

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 25.0013X** Page 1 of 3 Certificate history:

Issue No: 0 Status: Current

Date of Issue: 2025-07-18

Applicant: Metrix Instrument Co.

8824 Fallbrook Texas 77064

United States of America

Vibration Switches 5550 and 5550G Equipment:

Optional accessory:

Flameproof Ex "db" and Dust Ignition Ex "tb" Type of Protection:

Marking: Model 5550

> Ex db IIB+H₂ T6 Gb Ex tb IIIC T85°C Db

IP64*/IP66

 $Ta = -53^{\circ}C^{*} \text{ or } -40^{\circ}C \text{ to } +70^{\circ}C$

*IP64 when lower ambient is -53°C

Model 5550G

Ex db IIC T6 Gb Ex tb IIIC T85°C Db

IP66

Ta = -40°C to +70°C

Approved for issue on behalf of the IECEx

Certification Body:

Position: **Assistant Certification Manager**

Signature:

(for printed version)

(for printed version)

18 Jul 2025

L A Brisk

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 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**







Certificate No.: IECEx CML 25.0013X Page 2 of 3

Date of issue: 2025-07-18 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

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

Edition:2

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/ExTR25.0042/00

Quality Assessment Report:

GB/BAS/QAR10.0017/09

METRIX DOC NO: 1187247

REV: D



Certificate No.: IECEx CML 25.0013X Page 3 of 3

Date of issue: 2025-07-18 Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

A Type 5550 Vibration Switch comprises a rectangular enclosure and flat flanged cover, both manufactured from aluminium alloy.

See Annex for full description and Conditions of Manufacture.

SPECIFIC CONDITIONS OF USE: YES as shown below: See Annex for Specific Conditions of Use.

Annex:

IECEx CML 25.0013X Iss. 0 Certificate Annex.pdf

METRIX DOC NO: 1187247

REV: D

Annexe to: IECEx CML 25.0013X Issue 0

Apparatus: Vibration Switches 5550 and 5550G

Applicant: Metrix Instrument Co.



Description

A Type 5550 Vibration Switch comprises a rectangular enclosure and flat flanged cover, both manufactured from aluminium alloy.

The unit houses a trip switch, one or two microswitches and the option of a solenoid coil for remote resetting of the trip switch. The cover which is attached by four grade A2-80 stainless steel fasteners, has two operating shafts for adjustment of the trip switch setting and manual re-setting of the trip switch.

The micro switches are each rated up to 480 Va.c. 15A, and the coil when fitted is rated up to 230 Va.c. 1 A, or 24 Vd.c. 3A.

An M20 or 3/4" NPT cable entry hole is provided for the accommodation of a flameproof cable entry device, with or without the interposition of a flameproof thread adapter.

A Type 5550G Vibration Switch comprises a rectangular enclosure and threaded cover to IECEx UL 14.0071U. The base has provision for two cable entries, and houses a trip switch, one or two microswitches and the option of a solenoid coil for remote re-setting of the trip switch.

The micro switches are each rated up to 480 Va.c. 15A, and the coil when fitted is rated up to 230 Va.c. 1 A, or 24 Vd.c. 3 A.

Cable entry holes are provided as specified on the certified drawings for the accommodation of flameproof cable entry devices, with or without the interposition of a flameproof thread adapter. Unused entries are to be fitted with certified flameproof stopping plugs.

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 cable temperature may be up to 85°C at the maximum ambient temperature. This shall be taken into consideration when selecting suitable cable for connection.

1 of 1







The following	pages are th	e prior revis	sions of this c	ertificate.



INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.:

IECEX BAS 10.0095X

Page 1 of 4

Certificate history:

Issue 1 (2014-01-27) Issue 0 (2010-09-06)

Status:

Current

Issue No: 2

Date of Issue:

2020-07-03

Applicant:

Metrix Instrument Co.

8824 Fallbrook Houston Texas 77064

United States of America

Equipment:

Type 5550G Vibration Switch

Optional accessory:

Type of Protection:

Flameproof and dust protected

Marking:

Ex db IIC T6 Gb (Ta -40°C to +70°C)

Ex tb IIIC T85°C Db IP66

Approved for issue on behalf of the IECEx Certification Body:

Certification Doc

Technical Manager

Mr R S Sinclair

Fo Mancy

M POWNEY Certification Manager

Position:

Signature: (for printed version)

Date:

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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:

SGS Baseefa Limited Rockhead Business Park Staden Lane Buxton, Derbyshire, SK17 9RZ United Kingdom SGS

METRIX DOC NO: 1187247



Certificate No.: IECEx BAS 10.0095X Page 2 of 4

Date of issue: 2020-07-03 Issue No: 2

Manufacturer: Metrix Instrument Co.

8824 Fallbrook Houston Texas 77064

United States of America

Additional manufacturing locations:

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 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

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

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 Reports:

GB/BAS/ExTR10.0201/00 GB/BAS/ExTR13.0184/00 GB/BAS/ExTR20.0098/00

Quality Assessment Report:

GB/BAS/QAR10.0017/06

METRIX DOC NO: 1187247



Certificate No.: IECEx BAS 10.0095X Page 3 of 4

Date of issue: 2020-07-03 Issue No: 2

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

A Type 5550 Vibration Switch comprises a rectangular enclosure and threaded cover to IECEx UL 08.0005U. The base has provision for two cable entries, and houses a trip switch, one or two microswitches and the option of a solenoid coil for remote re-setting of the trip switch.

The micro switches are each rated up to 480Va.c.15A, and the coil when fitted is rated up to 230Va.c. 1A, or 24Vd.c. 3A.

Cable entry holes are provided as specified on the certified drawings for the accommodation of flameproof cable entry devices, with or without the interposition of a flameproof thread adapter. Unused entries are to be fitted with certified flameproof stopping plugs.

The cable entry devices, thread adapters and stopping plugs shall be suitable for the equipment, the cable and the conditions of use and shall be certified as Equipment (not a Component).

When used in an explosive dust atmosphere the cable entry devices shall maintain the ingress protection of the enclosure.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Potential electrostatic charging hazard – see instructions.

METRIX DOC NO: 1187247



Certificate No.: IECEx BAS 10.0095X Page 4 of 4

Date of issue: 2020-07-03 Issue No: 2

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above) Variation 2.1

The equipment covered by this certificate has been reviewed against the additional design and test requirements of IEC 60079-0: 2017, IEC 60079-1: 2014 and IEC 60079-31:2013 and compliance is confirmed.

The equipment may be marked:

Ex db IIC T6 Gb (Ta -40°C to +70°C)

Ex tb IIIC T85°C Db IP66

Variation 2.2

To introduce the Specific Condition of Use number 1.

EXTR: GB/BAS/EXTR20.0098/00 File Reference: 20/0188

METRIX DOC NO: 1187247



The following	pages are th	e prior revis	sions of this c	ertificate.



INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:

IECEx BAS 10.0095

issue No.:1

Status:

Current

Certificate history:

Issue No. 1 (2014-1-27) Issue No. 0 (2010-9-6)

Date of Issue:

2014-01-27

Page 1 of 4

Applicant:

Metrix Instrument Co.

8824 Fallbrook Houston Texas

77064

United States of America

Electrical Apparatus: Optional accessory:

Type 5550G Vibration Switch

Type of Protection:

Flameproof and dust protected

Marking:

Ex d IIC T6 Gb Ta -40°C to + 70°C

Ex tb IIIC T85°C Db Ta -40°C to + 70°C IP66

Approved for issue on behalf of the IECEx

Certification Body:

R S Sinclair

Position:

General Manager

Signature:

(for printed version)

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:

SGS Baseefa Limited Rockhead Business Park Staden Lane **Buxton** Derbyshire SK17 9RZ United Kingdom



METRIX DOC NO: 1187247



Certificate No.:

IECEx BAS 10.0095

Date of Issue:

2014-01-27

Issue No.: 1

Page 2 of 4

Manufacturer:

Metrix Instrument Co.

8824 Fallbrook

Houston Texas 77064

United States of America

Additional Manufacturing location

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 60079-31:2008

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'

Edition: 1

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:

GB/BAS/ExTR10.0201/00

GB/BAS/ExTR13.0184/00

Quality Assessment Report:

GB/BAS/QAR10.0017/02

METRIX DOC NO: 1187247



Certificate No.:

IECEX BAS 10.0095

Date of Issue:

2014-01-27

Issue No.: 1

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

A Type 5550 Vibration Switch comprises a rectangular enclosure and threaded cover to IECEx UL 08.0005U. The base has provision for two cable entries, and houses a trip switch, one or two microswitches and the option of a solenoid coll for remote re-setting of the trip switch.

The micro switches are each rated up to 480Va.c.15A, and the coil when fitted is rated up to 230Va.c. 1A, or 24Vd.c. 3A.

Cable entry holes are provided as specified on the certified drawings for the accommodation of flameproof cable entry devices, with or without the interposition of a flameproof thread adapter. Unused entries are to be fitted with certified flameproof stopping plugs.

The cable entry devices, thread adapters and stopping plugs shall be suitable for the equipment, the cable and the conditions of use and shall be certified as Equipment (not a Component).

When used in an explosive dust atmosphere the cable entry devices shall maintain the ingress protection of the enclosure.

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METRIX DOC NO: 1187247



Certificate No.:

IECEx BAS 10.0095

Date of Issue:

2014-01-27

Issue No.: 1

Page 4 of 4

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

Variation 1.1

To note a change of equipment name from 'Type 5550 Vibration Switch' to 'Type 5550G Vibration Switch'

Variation 1.2

To confirm that the equipment covered by this certificate has been reviewed against the requirements of IEC60079-0: 2011 Edition 6 and IEC60079-31: 2008 Edition 1 in respect of the differences from the standards to which this certificate was issued; none of these differences affect this equipment other than the product marking.

The product will now be marked as follows:-

Ex d IIC T6 Gb Ta -40°C to + 70°C Ex tb IIIC T85°C Db Ta -40°C to + 70°C IP66

EXTR: GB/BAS/EXTR13.0184/00	File Reference: 13/0162	
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METRIX DOC NO: 1187247



The following pages are the prior revisions of this certificate.



INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx BAS 10.0095	issue No.:0	Certificate history:
Status:	Current		
Date of Issue:	2010-09-06	Page 1 of 3	
Applicant:	Metrix Instrument Co. 8824 Fallbrook Houston Texas 77064 United States of Amer		
Electrical Apparatus: Optional accessory:	A Type 5550 Vibration S	iwitch	
Type of Protection:	Flameproof and dust pr	otected	
Marking:	Ex d IIC T6 (Ta -40°C to Ex tD A20 IP66	+ 70°C) Gb	
Approved for issue on bell Certification Body:	half of the IECEx	R S Sinclair	
Position:		Managing Director	
Signature: (for printed version) Date:		RSS:-	10
2. This certificate is not tra	edule may only be reprodu ansferable and remains the ticity of this certificate may	nced in full. e property of the issuing body. be verified by visiting the Offi	cial IECEx Website.
Certificate issued by:	December		

Baseefa **Rockhead Business Park** Staden Lane **Buxton** Derbyshire **SK17 9RZ United Kingdom**



METRIX DOC NO: 1187247 REV: A



Certificate No.: IECEx BAS 10.0095

Date of Issue: 2010-09-06 Issue No.: 0

Page 2 of 3

Manufacturer: Metrix Instrument Co.

8824 Fallbrook 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: 2007-10 Explosive atmospheres - Part 0: Equipment - General requirements

Edition: 5

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

Edition: 6

IEC 61241-0 : 2004 Electrical apparatus for use in the presence of combustible dust - Part 0: General

lition: 1 requirements

IEC 61241-1: 2004 Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by

Edition: 1 enclosures "tD"

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:

GB/BAS/ExTR10.0201/00

Quality Assessment Report: GB/BAS/QAR10.0017/00

METRIX DOC NO: 1187247

REV: A



Certificate No.:

IECEx BAS 10.0095

Date of Issue:

2010-09-06

Issue No.: 0

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

A Type 5550 Vibration Switch comprises a rectangular enclosure and threaded cover to IECEx UL 08.0005U. The base has provision for two cable entries, and houses a trip switch, one or two microswitches and the option of a solenoid coil for remote re-setting of the trip switch.

The micro switches are each rated up to 480Va.c.15A, and the coil when fitted is rated up to 230Va.c. 1A, or 24Vd.c. 3A.

Cable entry holes are provided as specified on the certified drawings for the accommodation of flameproof cable entry devices, with or without the interposition of a flameproof thread adapter. Unused entries are to be fitted with certified flameproof stopping plugs.

The cable entry devices, thread adapters and stopping plugs shall be suitable for the equipment, the cable and the conditions of use and shall be certified as Equipment (not a Component).

When used in an explosive dust atmosphere the cable entry devices shall maintain the ingress protection of the enclosure.

CONDITIONS OF CERTIFICATION: NO					

METRIX DOC NO: 1187247

REV: A