Certificate No: LR26127857TA
Issue Date: 27/04/2026
Expiry Date: 26/04/2031

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	**HD Hyundai Electric Co., Ltd.**
Address	477, Bundangsuseo-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, 13553, South Korea
Place of Production	BK Electronics Co., Ltd. 88 Iljik-ro, Manan-gu, Anyang, Gyeonggi-do, 13901, South Korea
Place of Production	HD Hyundai Electric Co., Ltd. 20 Guksasandan 1 ro Oksan myeon, Heungdeok gu, Cheongju si, 28111, South Korea
Type	Relays
Description	Digital Protection Relay
Trade Name	HGMAP
Application	Marine, offshore applications for use in environmental category ENV 2 in the "General power distribution zones" as defined in LR Type Approval System Test Specification No. 1-2024 where the Test Specification is satisfactory for the intended operation.
Specified Standard	Manufacturer's Specifications

Downloaded Copy

Gun-Nam Park

Electrical & Control - Senior 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.

Certificate No: LR26127857TA
Issue Date: 27/04/2026
Expiry Date: 26/04/2031

Type Approval Certificate

Ratings

AC Current : 1A/5A
AC Voltage : 110V/190V

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: LR21157332TA-01

The Design Appraisal Document LR26127857TA 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.