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Sezione Ordinaria
N. R.E.A. 429222
P.I. IT00793580150



CERTIFICATE

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 11 ATEX 041

[4] Equipment: Grounding and grounding control device, type GGCD 01

[5] Manufacturer: **TEP Ex d.o.o.**

[6] Address: Medarska 69, Hr-10090 Zegreb - Croatia

[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-B1018280.

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

**EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-7: 2007,
EN 60079-11: 2007, EN 60079-18: 2009**

[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 G Ex de [ib] mb IIC T5 Gb**

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

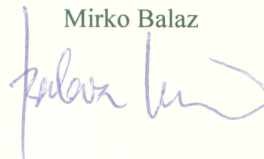
Date November 22th 2011 - Translation issued the November 22th 2011

Prepared

M.T.


Verified

Mirko Balaz



Approved

Fiorenzo Bregani


CESI S.p.A.
Testing & Certification Division

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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, D.M. 27/9/2000 e D.M. 02/02/2006

[13]

Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 11ATEX 041

[15] **Description of equipment**

Grounding control device type GGCD 01 is a device suitable to provide an active system for static grounding and grounding control.

The device provides a conductive connection to the ground and monitors the quality of the connection.

It is composed by a Ex [ib] mb electronic module (connected to external clamps K1 and K2) mounted into Ex e enclosure with Ex de control switch, signal lamps, push button and Ex e terminals.

Grounding and grounding control device type GGCD 01 are identified by the following code:

GGCD 01/



- K1 = type with one clamp, with 10m of cable .
 K2 = type with two clamps, with 2x10m of cable.

Electrical Characteristics

Rated voltage: 230 Vac \pm 10% – 50 Hz
 Rated current: 50 mA
 Rated power: 10 W

Output circuits: n.2 switch over contacts (NO+NC)
 Rated voltage: 250Vac
 Rated current: 8A

Intrinsic safety parameters:

Um: 253 Vac
 Uo: 16,75 V
 Io: 2,2 mA
 Po: 9,2 mW
 Maximum length of the clamp cable: 100m
 Maximum external cable inductance (Lc): 130 μ H
 Maximum external cable capacitance (Cc): 27 nF

Connecting terminals: 1,5 \div 4 mm²
 Cable for equipotential bonding: 25 mm² max.

Degree of protection (EN 60529): IP 66
 Ambient temperature range: -20 \div +50 °C

The detailed description of the grounding and grounding control device type GGCD 01 and its constructional characteristics are mentioned into manufacturer documents.

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

[13]

Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 11ATEX 041**

Installation conditions

The grounding control device type GGCD 01 use Ex e cable glands type SPU25 and Ex e plugs type SPC25, however accessories used for cable entries and for unused holes shall have IP 66 and shall be certificate according to the standards EN 60079-0 and EN 60079-7.

Warning label

- "Warning: do not open when energized"

[16] **Report n. EX-B1018280.**

Routine tests

The manufacturer shall carried out the routine tests prescribed at clause 27 of the EN60079-0 standard.

Dielectric test on the transformer T1 shall be performed according to clause 11.2 of the EN 60079-11 standard at 2500 Vac.

On the grounding control device type GGCD 01 the dielectric test with applied voltage shall be performed (according to clause 7.1 of the EN 60079-7) between terminals and earth: $2U + 1000$ Vac with a minimum value of 1500 Vac ($U =$ rated voltage).

Descriptive documents (prot. EX-B1018286)

- Technical description of the explosion protected grounding and grounding control device type GGCD-01/.. – Rev. 1 (pages 5) dated 15.04.2011
- Appendix I – spark ignition compliance (pages 2) dated 07.2011
- User manual for explosion protected grounding and grounding control device type GGCD-01/.. – Rev. 2 (pages 7) dated 22.07.2011
- Certificated drawing description C30.81.01.00-1 - C30.81.01.00-13, explosion protected grounding and grounding control device type GGCD-01 – Rev.1 (pages 6) dated 15.04.2011
- Drawing C30.81.01.00 rev.0 (pages 14) dated 04.2011
- Drawing SPO 01 T18.10.01.00 rev.0 dated 06.2004
- Drawing SPO 02 T18.20.01.00 rev.0 dated 06.2004
- Drawing SMO17 T64.00.01.00 rev.0 dated 02.2006
- Drawing SLP rev.0 dated 03.2006
- Drawing PBT 02 rev.0 dated 03.2006
- Declaration of conformity dated 03.10.2011

One copy of all documents is kept in CESI files.

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

None.

[18] **Essential Health and Safety Requirements**

Covered by EN standards mentioned at page 1.