



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 15.0033X** issue No.: **0** Certificate history: _____

Status: **Current**

Date of Issue: **2015-09-29** Page 1 of 3

Applicant: **IMI Sensors, a PCB Piezotronics Division**
3425 Walden Avenue
Depew, New York 14043
United States of America

Electrical Apparatus: **Piezoelectronic accelerometer**
Optional accessory: Type : Model EX615A42/MNNZZ series

Type of Protection: **Ex ia IIC ; Ex nA IIC**

Marking: **Ex ia IIC T6...T2 Ga**
Ui : 28V ; li : 0.1A ; Pi : 0.7W ; Ci : 15nF ; Li : 30µH
Ex nA IIC T6...T2 Gc
IECEX LCIE 15.0033 X
(The complete marking is available in Annex of this certificate).

Approved for issue on behalf of the IECEX
Certification Body:

Michel Equi

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

Documents relative to LCIE certification activities (Certificates, QARs, ExTRs) can be registered under the references "LCI" or "LCIE".





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Manufacturer: **IMI Sensors, a PCB Piezotronics Division**
3425 Walden Ave
Depew, New York 14043
United States of America

Additional Manufacturing location
(s):

PCB Piezoelectronics
10869 Hwy 903
Halifax, North California 27839
United States of America

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 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-15 : 2010 Edition: 4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

*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/ExTR15.0052/00](#)

Quality Assessment Report:

[NL/DEK/QAR14.0004/01](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The apparatus is a vibration sensor mainly composed of a stainless steel enclosure containing a sensing element and a wire for connection.

It can be installed in zone 0, 1 or 2 for Ex ia version.

It can be installed in zone 2 for Ex nA version.

Routine test (For non-sparking apparatus only) :

Dielectric strength test according to §23.2 of IEC 60079-15:2010. 500VAC shall be applied on each apparatus during 60 seconds without breakdown.

CONDITIONS OF CERTIFICATION: YES as shown below:

Ambient temperature	Temperature class
- 55°C ≤ Tamb ≤ +75°C	T6
- 55°C ≤ Tamb ≤ +90°C	T5
- 55°C ≤ Tamb ≤ +125°C	T4
- 55°C ≤ Tamb ≤ +190°C	T3
- 55°C ≤ Tamb ≤ +260°C	T2

Intrinsic safety device :

The intrinsically safe apparatus shall only be connected to intrinsically safe apparatus certified for the intended use. This association shall comply with the requirements of the standard IEC 60079-25.

Non sparking device :

The electrical installation to which the apparatus is connected must be protected against transients. The protective device has to be set at a level not exceeding 140% of the peak rated voltage values at the power supply terminals (according to clause 13.c of standard IEC 60079-15).



**Annex to Certificate
IECEX LCIE 15.0033 X issue 00**



IMI Sensors,
a PCB Piezotronics Division
Address :
Type : Model EX615A42/MNNZZ
Model :
Serial number :
Year of construction :

Ex ia IIC T6... T2 Ga
Ex nA IIC T6... T2 Gc
IECEX LCIE 15.0033 X

Intrinsic safety device :

Ui: 28V; Ii: 0.1A; Pi: 0.7W; Ci: 15nF; Li: 30μH

Non-sparking device :

U = 28V ; P = 0.7W

Ambient temperature	Temperature class
$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +75^{\circ}\text{C}$	T6
$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +90^{\circ}\text{C}$	T5
$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +125^{\circ}\text{C}$	T4
$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +190^{\circ}\text{C}$	T3
$-55^{\circ}\text{C} \leq T_{\text{amb}} \leq +260^{\circ}\text{C}$	T2

Type details :

Model EX615A42/ MNNZZ

M : Present only if metric length units
NNN : specifies cable length (three numbers)
ZZ : specifies termination type (two letters)