



Marine & Offshore

Certificate number: 28687/B0 BV

File number: NAV0/88062/1

Product code: 4442H

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

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

Daniamant Electronics A/S

Slangerup - DENMARK

for the type of product

BRIDGE NAVIGATIONAL WATCH ALARM SYSTEM (BNWAS)

BW-800

Requirements:

BV Rules for the Classification of Steel Ships,
IMO Res. A.694(17), IMO Res. MSC.128(75), IMO MSC/Circ.982, IMO Res. MSC.191(79), IMO Res. MSC.282(86),
IEC 61162 Series, IEC 60945 (2002), IEC 62616 (2010).

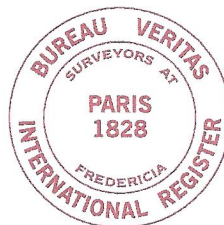
This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 08 Jun 2022

For Bureau Veritas Marine & Offshore,

At BV FREDERICIA, on 08 Jun 2017,

Jesper Jensen



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 electronic version is available at: <http://www.veristarnb.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=ofkistkyqm>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The Bridge Navigational Watch Alarm System BNWAS, Model BW-800, monitors the bridge activity and detect operator disability which could lead to marine accidents.

1.1 - BNWAS Components:

Component	Model Number
Main Unit	800
Reset Unit for Panel	801
Alarm Unit for Panel	802
Selector Unit for Panel	803
Reset Unit with Audio Alarm for Open Bridge Wing	821
Reset Unit for Open Bridge Wing	831
Dual Motion Sensor	805

1.2 - Technical Specifications:

Operating Modes	: Mode ON, Mode OFF and Automatic Mode
Inputs	: Inputs for Motion Sensors : Inputs for external Manual Reset Units : Input for Emergency
Outputs	: Output for Visual Alarm : Output for Audible Alarm : NMEA port for VDR / SVDR
Main Power Supply	: 24 VDC (4A max.)
Emergency Power Supply	: 24 VDC (4A max.)

1.3 - Software Version: 1.A.

2. DOCUMENTS AND DRAWINGS:

- 2.1 - Instruction and Installation Manual for BW-800, ver.1Ae.
- 2.2 - Unreferenced and Undated Part List of Components for Main Unit BW-800.
- 2.3 - Unreferenced and Undated BW-800 Specifications Data Sheet.
- 2.4 - Quality Handbook for Uni-Safe Electronics a/s, ver.1 - UK, dated 19/03/2012
- 2.5 - Product Handling Sheet BW-800 Bridge Watch, dated 26/04/2012.
- 2.6 - FAT Test BW-800 System-components, ver.1.2, dated 02/01/2012.

3. TEST REPORTS:

- 3.1 - Test Report Uni-Safe BW-800 IEC Performance Test 200902016-2, dated 16/02/2010.
- 3.2 - Test Report DELTA DANAK-19/11798, N°T201671, dated 19/01/2012.
- 3.3 - Test Report NEMKO N° E10089.00, dated 09/04/2010.
- 3.4 - Test Report SP N° ELd m201201, dated 29/03/2012.

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 - Approval also valid for ships to be granted with the notations: **SYS-NEQ, SYS-NEQ 1, SYS-IBS, SYS-IBS-1.**

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 - The above products are to be supplied by **Daniamant Electronics A/S** 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 - **Daniamant Electronics A/S** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products :

Selektro A/S	and/or	Protec Electronics Aps
Erhvervsvej 29-35,		Damgade 71,
9632 Moldrup,		DK-6400 Sonderborg,
DENMARK		DENMARK

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.

6.4 - Marking is to be in accordance with IEC60945.

7. OTHERS:

7.1 - This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that: **Daniamant Electronics A/S - Industrivej 24C - 3550 Slangerup - DENMARK** will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate No.:28687/A1 BV issued on 03 Jul 2014 by the Society.

*** END OF CERTIFICATE ***