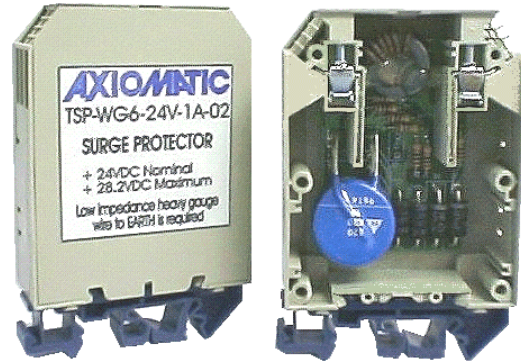


Two wire
**VOLTAGE SIGNAL
 SURGE PROTECTOR**

Type: TSP-WG6-xxV-1A-0y

Where: xx = Compliance Voltage
 y = 2 - Polarized Voltage
 y = 4 - Non-Polarized Voltage

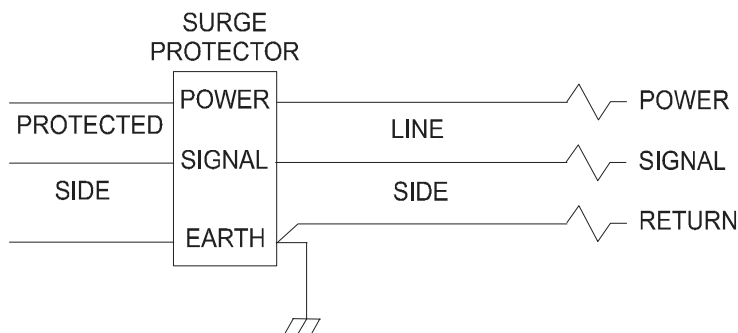


Features:

- Handles large current surges and voltage spikes without wear and tear to the circuitry of the protector
- Protection against closer (stronger) lightning strikes
- Hybrid design features reflection of surge energy as well as TRANZORB and MOV suppression
- 100% redundancy
- Compact WEG 6 pin DIN rail mount

Application: Transient surge protectors provide common and differential mode protection for toll booths, drawbridges, street light controllers and railroad crossing gates/signals. Electronic equipment is extremely susceptible to transient voltages and surge currents due to its relatively fragile semiconductor construction. A surge protector is a cost effective method of ensuring that equipment will have maximum life.

Function: The module has a PROTECTED SIGNAL and POWER side, which is connected to the data acquisition system input, and power supply. It also has a LINE side, which is connected to the transmission wire. The EARTH connection of the modules must be terminated to earth by low impedance heavy gauge wire.



Description: The TSP-WG6-xxV-1A-0y is a transient protection module, which provides over-voltage and surge current protection for 2 wire voltage signal circuits. The module provides two stages of protection for the power path and three stages of protection for the signal path. Internally, the module has 100% redundancy to safeguard the system and prevent nuisance failures. This series of modules is for systems using power, signal and return wires.

Technical Specifications: All specifications typical at nominal input voltage and 25 degrees C unless otherwise specified.

Operating Voltage*:	+(+/-) 10V		+(+/-) 24V		+(+/-) 60V		+(+/-) 130V	
	Signal	Power	Signal	Power	Signal	Power	Signal	Power
LINE Side Max. Input Voltage	11.1VDC	11.1VDC	28.2VDC	28.2VDC	70VDC	70VDC	145VDC	145VDC
Over-Voltage Level PROTECTED Side Suppression Begins	12.4VDC TRANZORB 16.5VRMS MOV	16.5VRMS MOV	31.4VDC TRANZORB 35VRMS MOV	35VRMS MOV	77.9VDC TRANZORB 85VRMS MOV	85VRMS MOV	162VDC TRANZORB 165VRMS MOV	165VRMS MOV
Maximum Clamp Volts For Max. Transients on Line	18.2VDC TRANZORB 36VRMS MOV	36VRMS MOV	45.7VDC TRANZORB 77VRMS MOV	77VRMS MOV	113VDC TRANZORB 165VRMS MOV	165VRMS MOV	234VDC TRANZORB 300VRMS MOV	300VRMS MOV
Surge Current: 8/20µSec Pulse 2mSec Pulse	2000A 10 Joules	2000A 10 Joules	4000A 44 Joules	4000A 44 Joules	13000A 66 Joules	13000A 66 Joules	13000A 120 Joules	13000A 120 Joules
Series Resistance	15 Ohms	5 Ohms	15 Ohms	5 Ohms	15 Ohms	5 Ohms	15 Ohms	5 Ohms
Resistance to Earth: Max. Over-Voltage Operating Voltage	0.01 Ohm > 1 MOhm	0.01 Ohm > 1 MOhm	0.01 Ohm > 1 MOhm	0.01 Ohm > 1 MOhm	0.01 Ohm > 1 MOhm	0.01 Ohm > 1 MOhm	0.01 Ohm > 1 MOhm	0.01 Ohm > 1 MOhm
Suppression Threshold Voltage Derating (mV/°C)	11.0	11.0	30.0	30.0	86.0	86.0	188.0	188.0

*NOTE: Polarized = +VDC; Non-Polarized = +/-VDC or AC RMS

Packaging/Dimensions: WEG 6 terminal modular housing, #12 to #22 AWG terminals
Size: 60.6 mm x 90.5 mm x 22.5 mm (2.39" x 3.56" x 0.89")
(W x H x D excluding DIN Rail)

Operating Conditions: -40 to +85°C (-40 to 185°F), 0 to 93% Relative Humidity

Ordering Part Number:

+ 10V TSP-WG6-10V-1A-02	+/- 10V TSP-WG6-10V-1A-04
+ 24V TSP-WG6-24V-1A-02	+/- 24V TSP-WG6-24V-1A-04
+ 60V TSP-WG6-60V-1A-02	+/- 60V TSP-WG6-60V-1A-04
+ 130V ... TSP-WG6-130V-1A-02	+/-130V TSP-WG6-130V-1A-04

Variations are available by special order.

Specifications are subject to change without notice.

Form: TD0105AX-7/20/98

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