



# 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](http://www.iecex.com)

Certificate No.: IECEx BAS 10.0021X issue No.: 2

Status: Current

Certificate history:  
Issue No. 2 (2015-9-7)  
Issue No. 1 (2011-4-14)  
Issue No. 0 (2010-8-5)

Date of Issue: 2015-09-07 Page 1 of 4

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

Electrical Apparatus: **Model 5485C Velocity Transducer**  
*Optional accessory:*

Type of Protection: **Intrinsic Safety**

Marking: **Ex ia IIC T+ Ga**  
**Temperature Class - see schedule**

Approved for issue on behalf of the IECEx  
Certification Body:

R. S. Sinclair

*PP DISCREPANCY*

Position:

Technical Manager

Signature:  
(for printed version)

*[Handwritten Signature]*  
\_\_\_\_\_

Date:

*10/9/15*  
\_\_\_\_\_

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:

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





# IECEX Certificate of Conformity

Certificate No.: IECEX BAS 10.0021X

Date of Issue: 2015-09-07

Issue No.: 2

Page 2 of 4

Manufacturer: **Metrix Instrument Co.**  
8824 Fallbrook  
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 60079-11 : 2011** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition: 6.0

*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/ExTR10.0040/00](#)

[GB/BAS/ExTR11.0096/00](#)

[GB/BAS/ExTR15.0245/00](#)

##### Quality Assessment Report:

[GB/BAS/QAR10.0017/03](#)



# IECEx Certificate of Conformity

Certificate No.: IECEx BAS 10.0021X

Date of Issue: 2015-09-07

Issue No.: 2

Page 3 of 4

## Schedule

### EQUIPMENT:

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

The Model 5485C Velocity Transducer is designed to measure vibrations and convert them into an output signal. It comprises a coil and magnet housed within a stainless steel enclosure. Electrical connections are made via a two-pole connector or integral cable.

### Input parameters

$U_i = 28V$      $C_i = 0$   
 $I_i = 120mA$      $L_i = 0.88mH \text{ max}$   
 $P_i = 625mW$

### CONDITIONS OF CERTIFICATION: YES as shown below:

1 The Temperature Classification and ambient temperature range of the Model 5485C can vary and may be as follows:

T6	$-54^{\circ}C \leq T_a \leq +45^{\circ}C$
T5	$-54^{\circ}C \leq T_a \leq +60^{\circ}C$
T4	$-54^{\circ}C \leq T_a \leq +95^{\circ}C$
T3	$-54^{\circ}C \leq T_a \leq +160^{\circ}C$
T2	$-54^{\circ}C \leq T_a \leq +260^{\circ}C$
T1	$-54^{\circ}C \leq T_a \leq +375^{\circ}C$

2. When terminated, the flying leads of the integral cable must be afforded a degree of protection of at least IP20.



# IECEx Certificate of Conformity

Certificate No.: IECEx BAS 10.0021X

Date of Issue: 2015-09-07

Issue No.: 2

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

### Variation 2.1

To permit minor drawing changes and to confirm that the equipment meets the requirements of IEC 60079-0:2011 & IEC 60079-11:2011. The equipment already carries marking in accordance with these standards.

ExTR: GB/BAS/ExTR15.0245/00

File Reference: 15/0575



**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](http://www.iecex.com)

Certificate No.: IECEx BAS 10.0021X issue No.:1

Status: **Current**

Certificate history:  
Issue No. 1 (2011-4-14)  
Issue No. 0 (2010-8-5)

Date of Issue: **2011-04-14** Page 1 of 4

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

Electrical Apparatus: **Model 5485C Velocity Transducer**  
*Optional accessory:*

Type of Protection: **Intrinsic Safety**

Marking: **Ex ia IIC T\* Ga**  
**Temperature Class - see schedule**

*Approved for issue on behalf of the IECEx  
Certification Body:* R. S. Sinclair

*Position:* Managing Director

*Signature:*  
*(for printed version)*

  
14-4-11

*Date:*

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Certificate issued by:

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



METRIX DOC No: 1166042  
REV: B



# IECEX Certificate of Conformity

Certificate No.: IECEx BAS 10.0021X

Date of Issue: 2011-04-14

Issue No.: 1

Page 2 of 4

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

Manufacturing location(s):

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#### 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 60079-11 : 2006** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "I"  
Edition: 5

*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/ExTR10.0040/00](#)  
[GB/BAS/ExTR11.0096/00](#)

Quality Assessment Report:

[GB/BAS/QAR10.0017/00](#)

METRIX DOC No: 1166042  
REV: B



# IECEx Certificate of Conformity

Certificate No.: IECEx BAS 10.0021X

Date of Issue: 2011-04-14

Issue No.: 1

Page 3 of 4

## Schedule

### EQUIPMENT:

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

The Model 5485C Velocity Transducer is designed to measure vibrations and convert them into an output signal. It comprises a coil and magnet housed within a stainless steel enclosure. Electrical connections are made via a two-pole connector or integral cable.

### Input parameters

U<sub>i</sub> = 28V    C<sub>i</sub> = 0  
I<sub>i</sub> = 120mA    L<sub>i</sub> = 0.88mH max  
P<sub>i</sub> = 625mW

### CONDITIONS OF CERTIFICATION: YES as shown below:

1 The Temperature Classification and ambient temperature range of the Model 5485C can vary and may be as follows:

T6	-54°C ≤ Ta ≤ +45°C
T5	-54°C ≤ Ta ≤ +60°C
T4	-54°C ≤ Ta ≤ +95°C
T3	-54°C ≤ Ta ≤ +160°C
T2	-54°C ≤ Ta ≤ +260°C
T1	-54°C ≤ Ta ≤ +375°C

METRIX DOC No: 1166042  
REV: B



# IECEX Certificate of Conformity

Certificate No.: IECEx BAS 10.0021X

Date of Issue: 2011-04-14

Issue No.: 1

Page 4 of 4

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

### Variation 1.1

To permit minor drawing changes that do not affect the original assessment.

ExTR: **GB/BAS/ExTR11.0096/00**

File Reference: **11/0273**

METRIX DOC No: 1166042  
REV: B

**The following pages are the prior revisions of this certificate.**



# IECEX Certificate of Conformity

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**IEC Certification Scheme for Explosive Atmospheres**  
for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX BAS 10.0021X** issue No.: **0** Certificate history:

Status: **Current**

Date of Issue: **2010-08-05** Page 1 of 3

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

Electrical Apparatus: **Model 5485C Velocity Transducer**  
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **Ex ia IIC T\* Ga**  
**Temperature Class - see schedule**

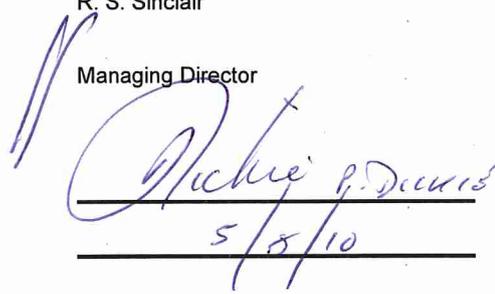
Approved for issue on behalf of the IECEx  
Certification Body:

R. S. Sinclair

Position:

Managing Director

Signature:  
(for printed version)



5/8/10

Date:

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# IECEx Certificate of Conformity

Certificate No.: IECEx BAS 10.0021X

Date of Issue: 2010-08-05

Issue No.: 0

Page 2 of 3

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[GB/BAS/QAR10.0017/00](#)



# IECEx Certificate of Conformity

Certificate No.: IECEx BAS 10.0021X

Date of Issue: 2010-08-05

Issue No.: 0

Page 3 of 3

## Schedule

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