

CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** FM16US0372X
3. **Equipment:** P/N 805501-a. Gassonic Observer-H Acoustic Gas Leak Detector
(Type Reference and Name) P/N 805701-a. Observer-i Acoustic Gas Leak Detector
4. **Name of Listing Company:** General Monitors Inc.
5. **Address of Listing Company:** 26776 Simpatica Circle
Lake Forest, CA 92630
USA
6. The examination and test results are recorded in confidential report number:
3043383 dated 17th October 2011
7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:
FM Class 3600:2018, FM 3610:2010, FM 3611:2004, FM Class 3615:2018, FM Class 3616:2011,
FM Class 3810:2018, ANSI/NEMA 250:2003
8. 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.
9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

Certificate issued by:

J. E. Marquedant
Manager, Electrical Systems

28 January 2019

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

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

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

SCHEDULE



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10. Equipment Ratings:

Explosionproof with intrinsically safe sensors for use in Class I, Division 1, Groups B, C and D; Dust-ignitionproof for use in Class II/ III, Division 1, Groups E, F and G; Nonincendive for use in Class I, II, III Division 2, Groups B, C, D, E, F and G hazardous (Classified) indoor and outdoor locations; enclosure Type 4X. The ambient temperature range -40°C to +60°C with a T5 temperature class.

11. The marking of the equipment shall include:

See section 12 below.

12. **Description of Equipment:**

General – The Gassonic Observer-H and Observer-i are stationary detectors that detect leaks from pressurized gas systems by sensing the airborne acoustics produced by the gas escaping, and are intended for use in hazardous locations.

Construction – The enclosure material is 316L stainless steel.

Ratings – Supply voltage 15-36 VDC, 250 mA maximum, with a nominal analog input signal current of 4 to 20 mA.

P/N 805501-a. Gassonic Observer-H Acoustic Gas Leak Detector.

XP-IS / I / 1 / BCD / T5 Ta = -40°C to +60°C;
DIP / II, III / 1 / EFG / T5 Ta = -40°C to +60°C;
NI / I, II, III / 2 / BCDEFG/ T5 Ta = -40°C to +60°C;
Type 4X
a = configuration 1, 2, 3, 4, 5, 6, 7, 8

P/N 805701-a. Observer-i Acoustic Gas Leak Detector.

XP-IS / I / 1 / BCD / T5 Ta = -40°C to +60°C;
DIP / II, III / 1 / EFG / T5 Ta = -40°C to +60°C;
NI / I, II, III / 2 / BCDEFG/ T5 Ta = -40°C to +60°C;
Type 4X
a = configuration 1, 2, 3 or 4

13. **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 explosionproof joints is necessary.

14. **Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

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15. Schedule Drawings

A copy of the technical documentation has been kept by FM Approvals.

16. Certificate History

Details of the supplements to this certificate are described below:

Date	Description
17 th October 2011	Original Issue.
30 th December 2013	<u>Supplement 1:</u> Report Reference: Revsion Request #797-32338-283 dated November 6 th 2012. Description of the Change: Minor design changes not affecting safety.
9 th November 2016	<u>Supplement 2:</u> Report Reference: Revision Request #RR207178 dated 9 th November 2016. Description of the Change: Added the model Observer-i. Certificate updated to the new format.
28 th January 2019	<u>Supplement 3:</u> Report Reference: RR217075 dated 28 th January 2019. Description of the Change: Minor documentation revisions. Update FM 3600, 3615 and 3810 to the latest editions.

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