



Nipple Mount Version



Flush Mount Version



Hardwire Version

Features

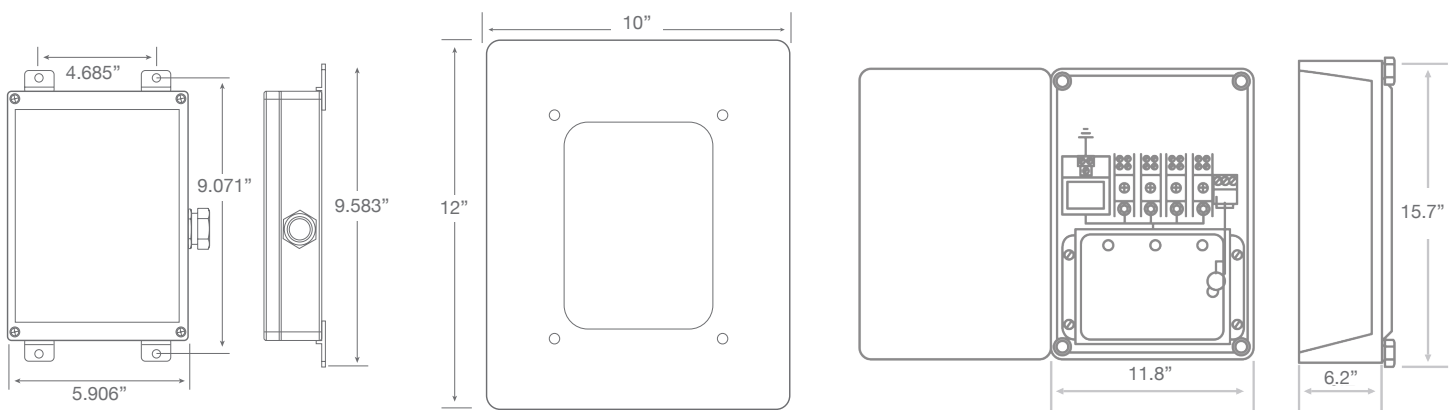
- UL/cUL 1449 4th edition type 1 listed
- I_{max}: 120-360 kA per phase
- Thermally fused metal oxide varistor suppression
- Real-time per phase LED indicators, remote contacts
- Sine wave tracking
- Short circuit current rating (SCCR) 200 kAIC
- Lead length: 40" / #10 AWG

- EMI/RFI noise filtration
- NEMA 4X plastic nipple mount enclosure
- 25 year warranty

Options

- NEMA 4X polycarbonate enclosure - hardwire version ONLY
- Flush Mount Cover - Item# VC-FMC

Dimensions



Flush Mount Cover

Part Number Breakdown

HxCx00-xxx-xxx

- Options Identifier: C= Remote Contacts
- Surge Rating Identifier: 120=120 kA/phase, 240=240 kA/phase, 360=360 kA/phase
- Voltage Identifier: 1=120/240 single phase, 2=120/208 3-phase Wye, 3=120/120/240 3-phase Hi-Leg Delta, 4=277/480 3-phase Wye, 5=480 3-phase Delta, 6=347/600 3-phase Wye, 8=240/415 3-phase Wye, 9=240 3-phase Delta

Specifications

Description			VC1	VC2	VC3	VC4	VC5	VC6	VC8	VC9
System Voltage		VAC	120/240	120/208	120/120/240	277/480	480	347/600	240/415	240
System Wiring			3W+G (Single Phase)	4W+G (3-Phase Wye)	4W+G (3-Phase Hi-Leg Delta)	4W+G (3-Phase Wye)	3W+G (3-Phase Delta)	4W+G (3-Phase Wye)	4W+G (3-Phase Wye)	3W+G (3-Phase Delta)
Maximum Operating Voltage	MCOV	L - N	150	150	150/320	320		550	320	
		N - G	150	150	150/320	320		550	320	
		L - G	150	150	150	320	550	550	320	320
		L - L	300	300	300/470	640	550	1100	640	640
Voltage Protection Rating	VPR	L - N	700	700	700	1,200		1,800	1,200	
		N - G	700	700	700	1,000		1,800	1,000	
		L - G	700	700	700	1,000	1,800	1,800	1,000	1,200
		L - L	1,000	1,000	1,800	1,800	3,000	3,000	1,800	1,800
Operating Current	Ic		<10 mA	<10 mA	<30 mA	<10 mA	<30 mA	<10 mA	<10 mA	<30 mA
Follow Current	If		None							
Maximum Leakage Current	Ipe		1 mA							
Maximum Fuse Rating			200 A, Class J							
Frequency	f		50/60/400 Hz							
Nominal Discharge Current per Mode	In		20 kA							
Maximum Discharge Current	I _{max}		120 kA - 360 kA per Phase							
Short Circuit Current Rating	SCCR		200 kA							
Standard Compliance			UL 1449 4th Edition Type 1 Listed, cUL Listed							
EMI/RFI Filtering			1283 Electromagnetic Interference Filter (-40 dB)							
Thermal Disconnect			Internal to Each Component							
Overload Disconnect			Internal to Each Device							
Failure Indicators			LED, Remote Signaling Contacts							
Operating Temperature			-40 to +185°F (-40 to +85°C)							
Housing-Enclosure Material			NEMA 4X Polymer							
Mounting Type			Nipple Mount or Wall Mounting by Screws (Not Included)							
Environmental Rating			NEMA 4X, IP65, IP66							
Installation Location			Indoor/Outdoor							

Installation Instructions

1. Preparation for Install of Surge Protection Device (SPD)

A. Verify the system voltage and wiring configuration is the same as the enclosed SPD by metering the panel voltage and checking it against the product label located on the SPD.



B. Review the installation area to ensure the proper space is available to properly mount and install the SPD. The enclosure should be mounted no more than 3 feet away from the distribution panel.

C. Check that the buildings facility grounding system meets all NEC & CEC requirements as well as local codes. A low resistance ground system is essential to the proper functioning of any SPD. The soil resistance level should be no more than 25 ohms. This can be verified by performing a soil resistivity test.

2. Location of Surge Protection Device (SPD)

A. For service entrance applications, install the SPD at the main distribution panel on the load side after the main disconnect.

B. For feeder/sub-panel applications, install the SPD directly adjacent to the panelboard.

IMPORTANT! Remember to keep conductor lead length to a maximum of 3ft or less.

Table 1

Wire	Color
Ground	Green or Green/Yellow
Neutral	White
Hot	Red, Blue, Black (Phase C, Hi-Leg)

3. Wiring of Surge Protection Device (SPD)

A. TURN OFF the power to the distribution panel where the SPD will be installed.

B. Type 1 installation - no breaker necessary, unless installing as a means of disconnecting the SPD for repair/replacement.

C. Type installation - install a circuit breaker to feed the SPD. This will allow safety personnel to remove power from the device in order to diagnose or service the unit. In addition, the device incorporates internal fusing, UL & CSA approved, that will protect against short circuit fault conditions.

D. Nipple mount SPD, or install either a rigid or flexible metal conduit between the SPD and the distribution panel.

E. Run wires of SPD to distribution panelboard - See *wiring diagrams for details*.

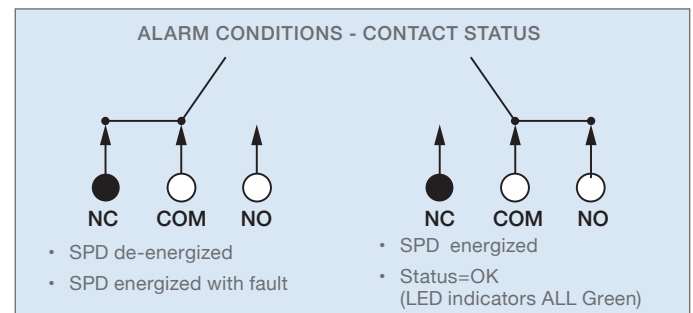
F. Ensure proper color codes: *Table 1*.

G. Tighten and recheck all connections.

H. If remote monitoring is employed, connect the form "C" contacts to the building monitor system or independent alarm, i.e. addressable relay. Contact relays will accept up to 1A/220 VAC. The dry contact terminals are N.O. (normally open), N.C. (normally closed) and COM (common). *Diagram 1*.

NOTES: *Check wiring before applying power.*

Diagram 1



Register Online at:
<https://surgewarrantyonline.com>



Important: Risk of electrical shock. This device should only be installed by qualified personnel.

Technical Assistance Call: 800-648-6802
After Hours Tech Support 443-600-3403

Figure 1

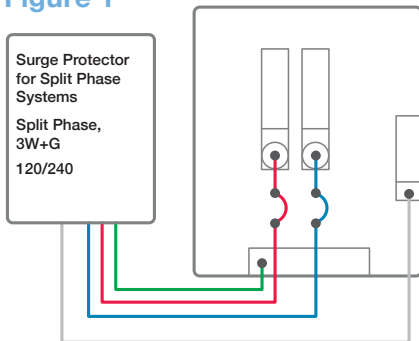


Figure 2

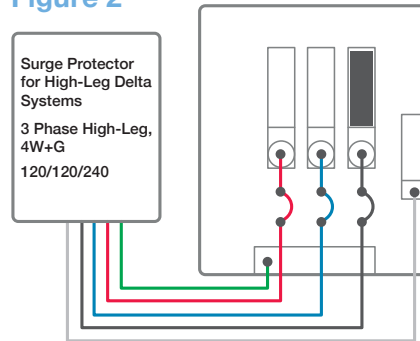


Figure 3

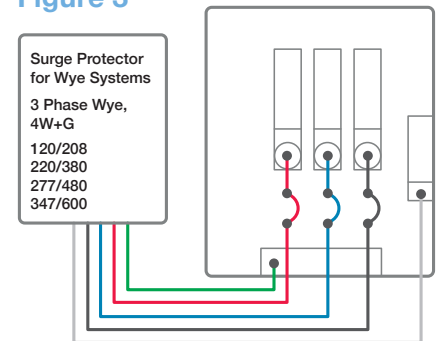
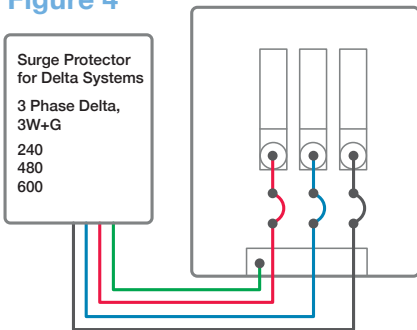


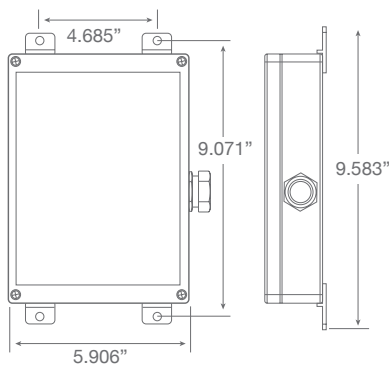
Figure 4



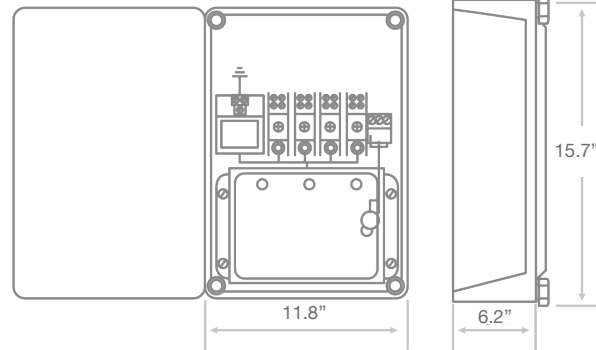
Voltage Configuration

Voltage	Phases	Wires	Neutral	Diagram
120/240 VAC	Split Phase	3W+G	Yes	Fig. 1
120/120/240 VAC	Three Phase High-Leg Delta	4W+G	Yes	Fig. 2
120/208 VAC	Three Phase Wye	4W+G	Yes	Fig. 3
240/415VAC	Three Phase Wye	4W+G	Yes	Fig. 3
277/480 VAC	Three Phase Wye	4W+G	Yes	Fig. 3
347/600 VAC	Three Phase Wye	4W+G	Yes	Fig. 3
240 VAC	Three Phase Delta	3W+G	No	Fig. 4
480 VAC	Three Phase Delta	3W+G	No	Fig. 4

Mounting Dimensions



Nipple Version



Hardwire Version