

SYSTEM FEATURES



- Slimline design ensures minimum lead-length for maximum performance
- Fail-Safe Design
- Component Level Fusing (CLF), individually fused MOV's for added safety
- NEMA LS1 Compliance – Single pulse tested at independent 3rd party nationally recognized lab
- Form C dry relay contacts
- Audible alarm with silence button
- Hybrid suppression technologies – MOV and Enhanced Transient Filter (ETF)
- UL 1283 Tracking Filter
- Compact Footprint – Makes installation flexible while insuring peak performance
- 30-Year Unlimited Free Replacement Warranty

PRODUCT SPECIFICATIONS

GENERAL SPECIFICATIONS

Maximum Rated Surge Current: 80kA per phase; 40kA per mode

Application: ANSI/IEEE C62.41 Location B & A. Ideal for flush mount in-wall and adjacent panelboards

Design: Fusing for safety and hybrid suppression design provides lowest let-through voltage protection for mission critical loads

Warranty: 30-Year Unlimited Free Replacement

Safety Listing: UL 1449 2nd Edition 2005 Revision (effective 2/9/2007) UL 1283

ELECTRICAL SPECIFICATIONS

Mode of Protection: All Mode. L-N, L-L, L-G, & N-G

Input Power Frequency: 40-440Hz (47-64 Hz with enhanced filter option)

Response Time: < 1 nanosecond

Standard Monitoring: Status indicator lights (one per phase & one service LED); Form C dry contacts for suppressor status; Audible alarm with silence button

Short Circuit Current Rating: 200 kAIC short circuit current rating. Component Level fusing (CLF) allows direct bus connection without the need for upstream over-current protection

MECHANICAL SPECIFICATIONS

Dimensions (approx.): 12"H x 4"W x 4"D

Enclosure: Compact NEMA 1 steel enclosure allows cable entry from top and both sides for flexible mounting to virtually any panelboard or disconnect application

Connection: Pre-wired 24" #10 AWG strand copper conductor

Mounting: Mounting feet top and bottom. Flush-mount cover plate and 3/4" Myers hub included

Operating Environment: -40° C to 60° C (-40° F to 160° F), 5% to 95% non-condensing humidity

Weight: 12 lbs. (5.4 kg)

AVAILABLE CONFIGURATIONS

Model Number	Description
TK-LP080-1S240-L	120/240VAC, 1 ϕ SPLIT-Phase, 3-wire + grd
TK-LP080-3Y208-L	120/208VAC, 3 ϕ WYE, 4-wire + grd
TK-LP080-3Y480-L	277/480VAC, 3 ϕ WYE, 4-wire + grd
TK-LP080-3D240-L	120/240VAC, 3 ϕ high-leg DELTA, 4-wire + grd (B phase must be 208V)

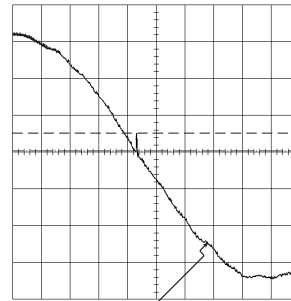
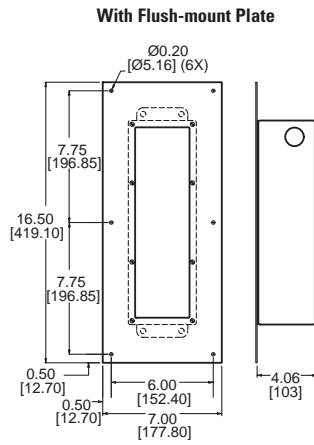
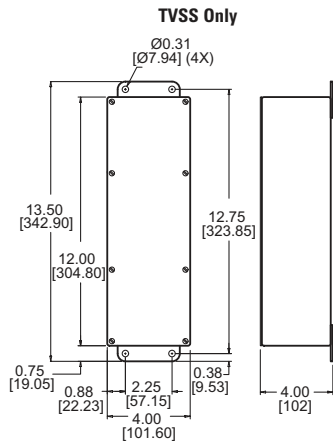
AVAILABLE OPTION

- Enhanced Transient Filter: add suffix "-F"
Example: TK-LP080-3Y208-FL

EMI / RFI FILTER ATTENUATION – MIL STANDARD 220B

Frequency	Attenuation
1kHz	1 dB
10kHz	14 dB
100kHz	42 dB
1MHz	22 dB
10MHz	6 dB
100MHz	2 dB
Max. Attenuation Frequency	57 dB @ 142 kHz





For 120/208V Configuration

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

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

All measurements in inches [mm]

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	ETF Models	ETF Models	All Models	UL 1449 2nd Edition
					A1 Ring Wave 2kV, 67A 180° Phase Angle	A3 Ring Wave 6kV, 200A 180° Phase Angle	B3 Ring Wave 6kV, 500A 90° Phase Angle	2005 Revision Suppressed Voltage Ratings
TK-LP080-1S240-L	120/240V	1-Phase 3-wire+grnd	L-N	150V	29V	56V	437V	400V
			L-G	150V	46V	81V	400V	
			L-L	300V	39V	88V	800V	
			N-G	150V	40V	112V	400V	
TK-LP080-3Y208-L	120/208V	3-Phase WYE 4-wire+grnd	L-N	150V	29V	56V	437V	400V
			L-G	150V	46V	81V	400V	
			L-L	300V	39V	88V	800V	
			N-G	150V	40V	112V	400V	
TK-LP080-3Y480-L	277/480V	3-Phase WYE 4-wire+grnd	L-N	320V	27V	71V	670V	800V
			L-G	320V	52V	119V	800V	
			L-L	640V	39V	73V	1500V	
			N-G	320V	48V	67V	800V	
TK-LP080-3D240-L	120/240V	3-Phase high-leg DELTA 4-wire+grnd	L-N	150V	27V	56V	437V	400V
			H-N	320V	52V	71V	670V	800V
			L-G	150V	52V	81V	400V	
			H-G	320V	52V	119V	800V	
			L-L	300V	39V	88V	800V	
			H-L	470V	39V	78V	1500V	
N-G	150V	40V	112V	400V				

ETF = Enhanced Transient Filter (-F suffix). All tests performed with 6" lead length, positive polarity.

All voltages are peak values ($\pm 10\%$) measured from the zero reference point at the phase angles referenced above using a 10 μ s/div display rate and 500 MS/s sampling rate.

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



For Technical Support
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