

## SYSTEM FEATURES



- Provides surge protection against harmful transients traveling on data and communications lines.
- Compact footprint allows for installation flexibility
- 10-Year Unlimited Free Replacement Warranty
- Two, Four, Six, Eight and Ten wire units.
- Models for circuits up to 190 volts.
- Install on data and signal lines carrying <400mA current with a max data rate of 10Mbps. For power applications over 400mA use LT series.

## PRODUCT SPECIFICATIONS

### GENERAL SPECIFICATIONS

**Maximum Rated Surge Current:** 18kA per pair

**Applications:** RS232, RS422/423/485 data, 4-20 mA current loop circuits and signal lines

**Design:** Multistage hybrid fail-safe design

**Warranty:** 10-Year Unlimited Free Replacement

### ELECTRICAL SPECIFICATIONS

**Strength:** 18kA per pair; 9kA per wire

**Maximum Operating Frequency:** 50MHz

**Maximum Continuous Amperage:** 400mA

**Mode of Protection:** Line-line and line-ground.

**Options:** **RJ-45 connectors**—add suffix “RJ” (available for units with 8 wires only)

**Response Time:** < 1 nanosecond

**Number of Protected Circuit:** 1-5 pair (2-10 wire)

**Series Resistance:** 2.4 ohm per wire

### MECHANICAL SPECIFICATIONS

**Dimensions (approx):** Two enclosure sizes depending on the number of circuits

**Case A (2-4 wire):** 3.94”H x 1.4”W x 2.28”D

**Case B (6-10 pair):** 3.94”H x 2.8”W x 2.28”D

**Enclosure Type:** Polycarbonate Rated V0

**Connection Method:** Hard-wired via box terminals #22AWG - #12AWG

**Mounting Method:** Screw down or Din-Rail mounted.

**Operating Temperature:** -40° C to 85° C (-40° F to 185° F)

**Weight:** 0.30 lbs.—0.75 lbs. (0.13 kg—0.34 kg) depending on number of circuits.

### SLP PERFORMANCE SPECIFICATIONS

Model Number	Protection Mode	MCOV (peak)	Max Data Rate	Let-Through Volt IEC 10 x 700 μs Impulse 2kV / 80A	Let-Through Volt ANSI/IEEE C3 Impulse 20kV / 10kA
TK-CT2-190SLPx-DIN2	L-L	200V	10Mbps	240V	220V
	L-G	200V		240V	220V
TK-CT2-120SLPx-DIN2	L-L	130V	10Mbps	180V	160V
	L-G	130V		180V	160V
TK-CT2-48SLPx-DIN2	L-L	56V	10Mbps	65V	62V
	L-G	56V		65V	62V
TK-CT2-24SLPx-DIN2	L-L	35V	10Mbps	38V	41V
	L-G	35V		38V	41V
TK-CT2-15SLPx-DIN2	L-L	15V	10Mbps	41V	39V
	L-G	15V		41V	39V
TK-CT2-10SLPx-DIN2	L-L	10V	10Mbps	24V	22V
	L-G	10V		24V	22V

All voltages are peak values (+10%). Test environment: static, positive polarity, time base = 1 ms  
x = 2 for 2 wire, 4 for 4 wire, 6 for 6 wire, 8 for 8 wire and 10 for 10 wire.

Specifications subject to change without notice, see web site [www.tpsurge.com](http://www.tpsurge.com) for latest revisions.

### SLP AVAILABLE CONFIGURATIONS

Model Number	# of Wires	Applications
TK-CT2-120SLP2-DIN2	2	
TK-CT2-120SLP4-DIN2	4	120VDC Control/Signal Circuit For 190VAC replace '120' with '190'
TK-CT2-120SLP6-DIN2	6	
TK-CT2-120SLP8-DIN2 <sup>1</sup>	8	
TK-CT2-120SLP10-DIN2	10	
TK-CT2-48SLP2-DIN2	2	
TK-CT2-48SLP4-DIN2	4	48V 4-20mA Current Loop
TK-CT2-48SLP6-DIN2	6	
TK-CT2-48SLP8-DIN2 <sup>1</sup>	8	
TK-CT2-48SLP10-DIN2	10	
TK-CT2-24SLP2-DIN2	2	
TK-CT2-24SLP4-DIN2	4	RS232 and 24V 4-20mA Current Loop
TK-CT2-24SLP6-DIN2	6	
TK-CT2-24SLP8-DIN2 <sup>1</sup>	8	
TK-CT2-24SLP10-DIN2	10	
TK-CT2-15SLP2-DIN2	2	
TK-CT2-15SLP4-DIN2	4	Circuit rated at 15V or below, such as RS485 Data
TK-CT2-15SLP6-DIN2	6	
TK-CT2-15SLP8-DIN2 <sup>1</sup>	8	
TK-CT2-15SLP10-DIN2	10	
TK-CT2-10SLP2-DIN2	2	
TK-CT2-10SLP4-DIN2	4	Circuit rated at 10V or below, such as RS422, RS423
TK-CT2-10SLP6-DIN2	6	
TK-CT2-10SLP8-DIN2 <sup>1</sup>	8	
TK-CT2-10SLP10-DIN2	10	

<sup>1</sup>RJ-45 option available for 8 wire units - add “RJ” suffix

