Maritime & Coastguard Agency
UK Approved Body Authorised by the MCA

Certificate number: 74863/A0 UK
File number: MPA2300671
Item number: UK/4.57
This certificate is not valid when presented without the full attached schedule composed of 7 sections

Approved Body 8517 - UNITED KINGDOM MARINE EQUIPMENT APPROVAL

UK TYPE-EXAMINATION (MODULE B) CERTIFICATE

This is to certify that Bureau Veritas SA UK Branch Office did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, subject to any conditions in the schedule attached hereto.

This certificate is issued to:
PRAXIS AUTOMATION TECHNOLOGY B.V.
ZIJLDIJK 24A, 2352 AB, LEIDERDORP, NETHERLANDS

for the type of product
BRIDGE NAVIGATIONAL WATCH ALARM SYSTEM (BNWAS)
Mega-Guard - BNWAS

Requirements:
SOLAS 74 Convention as amended, Regulations V/18, V/19
IMO Res. A.694(17)
IMO Res. MSC.128(75), MSC.191(79), MSC.302(87)
MSC.1/Circ.1474
IEC 60945 (2002) + /Corr. 1 (2008),
IEC 61162 series: IEC 61162-1 (2016) - IEC 61162-2 ed1.0 (1998-09) - IEC 61162-3 ed1.2 Consol. with am1 ed. 1.0 (2010-11) and am2 ed. 1.0 (2014-07) - IEC 61162-450:2018,
IEC 62288 Ed. 3.0: 2021
IEC 62616(2010) + /Corr. 1 (2012),
IEC 62923-1:2018,
IEC 62923-2:2018.

The attached (schedule of approval) forms part of this certificate.
This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with.

This certificate will expire on: 01 Jul 2025

Issued by Bureau Veritas SA UK Branch Office

(Approved Body 8517)
At BV GRONINGEN, on 31 Jul 2024,
Olaf RUITER

This certificate was created electronically and is valid without signature

BUREAU VERITAS MARINE & OFFSHORE INTERNATIONAL REGISTER

Note 1: This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.
Note 2: During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved Body.
Note 3: "The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body."
Note 4: In case limitations of use apply, these should be indicated in the Annex.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The Bridge Navigational Watch Alarm System **Mega-Guard - BNWAS** monitors the bridge activity and detect operator disability which could lead to marine accidents.

MEGA-GUARD E Series BNWAS - Bridge Navigational Watch Alarm System consisting of components:

– BNWAS TFT 5.7" Touch Operator Panel Part number 93.0.982.x and 93.0.983.x

– BNWAS I/O Module Part Number 98.6.030.805

– BNWAS LCD Operator Panel with buttons and integrated I/O Part number 93.0.970

Specifications

Operating Modes	Watch On, Watch Auto On, Watch Stand-by and Watch Off
System Controls	- Front Control Panel - Reset Box with Buzzer - Emergency Button Box - Buzzer Box for LOP
Digital Inputs	- 4 (Emergency In, Reset In, Autopilot In, ECDIS In)
Officer's Alarms Outputs	- 4 Officers
24VDC Outputs	- 5 (Visual Reset, Bridge Alarm, Crew Alarm, Config.1 Alarm, Config.2 Alarm)
Relay Outputs	- Fail relay output function
Front Panel	- Flat design - Back ground illuminated text
Redundant Ethernet link	- 2 RJ45 connectors for 93.0.970 - 4 RJ45 connectors for 93.0.982.x / 93.0.983.x
USB Port	- 1 USB port 2.0
Serial Link	- 1RS485 output to VDR via NMEA-0183 for 93.0.970 - 1RS485 output to VDR via NMEA-0183 for 93.0.982.x and 93.0.983.x
Main Power Supply	19-32 VDC / 1.25A maximum
Back-up power supply	19-32 VDC / 1.25A maximum
Software Version	- 1.R1.R2.0 for 93.0.970 - 2.R1.R2.0 for 93.0.982.x / 93.0.983.x / 98.6.030.805 where : * R1 changes if completely new functions are added to the software, * R2 changes if functionality has been improved (Bug fixing).

2. DOCUMENTS AND DRAWINGS:

2.1 - Operator Guide PTD-LCD-BNWAS-Panel-R1.14 dated 26 January 2024
2.2 - Drawing N02.98401-M01 Rev.C, dated 06/06/2012
2.3 - Drawing 93.0.970-F01 Rev. A, dated 31/10/2011
2.4 - Drawing 93.0.970-C01 Rev.A, dated 24/08/2011
2.5 - Drawing 93.0.375-M01 Rev.B, dated 06/06/2012
2.6 - Drawing 93.0.374-M01, Rev.A, dated 04/05/2012
2.7 - Drawing 93.0.354-M01, Rev.G, dated 06/06/2012
2.8 - Drawing 93.0.352-M11, Rev.B, dated 06/06/2012
2.9 - Drawing 93.0.352-M01, Rev.E, dated 06/06/2012
2.10 - Drawings - bundle : 93.0.982.x-F01 Rev.C, dated 09/02/2018, 93.0.982.x-M01 Rev.F, dated 20/12/2018, 93.0.983.x-F01 Rev.C, dated 09/02/2018 and 93.0.983.x-M01 Rev.C, dated 20/12/2018
2.11 - Drawing 98.6.030.805-F01 Rev.A, dated 23/01/2019
2.12 - Drawing 98.6.030.805-M01 Rev.A, dated 15/03/2019
2.13 - Drawing 91.9.012-A01 Rev. B, dated 30/03/2018
2.14 - Drawing 91.6.010-814-A01 Rev. A, dated 16/01/2018
2.15 - Operator Guide BNWAS PTD-Bridge Navigation Watch Alarm System R1.002 dated 26/01/2019
2.16 - IEC 62288 ed.2 VS IEC 62288 ed.3 GAP ANALYSIS FOR BNWAS dated 15/01/2024
2.17 - IEC 62288 ed3.0 gap analysis dated 19/10/2022
2.18 - Development Guidelines dated 26/11/2020.

3. TEST REPORTS:

3.1 - Test Report Sebert Trillingstechniek B.V. N° M12.001-2012.7025, dated 12/03/2012
3.2 - Test Report Praxis Cold Endurance Rev.1.0, dated 04/06/2012
3.3 - Test Report Praxis Heat Stability Rev.1.0, dated 04/06/2012
3.4 - Test Report Praxis Dry Heat Rev.1.2, dated 05/06/2012
3.5 - Test Report Sebert Trillingstechniek B.V. N° M12.002-2012.7057, dated 10/05/2012, rev.01
3.6 - Test Report Bicon N°PRA-20120426-X1, dated 05/07/2012
3.7 - Test Report Bicon N°PRA-20120426-X1ANS, dated 05/07/2012
3.8 - Test Report Praxis EMC Rev.1.2, dated 04/06/2012
3.9 - Corrosion Document Praxis, dated 05/06/2012
3.10 - Test Report Praxis IEC-62288, dated 06/07/2012
3.11 - Test Report Praxis IEC-62616, dated 06/07/2012
3.12 - Test Report Bicon N°PRA-20110906-X1-CSD, dated 23/09/2011
3.13 - BICON Test Report (Accredited Laboratory) :
3.13.1 - BICON Report PRA-20190415-X1-01-ANS, dated 17/06/2019
3.13.2 - BICON Report PRA-20190415-X1-01-CSD, dated 08/08/2019
3.13.3 - BICON Report PRA-20190415-X1-01-EMC, dated 08/08/2019
3.13.4 - BICON Report PRA-20190415-X1-02-ANS, dated 08/08/2019
3.13.5 - BICON Report PRA-20190415-X1-02-CSD, dated 08/08/2019
3.13.6 - BICON Report PRA-20190415-X1-02-EMC, dated 08/08/2019
3.14 - BNWAS MED 2014-90-EU Test Report-R1.10, dated 27/07/2019
3.15 - Type Approval Test Report witnessed by BV Local Inspector :
3.15.1 - Type Approval Low Temp Test Report - 2018 MED - R1.00, dated 18/07/2019
3.15.2 - Type Approval Dry Heat Test Report - 2018 MED - R1.00, dated 05/07/2019
3.15.3 - Type Approval Damp Heat Test Report - 2018 MED - R1.00, dated 26/07/2019
3.15.4 - Type Approval Power Failure and Variation Test Report - 2018 MED - R1.00, dated 05/07/2019
3.16 - Vibration Test Report M19.001-P19.001 Praxis Automation Report, dated 18/04/2019
3.17 - Test reports 5.1 - TFT 5.7 Touch Operator Panel (93.0.982.x) witnessed by BV Local Inspector
3.18 - Test reports 5.2 - TFT 5.7 Touch Operator Panel (930.983.x) witnessed by BV Local Inspector
3.19 - Test reports 5.3 - DIN IO-Module BNWAS (98.6.030.805) witnessed by BV Local Inspector
3.20 - MED 2014/90/EU TEST REPORT dated 26/07/2019

4. APPLICATION / LIMITATION:

4.1 - As per requirements stated on first page.
4.2 - Only Hardware and Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.
4.3 - The following component(s) shall comply with the requirements of Merchant Shipping Regulations 2016, as amended, and be UK marked:
- Bridge Navigational Watch Alarm System Mega-Guard - BNWAS.
4.4 - IEC 61162-3 (with amendements) and IEC 61162-450 (with amendements) are not supported by Bridge Navigational Watch Alarm System Mega-Guard - BNWAS.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - This certificate alone does not allow the applicant to issue the UK Declaration of Conformity and to affix the mark of conformity (United Kingdom conformity mark) to the products corresponding to this type. To this end, the production-control phase module D Production Quality Assurance or module E Product Quality Assurance or module F Product Verification of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, is to be complied with and controlled by a written inspection agreement with an Approved Body.
5.2 - For information concerning the production phase modules, **PRAXIS AUTOMATION TECHNOLOGY B.V** has declared the following manufacturing site:

PRAXIS AUTOMATION TECHNOLOGY B.V
ZIJLDIJK 24A 2352 AB LEIDERDORP
NETHERLANDS

6. MARKING OF PRODUCT:

Reference is made to the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, Part3:
In particular Article 15.3 specifies that the United Kingdom conformity mark shall be followed by the identification number of the Approved Body involved in the production control phase (module D, E or F) and by the year in which the mark is affixed (4 digits or last 2 digits).

7. OTHERS:

7.1 - It is PRAXIS AUTOMATION TECHNOLOGY B.V.'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.

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