

EU Type Examination Certificate CML 25ATEX1043X Issue 0

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **Vibration Switches 5550 and 5550G**
- 3 Manufacturer **Metrix Instrument Co.**
- 4 Address **8824 Fallbrook,
Houston,
Texas,
77064
United States of America**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 Eurofins CML B.V., Chamber of Commerce No 67386717, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018

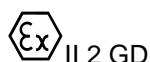
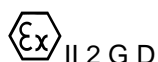
EN 60079-1:2014

EN 60079-31:2014

- 10 The equipment shall be marked with the following:

Model 5550

Model 5550G

Ex db IIB+H₂ T6 Gb

Ex db IIC T6 Gb

Ex tb IIIC T85°C Db

Ex tb IIIC T85°C Db

IP64*/IP66

IP66

Ta= -53°C* or -40°C to +70°C Ta= -40°C to +70°C

*IP64 when lower ambient is -53°C

11 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 re-setting 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 DEMKO 01ATEX015742U. 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.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	18 Jul 2025	R18574A/00 (MT135370)	Issue of Prime Certificate

Note: Drawings that describe the equipment or component are listed in the Annex.

13 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.

14 Specific Conditions of Use (Special Conditions)

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 EN 60079-1:2014 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.

Certificate Annex

Certificate Number CML 25ATEX1043X
Equipment Vibration Switches 5550 and 5550G
Manufacturer Metrix Instrument Co.



The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
9006-IECEX-AGENCY	1 to 13	E	18 Jul 2025	5550 Vibration Switch IECEX Certification Requirements
1065138-AGENCY	1 of 1	D	18 Jul 2025	Assembly/Marking DWG, 5550 IIC, Agency



The following pages are the prior revisions of this certificate.

SUPPLEMENTARY EU - TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

Supplementary EU - Type Examination Certificate Number: **Baseefa10ATEX0177/2X**

In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

Product: **A Type 5550G Vibration Switch**

Manufacturer: **Metrix Instrument Co.**

Address: **8824 Fallbrook, Houston, Texas, 77064, United States of America**

This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa10ATEX0177** to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

SGS Baseefa, Notified Body number 1180, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that the product, as modified by this supplementary certificate, has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

Item 9 of the original Certificate is replaced by "Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0: 2018 EN 60079-1: 2014 EN 60079-31:2014

except in respect of those requirements listed at item 18 of the Schedule."

The marking of the equipment has changed from the original Certificate and shall include the following:

**Ex II 2 GD Ex db IIC T6 Gb (Ta -40°C to +70°C)
Ex tb IIC T85°C Db IP66**

SGS Baseefa Customer Reference No. **0708**

Project File No. **20/0188**

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M Powney

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TECHNICAL MANAGER
On behalf of SGS Baseefa Limited

METRIX DOC NO: 1187241
REV: C

13 **Schedule**

14 **Certificate Number Baseefa10ATEX0177/2X**

15 **Description of the variation to the Product**

Variation 2.1

The equipment covered by this certificate has been reviewed against the additional design and test requirements of EN IEC 60079-0: 2018, EN 60079-1: 2014 and EN 60079-31: 2014 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.

16 **Report Number**

SGS Baseefa test report GB/BAS/ExTR20.0098/00.

17 **Specific Conditions of Use**

1. Potential electrostatic charging hazard – see instructions.

18 **Essential Health and Safety Requirements**

Compliance with the Essential Health and Safety Requirements is affected as follows.

Clause	Subject	Compliance
1.2.8	Overloading of equipment (protection relays, etc.)	Covered by installation rules and manufacturer's instructions
1.4.1	External effects	The Purchaser should make the manufacturer aware of such issues. Covered in Instructions
1.4.2	Aggressive substances, etc.	The Purchaser should make the manufacturer aware of such issues. Covered in Instructions

19 **Drawings and Documents**

Number	Sheet	Issue	Date	Description
1065138-AGENCY	1	B	xx.xx.xx	Assembly / Marking Dwg, 5550 IIC, Agency

The above drawing is common to Baseefa10ATEX0177X and IECEx BAS 10.0095X and is held on the latter.



The following pages are the prior revisions of this certificate.

SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

- Supplementary EC - Type Examination Certificate Number: **Baseefa10ATEX0177/1**
- Equipment or Protective System: **A Type 5550G Vibration Switch**
- Manufacturer: **Metrix Instrument Company**
- Address: **8824 Fallbrook Drive, Houston, Texas 77064, USA**
- This supplementary certificate extends EC – Type Examination Certificate No. **Baseefa10ATEX0177** to apply to equipment or protective systems designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.
- Item 9 of the original Certificate is replaced by “Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN60079-0: 2012

EN60079-1: 2007

EN60079-31: 2009

except in respect of those requirements listed at item 18 of the Schedule.”

- The marking of the equipment has changed from the original Certificate and shall include the following:

Ex II 2GD Ex d IIC T6 Gb Ta -40°C to + 70°C

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

This certificate shall be held with the original certificate.

Baseefa Customer Reference No. **0708**

Project File No. **13/0162**

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GENERAL MANAGER

On behalf of SGS Baseefa Limited

METRIX DOC NO: 1187241
REV: B

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REV: B

13

Schedule

14

Certificate Number Baseefa10ATEX0177/1

15 Description of the variation to the Equipment or Protective System

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 EN60079-0: 2012, EN60079-1: 2007 and EN60079-31: 2009 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 shown in point 9 above.

16 Report Number

Baseefa Certification Report GB/BAS/ExTR13.0184/00

17 Specific Conditions of Use

None

18 Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements is not affected by this variation.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
1065138-AGENCY	1 of 1	A	-	ASSEMBLY/MARKING DWG 5550 IIC, AGENCY

The above drawing is common to Baseefa10ATEX0177/1 and IECEx BAS 10.0095 and is held with the latter.

Note:- Drawing number 1065138 is no longer a certified drawing.



The following pages are the prior revisions of this certificate.



EC - TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

EC - Type Examination
Certificate Number: **Baseefa10ATEX0177**

Equipment or Protective System: **A Type 5550 Vibration Switch**

Manufacturer: **Metrix Instrument Company**

Address: **8824 Fallbrook Drive, Houston, Texas 77064, USA**

This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

Baseefa, Notified Body number 1180, in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No. **GB/BAS/ExTR10.0201/00**

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN60079-0: 2009 EN60079-1: 2007 EN61241-0: 2006 EN61241-1: 2004

except in respect of those requirements listed at item 18 of the Schedule.

If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

This EC - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

The marking of the equipment or protective system shall include the following :

Ex II 2GD Ex d IIC T6 (Ta -40°C to + 70°C) Gb Ex tD A20 IP66

This certificate may only be reproduced in its entirety, without any change, schedule included.

Baseefa Customer Reference No. **0708**

Project File No. **10/0472**

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

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DIRECTOR
On behalf of
Baseefa

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METRIX DOC NO: 1187241
REV: A

METRIX DOC NO: 1187241
REV: A



13

Schedule

14

Certificate Number Baseefa10ATEX0177

15 Description of Equipment or Protective System

A Type 5550 Vibration Switch comprises a rectangular enclosure and threaded cover to DEMKO07ATEX0622294U. 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 suitable 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) under an EC-Type Examination Certificate to Directive 94/9/EC.

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

16 Report Number

Baseefa Certification Report GB/BAS/ExTR10.0201/00

17 Special Conditions for Safe Use

None

18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
1065138	1	A	08.24.10	General Assembly
100282	1	B	05.04.10	Housing Modified
100296	1	A	07.19.10	Nameplate