

# Surge Tracker ST3-50xxx

50 kA Per Phase/ 50 kA Per Mode



## Specifications

<b>Protection Modes:</b>	<b>3Yx:</b> L-N, N-G (Direct), L-G (Indirect) <b>3Nx:</b> L-G (Direct), L-L (Indirect)	<b>1Px:</b> L-N, N-G (Direct), L-G, L-L (Indirect) <b>1Sx:</b> L-N, N-G (Direct) <b>2Nx:</b> L-G (Direct), L-L (Indirect)
<b>Surge Current Rating:</b>	50 kA	
<b>Nominal Discharge Current Rating (I<sub>n</sub>):</b>	20 kA	
<b>Short Circuit Current Rating:</b>	200 kA	

## Physical Specifications

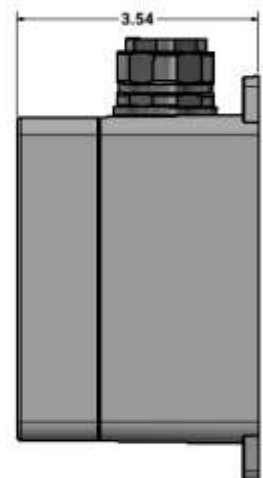
<b>Enclosure</b>	NEMA 4X Watertight
<b>Conduit Size:</b>	3/4" Metal Hub
<b>Temperature Rating:</b>	-40°C to 80°C
<b>Diagnostics:</b>	Blue LED normally on, Red LED indicates the SPD needs to be replaced. When the LED is off the unit needs to be replaced or check power.

## Standards and Certifications

<b>SPD Type:</b>	Type 1/Type 2
<b>Product Certifications</b>	ANSI/UL 1449 ANSI/UL 1283* and CSA C22.2 No. 269.2-13* and No. 8-13* (VZCA, VZCA7, FOKY* & FOKY7*) *Type 2 SPDs only
<b>Warranty:</b>	<b>5 years</b>

## Options

Option Code	SPD Type	Indicator LED	Audible Alarm	Dry Relay Contact	Advanced Surge Filtering
A	1	•			
B	1	•	•	•	
C	2	•			•
D	2	•	•	•	•



**MEASURED LIMITING VOLTAGE PERFORMANCE AND ELECTRICAL SPECIFICATIONS**

**ST3-50 Family Table**

Voltage Code	Circuit Type	MCOV	Mode	VPR Number A/B	VPR Number C/D	ANSI/IEEE C62.42 & C62.45 6" External Lead Length Let-Through Voltage Test Results	
						Cat A 30 Ω 100 kHz Ring Wave 2 kV / 67 A @ 270° Phase Angle	
						A/B Suffix	C/D Suffix
ST3-501P1x	120 V, Single Ø (2 wire + ground)	150 150	L-N N-G	600 600	700 600	505 V 363 V	35 V 357 V
ST3-501P2x	240 V, Single Ø (2 wire + ground)	320 320	L-N N-G	1200 1200	1200 1200	1165 V 803 V	121 V 247 V
ST3-501S1x	120/240 V, Split Ø (3 wire + ground)	150 150	L-N N-G	600 600	700 600	505 V 363 V	35 V 357 V
ST3-502N1x	120 V, Two Ø (2 wire + ground)	300 300	L-G L-L	700 1200	700 1200	824 V 969 V	515 V 55 V
ST3-502N2x	240 V, Two Ø (2 wire + ground)	320 640	L-G L-L	1200 2500	1200 2500	1743 V 1810 V	1148 V 59 V
ST3-502N4x	480 V, Two Ø (2 wire + ground)	552 552	L-G L-L	1800 4000	1800 4000	1701 V 1809 V	1732 V 69 V
ST3-502N6x	600 V, Two Ø (2 wire + ground)	690 690	L-G L-L	3000 3000	NA NA	1670 V 1657 V	NA NA
ST3-503Y1x	120/208 V, 3ØY (4 wire + ground)	150 150	L-N N-G	700 600	700 600	505 V 363 V	35 V 357 V
ST3-503Y2x	277/480 V, 3ØY (4 wire + ground)	320 320	L-N N-G	1200 1200	1200 1200	1165 V 803 V	121 V 247 V
ST3-503Y22x ST3-503Y23x ST3-503Y24x	220/380 V, 3ØY 230/400 V, 3ØY 240/415 V, 3ØY (4 wire + ground)	320 320	L-N N-G	1200 1200	1200 1200	1165 V 803 V	121 V 247 V
ST3-503Y3x	600/347 V, 3ØY (4 wire + ground)	420 420	L-N N-G	1500 1500	NA NA	1469 V 997 V	NA NA
ST3-503D1x	120/240 V, 3ØΔ (4 wire + ground)	150 320 150	L-N HL-N N-G	700 1200 600	700 1200 600	505 V 1469 V 363 V	35 V 121 V 357 V
ST3-503N1x	120 V, 3ØΔ (3 wire + ground)	300 300	L-G L-L	700 1200	700 1200	824 V 969 V	515 V 55 V
ST3-503N2x	240 V, 3ØΔ (3 wire + ground)	320 640	L-G L-L	1200 2500	1200 2500	1743 V 1810 V	1148 V 59 V
ST3-503N4x	480 V, 3ØΔ (3 wire + ground)	552 552	L-G L-L	1800 4000	1800 4000	1701 V 1809 V	1732 V 69 V
ST3-503N6x	600 V, 3ØΔ (3 wire + ground)	690 690	L-G L-L	3000 3000	NA NA	1670 V 1657 V	NA NA

**Measured Limiting Voltage (MLV) Test Parameters:** Positive polarity, Category A: Line power applied, Category C: No line power applied, Voltages are peak (±10%). Measured Limiting Voltages are measured from the insertion point on the sine wave to the peak of the surge for powered tests. Each MLV is the average of the phases within that mode of protection. In order to duplicate the results, the specified mode of protection must be tested in all phases (except N-G) and averaged together. (Individual mode or shot results may vary by more than 10%. Scope Settings: Time Base = 10 microseconds per division, Sampling Rate = 2.5 Giga-samples/sec, Bandwidth = 400 MHz (200 MHz for Cat C), Probes: Tektronix P5100/P6015A. These settings help to assure MLV results are accurate). **All tests performed with 6" lead length (external to the enclosure), simulating actual installed performance.**