

www.gminternational.com

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

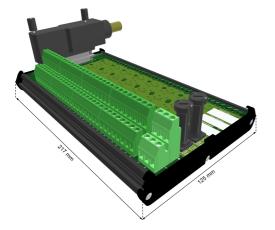
- Foxboro DI Card board interface
- 32 positions Termination Unit for up to 32 channels
- Field terminals for free-voltage contacts and NAMUR proximity sensors
 Field/System isolation
- Lower cables installation and maintenance costs
- Power supplies redundancy
- Power supplies voltage monitoring
- Active 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

vlaguZ

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 of $2 \le 10$ Vdc. Alarm is removed if power supply 1 and $2 \ge 20$ 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 k Ω typical (8 V no load, 8 mA short).

Input switching current levels: $ON \ge 2.1 \text{ mA}$, $OFF \le 1.2 \text{ mA}$.

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.

lage temperature. to

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

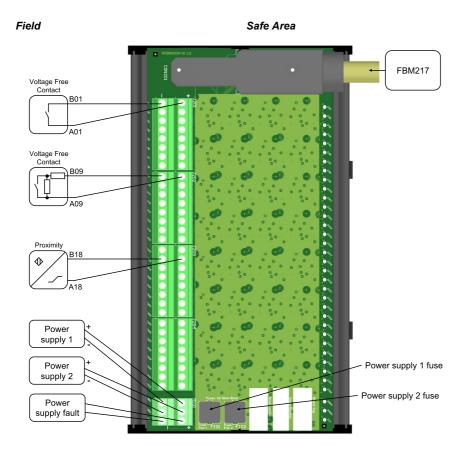
Ordering codes TUE-32-INV-001

Functional Safety Management Certification: GM International is certified to conform to IEC61508:2010 part 1 clauses 5-6 for safety related systems up to and included SIL3. In addition, GM International products have been granted I.S. certificates from the most credited Notified Bodies in the world.

Data specified in this document are merely descriptive of the products and should be integrated with relevant technical specifications. Our products are in constant development and the information presented herein refers to the time of document issue. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. Terms & Conditions can be found at our website. For more information refer to istruction manual.

FUNCTION DIAGRAM

Additional installation diagrams may be found in Instruction Manual.



www.gminternational.com

Functional Safety Management Certification:

1 Rev.1

GM International is certificate control of m to IEC61508:2010 part 1 clauses 5-6 for safety related systems up to and included SIL3. In addition, GM International products have been granted I.S. certificates from the most credited Notified Bodies in the world.

Data specified in this document are merely descriptive of the products and should be integrated with relevant technical specifications. Our products are in constant development and the information presented herein refers to the time of document issue. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. Terms & Conditions can be found at our website. For more information refer to istruction manual.