

TUE-32-INV-001

32-pos Term. Unit for Foxboro DI card FBM217

This Termination Unit with Enclosure (TUE) provides galvanic isolation through opto-couplers between the I/O Card of the system and the field terminals for Digital Input applications. It supports free-voltage contacts as well as NAMUR proximity sensors. The status (open or closed) of each channel is also indicated through individual LEDs. Redundant power supply with voltage monitoring is supported.

FEATURES

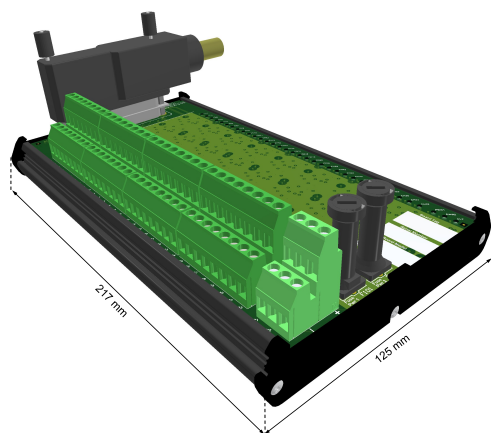
- Foxboro DI Card board interface
- 32 positions Termination Unit for up to 32 channels
- Field terminals for free-voltage contacts and NAMUR proximity sensors
- Field/System isolation
- Lower cables installation and maintenance costs
- Power supplies redundancy
- Power supplies voltage monitoring
- Active current limitation against sensor vs. board supply accidental short
- Single DIN Rail mounting

SUPPORTED CARDS & MODULES

SYSTEM	I/O CARD	CARDS / BOARDS	MODULES
FBM	FBM217	1	-

For more detailed information, refer to Instruction Manual.

TERMINATION BOARD IMAGE



TECHNICAL DATA

General

Maximum number of channels: 32

Supply

24 Vdc nom (20 to 30 Vdc), reverse polarity protected, redundant power supply, with OR diodes to mix supply voltages.

Current consumption (total supply): 0.42 A typical, with all input channels shorted.

Connection: by screw with terminations up to 2.5 mm².

Protection fuse: 2 A time lag.

Voltage monitor: contact closed if both power supplies are connected and active.

Supply fault detection

The on-board diagnostics monitors both power supplies integrity. Any malfunction is reported by deactivating a solid-state relay and activating the corresponding red LED.

Alarm is issued if power supply 1 or 2 < 10 Vdc.

Alarm is removed if power supply 1 and 2 ≥ 20 Vdc.

Connection: terminations up to 2.5 mm².

Output rating: 100 mA 35 V (≤ 0.5 V voltage drop).

I/O Card Interface

Connection: 1 x 37-pin D-sub male connector (require female mating connector).

Cable: system cable Type 4.

Field Interface

Connection: by screw with terminations up to 2.5 mm².

Input equivalent source: 8 V with 1 kΩ typical (8 V no load, 8 mA short).

Input switching current levels: ON ≥ 2.1 mA, OFF ≤ 1.2 mA.

Isolation

System/Field (including TUE power supply) 1.5 kV.

Environmental conditions

Operating temperature: -20 to +60 °C (Vsupply ≤ 25.2 Vdc), -20 to +50 °C (Vsupply > 25.2 Vdc).

Max altitude: 2000 m a.s.l.

Storage temperature: temperature limits -45 to +80 °C.

Mounting

Hardware included for mounting on single DIN-rail 35 mm.

Weight: about 420 g.

Location: installation in Safe Area.

Dimensions: Width 217 mm, Depth 125 mm, Height 68 mm.

ORDERING INFORMATION

Ordering codes

TUE-32-INV-001

FUNCTION DIAGRAM

Additional installation diagrams may be found in Instruction Manual.

