



CERTIFICATE NUMBER
15-HS1399405-PDA-DUP

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

SYSTEM SENSOR DE MEXICO S DE RL DE CV

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 Micro 5 - M5-XWT1T2-R-P-D-A-B-CC, M5-PID-XWT1T2-R-P-D-A-B-CC & M5-IR-XWT1T2-R-P-D-A-B-CC;**

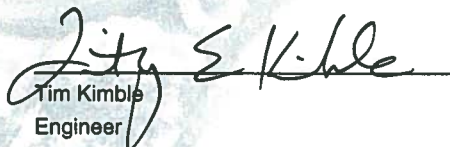
This Product Design Assessment (PDA) Certificate 15-HS1399405-PDA-DUP, dated 04/Aug/2015 remains valid until 03/Aug/2020 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

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).

SYSTEM SENSOR DE MEXICO S DE RL DE CV

AVE VALLE DEL CEDRO 1681 PAR IND INTERMEX JUAREZ CHIHUAHUA 32574

JUAREZ CHIHUAHUA

Mexico 32574

Telephone: 656-252-2605 ext. 2

Fax:

Email: sabino.rodriguez@honeywell.com

Web: systemsensor.com

Tier: 3 - Type Approved, unit certification not required

Product: Gas Detector

Model: Gas Alert Micro 5 - M5-XWT1T2-R-P-D-A-B-CC, M5-PID-XWT1T2-R-P-D-A-B-CC & M5-IR-XWT1T2-R-P-D-A-B-CC;

Intended Service:

Marine & Offshore Applications - Portable Multi Gas Detector

Description:

Intrinsically safe portable multi-gas detectors for monitoring up to 5 gases like oxygen, combustible and toxic gases simultaneously and continuously utilizing electrochemical, catalytic bead and photo-ionization sensors for use in hazardous locations.

Rating:

CSA: Class I, Group A, B, C, and D

IECEx: Ex d ia IIC (M5IR), Ex ia IIC (M5 and M5PID);

ATEX: II 2 G Ex d ia IIC T4 or 135.3 °C Gb (for M5IR); II 1 G Ex ia IIC T4 or 135.3 °C Ga (for M5 & M5PID)

Temperature code/maximum surface temperature depends on the batteries used:

Duracell MN1500 - Temperature code T4;

Energizer E91 - Temperature code 135.3 °C;

Lithium Polymer Rechargeable Battery Pack "M5-BAT08" or "M5-BAT08B" - Temperature code T4.

Ambient Temperature Range: -20 °C to +50 °C.

Dust and moisture ingress: IP65/66

See attached 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.

- Batteries must only be changed in Non-Hazardous Area (For Alkaline battery equipped models)
- Use approved 1.5V AA Batteries only. See Manual for approved listing. (For Alkaline battery equipped models)
- Battery must only be charged in a non-hazardous area. (For Lithium Polymer Rechargeable Battery pack "M5-BAT08" or "M5-BAT08B" equipped models)
- 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. 117992_GM5A-09D, Battery Pack Warning Label, Revision: D1, Pages: 1

Drawing No. 122500_GM52A-01B_label_certification_recharge-batt, Rechargeable Battery Pack, Revision: B, Pages: 1

Drawing No. 124289_GM52A-04C_label_battery-warning_rech, Rechargeable Battery Pack Warning Label, Revision: C, Pages: 1

Drawing No. 125801_GMBLA-01C_label_certification_LiPo-IR, Rechargeable Battery Pack Certification Label, Revision: C, Pages: 1

Drawing No. CoFC_2636215_50118920-022, CSA Certificate of Conformity, Revision: -, Pages: 1

Drawing No. DEKRA_216556800-KEMA06ATEX0206 Iss 9 (E)_signed, EC-Type Certificate, Revision: -, Pages: 1

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Drawing No. GM52UW-20C, PCB, Revision: C, Pages: 1

Drawing No. GM52W-30E, Block Diagram, Revision: E, Pages: 1

Drawing No. GM5A-22_F 126638-L3 127398-L3 Label-Cert GasAlert Micro5 PID-Toxic, Certification Label, Revision: F, Pages: 1

Drawing No. GMRA-01_H 122522-L3 Label-Cert GAMicro 5 IR, Label, Revision: H, Pages: 1

Drawing No. IECEx CSA 06, IECEx Certificate of Conformity, Revision: -, Pages: 1

Drawing No. Micro 5 Updats, New Updates Sheet, Revision: -, Pages: 1

Drawing No. PIDW-10K, PID Board, Revision: K, Pages: 1

IECEX Certificate of Conformity: IECEx CSA 06.0011 dtd 2013/07/18

EC- Type Examination Certificate No: KEMA 06ATEX0206

CSA Certificate: 1775580 (80259) dated 2013/06/26

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 4-8-3/13, 4-8-4/27, 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:

UL913, ANSI/ISA S12.13.01-2000

International:

IEC 60079-0:2011, IEC 60079-1:2007-04, IEC 60079-11:2011, EN60079-0:2012, EN 60079-1:2007; EN60079-11:2012, EN60079-26:2007, CSA C22.2 No.0-10; C22.2 No.152-M1984, C22.2 No.157-M1992.

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Government:

NA

EUMED:

NA

OTHERS:

NA