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Schema di certificazione

CESI A-TEX

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 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 d e [ib] mb IIC T5 Gb

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

Date June 8th 2011 - Translation issued the June 28th 2011

Prepared	**Verified**	**Approved**
M.T.	Mirko Balaz	Fiorenzo Bregani

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) 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 ± 10% – 50 Hz
Rated current:	50 mA
Rated power:	10 W
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 µH
Maximum external cable capacitance (Cc):	27 nF

Intrinsic Safety circuits shall be connected to clamps type K1 and/or K2

Connecting terminals:	1,5 ÷ 4 mm^2
Cable for equipotential bonding:	25 mm^2 max.
Degree of protection (EN 60529):	IP 66
Ambient temperature range:	-20 ÷ +50 °C

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

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[13] # Schedule

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

Installation conditions

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.

In the case of coupling of cable entry and cylindrical threaded accessory, a blocking system against loosening shall be provided, as specified by manufacturer or as indicated into relevant safety instructions.

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.

Routine 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 V with a minimum value of 1500 V (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 3)	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	(pages 13)	dated	04.2011
- Declaration of conformity		dated	07.2010

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.

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