



EU – TYPE EXAMINATION CERTIFICATE

[1]

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

[3] EU-Type Examination Certificate Number: **FIDI 19 ATEX 0051X**

Issue: **1**

[4] Product: **Control unit**

Type: **SKX 12/..; SKX 13/..; SKX14/..; SKX 15/..; SKX 15H/..**

[5] Manufacturer: **TEPEX Ltd.**

[6] Product: **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] FIDITAS Ltd., Notified Body number 2829 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: **FIDI 19 CR 051**

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

EN IEC 60079-0:2018

EN 60079-1:2014

EN IEC 60079-7:2015 / A1:2018

EN 60079-11:2012

EN 60079-18:2015 / A1:2017

EN 60079-31:2014

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:



I M2 Ex db eb ia/ib mb I Mb

II 2G Ex db eb ia/ib mb IIC T6 Gb

II 2D Ex tb IIIC T80°C Db

Our ref.: 19.CRT.027

Date: 05.06.2020.



FIDITAS Ltd.
Certification department

Approved:

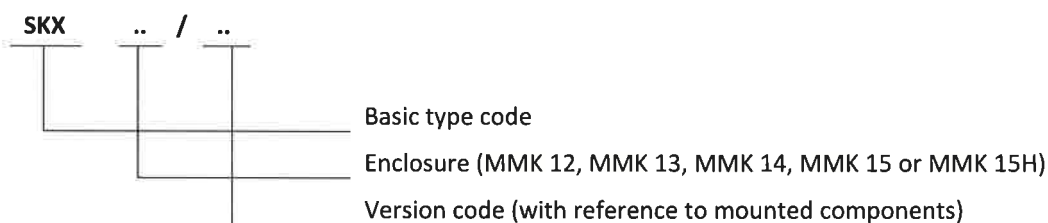
Marino Kelava, M.E.Eng.

[13]
SCHEDULE
[14] EU - TYPE EXAMINATION CERTIFICATE No.: FIDI 19 ATEX 0051X
[15] Description of product

Control units type SKX 12; SKX 13; SKX 14; SKX 15 and SKX 15H consist of empty enclosures type MMK 12, MMK 13, MMK 14, MMK 15, MMK 15H (FIDI 19 ATEX 0015U; II 2G Ex eb IIC Gb; II 2G Ex ia/ib IIC Gb; II 2D Ex tb IIIC Db; I M2 Ex eb I Mb; I M2 Ex ia/ib I Mb) and can be equipped with control switches, signal lamps, push buttons, potentiometer, actuators, terminals and measuring instruments with Ex component certificate as described in manufacturer's documentation. They are available in 5 enclosure designs in which elements can be mounted according to the manufacturer's documentation.

Separately certified cable glands in type of protection increased safety "eb" or protection by enclosure "tb" shall be used for cable entry.

Control units type SKX are identified by the following code:


Technical data:

Rated voltage U_i : 690 V AC
 Rated current I_{max} : up to 80 A (depends on version and ambient temperature)
 Ambient temperature: -20°C to +55 °C
 Mechanical protection: IP 66 (II 2G; II 2D) or
 IP 64 (I M2)

Rated values specified are maximum values, actual electrical values are determined by mounted electrical equipment/components. Depending on the system configuration, 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.



Table of maximum currents (SKX 15 / 67M):

Conductor cross section / terminal [mm ²]	Number of terminals	Temperature ambient, Ta [°C]	I _{max} [A]
2,5 / 2,5	2	40	18
	4		16
	24		13
	28		12
2,5 / 2,5	2	50	16
	4		14
	24		11
	28		10
2,5 / 2,5	2	55	15
	4		13
	24		10
	28		9
4 / 4	4	40	21
	8		18
	24		16
4 / 4	4	50	18
	8		16
	24		14
4 / 4	4	55	17
	8		15
	24		12
6 / 6	2	40	36
	4		32
	8		22
	16		20
6 / 6	2	50	30
	4		26
	8		19
	16		17
6 / 6	2	55	26
	4		23
	8		16
	16		14
10 / 10	2	40	50
	4		45
	8		37
	12		33
10 / 10	2	50	42
	4		37
	8		30
	12		26
10 / 10	2	55	38
	4		34
	8		27
	12		23



Conductor cross section / terminal [mm ²]	Number of terminals	Temperature ambient, T _a [°C]	I _{max} [A]
25/25	2	40	80
	4		70
	8		60
25/25	2	50	70
	4		60
	8		50
25/25	2	55	60
	4		50
	8		40

Explosion protection marking:

Control units with control switches, signal lamps, push buttons or potentiometers:



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

Control units with control switches, signal lamps, push buttons or potentiometers and measuring instruments:



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

Control units with only Ex eb terminals the marking:



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

Control units with only terminals for Ex i circuits:



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. FIDI 19 CR 051

[16.1] Routine testing

The manufacturer shall carry out routine test of dielectric strength on control units with internal wiring according to clause 7.1 of the standard EN IEC 60079-7.

[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 IEC 60079-0.



[18] Essential Health and Safety Requirements

Covered by the conformity with harmonized standards listed under 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	-	-	03.06.2020.
Drawing of control units II 2GD, type SKX 12, SKX 13, SKX 14 and SKX 15	T 64.10.46.00-1	-	03.06.2020.
Drawing of control units I M2, type SKX 12, SKX 13 and SKX 14	T 64.10.46.00-2	-	03.06.2020.
Drawing of control units I M2, type SKX 15	T 64.10.46.00-3	-	03.06.2020.
Instruction for use control units type SKX 12; SKX 13; SKX 14 and SKX 15	TEPEX.RS.024	04	03.06.2020.