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Certificate No: LR21270188TA Issue Date: 12/07/2021 Expiry Date: 05/11/2023

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer BARTEC Varnost d.o.o.

Address Cesta 9. Avgusta 59, Zagorje ob Savi, 1410, Slovenia

Type Electric Motors

Description Three-phase squirrel cage induction motors, explosion-proof design, having

flameproof enclosure and flameproof or increased safety terminal box.

TYPE: See Appendix

Trade Name 3KTC, 4KTC, 4KTC, 5KTC, 4KTS, 4KTSN

Application Marine, Offshore and Industrial use in potentially explosive atmospheres.

Specified Standard IEC 60034-1:2017

IEC 60079-0:2018, IEC 60079-1:2014/COR1: 2018, IEC 60079-7:2015

EN 60079-31:2013 (for 4KTC71-225)

Ratings See Appendix

Other Conditions Motors rated 100 kW and above intended for Lloyd's Register application have

to satisfy the additional requirements as specified in the LR Rules and

Regulation for the Classification of Ships, Part 6, Chapter 2.

Permitted ambient temperature range for 4KTS and 4KTSN series: -20°C to

+45°C

Maurizio Crucil

TTSO Senior Specialist to Lloyd's Register

EMEA

A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: 03/00111(E3)

The Design Appraisal Document LR21270188DA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Appendix

TYPE:

3KTC 180-225 4KTC 250-315 4KTC 71-225 5KTC 250-280 4KTS 90 - 180 4KTSN 90 - 180

RATINGS:

Frame size: $71 \div 315$

Rated Voltage [V a.c.]: $220 \div 690$

Rated Power [kW]: $0.048 \div 250$

Rated Frequency [Hz]: 50 /60 or Frequency Converter Fed

Insulation Class: F

Ex Coding**: Ex de IIC T* Gb

or

Ex d IIC T* Gb

or

Ex db eb IIB T4 Gb Ex db eb IIB T3 Gb

* = temperature class number or maximum °C surface temperature

**= Not applicable for 4KTSN motors

RANGE:

Type and Frame size	Power [kW] (50Hz, S1)	Voltage [V]	Frequency [Hz] (power freq. and variable)	Speed [rpm]
4KTC 71	up to 0.55	up to 690 V	50 / 60	750 ÷ 3600
			5 ÷ 100	75 ÷ 6000
4KTC 80	up to 1.1	up to 690 V	50 / 60	750 ÷ 3600
			5 ÷ 100	75 ÷ 6000
4KTC 90	up to 2.2	up to 690 V	50 / 60	750 ÷ 3600
			5 ÷ 100	75 ÷ 6000
4KTC 100	up to 3	up to 690 V	50 / 60	750 ÷ 3600
			5 ÷ 100	75 ÷ 6000
4KTC 112	up to 4	up to 690 V	50 / 60	750 ÷ 3600
			5 ÷ 100	75 ÷ 6000
4KTC 132	up to 7.5	up to 690 V	50 / 60	750 ÷ 3600
			5 ÷ 100	75 ÷ 6000

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4KTC 160	up to 18.5	up to 690 V	50 / 60	750 ÷ 3600
			5 ÷ 100	75 ÷ 6000
4KTC 180	up to 22	up to 720 V	50 / 60	750 ÷ 3600
			5 ÷ 100	75 ÷ 6000
4KTC 200	up to 37	up to 720 V	50 / 60	750 ÷ 3600
41/TC 225	45	+- 7201/	5 ÷ 100	75 ÷ 6000
4KTC 225	up to 45	up to 720 V	50 / 60 5 ÷ 100	750 ÷ 3600
4KTC 250	up to 55	up to 720 V	50 / 60	75 ÷ 6000 750 ÷ 3600
4KTC 250	up to 55	up to 720 v	5÷87	150 ÷ 5220
4KTC 280	up to 90	up to 720 V	50/60	750 ÷ 3600
• 200	ap 10 00	ap to 0 .	5 ÷ 100	150 ÷ 5220
4KTC 315	up to 250	up to 720 V	50 / 60	750 ÷ 3600
	•	·	5 ÷ 87	150 ÷ 5220
3KTC 180	up to 22	up to 690 V	50 / 60	750 ÷ 3600
			5 ÷ 87	150 ÷ 5220
3KTC 200	up to 37	up to 690 V	50 / 60	750 ÷ 3600
			5 ÷ 87	150 ÷ 5220
3KTC 225	up to 45	up to 690 V	50 / 60	750 ÷ 3600
FI/TC 2F0			5÷87	150 ÷ 5220
5KTC 250	up to 55	up to 690 V	50 / 60 5 ÷ 87	500 ÷ 3600
5KTC280	up to 90	up to 1100 V	50 / 60	150 ÷ 5220
JK1C200	up to 30	up to 1100 v	5÷87	
4KTS 90 S	up to 0.64	up to 690 V	50/60	1500 ÷ 1800
4KTS 90 L	up to 0.86	up to 690 V	50 / 60	1500 ÷ 1800
4KTS 100 LB	up to 1.82	up to 690 V	50 / 60	1500 ÷ 1800
4KTS 132 S	up to 2.66	up to 690 V	50 / 60	1500 ÷ 1800
4KTS 160 M	up to 4.28	up to 690 V	50 / 60	1500 ÷ 1800
4KTS 180 M	up to 7.5	up to 690 V	50 / 60	1500 ÷ 1800
4KTS 180 L	up to 11	up to 690 V	50 / 60	1500 ÷ 1800
4KTSN 90 S	up to 0.64	up to 690 V	50 / 60	1500 ÷ 1800
4KTSN 90 L	up to 0.86	up to 690 V	50 / 60	1500 ÷ 1800
4KTSN 100 LB	up to 1.82	up to 690 V	50 / 60	1500 ÷ 1800
	•	•	•	
4KTSN 132 S	up to 2.66	up to 690 V	50 / 60	1500 ÷ 1800
4KTSN 160 M	up to 4.28	up to 690 V	50 / 60	1500 ÷ 1800
4KTSN 180 M	up to 7.5	up to 690 V	50 / 60	1500 ÷ 1800
4KTSN 180 L	up to 11	up to 690 V	50 / 60	1500 ÷ 1800

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