



IECEX Certificate of Conformity

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 23.0188X	Page 1 of 3	Certificate history:
Status:	Current	Issue No: 0	
Date of Issue:	2025-10-31		
Applicant:	Metrix Instrument Co. 8824 Fallbrook Houston Texas 77064 USA United States of America		
Equipment:	MX2033 & MX2034 Digital Proximity Systems		
Optional accessory:			
Type of Protection:	Intrinsic Safety Ex "ia"		
Marking:	Ex ia IIC T4 Ga -40°C ≤ Ta ≤ 85°C		

Approved for issue on behalf of the IECEx
Certification Body:

L A Brisk

Position:

Assistant Certification Manager

Signature:
(for printed version)

Date:
(for printed version)

31 Oct 2025

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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:

Eurofins E&E CML Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom



METRIX DOC NO: 1456014
REV: E



IECEX Certificate of Conformity

Certificate No.: **IECEX CML 23.0188X**

Page 2 of 3

Date of issue: 2025-10-31

Issue No: 0

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

Manufacturing
locations: **Metrix Instrument Co.**
8824 Fallbrook
Houston
Texas 77064
USA
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 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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/ExTR25.0193/00](#)

Quality Assessment Report:

[GB/BAS/QAR10.0017/09](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX CML 23.0188X**

Page 3 of 3

Date of issue: 2025-10-31

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The MX2033-AA-BB-CC-DD and MX2034-AA-BB-CC-DD-EE-FFF-GG are normally supplied as part of the Digital Proximity System (DPS).

See Annex for full description.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to the IECEx Annex for Specific Conditions of Use.

Annex:

[IECEX CML 23.0188X Issue 0 Certificate Annex.pdf](#)

Annexe to: IECEx CML 23.0188X Issue 0
Apparatus: MX2033 & MX2034 Digital Proximity System
Applicant: Metrix Instrument Co.



Description

The MX2033-AA-BB-CC-DD and MX2034-AA-BB-CC-DD-EE-FFF-GG are normally supplied as part of the Digital Proximity System (DPS).

For MX2034-AA-BB-CC-DD-EE-FFF-GG where DD = X4, X5, X6, X7, or X8, these models are suitable for either Zone 0 (Ex ia) or for Zone 2 (Ex ec) use, the protection concept used must be irrevocably marked on the label at the time of installation.

For MX2034-AA-BB-CC-DD-EE-FFF-GG where DD = X0, these models are non-hazardous area certified, the letters after the main model number denote configuration options not affecting certification.

The MX2034 also includes a BNC connector that can be used in hazardous locations.

- Where DD = 07, S7, 08, S8, the BNC connector can be used in Zone 0 (Ex ia) installations.

The units comprise of three potted printed circuit boards housed inside a DIN rail mountable enclosure. A coaxial RF connector is present to enable a proximity probe to be connected using an extension cable, and screw terminal plug and socket assembly accepts the user connections.

The input terminals of MX2033 and MX2034 is to be powered only from resistively limited sources.

Ratings

MX2034 DD=04/S4, 05/S5, or 06/S6:

Input Terminals Pin 1(Loop-) & Pin 2(Loop+)

$U_i = 28V$
 $I_i = 93mA$
 $P_i = 0.66W$
 $C = 18nF$
 $L_i = 2\mu H$

Output BNC Dynamic Connector

$U_m = 0V$

MX2034 DD = 07/S7, 08/S8:

Input Terminals Pin 1(Loop-) & Pin 2(Loop+)

$U_i = 25.4V$
 $I_i = 86.8mA$
 $P_i = 0.551W$
 $C = 0\mu F$
 $L_i = 39.6\mu H$



Certificate Annex IECEx
Version: 12.0 Approval: Approved



Eurofins E&E CML Limited
Newport Business Park, New Port Road
Ellesmere Port, CH65 4LZ, UK



Input Terminals Pin 3(Sig) & Pin 4(COM) - BNC Dynamic Connector

$U_i = 15.5V$
 $I_i = 7.2mA$
 $P_i = 0.028W$
 $C_i = 7.48nF$
 $L_i = 192.28\mu H$

MX2033 Input Terminals Pin 1(-VT), Pin 2(COM) & Pin 3(Sig)

$U_i = 28V$
 $I_i = 138mA$
 $P_i = 0.81W$
 $C = 18nF$
 $L_i = 2\mu H$

Notes:

- ETL22ATEX0138X / IECEx ETL 22.0014X / ITS22UKEX0528X is superseded by this certificate.
- The product covered by Issue 0 of this certificate remains identical to that previously covered by ETL22ATEX0138X / IECEx ETL 22.0014X / ITS22UKEX0528X.
- Where ETL22ATEX0138X / IECEx ETL 22.0014X / ITS22UKEX0528X is specified in other product certification, or other technical specifications, this certificate reference for the product shall be used in its place; updating of the other product certificate or technical specification is not required.

Conditions of Manufacture

None.

Specific Conditions of Use

The following conditions relate to safe installation and/or use of the equipment.

- i. The protection concept used must be irrevocably marked on the label during installation.
- ii. To reduce the risk of electrostatic ignition the equipment must be cleaned only with a damp cloth.



Certificate Annex IECEx
Version: 12.0 Approval: Approved



Eurofins E&E CML Limited
Newport Business Park, New Port Road
Ellesmere Port, CH65 4LZ, UK



The following pages are the prior revisions of this certificate.



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEx ETL 22.0014X** Page 1 of 4 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2022-09-07

Applicant: **METRIX INSTRUMENT CO.**
8824 Fallbrook
Houston
TEXAS 77064
USA
United States of America

Equipment: **MX2033 & MX2034 Digital Proximity Systems**

Optional accessory:

Type of Protection: **Intrinsically Safe 'ia'**

Marking: Ex ia IIC T4 Ga
-40°C ≤ Ta ≤ 85°C
IECEx ETL22.0014X

Approved for issue on behalf of the IECEx
Certification Body:

Kevin J. Wolf

Position:

Certification Officer

Signature:
(for printed version)

Date:
(for printed version)

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Certificate issued by:

Intertek
3933 US Route 11 South
Cortland NY 13045-2995
United States of America

intertek

METRIX DOC NO: 1456014
REV: D



IECEX Certificate of Conformity

Certificate No.: **IECEX ETL 22.0014X**

Page 2 of 4

Date of issue: 2022-09-07

Issue No: 0

Manufacturer: **Metrix Instrument Co.**
8824 Fallbrook Dr
Houston, TX 77064
United States of America

Manufacturing locations: **Metrix Instrument Co.**
8824 Fallbrook Dr
Houston, TX 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 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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:

[US/ETL/ExTR22.0015/00](#)

Quality Assessment Report:

[GB/BAS/QAR10.0017/08](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx ETL 22.0014X**

Page 3 of 4

Date of issue: 2022-09-07

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The MX2033-AA-BB-CC-DD and MX2034-AA-BB-CC-DD-EE-FFF-GG are normally supplied as part of the Digital Proximity System (DPS).

For MX2034-AA-BB-CC-DD-EE-FFF-GG where DD = X4, X5, X6, X7, or X8, these models are suitable for either Zone 0 (Ex ia) or for Zone 2 (Ex ec) use, the protection concept used must be irrevocably marked on the label at the time of installation.

For MX2034-AA-BB-CC-DD-EE-FFF-GG where DD = X0, these models are non-hazardous area certified, the letters after the main model number denote configuration options not affecting certification.

The MX2034 also includes a BNC connector that can be used in hazardous locations.

- Where DD = 04, S4, 05, S5, 06, S6, the BNC connector can only be used in Zone 2 (Ex ec) installations.
- Where DD = 07, S7, 08, S8, the BNC connector can be used in Zone 0 (Ex ia) installations.

The units comprise of three potted printed circuit boards housed inside a DIN rail mountable enclosure. A coaxial RF connector is present to enable a proximity probe to be connected using an extension cable, and screw terminal plug and socket assembly accepts the user connections.

The input terminals of MX2033 and MX2034 is to be powered only from resistively limited sources

TERMINAL PARAMETERS

MX2034 DD=04/S4, 05/S5, or 06/S6:

Input Terminals Pin 1(Loop-) & Pin 2(Loop+)

Ui = 28V
Ii = 93mA
Pi = 0.66W
C = 18nF
Li = 2μH

Output BNC Dynamic Connector

Um = 0V

MX2034 DD = 07/S7, 08/S8:

Input Terminals Pin 1(Loop-) & Pin 2(Loop+)

Ui = 25.4V
Ii = 86.8mA
Pi = 0.551W
C = 0μF
Li = 39.6μH

Input Terminals Pin 3(Sig) & Pin 4(COM) - BNC Dynamic Connector

Ui = 15.5V
Ii = 7.2mA
Pi = 0.028W
Ci = 7.48nF
Li = 192.28μH

MX2033 Input Terminals Pin 1(-VT), Pin 2(COM) & Pin 3(Sig)

Ui = 28V
Ii = 138mA
Pi = 0.81W
C = 18nF
Li = 2μH

SPECIFIC CONDITIONS OF USE: YES as shown below:

Special Conditions of Use:

To reduce the risk of electrostatic ignition the equipment must be cleaned only with a damp cloth



IECEX Certificate of Conformity

Certificate No.: **IECEX ETL 22.0014X**

Page 4 of 4

Date of issue: 2022-09-07

Issue No: 0

Equipment (continued):

TERMINAL PARAMETERS

MX2034 Input Terminals Pin 1(Loop-) & Pin 2(Loop+)

$U_i = 28V$
 $J_i = 93mA$
 $P_i = 0.66W$
 $C = 18nF$
 $L_i = 2\mu H$

MX2034 DD = 07 Input Terminals Pin 1(Loop-) & Pin 2(Loop+)

$U_i = 25.4V$
 $I_i = 86.8mA$
 $P_i = 0.551W$
 $C_i = 18nF$
 $L_i = 2\mu H$

MX2033 Input Terminals Pin 1(-VT), Pin 2(COM) & Pin 3(Sig)

$U_i = 28V$
 $J_i = 138mA$
 $P_i = 0.81W$
 $C = 18nF$
 $L_i = 2\mu H$

MX 2034 BNC - Dynamic Output Connector

$U_i = 15.5V$
 $I_i = 7.2mA$
 $P_i = 0.028W$
 $C_i = 18nF$
 $L_i = 2\mu H$

Annex:

[IECEX ETL 22.0014X Annex.pdf](#)



Annex to IECEx Certificate of Conformity

Certificate No:	IECEX ETL 22.0014X	Issue No. 0
Annex No. 1		

Technical Documents				
#	Title:	Drawing No.:	Rev. Level:	Date:
1	Schematic, DPS, Analag/Digital Board	100495-AGENCY-DWG	J	8/13/2018
2	BOM, MX2032/MX2034 Controller Board (Agency)	100497-AGENCY	L	8/30/2021
3	BOM, MX2033 Controller Board (AGENCY)	100500-AGENCY	L	10/28/2021
4	Assembly, DPS, Analog/Digital Board	100497-AGENCY-DWG	E	8/13/2018
5	Fabrication Dwg, Analog PCB, MX2032, MX2033 & MX2034 (Agency)	100496-AGENCY-DWG	J	8/13/2018
6	Parts List for Assy, Adapter Board	9639-AGENCY	B	8/13/2018
7	Assy, Adapter Board (Agency)	9639-AGENCY-DWG	B	8/13/2018
8	Schematic, DPS, Power Supply Bd.	100492-AGENCY-DWG	H	8/13/2018
9	BOM, "MX2034 POWER SUPPLY BOARD"	100494-AGENCY	V	7/16/2022
10	Assy, DPS, Power Supply Bd.	100494-AGENCY-DWG	C	8/13/2018
11	Drill Dwg, Power Supply, MX2032 & MX2034 (Agency)	100493-AGENCY-DWG	E	8/13/2018
12	Schematic, DPS, Power Supply Bd.	100486-AGENCY-DWG	J	8/13/2018
13	BOM, "MX2033 POWER SUPPLY BOARD"	100491-AGENCY	N	8/20/2021
14	Assy, DPS, Power Supply Bd. (Agency)	100491-AGENCY-DWG	B	8/13/2018
15	Drill Dwg, Power Supply, MX2033 (Agency)	100487-AGENCY-DWG	G	8/13/2018
16	Schematic, DPS, Interconnect Bd.	100501-AGENCY-DWG	D	7/29/2021
17	BOM, DPS Interconnect Board (Agency)	100503-AGENCY	G	8/3/2021
18	Assy, DPS, Interconnect Bd. (Agency)	100503-AGENCY-DWG	C	7/29/2021
19	Drill Dwg, Interconnect PCB, MX2032, MX2033 & MX2034 (Agency)	100502-AGENCY-DWG	D	9/28/2021
20	Schem Dwg, MX2033/MX2034 interconnect board, RoHS, Agency	100972-AGENCY-DWG	B	5/7/2020
21	Drill Dwg, MX2033/MX2034 interconnect board, RoHS, Agency	100973-AGENCY-DWG	C	4/29/2021
22	Parts List, MX2033/MX2034 interconnect board, RoHS, Agency	100974-AGENCY	B	5/7/2020
23	Assy Dwg, MX2033/MX2034 interconnect board, RoHS, Agency	100974-AGENCY-DWG	B	5/7/2020
24	100974 Interconnect Board MX2034, 3 Pin Connector (94019-107) or 4 Pin Connector (94019-108) Modification Procedure	1862198-AGENCY	A	6/1/2019
25	100974 Interconnect Board for MX2033, 3 Pin Connector (94019-107) Modification Procedure	1881628-AGENCY	A	6/1/2019
26	Label, MX2032, MX2033 & MX2034	100563-XXX-AGENCY	C	5/5/2021
27	Label, Top, MX2032, MX2033 & MX2034	100511-XXX-AGENCY-DWG	C	4/12/2022
28	General Arrangement Drawing	1082695-AGENCY	E	8/13/2018

Certificate issued by:

intertek

Total Quality. Assured.

Legal entity name
Address

SFT-IECEX-OP-19f (26 October 2018)

Page 1 of 2

METRIX DOC NO: 1456014
REV: D



Annex to IECEx Certificate of Conformity

Certificate No:	IECEx ETL 22.0014X	Issue No. 0
Annex No. 1		

Technical Documents				
#	Title:	Drawing No.:	Rev. Level:	Date:
29	Intrinsically Safe Installation (Intertek) MX2033 & MX2034	100506-DWG	C	4/29/2022
30	Installation, (ATEX IECEx), MX2032, MX2033, & MX2034	100508-DWG	C	4/29/2022
31	Zone 2 Installation (ATEX IECEx), MX2032, MX2033, & MX2034	100515-DWG	C	4/29/2022
32	SCD, connector, screwless term block, 3 pos, 3.5mm, RoHS	94019-107-SCD	E	9/11/2020
33	SCD, connector, screwless term block, 4 pos, 3.5mm, RoHS	94019-108-SCD	E	9/11/2020
34	Div. 2 Installation (Intertek) MX2033/MX2034	100512-DWG	D	4/25/2022
35	Label, MX2033, and MX2034	100563-XXX	K	4/29/2022
36	Hazardous Area Installation Manual	1232961	E	April 2022

Certificate issued by:

intertek

Total Quality. Assured.

Legal entity name
Address

Page 2 of 2

SFT-IECEx-OP-19f (26 October 2018)

METRIX DOC NO: 1456014
REV: D



The following pages are the prior revisions of this certificate.



IECEx Certificate of Conformity

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 12.0032X** Page 1 of 4 [Certificate history:](#)
Status: **Current** Issue No: 1 [Issue 0 \(2015-07-16\)](#)
Date of Issue: **2019-10-25**
Applicant: **Metrix Instrument Company**
8824 Fallbrook
Houston
Texas 77064
United States of America
Equipment: **MX2032, MX2033 & MX2034 Digital Proximity Systems**
Optional accessory:
Type of Protection: **Intrinsic safety**
Marking: **Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +85°C)**

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Technical Manager

Signature:
(for printed version)

M POWNEY
Certification
Manager

Date:

M Powney
28/10/19

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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 DOCUMENT NO: 1456014
REV: C



IECEx Certificate of Conformity

Certificate No.: **IECEx BAS 12.0032X**

Page 2 of 4

Date of issue: **2019-10-25**

Issue No: 1

Manufacturer: **Metrix Instrument Company**
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 60079-0:2011 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 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/ExTR12.0040/00](#)

[GB/BAS/ExTR18.0206/00](#)

Quality Assessment Report:

[GB/BAS/QAR10.0017/06](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx BAS 12.0032X**

Page 3 of 4

Date of issue: 2019-10-25

Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Product Description

The MX2032-AA-BB-CC-DD, MX2033-AA-BB-CC-DD and MX2034-AA-BB-CC-DD-EE-FF are normally supplied as part of the Digital Proximity System (DPS).

The letters after the main model number denote configuration options not affecting certification except for the MX2034 EE = X4 X5 or X6 that is not covered by this certificate.

The units comprise three potted printed circuit boards housed inside a DIN rail mountable enclosure. A coaxial RF connector is present to enable a proximity probe to be connected using an extension cable, and 3 way accepts the user connections. The MX2034 also includes a BNC connector for dynamic output.

TERMINAL PARAMETERS

MX2032 & MX2034 Input Terminals Pin 1(Loop-) & Pin 2(Loop+)

$U_i = 28V$

$I_i = 93mA$

$P_i = 0.66W$

$C_i = 18nF$

$L_i = 2\mu H$

The equipment is to be powered only from resistively limited sources.

MX2032 & MX2034 Input Terminals Pin 3(Test) w.r.t Pin 1(Loop-) & Pin 2(Loop+)

$U_m = 0V$

This connection is not for use in hazardous areas.

MX2033 Input Terminals Pin 1(-V+), Pin 2(COM) & Pin 3(Sig)

$U_i = 28V$

$I_i = 138mA$

$P_i = 0.81W$

$C_i = 18nF$

$L_i = 2\mu H$

The equipment is to be powered only from resistively limited sources.

MX 2034 BNC - Dynamic Output Connector

$U_m = 0$

This connection is not for use in hazardous areas.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The protection concept used must be irrevocably marked on the label during installation.
2. For the MX2032 and 2034, the user terminal pin 3 is not for use in hazardous areas.
3. For the MX2034, the top BNC output connector is not for use in hazardous areas.
4. To reduce the risk of electrostatic ignition the equipment must be cleaned only with a damp cloth.

METRIX DOCUMENT NO: 1456014
REV: C



IECEx Certificate of Conformity

Certificate No.: **IECEx BAS 12.0032X**

Page 4 of 4

Date of issue: **2019-10-25**

Issue No: **1**

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 1.1

To permit minor electrical changes and minor drawing changes.

ExTR: **GB/BAS/ExTR18.0206/00**

File Reference: **18/0441**



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

Certificate No.: IECEx BAS 12.0032X issue No.:0 Certificate history:

Status: Current

Date of Issue: 2015-07-16 Page 1 of 3

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

Electrical Apparatus: **MX2032, MX2033 & MX2034 Digital Proximity Systems**
Optional accessory:

Type of Protection: **Intrinsic safety**

Marking: **Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +85°C)**

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

Position: Technical Manager

Signature:
(for printed version)

Date:


16-7-15

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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 12.0032X

Date of Issue: 2015-07-16

Issue No.: 0

Page 2 of 3

Manufacturer: **Metrix Instrument Company**
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/ExTR12.0040/00](#)

Quality Assessment Report:
[GB/BAS/QAR10.0017/03](#)



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 12.0032X

Date of Issue: 2015-07-16

Issue No.: 0

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The MX2032, MX2033 and MX2034 are normally supplied as part of the Digital Proximity System (DPS). The units comprise three potted printed circuit boards housed inside a DIN rail mountable enclosure. A coaxial RF connector is present to enable a proximity probe to be connected using an extension cable, and screw terminal plug and socket assembly accepts the user connections. The MX2034 also includes a BNC connector for dynamic output.

See annex for terminal parameters.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The protection concept used must be irrevocably marked on the label during installation.
2. For the MX2032 and 2034, the user terminal pin 3 is not for use in hazardous areas.
3. For the MX2034, the top BNC output connector is not for use in hazardous areas.
4. To reduce the risk of electrostatic ignition the equipment must be cleaned only with a damp cloth.

Annex: IECEx BAS 12.0032X Annex 0.pdf

TERMINAL PARAMETERS

MX2032 & MX2034 Input Terminals Pins 1 & 2

$$\begin{aligned}U_i &= 28V \\I_i &= 93mA \\P_i &= 0.66W \\C_i &= 18nF \\L_i &= 2\mu H\end{aligned}$$

The equipment is to be powered only from resistively limited sources.

MX2032 & MX2034 Input Terminals Pins 3 w.r.t Pins 1 & 2

$$U_m = 0V$$

This connection is not for use in hazardous areas.

MX2033 Input Terminals Pins 1, 2 & 3

$$\begin{aligned}U_i &= 28V \\I_i &= 138mA \\P_i &= 0.81W \\C_i &= 18nF \\L_i &= 2\mu H\end{aligned}$$

The equipment is to be powered only from resistively limited sources.

MX 2034 Dynamic Output Connector

$$U_m = 0$$

This connection is not for use in hazardous areas.



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

Certificate No.: IECEx BAS 12.0032X issue No.: 0 Certificate history:

Status: Current

Date of Issue: 2015-07-16 Page 1 of 3

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

Electrical Apparatus: **MX2032, MX2033 & MX2034 Digital Proximity Systems**
Optional accessory:

Type of Protection: **Intrinsic safety**

Marking: **Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +85°C)**

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

Position: Technical Manager

Signature:
(for printed version)

Date:


16-7-15

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 12.0032X

Date of Issue: 2015-07-16

Issue No.: 0

Page 2 of 3

Manufacturer: **Metrix Instrument Company**
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/ExTR12.0040/00](#)

Quality Assessment Report:
[GB/BAS/QAR10.0017/03](#)



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 12.0032X

Date of Issue: 2015-07-16

Issue No.: 0

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The MX2032, MX2033 and MX2034 are normally supplied as part of the Digital Proximity System (DPS). The units comprise three potted printed circuit boards housed inside a DIN rail mountable enclosure. A coaxial RF connector is present to enable a proximity probe to be connected using an extension cable, and screw terminal plug and socket assembly accepts the user connections. The MX2034 also includes a BNC connector for dynamic output.

See annex for terminal parameters.

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4. To reduce the risk of electrostatic ignition the equipment must be cleaned only with a damp cloth.

Annex: IECEx BAS 12.0032X Annex 0.pdf