
Installation Instructions

F240-XE - F273-XE

ME Megablock Series

1010.1 Equipment Information

Equipment Class II, Pollution Degree 2, Installation Category II

Maximum Altitude: 2000m

Humidity: 0 to 90% (non-condensing)

Operating Temperature: -45°C to 70°C

For Indoor Use Only (IP 54 minimum enclosure)

Electrical Ratings (see Drawing for connection information and certified devices)

Area Classification	Ratings	Drawing	Agency
II 2 G Ex em IIC T4 (Class I Zone 1)	30VDC, 1.5A	Below	KEMA

Installation

Refer to the drawing that is appropriate for the area in which the Megablock series device will be installed. These drawings represent typical installations and are intended to address the safety aspects of the area for which they are drawn. Actual segment connections may vary depending on factors such as the required number of Fieldbus devices to be connected to the segment (determines the specific models and quantities of Megablocks used).

IMPORTANT: For SpurGuards to work properly, the Fieldbus Segment MUST be isolated from ground.

The standard Screw Terminal Connectors are used as follows: Make sure the screw is loosened to accept the wire. Insert the wire making sure that all strands enter the wire clamping area. Also ensure that no insulation will be clamped and that bare wire does not extend beyond the edge of the plastic connector. Tighten the screw to the specified torque on the drawing. For the optional Spring Clamp Connectors (models with '-PC' suffix), the procedure is similar except that the wire is inserted into the connector while the spring loaded button is pressed with a screwdriver. Releasing the button secures the wire to the connector.

Mounting

Megablocks are designed to be mounted on 35 mm DIN rail using the clip mechanism on the back of each unit. Mounting can be vertical or horizontal. Use of DIN rail end stops is recommended.

Megablocks must be installed inside of an enclosure with a minimum rating of IP 54.

Once all wiring connections have been made, the retaining screws on each pluggable cable connector must be securely fastened.

Testing/Troubleshooting

Once DC power has been connected to the Fieldbus segment, the green power LED on the Megablock should be lit, indicating that a minimum of 9.2VDC is present on the segment trunk. **If the green LED is not lit**, verify the integrity and polarity of the trunk cable connections to the Megablock, that the voltage measured at the trunk connection to the Megablock is greater than 9.2VDC, that there are no shorts in the trunk cable, and that the power supply is operating properly.

On Megablock models with SpurGuard™ current limiters, verify that none of the red short circuit LED's are lit. **If any of the red LED's are lit**, remove the three-conductor plug from the affected spur connection. Locate and repair the short circuit on the spur cable before reconnecting.

Megablock models with an LED in the center of the block, Red illumination indicates that the onboard microprocessor has failed. The block should then be replaced. It is normal for this Red LED to flash on power up.

Operation

During normal operation, the green power LED should be lit. If the green LED is not lit, follow the instructions in the testing/troubleshooting section above.

A lit red LED indicates a short in a spur cable or in the Fieldbus device connected to the spur cable. The LED will cease to be lit once the short has been repaired.

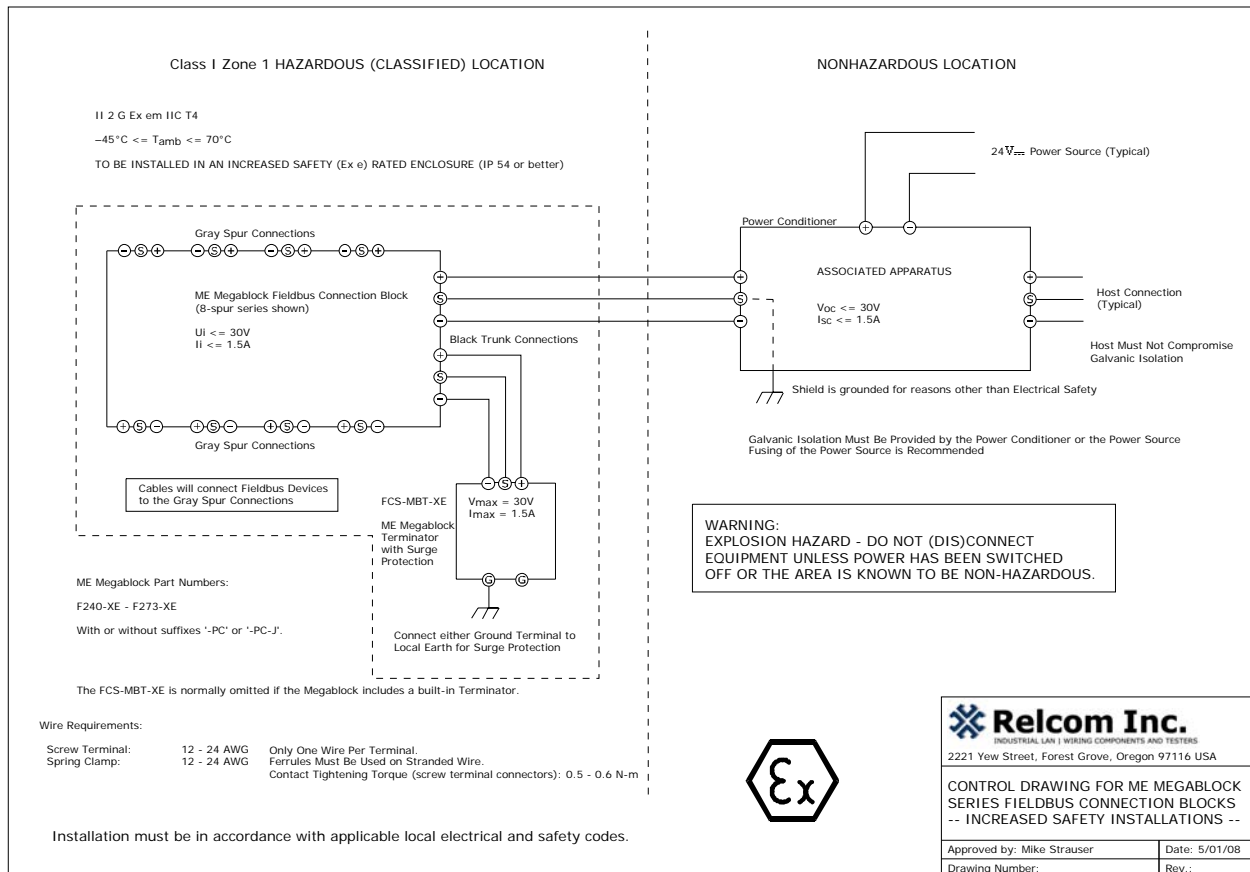
Maintenance Requirements

Megablocks contain no user serviceable parts. Non-functioning units should be returned to the manufacturer for replacement or repair. No regular cleaning is required. Visible dirt may be removed with a damp cloth.

For Further Information

Contact your local MTL representative or Relcom Inc. as listed at the bottom of this page.

Increased Safety Installation



Further Information

For further ATEX related safety information, see our document number 502-039.

Megablock Series EMC Summary

European Union EMC Tests in accordance with EN61326 EMC Product Family Standard for measurement, control and laboratory equipment.

Test Items: **F249, FCS-MBT**

Other products conforming based on these test results include:

F240-XE - F261-XE (with or without additional suffix "-PC", "-PC-J")

F268-XE - F273-XE (with or without additional suffix "-PC", "-PC-J")

FCS-MBT-XE

**European Union Electromagnetic Compatibility (EMC) Tests
in accordance with EC Council Directive 89/336/EEC**

Emissions Tests per EN61326

Result	Standard	Description	Port	Criteria
Pass	EN61326	Radiated Emissions	Enclosure	A
Pass	EN61326	Conducted Emissions	AC Mains	A

Immunity Tests per EN61326 Annex A

Result	Standard	Description	Port	Criteria
Pass	EN61000-4-2	Electrostatic Discharge Immunity	Enclosure	B
Pass	EN61000-4-3	RF Electromagnetic Field Immunity	Enclosure	A
Pass	EN61000-4-4	Electrical Fast Transient/Burst Immunity	DC / IO Port	B
Pass	EN61000-4-5	Electrical Slow Transient Immunity	DC / IO Port	B
Pass	EN61000-4-6	RF Conducted Immunity	DC / IO Port	A
N/A	EN61000-4-8	Magnetic Field Immunity	N/A	N/A
N/A	EN61000-4-11	Voltage Dips/Short Interruptions Imm.	N/A	N/A

I, Mike Strauser, representative for Relcom Inc., verify that the product tested is representative of production products to be sold.

