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 ETL 19.0002X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 0	
Date of Issue:	2019-02-04		
Applicant:	**PCB Piezotronics, Incorporated.** 3425 Walden Avenue, Depew, NY 14043-2495 **United States of America**		
Equipment:	**High Temperature Vibration Sensors: EX357 SERIES**		
Optional accessory:			
Type of Protection:	**Intrinsic Safety 'ia'; Type of Protection "nA"**		
Marking:	Ex ia IIC T6…770°C Ga Ex nA IIC T6…770°C Ga IECEx ETL 19.0002X ***-55°C ≤ Tamb ≤ +755°C***		

Approved for issue on behalf of the IECEx Certification Body:	**Kevin J. Wolf**
Position:	**Certification Officer**
Signature: (for printed version)	
Date: (for printed version)	

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:

Intertek
3933 US Route 11 South
Cortland NY 13045-2995
United States of America

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Manufacturer: **PCB Piezotronics, Incorporated.**
3425 Walden Avenue, Depew, NY 14043-2495
United States of America

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 60079-0:2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

IEC 60079-15:2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:4

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:

US/ETL/ExTR19.0003/00

Quality Assessment Report:

NL/DEK/QAR14.0004/03

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The EX357 Series products are High Temperature Vibration Sensors. There are various Models based on different construction combinations: family type, connector type, cable type, and/or cable length. All models have similar sensing elements: incorporated Piezo element (capacitive) for high temperatures. The vibration sensors provide a charge output when subjected to mechanical motion. The sensors have nickel-based alloy housings.

Models:

EX357XYYY/MNNNZZ Series High Temperature Sensor
Where X: family type (assigned as a letter A to Z)
YYY: variation type (sequential number that together with the letter X make up the model number).
MNNNZZ: specifies connectors type and cable length - Optional
“M”: is present only for metric length for integral cable option - Optional
“NNN”: specifies cable length (100 feet or 31 meters) (three

Temperature classification in function of the operating temperature:

T6 at ambient + 75°C

T5 at ambient + 90°C

T4 at ambient + 125'C

T3 at ambient + 190°C

T2 at ambient + 285°C

Ti at ambient + 435°C

770°C at ambient 755°C

SPECIFIC CONDITIONS OF USE: YES as shown below:

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Ex ia:

The apparatus must only be connected to a certified associated intrinsically safe equipment. This combination must be compatible regarding intrinsic safety rules (see electrical parameters). The apparatus shall be connected according to drawing 69892.

1. The mounting of the apparatus into an installation must be carried out in such a way that metallic body of the accelerometer and cable shield are reliably connected to the system earth.
2. The cable used must have an operating temperature compatible with the environment in which the accelerometer is installed.

Device complies with the requirements of the dielectric test per clause 6.3.13 of standard IEC 60079-11.

Ex nA:

1. The apparatus must be only connect to an equipment whose electrical parameters are compatible with the electrical parameters. The apparatus shall be connected according to drawing 68438 (page 2/2). The connected cable and the connector must provide a minimum ingress protection of IP54, when assessed according to IEC 60079-0 and IEC 60079-15. Unused connector must be fitted with an appropriately rated blanking cover.

Routine tests:

Dielectric Strength Test Per IEC 60079-15

Annex:

Annex 1 IECEx ETL 19.0002.pdf

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Certificate No:	IECEx ETL 19.0002X	
Annex No. 1		

Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
*TECHNICAL FILE INTRINSIC SAFETY IECEx ia	70094	B	25 Jan. 19
*DESCRIPTIVE NOTICE FOR THE CERTIFICATION OF IMI VIBRATION SENSORS	70099	NR	1/17/19
*ASSEMBLY APPROVAL EX357XYYY/MNNNZZ SERIES HIGH TEMP SENSOR	70051	NR	1/31/19
*APPROVAL EX357XYYY/MNNNZZ INTERCONNECTIONS	69892	NR	1/30/19
*XTAL APPROVAL DRAWING	69894	NR	9/21/18
*INSTRUCTIONS FOR USE – EX357XYYY/MNNNZZ Accelerometer Series	70101	NR	No Date
*TECHNICAL FILE INTRINSIC SAFETY IECEx nA	70095	B	25 Jan. 19
*DESCRIPTIVE NOTICE FOR THE CERTIFICATION OF IMI VIBRATION SENSORS	70100	NR	1/17/19

*Note: An * is included before the title of documents that are new or revised.*

Certificate issued by:

Intertek Testing Services NA Inc.
3933 US Route 11
Cortland NY 13045-2995
United States of America