

# CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**

2. **Certificate No:** FM16US0001X  
3. **Equipment:** MTL Gecma Workstation  
(Type Reference and Name)

4. **Name of Listing Company:** Eaton Electric Limited

5. **Address of Listing Company:** Great Marlings, Butterfield  
Luton, Bedfordshire,  
UK  
LU2 8DL

6. The examination and test results are recorded in confidential report number:

3054963 dated 2<sup>nd</sup> March 2017

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2011, FM Class 3810:2005,  
ANSI/ISA 60079-0:2013, ANSI/ISA 60079-7:2013, ANSI/ISA 60079-11:2014, ANSI/ISA 60079-18:2015,  
ANSI/ISA 60079-28:2015 and ANSI/IEC 60529:2004

8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.

9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

**Certificate issued by:**

  
\_\_\_\_\_  
J.E. Marquedant  
Manager, Electrical Systems

2 March 2017

\_\_\_\_\_  
Date

To verify the availability of the Approved product, please refer to [www.approvalguide.com](http://www.approvalguide.com)

**THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE**

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# SCHEDULE



US Certificate Of Conformity No: FM16US0001X

10. Equipment Ratings:

Increased Safety, Encapsulated, and intrinsically safe with intrinsically safe or fibre optic outputs for Class I, Zone 1, AEx e ib mb [ib] ib IIC T4 Gb or Class I, Zone 1, AEx e ib mb [ib] ib op is IIC T4 Gb hazardous (classified) locations, indoors and outdoors (IP54) with an ambient temperature rating of -30°C to +60°C.

11. The marking of the equipment shall include:

I / 1 / AEx e ib mb [ib] op is / IIC / T4 Gb IP54 Ta = -30 °C to +60 °C – fiber communications option

12. Description of Equipment:

**General** - The MTL Gecma Workstation is a range of remote terminals. The base unit contain the power supply, communications module and display. An optional intrinsically safe keyboard (FM16US0458X) can also be fitted. Communications to the non-hazardous located Safe Area Unit is via fiber optic link.

**Construction** – The MTL Gecma Workstation comprises a number of modules located within a stainless steel enclosure. When the optional keyboard is fitted, this is mounted in a separate but interconnected stainless steel housing.

**Ratings** - The MTL Gecma Workstation operate at either;  
a.c. version: 100-230 Vac, 50/60 Hz, 1.2 A; or  
d.c. version: 18-36 Vdc, 5.5 A, 100 W

Intrinsically safe output parameters for peripherals and communications;

	RS232 port	USB ports 1, 2, 3 and 4	External keyboard port	External pointing device port	LVDS (to Display Module)
Ui	12 V	0	0	0	4.935 V
Ii	-	-	-	-	3.275 A
Pi	-	-	-	-	3.927 W
Ci	0	11 nF	0	0	0
Li	0	0	0	0	0
Uo	6.015 V	5.355 V	5.5 V	5.5 V	4.935 V
Io	26 mA	972 mA	267 mA	126 mA	3.266 A
Po	39 mW	1.676 W	613 mW	264 mW	3.917 W
Co	37 µF	57.9 µF	58 µF	58 µF	100 µH
Lo	52 mH	37 µH	498 µH	2239 µH	3.3 µH
Lo/Ro					

The Workstations are rated for use in an ambient temperature range of -30 °C to +60 °C.

***MTL Gecma abcdefgh Workstation – fiber communications option***

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Member of the FM Global Group

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- a = Type; RT or PC
- b = Power Supply; AC or DC
- c = Communication; MM or SM
- d = Display size; 19, 22 or 24
- e = Screen type; touch or blank
- f = Keyboard; KBi or blank
- g = blank
- h = Certification; G

**13. Specific Conditions of Use:**

*1. The intrinsically safe circuits are not isolated from the enclosure; this shall be considered during installation.*

**14. Test and Assessment Procedure and Conditions:**

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

**15. Schedule Drawings**

A copy of the technical documentation has been kept by FM Approvals.

**16. Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
2 <sup>nd</sup> March 2017	Original Issue.

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