Certificate Number: 15-LD1308122-PDA 10/JAN/2017



Confirmation of Product Type Approval

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product.

This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 02/OCT/2020. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until 19/FEB/2020 subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Product Name: Manual Call Alarm Model Name(s): BF-300V2, BF-500V2/EX, BF-510WP-H

Presented to:

AUTRONICA FIRE & SECURITY AS HAAKON VII'S GT 4 Norway

Intended Service: ABS classed vessels and offshore facilities in accordance with the listed ABS

Rules and International Standards.

Description: Addressable Manual call points with self verifying function and fully compatible with

other fire detection panels such as the AUTROSAFE and AUTROSAFE IFG range. Models are as follow: BF-300V2 standard version for indoor use; BF-500V2/EX use

in hazardous areas; BF-510WP-H high current version for outdoor use. The Manual Call Point, Type BF-500V2/EX is considered to comply with the requirements for the Intrinsically Safe Apparatus for the level of protection ia,

Group IIC, Temperature Class T5

Tier: 3

Ratings: Voltage: Standard and water proof 16 to 26 VDC, Ex version 15.75 VDC; Working

temperature: between -25 and -40 to 70 degree C; Enclosure: Standard and Ex IP 44, Waterproof IP 55; Intrinsically safe certified: Ex ia IIC T5 Ga -20°C <=Ta <=

+70°C (BF-500V2/EX)

Service Restrictions: Unit Certification is not required for this product. If the manufacturer or purchaser

requests 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, the lack of

Asbestos in this product. Where BF-500V2/EX MCP units are to be installed in a

hazardous area the following requirements/notes are applicable:- 1. Installation is to be in accordance with any applicable conditions of certification detailed on the IECEx Certificate of Conformity. 2. Installation is to be in accordance with the requirements of the IEC 60079 series of standards (as applicable) or equivalent 3. The BF-500V2/EX MCP must be connected to an approved Autrosafe barrier BZ500. 4. Electrical equipment intended for installation in hazardous areas is to be of a certified safe type based on the class of the hazardous area at its location of installation as detailed in 4-8-3/13.1 of the ABS Rules for Building and Classing Steel Vessels 2015. Certificates in this regard are to be presented to the ABS Surveyor for verification on a case by case basis. 5. Equipment has been tested to the applicable IEC 60079 series standards by an independent laboratory listed on the United States Coast Guard Maritime Information Exchange Accepted Laboratories list, Approval Series 111.105 (Nemko AS, Oslo)

Notes / Documentation:

Drawing No. BF 300V2, Data Sheet BF 300V2 Manual call point with SelfVerify, Revision: -, Pages: 2 Drawing No. BF 500V2 EX, Data Sheet BF 500V2 EX Manual call point with SelfVerify, Revision: -, Pages: 3 Drawing No. BF 510WP H, Data Sheet BF 5100WP H Manual call point with SelfVerify weatherproof, Revision: -, Pages: 4 Drawing No. NEMKO- IECEX Certificate of Conformity Drawing No. IECEX Test Report ExTR60079-0_5A, ExTR60079-11_5A, Rev2 Drawing No. IECEX Test Report ExTR60079-26, Rev2 Drawing No. IECEX EX Test Report Cover 133996 Drawing No. IECEX EX Test Report Cover 187574 Drawing No. Annex to Certificate of Conformity Drawing No. DNV Report, Maritime Testing Of Manual Call Points Bf-300 V2, Bf-510wp-H and Bf-500v2/Ex, Report No. 2009-3598, Revision No. 01 Drawing No. TestT Report- BF-510WP-H EN54_11 DE080071 Drawing No. BF-500V2EX EN 54_11 DE080070 Drawing No. BF-300V2 EN54_11 DE080073

Term of Validity:

This Product Design Assessment (PDA) Certificate 15-LD1308122-PDA, dated 20/Feb/2015 remains valid until 19/Feb/2020 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.

ABS Rules:

- Steel Vessels Rules (2015) 1-1-4/7.7, 1-1-A3&A4; 4-7-2/3.4, 4-8-3/1.7, 4-8-3/1.11, 4-8-3/13, 4-9-8/7, 4-9-8 Table 1; - Steel Vessels Under 90 Meters (295 Feet) in Length (2015) 1-1-4/7.7, 1-1-A3&A4; 4-6-1/11, 4-6-1/15, 4-6-3/3, 4-6-3/11.1.1 (a) Ex i, 4-7-2 Table 1; - Mobile Offshore Drilling Units (2015) 1-1-4/9.7, 1-1-A2&A3, 4-3-1/3.15, 4-3-1/15, 4-3-3/9.1.2(a), 4-3-3/9.1.3; - Offshore Support Vessels (2015) 1-1-4/7.7, 1-1-A3&A4; 4-8-3/1.7, 4-8-3/1.11.1, 4-8-3/13; - Facilities on Offshore Installations (2015) 1-1-4/9.7, 1-1-A2&A3; - Steel Vessels for Service on Rivers and Intracoastal Waterways (2015) 1-1-4/7.7, 1-1-A3&A4; 4-5-1/13, 4-5-1/17, 4-5-3/11.1.1(a) Ex i; - High-Speed Craft (2015) 1-1-4/11.9, 1-1-A2&A3; 4-6-1/3.21.1, 4-6-3/9.1.1(a) Ex i, 4-7-9 Table 9; - Steel Barge Rules (2015) 1-1-4/7.9, 1-1-A3&A4;

National Standards:

EN-54-11:2001 A1:2005 and EN 54-17:2015+AC:2007 EN 60079-0:2009, EN 60079-11:2007, EN 60079-26:2007, EN 50081-1:1992, EN 50130-4:1995, EN 61000-6-2:1999 UL 464, 9th Edition, UL 60079-0, 5th Edition, UL 60079-1, 6th Edition, UL 60079-11, 5th Edition

International Standards:

IMO FSS Code Chapter 9 IACS UR E10 Rev5:Dec 2006 IEC 61000-4-2 Ed1.2:2001, IEC 61000-4-3:Ed 3.0: 2006, IEC 61000-4-4 Ed 2.0: 2004, IEC 61000-4-6: Ed 2.0: 2003, IEC 61000-4-8 Ed 1.0: 1993, IEC 60068-2-1 Ed 6.0: 2007, IEC 60068-2-2 Ed 5.0: 2007, IEC 60068-2-30 Ed 3.0: 2005, IEC 68-2-52 Ed 2.0: 1996, IEC 60092-504, Ed 3.0: 2001, IEC 60945 Ed 4.0: 08-2002, IEC 60947-2-47: Ed 3.0: 2005, IEC 60947-2 Ed 4.0: 2006, IEC 60529 Ed. 2.1: 2001, IEC 60079-0:2007, IEC 60079-11:2006, IEC 60079-26:2006 CISPR 16-1-1 Ed 2.0:2006, CISPR 16-2-3 Ed 2.0:2003

Government Authority:

EUMED: Others:

Certificate Number: 15-LD1308122-PDA

Model Certificate	Model Certificate No	Issue Date	Expiry Date	
PDA	15-LD1308122-PDA	20/FEB/2015	19/FEB/2020	

ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.