

Installation Instructions

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 (IP40 minimum enclosure)

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

Area Classification	Ratings	Drawing	Region	Authority
General Purpose; Class I, Div 2 (Ex nA)	32VDC, 1.5A	MB-0107	US, Canada / EU	FM / Relcom
Class I, Div 1 (Ex ia, ib IIC) Entity	24VDC, 250mA	MB-020108	EU	LCIE
Class I, Div 1 (Ex ia, ib IIC) FISCO	17.5VDC, 380mA	MB-020109	EU	LCIE
Non-Incendive Outputs (Ex nA [nL])	32VDC, 1.5A	MB-020116	US, Canada / EU	FM / Relcom

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). Megablocks are available with Spring Clamp Pluggable connectors (-PC suffix). These connectors have a spring loaded orange plunger that must be pressed with a screwdriver to insert or extract a wire in the adjacent hole.

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

Mounting

Megablocks are designed to be mounted on 35 mm DIN rail using the clip mechanisms 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 IP40.

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

Testing/Troubleshooting

When DC power has been connected to the Fieldbus segment, the green power LED on the Megablock should be lit, indicating that a minimum of 9.5VDC 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 9.5VDC, 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.

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.

Some versions have a Switchable Terminator. This is indicated by a large "T" with a dashed border. Use a small screwdriver to turn the Terminator On or Off as indicated on the label.

Some versions have an Internal Terminator. This is indicated by a large "T" with a solid border.

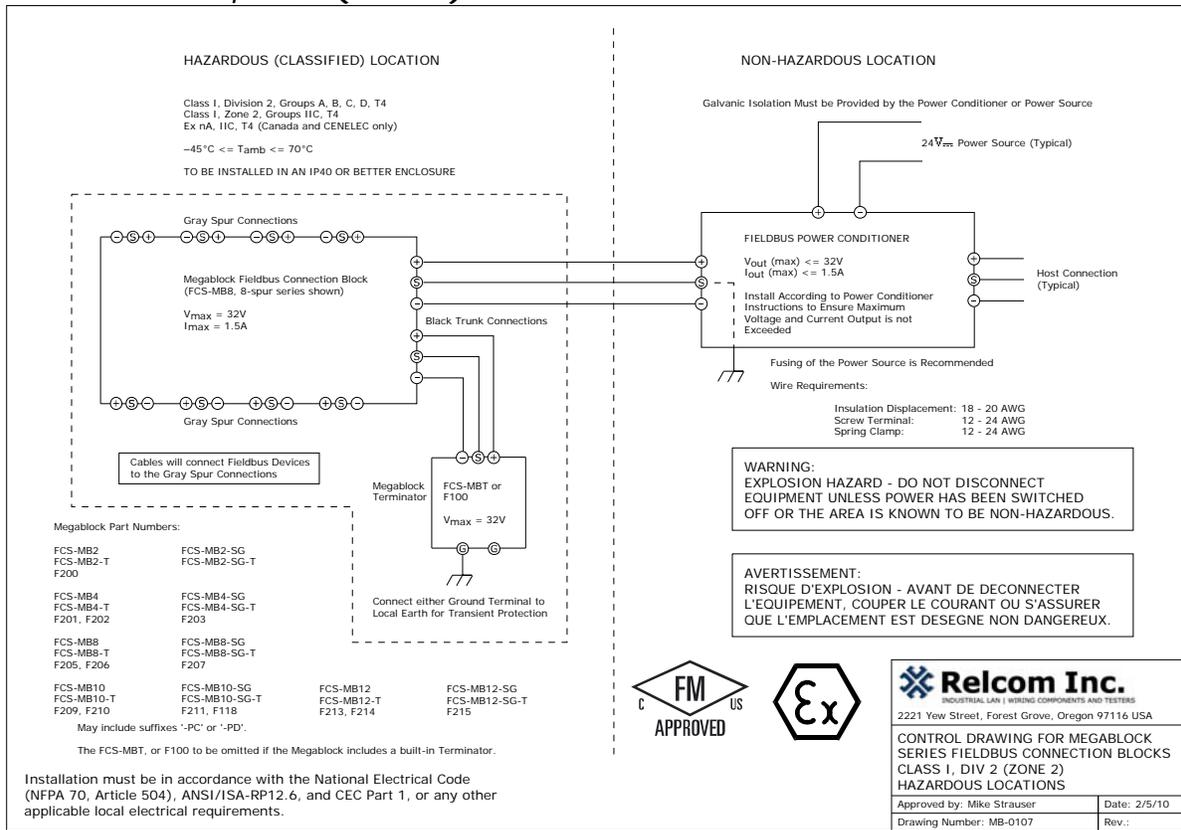
Maintenance Requirements

Megablocks contain no user serviceable parts. Non-functioning units should be returned to the manufacturer for replacement or repair. Units may only be cleaned with a damp cloth to prevent static electricity buildup.

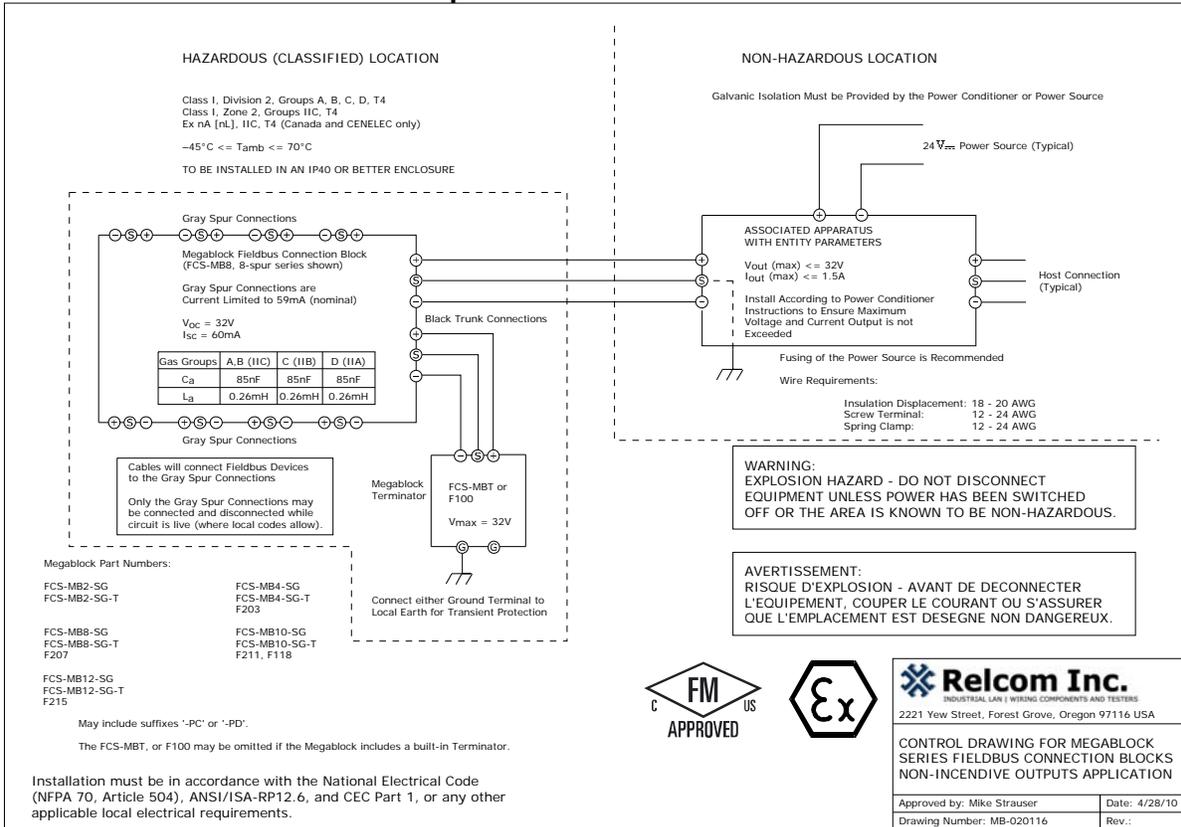
For Further Information

Contact your local MTL representative (www.mtl-fieldbus.com) or Relcom Inc. as listed at the bottom of this page.

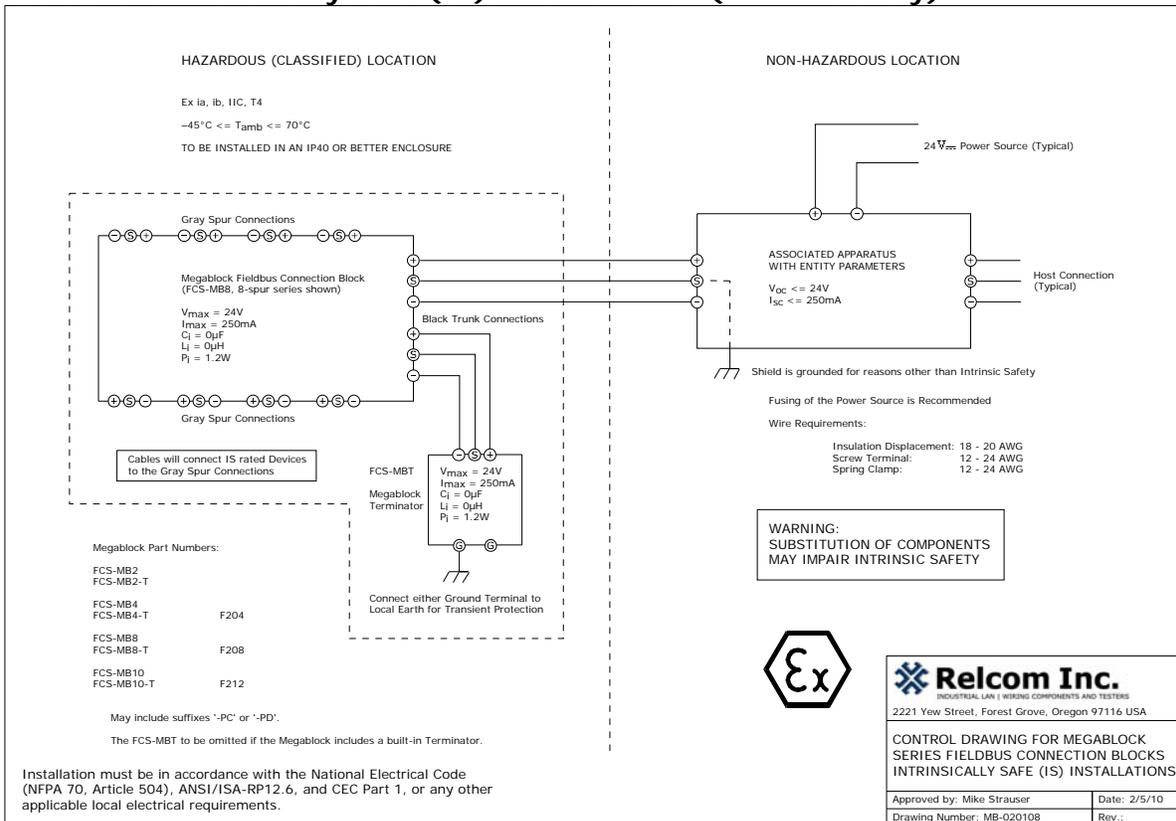
MB-0107: Class I, Div 2 (Zone 2) Installation



MB-020116: Non-Incendive Outputs Installation



MB-020108: Intrinsically Safe (IS) Installation – (CENELEC only)



MB-020109: FISCO Installation – (CENELEC only)

