CESI

CESI Centro Elettrotecnico Sperimentale Italiano Giacinto Motta SpA

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

[2]

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



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



[1] EC-TYPE EXAMINATION CERTIFICATE

Equipment or Protective System intended for use in potentially explosive atmospheres

Directive 94/9/EC

[3] EC-Type Examination Certificate number:

CESI 03 ATEX 062

[4] Equipment: Terminal boxes series S, S.1, GUA, GUF, EAH.

[5] Manufacturer: FONDISONZO Italia s.r.l.

[6] Address: Via Aquileia Z.I., 34076 Romans d'Isonzo (Gorizia – 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-A3/010979.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014: 1997 + A1..A2 EN 50018: 2000 + A1 EN 50281-1-1:1998 + A1

[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:

(Ex) II 2 GD EEx d IIC T6 or T5 IP 66/67 T85 °C or T100°C

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

Date March 27th, 2003 translation issued on March 27th, 2003

Prepared Mirko Balaz

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Approved
Ulisse Colombo

CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO

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[13] Schedule

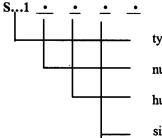
[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 062

[15] Description of equipment

Terminal boxes series S.1, S, GUA, GUF, EAH.

The enclosures of these terminal boxes are generally made in aluminium alloy. As an alternative they can also be made in brass or in stainless steel (see technical note A4-842 annexed to this certificate).

The various models of the terminal boxes subject of this certificate are identified by a code as follows:

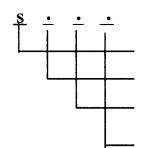


type of enclosure (manufactured in die-casting)

number and position of hubs: T,C,L,X,A,W,D,M,B

hub diameter: 1, 2, 3, 4, 5, 6

size of enclosure: 4, 6, 7, 9

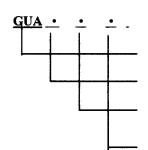


type of enclosure (manufactured with mould casting)

number and position of hubs: T,C,L,X,W,D,M,B

hub diameter: 1, 2, 3, 4, 5, 6

size of enclosure: 4, 6, 7, 9



type of enclosure (manufactured in die-casting)

number and position of hubs: T,C,L,X,W,D,M,B

hub diameter: 1, 2, 3, 4, 5, 6

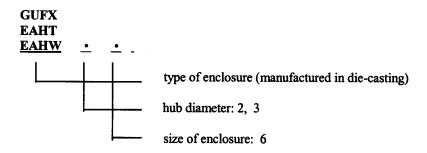
size of enclosure: 6, 9

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 062

[15] Description of equipment (follows)



The complete code of all the terminal boxes subject of this certificate is reported in the drawings A1-013, A1-014 and A1-015 annexed to this certificate.

Electrical characteristics

Rated voltage 750 [V]Rated frequency $50 \div 60 \text{ [Hz]}$

Terminals

Terminal section 2.5; 4; 6; 10; 16; 25; 35; 70 [mm²]

Rated current 12.5 ÷ 175 [A] Max. current density 2.5 ÷ 5 [A/mm²]

The type and number of terminals which can be installed in the various enclosures is indicated in detail, together with the maximum admissible currents and current densities, in the drawing A2-191 and in the safety instructions A/17 annexed to this certificate.

Degree of protection IP 66/67 (EN 60529 – 1991)

Ambient temperature:

 $-20 \div +40$ °C and $-20 \div +60$ °C for the enclosures of size 4, 6, 7 and 9 $-40 \div +40$ °C and $-40 \div +60$ °C for the enclosures of size 4 and 6

Temperature class for the terminal boxes category 2 G:

T6 for ambient temperature $-20 \div +40$ °C and $-40 \div +40$ °C T5 for ambient temperature $-20 \div +60$ °C and $-40 \div +60$ °C

Maximum surface temperature of the enclosure for the terminal boxes category 2 D:

T85 °C for ambient temperature $-20 \div +40$ °C and $-40 \div +40$ °C T100 °C for ambient temperature $-20 \div +60$ °C and $-40 \div +60$ °C

The accessories used for cable entry 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 66/67.

Warning label

In case of enclosures of temperature class T5:

"Use cables suitable for a temperature of 90 °C"

[13] Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 062

[16] Report n. EX-A3/010979

Routine tests

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

The manufacturer is exempted from the routine overpressure test since the terminal boxes have passed the type overpressure test carried out with the static method at 4 times the reference pressure:

- 51.5 bar for enclosures of size 4 and 6 (for operation at 40°C)
- 35.5 bar for enclosures of size 7 and 9 (for operation at 20°C)

Descriptive documents (prot. EX-A3/010981)

- n° A4-842 Rev. 0 (7 p.)	dated	15.02.2002
- n° A3-229 Rev. 0	dated	19.03.2001
- n° A3-230 Rev. 0	dated	15.03.2001
- n° A3-239 Rev. 0	dated	01.10.2001
- n° A2-191 Rev. 1	dated	03.02.2003
- n° A4-801 Rev. 0	dated	01.06.2000
- n° A1-013 Rev. 0	dated	20.03.2001
- n° A1-014 Rev. 0	dated	20.03.2001
- n° A1-015 Rev. 0	dated	20.03.2001
- Safety instructions Annexe A/17 Rev. 0 (6 p.)	dated	01.06.2000
- EC declaration of conformity n° CE/0031	dated	19.03.2001

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.