



EC-Type Examination Certificate

(1)

(2)

Equipment or Protective Systems Intended for Use
in Potentially Explosive Atmospheres
(Directive 94/9/EC)

(3) EC-Type Examination Certificate Number:

FTZÚ 14 ATEX 0060X

(4) Equipment: **Asynchronous electromotor type 5KTC 280...; 5KTCD 280...; 5KTCR 280...**

(5) Manufacturer: **BARTEC VARNOST, d.o.o**

(6) Address: **Cesta 9. Avgusta 59; 1410 Zagorje ob Savi; Slovenia**

(7) This equipment or protective system and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physical Technical Testing Institute, notified body number 1026 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°:

14/0060 dated 27.03.2015

(9) Compliance with Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012; EN 60079-1:2007; EN 60079-7:2007; EN 60079-31:2014

(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 testing 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 de IIC T4 Gb	or	Ex d IIC T4 Gb
	I M2 Ex de I Mb	or	Ex d I Mb
	II 2D Ex tb IIIC T135°C Db		

This EC-Type Examination Certificate is valid till: **27.03.2020**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 27.03.2015

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



**Physical Technical Testing Institute
Ostrava – Radvanice**

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 14 ATEX 0060X**

(15) **Description of Equipment:**

Three-phase squirrel-cage asynchronous electro motors type 5KTC 280...; 5KTCR 280... and terminal box are protected by flameproof enclosure. Terminal box can be alternatively protected by increased safety. Electro motor type 5KTCD and terminal box are protected by enclosure „t“. Terminal box is equipped with threaded entry for installation of Ex-cable glands. Enclosure is made of cast iron, fan and fan-cover of motors are made of steal. Fan of motors type 5KTC 280... and 5KTCD 280 is alternatively made of cast aluminium. In the terminal box are installed bushings type TOS*.A.*V, certificate PTB 04 ATEX 1099U for power circuits and line bushings type 07-9101-****, certificate EPS 13 ATEX 1619U with terminal type 07-9702-0*2*/1, certificate PTB 99 ATEX 3117U or alternatively bushings type TOS4.16A.690V certificate PTB 04 ATEX 1099U or line bushings with terminals type 07-9304-....; certificate PTB 00 ATEX 1034 U for control circuits.

Thermal protection of electromotor is ensured by PTC temperature sensors circuits. Nominal cut-off temperature of the PTC is 145 °C.

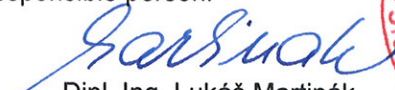
Entries into connection compartment enclosure of motor are designed for use of separately certified Ex-equipment cable glands.

Technical parameters:

Ambient temperature ranges:

Motor type 5KTC 280...:	-50°C ≤ Ta ≤ 60°C, Ex marking Ex d IIC T4 Gb
Motor type 5KTC 280...:	-25°C ≤ Ta ≤ 60°C, Ex marking Ex de IIC T4 Gb
Motor type 5KTCR 280...:	-20°C ≤ Ta ≤ 40°C, Ex marking Ex d I Mb and Ex de I Mb
Motor type 5KTCD 280...:	-30°C ≤ Ta ≤ 50°C, Ex marking Ex tb IIIC T135 °C Db

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Technical parameters: - continuation

TYPE: 5KTC 280 5KTCD 280	S-4	M-4
Rated power	75 kW	90 kW
Rated supply voltage	D/Y 400V / 690V $\pm 10\%$	
Rated current	D/Y 138A / 79,5A	D/Y 166A / 95,8A
Rated frequency	50 Hz / 60Hz	
Duty type	S1 to S9	
Frequency range in inverter	5 Hz to 87 Hz	

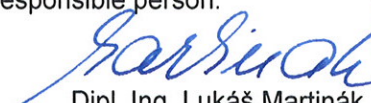
TYPE: 5KTCR 280	S-4	M-4
Rated power	75 kW	90 kW
Rated supply voltage	Y 1100 V $\pm 5\%$	
Rated current	Y 50A	Y 56,7A
Rated frequency	50 Hz / 60Hz	
Duty type	S1 to S9	
Frequency range in inverter	5 Hz to 87 Hz	

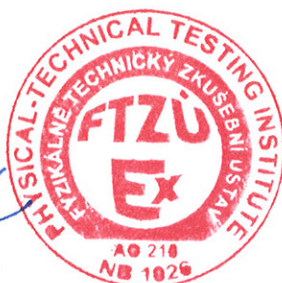
(16) Report No.: 14/0060

(17) Special conditions for safe use:

Verified values of the maximum gaps and minimum constructional length of flameproof joints of this enclosure are different from relevant minimum and maximum values mentioned in standard. To obtain information about joints dimension it is necessary to contact the manufacturer.

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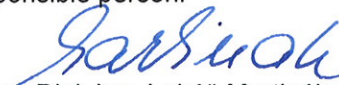
(18) Essential Health and Safety Requirements:

They are included in standards, which are mentioned in clause (9) of this certificate. The product was approved in accordance with above mentioned standards.

(19) List of Documentation:

<i>Document No.:</i>	<i>Date:</i>
023019	07.10.2013
019945 Rev. E	04.03.2015
023006 (4 sheets)	26.01.2011
023009 (7 sheets)	19.05.2014
023015 (4 sheets)	27.01.2011
023018	05.09.2013
024198 (4 sheets)	30.09.2013
024197 (7 sheets)	30.09.2013
024202 (4 sheets)	30.09.2013
024203	30.09.2013
024541 (3 sheets)	16.05.2014
024540 (6 sheets)	16.05.2014
022563	12.04.2010
018338	20.01.1999
024453	21.02.2014
023011	24.01.2011
023008	26.03.2009
024189	27.09.2013
024188	30.09.2013
016130	25.01.2011
016134	20.10.1992

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