

1 **EC - TYPE EXAMINATION CERTIFICATE**

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

3 EC - Type Examination Certificate Number: **Baseefa10ATEX0056X – Issue 2**

4 Equipment or Protective System: **Model 5485C Velocity Transducer**

5 Manufacturer: **Metrix Instrument Co.**

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

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

8 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's. See Certificate History

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

EN 60079-0:2012+A11:2013 EN 60079-11:2012

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

10 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.

11 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.

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

Ex II 1 G Ex ia IIC T* Ga *See schedule for temperature classification

Baseefa Customer Reference No. **0708**

Project File No. **15/0575**

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R S SINCLAIR *PP DB/REDAILEY*
GENERAL MANAGER

On behalf of SGS Baseefa Limited

METRIX Doc No: 1165905
REV: C

13 **Schedule**

14 **Certificate Number Baseefa10ATEX0056X – Issue 2**

15 **Description of Equipment or Protective System**

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

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

16 **Report Number**

GB/BAS/ExTR15.0245/00

17 **Specific Conditions of Use**

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.

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**

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
5485C-004-AGENCY	1 of 1	C	04-21-09	Part List, Assy Hi-Temp Velocity Transducer
5485C-AGENCY	1 & 2	C	04-21-09	Assembly, High Temperature Velocity Transducer 5485C
5485C-XXX-AGENCY	1 & 2	C	04-21-09	Parts List 5485C
8062-XXX-LCIE-AGENCY	1 of 1	A	08-14-15	Nameplate, 5485C
8433-XXX-AGENCY	1 of 1	B	04-21-09	Assembly, Bobbin M5

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
4850-XXX-AGENCY	1 of 1	A	04-21-09	Assembly, Cable High Temperature Transducer
7007-XXX-AGENCY	1 of 1	A	03-30-11	Magnet

All drawings are common to, and held with, IECEx BAS 10.0021X.

20 Certificate History

Certificate No.	Date	Comments
Baseefa10ATEX0056X	24 May 2010	The release of the prime certificate. The associated test and assessment is documented in Test Report No. GB/BAS/ExTR10.0040/00. Project File No. 09/1013.
Baseefa10ATEX0056X/1	14 April 2011	To permit minor drawing changes. Test Report No. GB/BAS/ExTR11.0096/00. Project File No. 11/0273.
Baseefa10ATEX0056X Issue 2	7 September 2015	This issue of the certificate incorporates previously issued primary & supplementary certificates into one certificate, permits minor drawing changes and confirms the current design meets the requirements of EN 60079-0:2012+A11:2013 & EN 60079-11:2012, including the revision of the marking in accordance with these standards. Test Report No. GB/BAS/ExTR15.0245/00. Project File No. 15/0575.
For drawings applicable to each issue, see original of that issue.		



The following pages are the prior revisions of this certificate.



1 **SUPPLEMENTARY EC - TYPE EXAMINATION CERTIFICATE**

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

3 Supplementary EC - Type Examination Certificate Number: **Baseefa10ATEX0056X/1**

4 Equipment or Protective System: **Model 5485C Velocity Transducer**

5 Manufacturer: **Metrix Instrument Co.**

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

7 This supplementary certificate extends EC – Type Examination Certificate No. Baseefa10ATEX0056X 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.

This supplementary certificate shall be held with the original certificate.

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

Baseefa Customer Reference No. **0708**

Project File No. **11/0273**

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.

A handwritten signature in blue ink, appearing to read "R S Sinclair".

R S SINCLAIR
DIRECTOR
On behalf of
Baseefa

Baseefa

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Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.



13

Schedule

14

Certificate Number Baseefa10ATEX0056X/1

15 Description of the variation to the Equipment or Protective System

Variation 1.1

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

16 Report Number

GB/BAS/ExTR11.0096/00

17 Special Conditions for Safe Use

None additional to those listed previously

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
7007-XXX-AGENCY	1 of 1	A	03-30-11	Magnet
8062-XXX-AGENCY	1 – 6	A	03-30-11	Nameplate, 5485C

These drawings are common to, and held with, IECEx BAS 10.0021X Issue 1

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The examination and test results are recorded in confidential Report No. **GB/BAS/ExTR10.0040/00**

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EN 60079-0:2009 EN 60079-11:2007

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

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⊕ II 1 G Ex ia IIC T* Ga *See schedule for temperature classification

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Baseefa Customer Reference No. **0708**

Project File No. **09/1013**

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Baseefa

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Baseefa is a trading name of Baseefa Ltd
Registered in England No. 4305578. Registered address as above.


R.S. SINCLAIR
DIRECTOR
On behalf of
Baseefa



13

Schedule

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Certificate Number Baseefa10ATEX0056X

15 Description of Equipment or Protective System

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

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

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T3	$-54^{\circ}\text{C} \leq T_a \leq +160^{\circ}\text{C}$
T2	$-54^{\circ}\text{C} \leq T_a \leq +260^{\circ}\text{C}$
T1	$-54^{\circ}\text{C} \leq T_a \leq +375^{\circ}\text{C}$

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
8062-XXX	1 - 4	W	11-30-89	Nameplate, 5485C
8433-XXX-AGENCY	1 & 2	A	04-21-09	Assembly, Bobbin M5
7007-XXX	1 of 1	H	08-18-94	Magnet
5485C-XXX-AGENCY	1 & 2	B	04-21-09	Parts List 5485C
5485C-AGENCY	1 & 2	B	04-21-09	Assembly, High Temperature Velocity Transducer 5485C
5485C-004-AGENCY	1 of 1	B	04-21-09	Part List, Assy Hi-Temp Velocity Transducer
4850-XXX-AGENCY	1 of 1	A	04-21-09	Assembly, Cable High Temperature Transducer

These drawings are common to, and held with IECEx BAS 10.0021X