DNV·GL

Certificate No:
TAA000028V

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Navigation Light Controllers

with type designation(s)
Navigation Light Control System NLS 3000

Issued to
DECKMA Decksmaschinen und Automation Vertriebsges. mbH
Rosengarten-Klecken, Germany

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

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

Temperature	**A**
Humidity	**B**
Vibration	**A**
EMC	**B**
Enclosure	**Required protection according to DNV GL Rules shall be provided upon installation on board**

Issued at **Hamburg** on **2019-03-01**

This Certificate is valid until **2024-02-29**.
DNV GL local station: **Hamburg**

Approval Engineer: **Didier Girardin**

for **DNV GL**
Digitally Signed By:
Papanuskas, Joannis

Joannis Papanuskas
Head of Section

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.

Product description

8 - 48 lanterns, bulb type or LED type
Power supply 12VDC, 24VDC; 115VAC, 230VAC, 50/60Hz

consisting of:
NLS 3000 MM01-E Main module
NLS 3000 LM08-E lantern module 8-line
NLS 3000 LM02-E lantern module 2-line
NLS 3000 BK01-E conventional operator panel (mimic)
NLS 3000 BG01-E graphically operator panel (touch screen)
NLS 3000 VM01-E VDR module
NLS 3000 SM01-E interface module
NLS 3000 DT01-E data module
RS 232 terminal adapter

Application/Limitation

Operation instruction of the manufacturer to be observed
Requirements as per MSC.253(83) recognized

Type Approval documentation

"Technical documentation" dated 2008-11-12
EMV Services report 08/8159-1dated 2008-11-03
Paconsult report 08/2137 dated 2008-08-29
Elektronik Services report 081005 dated 2008-10-05

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016

Marking of product

The products to be marked with:
- manufacturer name
- model name
- serial number
- power supply ratings

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.

END OF CERTIFICATE