

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
- Fail-safe design
- 24V, & 48V configurations.
- 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: 9kA per wire

Applications: 4-20mA Current loops, signal lines, data-lines, transducers, flow meters, and low voltage control circuits

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.

Response Time: < 1 nanosecond

Number of Protected Circuit: 1 (2 Wires)

Series Resistance: 2.4 ohm per wire

MECHANICAL SPECIFICATIONS

Dimensions (approx.): 4.25"H x 1.1"W x 1.0"D

Enclosure Type: Stainless steel type 316L 1/2" conduit pipe and cap models with NPT threads

Connection Method: Screw terminal connector; #12-30 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: 1.0 lbs. (0.45 kg)

SCP PERFORMANCE SPECIFICATIONS

Model Number	Protection Mode	MCOV (peak)	Max Data Rate	Let-Through Volt IEC 10 x 700 µs Impulse 2kV / 80A	Maximum Operating Frequency
TK-CT2-24SCP2	L-L Shield-G	35V 35V	10Mbps	50V 50V	50MHz
TK-CT2-48SCP2	L-L Shield-G	56V 56V	10Mbps	62V 62V	50MHz

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 for latest revisions.

AVAILABLE CONFIGURATIONS

Model Number	Number of Circuits	Applications
TK-CT2-24SCP2-CAP	1	24V Current Loop Prewired with Capped One End
TK-CT2-24SCP2-FT	1	24V Current Loop Prewired at Both Ends
TK-CT2-48SCP2-CAP	1	48V Current Loop Prewired with Capped One End
TK-CT2-48SCP2-FT	1	48V Current Loop Prewired at Both Ends

