

# CESI



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# ATEX-CESI



PRD N. 018B  
Membro degli Accordi di Mutuo  
Riconoscimento EA, IAF e ILAC  
Signatory of EA, IAF and ILAC  
Mutual Recognition Agreements

# 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 12 ATEX 017 X**

[4] Equipment: Control units type SKX ..

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

[6] Address: 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.

[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-B2009481.

[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: 2012, EN 60079-18: 2009, EN 60079-31:2009

[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 2G Ex e IIC or Ex de IIC or Ex de mb IIC or Ex ia/ib IIC T6 Gb  
II 2D Ex tb IIIC T80°C Db IP66

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

Date 09.09.2013 - Translation issued the 09.09.2013

Prepared  
Mirko Balaz

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Approved

Fiorenzo Bregani

S.p.A.

Testing & Certification Division  
Business Area Certification

Il Responsabile

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## Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 12 ATEX 017 X

### [15] Description of equipment

Control units series SKX made in polyester resin can be equipped with control switches, signal lamps, push buttons, potentiometer, actuators, terminals and measuring instruments with component certificate as described in manufacturer's documents. They are available in 4 sizes, that can mount until 3 elements on the cover, and can be assembled to form a modular control panel with threaded connection elements.

The cover is fixed to the body with 4 anti loosening screw and the gasket between body and cover guarantee the protection degree IP66.

The walls of the boxes can be drilled and taped with maximum size and maximum number of holes as specified in the manufacturer documents.

Control units type SKX are identified by the following code:

SKX .. / ..

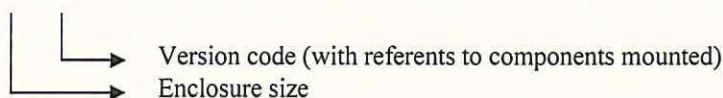


Table 1

Type	Dimensions
SKX 12	100x100x80 mm
SKX 13	150x100x80 mm
SKX 14	200x100x80 mm
SKX 15	200x150x80 mm
SKX 15H	200x150x135 mm

### Marking

For control units with control switches, signal lamps, push buttons or potentiometers the marking is the following:

 II 2G Ex de IIC T6 Gb  
 II 2D Ex tb IIC T80°C Db  
 IP66

For control units with control switches, signal lamps, push buttons or potentiometer and measuring instruments the marking is the following:

 II 2G Ex de mb IIC T6 Gb  
 II 2D Ex tb IIC T80°C Db  
 IP66

For control units with only Ex e terminals the marking is the following:

 II 2G Ex e IIC T6 Gb  
 II 2D Ex tb IIC T80°C Db  
 IP66

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## Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 12 ATEX 017 X

For control units with only terminals for Ex i circuits the marking is the following:

 II 2G Ex ia/ib IIC T6 Gb

### Electrical characteristics

Maximum rated voltage: 630 Vac – 50/60 Hz (400Vac with terminals type SL)  
Maximum rated current: 16 A with ambient temperature +40°C  
10 A with ambient temperature +50°C

Connecting terminals: 2,5 ÷ 16 mm<sup>2</sup>

Degree of protection (EN 60529): IP 66

Ambient temperature: -20 ÷ +40 °C,  
-20 ÷ +50 °C.

Rated values specified are maximum values, actual electrical values are determinate by mounted electrical equipment/component. Depending on the system conditions, the mode of operation, the utilisation category, etc., the manufacturer will define ratings which will be within the range of these limiting values and will comply with the relevant standards.

### Warning label

“Warning: do not open when energized”

[16] Report n. EX-B2009481

### Routine tests

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

On Ex e wired control units type SKX 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-B2009497)

- Technical description of the explosion protected control units  
type SKX 12, SKX 13, SKX 14, SKX15 (pages 7) dated 05.2013
- User manual for explosion protected control units  
type SKX 12, SKX 13, SKX 14, SKX15 – Rev. 03 (pages 9) dated 14.05.2013
- Certificated drawing description C64.10.39.00, C64.10.40.00-1,2, C64.10.41.00-1,2,  
C64.10.42.00-1,2,3, C64.10.43.00 enclosure MMK 12, MMK13, MMK14,  
MMK15, combination MMK12-15 (pages 4) dated 17.05.2012

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## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 12 ATEX 017 X**

- Drawing C64.10.39.00 rev.0		dated	09.2011
- Drawing C64.10.40.00-1 rev.0		dated	09.2011
- Drawing C64.10.40.00-2 rev.0		dated	09.2011
- Drawing C64.10.41.00-1 rev.0		dated	09.2011
- Drawing C64.10.41.00-2 rev.0		dated	09.2011
- Drawing C64.10.42.00-1 rev.0		dated	09.2011
- Drawing C64.10.42.00-2 rev.0		dated	09.2011
- Drawing C64.10.42.00-3 rev.0		dated	09.2011
- Drawing C64.10.43.00 rev.0		dated	09.2011
- Drawing C64.10.44.00 rev.0		dated	05.2013
- Drawing T18.10.01.00 rev.0		dated	06.2004
- Drawing T18.20.01.00 rev.0		dated	06.2004
- Drawing T42.12.06.00 rev.0		dated	06.2004
- Drawing T42.12.07.00 rev.0		dated	06.2004
- Drawing T61.02.01.00 rev.0		dated	03.2006
- Drawing T64.00.01.00 rev.0		dated	02.2006
- Drawing T65.00.01.00 rev.0		dated	12.2005
- Drawing 45.10.03.00 rev.0		dated	06.2008
- Certificated drawing description T18.10.01.00	(pages 2)	dated	10.05.2012
- Certificated drawing description T18.20.01.00	(pages 2)	dated	10.05.2012
- Certificated drawing description T42.12.06.00, T42.12.07.00		dated	15.05.2012
- Certificated drawing description T61.02.01.00		dated	16.05.2012
- Certificated drawing description T64.00.01.00	(pages 2)	dated	17.05.2012
- Certificated drawing description T65.00.01.00		dated	17.05.2012
- Declaration of conformity		dated	14.03.2012

One copy of all documents is kept in CESI files.

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

The clearances and creepage distances according to clause 4.3 and 4.4 of the EN 60079-7 standard have to be fulfilled.

Accessories used for cable entries and for unused holes shall have degree of protection IP 66 and shall be certificate according to the standards EN 60079-0, EN 60079-7 and EN 60079-31.

When selecting the permitted continuous current for cross section, the maximum permitted electrical current for the terminals and the connecting cable or conductor should be taken into consideration.

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

The Essential Health and Safety Requirements are assured by compliance to the following standards:

EN 60079-0: 2009	Explosive atmospheres – Part 0: Equipment - General requirements;
EN 60079-1: 2007	Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures “d”;
EN 60079-7: 2007	Explosive atmospheres – Part 7: Equipment protection by increased safety “e”;
EN 60079-11: 2012	Explosive atmospheres – Part 11: Equipment protection by intrinsic safety “i”;
EN 60079-18: 2009	Explosive atmospheres – Part 18: Equipment protection by encapsulation “m”;
EN 60079-31: 2009	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure “t”.

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