

CESI

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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

ATEX CESI

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. 19/6/1990, D.M. 20/7/1998 e D.M. 27/9/2000

CERTIFICATE



EC-TYPE EXAMINATION CERTIFICATE

- [1] **Equipment or Protective System intended for use in potentially explosive atmospheres**
Directive 94/9/EC
- [2] EC-Type Examination Certificate number:
CESI 02 ATEX 076
- [3] Equipment: Command, control and signalling units series EJB
- [4] Manufacturer: **F.E.A.M. S.p.A.**
- [5] Address: Via M. Pagano, 3 – 20090 Trezzano sul Naviglio (MI) - Italy
- [6] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [7] 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-A2/026811.
- [8] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014: 1997 + A1.. A2; EN 50018: 2000 + A1; EN 50020: 2002; EN 50281-1-1: 1998
- [9] 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.
- [10] 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.
- [11] The marking of the equipment or protective system shall include the following:
- II 2 GD EEx d IIB T6, T5, T4, T3 IP 65 T 85, T 100, T 135, T 150 °C
 - II 2 (1) GD EEx d [ia] IIB T6, T5, T4, T3 IP 65 T 85, T 100, T 135, T 150 °C
 - II 2 (2) GD EEx d [ib] IIB T6, T5, T4, T3 IP 65 T 85, T 100, T 135, T 150 °C

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

Date 29 October 2002 - Translation issued the 29th October 2002

Prepared

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Verified

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Approved

Ulisse Colombo

CESI

CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO
Business Unit Certificazione

Il Responsabile

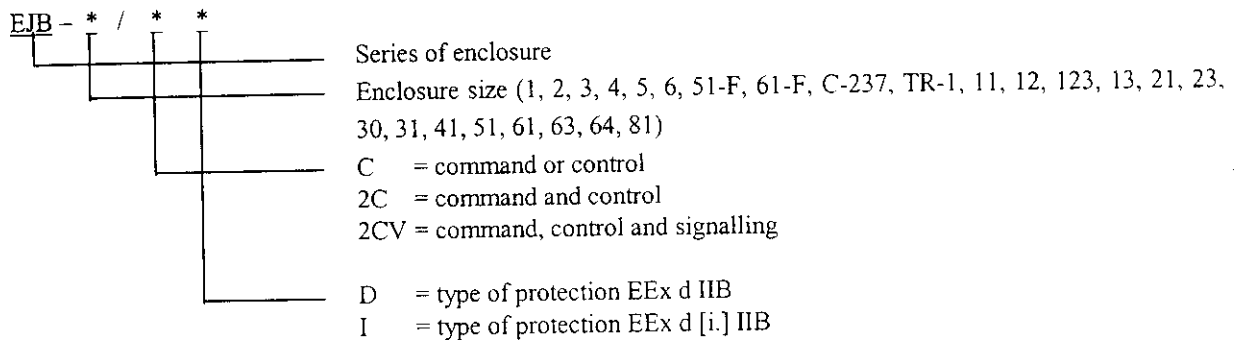
Schedule

[13]

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 076**

[15] **Description of equipment**

The command, control and signalling units series EJB are identified by a code as follows:



The enclosures of the command, control and signalling units series EJB 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 the certificate above mentioned.

The types of electrical and electronic components installed inside the command, control and signalling units are reported in the technical note NT-017/ATEX together with their electrical characteristics.

The enclosures can contain also associated apparatus with the type of protection [EEx ia/ib] IIB/IIC; in this case the command, control and signalling units series EJB have the type of protection EEx d [ia/ib] IIB.

Electrical characteristics

- Rated voltage: 24 ÷ 750 V a.c. 12 ÷ 220 V c.c.
- Rated frequency: 50/60 Hz
- Max. power dissipated on the enclosure EEx d: ≤ 420 W^{II}
- Rated power of signal lamps: ≤ 3 W for temperature class T5, T6 and maximum surface temperature T 85, T 100 °C
- Maximum rated current: 350 A^{III}
- Degree of protection: IP 65 (EN 60529 - 1991)
- Temperature class for category 2 G units:
T6, T5, T4, T3 as a function of the dimensions and of the power dissipated inside the enclosure
- Maximum surface temperature for category 2 D units:
T 85 °C, T 100 °C, T 135 °C, T 150 °C as a function of the dimensions and of the power dissipated inside the enclosure

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Schedule

[13]

[14] **EC-TYPE EXAMINATION CERTIFICATE** n. CESI 02 ATEX 076

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

[1] The maximum power which can be dissipated inside the enclosure and the maximum current are a function of the enclosure size, of the temperature class (for category 2 G units) or/and of the maximum surface temperature (for category 2 D units) as specified in details in the documentation annexed to this certificate.

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

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.

The use of windows and signal lamps is allowed only for temperature class T6, T5 and for maximum surface temperature T85 °C, T 100 °C.

Intrinsically safe circuits

The electrical characteristics of the intrinsically safe circuits are indicated on the nameplate of the associated apparatus used, subject of separate certification.

Warning label

“Restore silicone grease at every opening”

“Make sure that drainage and breathing valves are always closed”

“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 installation of intrinsically safe apparatus:

“Attention, intrinsically safe circuits inside”

In case of use of batteries:

“Attention, do not open when an explosive gas atmosphere is present”

“Replace only with battery type”

“Replace only with fuse type”

Additional warnings

In case of enclosures with temperature class T5, T4, T3 and maximum surface temperature T 100, T 135, T 150 °C:

“Use cables suitable for temperatures of 100, 135, 150 °C (respectively)”

Schedule

[13]

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 076**

[16] **Report n. EX-A2/026811**

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 enclosures EJB – 2, 5, 51-F, 11, 12, 123, 13, 21, 23, 30, 31, 41, 51, 61, 63, 64, 81
 - 12 bar on the enclosures EJB – 1, 3, 4, 6, 61-F, C-237, TR-1.
- with the static method (paragraph 15.1.3.1 of the EN 50018 standard).

Descriptive documents (prot. EX-A2/026817)

- | | | |
|--|-------|------------|
| - Technical note n. NT-017/ATEX (10 pg.) | dated | 05.07.2002 |
| - Instructions for use n. IU-017/ATEX Rev. 0 (2 pg.) | dated | 05.07.2002 |
| - ESR conformity list n. ESR-017/ATEX (3 pg.) | dated | 05.07.2002 |
| - Drawing n. AC-017/ATEX Rev. 0 (2 pg.) | dated | 05.07.2002 |
| - EC declaration of conformity | dated | 05.07.2002 |

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.