

1 **TYPE EXAMINATION CERTIFICATE**

2 **Safety Device, Controlling Device or Regulating Device intended for use outside a potentially explosive atmosphere but required for or contributing to the safe functioning of Equipment and Protective Systems with respect to the risks of explosion**  
**Directive 2014/34/EU**

3 Type Examination Certificate Number: **Baseefa19ATEX0110X**

4 Product: **MX2032, MX2033 & MX2034 Digital Proximity Systems**

5 Manufacturer: **Metrix Instrument Co.**

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

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 SGS Baseefa certifies that this product 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 Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential Report No. **GB/BAS/ExTR18.0206/00**

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

**EN 60079-0:2012+A11:2013 EN 60079-7:2015+A1:2018**

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 product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

11 This TYPE EXAMINATION CERTIFICATE relates only to the design of the specified equipment and not to specific items of equipment subsequently manufactured.

12 The marking of the product shall include the following :

**⊕ II 3G Ex ec IIC T4 Gc (-40°C ≤ T4 ≤ +85°C)**

SGS Baseefa Customer Reference No. **0708**

Project File No. **18/0441**

METRIX DOC NO: 1886927  
REV: A

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R S SINCLAIR

TECHNICAL MANAGER

On behalf of SGS Baseefa Limited

M POWNEY  
Certification  
Manager

13 **Schedule**

14 **Certificate Number Baseefa19ATEX0110X**

15 **Description of Product**

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 a 3 or 4 way terminal block accepts the user connections.

The MX2034-AA-BB-CC-DD-EE-FF where EE = X4, X5 or X6 includes connections for a dynamic output signal on the 4 way connector. All other variants have a 3 way connector present.

Rated supply voltage = 17V to 30V.

16 **Report Number**

GB/BAS/ExTR18.0206/00

17 **Specific Conditions of Use**

1. The protection concept used must be irrevocably marked on the label during installation, except for the MX2034-AA-BB-CC-DD-EE-FF where EE = X4 X5 or X6 that is marked as “ec” during manufacture.
2. The equipment must be installed in a suitably certified enclosure such that it is afforded a degree of protection of at least IP54 in accordance with EN 60529 and EN 60079-7 and is in an area of not more than pollution degree 2, as defined in IEC/EN 60664-1.
3. External transient supply limitation must be present that clamps at no more than 42V.

18 **Essential Health and Safety Requirements**

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
1.0.5 indent 2	Application of CE Marking
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 **Drawings and Documents**

Drawing No.	Sheet	Issue	Date	Description	METRIX DOC NO: 1886927 REV: A
<u>Analog/digital Drawings (MX2032, MX2033, MX2034)</u>					
100495-AGENCY	1 to 4	J	August 13, 2018	Schematic, DPS, Analog/Digital Board	
100496-AGENCY	1 to 9	J	AUG-13-18	Fabrication Dwg, Analog PCB, MX2032, MX2033 & MX2034 (Agency)	
100497-AGENCY	1	E	AUG-13-18	Assembly, DPS, Analog/Digital Board	
<u>Analog/digital Drawings (MX2032, MX2034)</u>					
100497-AGENCY	1 & 2	K	AUG-13-18	BOM, MX2032/2034 Controller Board	
<u>Analog/digital Drawings (MX2033)</u>					
100500-AGENCY	2	J	AUG-13-18	BOM, MX2033 Controller Board (Agency)	
<u>PSU Drawings (MX2032)</u>					
100488-AGENCY	1 & 2	G	AUG-13-18	BOM, “MX2032 Power Supply Board”	

Drawing No.	Sheet	Issue	Date	Description
100488-AGENCY	1	C	AUG-13-18	Assy, DPS, Power Supply Bd.
<u>PSU Drawings (MX2033)</u>				
100491-AGENCY	1 & 2	L	AUG-13-18	Parts List, Assy, DPS, Power Supply Board, RoHS
100491-AGENCY	1	B	AUG-13-18	Assy, DPS, Power Supply Bd. (Agency)
<u>PSU Drawings (MX2034)</u>				
100492-AGENCY	1 & 2	H	AUG-13-18	Schematic, DPS, Power Supply Bd.
100494-AGENCY	2	N	AUG-13-18	Parts List, Assy, DPS, Power Supply Board, MX2034, RoHS
100494-AGENCY	1	C	AUG-13-18	Assy, DPS, Power Supply Bd.
100493-AGENCY	1 to 9	E	AUG-13-18	Drill Dwg, Power Supply, MX2034 (Agency)
<u>PSU Drawings (MX2032 &amp; MX2033)</u>				
100486-AGENCY	1	J	AUG-13-18	Schematic MX2032 and MX2033 Power Supply Board
100487-AGENCY	1 to 9	G	AUG-13-18	Drill Dwg, Power Supply, MX2032 & MX2033 (Agency)
<u>Interconnect Drawings (MX2032, MX2033, MX2034)</u>				
100501-AGENCY	1	C	AUG-13-18	Schematic, DPS, Interconnect Bd.
100502-AGENCY	1 to 9	C	AUG-13-18	Drill Dwg, Interconnect PCB, MX2032, MX2033 & MX2034 (Agency)
100972-AGENCY	1	A	03/28/2019	Schem DWG, MX2033/MX2034 Interconnect Board, RoHS Agency
100973-AGENCY	1 to 9	A	7/31/2019	Drill Dwg, MX2033/MX2034 Interconnect Board, RoHS
100974-AGENCY	1	A	23-July-2019	Parts List, MX2033/MX2034 Interconnect Board, RoHS, Agency
100974-AGENCY	1	A	04/23/19	Assy DWG, MX2033/MX2034 Interconnect Board, RoHS, Agency
100503-AGENCY	1	F	April-26-19	BOM, DPS, Interconnect Board (agency)
100503-AGENCY	1	B	AUG-13-18	Assy, DPS, Interconnect Bd. (Agency)
94019-107-SCD	1	B	04-25-19	SCD, Connector, Screwless Term Block, 3 Pos, 3.5mm, RoHS
94019-108-SCD	1	B	04-25-19	SCD, Connector, Screwless Term Block, 4 Pos, 3.5mm, RoHS
1862198-AGENCY	1	A	October 2019	100974 Interconnect Board (instead of 100503) for MX2034 – 3 Pin Connector (94019-107) or 4 Pin Connector (940-108) Modification Procedure
1881628-AGENCY	1	A	Jun 2019	100974 Interconnect Board (instead of 100503) for MX2033 – 3 Pin Connector (94019-107) Modification Procedure
<u>General (MX2032, MX2033, MX2034)</u>				
100563-XXX-AGENCY	1 & 2	B	AUG-13-18	Label, MX2032, MX2033 & MX2034 (Agency)
100511-XXX-AGENCY	1 & 2	B	AUG-13-18	Label, Top, DPS (AGENCY)
1082695-AGENCY	1	E	AUG-13-18	General Arrangement Drawing
9639-AGENCY	1	B	AUG-13-18	Adapter Board
9639-AGENCY	1	B	AUG-13-18	Assembly, Adapter Board (Agency)

These drawings are held with IECEx BAS 12.0032X Issue 1, and are common to IECEx BAS 12.0033X Issue 1, Baseefa12ATEX0049X Issue 1 and Baseefa12ATEX0050X Issue 1.