



[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 01 ATEX 105**

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

[5] Manufacturer: **EL.FIT S.p.A.**

[6] Address: Via Aquileia 12, Villesse, 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-A1/039691.

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

**EN 50014: 1997 + A1...A2    EN 50018: 2000    EN 50281-1-1:1999**

[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 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 December 21<sup>st</sup>, 2001 - translation issued on December 21<sup>st</sup>, 2001

prepared CERT - M. Balaz **CESI**

**CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO**  
Business Unit Certificazione

approved CERT - U. Colombo

*EL/Responsabile*

[13]

## Schedule

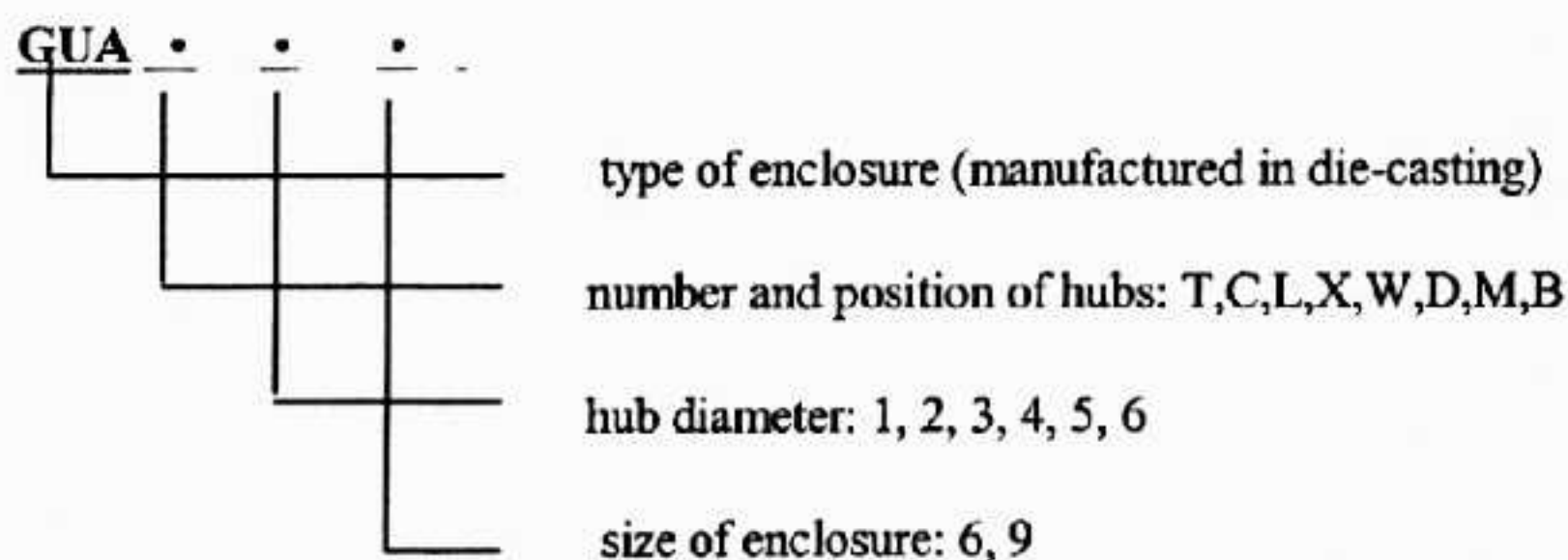
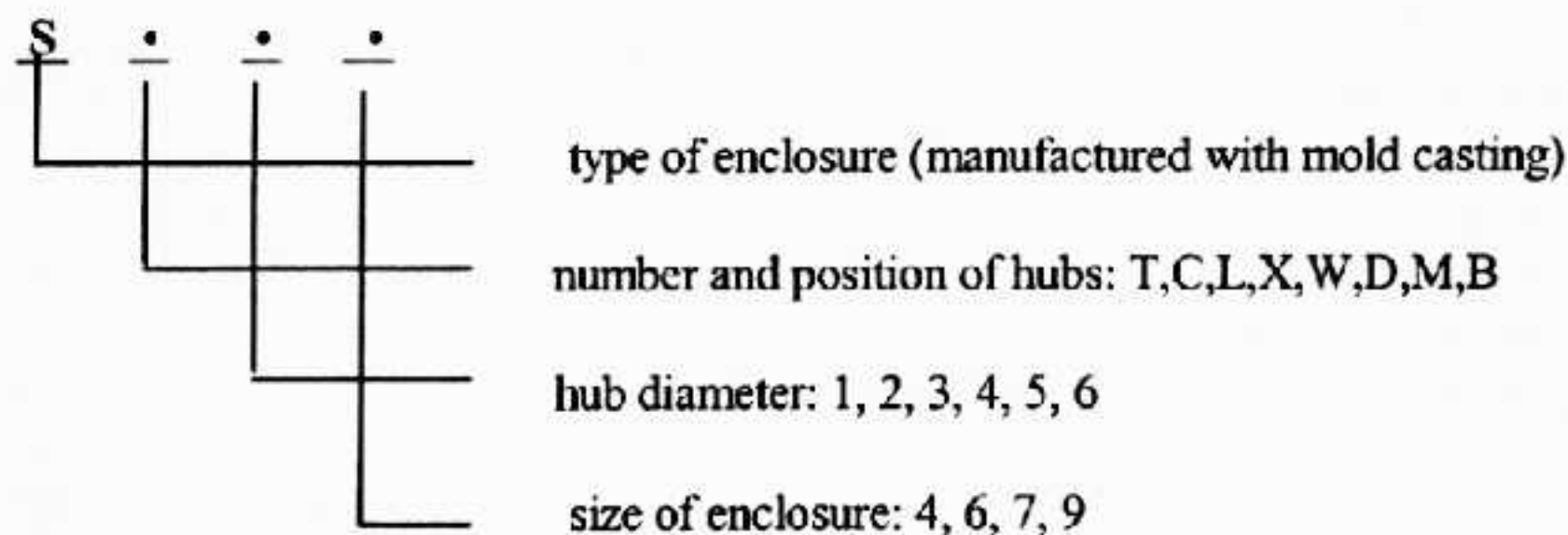
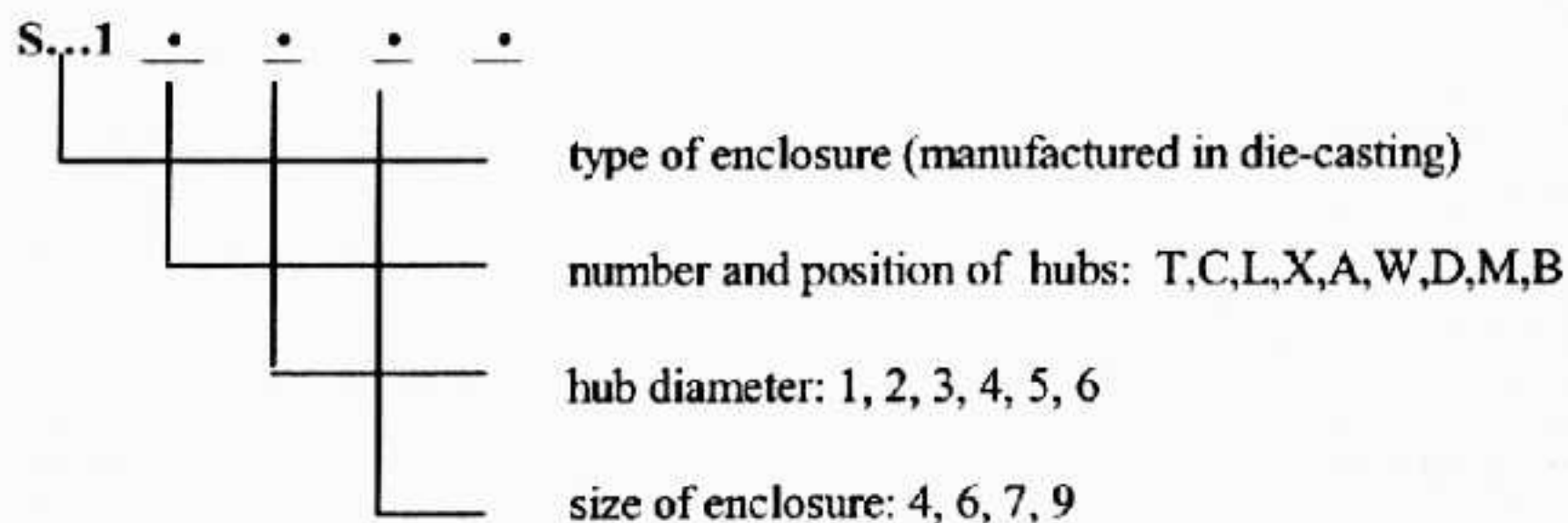
[14] **EC-TYPE EXAMINATION CERTIFICATE N. CESI 01 ATEX 105**

[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:



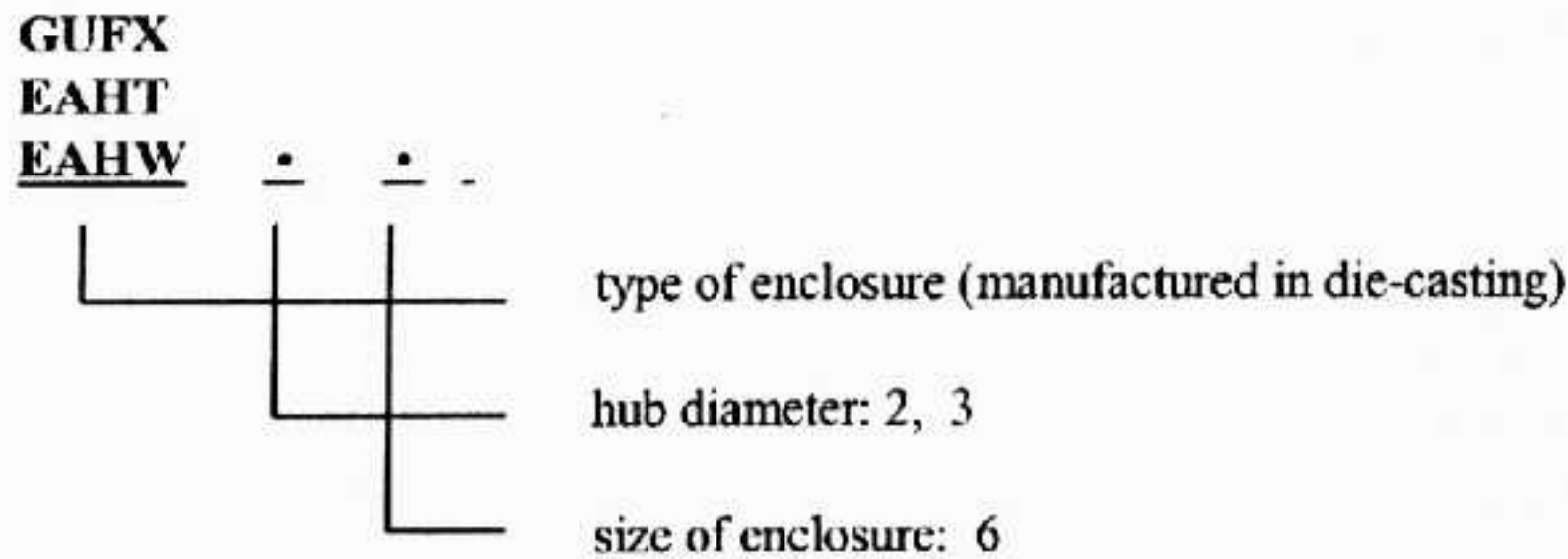
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[13]

## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE N. CESI 01 ATEX 105**



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 ÷ 60 [Hz]

### Terminals

Terminal section	2.5; 4; 6; 10; 16; 25; 35; 70 [mm <sup>2</sup> ]
Rated current	12.5 ÷ 175 [A]
Max. current density	2.5 ÷ 5 [A/mm <sup>2</sup> ]

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

Temperature class for the terminal boxes category 2 G:

T6	for ambient temperature - 20 ÷ + 40 °C and - 40 ÷ + 40 °C
T5	for ambient temperature - 20 ÷ + 60 °C and - 40 ÷ + 60 °C

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

T85 °C	for ambient temperature - 20 ÷ + 40 °C and - 40 ÷ + 40 °C
T100 °C	for ambient temperature - 20 ÷ + 60 °C and - 40 ÷ + 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

“Use screws of quality A2-70 according UNI 7323 with ultimate tensile strength of at least 700 N/mm<sup>2</sup>”.

### Additional warnings

In case of enclosures of temperature class T5 :  
 “Use cables suitable for a temperature of 90 °C”

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[13] **Schedule**

[14] **EC-TYPE EXAMINATION CERTIFICATE N. CESI 01 ATEX 105**

[16] **Report n. EX-A1/039691**

**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-A1/039693)**

- n° A4-842 Rev. 0 (7 p.)	dated	15.03.2001
- 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. 0	dated	15.03.2001
- 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
- Technical data of resin EPDM 70 black	dated	29.11.2001
- Technical data of resin NBR 70 black	dated	03.11.2000
- Technical data of resin Silicon 70 red	dated	04.02.2001
- Technical data of resin FKM (VITON) 70 black	dated	29.11.2001
- Safety instructions Amxe A/17 Rev. 0 (6 p.)	dated	01.06.2000
- EC declaration of conformity n° CE/003	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.

## EXTENSION n. 02/07

to EC-Type Examination Certificate CESI 01ATEX 105



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

Manufacturer: EL.FIT S.p.A.





Address: Via Aquileia 12, Villesse (GO)

### Admitted variation

- Upgrade to EN 60079-0 (2006), EN 60079-1 (2004), EN 60079-7 (2003), EN 60079-11 (2007)  
EN 61241-0 (2006), EN 61241-1 (2004) Standards
- Upgrade of nameplate

### Equipments identification

According to the protection mode, the terminal boxes S, S.1, GUA, GUF EAH shall include the following markings:

-  II 2GD Ex d IIC T6, T5 ; Ex tD A21 IP66/67 T 85 °C, T 100 °C
-  II 2GD Ex e II T6, T5 ; Ex tD A21 IP66/67 T 85 °C, T 100 °C
-  II 2 (opp. 1) GD Ex i. IIC T6, T5 ; Ex tD A21 IP66/67 T 85 °C, T 100 °C
-  II 2(1opp. 2)GD Ex d[ia] IIC T6, T5 ; Ex tD A21 IP66/67 T 85 °C, T 100 °C

### Cable entries

The accessory used for cable entries and for closing unused aperture shall be certified according to the following Standards:

- terminal boxes in execution "Ex d" : EN 60079-0, EN 60079-1, EN 61241-0, EN 61241-1
- terminal boxes in execution "Ex e" : EN 60079-0, EN 60079-7, EN 61241-0, EN 61241-1
- terminal boxes in execution "Ex i" : EN 60079-0, EN 60079-11, EN 61241-0, EN 61241-1

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 01ATEX105.

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date 16/05/2007 - translation issued the 16/05/2007

prepared Sergio Mezzetti

verified Mirko Balaz

approved Fiorenzo Bregani

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

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## EXTENSION n. 02/07

to EC-Type Examination Certificate CESI 01ATEX 105

Report n. EX-A7013496

### Routine tests

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

The dielectric test on terminal box "Ex e", if assembled by manufacturer, shall be performed according to the par. 7.2 of the EN 60079-7 Standard.

### Descriptive documents (prot. EX-A7013497)

- Technical Note A4-997 (5 pg.)	Rev. 01	dated	01/02/2007
- Drawing n°. A4-999	Rev. 00	dated	01/02/2007
- Drawing n°. A3-239	Rev. 02	dated	01/02/2007
- Drawing n°. A4-1010	Rev. 01	dated	01/02/2007
- EC Declaration of Conformity		dated	12/02/2007
- Safety Instruction A17 (11 pg.)	Rev. 02	dated	01/02/2007

One copy of all documents is kept in CESI files.

### 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 60079-7: 2003 Increased safety "e"
- EN 60079-11: 2007 Intrinsic safety "i"
- 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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## EXTENSION n. 02/07

to EC-Type Examination Certificate CESI 01ATEX 105



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

Manufacturer: EL.FIT S.p.A.





Address: Via Aquileia 12, Villesse (GO)

### Admitted variation

- Upgrade to EN 60079-0 (2006), EN 60079-1 (2004), EN 60079-7 (2003), EN 60079-11 (2007)  
EN 61241-0 (2006), EN 61241-1 (2004) Standards
- Upgrade of nameplate

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This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 01ATEX105.

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date 16/05/2007 - translation issued the 16/05/2007

prepared Sergio Mezzetti

verified Mirko Balaz

approved Fiorenzo Bregani

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

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## EXTENSION n. 02/07

to EC-Type Examination Certificate CESI 01ATEX 105

Report n. EX-A7013496

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

The dielectric test on terminal box "Ex e", if assembled by manufacturer, shall be performed according to the par. 7.2 of the EN 60079-7 Standard.

### Descriptive documents (prot. EX-A7013497)

- Technical Note A4-997 (5 pg.)	Rev. 01	dated	01/02/2007
- Drawing n°. A4-999	Rev. 00	dated	01/02/2007
- Drawing n°. A3-239	Rev. 02	dated	01/02/2007
- Drawing n°. A4-1010	Rev. 01	dated	01/02/2007
- EC Declaration of Conformity		dated	12/02/2007
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