

SYSTEM FEATURES



- Provides surge protection against harmful transient voltages that exceed the nominal operating voltage of low speed data (50MHz max), communications and signal line protocols
- Each line is protected against surge current impulses up to 9kA/wire
- Fail-safe design
- UL Listed 497B as Isolated Loop Protector
- Compact footprint and universal mounting bracket allows installation flexibility
- 10-Year Unlimited Free Replacement Warranty

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
Safety Listing: UL Listed 497B Isolated Loop Protector

ELECTRICAL SPECIFICATIONS

Strength: 18kA per pair; 9kA per wire
Mode of Protection: Line-line and line-ground.
Options:
Shield-ground protection – add suffix “S” (available for units with 2 to 4 wire)
RJ-45 connectors – add suffix “RJ” (available for units with 8 wires only)

Response Time: < 1 nsec
Number of Protected Circuit: 1-5 pair (2-10 wire)
Series Resistance: 2.4 ohm

MECHANICAL SPECIFICATIONS

Dimensions (approx): Two enclosure sizes depending on the number of circuits
Case A (1-2 pair): 2.885”H x 2.130”W x 1.130”D
Case B (3-5 pair): 4.375”H x 2.885”W x 1.230”D
Enclosure Type: High-impact, non-metallic UL 94-5V flame resistant rated
Connection Method: Screw terminal connector; #12-22 AWG
Mounting Method: All units come standard with a universal mounting bracket that allows the units to be screw or Din-Rail mounted (horizontally or vertically).
Operating Temperature: -40° C to 85° C (-40° F to 185° F)
Weight: 0.50 lbs. – 0.75 lbs. (0.23 kg – 0.34 kg) depending on number of circuits

SLP PERFORMANCE SPECIFICATIONS

Model Number	Protection Mode	MCOV (peak)	Maximum Operating Frequency	Max Data Rate	Let-Through Volt IEC 10 x 700 µs Impulse 2kV / 80A	Let-Through Volt ANSI/IEEE C3 Impulse 20kV / 10kA
TK-CT-120SLPx	L-L	130V	50MHz	10Mbps	180V	160V
	L-G	130V			180V	160V
	Shield-G	130V			180V ¹	160V ¹
TK-CT-48SLPx	L-L	56V	50MHz	10Mbps	65V	62V
	L-G	56V			65V	62V
	Shield-G	56V			65V ¹	62V ¹
TK-CT-24SLPx	L-L	36V	50MHz	10Mbps	38V	41V
	L-G	36V			38V	41V
	Shield-G	36V			38V ¹	41V ¹
TK-CT-15SLPx	L-L	18V	50MHz	10Mbps	41V	39V
	L-G	18V			41V	39V
	Shield-G	18V			41V ¹	39V ¹
TK-CT-10SLPx	L-L	12V	50MHz	10Mbps	24V	22V
	L-G	12V			24V	22V
	Shield-G	12V			24V ¹	22V ¹

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

¹ values for units with shield option.

Specifications subject to change without notice, see web site, www.TPSSurge.com for latest revisions.

SLP AVAILABLE CONFIGURATIONS

Model Number	No of Wire	Applications
TK-CT-120SLP2 ¹	2	120V Control/Signal Circuit
TK-CT-120SLP4 ¹	4	
TK-CT-120SLP6	6	
TK-CT-120SLP8 ²	8	
TK-CT-120SLP10	10	
TK-CT-48SLP2 ¹	2	48V 4-20mA Current Loop
TK-CT-48SLP4 ¹	4	
TK-CT-48SLP6	6	
TK-CT-48SLP8 ²	8	
TK-CT-48SLP10	10	
TK-CT-24SLP2 ¹	2	RS232 and 24V 4-20mA Current Loop
TK-CT-24SLP4 ¹	4	
TK-CT-24SLP6	6	
TK-CT-24SLP8 ²	8	
TK-CT-24SLP10	10	
TK-CT-15SLP2 ¹	2	Circuit rated at 15V or below, such as RS485 Data
TK-CT-15SLP4 ¹	4	
TK-CT-15SLP6	6	
TK-CT-15SLP8 ²	8	
TK-CT-15SLP10	10	
TK-CT-10SLP2 ¹	2	Circuit rated at 10V or below, such as RS422, RS423
TK-CT-10SLP4 ¹	4	
TK-CT-10SLP6	6	
TK-CT-10SLP8 ²	8	
TK-CT-10SLP10	10	

¹Shield option available for 2-4 wire units – add “-S” suffix

²RJ-45 option available for 8 wire units – add “-RJ” suffix

