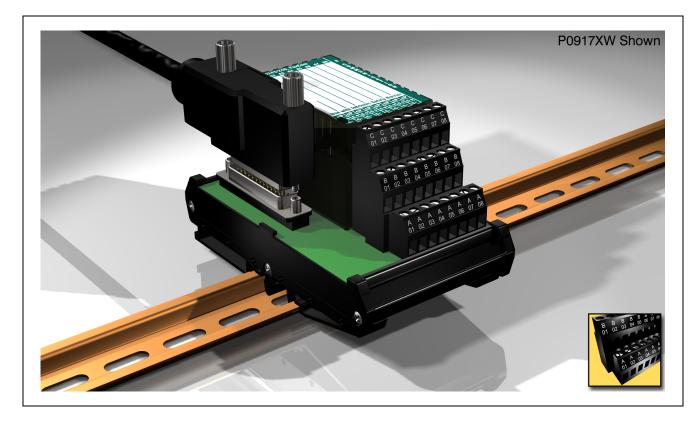


I/A Series[®] Hardware FBM243/246 Termination Assembly 8 FoxCom[™] Communication — External Intrinsic Safety Barrier



INTRODUCTION

The FBM243/246 FoxCom Termination Assembly is part of the FBM200 DIN Rail subsystem field wiring termination family.

Each FBM243/246 FoxCom Termination Assembly and its associated termination cable provides feedthrough interconnection between eight 2-wire Intelligent Field Device (IFD) signals and the FBM243 FoxCom Dual Baud Rate Intelligent Device Interface Module or the FBM246 FoxCom Redundant Dual Baud Rate Intelligent Device Interface Module.

For redundant FoxCom applications, a pair of FBM246s and a redundant adapter (Foxboro P/N P0917VU) are required (refer to PSS 21H-2Z46 B4.)

This Termination Assembly is designed for use with external intrinsic safety barriers that are not part of the I/A Series DIN Rail Mounted FBM subsystem. The Termination Assembly also supports the use of the Hand-Held Terminal (PSS 2A-1Z3 A), or PC20 Intelligent Field Device Configurator (PSS 2A-1Z3 E) on the hazardous side of the intrinsic safety barrier.

In applications that use external loop power, Cable Balun Modules (Foxboro P/N P0903SV) are required.

FEATURES

Key features include:

- Combination foot that supports 32 or 35 mm DIN rail mounting
- Multiple, integrated marking systems
- · Distinct family group color
- · Passive, with no additional in-circuit components
- 3-tier termination for per channel internal and/or external loop powered IFDs



FUNCTIONAL SPECIFICATIONS

Signal Input/Output

8 channel FoxCom communication Passive feedthrough, with FBM243 or FBM246 channel isolation

Loop Power

INTERNAL Supplied by FBM EXTERNAL Cable Balun Modules required (Foxboro P/N P0903SV)

Simplified Schematic

Refer to FBM200 Series Termination Assembly Overview, Product Specification Sheet PSS 21H-2W4 B3.

Termination Cable Connection

25-pin male D-subminiature connection

Termination Cable Type(a) Type 1

Family Group Color

Green - Communications

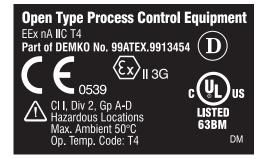
(a) Refer to FBM200 Series Termination Cables, Product Specification Sheet PSS 21H-2W4 B4, for complete information.

ENVIRONMENTAL SPECIFICATIONS

Temperature(a)

-20 to +50°C (-4 to +122°F)

Certification(b) Classification Type 1, 4



- (a) Refer to FBM200 Series Termination Assembly Overview, Product Specification Sheet PSS 21H-2W4 B3, for additional information.
- (b) Refer to DIN Rail Mounted FBM Equipment, Agency Certification, Product Specification Sheet PSS 21H-2W2 B3, for complete product certification information.

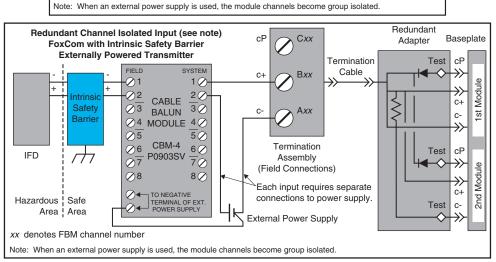
1st Module

Module

2nd

Redundant Channel Isolated Input FoxCom with Intrinsic Safety Barrier **Redundant Channel Isolated Input** Adapter Baseplate Internally (FBM) Powered Transmitter FoxCom with Intrinsic Safety Barrier Internally (FBM) Powered Transmitter сF Test сP Cxx ÷ ntrinsi Termination cP Cxx Safety Cable 3 C+ Termination Barrier C+ Bxx c-Cable Safety ≫ Barrie C+ Bxx IFD C٠ сP Test Hazardous Safe Ċ \rightarrow IFD c-Axx $\overline{\Box}$ Area ¦ Area **Termination Assembly** Baseplate ≫ (Field Connections) Hazardous Safe C+ Area Area Termination Assembly xx denotes FBM channel number c-Test (Field Connections) xx denotes FBM channel number Channel Isolated Input (see note) cF Cxx FoxCom with Intrinsic Safety Barrier Externally Powered Transmitter Termination FIELD SYSTEM Cable Сн Bxx Ø1 10 \rightarrow $\bigcirc 2$ 20 ntrins CABLE 30 Safety $\bigcirc 3$ BALUN Axx Barrie Ø4 40 MODULE $\bigcirc \overline{5}$ 50 CBM-4 Termination Baseplate Ø6 6⊘ IFD HP0903SV Assembly $\overline{07}$ 70 (Field Connections) Ø8 80 Each input requires separate TO NEGATIVE TERMINAL OF EXT. POWER SUPPLY ⊘+ connections to power supply. Hazardous | Safe ⊘₊ Area | Area External Power Supply xx denotes FBM channel number Note: When an external power supply is used, the module channels become group isolated. Redundant Redundant Channel Isolated Input (see note) cР Cxx Baseplate Adapter FoxCom with Intrinsic Safety Barrier **Externally Powered Transmitter** Termination сP Test FIELD SYSTEM Cable Bxx \gg C+ Ø1 $1 \oslash$ ≫ $\bigcirc 2$ 20 ntrinsi CABLE C+

WIRING DIAGRAMS



PHYSICAL SPECIFICATIONS

Mass

Construction(a)

Dimensions

P0917XW - PVC, compression

See DIMENSIONS-NOMINAL

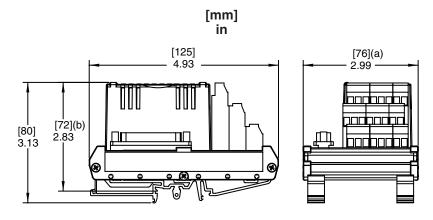
Field Terminations(a)

181 g (0.4 lb)

3 tiers, 8 positions

(a) Refer to FBM200 Series Termination Assembly Overview, Product Specification Sheet PSS 21H-2W4 B3, for additional information.

DIMENSIONS - NOMINAL



(a) Overall width - for determining DIN rail loading.

(b) Height above DIN rail (add to DIN rail height for total).

RELATED PRODUCT SPECIFICATION SHEETS (PSS)

PSS Number	Description
PSS 21H-2W4 B3	FBM200 Series Termination Assembly Overview
PSS 21H-2W4 B4	FBM200 Series Termination Cables
PSS 21H-2W66 B4	FBM243/246 Termination Assembly – 8 FoxCom Communication
PSS 21H-2W1 B3	DIN Rail Mounted FBM Subsystem Overview
PSS 21H-2W2 B3	DIN Rail Mounted FBM Equipment, Agency Certification
PSS 21H-2Z43 B4	FoxCom Dual Baud Rate Intelligent Device Interface Module (FBM243)
PSS 21H-2Z46 B4	FoxCom Redundant Dual Baud Rate Intelligent Device Interface Module (FBM246)
PSS 2A-1Z3 A	Hand-Held Terminal
PSS 2A-1Z3 E	PC20 Intelligent Field Device Configurator

The Foxboro Company

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