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Capitale sociale 8 550 000 €
interamente versato
Codice fiscale e numero
iscrizione CCIAA 00793580150

Registro Imprese di Milano
Sezione Ordinaria
N. R.E.A. 429222
P.I. IT00793580150

Schema di certificazione

CESI-ATEX

Il CESI è stato autorizzato dal governo italiano ad operare quale organismo di certificazione di apparecchi e sistemi destinati a essere utilizzati in atmosfera potenzialmente esplosiva con D.M. 1/3/1983, D.M. 19/8/1990, D.M. 20/7/1998 e D.M. 27/8/2000

CERTIFICATE



EC-TYPE EXAMINATION CERTIFICATE

- [1] **EC-TYPE EXAMINATION CERTIFICATE**
- [2] **Equipment or Protective System intended for use in potentially explosive atmospheres**
Directive 94/9/EC
- [3] EC-Type Examination Certificate number:
CESI 02 ATEX 057
- [4] Equipment: Terminal boxes series EJB - ...
- [5] Manufacturer: **F.E.A.M. S.p.A.**
- [6] Address: Via M. Pagano, 3 - 20090 Trezzano sul Naviglio (MI) - Italy
- [7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] CESI, notified body n. 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- The examination and test results are recorded in confidential report n. EX-A2/017213.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014: 1997 + A1.. A2; EN 50018: 2000; EN 50020: 1994; EN 50281-1-1: 1998
- [10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to 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 protective system shall include the following:
- II 2 GD EEx d IIB T6 IP 65 T 85 °C
 - II 2 GD EEx d [ia] IIB T6 IP 65 T 85 °C
 - II 2 GD EEx d [ib] IIB T6 IP 65 T 85 °C

This certificate may only be reproduced in its entirety and without any change, schedule included.

Date 31 May 2002 - Translation issued the 31st May 2002

Prepared
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Verified
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Approved
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CESI
CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO
Business Unit Certificazione

SI Responsabile

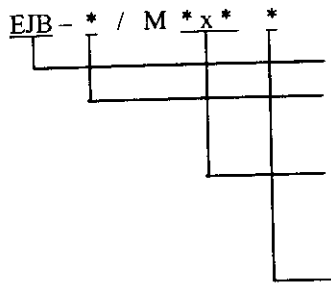
[13]

Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 057

[15] Description of equipment

The terminal boxes series EJB -..., are identified by a code as follows:



Series of enclosure

Enclosure size (1, 2, 3, 4, 5, 6, 51-F, 61-F, C-237, TR-1, 11, 12, 123, 13, 21, 23, 30, 31, 41, 51, 61, 63, 64, 81)

Quantity of terminals per cross-section (in the case of terminals with various cross-sections the code will indicated to the cross-section with the greatest number of terminals)

Type of terminals:

d for standard terminals

m for mixed terminals (standard + Ex-i)

The enclosures of the terminal boxes are the subject of the component certificate CESI 00 ATEX 067 U.

All the constructional characteristics of the enclosures are reported in the documents annexed to certificate above mentioned.

The enclosures of terminal boxes can contain terminal blocks of equal or different cross-section and intrinsically safe terminal blocks. The maximum rated current, the type and the maximum quantity of terminals are indicated in the documents annexed to this certificate (technical note NT-014/ATEX Rev. 1 and drawing AC-014-ATEX).

The accessories used for cable entries and for closing unused holes shall guarantee a minimum degree of protection IP 65 according to the standard EN 60529 and shall be certified according to the standards EN 50014, EN 50018 and EN 50281-1-1.

If cylindrical threads are used, the coupling between the cable entry and the enclosure shall be made according to the requirements indicated in the documents annexed to this certificate.

Electrical characteristics

- Rated voltage: 500 ÷ 700 V
- Terminals rated current: 6 ÷ 300 A
- Max. current bus bar: 625 A
- Current density: 1,25 ÷ 4,5 A/mm²
- Terminals cross-section: 2,5 ÷ 240 mm²
- Bus bar cross-section: 36 ÷ 400 mm²
- Degree of protection: IP 65 (EN 60529 - 1991)

- Temperature class for terminal boxes of category 2 G: T6
- Maximum surface temperature of the enclosure for terminal boxes of category 2 D: T 85 °C

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Schedule

[13]

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 057**

[15] **Description of equipment (follow)**

Warning label

“Restore silicone grease at every opening”

“Use screws quality 8.8 UNI EN 20898”

“Do not open when energized and wait at least 15 minutes before opening the enclosure”

In case of use of anticondensate heaters:

“Attention – energized resistors”.

In case of use of terminals for intrinsically safe circuits”

“Attention, intrinsically safe circuits inside”

[16] **Report n° EX-A2/017213**

Routine tests

The manufacturer shall carry out the routine tests prescribed at paragraph 24 of the EN 50014 standard and at paragraph 16 of the EN 50018 standard.

The routine overpressure test shall be carried out at

- 11,5 bar on the enclosure EJB – 2, 5, 51-F, 11, 12, 123, 13, 21, 23, 30, 31, 41, 51, 61, 63, 64, 81
- 12 bar on the enclosure EJB – 1, 3, 4, 6, 61-F, C-237, TR-1.

with the static method (paragraph 15.1.3.1 of EN 50018 Standard).

Descriptive documents (prot. EX-A2/017238)

- Technical note n. NT-014/ATEX Rev. 1 (8 pg.)	dated	15.04.2002
- Instructions for use n. IU-EJB-014/ATEX Rev. 1 (3 pg.)	dated	18.02.2002
- ESR conformity list n. ESR-014/ATEX Rev. 2 (3 pg.)	dated	15.04.2002
- Drawing n. AC-014-ATEX	dated	26.10.2002
- Declaration of conformity	dated	18.02.2002

One copy of all documents is kept in CESI files.

[17] **Special conditions for safe use**

None.

[18] **Essential Health and Safety Requirements**

Covered by standards indicated at page 1.

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