Certificate no.:
TAA00003UK

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Navigation Light Controllers

with type designation(s)
HL-8×2M-24D

issued to
Zhejiang Hule Electric Equipment Manufacture Co., Ltd.
Jiaxing, **China**

is found to comply with
DNV rules for classification – Ships
IMO Res.MSC.253(83) Performance standards for navigation lights, navigation light controllers and associated equipment
IMO Res. A.694(17) General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2026-03-05**
This Certificate is valid until **2031-03-04**.
DNV local unit: **Shanghai**

for **DNV**

Approval Engineer: **Tommi Juhani Rifaat**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

HL-8×2M-24D Navigation light controller consists of the following components:

Description	Item	Location
Navigation light control panel	HL-8 X 2M-24D	Protected
Navigation light actuation box	HL-8 X 2M-24D-1	Protected

Application/Limitation

- Installation to be in accordance with manufacturers documentation.
- Suitability of the interface for incandescent lights and LED lights has to be checked in accordance with navigation light manufacturer's specification and in regard to light failure indication.

Type Approval documentation

DNV No	Drw No	Rev	Title
9		1.2	Manual: Function description and user manual
8			Doc: Zhejiang, Comments list 2026-02-11 DNV final
7	CST-G325060500E		Report: CQC, IEC 61162, IEC 60945 & DNV-CG-0339 Test Report
6		1.1	Report: Zhejiang, DNV Type Approval Test Report
5			Manual: Zhejiang, Navigation light control panel Instruction Manual
4	AME3.943.001	A.01	Drawing: Zhejiang, Navigation light control panel Design document

Tests carried out

Applicable tests according to

- Environmental testing: Class Guideline DNV-CG-0339, (2021)
- Environmental testing: IEC 60945 (2002) inc.Corr.1 (2008)
- Performance testing: IMO Resolution MSC.253(83)
- Presentation testing: IEC 62288 (2021) incl.Amendment 1 (2024)
- Interface testing: IEC 61162-1 (2024)
- Bridge Alert Management testing: IEC 62923-1(2018) and IEC 62923-2 (2018)

Marking of product

The Manufacturer and Type Designation to be applied to the equipment in a clearly visible location. In addition, the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and supply voltage.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.
The main elements of the assessment are:

• Ensure that type approved documentation is available
• Inspection of factory samples, selected at random from the production line (where practicable)
• Review of production and inspection routines, including test records from product sample tests and control routines
• Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
• Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
• Ensuring traceability between manufacturer's product type marking and the type approval certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

Manufactured by:

Zhejiang Hule Electric Equipment Manufacture Co.,Ltd:
196, Sihuajing Road Qixing Twon, South Lake Dist. Jiaxing 314002 China