Instruction Bulletin

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Titan 75LC Transient Voltage Surge Suppressor (TVSS)



INTRODUCTION

The 75LC Surge Protective Device (SPD) offers surge suppression and noise filtration for any micro-processor based product, PLC's, Motion Control, OEM or any critical industrial load. The SPD can be installed on the incoming power source (20 amps or less).

INSTALLATION





NOTE: (4) Mounting Feet are included for Flange Mounting applications.

Figure 1: DIN Rail Mounting and Removing, Flange Mounting

HAZARD OF ELECTRIC SHOCK, BURN OR EXPLOSION.

- This equipment must be installed and serviced only by qualified electrical personnel in accordance with National and Local Electrical Codes.
- Turn off all power supplying this equipment before working on or inside equipment.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace all devices, doors, and covers before turning on power to this equipment.
- Do not apply petroleum-based products to non-metallic parts.

Failure to follow these instructions will result in death or serious injury.

CAUTION

HAZARD OF EQUIPMENT DAMAGE.

- Megger[®] or hi-potential tests will damage this surge protective device. Turn off all power supplying the equipment and isolate the surge protective device before testing.
- Not for use on ungrounded systems.

Failure to follow these precautions can result in equipment damage.



Figure 2: Verify Line Voltage

TROUBLESHOOTING



Figure 3: Diagnostic Operation



NOTE: Contacts shown in unpowered state. Figure 4: Remote Monitoring (optional)



Dimensions: in. [mm]

Figure 5: Dimensions

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- 1. Turn off all power supplying this equipment before working on or inside equipment.
- 2. Mount the SPD as shown in Figure 1.
- Confirm SPD is rated for your system by comparing the L-N voltage measurements to the Rated Line Voltage on the product label (120V or 230V). (see Figure 2)
- 4. Insure that the in-line circuit breaker rating and wire size are per National and Local Codes and match the current rating on the SPD label.
- 5. Connect as shown in Figure 2.

Model	Rated Load Current	Nominal Line Voltage
75LC120-5S(DC)	5 A	120 V
75LC120-10S(DC)	10 A	120 V
75LC120-15S(DC)	15 A	120 V
75LC120-20S(DC)	20 A	120 V
75LC230-5S(DC)	5 A	230 V
75LC230-10S(DC)	10 A	230 V
75LC230-15S(DC)	15 A	230 V
75LC230-20S(DC)	20 A	230 V
DC = indicates Dry Con	tact option	

Diagnostic Operation

- LED ON = Normal operation.
- LED OFF = Fault. Check line voltage, breakers and connections. If OK, replace unit. (see Figure 3)
- Remote Monitoring (Dry Contact option) (see Figure 4). A three-pin socket and plug are provided to allow the customer to wire one set of normally open (NO) and normally closed (NC) "Dry" Contacts to a remote monitoring indicator. The customer must provide power for this indicator, keeping within the specifications shown in Figure 4.

The SPD's internal electrical relay energizes only in the event of a fault within the SPD.

NOTE: The supplied three-pin plug can accept up to #16 AWG (1.5mm²) wire.

General Specifications		
Max Surge Current	40kA	
Housing	Open Type	
Product Weight	1 lb	
Connection Method	Terminals/Spade Lugs Sized for #22 to #12 AWG Wire	
Terminal Capacity	#22 to #14 AWG Stranded Wire	
Terminal Torque	30 lb-in. (3.3 N.M)	
Mounting Method	DIN Rail or Flange Mounting	
Circuit Type	Series Hybrid	
Thermal Fusing	Yes	
Sine Wave Tracking	Yes	
EMI/RFI Noise Rejection	Up to -75 dB	
Operating Temperature	-40° to +140°F (-40° to +60°C)	
Operating Frequency	50/60 Hz	
Diagnostics	Green LED, Form C Dry Contacts (optional)	
Product Standards eR1us to UL 1449-2nd Ed, UL 1283, CSA C22.2 Nand No. 8-M1989. IEC 61643-1		

Electrical equipment should be serviced only by qualified personnel. No responsibility is assumed by EFI Electronics for any consequences arising out of the use of this material. This document is not intended as an instruction manual for untrained persons.