

[1] **EU – TYPE EXAMINATION CERTIFICATE**

[2] Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres  
Directive 2014/34/EU.

[3] EU-Type Examination Certificate Number: **EXA 17 ATEX 0080X** Issue: **1**

[4] Product: **Control unit**  
Type: **SKX 12/..; SKX 13/..; SKX14 /..; SKX 15/..; SKX 15H/..**

[5] Manufacturer: **TEP Ex Ltd**

[6] Address: **Medarska 69, 10090 Zagreb, Croatia**

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

[8] Ex-Agencija Notified Body number 2465 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II of the Directive.

The examination and test results are recorded in confidential Report No.: **EXA 17CR078**

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

|                                 |                         |                         |
|---------------------------------|-------------------------|-------------------------|
| <b>EN 60079-0:2012/A11:2013</b> | <b>EN 60079-1:2014</b>  | <b>EN 60079-7:2015</b>  |
| <b>EN 60079-11:2012</b>         | <b>EN 60079-18:2015</b> | <b>EN 60079-31:2014</b> |

except in respect of those requirements listed at item 18 of the Schedule.

[10] If the sign 'X' is placed after the certificate number, it indicates that the product is subject to Specific Conditions of Use specified in the schedule to this certificate.

[11] This EU-Type Examination Certificate relates only to the design, examination and test of the specified product in accordance with Annex III. Further requirements of the Directive apply to the manufacturing process and supply of this products. These are not covered by this certificate.

[12] The marking of the product shall include the following:



**II 2G Ex db eb IIC T6 Gb**  
**II 2G Ex db eb mb IIC T6 Gb**  
**II 2G Ex eb IIC T6 Gb**  
**II 2G Ex ia/ib IIC T6 Gb**  
**II 2D Ex tb IIIC T80 °C Db**

and/or

**I M2 Ex db eb I Mb**  
**I M2 Ex db eb mb I Mb**  
**I M2 Ex eb I Mb**  
**I M2 Ex ia/ib I Mb**

Date: 23.09.2017.

PB.17.TC.741/DK



**Ex-Agencija**  
Department of equipment certification  
Approved by:

*Stipo Đerek, dipl.ing.el.*

[13]

**SCHEDULE**

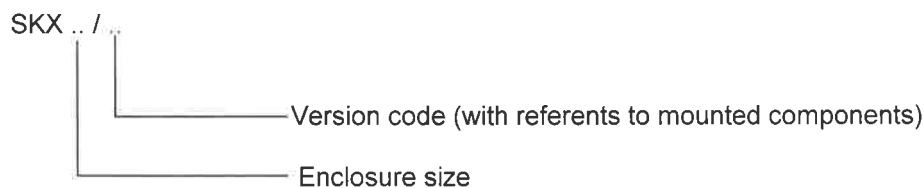
[14] **EU - TYPE EXAMINATION CERTIFICATE No.: EXA 17 ATEX 0080X**

[15] **Description of product**

Control units type SKX 12/..; SKX 13/..; SKX 14/..; SKX 15/..; SKX 15H/.. consist of empty enclosures type MMK 12, MMK 13, MMK 14, MMK 15 (EXA 14 ATEX 0073U; II 2G Ex e IIC Gb and/or II 2G Ex ia/ib IIC Gb) and can be equipped with control switches, signal lamps, push buttons, potentiometer, actuators, terminals and measuring instruments with component certificate as described in manufacturer's documentation. They are available in 4 sizes, that can mount up to 3 elements on the cover, and can be assembled to form a modular control panel with threaded connection elements.

Accessories used for cable entries and for unused holes are separately certified in appropriate type of protection.

Control units type SKX are identified by the following code:



| Type       | Dimensions         |
|------------|--------------------|
| SKX 12/..  | 100 x 100 x 80 mm  |
| SKX 13/..  | 150 x 100 x 80 mm  |
| SKX 14/..  | 200 x 100 x 80 mm  |
| SKX 15/..  | 200 x 150 x 80 mm  |
| SKX 15H/.. | 200 x 150 x 135 mm |

Rated data:

Ta: -20°C to +40°C / +50°C / +55°C

IP protection: IP 66, category 1 according to EN 60529 (II 2G; II 2D)

IP 64, category 1 according to EN 60529 (I M2)

Maximum rated voltage: 630 Vac -50/60 Hz

Maximum rated current: 80 A (depend on version and ambient temperature)

Connecting terminals: 2,5 mm<sup>2</sup> to 25 mm<sup>2</sup>

Rated values specified are maximum values, actual electrical values are determined 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.

Marking:

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

II 2G Ex db eb IIC T6 Gb and/or I M2 Ex db eb I Mb

II 2D Ex tb IIIC T80°C Db

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

II 2G Ex db eb mb IIC T6 Gb and/or I M2 Ex db eb mb I Mb  
 II 2D Ex tb IIIC T80°C Db

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

II 2G Ex eb IIC T6 Gb and/or I M2 Ex eb I Mb  
 II 2D Ex tb IIIC T80°C Db

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

II 2G Ex ia/ib IIC T6 Gb and/or I M2 Ex ia/ib I Mb

Warning marking:

'WARNING: DO NOT OPEN WHEN ENERGIZED'

**[16] Confidential Report No.** EXA 17CR078

**[16.1] Routine testing**

The manufacturer shall carry out the following routine test

- dielectric strength test according to standard EN 60079-7 cl. 7.1 with test voltage applied (2Un+1000) V but not less than 1500 V for a period at least 60 s or with 1.2 x (2Un+1000) V for a period at least 100 ms on control units type SKX with internal wiring.

**[17] Specific Conditions of Use**

Control units for mining application shall be protected from mechanical impact because they were tested with lower impact energy according to EN 60079-0.

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

Covered by the standards listed at item 9.

**[19] Drawings and Documents**

| Title:  | Drawing No.:    | Rev. level: | Date:       |
|---|-----------------|-------------|-------------|
| Technical description of explosion proof control units SKX 12; SKX 13; SKX 14; SKX 15/E   | -               | -           | 26.06.2017. |
| Drawing of control units II 2GD, type SKX 12, SKX 13, SKX 14 and SKX 15                   | T 64.10.46.00-1 | -           | 26.06.2017. |
| Drawing of control units I M2, type SKX 12, SKX 13 and SKX 14                             | T 64.10.46.00-2 | -           | 26.06.2017. |
| Drawing of control units I M2, type SKX 15  | T 64.10.46.00-3 | -           | 26.06.2017. |
| Instructions for use explosion proof control units type SKX 12; SKX 13; SKX 14 and SKX 15 | TEPEX.RS.024    | 3           | 06.2017.    |