

SPD - Surge Protective Devices

FirstSurge

Features & Benefits

- UL 1449 Listed, Type 2, Surge Protective Device (SPD)
- Rated for 120/240 split phase panels up to 400A
- Surge Current Capacities:
 - 60,000 A
 - 100,000 A
 - 140,000 A
- 3 Stage Commercial Grade Notification
- Ground Reference Monitoring (GRM)
- Installs onto any brand load center
- Type 4 rated outdoor enclosure
- 10 year product and connected equipment warranty*

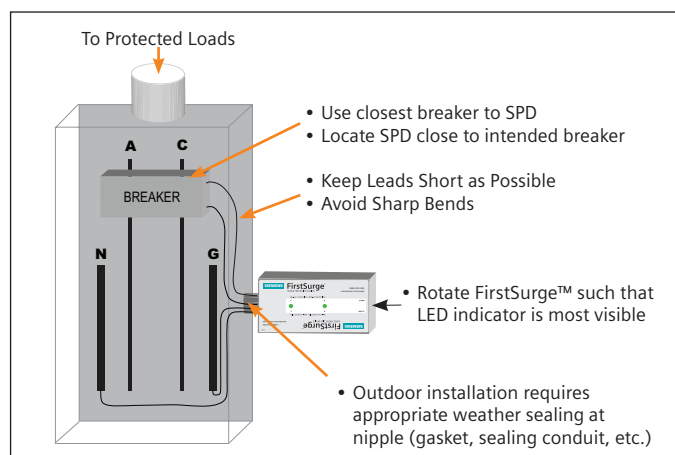
*See warranty for details

Installation Instructions:

FirstSurge™ is a Type 2 SPD. It is suitable for use downstream of the service disconnect.

Pre-Plan your installation. You need to accomplish the following:

- Meet all National and Local codes (NEC® Article 285 and UL 1449 address SPDs).
- Confirm System voltage to SPD voltage (120V SPD will fail instantly on 240V, 277V, etc.).
- Mount SPD as close to panel or equipment as possible to keep leads short. (long leads hurt performance).
- Ensure leads are as short and straight as possible, including neutral and ground. Use a breaker position that is close to the SPD and the panel's neutral and ground.
- Recommended breaker size is 20A.
- Make sure system is grounded per NEC® and clear of faults before energizing SPD. (inadvertent system problem may fail SPD).
- Never Hi-Pot test Any SPD. (will prematurely fail SPD).



Technical Specifications	
Surge Spike Capacity	FirstSurge™ Power (FS060) 60,000 A
	FirstSurge™ Plus (FS100) 100,000 A
	FirstSurge™ Pro (FS140) 140,000 A
Line Voltage	120/240 Split Phase, 50/60 Hz
UL 1449 3rd Ed VPR	L-N: 600 V
	L-G: 600 V
	N-G: 600 V
	L-L: 900 V
Rated Voltage (MCOV)	150V – L-N, L-G, and N-G; 300V – L-L
Response Time	<1 nanosecond
Enclosure	NEMA 4X Indoor and Outdoor Rated
Selection Information	
FirstSurge™ Power	FS060
FirstSurge™ Plus	FS100
FirstSurge™ Pro	FS140
FirstSurge™ Flush Mount Kit	XMFMTKIT

1. Use voltmeter to check voltages and ensure correct SPD. See Data Sheet for specs and wire-outs.
2. Determine Mounting location – weather resistant equipment may be required.
3. If SPD has optional Flush Mount Kit, pre-plan its installation. See Figure 3. (If flush mounting, be careful to not drop SPD into wall).
4. Remove power from panel/source. Confirm panel/source is deenergized.
5. Identify breaker location and SPD location. Position SPD such that LEDs are best visible. If Flush Mount Kit was ordered, follow Flush Mount instructions and then proceed at #6.
6. Mount SPD – weather resistant applications require additional sealing, etc. (not included)
 - Remove an appropriately sized knockout from panel.
 - Connect conductors as appropriate – short and straight as possible.
7. Label or mark conductors as appropriate (neutral: white, ground: green, energized: black).
8. Make sure system is bonded per NEC® and is clear of hazards or faults before energizing (N-G bonding not per NEC® will fail SPDs: #1 cause of SPD failures).
9. Energize and confirm proper operation of green LED indicators. If any connected phase LED does not illuminate, remove power, check all connections and test again. If any connected phase LED still does not illuminate, contact Siemens Technical Support at: 1-888-333-3545.
10. The SPD is equipped with an audible alarm which will sound in the event of an alarm condition. This indicates a problem with the SPD which requires further evaluation. There is no test or silence switch. De-energizing the SPD will silence the alarm.