Certificate No: LR26184459TA
Issue Date: 11/11/2024
Expiry Date: 10/11/2029

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	**KTE Co Ltd**
Address	95-12, Noksansaneop-daero, Gangseo-gu, Busan, 46752, South Korea
Place of Production	Dongkwang Engineering Co 191-8, Noksansaneopjung-ro, Gangseo-gu, Busan, South Korea
Type	Control Units
Description	Motor controller for marine electric motor starter
Trade Name	SMC-400 series
Application	Marine and offshore applications for use in environmental category ENV3 as defined in LR Type Approval System Test Specification No.1-2024 where the Test Specification is satisfactory for the intended operation.
Specified Standard	Manufacture's specification (TIR0703-00-D05, Rev.V1.4E)
Ratings	SMC-401 Constant start (Manual) SMC-402 Constant start (Manual – Auto) SMC-403 Constant start (Local – Remote) SMC-405 Reversible start (Forward – Reverse) SMC-406 2Speed start (High – Low) Variation : *W-With winding heater control *E-With element heater control

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Electrical & Control Technical Manager -
Northeast Asia to Lloyd's Register Asia
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*R-UVR with sequential timer

Additional Tests Low temperature test (at -20°C, 2 hours)

Other Conditions Type Approval does not eliminate the need (as required by LR Rules) the requirements for further review or for the product to be further inspected and/ or surveyed to be installed in ships classed or intended to be classed with LR If the specified standards are amended during the validity of this certificate, the product is to be reapproved 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 Asia of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR2004363TA-01

The Design Appraisal Document LR26184459TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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