



Marine & Offshore

Certificate number: 73371/A0 BV

File number: MPA2203601 Product code: 0243H

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

VAF INSTRUMENTS B.V.

DORDRECHT - NETHERLANDS

for the type of product

OVERRIDABLE POWER LIMITATION SYSTEMS (ELECTRONIC)

ShaPoLi system SDB-3 and SBP-3 panel PC

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships IMO MEPC 335(76)

EC Code: 31

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: 19 Oct 2027

For Bureau Veritas Marine & Offshore, At BV GRONINGEN, on 19 Oct 2022, Olaf RUITER

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.

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THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The product consists of the ShaPoLi data box SDB-3 and the panel PC SBP-3.

VAF ShaPoLi solution is a data collection, calculation, and presentation box, intended to handle data from a ships shaft power meter.

The SDB-3 can calculate torque, speed, and power output data. The Bridge Panel PC in combination with the SDB-3 can manage two torque sensors.

The GPS and NMEA signals are required signals and are used for position and speed.

The SDB-3 converts all these input signals to one RJ45 Ethernet signal for monitoring purposes through a Bridge Panel PC.

The digital output signal is available for connection to an external system like an Alarm and Monitoring System.

Functions, which can be performed with the SDB-3 and Bridge Panel PC system are:

- Measurement of the torque, shaft speed and power with one or two torque sensors.
- Displaying of the actual shaft speed, shaft power and the EEXI power limit.
- Triggers a visible and audible alarm when EEXI power limit is exceeded by the shaft power.
- Activates a digital output when the EEXI power limit is exceeded by the shaft power.
- Starts logging data when the EEXI power limit is exceeded.
- Other inputs are included in the logfile like for example GPS and NMEA-inputs.

Software version: V 1.0.0

2. DOCUMENTS AND DRAWINGS:

- Technical Manual TIB-620-GB-0622
- Test document SDB-3 and panel PC dated 06-05-2022
- SDB-3 product bulletin dated 02 Sep 2022
- SBP-3 product bulletin dated 02 Sep 2022
- Analyses document QD-000-GB-0122 dated 23 Dec 2021
- SDB-3 EUT document dated 02 Sep 2022
- SBP-3 EUT document dated 02 Sep 2022
- Software management plan KSD.2.8 rev 010-001 dated 22-03-19
- Software development flowchart KSD.2.8 dated 07 oct 2022
- Software version extract dated 06-05-2022
- Security information document V1.5-27-09-2022

3. TEST REPORTS:

- Checklist performance test Shapoli dated 06 May 2022
- Sebert Trillingstechniek test report M22.001-P22.001 dated 14 February 2022
- Sebert Trillingstechniek test report M22.002-P22.002 dated 22 February 2022
- IP44 VAF test report dated 29 Jun 2022
- Dekra test report 2264237.0501-EMC dated 2022-03-14

4. APPLICATION / LIMITATION:

- 4.1 Bureau Veritas Rules for the Classification of Steel Ships
- 4.2 Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev8
- 4.3 BUREAU VERITAS Environmental Category, EC Code: EC31
- 4.4 The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zones.
- 4.5 The equipment, once installed on board ship, is to be tested in accordance with the above referred Regulations under the supervision of a Society's Surveyor.
- 4.6 Each application and configuration is to be submitted to the Society's examination prior to fitting on board.
- 4.7 Only Hardware and Firmware / Software successfully tested together in compliance with the regulations as referred to in cover page, according to the declaration of the manufacturer are covered by this certificate.
- 4.8 Any modification of the hardware, firmware or software having an impact on the product performance or functionality has to be validated with type testing.
- 4.9 The system is categorized as Category I computer-based system.
- 4.10 Scope of this certificate is limited to the technical requirements indicated on the front page .
- 4.11 Use of the system on board always require the vessel's Flag Administration acceptance.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The ShaPoLi data box SDB-3 and the panel PC SBP-3 are to be supplied by VAF INSTRUMENTS B.V. in compliance

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with the type described in this certificate.

- 5.2 This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
- 5.3 **VAF INSTRUMENTS B.V.** 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, VAF INSTRUMENTS B.V. has declared to Bureau Veritas the following production site:

VAF INSTRUMENTS B.V. VIERLINGHSTRAAT 24 3316 EL DORDRECHT NETHERLANDS

6. MARKING OF PRODUCT:

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

7. OTHERS:

7.1 - It is **VAF INSTRUMENTS B.V.** 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.

*** END OF CERTIFICATE ***