



CERTIFICATE NUMBER  
15-HS1399406-PDA

DATE  
04 Aug 2015

ABS TECHNICAL OFFICE  
Houston OED - Systems

# CERTIFICATE OF DESIGN ASSESSMENT

This is to certify that a representative of this Bureau did, at the request of  
**BW TECHNOLOGIES BY HONEYWELL**

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: **Gas Detector**

Model: **GasAlert Extreme series: GAXT-H, GAXT-H2, GAXT-M, GAXT-M2, GAXT-S, GAXT-C, GAXT-Z, GAXT-D, GAXT-A, GAXT-A2, GAXT-P, GAXT-X, GAXT-E, GAXT-N, GAXT-V, GAXT-G.**

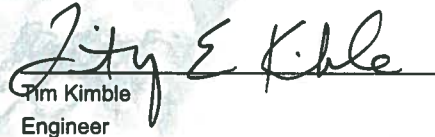
This Product Design Assessment (PDA) Certificate 15-HS1399406-PDA, dated 04/Aug/2015 remains valid until 03/Aug/2020 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

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.

AMERICAN BUREAU OF SHIPPING

  
Tim Kimble  
Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

**BW TECHNOLOGIES BY HONEYWELL**

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Web: www.gasmonitors.com

**Tier: 3 - Type Approved, unit certification not required**

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**Product:** Gas Detector**Model:** GasAlert Extreme series: GAXT-H, GAXT-H2, GAXT-M, GAXT-M2, GAXT-S, GAXT-C, GAXT-Z, GAXT-D, GAXT-A, GAXT-A2, GAXT-P, GAXT-X, GAXT-E, GAXT-N, GAXT-V, GAXT-G.**Intended Service:**

Marine &amp; Offshore Application - Portable Single Gas Detector

**Description:**

The GasAlert Extreme is an intrinsically safe, portable, disposable, battery operated, single gas detector intended for detection of hydrogen sulphide, low methanol hydrogen sulphide, carbon monoxide, carbon monoxide (low hydrogen sensitivity), sulfur dioxide, chlorine, hydrogen cyanide, nitrogen dioxide, ammonia, high range ammonia, phosphine, oxygen depletion, ethylene, nitric oxide, chlorine dioxide, and ozone. The device contains audible and visual alarms that are activated when conditions exceeds preset limits.

**Rating:**

IECEX: Ex ia IIC T4 Ga, Tamb = -40°C to +50°C

UL: Class I Group A, B, C, D and Class II, Groups E, F, G, intrinsically safe when used with one lithium battery.

ATEX: II 1G Ex ia IIC T4 Ga

**Operating Temperature:**H<sub>2</sub>S, SO<sub>2</sub> & HCN: -40°C to +50°C (-40°F to +122°F)

CO: -30°C to +50°C (-22°F to +122°F)

Other Gases: -20°C to +50°C (-4°F to +122°F)

**Operating Humidity:**CO, H<sub>2</sub>S, SO<sub>2</sub>, Cl<sub>2</sub>, HCN, NO<sub>2</sub>, NH<sub>3</sub>, PH<sub>3</sub>, ETO, NO, O<sub>3</sub>: 15% to 90%Cl<sub>2</sub>: 10% to 95%ClO<sub>2</sub>: 15% to 95%O<sub>2</sub>: 0% to 99%**Operating Voltage:**

One 3.0V Lithium battery

For detail specification see attached file.

**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.

- The battery must be replaced in a non-hazardous location in accordance with the manufacturer's instructions. Only the Panasonic Part No. CR-2PE/BN 3V primary Lithium cell may be used.

- To be used in accordance with User Manual D5561/4, iEPR: 117000.

- Does not meet the Performance requirements for Combustible Gas Detectors in ANSI/ISA S12.13.

**Notes/Drawing/Documentation:**

Drawing No. 114829-L3 GXUA-04K Cert Label, Certification Label, Revision: K, Pages: 1

Drawing No. AICP-13NK07516 IECEX Test Report Cover, IECEX Test Report, Revision: -, Pages: 1

Drawing No. DEMKO 04 ATEX 0336363X Rev, EC-Type Examination Cert, Revision: -, Pages: 1

Drawing No. GAXW-01D, Project File, Revision: D, Pages: 1

Drawing No. Gas Alert Extreme Up-dates, New Up-date Sheet, Revision: -, Pages: 1

Drawing No. IECEX UL 08, IECEX Certificate of Conformity, Revision: -, Pages: 1

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UL File No. E131021

**Terms of Validity:**

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**STANDARDS**

**ABS Rules:**

Rules for Conditions of Classification, Part 1 2015 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2015 Steel Vessel 4-8-4/27, 4-8-3/13, 5-1-7/17.7, 5-1-7/31.9 & 5-1-7/Table 1;

Rules for Conditions of Classification, Part 1 - 2015 Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2015 Mobile Offshore Drilling Units 4-3-1/15, 17.1, 4-3-3/9.1.2;

**National:**

UL 913

**International:**

IEC 60079-0:2011, IEC 60079-11:2011, IEC 60079-26:2006, EN 60079-0:2009, EN 60079-11:2012, EN 60079-26:2007.

**Government:**

NA

**EUMED:**

NA

**OTHERS:**

NA