

HAZARDOUS (CLASSIFIED) LOCATION

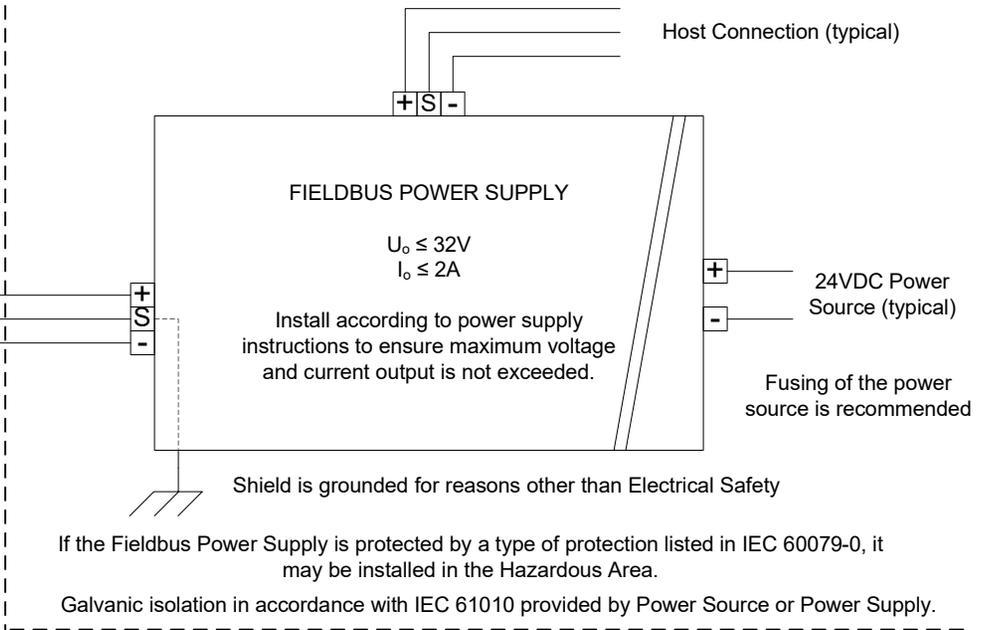
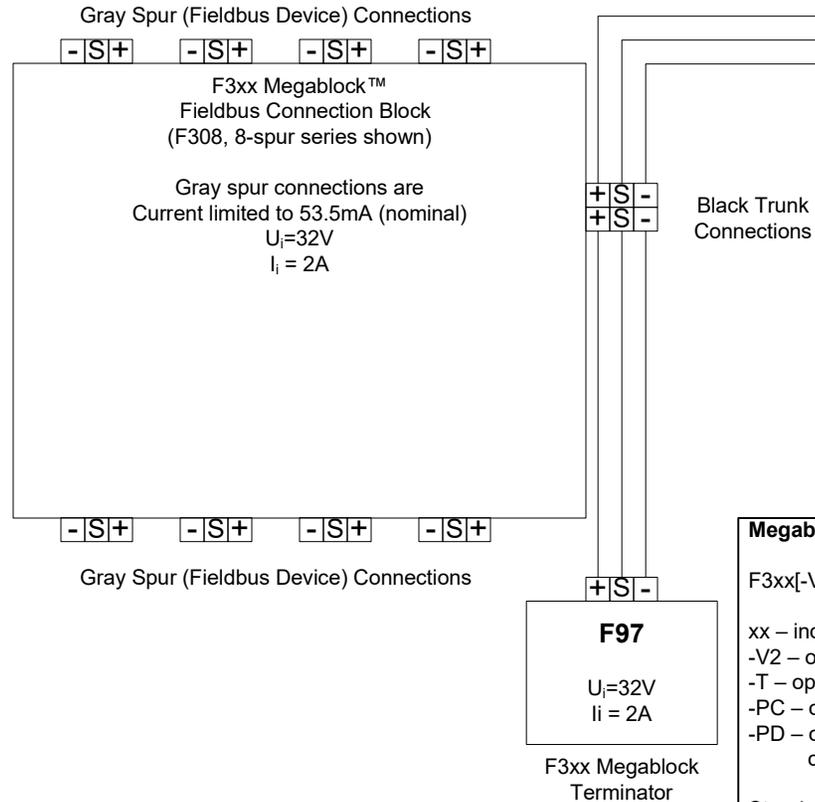
Ex nA IIC T4 Gc
Ex ec IIC T4 Gc

$-50^{\circ}\text{C} \leq T_{\text{amb}} \leq 70^{\circ}\text{C}$

NON-HAZARDOUS LOCATION

Specific Conditions of Use

- The apparatus is to be installed in an enclosure which maintains a minimum ingress protection rating of IP54 in accordance with IEC 60079-0.
- For level of protection 'nA' provisions shall be made externally to the apparatus to prevent the rated input being exceeded by transient disturbances of more than 140% of the rated voltage.
- For level of protection 'nA' the apparatus shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.



WARNING – EXPLOSION HAZARD. DO NOT DISCONNECT EQUIPMENT WHEN A FLAMMABLE OR COMBUSTIBLE ATMOSPHERE IS PRESENT

Megablock™ Part Numbers:
F3xx[-V2][-T][-PC][-PD]

xx – indicates the number of spurs (04, 08, 12, or 16)
-V2 – option for no over-voltage protection
-T – option for a built-in terminator
-PC – option for pluggable spring clamp connectors
-PD – option for pluggable insulation displacement connectors

Standard connectors are Pluggable Screw Terminal type.

The F97 is not used if the F3xx contains an internal Terminator (-T part number suffix).

Wire Requirements:	AWG	Torque
Screw Terminal	22-14	0.5-0.6Nm
Spring Clamp	24-12	NA
Insulation Displacement	20-18	NA

Agency drawing changes not allowed without prior written permission from Agency.

Relcom Inc.
INDUSTRIAL LAN | WIRING COMPONENTS AND TESTERS
2221 Yew Street, Forest Grove, Oregon 97116 USA

CONTROL DRAWING FOR F3XX MEGABLOCK™ SERIES FIELDBUS CONNECTION BLOCKS IECEx Ex ec, AND Ex nA INSTALLATIONS

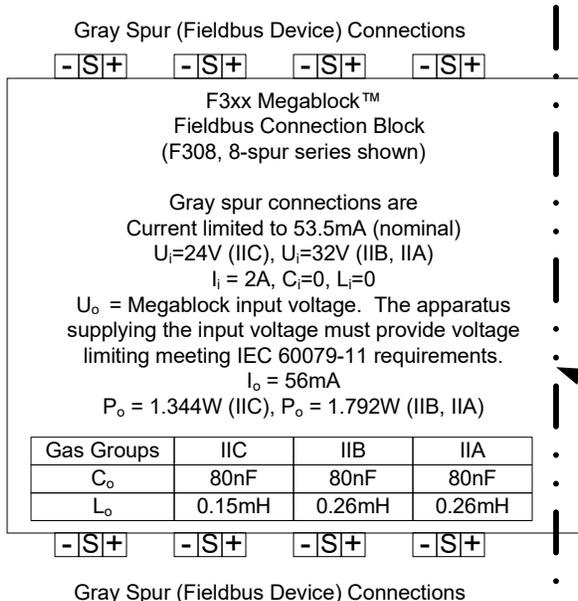
Approved by: Cyrus Kelly	Date: 02 DEC 2022
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HAZARDOUS (CLASSIFIED) LOCATION

Ex nA [ic] IIC T4 Gc $-50^{\circ}\text{C} \leq T_{\text{amb}} \leq 70^{\circ}\text{C}$
 Ex ec [ic] IIC T4 Gc

Specific Conditions of Use

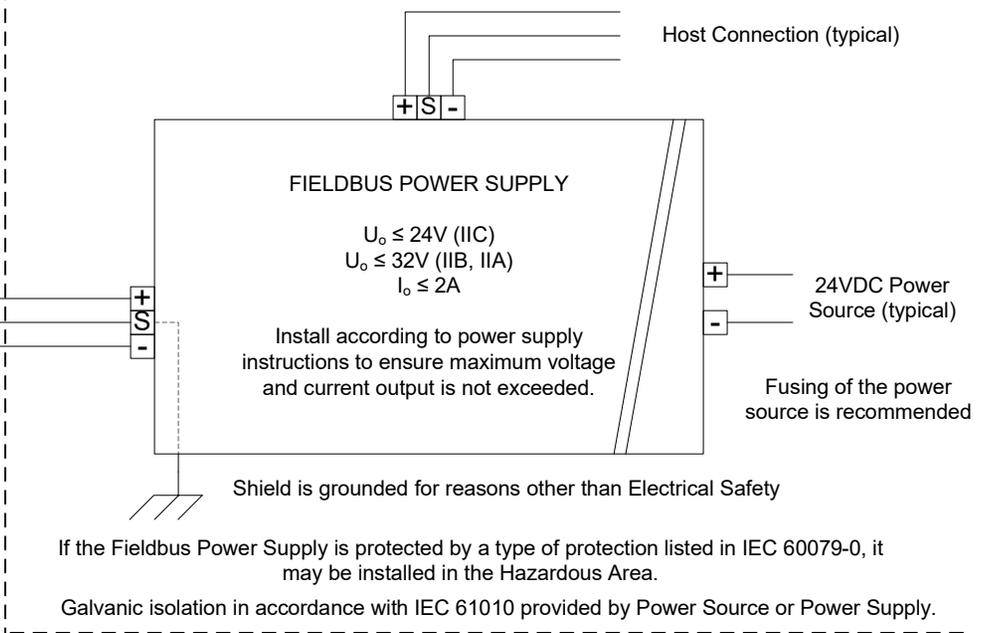
- The apparatus is to be installed in an enclosure which maintains a minimum ingress protection rating of IP54 in accordance with IEC 60079-0.
- For level of protection 'nA' provisions shall be made externally to the apparatus to prevent the rated input being exceeded by transient disturbances of more than 140% of the rated voltage.
- For level of protection 'nA' the apparatus shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.



- Ex ic (FISCO) Gray Spur Outputs:**
- Cable $\leq 60\text{m}$
 - Cable Resistance R_c : 15-150ohms/km
 - Cable Capacitance C_c : 45-200nF/km
 - Cable Inductance L_c : 0.4-1.0mH/km
 - Fieldbus device FISCO certified in accordance with IEC 60079-27.
 - U_o of Fieldbus Power Supply $\leq 17.5\text{V}$
 - Installation to comply with IEC 60079-27.
- Ex ic (Entity) Gray Spur Outputs:**
- $C_o > C_i + C_{\text{cable}}$
 - $L_o > L_i + L_{\text{cable}}$
 - Fieldbus device 'Ex i' rated to meet U_o of Megablock and have entity parameters.

Installation must be in accordance with any applicable local electrical requirements.

NON-HAZARDOUS LOCATION



SEPARATOR MUST BE INSTALLED BETWEEN BLACK AND GRAY CONNECTORS TO SUPPORT [ic] RATING

WARNING – EXPLOSION HAZARD. DO NOT DISCONNECT EQUIPMENT WHEN A FLAMMABLE OR COMBUSTIBLE ATMOSPHERE IS PRESENT (except gray spurs).

Megablock™ Part Numbers:

F3xx[-T][-PC][-PD]

xx – indicates the number of spurs (04, 08, 12, or 16)
 -T – option for a built-in terminator
 -PC – option for pluggable spring clamp connectors
 -PD – option for pluggable insulation displacement connectors

Standard connectors are Pluggable Screw Terminal type.

The F97 is not used if the F3xx contains an internal Terminator (-T part number suffix).

Connector Type	AWG	Torque
Screw Terminal	22-14	0.5-0.6Nm
Spring Clamp	24-12	NA
Insulation Displacement	20-18	NA

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CONTROL DRAWING FOR F3XX MEGABLOCK™ SERIES FIELDBUS CONNECTION BLOCKS IECEx Ex ec [ic], AND Ex nA [ic] INSTALLATIONS

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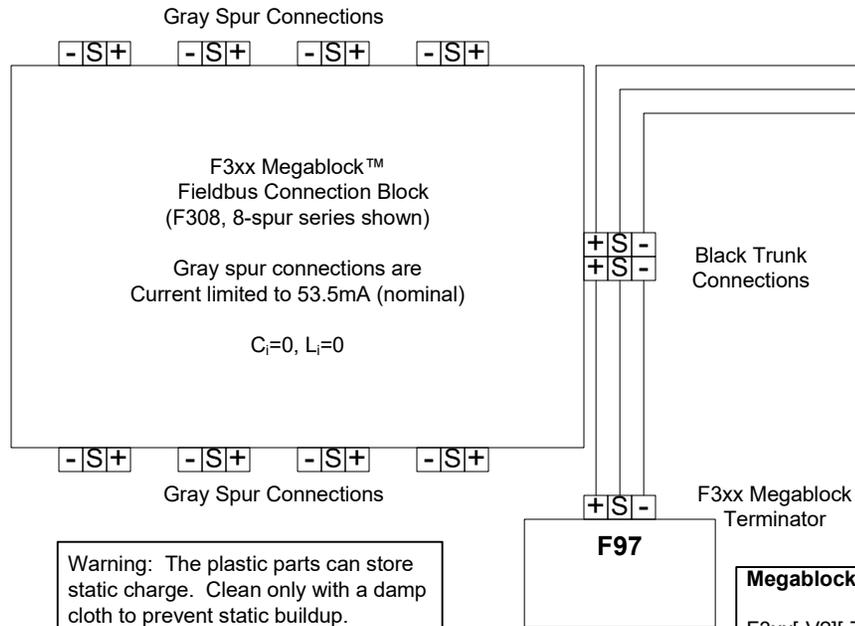
HAZARDOUS (CLASSIFIED) LOCATION

Ex ic IIC T4 Gc FISCO $-50^{\circ}\text{C} \leq T_{\text{amb}} \leq 70^{\circ}\text{C}$

NON-HAZARDOUS LOCATION

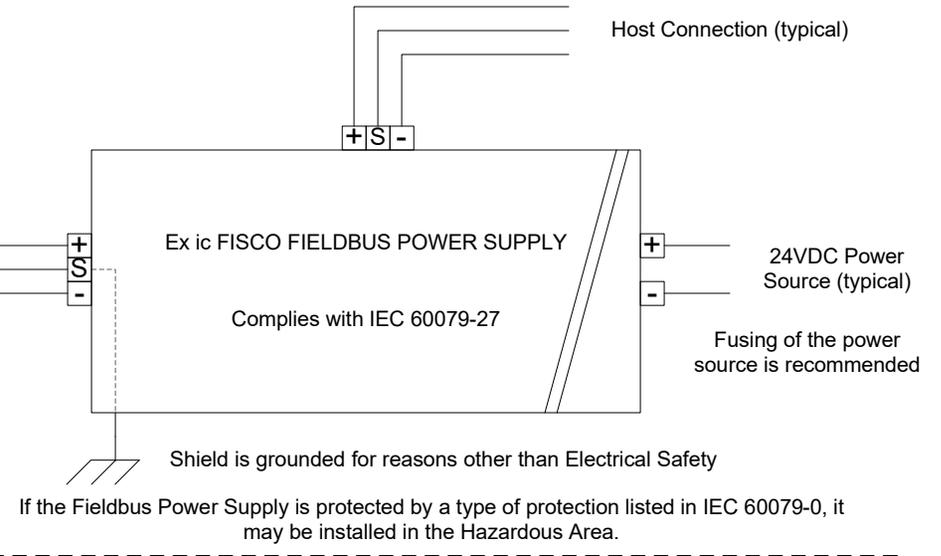
Specific Conditions of Safe Use

- The apparatus is to be installed in an enclosure which maintains a minimum ingress protection rating of IP54 and meets the enclosure requirements of IEC 60079-0 and IEC 60079-11.



FISCO ic (FNICO) Installation Requirements	
Device Capacitance:	0 – 5nF
Device Inductance:	0 – 10µH
Cable resistance, R_c :	15 – 150 ohms/km
Cable inductance, L_c :	0.4 – 1.0 mH/km
Cable capacitance, C_c :	45-200nF/km
Max. Segment length:	1 km for IIC; 5 km for IIB (Note 1)
Maximum Spur length:	60m
Installation to comply with IEC 60079-27	

Note 1: Limited to 1.9 km by IEC61158-2.



Installation must be in accordance with any applicable local electrical requirements.

Megablock™ Part Numbers:

F3xx[-V2][-T][-PC][-PD]

- xx – indicates the number of spurs (04, 08, 12, or 16)
- V2 – option for no over-voltage protection
- T – option for a built-in terminator
- PC – option for pluggable spring clamp connectors
- PD – option for pluggable insulation displacement connectors

Standard connectors are Pluggable Screw Terminal type.

The F97 is not used if the F3xx contains an internal Terminator (-T part number suffix).

Wire Requirements:

Connector Type	AWG	Torque
Screw Terminal	22-14	0.5-0.6Nm
Spring Clamp	24-12	NA
Insulation Displacement	20-18	NA

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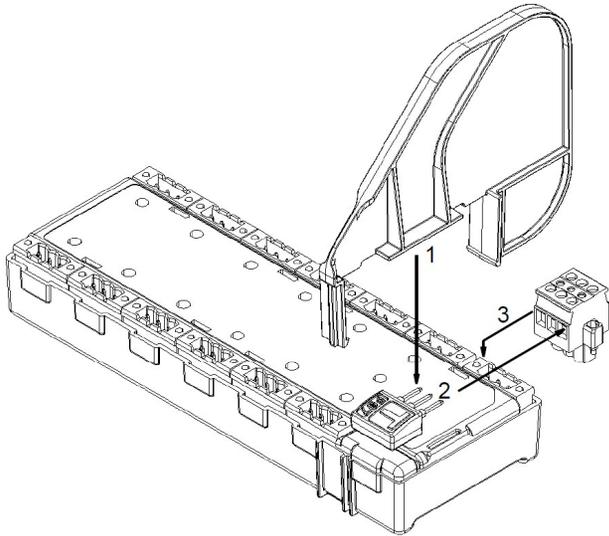


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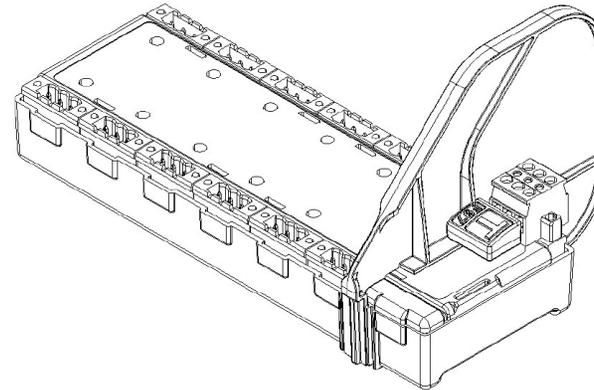
CONTROL DRAWING FOR F3XX
MEGABLOCK™ SERIES FIELDBUS
CONNECTION BLOCKS
IECEx Ex ic INSTALLATIONS

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Installing the Partition, Terminator, and Connector



Partition, Terminator, and Connector Installed



Partition Installation

The Partition must be installed for Ex nA [ic] and EX ec [ic] applications. Orient the partition as shown above and press down as indicated by the arrow. The 'fingers' will slide in the two channels on each side of the F3xx until they latch in place at the bottom of the case. The channels are sized differently so the Partition cannot be installed backwards.

Terminator Installation

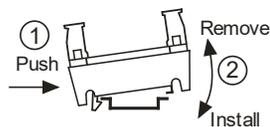
If needed the F97 Terminator is installed in the Black Dual Pluggable connector as shown above. Insert it into the connector and tighten the screws.

Connector Installation

The connectors are installed as shown in the diagram above. Fully insert them into the mating connector on the F3xx. Secure the two retaining screws to prevent the connector from unexpectedly dislodging.

DIN Rail Mounting

F3xx 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.



Certification Markings – F3xx

F3xx and F97	IECEX FMG 11.0017 X
Install per Doc. No. 502-485	
Ex nA IIC T4 Gc	Ex ec IIC T4 Gc
Ex nA [ic] IIC T4 Gc	Ex ec [ic] IIC T4 Gc
Ex ic IIC T4 Gc FISCO	Relcom Inc.
-50C<Tamb<70C	Forest Grove, OR USA

Certification Markings – F3xx-V2

F3xx-V2 and F97	IECEX FMG 11.0017 X
Install per Doc. No. 502-485	
Ex nA IIC T4 Gc	Ex ec IIC T4 Gc
Ex ic IIC T4 Gc FISCO	Relcom Inc.
-50C<Tamb<70C	Forest Grove, OR USA

Repair and Maintenance

No maintenance is required for these products. There are also no user serviceable parts in these products. Contact the distributor or factory for any product issues.

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2221 Yew Street, Forest Grove, Oregon 97116 USA

F3XX MEGABLOCK™ SERIES
INSTALLATION INSTRUCTIONS

Approved by: Cyrus Kelly

Date: 02 DEC 2022

Doc. No. 502-485

Rev. G.0

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