



CERTIFICATE NUMBER
15-HS1399408-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: **Gas Alert Quattro Model QT-XWHM-A-Y-*****

This Product Design Assessment (PDA) Certificate 15-HS1399408-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

2840 2ND AVENUE S.E.

CALGARY ALBERTA

Canada T2A 7X9

Telephone: 403-248-9226

Fax: 403-273-3708

Email: bonnie.saxinger@honeywell.com

Web: www.gasmonitors.com

Tier: 3 - Type Approved, unit certification not required

Product: Gas Detector**Model:** Gas Alert Quattro Model QT-XWHM-A-Y-*****Intended Service:**

Marine & Offshore Applications - Portable Multi Gas Detector

Description:

The Gas Alert Quattro is an intrinsically safe, portable multi-gas detector for monitoring up to 4 gases simultaneously and continuously: Oxygen (deficiency/enrichment), combustibles, carbon monoxide and hydrogen sulfide. A 4.2V Lithium Polymer battery pack or 3-Cell "AA" Alkaline pack powers the detector.

Rating:

CSA: Intrinsically Safe, Class I, Division 1, Groups A, B, C & D;

ATEX: II 1 G Ex ia IIC T4 or T135.3°C Ga;

IEC: Ex ia IIC T4 or T135.3°C ;

Ambient Temperature Rating: -4 °F to +122 °F (-20 °C to +50 °C);

IP 66/67

See attache.d "pdf" Specifications for Ratings, Certifications, Options, Alarms, Gases Detected, etc.

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.

- CSA: Intrinsically Safe when powered by Lithium Polymer battery pack (Part no: QT-BAT-Rxxx) or Alkaline Cells (Duracell MN1500, Energizer E91VP)
- IECEx: Battery powered by Energizer E91VP, Duracell MN1500, or Lithium Polymer
- Meets the Performance requirements for Combustible Gas Detectors in ANSI/ISA S12.13
- Approval is for hardware only. Each vessel configuration and external connection is to be specifically approved.

Notes/Drawing/Documentation:

Drawing No. CoFC 2690149 50118920-028, CSA Certificate of Conformity, Revision: -, Pages: 1

Drawing No. DEKRA_217020700-09ATEX0137 Iss 5_Signed_50118920-027, EC-Type Examination, Revision: -, Pages: 1

Drawing No. GAQBW-20F Lipo Bat, Block Diagram, Revision: F, Pages: 1

Drawing No. GAQMW-10I Main and Sensor Boards, Block Diagram, Revision: I, Pages: 1

Drawing No. IECEx CSA 09, IECEx Certificate of Conformity, Revision: -, Pages: 1

Drawing No. Quattro Updates, New Updates Sheet, Revision: -, Pages: 1

IECEx Certificate of Conformity: IECEx CSA 09.0006 dtd 2009/12/2

EC- Type Examination Certificate No: KEMA 09ATEX0137 dtd 2009/10/14(Lithium Polymer battery pack - Narada P/N:NLP 704050LT20 or BYD P/N:SL684048) .

CSA Certificate: 2138307 (80259) dated 2009/12/01

Terms of Validity:

This Product Design Assessment (PDA) Certificate 15-HS1399408-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

BW TECHNOLOGIES BY HONEYWELL

2840 2ND AVENUE S.E.

CALGARY ALBERTA

Canada T2A 7X9

Telephone: 403-248-9226

Fax: 403-273-3708

Email: bonnie.saxinger@honeywell.com

Web: www.gasmonitors.com

Tier: 3 - Type Approved, unit certification not required

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:

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;

2015 Facilities on Offshore Installations 3-8/7.3.1(i).

National:

UL 913, ANSI/ISA 12.13.01-2000

International:

IEC 60079-0:2011, IEC 60079-11:2011, EN60079-0:2012, EN 60079-11:2012, EN 60079-25:2007, C22.2 No.0-M1991, C22.2 No. 152-M1984, C22.2 No. 157-M1992

Government:

NA

EUMED:

NA

OTHERS:

NA