1 EU-TYPE EXAMINATION CERTIFICATE

- 2 Equipment or Protective systems intended for use in Potentially
 - Explosive Atmospheres Directive 2014/34/EU
- 3 EU-Type Examination Certificate No: FM11AT
- 4 Equipment or protective system: (Type Reference and Name)
- 5 Name of Applicant:
- 6 Address of Applicant:

FM11ATEX0003X

Gassonic Observer-H Acoustic Gas Leak Detector Observer-i Acoustic Gas Leak Detector

General Monitors Inc.

26776 Simpatica Circle Lake Forrest, CA 92630 United States of America

- 7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.
- 8 FM Approvals Europe Ltd, notified body number 2809 in accordance with Article 17 of Directive 2014/34/EU of 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number:

3040159EC dated 30th November 2011

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN 60079-0:2012+A11:2013, EN 60079-1:2014, EN 60079-11:2012, EN 60079-31:2014 and EN 60529:1992+A1:2000+A2:2013

- 10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
- 11 This EU-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- 12 The marking of the equipment or protective system shall include:



II 2 G Ex db ia IIB+H₂ T6 Gb Tamb = -40° C to $+60^{\circ}$ C

II 2 D Ex tb IIIC T85°C Db Tamb = -40°C to +60°C

Richard Zammitt Certification Manager, FM Approvals Europe Ltd.

Issue date: 08th April 2019

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals Europe Ltd. One Georges Quay Plaza, Dublin. Ireland. D02 E440 T: +353 (0) 1761 4200 E-mail: <u>atex@fmapprovals.com</u> <u>www.fmapprovals.com</u>





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13 **Description of Equipment or Protective System:**

The Gassonic Observer-H Gas Leak Detector and the Observer-i Gas Leak Detector are stationary ultrasonic gas leak detectors that detect leaks from pressurized gas systems by sensing the airborne ultrasound generated by the escaping gas. This detection method is omni-directional. A microphone picks up the whistling sound of a leak and turns it into a signal. There is a transducer in the stainless steel enclosure which acts as a test source for the detector. The apparatus is built into a semi-spherical stainless steel enclosure with a circular indicator window. The microphone and the transducer are mounted outside the main enclosure. A guard protects the microphone from impact.

The enclosure has an ingress protection rating of IP66.

The optional configurations cover a HART® interface and alternative connections facilities.

Electrical ratings: U = 15 - 36 Vdc Um = 250 Vrms

805501-a Gassonic Observer-H Acoustic Gas Leak Detector a = configuration 4 or 8

805701-a Observer-i Acoustic Gas Leak Detector a = configuration 1, 2, 3, or 4

14 Specific Conditions of Use:

- 1. The Class A4-70, M6 x 1 x 20 bolts connecting the bulkhead flanges must be tightened at 9 Nm.
- 2. Consult the manufacturer if dimensional information on the flameproof joints is necessary.

15 Essential Health and Safety Requirements:

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

16 Test and Assessment Procedure and Conditions:

This EU-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Europe Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Europe Ltd's ATEX Certification Scheme.

17 Schedule Drawings

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body.

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18 Certificate History

Details of the supplements to this certificate are described below:

Date	Description
08 th December 2011	Original Issue.
25 th September 2013	Supplement 1 Report Reference: 3040159rev130827 dated 09 th September 2013. Description of the Change: Addition of model Gassonic Observer-i.
09 th January 2014	Supplement 2: Report Reference: 3040159rev121106 dated 30 th December 2013. Description of the Change: Minor electrical and clerical updates not affecting compliance.
18 th October 2016	Supplement 3: Report Reference: RR206550 dated 13 th October 2016. Description of the Change: Minor drawing changes, changed mounting bolts, removed "Gassonic" reference for the Observer-i. Updated standards and updated certificate to EU format.
27 th April 2017	Supplement 4: Report Reference: RR208817 dated 17 th April 2017. Description of the Change: Minor drawing changes.
30 th January 2019	Supplement 5: Report Reference: RR217075 dated 28 th January 2019. Description of the Change: Minor drawing changes.
08 th April 2019	Supplement 6: Description of the Change: Certificate transferred from FM Approvals Ltd., notified body no. 1725, to FM Approvals Europe Ltd., notified body no. 2809.

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