



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 08/APR/2018. 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 03/AUG/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: Gas Detector

Model Name(s): Gas Alert Quattro Model QT-XWHM-A-Y-***

Presented to:

BW TECHNOLOGIES BY HONEYWELL
2840 2ND AVENUE S.E.
Canada

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.

Tier:

3

Ratings:

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 Restrictions:

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, this 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

Notes / Documentation: Combustible Gas Detectors in ANSI/ISA S12.13 - Approval is for hardware only. Each vessel configuration and external connection is to be specifically approved.
 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

Term 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 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: 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 Standards: UL 913, ANSI/ISA 12.13.01-2000

International Standards: 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 Authority:
EUMED:
Others:

| Model Certificate | Model Certificate No | Issue Date | Expiry Date |
|-------------------|----------------------|-------------|-------------|
| PDA | 15-HS1399408-PDA | 06/AUG/2015 | 03/AUG/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.