Total Protection Solutions

ServiceTrack STX100

Surge Protective Device

System Features



- **Industry Best 30-Year Unlimited Free Replacement Warranty**
- Providing the highest level of protection with the lowest let-through voltage in the industry
- Fail-Safe Design
- Component Level Fusing
- Form C dry relay contacts and audible alarm with silence button
- Two suppression technologies: MOV and optional all mode Enhanced Transient Filter
- UL 1283 Tracking Filter
- Ultra, Compact Footprint – efficiency and performance
- Weatherproof Nema 4X Polycarbonate
- **Industry Best Enhanced Transient Filter to Reduce Lock-ups, Glitches & Premature Failure of Electronics**

SPD Product Specifications

General Specifications

Maximum Rated Surge Current: 100kA per phase; 50kA per mode
Application: ANSI/IEEE C62.41 Location C, B & A. Ideal for distribution panels, branch panels and critical loads
Design: Optimum performing parallel hybrid with component level fusing
Warranty: 30-Year Unlimited Free Replacement
Safety Listing: UL1449 5th Ed., Type 1 and Type 2 for Type 1 & Type 2 Locations, and UL 1283
Nominal Discharge Surge Current I_n: 20kA

Electrical Specifications

Modes of Protection: All Modes. L-N, L-L, L-G, & N-G
Input Power Frequency: 50-60Hz
Response Time: < 1 nanosecond
Standard Monitoring: Green power indicator lights (one per phase) & one red service LED; Form C dry relay contacts for suppressor status; Audible alarm with silence button
Short Circuit Current Rating: 200 kA on all units. No upstream over-current protection required - suitable for direct bus connection.

Mechanical Specifications

Dimensions (approx.): 8.74"H x 5.25"W x 3.30"D
(222 mm H x 133.35 mm W x 83.82 mm D)
Enclosure: UL94V-O weather-proof, NEMA 4X Polycarbonate non-conductive
Connection: Pre-wired with 36"(915 mm) of #10 AWG conductor
Mounting: Multi-point mounting feet
Operating Environment: -40° C to 70° C (-40° F to 158° F)
5% to 95% non-condensing humidity
Weight: Less than 5 lbs/2.27 kg

Available Configurations

Model Number	Description
TK-STX100-1P120	120VAC, 1ø, 2-wire + grd
TK-STX100-1P240	240VAC, 1ø, 2-wire + grd
TK-STX100-1S240	120/240VAC,1ø, SPLIT-PHASE, 3-wire + grd
TK-STX100-1S480	277/480VAC, 1ø, SPLIT-PHASE, 3-wire + grd
TK-STX100-3Y208	120/208VAC, 3ø, WYE, 4-wire + grd
TK-STX100-3Y380	220/380VAC, 3ø, WYE, 4-wire + grd
TK-STX100-3Y400	230/400VAC, 3ø, WYE, 4-wire + grd
TK-STX100-3Y415	240/415VAC, 3ø, WYE, 4-wire + grd
TK-STX100-3Y480	277/480VAC, 3ø, WYE, 4-wire + grd
TK-STX100-3Y600	347/600VAC, 3ø, WYE, 4-wire + grd
TK-STX100-3D240	120/240VAC, 3ø, high-leg DELTA, 4-wire + grd (B phase must be 208V)
TK-STX100-240NN	240VAC, 3ø, DELTA, 3-wire + grd
TK-STX100-380NN	380VAC, 3ø, DELTA, 3 wire + grd
TK-STX100-480NN	480VAC, 3ø, DELTA, 3-wire + grd
TK-STX100-600NN	600VAC, 3ø, DELTA, 3-wire + grd
TK-STX100-690NN	690VAC, 3ø, DELTA, 3-wire + grd

AVAILABLE OPTIONS *Order as a Suffix Example: TK-STX100-3Y208-F*

- Enhanced Transient Filter (ETF): add suffix "-F"
- Nema 4 Steel Enclosure: add suffix "-L"
- Surge Counter: add suffix "-B"

Order as Separate Item
STX-FMP (for Flush-Mount Plate Kit)

- Non-Fused Disconnect Switch: DN-200KAIC-60A-1

EMI / RFI Filter Attenuation – Mil Standard 220B

Frequency	Attenuation
1kHz	2 dB
10kHz	17 dB
100kHz	40 dB
1MHz	18 dB
10MHz	6 dB
100MHz	1 dB
Max. Attenuation Frequency	41 dB @ 106 kHz

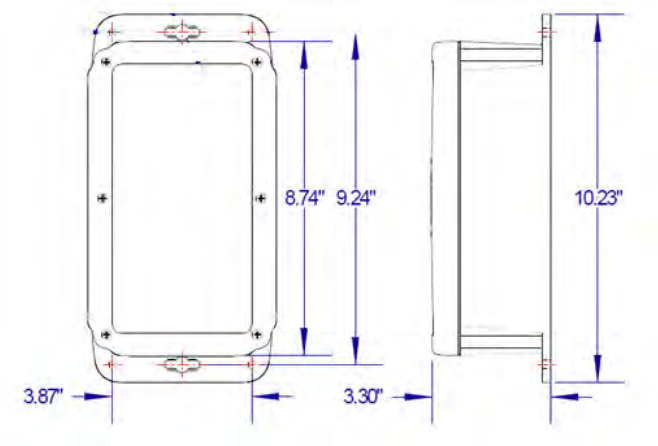
FREE REPLACEMENT ★30 YEAR★ WARRANTY ★30 YEAR★

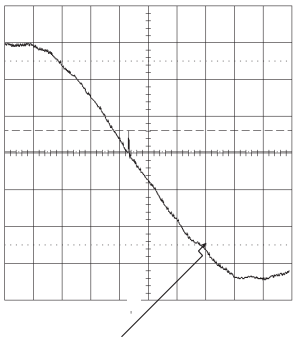
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Made in U.S.A.

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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

ANSI/IEEE C62.41 & C62.45
Let-Through Voltage Test Results

Model	System Voltage	System Configuration	MCOV	Mode	A1 2kV, 67A 180° Phase Angle	A3 6kV, 200A 180° Phase Angle	Cat B3/C1 (6 kV, 3 kA) 90° Phase Angle	UL Voltage Ratings UL 1449 5th Ed. Voltage Protection Ratings
TK-STX100-1P120	120V	1-Phase 2-wire+grnd	150V	L-N	40	107	325	700
			150V	L-G	60	135	380	800
			150V	N-G	65	134	390	700
TK-STX100-1P240	240V	1-Phase 2-wire+grnd	320V	L-N	55	92	560	1000
			320V	L-G	50	140	610	1200
			320V	N-G	50	168	740	1000
TK-STX100-1S240	120/240V	Split Phase 3-wire+grnd	150V	L-N	40	107	325	700
			150V	L-G	60	135	380	800
			300V	L-L	50	150	756	1000
			150V	N-G	65	134	390	700
TK-STX100-1S480	277/480V	Split Phase 3-wire+grnd	320V	L-N	50	92	560	1200
			320V	L-G	50	140	610	1200
			550V	L-L	65	108	1140	1800
			320V	N-G	60	168	740	1000
TK-STX100-3Y208	120/208V	3-Phase WYE 4-wire+grnd	150V	L-N	40	107	325	700
			150V	L-G	60	135	380	800
			300V	L-L	50	150	756	1000
			150V	N-G	65	134	390	700
TK-STX100-3Y380	220/380V	3-Phase WYE 4-wire+grnd	320V	L-N	50	92	560	1000
			320V	L-G	50	140	610	1200
			550V	L-L	65	108	1140	1800
			320V	N-G	60	168	740	1000
TK-STX100-3Y480 TK-STX100-3Y400 TK-STX100-3Y415	277/480V 230/400V 240/415V	3-Phase WYE 4-wire+grnd	320V	L-N	50	92	560	1200
			320V	L-G	50	140	610	1200
			550V	L-L	65	108	1140	1800
			320V	N-G	60	168	740	1000
TK-STX100-3Y600 TK-STX100-3Y525	347/600V 300/525V	3-Phase WYE 4-wire+grnd	420V	L-N	40	92	595	1200
			420V	L-G	55	138	645	2500
			840V	L-L	50	120	1340	2500
			420V	N-G	60	120	900	1200
TK-STX100-3D240	120/240V	3-Phase High-Leg DELTA 4-wire+grnd	150V	L-N	45	107	560	700
			320V	HL-N	50	92	560	1200
			150V	L-G	60	135	610	800
			320V	HL-G	50	140	610	1200
			320V	L-L	55	150	565	1200
			320V	HL-L	60	168	740	1800
			150V	N-G	65	134	740	700
TK-STX100-240NN	240V	3-Phase DELTA 3-wire+grnd	320V	L-L	55	150	565	1000
			320V	L-G	N/A	N/A	605	1000
TK-STX100-380NN	380V	3-Phase DELTA 3-wire+grnd	550V	L-L	55	135	705	1800
			550V	L-G	N/A	N/A	775	1800
TK-STX100-480NN TK-STX100-400NN	480V 400V	3-Phase DELTA 3-wire+grnd	550V	L-L	55	135	705	1800
			550V	L-G	N/A	N/A	775	1800
TK-STX100-600NN TK-STX100-690NN	600V 690V	3-Phase DELTA 3-wire+grnd	840V	L-L	65	140	925	2500
			840V	L-G	N/A	N/A	975	2500

ETF = Enhanced Transient Filter (-F suffix). All tests performed with 6" (152 mm) lead length, positive polarity.
All voltages are peak values (±10%) measured from the zero reference point at the phase angles referenced above using a 1 µs/div display rate and 100 Mega samples/sec sampling rate. Specifications subject to change without notice. See web site www.TPSsurge.com for latest revisions.

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