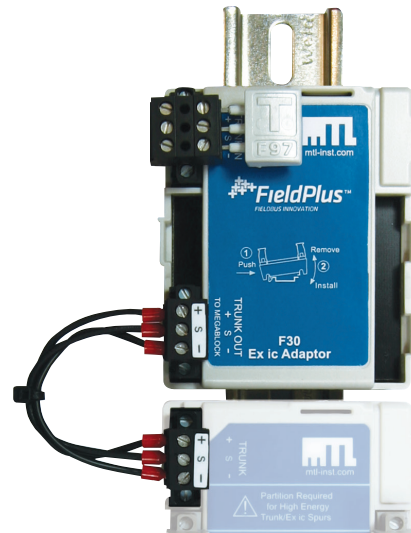




F30 Ex ic Adaptor

Accessory for F300 Series Megablock Wiring Hubs

- Use with F300 Series Megablocks and 918x-x2 Series fieldbus power supplies to provide Ex ic intrinsically safe spurs for FOUNDATION™ Fieldbus networks
- Allows spurs to be live-worked in Zone 2 when connected to suitably certified field instruments
- Compatible with FISCO and Entity certified fieldbus devices
- Installs with Megablock in field junction box
- Supports long trunk cable lengths and heavily loaded fieldbus segments



The F30 Ex ic Adaptor is an accessory to F300 Series Megablock wiring hubs, and provides intrinsically safe Ex ic spur connections for fieldbus networks in Zone 2 hazardous areas. One F30 is used with each Megablock, to limit the voltage at the spurs to Ex ic levels. When connected to suitably certified fieldbus instruments, the spurs may be live-worked in accordance with normal intrinsic safety procedures. The F30 is completely transparent to all fieldbus communications.

The F30 is compatible with F304, F308 and F312 Megablock types, typically providing up to 12 Ex ic spurs per fieldbus segment. Up to two F30s and their associated Megablocks may be connected to a single segment, to allow the fieldbus trunk to be extended between junction boxes in the field.

The spurs are compatible with FISCO and Entity certified fieldbus instruments. Where FISCO instruments are selected, cable parameter calculations are not required.

To comply with intrinsic safety requirements, each fieldbus segment must be powered by a 918x-x2 Series fieldbus power supply, fitted with 9192-FP power modules.

Ex ic replaces the earlier Ex nL technique for energy-limited fieldbus networks, and brings the technique into line with formal intrinsic safety procedures.

A key benefit of MTL's Ex ic spur solution is that the fieldbus power supply has a higher output voltage than competing products, allowing longer trunk cable lengths and more fieldbus instruments per segment. Requirements for ensuring compatibility with major host control systems are also simplified.

The F30 is designed for installation in the field enclosure together with the Megablock wiring hub. A full range of compatible stainless steel and glass reinforced polyester (GRP) enclosures are available.

F30 Ex ic Adaptor

March 2014

SPECIFICATION

MECHANICAL/ENVIRONMENTAL

Mounting requirements

35mm DIN rail, to EN50022

Weight

(including cable) 90g (typ)

Wire capacity

0.14 to 2.5mm²

Case material

Polycarbonate

Temperature range

Operating -40° to +70°C

Storage -40° to +85°C

ELECTRICAL

Relative Humidity

0 to 95% non-condensing

Trunk input voltage range

11.0 - 24.0V DC

Trunk Output voltage range

10.8 - 15.6V DC

Absolute maximum input voltage

32.0V DC without damage

Reverse Polarity Protection

Continuous protection against damage

Maximum input current

300mA (input voltage up to 21V DC)

Trunk output voltage limit, U_o @ 25°C

17.5V DC max

Quiescent Current

5mA max

PHYSICAL NETWORK

IEC 61158-2

FOUNDATION™ fieldbus H1

Profibus PA

HAZARDOUS AREA APPROVALS

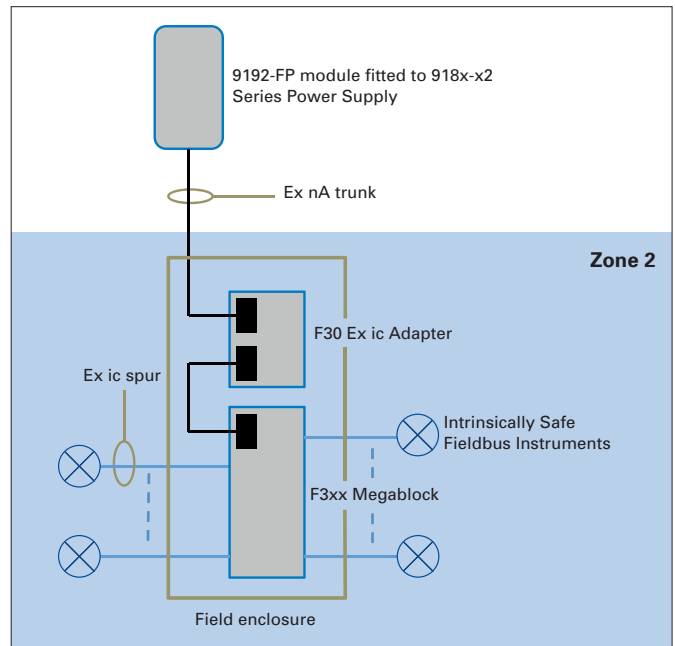
Certification code

II 3G Ex nA IIC T4 Gc

Certification numbers

DEKRA ATEX 0129X

IECEX DEK 13.0038X

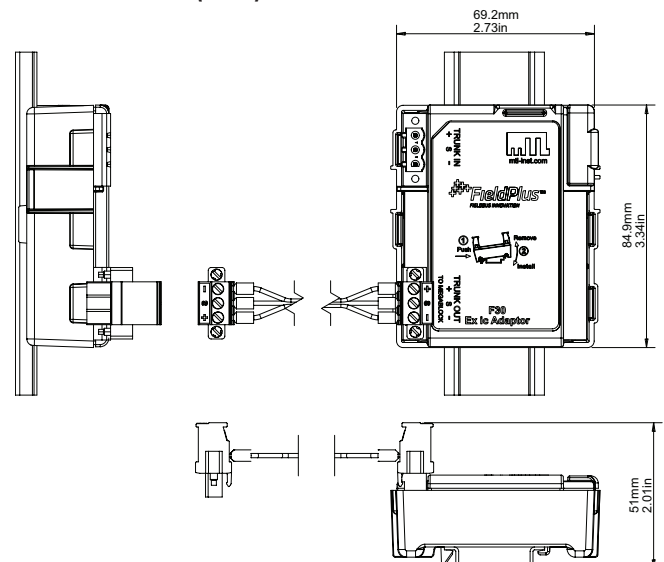


ORDERING INFORMATION

F30 Ex ic Adapter, screw clamp terminals

Note: The F30 is supplied with a preassembled cable for connecting to the Trunk Terminals of the associated Megablock. A Trunk connector is not supplied with the F30; this is transferred from the Megablock to the F30 during installation.

DIMENSIONS (mm)



Crouse-Hinds
by **EATON**

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