CERTIFICATE NUMBER
17-LD1597697-PDA

DATE
08 Mar 2017

ABS TECHNICAL OFFICE
London Engineering Department

CERTIFICATE OF DESIGN ASSESSMENT

This is to certify that a representative of this Bureau did, at the request of

DANIAMANT ELECTRONICS A/S

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: **Bridge Navigational Watch Alarm System (BNWAS)**
Model: **BW-800**

This Product Design Assessment (PDA) Certificate 17-LD1597697-PDA, dated 08/Mar/2017 remains valid until 07/Mar/2022 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Theodoros Chatzigkaidas
Engineer/Consultant

DANIAMANT ELECTRONICS A/S
INDUSTRIVEJ 24 C
DK-3550 SLANGERUP
Denmark
Telephone: +45 47 373800
Fax: +45 47 373809
Email: info@daniamant.com
Web: www.daniamant.com

Tier: 2 - PDA Issued TC

Product: **Bridge Navigational Watch Alarm System (BNWAS)**
Model: **BW-800**
Intended Service:
For use on ABS Classed Vessels and Offshore Installations in accordance with the listed ABS Rules and International Standards.

Description:
The BW-800 unit is monitoring on the bridge for the awareness of the Officer of the Watch (OOW) and providing alerting of the Captain or another responsible person in the event of OOW becoming incapable of performing their duties. It comprises the following: BW-800 Bridge Watch Main unit; 801 Bridge Watch Reset unit; 802 Bridge Watch Alarm unit; 803 Bridge Watch Backup Officer Selector unit; 805 Dual Motion Sensor with interfaces to vessel heading/track control/autopilot and VDR systems.

Rating:
Main power 24V DC, battery back-up 24V DC, Motion Sensor 12V DC

Service Restriction:
Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:
The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:
Drawing No. ABC Cert 11-LD817488-PDA, ABS Certification, Revision: -, Pages: -
Drawing No. ABS letter 14Dec2011, ABS Review Letter Dec-2011, Revision: -, Pages: -
Drawing No. BW-800-MED-B-8029, Module B Certification, Revision: -, Pages: 3
Drawing No. ISO-009132_i01_Daniamant_Electronics, Certificate of Quality Management System Registration, Revision: -, Pages: 1
Drawing No. Request-Type-Approval-ABS-Rev, Request for Renewal of PDA, Revision: -, Pages: -

Terms of Validity:
This Product Design Assessment (PDA) Certificate 17-LD1597697-PDA, dated 08/Mar/2017 remains valid until 07/Mar/2022 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

STANDARDS

ABS Rules:
- Steel Vessels (2017): 1-1-4/7.7, 1-1-A3 & A4; 4-8-3/1.7, 4-8-3/1.11, 4-9-8/13, 4-9-8/13 Table 1, Table 2;
- Steel Vessels Under 90 Meters (295 Feet) in Length (2017) 1-1-4/7.7, 1-1-A3 & A4; 4-1-1/3.3, 4-7-1/5.39, 4-7-

DANIAMANT ELECTRONICS A/S
INDUSTRIVEJ 24 C
DK-3550 SLANGERUP
Denmark
Telephone: +45 47 373800
Fax: +45 47 373809
Email: info@daniamant.com
Web: www.daniamant.com

2/15.1, 4-7-2/15.3, 4-7-2/17.3;
- Facilities on Offshore Installations (2017): 1-1-4/9.7, 1-1-A2 & A3, 1-1;
- Offshore Support Vessels (2017): 1-1-4/7.7, 1-1-A3 & A4, 4-9-8/7, 4-9-8/13, 4-9-8/Tables 1 & 2;
- Mobile Offshore Drilling Units (2017): 1-1-4/9.7, 1-1-A2 & A3, 6-1-1/9, 6-1-1/13;
- Steel Vessels for Service on Rivers and Intracoastal Waterways (2017): 1-1-4/7.7, 1-1-A3 & A4;
- High Speed Crafts (2017): 1-1-4/11.9, 1-1-A2 & A3;
- Steel Barges (2017): 1-1-4/7.7, 1-1-A3 & A4;

National:
NA

International:
IMO Res. MSC. 128(75), A. 694(17), A. 830(19)(Adopted 20 May 2002); IACS UR E10 Rev 6: 20146; EN 60945 Ed4.0: 2002, IEC 61162-1:2016, IEC 62616 Ed1.0: 2010

Government:
NA

EUMED:
NA

OTHERS: TC
NA