

## SYSTEM FEATURES



- Provides surge protection against harmful transient voltages that exceed the nominal operating voltage of AC critical dedicated control loads and telephone line applications
- Ideal for protecting the PLCs, fire alarm panels, ATM, electronic access readers, POS, building management systems and other mission critical loads
- Compact, fail-safe design allows flexible installation into electrical/control panels
- Dual Component-Level Fusing (CLF) standard
- Enhanced Transient Filter (ETF) standard
- NEMA LS1 compliance (NEMA LS1 2.2-9 and 3-9)
- Form C dry relay contacts for remote monitoring
- Recognized under UL 1449 2nd Edition as TVSS, UL 1283 as Electromagnetic Filter, UL 497A as Secondary Telephone Protector and cUL
- 15-Year Unlimited Free Replacement Warranty

## PRODUCT SPECIFICATIONS

### GENERAL SPECIFICATIONS

**Maximum Rated Surge Current:** 70kA per phase  
**Application:** ANSI/IEEE C62.41 Location C, B & A  
**Design:** Fail-safe design with dual component-level fusing (secondary over-current and thermal protection)  
**Warranty:** 15-Year Unlimited Free Replacement  
**Safety Listing:** Recognized under UL 1449 2nd Edition TVSS, cUL, UL 1283 Filter, UL 497A Secondary Telephone Protector

### ELECTRICAL SPECIFICATIONS

**Modes of Protection:** All modes. L-N, L-G, & N-G (for AC); Tip-to-Ring, Tip-to-Ground and Ring-to-Ground (for telecom)  
**Input Power Frequency:** 47-64 Hz (for AC); 10MHz (for telecom)  
**Maximum Continuous Operating Current:** 30 amps or 60 amps  
**Response Time:** < 1 nanosecond  
**Standard Monitoring:** Includes ultra bright LED status indicating light and Form C dry relay contacts for remote monitoring  
**Short Circuit Current Rating:** 100kAIC short circuit current rating with a 30 amp or 60 amp max Class T fuse (based on current rating of device)

### MECHANICAL SPECIFICATIONS

**Dimensions:** 4.73"H x 6.23"W x 2.37"D (30 amp models); 4.72"H x 7.29"W x 3.68"D (60 amp models)  
**Enclosure:** ABS Plastic UL94-5VA  
**Connection:** (For Telecom) RJ14 modular jacks (For AC) Hard-wired via box terminals on 30 amp models; Stud-lugs on 60 amp models  
**Mounting:** Multi-point mounting feet  
**Operating Environment:** -40° C to 70° C (-40° F to 160° F); 5% to 95% non-condensing humidity  
**Weight:** 30 amp models 1 lbs (0.45 kg); 60 amp models 2 lbs (0.9 kg)

### AVAILABLE CONFIGURATIONS

Model Number	Configuration	Protection	Connection
TK-LTE120-30A-RJ	120V, 1 $\phi$ 2-wire + grd 30 amps	AC & Telecom	Wire Terminals & RJ14
TK-LTE250-30A-RJ	250V, 1 $\phi$ 2-wire + grd 30 amps	AC & Telecom	Wire Terminals & RJ14
TK-LTE120-30A	120V, 1 $\phi$ 2-wire + grd 30 amps	AC only	Wire Terminals
TK-LTE250-30A	250V, 1 $\phi$ 2-wire + grd 30 amps	AC only	Wire Terminals
TK-LTE120-60A	120V, 1 $\phi$ 2-wire + grd 60 amps	AC only	Stud-lugs
TK-LTE250-60A	250V, 1 $\phi$ 2-wire + grd 60 amps	AC only	Stud-lugs

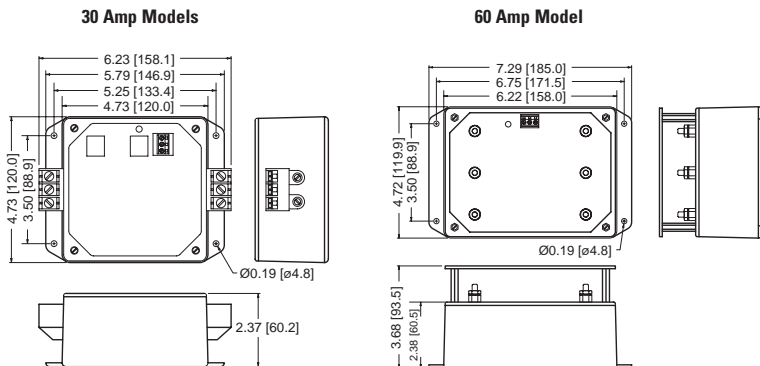
### AVAILABLE OPTION

- Din-rail mounting clips: add suffix "-DIN"  
*Example: TK-LTE120-30A-RJ-DIN*

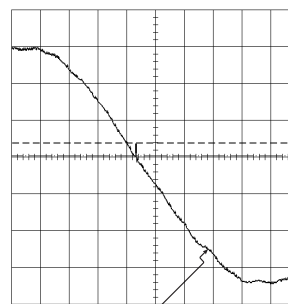
### EMI / RFI FILTER ATTENUATION – MIL STANDARD 220B

Frequency	Attenuation
1kHz	3 dB
10kHz	20 dB
100kHz	34 dB
1MHz	32 dB
10MHz	28 dB
20MHz	19 dB
Max. attenuation	35 dB @ 272kHz





All measurements in inches [mm]



AC Sine Wave

Peak Let-Through Voltage Level - 20V  
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

Model Number	System Voltage	System Configuration	Protection Mode	MCOV	Measured Limited Voltage			UL SVR
					All Models	All Models	All Models	UL 1449 2nd Edition
					A1 Ring Wave	A3 Ring Wave	B3/C1 Impulse Wave	Suppressed
					2kV, 67A	6kV, 200A	6kV, 3kA	Voltage
					180° Phase Angle	180° Phase Angle	90° Phase Angle	Ratings
TK-LTE120-30A	120V	1-Phase 2-wire+ground	L-N	150V	20V	60V	413V	400V
			L-G	150V	23V	56V	417V	400V
			N-G	150V	23V	59V	442V	400V
TK-LTE250-30A	250V	1-Phase 2-wire+ground	L-N	275V	20V	63V	839V	800V
			L-G	275V	21V	61V	855V	800V
			N-G	275V	23V	62V	884V	800V
TK-LTE120-30A-RJ	120V	1-Phase 2-wire+ground	L-N	150V	21V	61V	412V	400V
			L-G	150V	23V	62V	424V	400V
			N-G	150V	23V	61V	448V	400V
TK-LTE250-30A-RJ	250V	1-Phase 2-wire+ground	L-N	275V	20V	62V	832V	800V
			L-G	275V	23V	61V	863V	800V
			N-G	275V	24V	64V	870V	800V
TK-LTE120-60A	120V	1-Phase 2-wire+ground	L-N	150V	21V	59V	400V	400V
			L-G	150V	23V	63V	415V	400V
			N-G	150V	24V	65V	415V	400V
TK-LTE250-60A	250V	1-Phase 2-wire+ground	L-N	275V	21V	63V	816V	800V
			L-G	275V	23V	64V	832V	800V
			N-G	275V	23V	65V	832V	800V

All voltages are peak values (±10%) measured from the zero reference point at the phase angles referenced above using a 10 µs/div display rate and 500 MS/s sampling rate. Specifications subject to change without notice, see web site, www.tpsjoslyn.com for latest revisions.

## TELECOM PERFORMANCE SPECIFICATIONS

**Application:** Standard voice grade dial-up telephone lines (POTS) up to 2 pairs

**Design:** Multi-stage hybrid

**Maximum Rated Surge Current:** 2kA per pair

**Modes of Protection:** All modes. Tip-to-Ring, Tip-to-Ground & Ring-to-Ground

**Safety Listing:** Recognized under UL 497A as Secondary Telephone Protector

**Maximum Operating Frequency:** 10MHz

**Maximum Data Rate:** 2Mbps

**Maximum Continuous Operating Voltage:** 240V peak

**Response Time:** < 1 nanosecond

**Measured Limited Voltage (IEC 10x700 µsec Impulse, 2kV/80A):** 260V

**Connection:** Modula Jack RJ14 (accepts RJ11)

