



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX CML 23.0051X** Page 1 of 3 [Certificate history:](#)
Status: **Current** Issue No: 0
Date of Issue: 2023-08-02
Applicant: **Sensonics**
HP4 1EF
United Kingdom
United Kingdom
Equipment: **QZA Accelerometer**
Optional accessory:
Type of Protection: **Intrinsic Safety "i"**
Marking: **Ex ia IIB T5 Ga**
-20°C to +75°C

Approved for issue on behalf of the IECEx
Certification Body:

Ben Trafford

Position:

Certification Officer

Signature:
(for printed version)

Date:
(for printed version)

2023-08-02

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

Eurofins E&E CML Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom





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Manufacturer: **Sensonics**
HP4 1EF
United Kingdom
United Kingdom

Manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[GB/CML/ExTR23.0075/00](#)

Quality Assessment Report:

[GB/BAS/QAR17.0019/04](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

QZA Accelerometer

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to Annex

Annex:

[IECEX CML 23.0051X Annex.pdf](#)

Annexe to: IECEx CML 23.0051X Issue 1
Applicant: Sensonics Ltd
Apparatus: QZA Accelerometer

Description

The Model QZA is an accelerometer designed to measure vibration and provide an electrical output proportional to the vibration. It consists of a piezoelectric crystal and an encapsulated PCB housed in a stainless steel enclosure. Electrical connections are made by either a connector, a flying lead or cables within a conduit.

The equipment has the following safety parameters,

Input Parameters

QZA

	Connector	With Integral Cable
$U_i = 28V$	$C_i = 20 \text{ nF}$	$C_i^* = 20 \text{ nF} + 200 \text{ pF/m}$
$I_i = 0.005 \text{ A}$	$L_i = 0$	$L_i = 0 + 1 \text{ uH/m}$
$P_i = 1 \text{ W}$		

* Subject to the following maximum limits:

Group IIB	627 nF
Group IIA	2.05 μF

Conditions of Manufacture

The following are conditions of manufacture

- i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.





Specific Conditions of Use

The following relate to the installation and/or safe use of the equipment:

- i. The equipment may be supplied with an integral cable attached, the cable has the following parameters:

$$C_c \leq 200 \text{ pF/m}$$

$$L_c \leq 1 \text{ }\mu\text{H/m}$$

The user shall take into account the length of the integral cable and the above stated parameters in conjunction with any additional field wiring.