

EU-TYPE EXAMINATION CERTIFICATE



- [1] **EU-TYPE EXAMINATION CERTIFICATE**
- [2] **Equipment or Protective System intended for use
in Potentially Explosive Atmospheres
Directive 2014/34/EU**
- [3] EU-Type Examination Certificate Number: **DEMKO 18 ATEX 1866X Rev. 0**
- [4] Product: **Searchzone Sonik – Ultrasonic Gas Leak Detector**
- [5] Manufacturer: **Honeywell Analytics Limited**
- [6] Address: **Hatch Pond House, 4 Stinsford Road, Nuffield Estate, Poole, Dorset, BH17 0RZ, United Kingdom**
- [7] This product 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 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to design and construction of products 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. **4787832573.7.1**

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0:2012+A11:2013
EN 60079-7:2015**

**EN 60079-1:2014
EN 60079-11:2012**

EN 60079-31:2014

- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to special conditions for safe use specified in the schedule to this certificate.
- [11] This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by the certificate.
- [12] The marking of the product shall include the following:

**II 2 G Ex db ia IIC T4 Gb
Ex db eb ia IIC T4 Gb**

II 2 D Ex tb IIIC T100°C Db

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2018-10-29



Notified Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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Schedule
EU-TYPE EXAMINATION CERTIFICATE No.
DEMKO 18 ATEX 1866X Rev. 0

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[15] Description of Product

The Searchzone Sonik has been assessed as dust protected, flameproof, increased safety and intrinsically safe.

The wiring enclosure contains Increased safety terminals and has been assessed as increased safety, flameproof and dust protected. Integral threaded entries in the wiring enclosure allow field wiring of the equipment

The main enclosure contains IS and non-IS electronics and has been assessed as flameproof and dust protected. An antenna protrudes from the main enclosure for Bluetooth connectivity and is protected by Ex ia blocking capacitors.

The front housing contains IS electronics and has been assessed as dust protected.

Internal and external earthing points are provided. Mounting the equipment is enabled by a proprietary Honeywell bracket, provided with the equipment.

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exception 1) to the scope of EN 60079-28:2015.

Temperature range

The ambient temperature range is $-55^{\circ}\text{C} \leq T_{\text{amb}} \leq 75^{\circ}\text{C}$

Electrical data

Maximum input range: 18-32Vdc (24 Vdc nominal).
Maximum input power: 3 Watts nominal, 18 Watts with heaters on.
Relay contact ratings: Max. 32 Vdc/ac (Ex eb only).
Max. 250Vac / 32Vdc (Ex db / Ex tb)
Max. 2 A resistive

Intrinsically safe specifications:

U_m : 250 Vrms

Routine tests

Routine hydrostatic pressure tests are not required, as the enclosures have been successfully tested at four times the reference pressure.

The manufacturer shall perform routine dielectric strength tests on the parts referenced at the voltages specified and maintain for at least 60 seconds as specified in EN 60079-7 Clause 7.1 as shown below, alternatively, tests shall be carried out at 1,2 times the test voltage specified below and maintained for at least 100 ms. There shall be no breakdown of the insulation.

Voltage Applied Between	Test voltage (V)
All circuits to ground	500
All circuits to ground	1500
Relay 1 to 2	1500
Relay 1 to 3	1500
Relay 2 to 3	1500
4-20mA output to 18-32 Vdc input, 0V, RS485 +ve and -ve	1350
24Vdc, 0V, 4-20mA output, RS485 +ve and -ve to all relays	3000

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Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this EU-Type Examination Certificate.

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Specific conditions of use:

- Flamepaths are not to be repaired
- The equipment shall be connected to circuits providing Overvoltage Category II or better according to EN 60664-1
- To minimize the risk of electrostatic charge, provisions shall be made for an adequate grounding of the equipment, including accessories (e.g. sunshade). Equipment shall be installed in a manner so that accidental discharge shall not occur.

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Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

The Searchzone Sonik has in addition to enclosure tests for the type of hazardous location protection, passed the tests for Ingress Protection to IP66/67 in accordance with EN60529:1991+A1:2000+A2:2013.

Honeywell

The trademark will be used as the company identifier on the marking label.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.