Certificate No: LR25282029TA
Issue Date: 21/04/2025
Expiry Date: 20/04/2030

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	**LS ELECTRIC Co., Ltd. Cheonan Factory**
Address	56, Samseong 4-gil, Mokcheon-eup, Dongnam-gu, Cheonan-si, Cungcheongnam-do, 31226, South Korea
Type	Inverters
Description	Fan and Pump AC drive
Trade Name	LSLV-H100 series
Application	Marine and offshore use in environmental category ENV2 in “general power distribution zones” as defined in LR Type Approval System Test Specification No.1-2024
Specified Standard	Manufacture’s standards EN 61800-3:2004/A1:2012, EN 61800-5-1:2007
Ratings	LSLV _ _ _ _ H100 - _ C _ _ _ 1 2 3 4 5 6 7 8 Motor capacity, kW (character 1 to 4) 0008-0.75, 0015-1.5, 0022-2.2, 0037-3.7, 0055-5.5, 0075-7.5, 0110-11, 0150-15, 0185-18.5, 0220-22, 0300-30, 0370-37, 0450-45, 0550-55, 0750-75, 0900-90, 1100-110, 1320-132, 1600-160, 1850-185, 2200-220, 2500-250, 3150-315, 3550-355, 4000-400, 5000-500

Downloaded Copy

Gyung-Hwan Lee

Electrical & Control - Lead Specialist to
Lloyd's Register Asia
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.

Type Approval Certificate

Input voltage, V (character 5)
2: 3-phase 200-240, 4: 3-phase 380-440 (0.75~90kW) or 380-500 (110~500kW)

UL type (character 6)
O: UL open, E: UL Type 1

EMC filter (character 7)
F: built-in EMC, N: non-EMC

Reactor (character 8)
D: built in DC reactor, N: Non DC reactor

Software version: xxxxxx

Models:
LSLV0008H100-2CONN, LSLV0015H100-2CONN, LSLV0022H100-2CONN, LSLV0037H100-2CONN, LSLV0055H100-2CONN, LSLV0075H100-2CONN, LSLV0110H100-2CONN, LSLV0150H100-2CONN, LSLV0185H100-2CONN, LSLV0008H100-4COFN, LSLV0015H100-4COFN, LSLV0022H100-4COFN, LSLV0037H100-4COFN, LSLV0055H100-4COFN, LSLV0075H100-4COFN, LSLV0110H100-4COFN, LSLV0150H100-4COFN, LSLV0185H100-4COFN, LSLV0220H100-4COFN, LSLV0300H100-4COFN, LSLV0370H100-4COND, LSLV0450H100-4COND, LSLV0550H100-4COND, LSLV0370H100-4COFD, LSLV0450H100-4COFD, LSLV0550H100-4COFD, LSLV0750H100-4COFD, LSLV0900H100-4COFD, LSLV1100H100-4COFD, LSLV1320H100-4COFD, LSLV1600H100-4COFD, LSLV1850H100-4COFD, LSLV2200H100-4COFD, LSLV2500H100-4COFD, LSLV3150H100-4COFD, LSLV3550H100-4COFD, LSLV4000H100-4COFD, LSLV5000H100-4COFD
Damper types- ATCM-2010 (0.75 to 30kW), ATCM-2020 (37 to 185kW), ATCM-2030 (220 to 500kW)

Additional Tests Dry heat test at 55˚C (16 hours)

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.

Type Approval Certificate

Other Conditions

The complete installation, reserved cabinet solely for inverter propose with isolation damper, and function is subject to separate plan appraisal according applicable Rules and Regulations, when installed on LR classed vessels. Screened cables between motor and inverter to be installed on LR Classed vessels, Inverter used for marine system rated 5kW upwards to be satisfied LR Rules and Regulations, the type selection and installation requirements according LS Electric guide line have to be fulfilled.
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.(In case of applications other than marine) The application of the type approval certificate will be limited to the relevant scope of the specified standard and acceptance thereof by the local authorities.

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 Asia of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR2003457TA

The Design Appraisal Document LR25282029TA 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.