

CERTIFICATE OF CONFORMITY



- HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
- Certificate No:** FM17US0075X
- Equipment:** F304, F308, F312 and F316 Fieldbus Megablocks
(Type Reference and Name) Fieldbus Megablocks
- Name of Listing Company:** Relcom, Inc.
- Address of Listing Company:** 2221 Yew Street
Forest Grove, OR 97116
USA
- The examination and test results are recorded in confidential report number:

3041271 dated 15th September 2011
- 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 3611:2004, FM Class 3810:2005,
ANSI/ISA 60079-0:20109 ANSI/UL 60079-15:2009
- 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.
- 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.
- Equipment Ratings:**

Nonincendive for use in Class I, Division 2, Groups A, B, C and D; Temperature Class T4 Ta = -50°C to +70°C with Nonincendive Field Wiring in accordance with drawing 502-484; Nonincendive for use in Class I, Zone 2 AEx IIC T4 Ta = -50°C to +70°C with Nonincendive Field Wiring in accordance with drawing 502-484 hazardous (classified) locations.

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

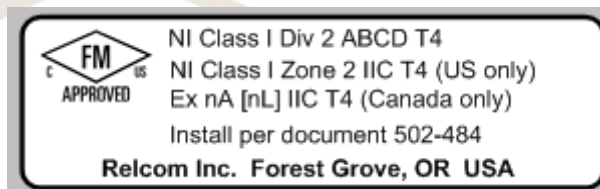
THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

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SCHEDULE

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11. The marking of the equipment shall include:



12. **Description of Equipment:**

Megablock models F304, F308, F312, and F316 (the F3xx series products) are interconnection blocks for use in Fieldbus systems. They allow connection of up to sixteen (16) devices to a Fieldbus segment. Each product consists of one (1) 2-entry trunk port and up to sixteen (16) spur ports. Each spur port includes a current limiting "SpurGuard" circuit. The SpurGuards prevent a short on the spur cable or a short in the attached device from disabling the entire Fieldbus segment. Each F304, F308, F312 and F316 includes an F97 Fieldbus terminator to be installed if needed. F3xx Megablock versions with a -T suffix (i.e. F304—xx-T-xx) include a built-in terminator. Pluggable screw terminal connectors are standard on F3xx Megablocks. All pluggable screw terminal connectors are replaced by cage clamp style connectors by adding -PC to the part number (i.e. F304-xx-T-PC). All pluggable screw terminal connectors except the trunk connector are replaced by insulation displacement style connectors by adding -PD to the part number (i.e. F304-xx-T-PD). The F3xx Megablocks Terminator are intended for installation in an IP54 enclosure. On version without Nonincendive output connections the Overvoltage Protection Circuit is not populated indicated by -V2 (i.e. F304-V2-T-PD).

The model code structure for the F304, F308, F312 and F316 and applicable Nonincendive Field wiring parameters are as follows:

F3a-b-c-d. Megablock Series Fieldbus Connection Blocks.

- a = Number of Spurs: 04, 08, 12 or 16.
- b = Option for Over-voltage protection: -V2 or blank.
- c = Option for a built in terminator: -T or blank.
- d = Option for terminal connection: -PC, -PD or blank.

Nonincendive Field Wiring Parameters Group C and D (IIB, IIA) only:

$V_{max} = 32V$, $C_i = 0$, $L_i = 0$
 $V_{oc} = 32V$, $I_o = 56mA$, $P_o = 1.792W$, $C_a = 80nF$, $L_a = 0.26mH$

Nonincendive Field Wiring Parameters Group A and B (IIC):

$V_{max} = 24V$, $C_i = 0$, $L_i = 0$
 $V_{oc} = 24V$, $I_o = 56mA$, $P_o = 1.344W$, $C_a = 80nF$, $L_a = 0.15mH$

13. **Specific Conditions of Use:**

1. The apparatus is to be housed in an IP54 enclosure.
2. The apparatus shall be installed in an enclosure meeting the requirements of ANSI/ISA 61010-1 (82.02.01).
3. The apparatus shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application.

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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
15 th September 2011	Original Issue.
2 nd March 2017	Supplement 2: Report Reference: – RR208629 dated 2 nd March 2017 Description of the Change: Change to model code structure to allow configuration without over-voltage protection circuitry.

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