



Service, Repair, and Return Policies and Instructions
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The information contained in this document supersedes all similar information that may be found elsewhere in this manual.

Service – Due to the sophisticated nature of the sensors and associated instrumentation provided by PCB Piezotronics, user servicing or repair is not recommended and, if attempted, may void the factory warranty. Routine maintenance, such as the cleaning of electrical connectors, housings, and mounting surfaces with solutions and techniques that will not harm the physical material of construction, is acceptable. Caution should be observed to ensure that liquids are not permitted to migrate into devices that are not hermetically sealed. Such devices should only be wiped with a dampened cloth and never submerged or have liquids poured upon them.

Repair – In the event that equipment becomes damaged or ceases to operate, arrangements should be made to return the equipment to PCB Piezotronics for repair. User servicing or repair is not recommended and, if attempted, may void the factory warranty.

Calibration – Routine calibration of sensors and associated instrumentation is recommended as this helps build confidence in measurement accuracy and acquired data. Equipment calibration cycles are typically established by the users own quality regimen. When in doubt about a calibration cycle, a good “rule of thumb” is to recalibrate on an annual basis. It is

also good practice to recalibrate after exposure to any severe temperature extreme, shock, load, or other environmental influence, or prior to any critical test.

PCB Piezotronics maintains an ISO-9001 certified metrology laboratory and offers calibration services, which are accredited by A2LA to ISO/IEC 17025, with full traceability to SI through N.I.S.T. In addition to the normally supplied calibration, special testing is also available, such as: sensitivity at elevated or cryogenic temperatures, phase response, extended high or low frequency response, extended range, leak testing, hydrostatic pressure testing, and others. For information on standard recalibration services or special testing, contact your local PCB Piezotronics distributor, sales representative, or factory customer service representative.

Returning Equipment – *Following these procedures will ensure that your returned materials are handled in the most expedient manner.* Before returning any equipment to PCB Piezotronics, contact your local distributor, sales representative, or factory customer service representative to obtain a Return **Warranty, Service, Repair, and Return Policies and Instructions** Materials Authorization (RMA) Number. This RMA number should be clearly marked on the outside of all package(s) and on the packing

list(s) accompanying the shipment. A detailed account of the nature of the problem(s) being experienced with the equipment should also be included inside the package(s) containing any returned materials.

A Purchase Order, included with the returned materials, will expedite the turn-around of serviced equipment. It is recommended to include authorization on the Purchase Order for PCB to proceed with any repairs, as long as they do not exceed 50% of the replacement cost of the returned item(s). PCB will provide a price quotation or replacement recommendation for any item whose repair costs would exceed 50% of replacement cost, or any item that is not economically feasible to repair. For routine calibration services, the Purchase Order should include authorization to proceed and return at current pricing, which can be obtained from a factory customer service representative.

Contact Information – International customers should direct all inquiries to their local distributor or sales office. A

complete list of distributors and offices can be found at www.pcb.com. Customers within the United States may contact their local sales representative or a factory customer service representative. A complete list of sales representatives can be found at www.pcb.com. Toll-free telephone numbers for a factory customer service representative, in the division responsible for this product, can be found on the title page at the front of this manual. Our ship to address and general contact numbers are:

PCB Piezotronics, Inc.
3425 Walden Ave.
Depew, NY14043 USA
Toll-free: (800) 828-8840
24-hour SensorLineSM: (716) 684-0001
Website: www.pcb.com
E-mail: info@pcb.com



PCB工业监视和测量设备 - 中国RoHS2公布表
 PCB Industrial Monitoring and Measuring Equipment - China RoHS 2 Disclosure Table

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
住房	○	○	○	○	○	○
PCB板	X	○	○	○	○	○
电气连接器	○	○	○	○	○	○
压电晶体	X	○	○	○	○	○
环氧	○	○	○	○	○	○
铁氟龙	○	○	○	○	○	○
电子	○	○	○	○	○	○
厚膜基板	○	○	X	○	○	○
电线	○	○	○	○	○	○
电缆	X	○	○	○	○	○
塑料	○	○	○	○	○	○
焊接	X	○	○	○	○	○
铜合金/黄铜	X	○	○	○	○	○
本表格依据 SJ/T 11364 的规定编制。						
○：表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。						
X：表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。						
铅是欧洲RoHS指令2011/65/ EU附件三和附件四目前由于允许的豁免。						

CHINA RoHS COMPLIANCE

Component Name	Hazardous Substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Chromium VI Compounds (Cr(VI))	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
Housing	O	O	O	O	O	O
PCB Board	X	O	O	O	O	O
Electrical Connectors	O	O	O	O	O	O
Piezoelectric Crystals	X	O	O	O	O	O
Epoxy	O	O	O	O	O	O
Teflon	O	O	O	O	O	O
Electronics	O	O	O	O	O	O
Thick Film Substrate	O	O	X	O	O	O
Wires	O	O	O	O	O	O
Cables	X	O	O	O	O	O
Plastic	O	O	O	O	O	O
Solder	X	O	O	O	O	O
Copper Alloy/Brass	X	O	O	O	O	O

This table is prepared in accordance with the provisions of SJ/T 11364.

O: Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572.

X: Indicates that said hazardous substance contained in at least one of the homogeneous materials for this part is above the limit requirement of GB/T 26572.

Lead is present due to allowed exemption in Annex III or Annex IV of the European RoHS Directive 2011/65/EU.

DOCUMENT NUMBER: 21354

DOCUMENT REVISION: **D**

ECN: 46162

2

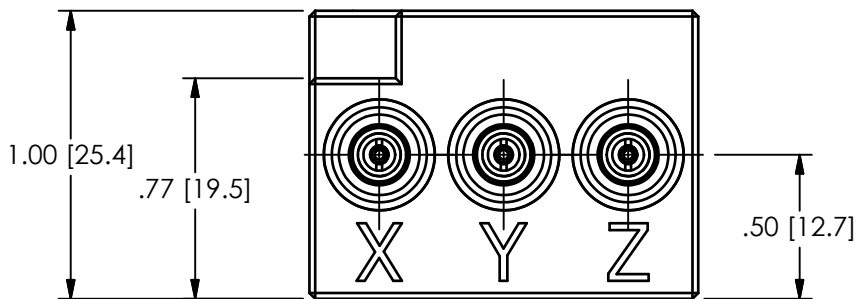
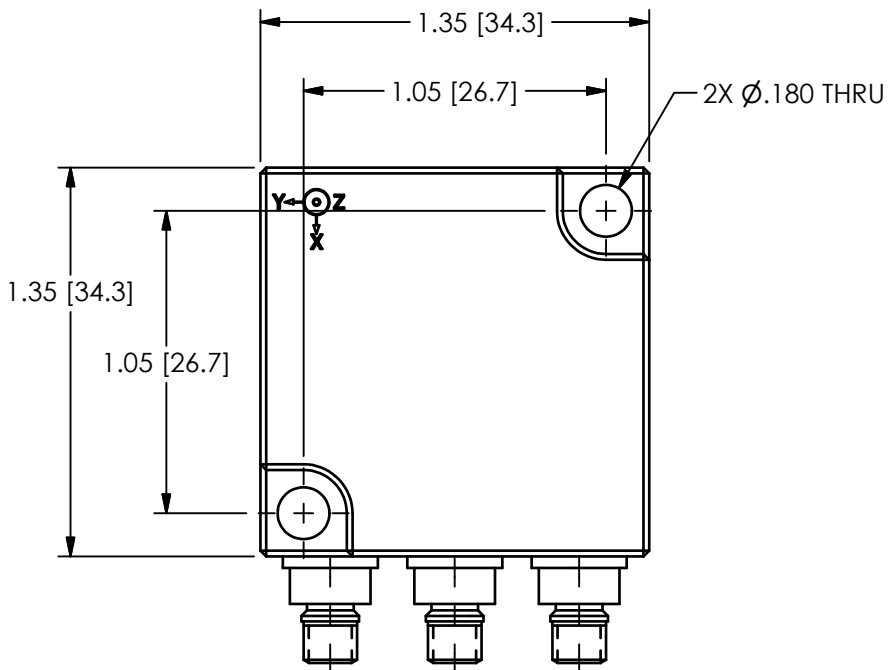
1

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REVISIONS

REV	DESCRIPTION	DIN
NR	RELEASED TO DRAFTING	48007

62485



UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:

DRAWN		CHECKED		ENGINEER	
KRM	8/9/18	KRM	8/9/18	JJD	8/9/18

PCB PIEZOTRONICS™

3425 WALDEN AVE. DEPEW, NY 14043
(716) 684-0001 E-MAIL: sales@pcb.com

CODE IDENT. NO. 52681	DWG. NO. 62485
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SCALE: 1.5X	SHEET 1 OF 1
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TITLE
 OUTLINE DRAWING
 MODEL 356A73
 TRIAXIAL ACCELEROMETER

2

1





LCIE

ATTESTATION D'EXAMEN UE DE TYPE EU TYPE EXAMINATION CERTIFICATE



1 Version : 00

LCIE 18 ATEX 3009 X

Issue : 00

Directive 2014/34/UE

Directive 2014/34/EU

2 Appareil ou Système de Protection destiné à être utilisé en Atmosphères Explosibles

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres

3 Produit :
Accéléromètres triaxiaux haute température

Product :
Triaxial high temperature accelerometers

Type: EX356XXXX/MNNZZ

4 Fabricant :

Manufacturer :

PCB Piezotronics

5 Adresse :

Address :

3425 Walden avenue
Depew, New York 14043
USA

6 Ce produit et ses variantes éventuelles acceptées sont décrits dans l'annexe de la présente attestation et dans les documents descriptifs cités en référence.

This product any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

7 Le LCIE, Organisme Notifié sous la référence 0081 conformément à l'article 17 de la directive 2014/34/UE du Parlement européen et du Conseil du 26 février 2014, certifie que ce produit est conforme aux Exigences Essentielles de Sécurité et de Santé pour la conception et la construction de produits destinés à être utilisés en atmosphères explosibles, données dans l'annexe II de la Directive.

LCIE, Notified Body number 0081 in accordance with article 17 of the Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014 certifies that product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

Les résultats des vérifications et essais figurent dans le(s) rapport(s) confidentiel(s) N° :

The examination and test results are recorded in confidential report(s) N°:

138887-679774-01

8 Le respect des Exigences Essentielles de Sécurité et de Santé est assuré par la conformité à :

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

EN 60079-0:2012 + A11:2013
EN 60079-11:2012

9 Le signe « X » lorsqu'il est placé à la suite du numéro de l'attestation, indique que cet appareil est soumis aux conditions particulières d'utilisation, mentionnées dans l'annexe de cette attestation.

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

10 Cette Attestation d'Examen UE de Type concerne uniquement la conception et la construction du produit spécifié. Des exigences supplémentaires de la directive sont applicables pour la fabrication et la fourniture du produit. Ces dernières ne sont pas couvertes par la présente attestation.

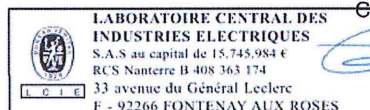
This EU Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

11 Le marquage du produit est mentionné dans l'annexe de cette attestation.

The marking of the product is specified in the schedule to this certificate.

Fontenay-aux-Roses, le 23 février 2018

Responsable de Certification



Certification Officer
Julien Gauthier

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CERT-ATEX-FORM 04 Rev. 02

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LCIE

Laboratoire Central des Industries Electriques

Une société de Bureau Veritas

33 Avenue du Général Leclerc

92260 Fontenay-aux-Roses

FRANCE

WWW.LCIE.FR

12 DESCRIPTION DU PRODUIT

L'accéléromètre triaxial haute température est composé d'une enveloppe en alliage à base de nickel avec un ensemble de cristaux piézoélectriques, de connecteurs et de câbles.

Il y a deux versions:

- 1) Accéléromètre triaxial avec connecteurs.
- 2) Accéléromètre triaxial avec câbles intégrés.

Paramètres spécifiques des modes de protection concernés :

DESCRIPTION OF PRODUCT

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.

Specific parameters of the concerned protection modes:

Version <i>Version</i>	Paramètres électriques de sécurité intrinsèque <i>Intrinsic safety electrical parameters</i>
Connecteurs / <i>Connectors</i>	U_i : 28 V, I_i : 120 mA, P_i : 1 W, C_i : 750 pF, L_i : 0 ou/ou U_i : 15 V, I_i : 900 mA, P_i : 1 W, C_i : 750 pF, L_i : 0
Câbles intégrés / <i>Integral cables</i>	U_i : 28 V, I_i : 120mA, P_i : 1W, C_i : 6 nF, L_i : 30µH ou/ou U_i : 15 V, I_i : 900mA, P_i : 1W, C_i : 6 nF, L_i : 30µH

DETAIL DE LA GAMME

EX356 X YYY / MNNZZ

Spécifie le type de connecteur et la longueur du câble – en option.

Specifies connectors type and cable length – optional.

Type de variation (numéro séquentiel qui avec la lettre X, constitue le numéro de modèle).

Variation type (sequential number that together with the letter X make up the model number).

Type de famille (désigné sous la forme d'une lettre A à Z).

Family type (assigned as a letter A to Z).

RANGE DETAILS

M Présent uniquement pour longueur métrique pour la version de câble intégral.

Present only for metric length for integral cable version.

NNN Spécifie la longueur du câble (32 pieds ou 10 mètres max) (trois chiffres).

Specifies cable length (32 feet or 10 meters max) (three numbers).

ZZ Spécifie le type de connecteurs (deux lettres).

Specifies connectors type (two letters).

MARQUAGE

Le marquage du produit doit comprendre :

PCB Piezotronics
 Adresse : ...
 Type : EX356XXXX/MNNZZ (1)
 N° de fabrication : ...
 Année de fabrication : ...
 Ⓜ II 1 G
 Ex ia IIC T6...482°C Ga (2)
 LCIE 18 ATEX 3009 X
 $-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +472^{\circ}\text{C}$
 $U_i: \dots\text{V}; I_i: \dots\text{mA}; P_i: \dots\text{mW}; C_i: \dots\ \mu\text{F}; L_i: \dots\ \mu\text{H}$ (3)
 (1): complété par la désignation de type.
 (2): voir le tableau des températures.
 (3): complétées par les paramètres électriques de sécurité intrinsèque de la version concernée.

Le marquage peut être réduit ainsi :

PCB Piezotronics
 Adresse : ...
 Type : EX356XXXX/MNNZZ
 N° de fabrication : ...
 Année de fabrication : ...
 Ⓜ II 1 G
 Ex ia IIC T6...482°C Ga
 LCIE 18 ATEX 3009 X
 $U_i: \dots\text{V}; I_i: \dots\text{mA}; P_i: \dots\text{mW}; C_i: \dots\ \mu\text{F}; L_i: \dots\ \mu\text{H}$

Tableau des températures / *Temperatures table*

Température ambiante <i>Ambient temperature</i>	Classe de température <i>Temperature class</i>
$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +80^{\circ}\text{C}$	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

L'appareil doit également comporter le marquage normalement prévu par les normes de construction qui le concernent sous la responsabilité du fabricant.

MARKING

The marking of the product shall include the following:

PCB Piezotronics
 Address : ...
 Type : EX356XXXX/MNNZZ (1)
 Serial number : ...
 Year of construction : ...
 Ⓜ II 1 G
 Ex ia IIC T6...482°C Ga (2)
 LCIE 18 ATEX 3009 X
 $-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +472^{\circ}\text{C}$
 $U_i: \dots\text{V}; I_i: \dots\text{mA}; P_i: \dots\text{mW}; C_i: \dots\ \mu\text{F}; L_i: \dots\ \mu\text{H}$ (3)
 (1): completed with type designation.
 (2): see temperatures table.
 (3): completed by intrinsic safety electrical parameters of version concerned.

The marking can be reduce as following:

PCB Piezotronics
 Address : ...
 Type : EX356XXXX/MNNZZ
 Serial number : ...
 Year of construction : ...
 Ⓜ II 1 G
 Ex ia IIC T6...482°C Ga
 LCIE 18 ATEX 3009 X
 $U_i: \dots\text{V}; I_i: \dots\text{mA}; P_i: \dots\text{mW}; C_i: \dots\ \mu\text{F}; L_i: \dots\ \mu\text{H}$

The equipment shall also bear the usual marking required by the product standards applying to such equipment under the manufacturer responsibility.

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ATTESTATION D'EXAMEN UE DE TYPE - ANNEXE

EU TYPE EXAMINATION CERTIFICATE - SCHEDULE

1 Version : 00

LCIE 18 ATEX 3009 X

Issue : 00

13 CONDITIONS PARTICULIERES D'UTILISATION

- a. L'appareil ne doit être raccordé qu'à des matériels de sécurité intrinsèque certifiés. Cette association doit être compatible vis-à-vis de la sécurité intrinsèque.
- b. Température ambiante d'utilisation : -55°C à +472°C.
- c. Le montage de l'appareil dans une installation doit être effectué de telle sorte que le corps métallique de l'accéléromètre triaxial à haute température et le blindage du câble soient reliés de manière fiable à la terre du système.
- d. L'appareil devra être installé comme défini dans le plan n°62991 rév. NR du 02/02/2018.
- e. Le câble utilisé doit avoir une température d'utilisation compatible avec l'environnement dans lequel l'appareil est installé.

SPECIFIC CONDITIONS OF USE

The apparatus must only be connected to associated intrinsically safe certified equipment. This combination must be compatible as regard the intrinsic safety rules.

Operating ambient temperature: -55°C to +472°C.

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.

The apparatus must be installed per drawing n°62991 rev. NR dated 2018/02/02.

The cable used must have an operating temperature compatible with the environment in which the equipment is installed.

14 EXIGENCES ESSENTIELLES DE SANTE ET DE SECURITE

Couvertes par les normes listées au point 8.

ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

Covered by standards listed at 8.

15 DOCUMENTS DESCRIPTIFS

DESCRIPTIVE DOCUMENTS

N°	Description	Reference	Rev.	Date	Page(s)
1.	Dossier technique / <i>Technical file</i>	62977	NR	2018/02/02	11
2.	Notice d'instruction / <i>Instruction manual</i>	67111	---	---	3

16 INFORMATIONS COMPLEMENTAIRES

Essais individuels

Néant.

Conditions de certification

Les détenteurs d'attestations d'examen UE de type doivent également satisfaire les exigences de contrôle de production telles que définies à l'article 13 de la Directive 2014/34/UE.

ADDITIONAL INFORMATION

Routine tests

None.

Conditions of certification

Holders of EU type examination certificates are also required to comply with the production control requirements defined in article 13 of Directive 2014/34/EU.

17 DETAILS DES MODIFICATIONS

Version 00 : Evaluation de l'accéléromètre triaxial à haute température type EX356XYYY/MNNZZ selon les normes EN 60079-0:2012+A11:2013 et EN 60079-11:2012.

DETAILS OF CHANGES

Issue 00 : Assessment of triaxial high temperature accelerometer type EX356XYYY/MNNZZ according to EN 60079-0:2012+A11:2013 and EN 60079-11:2012 standards.

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ATTESTATION D'EXAMEN DE TYPE

TYPE EXAMINATION CERTIFICATE



1 Version : 00

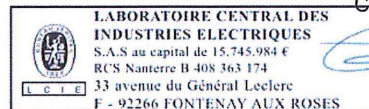
LCIE 18 ATEX 1004 X

Issue : 00

- | | | |
|--|---|---|
| 2 | Directive 2014/34/UE
Appareil ou Système de Protection destiné à être utilisé en Atmosphères Explosibles | Directive 2014/34/EU
Equipment or Protective System Intended for use in Potentially Explosive Atmospheres |
| 3 | Produit :
Accéléromètres triaxiaux haute température | Product :
Triaxial high temperature accelerometers |
| Type: EX356XXXX/MNNZZ | | |
| 4 | Fabricant : | Manufacturer : |
| 5 | Adresse : | Address : |
| PCB Piezotronics
3425 Walden avenue
Depew, New York 14043
USA | | |
| 6 | Ce produit et ses variantes éventuelles acceptées sont décrits dans l'annexe de la présente attestation et dans les documents descriptifs cités en référence. | This product any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to. |
| 7 | Le LCIE certifie que ce produit est conforme aux Exigences Essentielles de Sécurité et de Santé pour la conception et la construction de produits destinés à être utilisés en atmosphères explosibles, données dans l'annexe II de la Directive.
Les résultats des vérifications et essais figurent dans le(s) rapport(s) confidentiel(s) N° : | LCIE certifies that product has been found to comply with the Essential Health and Safety Requirements relating to the 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(s) N° : |
| 138887-679774-02 | | |
| 8 | Le respect des Exigences Essentielles de Sécurité et de Santé est assuré par la conformité à : | Compliance with the Essential Health and Safety Requirements has been assured by compliance with : |
| EN 60079-0:2012 + A11:2013
EN 60079-15:2010 | | |
| 9 | Le signe « X » lorsqu'il est placé à la suite du numéro de l'attestation, indique que cet appareil est soumis aux conditions particulières d'utilisation, mentionnées dans l'annexe de cette attestation. | If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate. |
| 10 | Cette Attestation d'Examen de Type concerne uniquement la conception et la construction du produit spécifié.
Des exigences supplémentaires de la directive sont applicables pour la fabrication et la fourniture du produit. Ces dernières ne sont pas couvertes par la présente attestation. | This 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 this certificate. |
| 11 | Le marquage du produit est mentionné dans l'annexe de cette attestation. | The marking of the product is specified in the schedule to this certificate. |

Fontenay-aux-Roses, le 23 février 2018

Responsable de Certification



Certification Officer
Julien Gauthier

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LCIE

Laboratoire Central des Industries Electriques

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33 Avenue du Général Leclerc

92260 Fontenay-aux-Roses

FRANCE

WWW.LCIE.FR

12 DESCRIPTION DU PRODUIT

L'accéléromètre triaxial haute température est composé d'une enveloppe en alliage à base de nickel avec un ensemble de cristaux piézoélectriques, de connecteurs et de câbles.

Il y a deux versions :

- 1) Accéléromètre triaxial avec connecteurs.
- 2) Accéléromètre triaxial avec câbles intégrés.

Paramètres spécifiques des modes de protection concernés :

DESCRIPTION OF PRODUCT

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.

Specific parameters of the concerned protection modes:

Version <i>Version</i>	Paramètres électriques <i>Electrical parameters</i>
Connecteurs / <i>Connectors</i>	U ≤ 28 V, I ≤ 120 mA, P ≤ 1 W ou/or
Câbles intégrés / <i>Integral cables</i>	U ≤ 15 V, I ≤ 900 mA, P ≤ 1 W

DETAIL DE LA GAMME

RANGE DETAILS

EX356 X YYY / MNNZZ

Spécifie le type de connecteur et la longueur du câble – en option.

Specifies connectors type and cable length – optional.

Type de variation (numéro séquentiel qui avec la lettre X, constitue le numéro de modèle).

Variation type (sequential number that together with the letter X make up the model number).

Type de famille (désigné sous la forme d'une lettre A à Z).

Family type (assigned as a letter A to Z).

M Présent uniquement pour longueur métrique pour la version de câble intégral.

Present only for metric length for integral cable version.

NNN Spécifie la longueur du câble (32 pieds ou 10 mètres max) (trois chiffres).

Specifies cable length (32 feet or 10 meters max) (three numbers).

ZZ Spécifie le type de connecteurs (deux lettres).

Specifies connectors type (two letters).

MARQUAGE

Le marquage du produit doit comprendre :

PCB Piezotronics
 Adresse : ...
 Type : EX356XYYY/MNNZZ (1)
 N° de fabrication : ...
 Année de fabrication : ...

 Ex II 3 G

Ex nA IIC T6...482°C Gc (2)

LCIE 18 ATEX 1004 X

-55°C ≤ T_{amb} ≤ +472°C

U ≤ ...V, I ≤ ...mA, P ≤ ...mW (3)

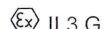
(1): complété par la désignation de type.

(2): voir le tableau des températures.

(3): complétées par les paramètres électriques.

Le marquage peut être réduit ainsi :

PCB Piezotronics
 Adresse : ...
 Type : EX356XYYY/MNNZZ
 N° de fabrication : ...
 Année de fabrication : ...

 Ex II 3 G

Ex nA IIC T6...482°C Gc

LCIE 18 ATEX 1004 X

U ≤ ...V, I ≤ ...mA, P ≤ ...mW

MARKING

The marking of the product shall include the following:

PCB Piezotronics
 Address : ...
 Type : EX356XYYY/MNNZZ (1)
 Serial number : ...
 Year of construction : ...

 Ex II 3 G

Ex nA IIC T6...482°C Gc (2)

LCIE 18 ATEX 1004 X

-55°C ≤ T_{amb} ≤ +472°C

U ≤ ...V, I ≤ ...mA, P ≤ ...mW (3)

(1): completed with type designation.

(2): see temperatures table.

(3): completed by electrical parameters.

The marking can be reduce as following:

PCB Piezotronics
 Address : ...
 Type : EX356XYYY/MNNZZ
 Serial number : ...
 Year of construction : ...

 Ex II 3 G

Ex nA IIC T6...482°C Gc

LCIE 18 ATEX 1004 X

U ≤ ...V, I ≤ ...mA, P ≤ ...mW

Tableau des températures / *Temperatures table*

Température ambiante <i>Ambient temperature</i>	Classe de température <i>Temperature class</i>
-55°C ≤ T _{amb} ≤ +80°C	T6
-55°C ≤ T _{amb} ≤ +95°C	T5
-55°C ≤ T _{amb} ≤ +130°C	T4
-55°C ≤ T _{amb} ≤ +195°C	T3
-55°C ≤ T _{amb} ≤ +290°C	T2
-55°C ≤ T _{amb} ≤ +440°C	T1
-55°C ≤ T _{amb} ≤ +472°C	482°C

L'appareil doit également comporter le marquage normalement prévu par les normes de construction qui le concernent sous la responsabilité du fabricant.

The equipment shall also bear the usual marking required by the product standards applying to such equipment under the manufacturer responsibility.

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 CERT-ATEX-FORM 05 Rev. 02

13 CONDITIONS PARTICULIERES D'UTILISATION

- a. Les paramètres électriques de l'alimentation peuvent être connectés à l'accéléromètre triaxial haute température ne doit pas dépasser les paramètres électriques définis.
- b. Température ambiante d'utilisation : -55°C à +472°C.
- c. Pour l'installation finale, l'accéléromètre triaxial haute température doit être raccordé conformément aux exigences de la norme EN 60079-14, fournissant et maintenant le degré de protection IP54.
- d. Le montage de l'appareil dans une installation doit être effectué de telle sorte que le corps métallique de l'accéléromètre triaxial à haute température et le blindage du câble soient reliés de manière fiable à la terre du système.
- e. L'appareil devra être installé comme défini dans le plan n°62991 rév. NR du 02/02/2018.
- f. Le câble utilisé doit avoir une température d'utilisation compatible avec l'environnement dans lequel l'appareil est installé.

SPECIFIC CONDITIONS OF USE

The electrical parameters of power supply can be connected to the triaxial high temperature accelerometer must not exceed the electrical parameters defined.

Operating ambient temperature: -55°C to +472°C.

For final installation, the triaxial high temperature accelerometer must be connected in compliance with requirements of EN 60079-14 standard, providing and maintaining degree of protection at least IP54.

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.

The apparatus must be installed per drawing n°62991 rev. NR dated 2018/02/02.

The cable used must have an operating temperature compatible with the environment in which the equipment is installed.

14 EXIGENCES ESSENTIELLES DE SANTE ET DE SECURITE

Couvertes par les normes listées au point 8.

ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

Covered by standards listed at 8.

15 DOCUMENTS DESCRIPTIFS

DESCRIPTIVE DOCUMENTS

N°	Description	Reference	Rev.	Date	Page(s)
1.	Dossier technique / <i>Technical file</i>	62978	NR	2018/02/02	11
2.	Notice d'instruction / <i>Instruction manual</i>	67111			3

16 INFORMATIONS COMPLEMENTAIRES

Essais individuels

Conformément au paragraphe 23.2.1 de la norme EN 60079-15, chaque exemplaire de l'appareil doit être soumis à un essai de rigidité diélectrique sous 500 Volts pendant 60s.

ADDITIONAL INFORMATION

Routine tests

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

17 DETAILS DES MODIFICATIONS

Version 00 : Evaluation de l'accéléromètre triaxial à haute température type EX356XYYY/MNZZ selon les normes EN 60079-0:2012+A11:2013 et EN 60079-15:2010.

DETAILS OF CHANGES

Issue 00: Assessment of triaxial high temperature accelerometer type EX356XYYY/MNZZ according to EN 60079-0:2012+A11:2013 and EN 60079-15:2010 standards.



Certificate of Compliance

Certificate: 70181221

Master Contract: 184981

Project: 70181221

Date Issued: 2018-07-12

Issued to: PCB Piezotronics
3425 Walden Ave
Depew, New York 14043
USA
Attention: Carrie Termin

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Issued by: *Anil Sodhi*
Anil Sodhi

PRODUCTS

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations

CLASS 2258 84 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations -
Certified to US Standards

Class I, Div. 1, Group A, B, C & D;

Ex ia IIC T6 ...482°C Ga;

Class I, Zone 0, AEx ia IIC T6 ...482°C Ga

Models EX356XYYY/MNNZZ series High Temperature Accelerometer; intrinsically safe with combined entity parameters for three axis as shown below; must be installed as per installation drawing 62992; temperature code as shown below. Ambient temperature -55°C to $+472^{\circ}\text{C}$



Certificate: 70181221
Project: 70181221

Master Contract: 184981
Date Issued: 2018-07-12

Entity Parameters	Temperature Code
<u>Version with Connectors</u> Ui: 28 V, Ii: 120 mA, Pi: 1 W, Ci: 750 pF, Li: 0 or Ui: 15 V, Ii: 900 mA, Pi: 1 W, Ci: 750 pF, Li: 0	T6 (-55°C to +80°C) T5 (-55°C to +95°C) T4 (-55°C to 130°C) T3 (-55°C to 195°C)
<u>Version with integral cables</u> Ui: 28 V, Ii: 120mA, Pi: 1 W, Ci: 6nF, Li: 30 µH or Ui: 15 V, Ii: 900 mA, P1: 1W, Ci: 6 nF, Li: 30 µH	T2 (-55°C to 290°C) T1 (-55°C to 440°C) 482°C (-55°C to 472°C)

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations – Certified to U.S. Standards

Class I, Div. 2, Group A, B, C and D;

Ex nA IIC T6 ...482°C Gc ;

Class I, Zone 2, AEx nA IIC T6 ...482°C Gc:

Models EX356YYYY/MNNNZZ series High Temperature Accelerometer; must be installed as per installation drawing 62992. Ambient temperature -55°C to +472°C.

Electrical ratings: 28Vdc, 120mA max. 1W max.

Conditions of Acceptability:

1. For Canadian Installations, sensor case must be bonded to ground according to the requirements of CEC, Part 1.
2. For US Installations, sensor case must be bonded to ground according to the requirements of NEC.
3. The sensor must only be connected to a certified associated apparatus.
4. The cable used must have an operating temperature compatible with the environment in which the sensor is installed.
5. The combined Entity parameters for EX356YYYY/MNNNZZ shall not exceed the safe limit requirements for Gas Group IIC.
6. The above accelerometer model EX356YYYY/MNNNZZ is certified as a component for use in the final assembly. The final application shall be subjected to approval of local authority having jurisdiction.



Certificate: 70181221

Master Contract: 184981

Project: 70181221

Date Issued: 2018-07-12

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 60079-0:15	Explosive Atmospheres - Part 0: Equipment - General Requirements
CAN/CSA-C22.2 No. 60079-11:14	Explosive Atmospheres - Part 11: Equipment Protection By Intrinsic Safety "I"
CAN/CSA C22.2 No. 60079-15:12	Electrical apparatus for explosive gas atmospheres - Part 15: Construction, test and marking of type of protection "n"
CAN/CSA-C22.2 No. 61010-1-12	Safety Requirements For Electrical Equipment For Measurement, Control, And Laboratory Use - Part 1: General Requirements
ANSI/ISA-60079-0-2013	Explosive Atmospheres - Part 0: Equipment - General Requirements
ANSI/ISA-60079-11-2014	Explosive Atmospheres - Part 11: Equipment Protection By Intrinsic Safety "I"
ANSI/ISA-60079-15 -2012	Explosive atmospheres – Part 15: Equipment protection by type of protection "n"
ANSI/ISA-61010-1 Third Edition	Safety Requirements For Electrical Equipment For Measurement, Control, And Laboratory Use - Part 1: General Requirements
C22.2 No. 213-17	Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
ANSI/ISA-12.12.01-2015	Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations



Supplement to Certificate of Compliance

Certificate: 70181221

Master Contract: 184981 (103164_0_000)

*The products listed, including the latest revision described below,
are eligible to be marked in accordance with the referenced Certificate.*

Product Certification History

Project	Date	Description
70181221	2018-07-12	Original Certification (cCSAus) for Triaxial high temperature accelerometers model EX356YYYY/MNNNZZ for following markings: Ex ia IIC T6...482°C Ga; Class I, Zone 0, AEx ia IIC T6...482°C Ga; Class I, Division 1, Groups ABCD Ta : -55°C ≤ Tamb ≤ +472°C; Ex nA IIC T6...482°C Gc; Class I, Zone 2, AEx nA IIC T6...482°C Gc; Class I Division 2, Groups ABCD Ta : -55°C ≤ Tamb ≤ +472°C.



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 18.0006X Issue No: 0 Certificate history:
Issue No. 0 (2018-02-23)

Status: Current

Date of Issue: 2018-02-23 Page 1 of 3

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

Equipment: Triaxial high temperature accelerometers - Type : EX356XYYY/MNNNZZ
Optional accessory:

Type of Protection: Ex ia

Marking: Ex ia IIC T6...482°C Ga
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





IECEX Certificate of Conformity

Certificate No: IECEX LCIE 18.0006X

Issue No: 0

Date of Issue: 2018-02-23

Page 2 of 3

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

*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/ExTR18.0008/00](#)

Quality Assessment Report:

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



IECEx Certificate of Conformity

Certificate No: IECEx LCIE 18.0006X

Issue No: 0

Date of Issue: 2018-02-23

Page 3 of 3

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 apparatus shall only be connected to associated intrinsically safe certified equipment. This combination must be compatible as regard the intrinsic safety rules.
2. Operating ambient temperature: -55°C to +472°C
3. 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.
4. The apparatus must be installed per drawing n°62991 rev. NR dated 2018/02/02.
5. The cable used must have an operating temperature compatible with the environment in which the equipment is installed.

Annex:

[IECEx LCIE 18.0006X issue 00 Annex 01-PCB Piezotronics .pdf](#)



Annex 01 to Certificate IECEX LCIE 18.0006X 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	62979	NR	2018/02/02
Instruction manual	67111		

MARKING

PCB Piezotronics

Address: ...

Type : EX356XYYY/MNNZZ (1)

Serial number: ...

Year of construction: ...

Ex ia IIC T6...482°C Ga (2)

IECEX LCIE 18.0006 X

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

U_i : ... V; I_i : ... mA; P_i : ... mW; C_i : ... μF ; L_i : ... μH (3)

(1): completed with type designation.

(2): see temperatures table.

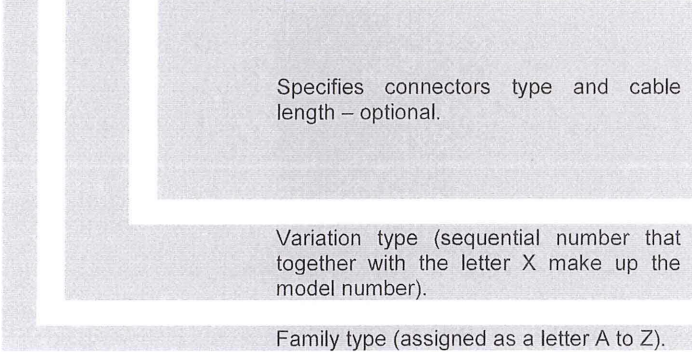
(3): completed by intrinsic safety electrical parameters of version concerned.

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

EX356 X YYY / MNNZZ



- M Present only for metric length for integral cable version.
- NNN Specifies cable length (32 feet or 10 meters max) (three numbers).
- ZZ Specifies connectors type (two letters).

RATINGS

Version	Intrinsic safety electrical parameters
Connectors	U_i : 28 V, I_i : 120 mA, P_i : 1 W, C_i : 750 pF, L_i : 0 or U_i : 15 V, I_i : 900 mA, P_i : 1 W, C_i : 750 pF, L_i : 0
Integral cables	U_i : 28 V, I_i : 120mA, P_i : 1W, C_i : 6 nF, L_i : 30μH or U_i : 15 V, I_i : 900mA, P_i : 1W, C_i : 6 nF, L_i : 30μH

ROUTINE TESTS

None.

APPARATUS OVERVIEW

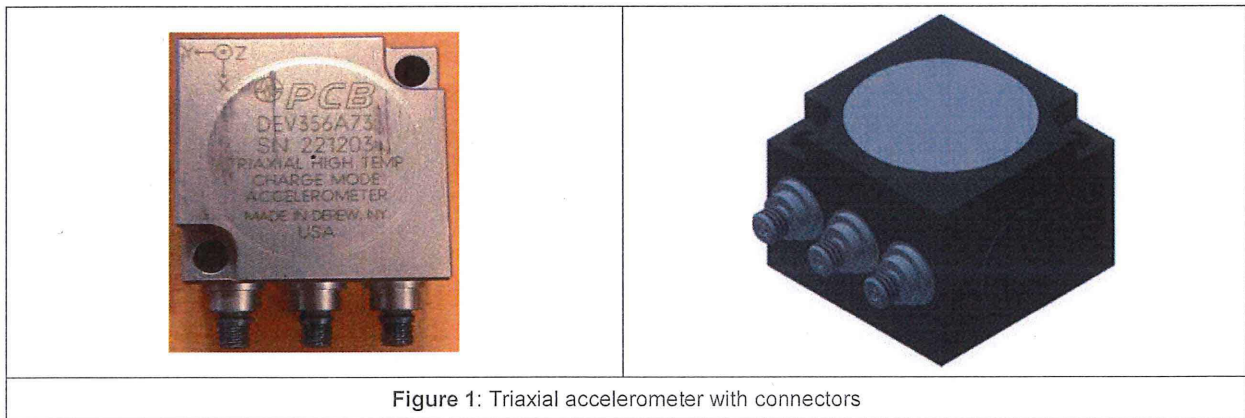


Figure 1: Triaxial accelerometer with connectors



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:

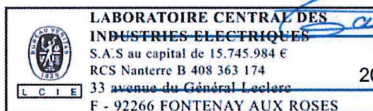
Julien Gauthier

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





IECEX Certificate of Conformity

Certificate No: IECEX LCIE 18.0007X

Issue No: 0

Date of Issue: 2018-02-23

Page 2 of 3

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](#)



IECEx Certificate of Conformity

Certificate No: IECEx LCIE 18.0007X

Issue No: 0

Date of Issue: 2018-02-23

Page 3 of 3

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.

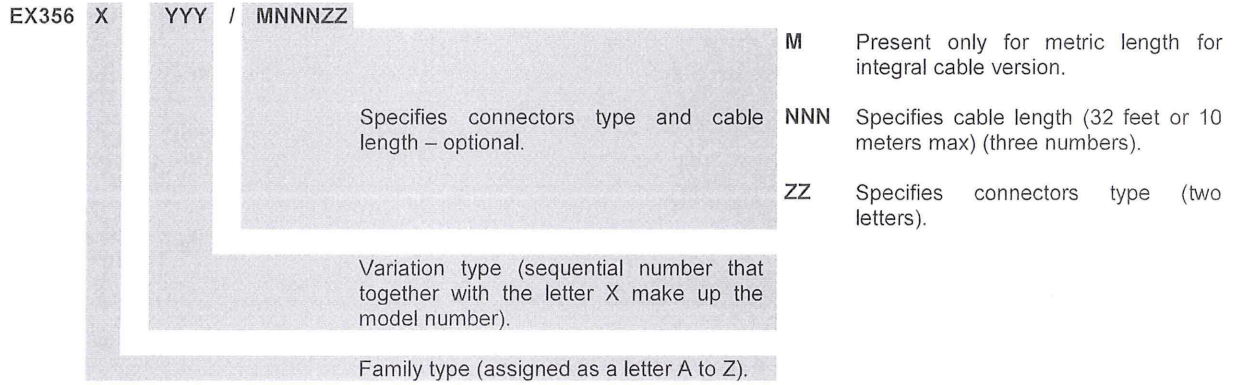
(2): see temperatures table.

(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



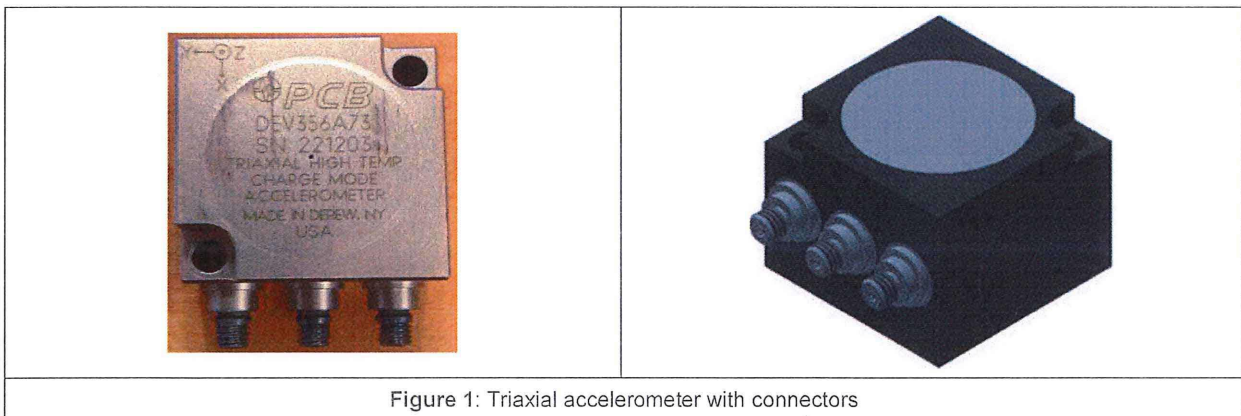
RATINGS

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



EU Declaration of Conformity PS187
In Accordance with ISO/IEC 17050

Manufacturer: PCB Piezotronics, Inc. 3425 Walden Avenue Depew, New York 14043 USA	Authorized European Representative: PCB Piezotronics Europe GmbH Porschestrasse 20-30 41836 Hückelhoven, Germany
--	---

Certifies that type of equipment: High Temperature Triaxial Charge Mode Accelerometer(s)

Whose Product Models Include: EX356XYYY Series

Note: "X," is a place holder for one letter indicating Model or Special Configuration
 "YYY," is a place holder for up to three numbers

For Example: EX356A73

These letters and numbers are included in the model numbers of the series. For details see the related data sheets.

This declaration is applicable to all High Temperature Accelerometer(s) of the above series which have the CE & ATEX mark on their data sheets and where those data sheets refer to this declaration of conformity. The data sheets for all model numbers referenced above, which include the CE & ATEX mark on such data sheets and refer to this Declaration of Conformity are hereby incorporated by reference into this Declaration.

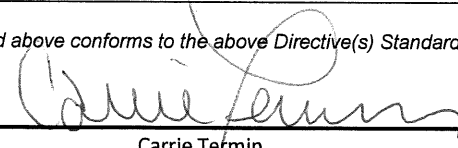
Conform to the following EU Directive(s) when installed per product documentation:	2014/34/EU 2011/65/EU	ATEX Directive RoHS Directive
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Standards to which Conformity is Declared:

Harmonized Standards	EN 60079-0:2012+ A11:2013 EN 60079-11:2012 EN 50581:2012	General Explosive Atmosphere Intrinsic safe, i Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances
EC Type Examination	ATEX Certification	LCIE 18 ATEX 3009 X Ex ia IIC T6...482°C Ga, II 1 G
Voluntary Certification	Voluntary Type Examination Certificate	LCIE 18 ATEX 6032 X Ex nA IC T6...482°C Gc, II 3 G
Other International Certifications	IECEX Certification	IECEX LCIE 18.0006X Ex ia IIC T6...482°C Ga IECEX LCIE 18.0007X Ex nA IIC T6...482°C Gc
Notified Body Name		Laboratoire Central des Industries Electriques (0081)
Notified Body's Address		FONTENAY-AUX-ROSES (Head Office) 33, avenue du Général Leclerc FR- 92260 Fontenay-aux-Roses Tel. : + 33 1 40 95 60 60 Fax : + 33 1 40 95 86 56

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) Standard(s)

Place: Depew, NY **Date:** 07/31/18

Signature: 

Name: Carrie Termin

Title: Regulatory Affairs and Product Certification Specialist
