



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 16.0048X

Issue No: 1

Certificate history:

Issue No. 1 (2017-06-08)

Issue No. 0 (2017-03-29)

Status: **Current**

Page 1 of 4

Date of Issue: **2017-06-08**

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

Equipment: **Mechanical vibration switch; type EX685A09, EX685A19, EX685A29, EX685A39**

Optional accessory:

Type of Protection: **Ex d, Ex tb**

Marking:

Ex d IIB T6 Gb

Ex tb III C T85°C Db

*Approved for issue on behalf of the IECEx
Certification Body:*

Julien Gauthier

Position:

Certification Officer

Signature:

(for printed version)

Date:

2017-06-08

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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Page 2 of 4

Manufacturer: **PCB PIEZOTRONICS Inc.**
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 60079-1 : 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:6

IEC 60079-31 : 2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

*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/ExTR16.0075/01](#)

Quality Assessment Report:

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



IECEX Certificate of Conformity

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Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The mechanical vibration switch is a shock sensitive mechanism for shutdown an equipment. Electrical characteristic of the standard option EX685A09 (without remote) :

Rated voltage	Resistive load [A]	Inductive load [A]
125 VAC	15	10
250 VAC	15	10
480 VAC	3	2
8 VDC	15	15
14 VDC	15	10
30 VDC	6	5
125 VDC	0.5	0.05
250 VDC	0.25	0.03

The EX685A09 type has to be reset manually rather than the option with remote, EX685A19 (24VDC), EX685A29 (120VAC) and EX685A39 (240VAC). All the types function identically using magnetic latch technology.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Repairs of flameproof joints should not be undertaken by the end user. In the event that flameproof joint must be repaired, contact the manufacturer.



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Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue01: Adding EX to Type: EX685Ax9 replaces 685Ax9

Annex:

LCIE 16.0048 issue01-Annex01.pdf



Annex 01 to Certificate IECEX LCIE 16.0048X issue 01



FULL EQUIPMENT DESCRIPTION

The mechanical vibration switch is a shock sensitive mechanism for shutdown an equipment.
Electrical characteristic of the standard option EX685A09 (without remote) :

Rated voltage	Resistive load [A]	Inductive load [A]
125 VAC	15	10
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The EX685A09 type has to be reset manually rather than the option with remote, EX685A19 (24VDC), EX685A29 (120VAC) and EX685A39 (240VAC). All the types function identically using magnetic latch technology.

MARKING

PCB PIEZOTRONICS Inc.

Address:...

Type : EX685A09, EX685A19, EX685A29 or EX685A39

Serial number:...

Year of construction: ...

Ex d IIB T6 Gb

Ex tb IIIC T85°C Db

-20°C ≤ T_{amb} ≤ +60°C

IECEX LCIE 16.0048X

WARNING – DO NOT OPEN WHEN ENERGIZED.

WARNING – AFTER DE-ENERGIZING, DELAY X* MINUTES BEFORE OPENING.

CAUTION – USE FASTENERS WITH YIELD STRESS ≥ 450 MPa

* Opening time (minute)	2	26
Option	Without remote reset	With remote reset

RANGE DETAILS

EX685A09, EX685A19, EX685A29, EX685A39.

For details see full equipment description in above.

RATINGS

Refer to full equipment description in above.

ROUTINE TESTS

None.



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Certificate No.: IECEx LCIE 16.0048X Issue No: 0 Certificate history:
Issue No. 0 (2017-03-29)

Status: **Current** Page 1 of 3

Date of Issue: **2017-03-29**

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

Equipment: **Mechanical vibration switch; type 685A09, 685A19, 685A29, 685A39**
Optional accessory:

Type of Protection: **Ex d, Ex tb**

Marking:
Ex d IIB T6 Gb
Ex tb III C T85°C Db

*Approved for issue on behalf of the IECEx
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Date of Issue: **2017-03-29**

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Page 3 of 3

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SPECIFIC CONDITIONS OF USE: YES as shown below:

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Annex:

[LCIE 16.0048 issue00-Annex 00.pdf](#)



Annex 00 to Certificate IECEx LCIE 16.0048X issue 00



FULL EQUIPMENT DESCRIPTION

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Electrical characteristic of the standard option 685A09 (without remote) :

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Type : 685A09, 685A19, 685A29 or 685A39

Serial number:...

Year of construction: ...

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RANGE DETAILS

685A09, 685A19, 685A29, 685A39.

For details see full equipment description in above.

RATINGS

Refer to full equipment description in above.

ROUTINE TESTS

None.