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 15.0040X issue No.:0	Certificate history:
Status:	**Current**	
Date of Issue:	**2015-08-04**	Page 1 of 3

Applicant: **Metrix Instrument Company**
8824 Fallbrook Drive
Houston, TX 77064
United States of America

Electrical Apparatus: **Vibration sensors type SA6200 series, SA6200UW series, SA6250 series and SV6300 series**
Optional accessory:

Type of Protection: **Ex ia and Ex nA**

Marking: Ex ia IIC T4 Ga
Ex nA IIC T4 Gc
IECEx LCIE 15.0040 X
(see annex for full informations)

Approved for issue on behalf of the IECEx Certification Body: Rémi Hanot

Position: Certification Officer

Signature:
(for printed version)

Date: 2015/08/04

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.

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 activites (Certificates, QARs, ExTRs) can be registered under the references "LCI" or "LCIE".

L C I E

METRIX DOCUMENT NO. 1465798
REV: A

IE-031

IECEx Certificate of Conformity

Certificate No.: IECEx LCIE 15.0040X

Date of Issue: **2015-08-04** Issue No.: **0**

Manufacturer: **Metrix Instrument Company**
8824 Fallbrook Drive
Houston, TX 77064
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 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/ExTR15.0063/00

Quality Assessment Report:

GB/BAS/QAR10.0017/03

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Schedule

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

The model SA6200 series, SA6200UW series, SA6250 series, SV6300 series piezoelectric vibration sensors utilize a quartz crystal to convert a mechanical vibration measurement into an electric signal.The sensor consists of a sealed cylindrical metal case, which houses a pcb substrate board and a piezo crystal element. The circuitry is connected to a connector or an integral cable (see annex for full informations).
Electrical parameters : see annex
Routine test : see annex

CONDITIONS OF CERTIFICATION: YES as shown below:

Version "ia" :The apparatus must be only connected to a certified associated intrinsically safe equipment. This combination must be compatible regarding intrinsic safety rules (see electrical parameters).
Operating ambient temperature : - 54°C to + 121°C.
The apparatus shall be connected according to drawing n°8072 (page 1/2).
Version "nA" :The apparatus must be only connected to an equipment whose electrical parameters are compatible with the electrical parameters.
Operating ambient temperature : -54°C to +121°C.
The apparatus shall be connected according to drawing n°8072 (page 2/2).

Annex: LCIE 15.0040X Issue 00 - annex 01-version 1.pdf

Annex 01 to Certificate
IECEx LCIE 15.0040X issue 00

Description of the equipment :

The model SA6200 series, SA6200UW series, SA6250 series, SV6300 series piezoelectric vibration sensors utilize a quartz crystal to convert a mechanical vibration measurement into an electric signal.
The sensor consists of a sealed cylindrical metal case, which houses a pcb substrate board and a piezo crystal element. The circuitry is connected to a connector or an integral cable.

Models are electrical identical, but mechanical different :
- SA6200-2X1 with top 2-pin connector
- SA6200-5X1 with top 2-pin connector
- SA6250-2X1 with top 2-pln connector
- SA6250-5X1 with top 2-pin connector
- SV6300-2X1 with top 2-pin connector
- SV6300-5X1 with top 2-pin connector
- SA6200UW-2X1 with integral molded cable
- SA6200UW-5X1 with integral molded cable

X : is a number from 0-9 that signifies the type of mounting stud.

The sensors have stainless steel housings and quartz sensing element with capacitance value of 6pF for the piezoelectric sensing element for each of the SA6200-2X1, SA6200-5X1, SA6200UW-2X1 and SA6200UW-5X1 sensors.
The sensors have stainless steel housings and ceramic sensing elements with capacitance value of 2000pF for the piezoelectric sensing element for each of the SA6250-2X1, SA6250-5X1, SV6300-2X1 and SV6300-5X1.

Marking :

Metrix Instrument Company
Address :
Type : SA62... or SV63... (completed with the model)
Serial number : ...
Year of construction : ...
Ex ia IIC T4 Ga
Ex nA IIC T4 Gc
IECEx LCIE 15.0040 X
-54℃ ≤ Ta ≤ +121℃
Version "ia" only :
Ui : ... V, *Ii* : ... mA, *Pi* : ...W, *Ci* : ...nF, *Li* : ...µH (completed according to the model)

Electrical parameters :

Version "ia":

Type	*Ui* (V)	*Ii* (mA)	*Pi* (W)	*Ci* (nF)	*Li* (µH)
SA6250-2X1, SA6250-5X1, SA6200-2X1, SA6200-5X1	28	93	1	6.5	0
SV6300-2X1, SV6300-5X1	28	93	1	69.2	0
SA6200UW-2X1, SA6200UW-5X1	28	93	1	61	305

Version "nA":

U : 28V, I : 93mA, P : 1W

Routine test :

Version "ia" : None.
Version "nA" : each apparatus must be submitted to a dielectric strength 600V 50Hz during 100ms between the terminals and the housing.