

[1] **EC-TYPE EXAMINATION CERTIFICATE**

[2] **Equipment or Protective System intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC**



[3] **EC-Type Examination Certificate Number: DEMKO 08 ATEX 142547X**

[4] **Equipment or Protective System: Acoustic gas leakage detector Gassonic Surveyor**

[5] **Manufacturer: General Monitors Ireland Ltd**

[6] **Address: Ballybrit Business Park, Galway, Ireland**

[7] This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8] UL International Demko A/S, notified body number 0539 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. 142547

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2006 E **EN 60079-11: 2007 E**

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

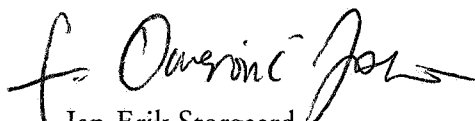
[11] This EC-Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by the certificate.

[12] The marking of the equipment or protective system shall include the following:

 **II 2G Ex ia IIC T4**

On behalf of UL International Demko A/S

Herlev, 2008-01-17


Jan-Erik Storgaard
Certification Manager

UL International Demko A/S

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Certificate: 08 ATEX 142547X

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Schedule

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EC-TYPE EXAMINATION CERTIFICATE No. DEMKO 08 ATEX 142547X

[15] Description of Equipment or protective system

The Gassonic Surveyor is an ultrasonic gas leak detector. It's designed to detect pressurized gas leaks by sensing the ultrasound characteristic for escaping pressurized gas. It consists of a stainless steel enclosure in two parts. The upper part is used for mounting and cable inlet. The lower part contains the microphone.

Nomenclature:

Gassonic Surveyor

Temperature range

The ambient temperature range is $-40\text{ }^{\circ}\text{C}$ to $+75\text{ }^{\circ}\text{C}$.

Electrical data

Intrinsically safe specifications:

Power, J1_1 & J1_2:

U_i : 28 / 17.3 V
 I_i : 120 / 220 mA
 P_i : 0.95 W
 L_i : 0.01 mH
 C_i : 10 nF

4-20 mA output J1_3 & J1-2:

U_o : = U_i
 I_o : = I_i
 P_o : = P_i
 L_o : 0.01 mH
 C_o : 22 nF

Relay, J1_4 & J1_5, input:

U_i : 28 / 17.3 V
 I_i : 120 / 220 mA
 P_i : 0.95 W
 L_i : 0.01 mH
 C_i : 22 nF

Relay, J1_4 & J1_5, output data:

U_o : = 5.9 V
 I_o : = I_i
 P_o : = P_i
 L_o : depends on barrier data
 C_o : depends on barrier data

Installation instructions

All cable entry devices and blanking elements shall be certified, suitable for the conditions of use and correctly installed.

Unused apertures shall be closed with suitable blanking elements.

For ambient temperatures below $-10\text{ }^{\circ}\text{C}$ and above $+60\text{ }^{\circ}\text{C}$ use field wiring suitable for both minimum and maximum ambient temperature.

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Report No.

Project Report No.: 142547-01 (Hazardous Location Testing)

Documents:

| Description: | Drawing No.: | Rev. Level: | Date: |
|---|--------------------------|-------------|------------|
| Connector Wire | AQ1715 | 4 | 2007-11-20 |
| System Isolator/Barrier Surveyor, 5 p | BH0002 | 1 | 2008-01-10 |
| Plug | DA6942 | 3 | 2007-11-19 |
| Plug | DA6943 | 2 | 2006-11-24 |
| Bushing vent | DB3573 | 1 | 2006-10-31 |
| Bushing $\varnothing 5,1-\varnothing 7$ | DB3574 | 1 | 2007-07-31 |
| Bushing | DB3577 | 1 | 2007-10-24 |
| Bottom 1 milled | DC0590 | 4 | 2006-09-20 |
| Top 1 milled | DC0591 | 5 | 2007-10-18 |
| EMC Box basis | DD9019 | 1 | 2007-05-31 |
| Fence Encapsulation | DD9020 | 1 | 2007-10-19 |
| Gasket middle | DS6015 | 5 | 2007-02-02 |
| Isolation Washer | DU0250 | 3 | 2004-12-10 |
| Protective plate isolation | DU0252 | 3 | 2007-02-02 |
| Protective plate | GV3026 | 5 | 2007-01-25 |
| Prepolarized 40 AB | MM4190 | 4 | 2004-06-01 |
| Bottom 1 engraved | SC4013 | 2 | 2008-01-11 |
| Gassonic Surveyor | Surveyor | 4 | 2007-07-16 |
| Gassonic Surveyor assy | Surveyor assy | 3 | 2007-05-03 |
| Surveyor blue hard compound, 2 p | UC5374 | 1 | 2007-12-10 |
| PCB One Tough gel | UC5375 | 1 | 2007-12-10 |
| O-ring 12,00-1,00 70 NBR | YJ0915 | 1 | 2007-04-01 |
| O-ring 10,00-2,00 70 NBR | YJ0919 | 1 | 2007-04-01 |
| Sealing Washer M20/ $\varnothing 27$ | YJ3111A | 1 | 2005-01-14 |
| PCB One | ZD2023 | 2 | 2007-03-05 |
| Block DIAGRAM | PCB One | 1.20 | 2007-10-22 |
| Interface | PCB One | 1.20 | 2007-10-22 |
| P. 3 Microphone input | PCB One | 1.20 | 2007-10-22 |
| P.4 CPU | PCB One | 1.20 | 2007-10-22 |
| P.5 Power Supply | PCB One | 1.20 | 2007-10-22 |
| P.7 Analog output | PCB One | 1.20 | 2007-10-22 |
| P.8 Relay | PCB One | 1.20 | 2007-10-22 |
| Bill of Materials | PCB One | 1.30 | 2008-01-10 |
| PCB Drawings | PCB_surv1_20x _20.pcb | 1.20 | 2007-10-22 |

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[17] Special conditions for safe use:

- Installation shall be in accordance with EN60079-14 and -25 and relevant local regulations.
- The Surveyor shall be supplied from an isolated, certified barrier/power supply.

[18] Essential Health and Safety Requirements

Concerning ESR this Schedule verifies compliance with the Ex standards only. The manufacturer's Declaration of Conformity declares compliance with other relevant Directives.

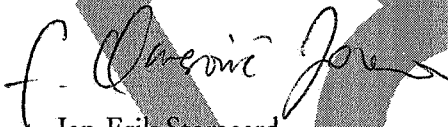
Additional information

The Surveyor has in addition passed the tests for Ingress Protection to IP 66 in accordance with EN60529: 1991/A1 2001

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in ANNEX III to Directive 94/9/EC of the European Parliament and the Council of 23 March 1994.

On behalf of UL International Demko A/S

Herlev, 2008-01-17



Jan-Erik Storgaard
Certification Manager

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