Certificate Number: 16-LD1500057-PDA 19/APR/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 27-APR-2021. 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 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: Alarm Sounding and Light Devices

Model Name(s): CU1 Range Combination - Beacon Sounders, CU1S, CU1S-W,

CU1H, CU1H-W

Presented to:

EATON MEDC LIMITED UNIT B, SUTTON PARKWAY ODDICROFT LANE NG17 5FB United Kingdom

Intended Service: For use on ABS Classed Vessels and Offshore Facilities in accordance with the

listed ABS Rules and International Standards.

Description: Use for Marine and Offshore applications in potentially explosive atmospheres

Zone 1 and Zone 2. Beacon/sounder unit manufactured from UV stable glass reinforced polyester with glass beacon lens. CU1S, CU1S-W (Standard); CU1H,

CU1H-W (High ambient, sound driver output limited to 5W). W denotes

Weatherproof version

Tier: 3

Ratings: Nominal output 90dB(A) 460mA to 116dB(A) 1387mA (110dB(A) CU1-H) 10 joule

beacon sounder 24V DC 1387mA, 48V DC 864mA; 110V AC 365mA to 250V AC 241mA; 5 joule beacon sounder 24/48V DC and 110V AC to 250V AC 700mA (full range is 12V DC to 254V AC with max power dissipation 50W). IP 66 & 67. Sound output: 116dB (A). Atex certificate: Baseefa04ATEX0273X/1 & 2. Type CU1-S: Ex II 2 G EEx de IIB T4 (-50 C<=Ta<=+50 C). Type CU1-H: Ex II 2 G EEx de IIB T4 (-50 C<=Ta<=+70 C). IECEX certificate: IECEx BAS 11.0149x: Type CU1-S: Ex de IIB T4 (T ambient -50 to +50 C degrees). Type CU1-H: Ex de IIB T4 (T ambient -50

to +70 C degrees).

Certificate Number: 16-LD1500057-PDA

Service Restrictions: Unit Certification is not required for this product. Installation and use is to be in

> accordance with manufacturers instructions and requirements and any special conditions detailed on the EC Type Examination Certificate. Installation must be followed as indicated on ABS Rules for Steel Vessels Under 90 Meter (295 feet) 4-6-3/11; Steel Vessels (2016) 4-8-4/27, Mobile Offshore Drilling Units (2016) 4-3-3/9, Offshore Support Vessels (2016) 4-8-4/27, High-Speed Craft (2016)

4-6-3/9, Facilities on Offshore Installation (2016) 3-6/15.3.

Comments: ATEX certified equipment is not to be installed in hazardous areas on U.S. Flagged

Vessels, unless it can be proven to have been tested to the IEC 60079 series standards by an independent laboratory accepted by the U.S. Coast Guard. USCG MI Notice 01-12 (February 7, 2012)." The Manufacturer has provided a declaration

about the control of, or the lack of Asbestos in this product.

Notes / Documentation: Drawing No. 04ATEX0273X, EC-type examination certificate, Revision: 6, Pages: 7

Drawing No. 297-163, Certification label CU1-H combination uni, Revision: B, Pages: 1 Drawing No. 297-164, Certification label CU1-S combination unit, Revision: B, Pages: 1 Drawing No. 6DS126, Combination-beacon sounder EExde,

weatherproof CU1 range, Revision: F, Pages: 2 Drawing No. IECEx BAS

11.0149X, IECEX certficate of conformity, Revision: -, Pages: -

Term of Validity: This Product Design Assessment (PDA) Certificate 16-LD1500057-PDA, dated

28/Apr/2016 remains valid until 27/Apr/2021 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 Vessel Rules (2016): 1-1-4/7.7, 1-1-A3 & A4; 4-8-3/13 - Steel Vessels

Under 90 Meters (295 Feet) in Length (2016): 1-1-4/7.7, 1-1-A3&A4 - Facilities on Offshore Installations (2016): 1-1-4/9.7, 1-1-A2 & A3 - Offshore Support Vessels (2016): 1-1-4/7.7, 1-1-A3 & A4, 4-8-3/13 - Mobile Offshore Drilling Units (2016): 1-1-4/9.7, 1-1-A2 & A3, 4-3-3/9.1 - Steel Vessels for Service on Rivers and Intracoastal Waterways (2016): 1-1-4/7.7, 1-1-A3 & A4; 4-5-3/11.1 - High Speed Crafts (2016): 1-1-4/11.9, 1-1-A2 & A3, 4-6-3/9.1 - Steel Barge Rules (2016):

1-1-4/7.9, 1-1-A3 & A4

National Standards:

International Standards: IEC 60079-0: 2007-10 Edition: 5; IEC 60079-1: 2007-04 Edition: 6; IEC 60079-7:

2006-07 Edition: 4

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Government Authority:

EUMED: Others:

PDA

Model Certificate **Model Certificate No Issue Date Expiry Date** 28-APR-2016

ABS Programs

27-APR-2021

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.