



Marine & Offshore
Division

Certificate number: 26799/B0 BV

File number: ACE 9/2/5

Product code: 2842I

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

Glamox Production GmbH & Co. KG

Teterow - GERMANY

for the type of product

NAVIGATION LIGHT SWITCHBOARDS AND CONTROL PANELS

aqua signal Control System (ASC)

Navigation light switch and monitoring

342550x000 and 343550x000

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships.
Resolution MSC.253(83).

This certificate is issued to attest that BUREAU VERITAS 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: 04 Apr 2022

For BUREAU VERITAS,

At BV HAMBURG, on 04 Apr 2017,

Dirk Hoepfner



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. 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 Division 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 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.

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BV Mod. Ad.E 530 October 2014

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The ASC series are navigation light switchboards and panels for the control and monitoring of LED or bulb type navigation lights.

Installation of control panels in a cut-out of a bridge console.

1.1 - Main characteristics:

- Degree of Protection: IP 22
- Power supply voltage for devices and lights: 24VDC, 115VAC, 230VAC.

1.2 - Components:

ID	No.	Description
3425502000	ASC Navigation light controller 8+8 circuits; protected by fuses	
	8342550200	Control panel type 1
	8342552000	Cabinet Type 1, incl. 1 mains switch module and 1 relay module
3425504000	ASC Navigation light controller 16+16 circuits; protected by fuses	
	8342550400	Control panel type 2
	8342551400	Cabinet Type 2, incl. 1 mains switch module and 2 relay module
3425506000	ASC Navigation light controller 16+16+16 circuits; protected by fuses	
	8342550600	Control panel type 3
	8342551500	Cabinet Type 3, incl. 1 mains switch module and 4 relay module
3435502000	ASC Navigation light controller 8+8 circuits; protected by circuit breaker	
	8342550200	Control panel type 1
	8343503200	Cabinet Type 1, incl. 1 mains switch module and 1 relay module
3435504000	ASC Navigation light controller 16+16 circuits; protected by circuit breaker	
	8342550400	Control panel type 2
	8343503300	Cabinet Type 2, incl. 1 mains switch module and 2 relay module
3435506000	ASC Navigation light controller 16+16+16 circuits; protected by circuit breaker	
	8342550600	Control panel type 3
	8343503400	Cabinet Type 3, incl. 1 mains switch module and 4 relay module

2. DOCUMENTS AND DRAWINGS:

Manuals: 9420106400_eng Rev. 1 dated 06.06.2011

Drawings: 3425502000, 3425504000, 3425506000, 3435502000, 345504000, 345506000, 7342554400, 7342554800, 7342554900, 8342551400, 8342551500, 8342552000,

3. TEST REPORTS:

aqua signal AG:

- TR-10708 Rev.0.1 dated 13.01.2010

EMV Services GmbH & Co. KG:

- 09/9007-8 dated Sep. 25, 09

4. APPLICATION / LIMITATION:

4.1 - BUREAU VERITAS Rules and Regulations for the Classification of Steel Ships.

4.2 - BUREAU VERITAS Environmental Category, **EC Code: 31**

4.3 - As per MSC253(83)

4.4 - Approval valid for ships having to comply with SOLAS 74 Convention, as amended, and for units having to comply with IMO Resolution A649 (The "MODU Code").

4.5 - Connection of groundings inside of switching cabinet and the use of feed through capacitors for every lamp line are to be in accordance to tested equipment.

4.6 - Interface modules for the external monitoring mode are not covered by the present certificate.



5. PRODUCTION SURVEY REQUIREMENTS:

5.1 -The above products are to be supplied by Glamox Production GmbH & Co. KG in compliance with the type and the requirements described in this certificate.

5.2 -This type of product is within the category IBV of Bureau Veritas Rule Note NR320.

5.3 -BV product certificate is required.

6. MARKING OF PRODUCT:

- Maker's name or trade mark.
- Date of manufacture and/or serial number.
- Equipment type or model identification under which it was type-tested.
-  or  conformity marking, as relevant

7. OTHERS:

7.1 -It is **Glamox Production GmbH & Co. KG** 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. 26799/A0 BV issued on 19.03.2012 by the Society.

*** END OF CERTIFICATE ***