# GeneralFOUNDATION™ FieldbusSpecificationsProfibus PA

## F100

The **F100** is a Terminator for Foundation Fieldbus or Profibus PA. It is certified for use in ordinary locations and in Class I, Division 2 or Zone 2 hazardous areas. For Intrinsically Safe installations, refer to the **FCS-MBT** IS Megablock Terminator.

Foundation Fieldbus and Profibus PA share the same physical layer specification (IEC 61158-2). For this type of network, two Terminators are required on each segment. Usually one terminator is provided by the Power Conditioner in the Control Room. The **F100** is ideally suited to provide the Terminator that is normally in a junction box in the field (along with a Megablock for interconnecting devices). Not only does the **F100** include the Terminator, it also includes some differential and common mode (cable shield) surge protection.

A large "T" is placed on the **F100** label for easy identification of the Terminator location.

The **F100** is fully encapsulated to provide long life and resistance to contaminates.

### Grounding

The Ground connection on the **F100** is used to shunt any surge currents that may get on the cable shield to a local ground in the junction box. Under normal operating conditions, the cable shield remains DC isolated from this local ground. Although the normal practice is to ground the cable shield in the control room, this ad-



ditional ground connection will not cause ground loops. However, in the event of a voltage surge on the cable shield, a gas discharge tube in the **F100** fires and shunts this unwanted current to ground.

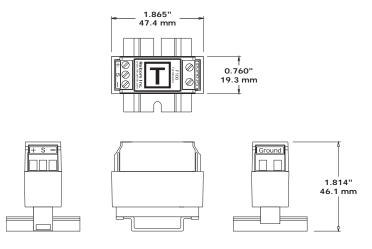
Specifications				
Mounting Requirements	35mm DIN Rail; IP40 (minimum) Enclosure			
Wire Capacity	12-24 AWG, 2.5mm2 maximum			
Case Material	Lexan Polycarbonate			
Operating Temperature	-45°C to +70°C			
Storage Temperature	-50°C to +70°C			
Humidity	0 to 90% (non-condensing)			
Screw Torque Range	0.5-0.6 Nm			
Weight	49 grams			
Input Voltage	32VDC maximum			
Input Current	1.5A maximum (no DC current used by the F100)			
Differential Mode Voltage Limit	39V (transient)			
Common Mode Voltage Limit (shield)	75V (transient)			

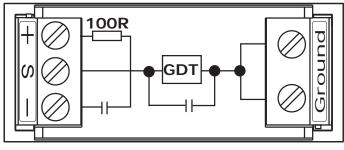
Product specifications are subject to change without notice.



#### Dimensions

**Internal Diagram** 





#### **Related Documents:**

- PS-001: Megablock Product Overview
- PS-002: Megablock Selection Guide
- 500-275: Megablock Installation Instructions
- 501-123: Relcom Fieldbus Wiring Guide

Accessories Pa	Part Number	
Heavy Duty DIN rail end stop	FCS-A06	
35 mm DIN Rail, aluminum, 1 meter	FCS-A01	

#### Approvals:



Region (Authority)	Standard	Certificate	Approved For	Ratings	
EU	EN61326		Class A	CE	
(Relcom)			Industrial Locations		
Canada	C22.2 No. 0-M1982	1198909	Class I, Div 2, ABCD, T4	Vmax = 32VDC	
(CSA)	C22.2 No.1010.1-92		Ex nA IIC T4	Imax = 1.5A	
	C22.2 No.1010.1B-97				
	T.I.L. No. I-29				
	C22.2 No. 157-92				
	C22.2 No. 213 - M1987				
	CAN/CSA-E60079-0-02				
	CAN/CSA-E60079-15-02				
USA	3600: 1998	3013269	Class I, Div 2, ABCD T4		
(FM)	3611: 1999		Class I, Zone 2, IIC T4	Same as Above	
	3810: 1989				
EU	IEC 60079-0: 2009	RELC	⟨٤́ɤ⟩ II 3 G Ex nA IIC T4 Gc		
(Relcom)	IEC 60079-15: 2010	07ATEX1004X		Same as Above	