

## SYSTEM FEATURES



- Provides surge protection against harmful transient voltages that exceed the nominal operating voltage of AC and DC critical dedicated control loads
- Ideal for protecting the PLCs, building management systems, OEM & systems integration controls and other microprocessor-based loads
- Compact, fail-safe design allows flexible installation into electrical/control panels
- Dual Component-Level Fusing (CLF) standard
- Enhanced Transient Filter (ETF) standard
- Recognized under UL 1449 2nd Edition as TVSS, UL 1283 as Electromagnetic Filter and cUL
- 15-Year Unlimited Free Replacement Warranty

## PRODUCT SPECIFICATIONS

### GENERAL SPECIFICATIONS

**Maximum Rated Surge Current:** 30kA per phase  
**Application:** ANSI/IEEE C62.41 Location C, B & A  
**Design:** Ultra compact, fail-safe design with dual component-level fusing  
**Warranty:** 15-Year Unlimited Free Replacement  
**Safety Listing:** Recognized under UL 1449 2nd Edition TVSS, cUL, UL 1283 Filter

### ELECTRICAL SPECIFICATIONS

**Modes of Protection:** All modes. L-N, L-G, & N-G  
**Input Power Frequency:** 47-64 Hz  
**Maximum Continuous Operating Current:** 15 amps  
**Response Time:** < 1 nanosecond  
**Standard Monitoring:** Status indicating light  
**Short Circuit Current Rating:** 100kAIC short circuit current rating with a 15 amp max Class T fuse

### MECHANICAL SPECIFICATIONS

**Dimensions:** 3.50"H x 0.89"W x 3.99"D  
**Enclosure:** ABS Plastic UL94-5VA  
**Connection:** Hard-wired via box terminals 22 AWG – 12 AWG conductor  
**Mounting:** Din-Rail  
**Operating Environment:** -40° C to 70° C (-40° F to 160° F); 5% to 95% non-condensing humidity  
**Weight:** 1 lbs (0.45 kg)

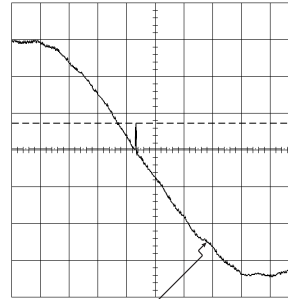
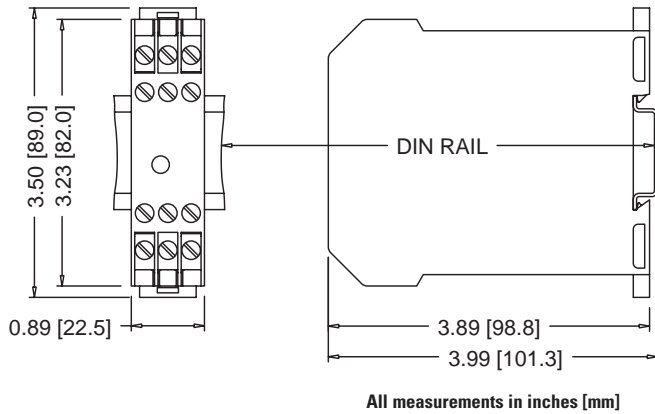
### AVAILABLE CONFIGURATIONS

Model Number	Voltage	Configuration
TK-LT24-15A-DIN	24V AC or DC	1ø 2-wire + grd
TK-LT48-15A-DIN	48V AC or DC	1ø 2-wire + grd
TK-LT120-15A-DIN	120V AC or DC	1ø 2-wire + grd
TK-LT250-15A-DIN	250V AC or DC	1ø 2-wire + grd

### EMI / RFI FILTER ATTENUATION – MIL STANDARD 220B

Frequency	Attenuation
1kHz	1 dB
10kHz	5 dB
100kHz	29 dB
1MHz	32 dB
10MHz	8 dB
20MHz	9 dB
Max. attenuation	34 dB @ 495kHz





Peak Let-Through Voltage Level - 44V  
Reference Level Zero Crossing of AC Sine Wave

For 120V Configuration

ANSI/IEEE C62.41.1  
Category A1 Ring Wave  
2000V, 67A Test Plot

L-N Mode, Dynamic,  
180° Phase Angle,  
Positive Polarity  
1 msec/div Horizontal  
500 Mega samples/sec  
55V/div Vertical

ANSI/IEEE C62.41.1-2002, C62.41.2-2002, & C62.45-2002

Measured Limited Voltage

UL SVR

Model Number	System Voltage	System Configuration	Protection Mode	AC MCOV	Measured Limited Voltage			UL SVR
					All Models A1 Ring Wave 2kV, 67A 180° Phase Angle	All Models A3 Ring Wave 6kV, 200A 180° Phase Angle	All Models B3/C1 Impulse Wave 6kV, 3kA 90° Phase Angle	UL 1449 2nd Edition Suppressed Voltage Ratings
TK-LT24-15A-DIN	5-30 VAC	1-Phase	L-N	30V	44V	83V	152V	N/A
	5-38 VDC	2-wire+grnd	L-G	30V	75V	91V	173V	N/A
			N-G	30V	50V	85V	173V	N/A
TK-LT48-15A-DIN	24-50 VAC	1-Phase	L-N	50V	44V	115V	197V	N/A
	24-65 VDC	2-wire+grnd	L-G	50V	97V	145V	225V	N/A
			N-G	50V	49V	117V	193V	N/A
TK-LT120-15A-DIN	48-150 VAC	1-Phase	L-N	150V	47V	127V	438V	400V
	48-200 VDC	2-wire+grnd	L-G	150V	92V	239V	496V	400V
			N-G	150V	47V	128V	470V	400V
TK-LT250-15A-DIN	120-275 VAC	1-Phase	L-N	275V	49V	130V	851V	800V
	120-300 VDC	2-wire+grnd	L-G	275V	90V	234V	955V	800V
			N-G	275V	48V	130V	960V	800V

All voltages are peak values ( $\pm 10\%$ ) measured from the zero reference point at the phase angles referenced above using a 10  $\mu\text{s}/\text{div}$  display rate and 500 MS/s sampling rate. Specifications subject to change without notice, see web site, [www.tpsjoslyn.com](http://www.tpsjoslyn.com) for latest revisions.