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

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 e D.M. 02/02/2006

CERTIFICATE



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 10 ATEX 040

[4] Equipment:

Terminal boxes type RK01/...

[5] Manufacturer:

TEPEx Ltd.

[6] Address:

[1]

[2]

Medarska 69, Hr-10090 Zagreb - 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.
- 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-B0020591.

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

EN 60079-0: 2006, EN 60079-7: 2007, EN 60079-11: 2007 EN 61241-0: 2006, EN 61241-1: 2004

- [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:

 $\langle E_{x} \rangle$

II 2G Ex e II T6 or Ex ia/ib IIC T6

II 2D Ex tD A21 IP66 T80°C

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

Date 20 July 2010 - Translation issued the 20th July 2010

Prepared M.T.

H.Y.

Verified Mirko Balaz Approved Fiorenzo Bregani

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"Area/Tecnica Certificazione"



[13] Schedule

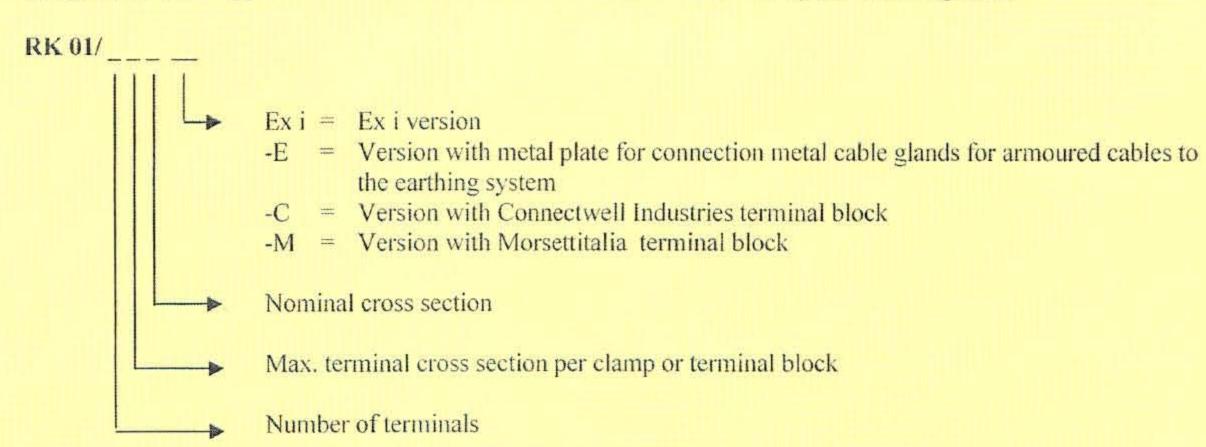
[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 10 ATEX 040

[15] Description of equipment

The junction boxes type RK 01, made in Polyamide are used for cable connection up to 6mm². Gasket on cover is used for guarantee degree of protection IP 66.

Junction boxes type RK 01 are provided with 6 holes for cable entries where can be mounted cable glands and/or plugs suitable for Ex e / Ex tD type of protection.

The junction boxes type RK01/*** and their characteristics, are identified by the following code:



Туре	Number of terminal and cross section	Terminals	Rated Voltage	Rated current		
				T _{amb} =40°C	T _{amb} =50°C	T _{amb} =70°C
RK 01/514-M	5 - 1 x 4 mm ²	Terminal block Morsettitalia*	690 V	20 A	16 A	12
RK 01/514-C	$5 - 1 \times 4 \text{ mm}^2$	Connectwell Industries	630 V	20 A	16 A	-
RK 01/516-M	$5 - 1 \times 6 \text{ mm}^2$	Terminal block Morsettitalia*	690 V	25 A	20 A	-
RK 01/516-C	5 - 1 x 6 mm ²	Connectwell Industries	630 V	25 A	20 A	(-)
RK 01/514 Ex i	5 - 1 x 4 mm ²	Terminal block Morsettitalia* or Connectwell Industries	60 V	**	**	**
RK 01/544	$5 - 4 \times 4 \text{ mm}^2$	Terminals MT 45	630 V	22 A	18 A	-
RK 01/744	$7 - 4 \times 4 \text{ mm}^2$	Terminals MT 47	630 V	22 A	18 A	-
RK 01/544-E	5 - 4 x 4 mm ²	Terminals MT 45	630 V	22 A	18 A	-

^{*} Applicable only with ambient temperature -20°C

Degree of protection (EN 60529): IP 66

Ambient temperature : $-20 \div +40$ °C or +50 °C

-40 ÷ +50 °C with suitable cable glands

-40 ÷ +70 °C for Ex-i with suitable cable glands

Details of the electrical characteristics and size / position of the cable entries are specified in the user manual.

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

^{**} Value of current for Ex-i version is related to intrinsically safe circuits protected by associated apparatus.

[13] Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 10 ATEX 040

[15] Description of equipment (follows)

Cable entries

1. Ex cable glands / plugs as integral part of apparatus

Junction boxes type RK 01 can use M25 cable glands type SPU25 for non-armoured cables and M25 plugs type SPC25 made in Polyamide for ambient temperature -20°C.

2. Ex cable glands / plugs with separate ATEX certificate

The accessories used for cable entries and for closing unused openings shall be certified according to EN60079-0, EN60079-1, EN61241-0 and EN61241-1 standards. A minimum degree of protection IP66 shall be guaranteed according to EN60529 standard.

The accessories for cable entries shall be suitable for the ambient temperature specified in the marking.

Warning label

"Warning: do not open when energized"

[16] Report n. EX-B0020591.

Routine tests

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

On the junction boxes type RK 01 the dielectric test with applied voltage shall be performed (according to clause 7.1 of the EN 60079-7) between terminals and earth:

- for electrical apparatus with rated voltage not exceeding 90V peak: 500 V
- for other apparatus where working voltage exceed 90V: 2U + 1000 V with a minimum value of 1500 V (U = rated voltage).

Descriptive documents (prot. EX-B0020596)

- Technical description of the explosion protected junction box, type RK01/	(pages 6)	dated	07.2010
- User manual TEPEx.RS.039 - rev.0	(pages 4)	dated	20.07.2010
- Certificated drawing description C20.00.01.00-1, C20.00.01.00-2,			
C20.00.01.00-3, C20.00.01.00-4, C20.00.01.00-5; junction box RK01/	(pages 4)	dated	07.2010
- drawing C20.00.0[1.00-1		dated	05.2009
- drawing C20.00,01.00-2		dated	05.2009
- drawing C20.00.01.00-3		dated	05.2009
- drawing C20.00.01.00-4		dated	05.2009
- drawing C20.00.01.00-5		dated	05.2009
- Declaration of conformity		dated	07.2010
One copy of all documents is kept in CESI files.			

[17] Special conditions for safe use None.

[18] Essential Health and Safety Requirements Assured by compliance to the Standards.