

SurgeLogic®

SurgeLogic® Surge Protective Device (SPD) products offer the world's finest array of solutions for electrical distribution systems. From simple to mission-critical applications in commercial, industrial, and OEM design, the comprehensive SurgeLogic® line provides devices for every need.

Externally Mounted Surge Protective Devices

SurgeLogic® offers a full range of externally mountable SPDs. These units are designed to provide protection against surges from service entrance panels down to point of use equipment.

Listed to UL1449 Second Edition rev. 2/9/2007 (Third Edition effective 9/29/2009), and UL 1283 where applicable. Meets requirements of ANSI/IEEE C62.41.1, C62.41.2, and C62.45.

- 10 year product warranty
- Standard product protection modes L-N, L-G, L-L, and N-G
- Standard internal 200 kA AIC surge rated fusing, 200 kA SSCR

- Audible alarm with enable/disable switch, dry contacts, and surge counter standard
- Indicator LEDs; normal (green) and fault condition (red) for each phase

Modular External SPD

External Modular Assembly (EMA) SPD products feature a design based on modules for a flexible, cost effective way to achieve superior protection at every level of the electrical distribution system. Modularity means lower life cycle costs and fast, easy service or replacement.

Table 6.1: EMA Series Modular Device

Service Voltage	Peak Surge Current Rating per Phase (kA)	NEMA 1/3R/12 Cat. No.	\$ Price	NEMA 4X Stainless Steel Cat. No.	\$ Price
Note: Supplied with audible alarm, alarm enable/disable switch, dry contacts, and surge counter.					
120/240 V, 1-phase, 3-wire +ground	120	TVS1EMA12A ()	4547.00	TVS1EMA12S ()	5964.00
	160	TVS1EMA16A ()	4957.00	TVS1EMA16S ()	6414.00
	240	TVS1EMA24A ()	7421.00	TVS1EMA24S ()	8838.00
	320	TVS1EMA32A ()	9962.00	—	—
	480	TVS1EMA48A ()	14798.00	—	—
208Y/120 V, 3-phase, 4-wire +ground ■	120	TVS2EMA12A ()	4760.00	TVS2EMA12S ()	6177.00
	160	TVS2EMA16A ()	5231.00	TVS2EMA16S ()	6648.00
	240	TVS2EMA24A ()	7782.00	TVS2EMA24S ()	9200.00
	320	TVS2EMA32A ()	10431.00	—	—
	480	TVS2EMA48A ()	15522.00	—	—
120/240 V, 3-phase, 4-wire +ground High-leg Delta	120	TVS3EMA12A ()	4760.00	TVS3EMA12S ()	6177.00
	160	TVS3EMA16A ()	5231.00	TVS3EMA16S ()	6648.00
	240	TVS3EMA24A ()	7782.00	TVS3EMA24S ()	9200.00
	320	TVS3EMA32A ()	10431.00	—	—
	480	TVS3EMA48A ()	15522.00	—	—
480Y/277 V, 3-phase, 4-wire +ground ▲ ■	120	TVS4EMA12A ()	4973.00	TVS4EMA12S ()	6390.00
	160	TVS4EMA16A ()	5468.00	TVS4EMA16S ()	6885.00
	240	TVS4EMA24A ()	8147.00	TVS4EMA24S ()	9564.00
	320	TVS4EMA32A ()	10904.00	—	—
	480	TVS4EMA48A ()	16250.00	—	—
600Y/347 V, 3-phase, 4-wire +ground ■	120	TVS8EMA12A ()	5220.00	TVS8EMA12S ()	6638.00
	160	TVS8EMA16A ()	5714.00	TVS8EMA16S ()	7131.00
	240	TVS8EMA24A ()	8528.00	TVS8EMA24S ()	9945.00
	320	TVS8EMA32A ()	11399.00	—	—
	480	TVS8EMA48A ()	17012.00	—	—

▲ 480Y/277 series applies to the following voltages 380Y/220, 400Y/230, and 415Y/240
■ Can be used on 4-wire or 3-wire grounded neutral system.

() For option, select and add the appropriate suffix from the option listing below:

Non-Modular External SPD

Non-modular External Brick Assembly (EBA) SPD products consist of a consolidation of phase modules into one solid "brick" casting and offered at a competitive price for those who want great protection on a limited budget.

Table 6.2: EBA Series Non-Modular Device

Service Voltage	Peak Surge Current Rating per Phase (kA)	NEMA 1/3R/12 Cat. No.	\$ Price	NEMA 4X Stainless Steel Cat. No.	\$ Price
Note: Supplied with audible alarm, alarm enable/disable switch, dry contacts, and surge counter.					
120/240 V, 1-phase, 3-wire +ground	120	TVS1EBA12A ()	3467.00	TVS1EBA12S ()	4884.00
	160	TVS1EBA16A ()	4208.00	TVS1EBA16S ()	5625.00
	240	TVS1EBA24A ()	6290.00	TVS1EBA24S ()	7707.00
208Y/120 V, 3-phase, 4-wire +ground ▲	120	TVS2EBA12A ()	3588.00	TVS2EBA12S ()	5006.00
	160	TVS2EBA16A ()	4388.00	TVS2EBA16S ()	5805.00
	240	TVS2EBA24A ()	6525.00	TVS2EBA24S ()	7943.00
120/240 V, 3-phase, 4-wire +ground High-leg Delta	120	TVS3EBA12A ()	3588.00	TVS3EBA12S ()	5006.00
	160	TVS3EBA16A ()	4388.00	TVS3EBA16S ()	5805.00
	240	TVS3EBA24A ()	6525.00	TVS3EBA24S ()	7943.00
480Y/277 V, 3-phase, 4-wire +ground ▲ ■	120	TVS4EBA12A ()	3743.00	TVS4EBA12S ()	5160.00
	160	TVS4EBA16A ()	4581.00	TVS4EBA16S ()	5999.00
	240	TVS4EBA24A ()	6827.00	TVS4EBA24S ()	8244.00
600Y/347 V, 3-phase, 4-wire +ground ▲	120	TVS8EBA12A ()	3905.00	TVS8EBA12S ()	5322.00
	160	TVS8EBA16A ()	4787.00	TVS8EBA16S ()	6204.00
	240	TVS8EBA24A ()	7143.00	TVS8EBA24S ()	8561.00

▲ Can be used on 4 wire or 3 wire grounded neutral system.
■ 480Y/277 series applies to the following voltages 380Y/220, 400Y/230, and 415Y/240

() For options, select and add the appropriate suffix from the option listing below:

Option	\$ Price
(l) Integral Switch	492.00

10 Mode Modular External SPD *New!*

The 10-Mode (All Mode) SPD is an external modular parallel system that provides discrete surge suppression paths for all ten modes (L-L, L-N, L-G, N-G). Optional Sine Wave Tracker (SWT) circuitry establishes the power surge clamping window relative to the sine wave voltage to provide increased performance at distribution and branch panel applications.

- 10 year product warranty
- Audible alarm, dry contacts and surge counter are included in the standard diagnostic package
- Standard internal 200 kA IC fault rated fusing, 200 kA SCCR

Table 6.3: 10 Mode Modular Devices

Service Voltage	Peak Surge Current Rating per Phase (kA)	NEMA 1/3R/12 Cat. No.	\$ Price	NEMA 4X Stainless Steel Cat. No.	\$ Price
Note: Supplied with audible alarm, alarm enable/disable switch, dry contacts, and surge counter.					
208Y/120 V, 3-phase, 3-4 wire	120	TVS2MEMA12A ()	881.00	TVS2MEMA12S ()	6927.00
	180	TVS2MEMA18A ()	1079.00	TVS2MEMA18S ()	12657.00
	270	TVS2MEMA27A ()	1376.00	TVS2MEMA27S ()	15627.00
	360	TVS2MEMA36A ()	1673.00	TVS2MEMA36S ()	18597.00
480Y/277 V, 3-phase, 3-4 wire ▲	120	TVS4MEMA12A ()	9023.00	TVS4MEMA12S ()	10890.00
	180	TVS4MEMA18A ()	11003.00	TVS4MEMA18S ()	12870.00
	270	TVS4MEMA27A ()	13973.00	TVS4MEMA27S ()	15840.00
	360	TVS4MEMA36A ()	16943.00	TVS4MEMA36S ()	18810.00
600Y/347 V, 3-phase, 3-4 wire	120	TVS8MEMA12A ()	9270.00	TVS8MEMA12S ()	10677.00
	180	TVS8MEMA18A ()	11250.00	TVS8MEMA18S ()	13118.00
	270	TVS8MEMA27A ()	14220.00	TVS8MEMA27S ()	16088.00
	320	TVS8MEMA32A ()	17190.00	TVS8MEMA32S ()	19058.00

▲ 480Y/277 series applies to the following voltages 380Y/220, 400Y/230, and 415Y/240
() For option, select and add the appropriate suffix from the following listing:

Option	\$ Price
(SWT) Sine Wave Tracking	800.00

High Resistance Ground (HRG) Modular External SPD *New!*

The SurgeLogic® High Resistance Ground (HRG) SPD is an external modular parallel system that provides protection from transients referenced phase to phase and phase to ground and is designed specifically for HRG configured systems.

Table 6.4: HRG Modular Device

Service Voltage	Peak Surge Current Rating per Phase (kA)	NEMA 1/3R/12 Cat. No.	\$ Price	NEMA 1/3R/12 with Integral Switch Cat. No.	\$ Price	NEMA 4X Stainless Steel with Integral Switch Cat. No.	\$ Price
Note: Supplied with audible alarm, alarm enable/disable switch, dry contacts, and surge counter.							
480Y/277 V, 3-phase, ▲ 4-wire HRG	120	TVS4HEMA12A ()	5723.00	TVS4HEMA12AI ()	9645.00	TVS4HEMA12SI ()	12690.00
	160	TVS4HEMA16A ()	7043.00	TVS4HEMA16AI ()	10965.00	TVS4HEMA16SI ()	14010.00
	200	TVS4HEMA20A ()	8363.00	TVS4HEMA20AI ()	12285.00	TVS4HEMA20SI ()	15330.00
600Y/347 V, 3-phase, 4-wire HRG	120	TVS8HEMA12A ()	5970.00	TVS8HEMA12AI ()	9893.00	TVS8HEMA12SI ()	12938.00
	160	TVS8HEMA16A ()	7290.00	TVS8HEMA16AI ()	11213.00	TVS8HEMA16SI ()	14258.00
	200	TVS8HEMA20A ()	8610.00	TVS8HEMA20AI ()	12533.00	TVS8HEMA20SI ()	15578.00

▲ 480Y/277 series applies to the following voltages 380Y/220, 400Y/230, and 415Y/240

Option Descriptions

- **Integral Switch.** The integral switch provides a mechanical means to electrically isolate the entire surge suppressor before opening the enclosure door to facilitate servicing of the unit's components.
- **Remote Monitor.** This option displays the alarm status of the surge protective device up to 1000 feet from the unit.
- **Flush Mounting.** Flush mounting collar can be used on 120–240 kA EMA and EBA series devices. Devices with integral switch require 20" flush mounting collar.

Description	Cat. No.	\$ Price
Remote Monitor	TVS12RMU	788.
12" Flush Mounting Collar	TVS12FMK	945.
20" Flush Mounting Collar	TVS20FMK	1103.