

## SPD50K Series - Surge Protective Devices

The SPD50K Series offers easily monitored protection from surges. The visual diagnostic system that is featured in the SPD50K is easy to see and easy to diagnose. When the Green LED is visible, the protective device is okay and working correctly. When the Green LED is extinguished an audible alarm will sound. The equipment should be replaced. The LED is visible from multiple sides and angles to allow for better viewing of the status from any of the tri-mount options.

#### **Application**

• Can be installed anywhere in any electrical distribution system; line-side or load-side of main disconnect

#### **Features**

- 50 kA per phase surge current rating
- Type 1: UL 1449, CSA 22.2 No. 269.1
- 200 kA SCCR
- Complies with UL 96A 12th Edition master label requirements for lighting protection systems
- Voltage specific design
- Tri-mount installation possible via standard 0.75 in. nipple, DIN-Rail mount (rail not included) or bracket mount for flat surfaces
- Visual diagnostics
- Audible alarm with relay contacts
- Dry contact connection leads exit through nipple via #18 AWG (3 feet) at 24 Vdc @ 2 Amps
- Ten year limited warranty

## **Certifications and Compliances**

- (YL) Listed
  - UL 1449
- RoHS Compliant
- ANSI/IEEE C62.41.1-2002, C62.41.2-2002, C62.45-2002, C62.62-2010 and C62.72-2016



#### **Specifications**

Performance Specifications							
50 kA per phase							
UL 1449 Tested Inominal	20 kA						
UL 1449 Tested SCCR	200 kA						
Individually fused & Thermally Protected MOVS							
Repetitive Impulse	5000 - 3 kA - 8x20 μs 1000 - 10 kA - 8x20 μs						
Physical Specifications							
Relative Humidity Range	0-95% non-condensing						
Operating Frequency	47-63 Hz						
Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)						
Response Time	<1 nanosecond						
Solid State Bi–directional Operation							
NEMA 4X Polycarbonate Enclosure	UL 94V-0						
Pre-wired with 3 feet (.9 meter) of #10 AWG Conductor							
Typical Connection	30 A Breaker						

#### **System Features**

Green = Go Visual Diagnostic Monitoring									
Green LED visible = okay, Green LED extinguished = replace									
LED visible from multiple sides and angles - better viewing									
Every MOV is monitored as opposed to 'power is present'									
Tri-Mount Installation									
Std. 0.75 in. nipple	DIN-Rail Mount (rail not incl.)	Bracket Mount for flat surfaces							



# **SPD50K Series - Surge Protective Devices**

## **Wiring Specifications**

		System Reference Configuration Diagram	UL 1449 Test Data							
		V Phase A (Black) V Neutral (White) Black Black								
Model	2 POLE	Phase B (Black) Ground (Green)  Green  Green  Green	L-N	L-L	N-G	L–G	I <sub>n</sub>	SCCR	MCOV	
SPD50K10S		120/240 V	700	1200	600	1200	20 kA	200 kA	150	
		Phase A (Black) A B Phase B (Black) Neutral (White) White    V								
Models	ш	Phase C (Black) Black  Ground (Green) Green	L-N	L-L	N-G	L-G	I <sub>n</sub>	SCCR	MCOV	
SPD50K10Y	WYE	208 Y/120 V	700	1200	600	1200	20 kA	200 kA	150	
SPD50K27Y		480 Y/277 V	1200	2000	1000	1800	20 kA	200 kA	320	
SPD50K34Y		600 Y/347 V	1500	2500	1200	2500	20 kA	200 kA	420	
	Phase B (Black) Black Phase C (Black) Black Phase C (Black) Black									
Models	Ø	Ground (Green) Green	L-N	L-L	N-G	L-G	I <sub>n</sub>	SCCR	MCOV	
SPD50K24D*	DELTA	240 V Delta	-	1500	-	1200	20 kA	200 kA	320	
SPD50K48D*		480 V Delta	-	3000	-	1800	20 kA	200 kA	552	
SPD50K60D*		600 V Delta	-	2500	-	2500	20 kA	200 kA	690	

<sup>\*</sup> Does not include N-G protection

## Dimensional Diagram - in. (mm)

