



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEX LCIE 18.0007X Issue No: 0 Certificate history:
Issue No. 0 (2018-02-23)

Status: **Current** Page 1 of 3

Date of Issue: **2018-02-23**

Applicant: **PCB Piezotronics**
3425 Walden avenue
Depew, New York 14043
United States of America

Equipment: **Triaxial high temperature accelerometers - Type : EX356YYYY/MNNZZ**
Optional accessory:

Type of Protection: **Ex nA**

Marking:
Ex nA IIC T6...482°C Gc
Refer to the attachment for full marking.

Approved for issue on behalf of the IECEX
Certification Body:

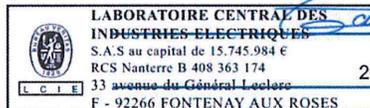
Julien Gauthier

Position:

Certification Officer

Signature:
(for printed version)

Date:



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 the [Official IECEX Website](http://www.iecex.com).

Certificate issued by:

Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
FR-92260 Fontenay-aux-Roses
France





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Manufacturer: **PCB Piezotronics**
3425 Walden avenue
Depew, New York 14043
United States of America

Additional Manufacturing location(s):

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

*This Certificate **does not** indicate compliance with electrical 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:

[FR/LCIE/ExTR18.0009/00](#)

Quality Assessment Report:

[NL/DEK/QAR14.0004/02](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Triaxial high temperature accelerometer is composed of a nickel-based alloy enclosure with a set of piezoelectric crystals, connectors and cables.

There are two versions:

1. Triaxial accelerometer with connectors.
2. Triaxial accelerometer with integral cables.

Refer to the attachment for full description.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The electrical parameters of power supply can be connected to the triaxial high temperature accelerometer must not exceed the electrical parameters defined.
2. Operating ambient temperature: -55°C to +472°C.
3. For final installation, the triaxial high temperature accelerometer must be connected in compliance with requirements of IEC 60079-14 standard, providing and maintaining degree of protection at least IP54.
4. The mounting of the apparatus into an installation must be carried out in such a way that metallic body of the triaxial high temperature accelerometer and cable shield are reliably connected to the system earth.
5. The apparatus must be installed per drawing n°62991 rev. NR dated 2018/02/02.
6. The cable used must have an operating temperature compatible with the environment in which the equipment is installed.

Annex:

[IECEX LCIE 18.0007X issue 00 Annex 01-PCB Piezotronics .pdf](#)



Annex 01 to Certificate IECEX LCIE 18.0007X issue 00



FULL EQUIPMENT DESCRIPTION

Triaxial high temperature accelerometer is composed of a nickel-based alloy enclosure with a set of piezoelectric crystals, connectors and cables.

There are two versions :

- 1) Triaxial accelerometer with connectors.
- 2) Triaxial accelerometer with integral cables.

Title	Reference	Rev. Level	Date
Technical file	62980	NR	2018/02/02
Instruction manual	67111		

MARKING

PCB Piezotronics

Address: ...

Type : EX356XYYY/MNNZZ (1)

Serial number: ...

Year of construction: ...

Ex nA IIC T6...482°C Gc (2)

IECEX LCIE 18.0007 X

$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +472^{\circ}\text{C}$

$U \leq \dots\text{V}, I \leq \dots\text{mA}, P \leq \dots\text{mW}$ (3)

(1): completed with type designation.

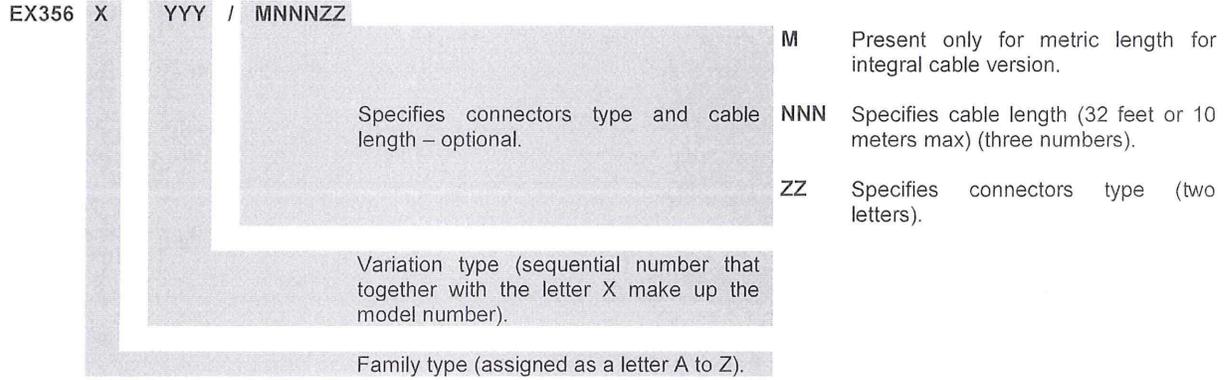
(2): see temperatures table.

(3): completed by electrical parameters.

Temperatures table

Ambient temperature	Temperature class
$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +80^{\circ}\text{C}$	T6
$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +95^{\circ}\text{C}$	T5
$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +130^{\circ}\text{C}$	T4
$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +195^{\circ}\text{C}$	T3
$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +290^{\circ}\text{C}$	T2
$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +440^{\circ}\text{C}$	T1
$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +472^{\circ}\text{C}$	482°C

RANGE DETAILS



RATINGS

Version	Electrical parameters
Connectors	$U \leq 28 \text{ V}, I \leq 120 \text{ mA}, P \leq 1 \text{ W}$ or $U \leq 15 \text{ V}, I \leq 900 \text{ mA}, P \leq 1 \text{ W}$
Integral cables	

ROUTINE TESTS

According to clause 23.2.1 of IEC 60079-15 standard, each apparatus must be submitted to a dielectric strength test under 500 Volts during 60s.

APPARATUS OVERVIEW

