



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx FTZU 15.0006X Issue No: 0 Certificate history:
Status: Draft Page 1 of 3 Issue No. 0* (2015-03-30)
Date of Issue: 2015-03-30
Applicant: BARTEC VARNOST d.o.o.
Cesta 9. Augusta 59
1410 Zagorje ob Savi
Slovenia
Electrical Apparatus: Asynchronous electromotor 5KTC 280...; 5KTCD 280...; 5KTCR 280...
Optional accessory:
Type of Protection: Flameproof enclosure "d", Increased safety "e", dust protection by enclosure "t"
Marking:
Ex de I Mb or Ex d I Mb
Ex de IIC T4 Gb or Ex d IIC T4 Gb Ex tb IIIC T135 ° C Db

Approved for issue on behalf of the IECEx
Certification Body:

Dipl. Ing. Lukáš Matinák

Position:

Head of the Certification Body

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Fyzikálně technický zkušební ústav
(Physical -Technical Testing Institute)
Pikartská 7
71607 Ostrava - Radvanice
Czech Republic





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Manufacturer: **BARTEC VARNOST d.o.o**
Cesta 9. Augusta 59
1410 Zagorje ob Savi
Slovenia

Additional Manufacturing
location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2008 Edition:1	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2006-07 Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

Quality Assessment Report:

SI/SIQ/QAR11.0003/02



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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 steel. 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 IECEx SIQ 13.0001U for power circuits and line bushings type 07-9101-****, certificate IECEx EPS 13.0045U with terminal type 07-9702-0*2*/1, certificate IECEx 07.0007U or alternatively bushings type TOS4.16A.690V certificate IECEx SIQ 13.0001U or line bushings with terminals type 07-9304-....; certificate IECEx PTB 06.0035U 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...: $-50^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$, Ex marking Ex d IIC T4 Gb

Motor type 5KTC 280...: $-25^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$, Ex marking Ex de IIC T4 Gb

Motor type 5KTCR 280...: $-20^{\circ}\text{C} \leq T_a \leq 40^{\circ}\text{C}$, Ex marking Ex d I Mb and Ex de I Mb

Motor type 5KTCD 280...: $-30^{\circ}\text{C} \leq T_a \leq 50^{\circ}\text{C}$, Ex marking Ex tb IIIC T135 °C Db

	S-4	M-4
TYPE: 5KTC 280 5KTCD 280		
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	

	S-4	M-4
TYPE: 5KTCR 280		
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	

CONDITIONS OF CERTIFICATION: YES as shown below:

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.

ExTR :

ExTR Reference Number *: CZ/FTZU/ExTR15.0006/00
(automatic numbering)

Status*: Draft

ExTR Free Reference Number*: CZ/FTZU/ExTR15.0006/00

Date of Issue: 2015-03-30
(yyyy-mm-dd)

List of Standards Covered*: IEC 60079-0 (Ed.6.0); IEC 60079-1 (Ed.6); IEC 60079-31 (Ed.2); IEC 60079-7 (Ed.4)

Issuing ExTL*: FTZU - Fyzikalne technicky zkusebni ustav

Endorsing ExCB*: FTZU - Fyzikalne technicky zkusebni ustav

Manufacturer*: BARTEC VARNOST d.o.o
Cesta 9. Augusta 59
1410 Zagorje ob Savi

Country of Manufacture*: Slovenia

Ex Protection*: Flameproof enclosure "d", Increased safety "e", dust protection by enclosure "t"

Ratings: Max Un = 1100V, Max Pn = 90 kW

Product*: Asynchronous electromotor

Model Reference*: 5KTC 280...; 5KTCD 280...; 5KTCR 280...

Related IECEx Certificates: -

Comment: 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 IECEx SIQ 13.0001U for power circuits and line bushings type 07-9101-****, certificate IECEx EPS 13.0045U with terminal type 07-9702-0*2*/1, certificate IECEx 07.0007U or alternatively bushings type TOS4.16A.690V certificate IECEx SIQ 13.0001U or line bushings with terminals type 07-9304-....; certificate IECEx PTB 06.0035U 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.

Attachment: