



Marine & Offshore

Certificate number: 28119/C0 BV

File number: ACE9/853/1 Product code: 2842l

This certificate is not valid when presented without the full attached schedule

www.veristar.com

composed of 7 sections

# TYPE APPROVAL CERTIFICATE

This certificate is issued to

# Böning Automationstechnologie GmbH & Co. KG

Ganderkesee - GERMANY

for the type of product

# **NAVIGATION LIGHT SWITCHBOARDS AND CONTROL PANELS**

Navigation Light Controller AHD-DPS02

### Requirements:

Bureau Veritas Rules and Regulations for the Classification of Steel Ships. IMO Res. MSC.253(83)

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 14 Apr 2030

For Bureau Veritas Marine & Offshore, At BV HAMBURG, on 14 Apr 2025,

Dirk Hoepfner

This certificate was created electronically and is valid without signature



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

Certificate number: 28119/C0 BV

# THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION:

The AHD-DPS02 is a modular navigation light controller with operation hour counter for each lantern.

### 1.1 - Components:

Type	Description	SW-Vers.
AHD-DPS02 BS	Bridge control module; 4 x panel communication	4.0
AHD-DPS02 G14	Main module; 14 relay outputs; ext.connections: 1x serial, 1x CAN	3.49
AHD-DPS02 A07	Extension module; 7 relay outputs	16.0
A250	Selector switch for main / emergency power supply	-

#### 1.2 - Main characteristics:

Power supply:	24V DC; 115V AC; 230V AC
Degree of protection:	IP 22 (Bridge control module); IP 20 other modules and selector switch

### 2. DOCUMENTS AND DRAWINGS:

- Software versions, dated 13 Jan 2012
- AHD-DPS02 A07 080101DD-A Rev.12, dated 16 Jan 2008
- AHD-DPS02\_G14D1\_080102DD-A Rev. 12, dated 17 Jan 2008
- General Software Quality plan Version 5 n° FO-00022-DE\_KE-10f\_FB, dated 17 May 2022
- Operating Manual AHD-DPS02\_DOK\_EN\_V22, dated 19 Nov 2023
- AHD-DPS02\_AM eng, dated 06 Mar 2025
- AHD-DPS02 GM eng, dated 06 March 2025.
- AHD-DPS02\_BS eng, dated 06 Mar 2025

### 3. TEST REPORTS:

Bundesamt für Seeschifffahrt und Hydrographie (BSH): - 537, dated 07 Nov 2007

Carl Zeiss Jena GmbH: - SPU-QK/EMV 017/2012, dated 27 Apr 2012

**EMV Services GmbH & Co. KG: -** 07/7100-9-3, dated Nov. 09, 07

Paconsult GmbH: - 07-1692 Rev. 1, dated 21 January 2008; 08-1930, dated 27 Feb 2008

SLG Pruef- und Zertifizierungs GmbH:

- Test Report 1221-20-EE-PB001, dated 21 Dec 2020

## **4. APPLICATION/LIMITATION:**

- 4.1 Bureau Veritas Rules for the Classification of Steel Ships and Regulation MSC.253(83).
- 4.2 Bureau Veritas Environmental Category, EC Code: 31
- 4.3 The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone.
- 4.4 Documents relating to each application are to be submitted to the Society's examination prior fitting on board.
- 4.5 Lifetime monitoring of LED lamps are to be adjusted according to expected lifetime specified by lamp manufacturer.
- 4.6 The minimum safe distance at which the equipment may be mounted from a standard or a steering magnetic compass is not to be less than 1,7 m.
- 4.7 Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev 9.
- 4.8 Only Hardware and Firmware / Software successfully tested together in compliance with the rules as referred to in cover page, according to the declaration of the manufacturer are covered by this certificate.
- 4.9 In accordance with IACS UR E22 and as applicable to programmable devices for computer based systems of Category II or III, for each ship application:
- Ship specific documentation is to be submitted including software documentation and categorization of the computer based system.
- Inspection and testing before installation onboard is to be performed under the surveillance of the Society.

## 5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The above mentioned products are to be supplied by **Böning Automationstechnologie GmbH & Co. KG** in compliance with the type described in this certificate.
- 5.2 This type of product is within the category IBV of Bureau Veritas Rule Note NR320.
- 5.3 Bureau Veritas product certificate is required.
- 5.4 For information, **Böning Automationstechnologie GmbH & Co. KG** has declared to Bureau Veritas the following production site:

Böning Automationstechnologie GmbH & Co. KG Am Steenöver, 4 27777 Ganderkesee GERMANY

Page 3 / 3

Certificate number: 28119/C0 BV

## **6. MARKING OF PRODUCT:**

- Maker's name or trade mark.
- Equipment type or model identification.
- Date of manufacture and/or serial number.
- Bureau Veritas' Marks.

# **7. OTHERS:**

7.1 - It is Böning Automationstechnologie GmbH & Co. KG's responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval. 7.2 - This certificate supersedes the Type Approval Certificate No. 28119/B0 BV issued by the Society.

\*\*\* END OF CERTIFICATE \*\*\*