Certificate Number: 17-BK1628217-PDA-DUP 05/JUL/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 17-MAY-2022. 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: Portable Gas Detector Model Name(s): BW Clip4

Presented to:

HONEYWELL CO., LTD. 56, CHAAM-DONG, 330-200 Korea, Republic of

Intended Service: Marine and Offshore Application – Potable Gas Detector for Combustible Gas,

Oxygen, Carbon Monoxide and Hydrogen Sulphide

Description: BW Clip4 is an intrinsic safe type non-replaceable battery-operated portable gas

detector capable of measuring Oxygen, Carbon Monoxide and Hydrogen Sulphide

Tier: 3

Ratings: a) IP grade: IP68 b) Size: 4.7x2.7x1.3 inch / 12.0x6.8x3.2 cm c) Weight: 8.2 oz /

233 g d) Operating temperature: -4 to 131 F / -20 to 50 degree C e) Humidity: 5 – 95% RH (non-condensing) continuous f) Audible alarm: 95 dB at 30 cm (1ft) g) Ex ia IIC T4 Ga certified by IECEx UL 16.0156X and DEMKO 16 ATEX 1798X

Service Restrictions:

a) Unit certification is not required for this product, b) If the manufacturer or

a) Unit certification is not required for this product. b) 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: a) Application and use are to be in accordance with the manufacturer's instructions.

b) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. c) Suitable means of calibrating the instrument (BW Clip

4) is to be available on-board the vessel.

Notes / Documentation: This Product Design Assessment is based on as follows: a) Manufacturer's

drawing no. 3102E0009 (Issue 1) b) Manufacturer's operator manual for BW Clip4

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Portable Gas Detector c) Recognized test laboratory's certificate nos. 11356687 (dated 20-Sep-2016) and 20161220-E480011 (dated 20-Dec-2016) d) Recognized test laboratory's test reports no. DRKRREL1609-0303 (dated 13-Sep-2016) e) Manufacturer's test report no. BWClip4_ABS_20170421 (dated 21-Apr-2017)

witnessed by attending Surveyor (SE3318391)

Term of Validity: This Product Design Assessment (PDA) Certificate 17-BK1628217-PDA-DUP,

dated 03/Jul/2017 remains valid until 17/May/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.

ABS Rules: a) 2017 Steel Vessels Rules 1-1-4/7.7, 1-1/A3, 1-1-/A4, 11, 4-9-8/Table 1,

5C-1-7/17.7 and 19.5.1, b) 2017 Steel Vessels Under 90 Meters (295 Feet) in Length 1-1-4/7.7, 1-1/A3, 1-1/A4, 4-7-2/Table 1, 4-5-2/33.5, c) 2017 Offshore Support Vessels 1-1-4/7.7, 1-1/A3, 1-1-/A4, 11, 4-9-8/Table 1, 5C-1-7/17.7 and 19.5.1, d) 2017 Facilities on Offshore Installations 1-1-4/9.7, 1-1/A2, 1-1/A3, e)

2017 Mobile Offshore Drilling Units Rules 1-1-4/9.7, 1-1/A2, 1-1/A3

National Standards: CAN/CSA C22.2 No. 152-M1984 (2016)

International Standards: Government Authority:

EUMED: Others:

Model CertificateModel Certificate NoIssue DateExpiry DatePDA-DUP17-BK1628217-PDA-DUP02-JUL-201717-MAY-2022

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.