Instruction Bulletin

8287-0005A 03/03

Titan 100W
Transient Voltage Surge Suppressor (TVSS)

PRECAUTIONS

⚠ DANGER

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 enclosure containing this 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.

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

⚠ WARNING

Not for use on ungrounded systems.

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

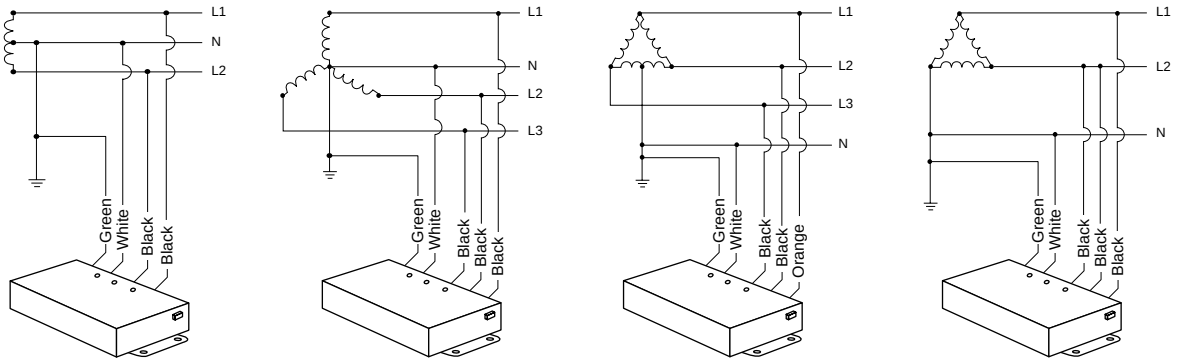
CAUTION

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.

Failure to follow these precautions can result in equipment damage.

INSTALLATION



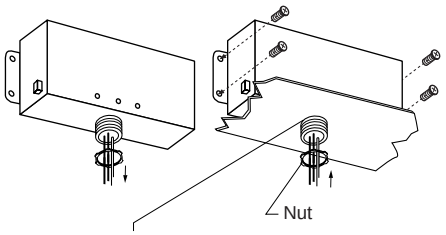
1Ø 3-wire 120/240 Vac

3Ø 4-wire 208Y/120 Vac, 380Y/220 Vac, 480Y/277 Vac, or 600Y/347 Vac

3Ø 4-wire 240D/120 Vac

3Ø 3-wire (grounded B phase) 240D Vac, 480D Vac or 600D Vac

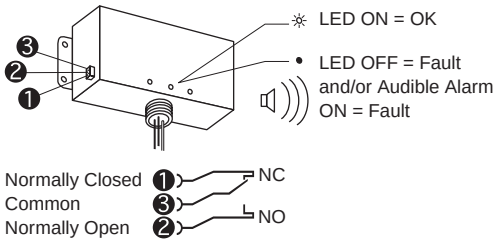
Figure 1: Wiring Diagrams



0.75 in. [19 mm] knockout (trade size)
Actual hole size 1.0 in. [25 mm]

NOTE: The surge protective device must be installed in an accessible location (not within walls).

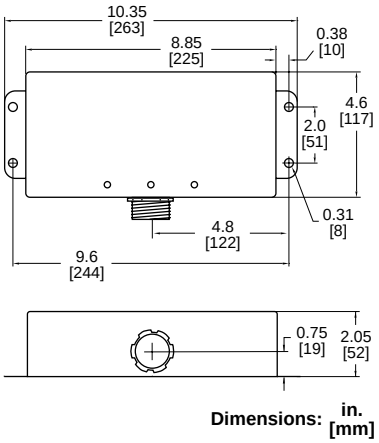
Figure 2: Mounting Unit



0.3 A @125 VAC, 110 VDC
1.0 A @ 30 VDC

NOTE: Contacts shown in unpowered and faulted state.

Figure 3: Remote Monitoring and Diagnostic Operation



Dimensions: in. [mm]

Figure 4: Dimensions

1. Turn off all power supplying this equipment before working on or inside any enclosure containing this equipment.
2. Identify proper location for surge protective device. Locate as close as possible to the panel being protected. Mount unit securely, as close to the electrical connection as possible. See Figure 2 for mounting instructions.
   NOTE: The surge protective device must be installed in an accessible location (not within walls).
3. Confirm surge protective device is rated for your system by comparing voltage measurements to the Line Voltage (L-L, L-N) on the product label.
4. Install in accordance with National and Local Electrical Codes and match branch circuit breakers to the size of wire being used (#12 AWG, up to 20 A).
5. Confirm that the electrical terminals used to attach this device are identified for these conductors.
6. Twist conductors 1/2 turn or more for every 12 inches of length.
7. Do not loop or coil wires. Be sure to maintain adequate wire bending space per NFPA 70 2002 Edition, article 408.35.
8. Use on grounded systems only.

Diagnostic Operation

- LED ON = Normal operation (see Figure 3).
- LED OFF (one or more) and/or Audible Alarm ON = Fault. Check phase voltage on line side of fuse, circuit breakers and connections. If OK replace TVSS unit.
- Remote Monitoring (Dry Contacts). A three-pin socket and plug are provided to allow the user to wire one set of normally open (NO) and normally closed (NC) Dry Contacts to a remote monitor. The user must provide power for the remote monitor, keeping within the specifications shown in Figure 3.
  The SPD's internal electrical relay energizes when AC power is applied and de-energizes in event of a fault within the SPD or removal of power from unit.
  NOTE: The supplied three-pin plug can accept up to #16 AWG (1.5mm^2) wire.

General Specifications	
Max Surge Current	100 kA/Phase
Short Circuit Current Rating	5 kA, 600 V Maximum
Housing Rating	NEMA Type 1
Product Weight	2 lbs. (0.91 kg)
Connection Method	Parallel, #12 AWG Stranded Wire
Terminal Fusing	Yes
EMI/RFI Noise Rejection	Up to -30 dB
Operating Temperature	-40˚ to +140˚F (-40˚ to +60˚C)
Operating Frequency	50/60/400 Hz
Diagnostics	Green Status LED, Audible Alarm, Dry Contacts
Product Standards	c UL us to UL 1449-2nd Ed, CSA C22.2 No. 0-M91

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