

SYSTEM FEATURES



- Provides surge protection against harmful transient voltages that exceed the nominal operating voltage of AC critical dedicated control loads
- Ideal for protecting the PLCs, fire alarm panels, CNC control systems, electric access readers, POS, building management systems, OEM & systems integration controls and other microprocessor-based loads
- Compact, fail-safe design allows flexible installation into electrical/control panels
- Enhanced Transient Filter (ETF) standard
- Recognized under UL 1449 2nd Edition 2005 Revision as TVSS, UL 1283 as Electro-magnetic Filter
- 15-Year Unlimited Free Replacement Warranty

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS

Maximum Rated Surge Current: 65kA per phase
Application: ANSI/IEEE C62.41 Location C, B & A
Design: Ultra compact, fail-safe design
Warranty: 15-Year Unlimited Free Replacement
Safety Listing: Recognized under UL 1449 2nd Edition 2005 Revision TVSS, UL 1283 Filter. Unit contains no serviceable parts

ELECTRICAL SPECIFICATIONS

Modes of Protection: All modes. L-N, L-L, L-G, & N-G
Input Power Frequency: 47-64 Hz
Maximum Continuous Operating Current: 40 amps
Response Time: < 1 nanosecond
Standard Monitoring: Status indicating light
Short Circuit Current Rating: 65kAIC short circuit current rating with a 50 amp max Class J fuse or breaker

MECHANICAL SPECIFICATIONS

Dimensions: 3.93"H x 5.77"W x 1.94"D
Enclosure: High-impact robust no-metallic
Connection: Hard-wired via box terminals 22 AWG – 8 AWG conductor
Mounting: Multi-point mounting feet
Operating Environment: -40° C to 60° C (-40° F to 140° F); 5% to 95% non-condensing humidity
Weight: 2.25 lbs (1.02 kg)

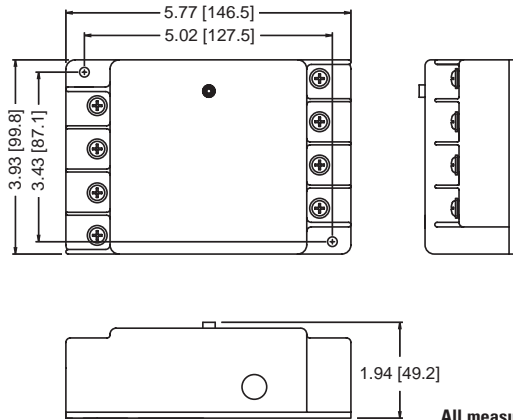
AVAILABLE CONFIGURATIONS

Model Number	Configuration
TK-LTL120P-40A	120V, 1Ø 2-wire + grd
TK-LTL220P-40A	220V, 1Ø 2-wire + grd
TK-LTL277P-40A	277V, 1Ø 2-wire + grd
TK-LTL120S-40A	120/240V, 2Ø 3-wire + grd
TK-LTL220S-40A	220/380V, 2Ø 3-wire + grd
TK-LTL277S-40A	277/480V, 2Ø 3-wire + grd

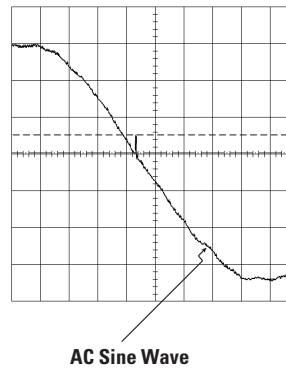
EMI / RFI FILTER ATTENUATION – MIL STANDARD 220B

Frequency	Attenuation
1kHz	1 dB
10kHz	10 dB
100kHz	30 dB
1MHz	58 dB
10MHz	33 dB
100MHz	28 dB
Max. attenuation	59 dB @ 985kHz





All measurements in inches [mm]



Peak Let-Through Voltage Level - 35V
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	MCOV	Measured Limited Voltage			UL SVR
					A1 Ring Wave 2kV, 67A 180° Phase Angle	A3 Ring Wave 6kV, 200A 180° Phase Angle	B3/C1 Impulse Wave 6kV, 3kA 90° Phase Angle	UL 1449 2 nd Edition 2005 Revision Suppressed Voltage Ratings
TK-LTL120P-40A	120V	1-Phase 2-wire+grnd	L-N	150V	35V	120V	413V	400V
			L-G	150V	279V	357V	397V	400V
			N-G	150V	337V	353V	388V	400V
TK-LTL220P-40A	220V	1-Phase 2-wire+grnd	L-N	275V	43V	125V	744V	700V
			L-G	275V	540V	598V	697V	800V
			N-G	275V	543V	568V	689V	700V
TK-LTL277P-40A	277V	1-Phase 2-wire+grnd	L-N	320V	39V	115V	829V	800V
			L-G	320V	670V	707V	801V	900V
			N-G	320V	651V	680V	786V	800V
TK-LTL120S-40A	120/240V	1-Phase 3-wire+grnd	L-N	150V	45V	127V	402V	400V
			L-G	150V	323V	425V	770V	700V
			L-L	300V	84V	249V	790V	800V
TK-LTL220S-40A	220/380V	3-Phase WYE 4-wire+grnd	L-N	275V	47V	129V	775V	700V
			L-G	275V	514V	676V	1465V	1500V
			L-L	550V	87V	233V	1530V	1500V
TK-LTL277S-40A	277/480V	3-Phase WYE 4-wire+grnd	L-N	320V	45V	128V	890V	900V
			L-G	320V	524V	685V	1685V	1800V
			L-L	640V	86V	261V	1720V	1800V
			N-G	320V	470V	637V	800V	900V

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.tpsjlyn.com for latest revisions.