

TYPE EXAMINATION CERTIFICATE

**Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU**

Type Examination Certificate Number: **Baseefa18ATEX0075X – Issue 2**

In accordance with Article 41 of Directive 2014/34/EU, Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

Product: **TOPRX 10, 12 & 15 inch Industrial HMI Touch Panels**

Manufacturer: **M2I Corporation**

Address: **11-35, Simin-daero 327beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14055, Republic of Korea**

This re-issued certificate extends Type Examination Certificate No. Baseefa18ATEX0075X to apply to product 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.

SGS Fimko Oy certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products of Category 3 intended for use in potentially explosive atmospheres given in Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The original certificate was issued by SGS Baseefa Ltd (UK Notified Body 1180). It, and any supplements previously issued by SGS Baseefa Ltd have been transferred to the supervision of SGS Fimko Oy (EU Notified Body 0598). The original certificate number is retained.

The examination and test results are recorded in confidential Report No. **See Certificate History**

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

EN IEC 60079-0: 2018 EN 60079-7: 2015 + A1: 2018

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

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.

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

The marking of the product shall include the following:

⊕ II 3G Ex ec IIC T6 Gc (-10°C ≤ T_a ≤ +50°C)

SGS Fimko Oy Customer Reference No. **7208**

Project File No. **20/0373**

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Schedule

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Certificate Number Baseefa18ATEX0075X – Issue 2

15 Description of Product

The TOPRX 10, 12 & 15 inch Industrial HMI Touch Panels are designed to be mounted in the zone 2 hazardous area providing a user interface to interconnected equipment via either a 10, 12 or 15 inch touchscreen.

The equipment is designed to be mounted in a suitably certified enclosure with only the touchscreen accessible. The associated electronic circuitry comprises a CPU with USB, Ethernet, RS232C, RS422/485, and compact flash card interface connections mounted behind the touchscreen inside a plastic enclosure. External power supply and various communication connections are made via secured plug and socket connections located on the back of the equipment. A USB connector is provided on the front of the equipment behind a cover for use only when the explosive atmosphere is not present.

The equipment is secured in the front of the enclosure in which it is mounted using supplied mounting clamps. A gasket fitted around the touch panel bezel ensures the seal between the touch panel and enclosure with a degree of protection of at least IP54.

The following models of the TOPRX 10, 12 & 15 inch Industrial HMI Touch Panels are covered by this report:-

- TOPRX1000VD-Ex 10 inch Industrial HMI Touch Panel with 640 x 480 Resolution
- TOPRX1000SD-Ex 10 inch Industrial HMI Touch Panel with 800 x 600 Resolution
- TOPRX1200SD-Ex 12 inch Industrial HMI Touch Panel with 800 x 600 Resolution
- TOPRX1200XD-Ex 12 inch Industrial HMI Touch Panel with 1024 x 768 Resolution
- TOPRX1500XD-Ex 15 inch Industrial HMI Touch Panel with 1024 x 768 Resolution

The only differences between these models are the touchscreen type, size and resolution, and the connection interfaces provided.

Input Parameters: Power Input Terminals

Maximum Working Voltage = 24V d.c.

16 Report Number

See Certificate History

17 Specific Conditions of Use

1. The equipment must only be installed and used in an area of pollution degree 2 or better, as defined in IEC 60664-1, and in an enclosure that provides a minimum degree of protection of IP54 in accordance with EN 60079-0.
2. The equipment shall only be installed in locations where there is a low risk of mechanical damage.
3. External connections to the equipment, including the front USB port must not be inserted or removed unless either the area in which the equipment is installed is known to be non-hazardous, or the circuits connected have been de-energised.
4. External connections to the equipment must be secured using the mechanical securing devices provided adjacent to connection to prevent unintentional separation.
5. The equipment is fitted with transient protection devices on the power input and is incapable of withstanding the 500V dielectric strength test of clause 6.1 of EN 60079-7: 2015 + A1: 2018 on this connection. This must be taken into account when installing the equipment.

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
1.2.7	Protection against other hazards (LVD type requirements, etc.)
1.2.8	Overloading of equipment (protection relays, etc.)
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 Drawings and Documents

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
RX10N-P0101	1 of 1	1	2020.12.08	Label – Product (Ex)
RX10N-P0102	1 of 1	1	2020.12.08	Label – Product (Ex)
RX12N-P0101	1 of 1	1	2020.12.08	Label – Product (Ex)
RX12N-P0102	1 of 1	1	2020.12.08	Label – Product (Ex)
RX15N-P0101	1 of 1	1	2020.12.08	Label – Product (Ex)

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
RX01C-A0100	1 of 1	0	2018.03.20	USB Cover Set - RX(Ex)
RX01C-P0200	1 of 1	0	2015.09.17	SD Cover – RX
RX01C-P0310	1 of 1	0	2016.03.04	EMI Gasket Connector
RX05H-A0100	1 & 2	0.3	15.06.18	TOP RX – Front
RX10H-A0150	1 of 1	0.2	16.08.09	Ex_Sub
RX10H-A0200	1 to 18	V1.0	2016.03.24	TOPRX10-DC
RX10H-A0300	1 of 18	0.1G	17.04.10	TOPRX104 / 00_Block
RX10H-A0300	2 of 18	0.1G	17.04.10	TOPRX104 / Top Side
RX10H-A0300	3 of 18	0.1G	17.04.10	TOPRX104 / Bottom Side
RX10H-A0300	4 of 18	0.1G	17.04.10	TOPRX104 / 00_History
RX10H-A0300	5 of 18	0.1G	17.04.10	TOPRX104 / 01_Power
RX10H-A0300	6 of 18	0.1G	17.04.10	TOPRX104 / 02_CPU I/O
RX10H-A0300	7 of 18	0.1G	17.04.10	TOPRX104 / 03_DDR3
RX10H-A0300	8 of 18	0.1G	17.04.10	TOPRX104 / 04_Memory
RX10H-A0300	9 of 18	0.1G	17.04.10	TOPRX104 / 05_COM1
RX10H-A0300	10 of 18	0.1G	17.04.10	TOPRX104 / 06_COM2
RX10H-A0300	11 of 18	0.1G	17.04.10	TOPRX104 / 07_COM3
RX10H-A0300	12 of 18	0.1G	17.04.10	TOPRX104 / 08_LCD
RX10H-A0300	13 of 18	0.1G	17.04.10	TOPRX104 / 09_Backlight
RX10H-A0300	14 of 18	0.1G	17.04.10	TOPRX104 / 10_USB & SD Card
RX10H-A0300	15 of 18	0.1G	17.04.10	TOPRX104 / 11_Ethernet_USB

Number	Sheet	Issue	Date	Description
RX10H-A0300	16 of 18	0.1G	17.04.10	TOPRX104 / 12_Ethernet_USB2
RX10H-A0300	17 of 18	0.1G	17.04.10	TOPRX104 / 13_Touch
RX10H-A0300	18 of 18	0.1G	17.04.10	TOPRX104 / 14_Option
RX10N-A3000	1 to 3	1	19.01.24	TOP-RX10(EX)-S
RX10N-A3100	1 to 3	1	19.01.30	TOP-RX10(EX)-V
RX10N-P0010	1 of 1	0	16.03.15	Front Case - RX10
RX10N-P0022	1 of 1	0	2017.10.11	Front Sheet – RX10(EX)-A
RX10N-P0031	1 of 1	0	2017.10.16	LCD Bracket – RX10 V2
RX10N-P0041	1 of 1	0	2017.07.10	Conn. Guide – RX10 V2
RX10N-P0050	1 of 1	0	16.03.15	Rear Case RX-10
RX10N-P0070	1 of 1	0	16.03.15	Seal Gasket – RX10
RX10N-P0110	1 of 1	0	2017.03.27	Label – Warning
RX12N-A3000	1 to 3	1	19.01.31	TOP RX12(EX)-S
RX12N-A3100	1 to 3	1	19.01.31	TOP RX12(EX)-X
RX12N-P0010	1 of 1	1	2016.03.15	Front Case RX-12
RX12N-P0022	1 of 1	0	17.02.15	Front Sheet – RX12(EX)-A
RX12N-P0030	1 of 1	0	2015.11.23	LCD Bracket – RX12
RX12N-P0050	1 of 1	0	16.03.15	Rear Case RX-12
RX12N-P0070	1 of 1	0	16.03.15	Sealing Gasket –RX12
RX15N-A3000	1 to 3	1	19.01.31	TOP-RX15(EX) –X
RX15N-P0010	1 of 1	0	16.03.15	Front Case RX-15
RX15N-P0022	1 of 1	0	2017.10.11	Front Sheet –RX15(EX) A
RX15N-P0030	1 of 1	0	16.03.15	LCD Bracket –RX15
RX15N-P0050	1 of 1	0	16.03.15	Rear Case RX-15
RX15N-P0070	1 of 1	0	16.03.15	Sealing Gasket –RX15

20 Certificate History

Certificate No.	Date	Comments
Baseefa18ATEX0075X	25 July 2018	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0: 2012 + A11: 2013 and EN 60079-7: 2015 + A1: 2018 is documented in Certificate Report No. GB/BAS/ExTR18.0165/00, Project File No. 18/0221.
Baseefa18ATEX0075X Issue 1	7 March 2019	To permit minor mechanical changes to all models of the TOPRX 10, 12 & 15 inch Industrial HMI Touch Panels not affecting the original assessment. Project File No. 19/0032.
Baseefa18ATEX0075X Issue 2	6 January 2021	This issue of the certificate permits: i) The change of address from: M2I Bldg, 35-11, Jeonpa-ro 24beon-gil, Manan-gu, Anyang-si, Gyeonggi-do, Korea 430-857 To: 11-35, Simin-daero 327beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14055.Republic of Korea

Certificate No.	Date	Comments
		<p>As a result, the label drawings of all models of the equipment were revised to list the new address.</p> <p>ii) To permit the correction of date of standard EN 60079-7: 2015+A1:2018 on page 1 and 2 of the certificate.</p> <p>iii) To confirm the current designs of all variants of the TOPRX 10, 12, & 15 inch Industrial HMI Touch Panels have been reviewed against the requirements of EN IEC 60079-0: 2018 in relation to the differences from EN 60079-0: 2012 + A11: 2013 and none of the differences affect the equipment.</p> <p>Project File No. 20/0373</p>
For drawings applicable to each issue, see original of that issue.		