



UL Listed to UL 1449-3 Photovoltaic Standard
(VZCA.E321351 & VZCA7.E321351)

- UL Listed as opposed to Recognized - avoids scrutiny over Technical Considerations of Recognized products
- Avoids Certification Surprises
- No Unexpected Installation Requirements

*Listed to UL 1449 as DC SPD for use in PV applications
Options & Configurations for OEMs (see back)*

Does not require additional upstream fusing for SPD safety protection

- 100kA DC Short Circuit Current Rating (SCCR)
- Fail-Safe operation – arc breaking, slide-gate thermal disconnectors built-in
- Avoids safety challenges & fusing shortcomings of overseas-standard SPDs

Performance Specifications

- 50kA 8x20µs Per Mode
- 300Vdc, 600Vdc, 1000Vdc & OEM models
- All modes of protection: DC+ – G, DC- – G, DC+ – DC-
- UL 1449 tested I_n: 20kA (highest available)
- UL 1449 tested SCCR: 100kA DC
- UL 1449-3 Listed as Type 1 SPD
- UL 1449 Type 2 optional for cUL Mark
- Large-Block arrester-grade 34mm square MOVs
- Individually Fused & Thermally Protected MOVs
- Repetitive Impulse: 5000 - 3kA-8x20µs; 1000 - 10kA-8x20µs
- Response Time: < 1nanosecond

Physical Specifications

- Relative Humidity Range: 0-95% non-condensing
- Operating Frequency: DC
- Operating Temperature: -40°C (-40°F) to +65°C (149°F)
- Solid State Bi-directional Operation
- NEMA 4X Polycarbonate Enclosure – UL746C(f1), UL 94-5VA
- Pre-wired with 3' (1m) of #8 AWG & #6 AWG ground conductor

Tri-Mount Installation - Mounting Kit Included



Std. 3/4"-14
Nipple



DIN-rail Mount
(rail not incl.)

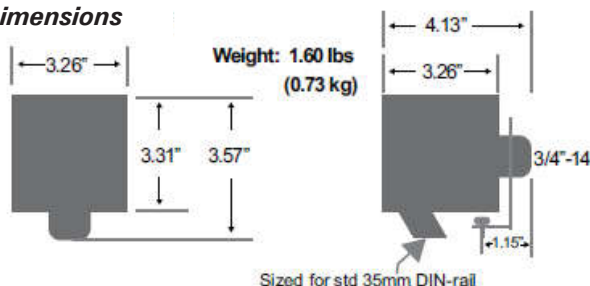


Bracket Mount
for flat surfaces

Monitoring Configurations

- Standard - Low consumption LED; monitors every MOV
 - Illuminates when power is produced
- Options:
 - R – Removes LED and its circuitry
 - M – MOV Microswitch access option (requires R above)

Dimensions



Quality, Standards & Validation

- 2 year warranty (longer optional)
- ANSI/IEEE C62.41.1-2002, C62.41.2-2002 & C62.45-2002
- Burn-In tested Prior to Shipment
- ISO 9001:2008 Quality Management System
- ISO 17025: Certified Test Lab
- IEC 61643, CE
- UL 96A Lightning Protection Master Label Eligible



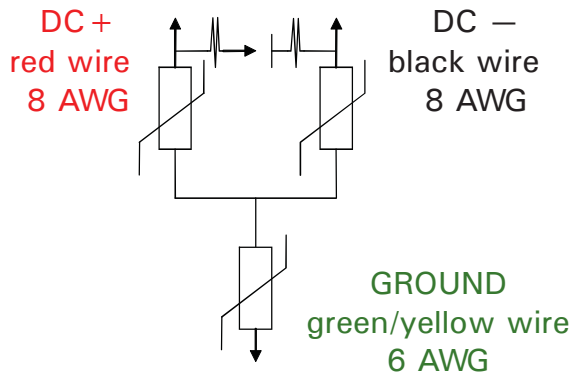
Applications & Models:

UL 1449-3 Model Number	S50A300VDC	S50A600VDC	S50A1000VDC
DC Voltage	0-300Vdc	0-600Vdc	0-1000Vdc
Maximum Continuous Operating Voltage	424Vdc	905Vdc	1188Vdc
Voltage Protection Level (Up) @ 6kV/3kA	< 1000Vp	< 2000Vp	< 2500Vp

SPDEE DC Model Number Configurator & Options

UL 1449:	S50A	Voltage	Options
	50kA default	300VDC 600VDC 1000VDC	2 = Type 2 SPD bearing cULus Mark (for Canada) R = Removes LED and its circuitry Visual Monitoring via pop-up indicator tabs on each MOV. M = Microswitch option – requires R option above. Allows remote access to logic connected MOV diagnostics. Includes 20 AWG wires out of nipple. Power must be limited to 50mA at 12VDC G = For Grounding DC + terminal of system
Examples:			
- S50A300VDCRM = 50kA, 300Vdc, Remove LED, Microswitch Monitoring			
- S50A1000VDC2 = 50kA, 1000Vdc, Type 2 marking for Canada			

Schematic: All Modes of Protection



Available Z Mounting Bracket Accessory



AC Voltage SPDEE's Also Available



OEM & Brand Label Opportunities
Please call 800.237.4567