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

CERTIFICATE

1056



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 03 ATEX 015
- [3] Equipment: Surge arresters series CCF.SC and EJB.SC.
- [4] Manufacturer: **COR.TEM S.p.A.**
- [5] Address: Via Aquileia 10, Villesse (Gorizia - 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-A3/001304.
- [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 50281-1-1:1999 + A1
- [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 or T5 IP 65 or IP 66/67 T85°C or T100 °C

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

Date February 3rd 2003 translation issued on February 3rd 2003

Prepared
Mirko Balaz

Approved
Ulisse Colombo

CESI
CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO
Business Unit Certificazione

Il Responsabile

[13]

Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 015**

[15] **Description of equipment**

The surge arresters subject of this certificate are mounted inside enclosures series CCF and EJB of size 5 and 6.
As regards the protection against combustible gases the type of protection is EEx d IIB T6 or T5.
As regards the protection against combustible dusts the enclosures series CCF and EJB are made in two versions with different degree of protection IP:

- enclosures with silicone grease placed between body and cover: IP 65
- enclosures with sealing gasket placed between body and cover: IP 66/67

The enclosures of these units are made in aluminium or stainless steel.

The empty enclosures series CCF and EJB are subject of the component certificate CESI 00 ATEX 036 U. All the constructional details of the enclosures are reported in the documents annexed to the above mentioned component certificate.

Electrical characteristics

Rated voltage (kV)	6	9	10,5	12	15
Continuous operating voltage (kV)	4,8	7,2	8,4	9,6	12
Rated discharge current	10 kA				
Rated frequency	50 ÷ 60 Hz				
Ambient temperature	- 20 ÷ + 40 °C				
	- 20 ÷ + 55 °C				

Temperature class:

- T6 for ambient temperature - 20 ÷ + 40 °C
- T5 for ambient temperature - 20 ÷ + 55 °C

Maximum surface temperature of the enclosure:

- T85 °C for ambient temperature - 20 ÷ + 40 °C
- T100 °C for ambient temperature - 20 ÷ + 55 °C

Warning label

“Use screws of quality A2-70 according UNI 7323 with ultimate tensile strength of at least 700 N/mm²”.

Additional warnings

The choice of the characteristics of surge arresters shall be made according to the requirements of the standard IEC 99-5 (1996), taking into account all the overvoltages foreseeable on the plant so that the correct operation of the arresters is not jeopardised.

The earth terminal inside the enclosure shall be connected directly to the ground system of the plant through a conductor having cross-section according to clause 15.4 of the standard EN 50014.

The accessories used for cable entries and for closing unused apertures shall be certified according to the standards EN 50014, EN 50018 and EN 50281-1-1 and shall guarantee a degree of protection IP at least equal to that of the enclosure.

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

[13]

Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 015**

[16] **Report n. EX-A3/001304**

Routine tests

The manufacturer shall carry out the routine tests prescribed at clause 24 of the EN 50014 standard.

The routine overpressure test shall be carried out with the static method (clause 15.1.3.1 of EN 50018 standard) at the pressure of:

- 11.9 bar for enclosure size 5
- 11.5 bar for enclosure size 6

Descriptive documents (prot. EX-A3/001307)

- | | |
|---|------------------|
| - n. A4-4360 Rev. 0 | dated 15.07.2002 |
| - n. A1-4300 Rev. 0 (2 p.) | dated 15.07.2002 |
| - n. A4-4129 Rev. 0 | dated 26.06.2000 |
| - Safety instructions F-272 (5 p.) | dated 15.07.2002 |
| - EC declaration of conformity n. CE/0033 | dated 15.07.2002 |

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.

EXTENSION n. 01/07

to EC-Type Examination Certificate CESI 03 ATEX 015



Equipment: Surge arresters series CCF.SC and EJB.SB

Manufacturer: CORTEM S.p.A.

Address: Via Aquileia, 10 Villesse (Gorizia), Italia

Admitted variation

- Conformity to EN 60079-0 (2006), EN60079-1 (2004), EN 61241-0 (2006), EN 61241-1 (2004) Standards
- Update of nameplate
- Execution IIB + H₂
- Add new boxes:
 - EJB-55, EJB-55B
 - EJBX7 (only for stainless steel material)

Equipment identification and description

The marking of the equipment shall include the following:

II 2 GD Ex d IIB+H₂ T6 o T5 ; Ex tD A21 IP65 o IP66/67 T85 °C o T100°C or:

II 2 GD Ex d IIB T6 o T5 ; Ex tD A21 IP65 o IP66/67 T85 °C o T100°C

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 03ATEX015.

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date translation issued 6 december 2007

prepared Giorgio Chinnici

verified Mirko Balaz

approved Fiorenzo Bregani

CESI S.p.A.
Divisione Energia
"Area Tecnica Certificazione"
Il Responsabile

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EXTENSION n. 01/07

to EC-Type Examination Certificate CESI 03 ATEX 015

Electrical characteristics

Unchanged.

Constructive characteristics

The execution IIB+H₂ and the new boxes:

- EJB-55, EJB-55B
- EJBX7 (only for stainless steel material)

are subject of the component certificate CESI 00 ATEX 036U. All the constructional details of the enclosures are reported in the documents annexed to the above mentioned component certificate.

Cable entries

The accessories used for cable entries and for unused holes shall be subject of separate certification:

- in the unit of category II 2GD shall be certified according to the standards: EN 60079-0 (2006); EN 60079-1 (2004); EN 61241-0 (2006); EN 61241-1 (2004) and shall guarantee a degree of protection IP66 according to EN 60529 (1991) Standard.

Report n. EX- A7032764

Routine tests

The manufacturer shall carry out the routine tests prescribed at par. 27 of the EN 60079-0 (2006) and at par. 24 of the EN 61241-0 (2006) Standards.

The overpressure routine test shall be carried out with static method, at the pressure of

- 11,9 bar for enclosure size from 1 to 5
- 11,5 bar for enclosure size 6
- 10 bar for enclosure size 7

in conformity to the par. 15.1.3.1 of the EN 60079-1 Standard

Descriptive documents (prot. EX-A7032765)

- Technical Note n. A4-4987 (1 pag.)	dated	23 March 2007
- Drawing A1-4300 (2 sheets)	dated	23 March 2007
- Drawing A4-4951	dated	02 April 2007
- Drawing A4-4952	dated	02 April 2007
- EC Declaration of Conformity	dated	23 March 2007
- Safety instructions F-272 rev. 1 (4 pag.)	dated	23 March 2007

One copy of all documents is kept in CESI files.

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EXTENSION n. 01/07

to EC-Type Examination Certificate CESI 03 ATEX 015

Essential Health and Safety Requirements

The Health and Safety Requirements are assured by compliance with the following Standards:

- EN 60079-0 : 2006: Electrical apparatus for explosive gas atmospheres.
General requirements
- EN 60079-1 : 2004 Flamoproof enclosures "d".
- EN 61241-0 : 2006 Electrical apparatus for use in the presence of combustible dust.
General requirements
- EN 61241-1 : 2004 Protection by enclosures "tD"

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