



# Certificate of Compliance

**Certificate:** 2413213 (LR 49334)

**Master Contract:** 168872

**Project:** 2556508

**Date Issued:** October 2, 2012

**Issued to:** **Metrix Instrument Co.**  
**8824 Fallbrook Dr.**  
**Houston, TX 77064**  
**USA**  
**Attention: Stephen Kraig**

*The products listed below are eligible to bear the CSA Mark shown*



*John Yam*

**Issued by:** John Yam

## **PRODUCTS**

**CLASS 2258 84** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - - For Hazardous Locations - Certified to US Standards

**CLASS 2258 04** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations

**CLASS 2258 03** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations

### **Class I, Division 1, Groups A, B, C and D:**

Velocity Transducers, Models 5485C-XX, CMSS85-7, CMSS85-8XX, CMSS85-9 and CMSS85-10-XX, intrinsically safe, must be connected to CSA Certified zener barrier, rated 22V max, 300 ohms min or 14V max, 50 ohms min, when installed per drawing No 7623 (Models XXXX85C).

**CLASS 2258 04** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations

METRIX DOC NO: 1165911  
REV: B



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**Date Issued:** October 2, 2012

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**Class I, Division 1, Groups A, B, C and D:**

Velocity Transducers, Models 5485C-XX, CMSS85-7, CMSS85-8XX, CMSS85-9 and CMSS85-10-XX; intrinsically safe with the following entity parameters:  $V_{max} = 28V$ ,  $I_{max} = 250mA$ ,  $C_i = 0$ ,  $L_i = 0.88mH$

Notes:

- The above products must be installed in accordance with drawing No 7623 (Models XXXX85C)
- Suffixes "XX" denote coil sensitivity and cable length.

**APPLICABLE REQUIREMENTS**

CSA Std C22.2 No. 142-M1987 - Process Control Equipment

CAN/CSA-C22.2 No. 157-M92 - Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations



## *Supplement to Certificate of Compliance*

**Certificate:** 2413213

**Master Contract:** 168872

*The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

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<b>Project</b>	<b>Date</b>	<b>Description</b>
2556508	October 2, 2012	Update to report 2413213 to include updated drawings per only a paperwork review.
2413213	July 18, 2011	Supersedes 1351828; update report 1351828 to include updated drawings per only a paperwork review. Due to the duplication of project numbers the certificate 1351828 was assigned new certificate number 2413213.

### **History**

1351828 - October 1, 2002 - (Superceded by report 2413213.) Certification of velocity transducers Models 5485C-XX, CM5585-7, CM5585-8XX, CM5585-9, CM5585-10-XX and 5475C-XX (Supercedes Report LR49334-4).

LR 49334-30 - December 4, 1998 - Update to Report LR 49334-4, to cover revised drawings.

LR 49334-16 - February 25, 1994 - Update to Report LR 49334-4 to cover revised construction of 5475C and 5485C Transducers and to add Entity Parameters.

LR 49334-13 - June 21, 1993 - Update to -4 to cover additional model numbers for SKF monitoring.

LR 49334-10 - December 2, 1991 - Update of Report LR 49334-4 to cover: alternate grounding method, deletion of factory test.

LR 49334-4 - August 11, 1987 - Original Certification.

METRIX DOC NO: 1165911 REV: B
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**The following pages are the prior revisions of this certificate.**



# Certificate of Compliance

**Certificate:** 2413213 (LR 49334)

**Master Contract:** 168872

**Project:** 2413213

**Date Issued:** July 18, 2011

**Issued to:** Metrix Instrument Co.

8824 Fallbrook Dr.  
Houston, TX 77064  
USA

Attention: David Dobsky

*The products listed below are eligible to bear the CSA Mark shown*



*Ron Wachowicz*

**Issued by:** Ron Wachowicz, C.E.T.

## PRODUCTS

**CLASS 2258 03** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non -  
Incendive Systems - For Hazardous Locations

**CLASS 2258 04** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For  
Hazardous Locations

**CLASS 2258 03** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For  
Hazardous Locations

### **Class I, Division 1, Groups A, B, C and D:**

Velocity Transducers, Models 5485C-XX, CMSS85-7, CMSS85-8XX, CMSS85-9 and CMSS85-10-XX,  
intrinsically safe, must be connected to CSA Certified zener barrier, rated 22V max, 300 ohms min or 14V max,  
50 ohms min, when installed per drawing No 7623 (Models XXXX85C).

**CLASS 2258 04** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations

METRIX DOC No: 1165911  
REV: A



**Certificate:** 2413213 (LR 49334)

**Master Contract:** 168872

**Project:** 2413213

**Date Issued:** July 18, 2011

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**Class I, Division 1, Groups A, B, C and D:**

Velocity Transducers, Models 5485C-XX, CMSS85-7, CMSS85-8XX, CMSS85-9 and CMSS85-10-XX; intrinsically safe with the following entity parameters: V max = 28V, I max = 250mA, Ci = 0, Li = 0.88mH

Notes:

- The above products must be installed in accordance with drawing No 7623 (Models XXXX85C)
- Suffixes "XX" denote coil sensitivity and cable length.

**APPLICABLE REQUIREMENTS**

CSA Std C22.2 No. 142-M1987 - Process Control Equipment

CAN/CSA-C22.2 No. 157-M92 - Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations



## *Supplement to Certificate of Compliance*

**Certificate:** 2413213

**Master Contract:** 168872

*The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

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<b>Project</b>	<b>Date</b>	<b>Description</b>
2413213	July 18, 2011	Supersedes 1351828; update report 1351828 to include updated drawings per only a paperwork review. Due to the duplication of project numbers the certificate 1351828 was assigned new certificate number 2413213.

### **History**

1351828 - October 1, 2002 - (Superceded by report 2413213.) Certification of velocity transducers Models 5485C-XX, CM5585-7, CM5585-8XX, CM5585-9, CM5585-10-XX and 5475C-XX (Supercedes Report LR49334-4).

LR 49334-30 - December 4, 1998 - Update to Report LR 49334-4, to cover revised drawings.

LR 49334-16 - February 25, 1994 - Update to Report LR 49334-4 to cover revised construction of 5475C and 5485C Transducers and to add Entity Parameters.

LR 49334-13 - June 21, 1993 - Update to -4 to cover additional model numbers for SKF monitoring.

LR 49334-10 - December 2, 1991 - Update of Report LR 49334-4 to cover: alternate grounding method, deletion of factory test.

LR 49334-4 - August 11, 1987 - Original Certification.

METRIX DOC No: 1165911  
REV: A

# Certificate of Compliance

**Certificate:** 1351828 (LR 49334-4)

**Master Contract:** 168872

**Project:** 1351828

**Date Issued:** October 1, 2002

**Issued to:** Metrix Instrument Co.  
1711 Townhurst Dr.  
Houston, TX 77043  
USA

**Attention:** Mr. David Dobsky

*The products listed below are eligible to bear the CSA Mark shown*



**Issued by:**

  
Joe da Silva, C.E.T.

**Authorized by:**

  
Nick Alfano  
Operations Manager

## PRODUCTS

CLASS 2258 03 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations

Class I, Groups A, B, C and D:

- Velocity Transducers, Models 5485C-XX, CMSS85-7, CMSS85-8XX, CMSS85-9, CMSS85-10-XX and 5475C-XX, intrinsically safe, must be connected to CSA Certified zener barrier, rated 22V max, 300 ohms min or 14V max, 50 ohms min, when installed per Dwg No 7623 (Models XXXX85C) or Dwg No 7671 (Model 5475C).

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations

Class I, Groups A, B, C and D:

- Velocity Transducers, Models 5485C-XX, CMSS85-7, CMSS85-8XX, CMSS85-9, CMSS85-10-XX and 5475C-XX; intrinsically safe with the following entity parameters:

V max = 28V

I max = 250mA

Ci = 0

Li = 0.88mH

### Notes:

1. The above products must be installed in accordance with Dwg No 7623 (Models XXXX85C) or Dwg No 7671 (Model 5475).
2. Suffixes "XX" denote coil sensitivity and cable length.



CSA INTERNATIONAL

**Certificate:** 1351828

**Master Contract:** 168872

**Project:** 1351828

**Date:** October 1, 2002

**APPLICABLE REQUIREMENTS**

CSA Std C22.2 No.	142-M1987	-	Process Control Equipment
CAN/CSA-C22.2 No.	157-92	-	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations

**MARKINGS**

- CSA Monogram;
- Model number;
- Serial number;
- Company name;
- Hazardous location designation;
- The words "INTRINSICALLY SAFE/SECURITE INTRINSEQUE";
- Reference to installation instructions;
- The symbol Exia;
- Entity parameters.

METRIX DOC No: 1165911  
REV: A



## *Supplement to Certificate of Compliance*

**Certificate:** 1351828 (LR49334-4)

**Master Contract:** 168872

*The products listed, including the latest revision described below,  
are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

<b>Project</b>	<b>Date</b>	<b>Description</b>
-30	Dec. 4, 1998	Update to cover revised drawing.
1351828	Oct. 1, 2002	Update to include new Vmax entity parameter and also alternate construction to omit ground wire.



## Certificate of Compliance

**Certificate Number:** LR 49334-4

**Revision:** LR 49334-30

**Date Issued:** December 4, 1998

**Issued To:** Metrix Instrument Co.  
1711 Townhurst Dr.  
Houston, TX 77043  
Attention: Mr. Quentin Bach

*The products listed below are eligible to bear the CSA Mark shown*



**Issued by** R. Wildish  
Toronto, Canada

**Signature:** \_\_\_\_\_

CLASS 2258 03 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations

### PRODUCTS

Class I, Groups A, B, C and D:

- Velocity Transducers, Models 5485C-XX, CMSS85-7, CMSS85-8XX, CMSS85-9, CMSS85-10-XX and 5475C-XX, intrinsically safe, must be connected to CSA Certified zener barrier, rated 22V max, 300 ohms min or 14V max, 50 ohms min, when installed per Dwg No 7623 (Models XXXX85C) or Dwg No 7671 (Model 5475C).

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations

### PRODUCTS

Class I, Groups A, B, C and D:

- Velocity Transducers, Models 5485C-XX, CMSS85-7, CMSS85-8XX, CMSS85-9, CMSS85-10-XX and 5475C-XX; intrinsically safe with the following entity parameters:

V max = 10V      I max = 250mA      Ci = 0      Li = 0.88mH

### Notes:

1. The above products must be installed in accordance with Dwg No 7623 (Models XXXX85C) or Dwg No 7671 (Model 5475).
2. Suffixes "XX" denote coil sensitivity and cable length.

### APPLICABLE REQUIREMENTS

CSA Std C22.2 No. 142-M1987 - Process Control Equipment

METRIX DOC No: 1165911  
REV: A



**Certificate No:** LR 49334-4

**Date:** December 4, 1998

**Revision:** LR 49334-30

CAN/CSA-C22.2 No. 157-92 - Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations

**MARKINGS**

- CSA Monogram;
- Model number;
- Serial number;
- Company name;
- Hazardous location designation;
- The words "INTRINSICALLY SAFE/SECURITE INTRINSEQUE";
- Reference to installation instructions;
- The symbol Exia;
- Entity parameters.

METRIX DOC No: 1165911  
REV: A



## *Supplement to Certificate of Compliance*

**Certificate Number:** LR 49334-4

**Issued To:** Metrix Instrument Co.  
1711 Townhurst Dr.  
Houston, TX 77043  
**Attention:** Mr. Quentin Bach

*The products listed, including the latest revision described below,  
are eligible to be marked in accordance with the referenced Certificate.*

**Issued By:** R. Wildish  
Toronto, ON Canada

**Signature** \_\_\_\_\_

### **Product Certification History**

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<b>Revision</b>	<b>Date</b>	<b>Description</b>
- 30	Dec. 4/98	Update to cover revised drawings.

METRIX DOC No: 1165911  
REV: A