

**CESI**

**CESI**  
 Centro Elettrotecnico  
 Sperimentale Italiano  
 Giacinto Motta SpA

Via R. Rubattino 54  
 20134 Milano - Italia  
 Telefono +39 022125.1  
 Fax +39 0221255440  
 www.cesi.it

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

**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 04 ATEX 129**

[4] Equipment: Grounding system type GRD-4200

[5] Manufacturer: **COR.TEM S.p.A.**

[6] Address: Via Aquileia 10, Villesse (Gorizia)

[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-A4/517285.

[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 50020:2002 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:

II 2(1)GD EEx d [ia] ia IIB T6 IP 66 or IP 65 T85°C

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

Date October 27<sup>th</sup>, 2004 translation issued on October 27<sup>th</sup>, 2004

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 04 ATEX 129**

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[15] **Description of equipment**

The grounding system GRD-4200 comprises an explosion-proof measuring and control unit, and either grounding cable with clamp or a cable dispenser with cable and clamp.

In the explosion-proof control unit both electrical and electronic components with command and control functions and associated apparatus for interface with intrinsic safety circuits are installed.

The associated apparatus are subject of separate certification with type of protection [EEx ia] IIC.

The types of electrical components installed in the control unit are reported in the documents annexed to this certificate together with the relevant electric parameters. The explosion-proof enclosure EEx d IIB, is subject of the component certificate CESI 00 ATEX 036 U.

As regards the protection against combustible dusts, the enclosures 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

### Electrical characteristics

Rated voltage	24; 110; 230 V a.c.	24 V d.c.
Rated frequency	50 ÷ 60 Hz	----
Ambient temperature	- 20 ÷ + 50 °C	

Temperature class for category 2G. units: T6

Maximum surface temperature for category 2.D units: T 85 °C

Degree of protection IP 65 or IP 66 (EN 60529 – 1991)

### Intrinsic safety circuits

The electrical characteristics of the intrinsic safety circuits are reported on the label of the associated apparatus used.

The accessories used for cable entries and for closing unused apertures in the units of category II 2(1) GD 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.

### Warning labels

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

[16] **Report n. EX-A4/517285**

### Routine tests

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

The routine overpressure test shall be carried out with the static method (paragraphs 15.1.3. of the standard EN 50018) at the pressure of 11.9 bar.

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## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 04 ATEX 129**

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### Descriptive documents (prot. EX-A4/517289)

- Technical note n. A4-4792 Rev. 0	dated	06.09.2004
- Drawing n. A1-4669 Rev. 0 (2 sheets)	dated	06.09.2004
- Safety instructions F-293 Rev. 0 (5 pages)	dated	06.09.2004
- EC declaration of conformity CE/0050	dated	06.09.2004

One copy of all the documents is kept in CESI files.

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

None.

[18] **Essential health and safety requirements**

Covered by standard fulfilments.