Certificate No: LR24130191TA
Issue Date: 29/10/2024
Expiry Date: 28/07/2029

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	**Clemens Lammers GmbH & Co. KG**
Address	Offenbergweg 17, Rheine, 48432, Germany
Type	Electric Motors
Description	Asynchronous Low-Voltage Motors with Aluminium or Cast-Iron Enclosure 1TZ5 series 1TZ9 series 1PC1 series 1TE1 series 1PC3 series
Trade Name	1TZ5, 1TZ9, 1PC1, 1TE1, 1PC3
Application	Marine and Offshore use
Specified Standard	IEC/ EN 60034-1: 2010 with allrelevant parts IEC 60092-301: 1980, including Amd 1: 1994 and Amd 2: 1995
Ratings	Rated Output: 0,03 kW up to 580 kW Synchronous Speed: 750 rpm to 3600 rpm RatedVoltage: 200 V up to 690 V

Downloaded Copy

Thorsten Wolff

Electrical & Control - Senior Specialist to
Lloyd's Register EMEA
A member of the Lloyd's Register group

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

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Certificate No: LR24130191TA
Issue Date: 29/10/2024
Expiry Date: 28/07/2029

Type Approval Certificate

Rated Frequency:	50 Hz, 60Hz, converter operation <= 690 V
Number of Poles:	2, 4, 6, 8 and pole-changing types
Insulation Class:	155 (F), 180 (H)
AmbientTemperature:	-20 °C - +50 °C
Type of Enclosure:	IP55, IP56, IP65 or IP66
Frame Size:	71M up to 355L

Motor types 1TE102.1A… to 1TE102.1D… and 1TE103.1A… to 1TE103.1D… are certified safetype as:II 3D Ex tc IIIB T120°C Dc IP55 orII 3D Ex tc IIIB T140°C Dc IP55accordingto PTB 15 ATEX 3005.
Motortypes 1TE101.1A… to 1TE101.1D… are certified safe type as: II 2D Ex tb IIIC T120°C Db IP65 or II 2D Ex tb IIIC T140°C Db IP65according to PTB 15 ATEX 3007.

Other Conditions

The ratings and conditions for the application of the certified safe type motors in hazardous zones and areas are to be obtained from the applicable PTB certificates.

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re- approved prior to it being supplied to vessels to which the amended standards apply.

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: LR2002495TA

The Design Appraisal Document TSO-24-023703/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Downloaded Copy

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

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.