



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEX CML 24.0126X** Page 1 of 3 [Certificate history:](#)
Status: **Current** Issue No: 0
Date of Issue: 2025-01-13
Applicant: **Metrix Instrument Co.**
8824 Fallbrook
Houston
Texas
77064
United States of America
Equipment: **Vibration Switches SW6000 and SM6100**
Optional accessory:
Type of Protection: **Flameproof Ex "db"**
Marking: Ex db IIB+H₂ T5 Gb
Ta: -40°C to +85°C (without display)
Ta: -10°C to +70°C (with display)

Approved for issue on behalf of the IECEx
Certification Body:

Stelios Roumbedakis

Position:

Certification Manager

Signature:
(for printed version)

S. Roumbedakis

Date:
(for printed version)

2025-01-13

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 www.iecex.com or use of this QR Code.



Certificate issued by:

Eurofins E&E CML Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom



METRIX DOC NO: 1168055
REV: C



IECEX Certificate of Conformity

Certificate No.: **IECEX CML 24.0126X**

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Date of issue: 2025-01-13

Issue No: 0

Manufacturer: **Metrix Instrument Co.**
8824 Fallbrook
Houston
Texas
77064
United States of America

Manufacturing
locations: **Metrix Instrument Co.**
8824 Fallbrook
Houston
Texas
77064
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 equipment 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 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-1:2014](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

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

[GB/CML/ExTR24.0215/00](#)

Quality Assessment Report:

[GB/BAS/QAR10.0017/09](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX CML 24.0126X**

Page 3 of 3

Date of issue: 2025-01-13

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Vibration switches SW6000 and SM6100 are used in detecting machine vibration and providing shut down protection when a predetermined vibration level is exceeded.

Refer to Certificate Annex for full Product Description and Conditions of Manufacture.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to Certificate Annex for Specific Conditions of Use.

Annex:

[IECEX CML 24.0126X Iss. 0 Certificate Annex_1.pdf](#)

Annexe to: IECEx CML 24.0126X Issue 0
Apparatus: Vibration Switches SW6000 and SM6100
Applicant: Metrix Instrument Co.



Description

Vibration Switches SW6000 and SM6100 are used in detecting machine vibration and providing shut down protection when a predetermined vibration level is exceeded.

SW6000 employs an internal accelerometer.

SM6100 can accept various external vibration transducers.

Ratings:

115 VAC 50/60Hz, 41 mA

230 VAC 50/60 Hz, 20 mA

24 VDC, 200 mA

Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.

Specific Conditions of Use

The following conditions relate to safe installation and/or use of the equipment.

- i. The equipment includes flameproof joints that have dimensions that differ from the requirements of IEC 60079-1:2014 Ed. 7 Table 3. As such, the flameproof joints are not intended to be repaired by anyone other than the manufacturer.
- ii. The equipment incorporates a certified operator (IECEX UL 15.0123U) that is considered to be a potential electrostatic charging hazard. As such, the user shall minimize the risk of electrostatic discharge using methods listed in the manufacturer's instructions as per IEC 60079-0:2017 Ed. 7 clause 7.4.2. Additionally, the surface shall only be cleaned with a damp cloth.
- iii. The equipment can incorporate an optional display. Its inclusion alters the ambient temperature range of the equipment as follows:
Ta = -40°C to +85°C (without display)
Ta = -10°C to +70°C (with display)

Components used which are covered by Ex Certificates issued to older editions of Standards

None.



Certificate Annex IECEx
Version: 10.0 Approval: Approved



Eurofins E&E CML Limited
Newport Business Park, New Port Road
Ellesmere Port, CH65 4LZ, UK

CML



The following pages are the prior revisions of this certificate.



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 LCI 11.0016X** issue No.:1

Certificate history:
Issue No. 1 (2015-4-28)
Issue No. 0 (2011-3-11)

Status: **Current**

Date of Issue: **2015-04-28** Page 1 of 4

Applicant: **Metrix Instrument Co.**
8824 Fallbrook Drive
Houston, Texas 77064
United States of America

Electrical Apparatus: **Vibration Switches / type : SW6000 and SM6100**
Optional accessory:

Type of Protection: **Flameproof "d"**

Marking: METRIX INSTRUMENT Co.
Address:
Type:
Serial Number:
Year of manufacturing:
Ex d IIB + H2 T4 Gb
Tamb: -40°C to +85°C (1) or
Tamb: -10°C to +70°C (2)
IECEx LCI 11.0016X
Note (1) : without display function
Note (2) : with display function

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

Position: Certification Officer

Signature:
(for printed version)

Date:

2015/04/28

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".





IECEX Certificate of Conformity

Certificate No.: IECEx LCI 11.0016X

Date of Issue: 2015-04-28

Issue No.: 1

Page 2 of 4

Manufacturer: **Metrix Instrument Co.**
8824 Fallbrook Drive
Houston, Texas 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 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

*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/LCI/ExTR11.0016/01](#)

Quality Assessment Report:

[GB/BAS/QAR10.0017/02](#)



IECEx Certificate of Conformity

Certificate No.: IECEx LCI 11.0016X

Date of Issue: 2015-04-28

Issue No.: 1

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

SW6000 and SM6100 vibration switches are used in detecting machine vibration and providing protection to the machine by shutting it down when predetermined vibration level is exceeded. SW6000 employs an internal accelerometer while SM6100 can accept various external vibration transducers.

CONDITIONS OF CERTIFICATION: YES as shown below:

Ambiant temperature range is -40°C to +85°C for model without display.
Ambiant temperature range is -10°C to +70°C for model with liquid crystal display



IECEx Certificate of Conformity

Certificate No.: IECEx LCI 11.0016X

Date of Issue: 2015-04-28

Issue No.: 1

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

Issue 1 : normative update according to IEC 60079-0:2011 Ed 6.0



The following pages are the prior revisions of this certificate.



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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Certificate No.: issue No.: Certificate history:

Status:

Date of Issue: **2011-03-11** Page 1 of 3

Applicant: **Metrix Instrument Co.**
8824 Fallbrook Drive
Houston, Texas 77064
United States of America

Electrical Apparatus: **Vibration Switches / type : SW6000 and SM6100**
Optional accessory:

Type of Protection: **Flameproof "d"**

Marking: **METRIX INSTRUMENT Co.**
Address:
Type:
Serial Number:
Year of manufacturing:
Ex d IIB + H2 T4
Tamb: -20°C to +85°C (1) or
Tamb: -10°C to +70°C (2)
IECEX LCI 11.0016X
Note (1) : without display function
Note (2) : with display function

Approved for issue on behalf of the IECEx
Certification Body:

Marc GILLAUX

Position:

Certification Manager

Signature:
(for printed version)

Date:

11 MARS 2011

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Certificate issued by:

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



L C I E



IECEX Certificate of Conformity

Certificate No.: IECEx LCI 11.0016X

Date of Issue: 2011-03-11

Issue No.: 0

Page 2 of 3

Manufacturer: **Metrix Instrument Co.**
8824 Fallbrook Drive
Houston, Texas 77064
United States of America

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 : 2004 Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
Edition: 4.0

IEC 60079-1 : 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition: 6

*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/LCI/ExTR11.0016/00

Quality Assessment Report:

GB/BAS/QAR10.0017/00



IECEx Certificate of Conformity

Certificate No.: IECEx LCI 11.0016X

Date of Issue: 2011-03-11

Issue No.: 0

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

SW6000 and SM6100 vibration switches are used in detecting machine vibration and providing protection to the machine by shutting it down when predetermined vibration level is exceeded. SW6000 employs an internal accelerometer while SM6100 can accept various external vibration transducers.

CONDITIONS OF CERTIFICATION: YES as shown below:

Ambiant temperature range is -20°C to +85°C for model without display.
Ambiant temperature range is -10°C to +70°C for model with liquid crystal display