Certificate No: LR21183865TA
Issue Date: 15/05/2021
Expiry Date: 14/05/2026

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	**KMC**
Address	#21, Gayangro 58-beon-gil, Seongsan-gu, Changwon, Gyeongsangnam-do, 51486, Republic of Korea
Type	Control Units
Description	Automatic Battery charger
Trade Name	BCSMP-320S
Application	Marine and offshore applications for use in environmental category ENV 4 in the "General Power Distribution Zones" as defined in LR Type Approval System Specification No.1-2019.
Specified Standard	Manufacture's Specification, EURO Mutual Recognition Technical Requirements, Tier 3 – Battery Chargers(Version 0.3 / 01 January 2019).
Ratings	Input voltage (1 phase AC100V to 240V), frequency (50/60Hz), recommended battery capacity(200Ah), boost charge voltage (DC 27.5V), float charge voltage (DC 26.5V), output voltage range (DC 24V), maximum output current (10A).
Additional Tests	Degrees of protection (IP44), Dry heat test (at 55˚C,16 hours), Temperature rise test (IEC60947-1), Shock test (IEC60947-1).

Downloaded Copy

Gyung-Hwan Lee

Digital & Control Team Leader 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.

Certificate No: LR21183865TA
Issue Date: 15/05/2021
Expiry Date: 14/05/2026

Type Approval Certificate

Other Conditions

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.

The Design Appraisal Document LR21183865TA 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.