



Marine & Offshore

Certificate number: 20391/C0 BV

File number: AP 3385

Product code: 4201H

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

MARINELEC TECHNOLOGIES

Quimper - FRANCE

for the type of product

ENGINE TELEGRAPHS

ORION V2 Telegraph

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships.
IEC 60945 (2002) and Cori.1 (2008)

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: 13 Sep 2023

For Bureau Veritas Marine & Offshore,

At BV SAINT-NAZAIRE, on 13 Sep 2018,

Francois Lopinot



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.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Orion V2 telegraph

Power supply : 24Vdc, -25% +30%
Power consumption : 0.3A max
Index of protection : IP 44

2. DOCUMENTS AND DRAWINGS:

- 2.1 - Document Ref.: ORION V2 MANU FR C from MARINELEC TECHNOLOGIES dated 22/01/2008.
- 2.2 - Approval documentation Ref.: ORION_V2_DOC_BV Rev.V0 from MARINELEC TECHNOLOGIES.
- 2.3 - Conception documentation Ref.: ORIONV2_DOC_CONCEPTION_FR from MARINELEC TECHNOLOGIES.

3. TEST REPORTS:

- 3.1 - KENTA Electronic Test Report No. 203 902 EMC dated April 2008.
- 3.2 - IEC 60945 (2002).

4. APPLICATION / LIMITATION:

- 4.1 - According to BUREAU VERITAS Rules for the Classification of Steel Ships.
- 4.2 - The equipment fulfills the EMC requirements for installation on the Bridge and Deck Zone.
- 4.3 - Approval also valid for ships to be granted with the notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
- 4.4 - Each application is to be submitted to the Society for examination.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 - The above products are to be supplied by **MARINELEC TECHNOLOGIES** in compliance with the type described in this certificate.
- 5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320.
- 5.3 - **MARINELEC TECHNOLOGIES** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.
- 5.4 - For information, **MARINELEC TECHNOLOGIES** has declared to Bureau Veritas the following production site(s):

MARINELEC TECHNOLOGIES
12 Rue Alfred Le Bars
29000 Quimper
FRANCE

6. MARKING OF PRODUCT:

- 6.1 - Trade name.
- 6.2 - Date of manufacture and serial number.
- 6.3 - Equipment type number or model identification under which it was type-tested.

7. OTHERS:

- 7.1 - It is **MARINELEC Technologies, Quimper - France'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 N°20391/B0 BV issued on 09 Sep 2013 by the Society.

*** END OF CERTIFICATE ***