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Externally Mounted Surge Protective Devices

These units are designed to provide surge suppression from service entrance panels to point-of-use equipment.
US and Canadian UL® Listed to UL 1449 3rd Edition and UL 1283 5th Edition. Complies with requirements of NEC® Article 285 and CSA 22.2 No. 8-M1986 as appropriate. Complies with UL 96A 12th Edition Master Label requirements for Lightning Protection Systems.

- 10 modes of protection
- 200 KA SCCR
- 10 year, product warranty
- EMI/RFI Ilering
- Audible alarm with enable/disable switch, dry contacts, and surge counter standard
- Indicator LEDs; normal (green) and fault condition (red) for each phase

External SPD Options:

- **Enhanced Filtering Module:** Sine wave tracking circuitry provides enhanced EMI/RFI Ilering of -54 dB at 100 kHz and establishes a power surge clamping window relative to the sine wave voltage to increase performance at distribution and branch panel applications.
- **Type 1:** 1449 Type 1 SPDs can be located at any point in the electrical system, on the line or load side of the equipment overcurrent device.
- **Integral Disconnect:** The integral disconnect 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.

External Modular Assembly (EMA) SPDs

EMA SPD products feature a design based on individual phase modules for a flexible, cost effective way to achieve superior surge suppression at every level of the electrical distribution system. Modularity results in lower life cycle costs and fast, easy service or replacement.

EMA SPD Series

Remote Monitor TVS12RMU

EMA SPDs

Service Voltage	Peak Surge Current Rating per Phase (kA)	NEMA 1 Cat. No.	NEMA 4X Stainless Steel Cat. No.
120/240 V, 1-phase, 3-wire + ground ⚠	120	SSP01EMA12( )	SSP01EMA12S( )
	160	SSP01EMA16( )	SSP01EMA16S( )
	240	SSP01EMA24( )	SSP01EMA24S( )
	320	SSP01EMA32( )	SSP01EMA32S( )
	480	SSP01EMA48( )	SSP01EMA48S( )
208Y/120 V, 3-phase, 4-wire + ground Wye ⚠ 🔔 ⤮	120	SSP02EMA12( )	SSP02EMA12S( )
	160	SSP02EMA16( )	SSP02EMA16S( )
	240	SSP02EMA24( )	SSP02EMA24S( )
	320	SSP02EMA32( )	SSP02EMA32S( )
	480	SSP02EMA48( )	SSP02EMA48S( )
240/120 V, 3-phase, 4-wire + ground High-leg Delta ⚠	120	SSP03EMA12( )	SSP03EMA12S( )
	160	SSP03EMA16( )	SSP03EMA16S( )
	240	SSP03EMA24( )	SSP03EMA24S( )
	320	SSP03EMA32( )	
	480	SSP03EMA48( )	
240 V, 3-phase, 3-wire + ground Delta	100	SSP06EMA10( )	SSP06EMA10S( )
	120	SSP06EMA12( )	SSP06EMA12S( )
	160	SSP06EMA16( )	SSP06EMA16S( )
	200	SSP06EMA20( )	SSP06EMA20S( )
	240	SSP06EMA24)	SSP06EMA24S( )
	320	SSP06EMA32( )	SSP06EMA32S( )
	480	SSP06EMA48( )	SSP06EMA48S( )
480Y/277 V, 3-phase, 4-wire + ground Wye ⚠ ★	120	SSP04EMA12( )	SSP04EMA12S( )
	160	SSP04EMA16( )	SSP04EMA16S( )
	240	SSP04EMA24( )	SSP04EMA24S( )
	320	SSP04EMA32( )	SSP04EMA32S( )
	480	SSP04EMA48( )	SSP04EMA48S( )
480 V, 3-phase, 3-wire + ground Delta▲	100	SSP05EMA10( )	SSP05EMA10S( )
	120	SSP05EMA12( )	SSP05EMA12S( )
	160	SSP05EMA16( )	SSP05EMA16S( )
	200	SSP05EMA20( )	SSP05EMA20S( )
	240	SSP05EMA24( )	SSP05EMA24S( )
	320	SSP05EMA32( )	SSP05EMA32S( )
	480	SSP05EMA48( )	SSP05EMA48S( )
600Y/347 V, 3-phase, 4-wire + ground Wye ⚠ ⤮	120	SSP08EMA12( )	SSP08EMA12S( )
	160	SSP08EMA16( )	SSP08EMA16S( )
	240	SSP08EMA24( )	SSP08EMA24S( )
	320	SSP08EMA32( )	SSP08EMA32S( )
	480	SSP08EMA48( )	SSP08EMA48S( )
600 V, 3-phase, 3-wire + ground Delta✖	100	SSP09EMA10( )	SSP09EMA10S( )
	120	SSP09EMA12( )	SSP09EMA12S( )
	160	SSP09EMA16( )	SSP09EMA16S( )
	180	SSP09EMA18( )	SSP09EMA18S( )
	200	SSP09EMA20( )	SSP09EMA20S( )
	240	SSP09EMA24( )	SSP09EMA24S( )
	320	SSP09EMA32( )	SSP09EMA32S( )

⚠ Do not use on ungrounded systems. Systems must be solidly grounded.
🔔 208Y/120 series also applies to the following voltage 220Y/127.
⤮ Can be used on 4-wire or 3-wire grounded wye systems with or without neutral.
★ 480Y/277 series applies to the following voltages 380Y/220, 400Y/230, and 415Y/240. ▲
480 V Delta series also applies to the following voltage 480Y/277V HRG.
✖ 600 V Delta series also applies to the following voltage 600Y/347V HRG

External Modular Options ( )	
(D) ❮ Integral Switch	
(F)	Enhanced Filtering Module (not applicable for Delta, HRG or HLD)
(DF) ❮	Disconnect Switch and Enhanced Filtering Module (not applicable for Delta, HRG or HLD)

Accessory Description	Cat. No.
Remote Monitor	TVS12RMU

❮ Not available in stainless steel for 320 and 480 kA

MA Replacement Module

Delta Replacement Module

Replacement Modules

All modules and brick assemblies are US and Canadian UL® Recognized to UL 1449 3rd Edition and UL 1283 5th Edition.

Complies with requirements of NEC® Article 285 and CSA C22.2 No. 8-M1986 as appropriate.

System Voltage	Peak Surge Current Rating (kA)	Catalog Numbers		
		Phase A	Phase B	Phase C
120/240 V, 1-phase, 3-wire + ground	120	MA1IMA12	—	MA1IMA12
	160	MA1IMA16	—	MA1IMA16
	240	MA1IMA24		MA1IMA24
208Y/120 V, 3-phase, 4-wire + ground Wye	120	MA1IMA12	MA1IMA12	MA1IMA12
	160	MA1IMA16	MA1IMA16	MA1IMA16
	240	MA1IMA24	MA1IMA24	MA1IMA24
240/120 V, 3-phase, 4-wire + ground High-Leg Delta	120	MA1IMA12	MA1IMA12	MA1IMA12
	160	MA1IMA16	MA1IMA16	MA1IMA16
	240	MA1IMA24	MA1IMA24	MA1IMA24
240 V, 3-phase, 3-wire + ground Delta	100	MA6IMA10	MA6IMA10	MA6IMA10
	120	MA6IMA12	MA6IMA12	MA6IMA12
	160	MA6IMA16	MA6IMA16	MA6IMA16
	200	MA6IMA20	MA6IMA20	MA6IMA20
	240	MA6IMA24	MA6IMA24	MA6IMA24
480Y/277 V, 3-phase, 4-wire + ground Wye ⤮	120	MA4IMA12	MA4IMA12	MA4IMA12
	160	MA4IMA16	MA4IMA16	MA4IMA16
	240	MA4IMA24	MA4IMA24	MA4IMA24
480 V, 3-phase, 3-wire + ground Delta ★	100	MA5IMA10	MA5IMA10	MA5IMA10
	120	MA5IMA12	MA5IMA12	MA5IMA12
	160	MA5IMA16	MA5IMA16	MA5IMA16
	200	MA5IMA20	MA5IMA20	MA5IMA20
	240	MA5IMA24	MA5IMA24	MA5IMA24
600Y/347 V, 3-phase, 4-wire + ground Wye	120	MA8IMA12	MA8IMA12	MA8IMA12
	160	MA8IMA16	MA8IMA16	MA8IMA16
	240	MA8IMA24	MA8IMA24	MA8IMA24
600 V, 3-phase, 3-wire + ground Delta ⚠	100	MA9IMA10	MA9IMA10	MA9IMA10
	120	MA9IMA12	MA9IMA12	MA9IMA12
	160	MA9IMA16	MA9IMA16	MA9IMA16
	180	MA9IMA18	MA9IMA18	MA9IMA18

208Y/120 series also applies to the following voltage 220Y/127.
High-leg delta (Phase B modules are different than Phase A and Phase C modules).
⤮ 480Y/277 series applies to the following voltages 380Y/220, 400Y/230, and 415Y/240.
★ 480 V Delta series also applies to the following voltage 480Y/277V HRG.
⚠ 600 V Delta series also applies to the following voltage 600Y/347V HRG.

Note: For UL 1449 Type 1 Modules, add suffix (1). Example: MA1IMA121

XDSE Series

Surgelogic™ Type XDSE Surge Protective Devices

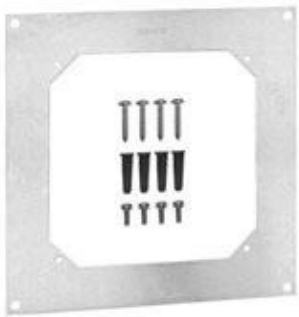
Surgelogic™ XDSE surge protective devices feature a compact design that allows surge suppression to be externally installed adjacent to electrical distribution equipment. XDSE systems are designed to provide high-quality surge suppression for a wide variety of commercial, industrial or institutional applications. XDSEs incorporate patented overvoltage technology innovations that provide superior overvoltage withstand capability for systems with unstable power, without compromising transient clamping performance.
US and Canadian UL Listed to the UL 1449 standard. Complies with requirements of NEC Article 285 and CSA 22.2 269.1 and 269.2 as appropriate. Complies with UL 96A 12th Edition Master Label requirements for Lightning Protection Systems.

- LED light indicates operation status
- Short circuit current rating up to 200 kA
- Suitable for indoor and outdoor applications (NEMA Type 4X rated)
- Convenient lug connection inside enclosure
- -50db EMI/RFI filtering
- Audible alarm
- Dry contacts

XDSE Surge Protection Devices

Service Voltage	Peak Surge Current Rating per Phase (kA)	Cat. No.★
120/240V 1-phase, 3-wire + ground	100	SSP01XDSE10A
	150	SSP01XDSE15A
	200	SSP01XDSE20A
208Y/120V■ 3-phase, 4-wire + ground	100	SSP02XDSE10A
	150	SSP02XDSE15A
	200	SSP02XDSE20A
240/120 HLD◆, 3-phase, HLD◆, 4-wire + ground	100	SSP03XDSE10A
	150	SSP03XDSE15A
	200	SSP03XDSE20A
240V, 3-phase, 3-wire + ground	100	SSP06XDSE10A
	150	SSP06XDSE15A
	200	SSP06XDSE20A
480Y/277V▲, 3-phase, 4-wire + ground	100	SSP04XDSE10A
	150	SSP04XDSE15A
	200	SSP04XDSE20A
480Y/277V●, 3-phase, 3-wire + ground	100	SSP05XDSE10A
	150	SSP05XDSE15A
	200	SSP05XDSE20A
600Y/347V, 3-phase, 4-wire + ground	100	SSP08XDSE10A
	150	SSP08XDSE15A
	200	SSP08XDSE20A
600V, 3-phase, 3-wire + ground	100	SSP09XDSE10A

★ add suffix "1" for type 1 SPD
■ 208Y/120V series also apply to the following voltage 220Y/127V
◆ HLD = High Leg Delta
▲ 480Y/277V series also apply to the following voltages 380Y/220, 400Y/230 and 415Y/240
● 480V Delta series also apply to the following voltage 480Y/277V HRG
600V Delta series also apply to the following voltages 600Y/347V HRG



XDSEMKF

Accessories

Description	Cat. No.
Flush Mounting Kit	XDSEMKF
Remote Monitor	TVS12RMU

Internally Mounted Surge Protective Devices

Internally mounted surge protective devices are installed integrally to systems for service entrance and branch panel surge suppression. Internally mounted SPDs installed next to supply busses provide maximum performance inside Square D™ systems. Built-in performance is the best way to ensure cost effective power quality (especially important for critical power facilities).

US and Canadian UL® Recognized as a Type 2 (or 1 with optional suf x in catalog number) SPD Component Assembly to UL 1449 3rd Edition and UL 1283 5th Edition. Complies with requirements of NEC® Article 285 and CSA C22.2 No. 8-M1986 as appropriate. Complies with UL 96A 12th Edition Master Label requirements for Lightning Protection Systems.

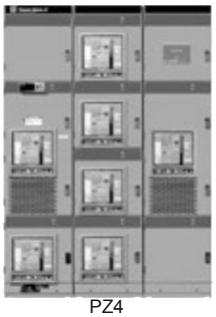
Factory installed integral/internal SPD products make adding surge suppression to new construction projects easy. Refer to the sections listed below to identify the correct product for your application or contact Customer Care Centre at 1-800-565-6699 for assistance.

Panelboards

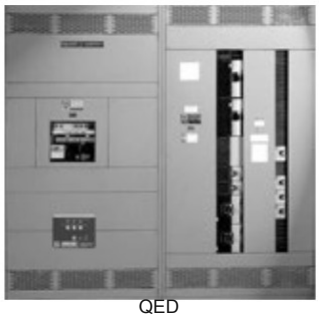
NF

NQ

Switchboards and Switchgear



PZ4



QED

Motor Control Centers

MCC

Integrated Power and Control Centers

IPAC2

SurgeLoc Surge Protective Devices (Available also in Retrofit)

SurgeLoc, a new line of commercial surge that provides advanced power and equipment protection for Square D™ NQ panelboards. SurgeLoc installs in 2 minutes or less, a 90% reduction from the typical 20 minutes for an externally mounted SPD and exceeds competitor products with outstanding speci cations in a compact device.

- EMI/RFI Noise Rejection
- Coordinated Fuse Technology
- Eliminates need for additional enclosure or longer wire leads for mounting external SPD
- 24 - 30% height reduction by using standard panel size
- 80,000 to 240,000 Amp Capacity (depending on model)
- 10 year warranty
- Option: Remote Monitor

Voltage	Peak Surge Current Rating (kA)	Cat. No.
120/240 V	80	SSP01BIA08PBQ1
208Y/120V 🔔	80	SSP02BIA08PBQ1
240/120 HLD	80	SSP03BIA08PBQ1
120/240 V	100	SSP01BIA10PBQ1
208Y/120V 🔔	100	SSP02BIA10PBQ1
240/120 HLD	100	SSP03BIA10PBQ1
120/240 V	120	SSP01BIA12PBQ1
208Y/120V 🔔	120	SSP02BIA12PBQ1
240/120 HLD	120	SSP03BIA12PBQ1
120/240 V	160	SSP01BIA16PBQ1
208Y/120V 🔔	160	SSP02BIA16PBQ1
240/120 HLD	160	SSP03BIA16PBQ1
120/240 V	200	SSP01BIA20PBQ1
208Y/120V 🔔	200	SSP02BIA20PBQ1
240/120 HLD	200	SSP03BIA20PBQ1
120/240 V	240	SSP01BIA24PBQ1
208Y/120Vb	240	SSP02BIA24PBQ1
240/120 HLD	240	SSP03BIA24PBQ1

🔔 208Y/120 series also applies to the following voltage 220Y/127.

Note: When selecting a panelboard with a SurgeLoc SPD, an additional 12 circuit positions (6 adjacent mounting spaces per side) or 4.5 inches of space on each side are required. For example, if desired number of circuits is 30, a 42 circuit panelboard is required.

Note: Surgeloc SPDs are only available in Type 1 SPD format.

I-Line™ SPD Unit

QMB SPD Unit

Busway SPD Unit

MCC SPD Unit

Internally Mounted—Retrofit

To ensure high-performance surge suppression at critical power locations, a variety of SPDs have been designed speci cally for retro tting into commonly used Square D™ systems. The QMB fusible switch, 6 in. MCC bucket, I-Line and Busway plug-on units come with the SPD factory-installed. Retro tting SPD units into I-Line, QMB, MCC, and Busway applications is simple.

- Audible alarm with enable/disable switch, dry contacts, and surge counter standard.
- 200 kA SCCR
- Indicator LEDs
- EMI/RFI ltering

Internally Mounted—Retrofit

Voltage	Surge Current Rating	I-Line Branch Units		QMB Branch Units⌂	Busway Units	Model 6 MCC Units⤮
		Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.
120/240 V, 1-phase, 3-wire + ground	120 kA 160 kA 240 kA	HL1IMA12C( ) HL1IMA16C( ) HL1IMA24C( )	HR1IMA12C( ) HR1IMA16C( ) HR1IMA24C( )	QMB1IMA12 QMB1IMA16 QMB1IMA24	— —	— —
208Y/120 V, 3-phase, 4-wire + ground✈➲ Wye	120 kA 160 kA 240 kA	HL2IMA12C( ) HL2IMA16C( ) HL2IMA24C( )	HR2IMA12C( ) HR2IMA16C( ) HR2IMA24C( )	QMB2IMA12 QMB2IMA16 QMB2IMA24	— PIU2IMA16 PIU2IMA24	MCC2IMA12 MCC2IMA16 MCC2IMA24
240/120 V, 3-phase, 4-wire + ground High-leg Delta	120 kA 160 kA 240 kA	HL3IMA12C( ) HL3IMA16C( ) HL3IMA24C( )	HR3IMA12C( ) HR3IMA16C( ) HR3IMA24C( )	QMB3IMA12 QMB3IMA16 QMB3IMA24	— PIU3IMA16 PIU3IMA24	MCC3IMA12 MCC3IMA16 MCC3IMA24
240 V, 3-phase, 3-wire + ground, Delta	120 kA 160 kA 240 kA	HL6IMA12C( ) HL6IMA16C( ) HL6IMA24C( )	HR6IMA12C( ) HR6IMA16C( ) HR6IMA24C( )	— —	— —	— —
480Y/277 V, 3-phase, 4-wire + ground ✈◊ Wye	120 kA 160 kA 240 kA	HL4IMA12C( ) HL4IMA16C( ) HL4IMA24C( )	HR4IMA12C( ) HR4IMA16C( ) HR4IMA24C( )	QMB4IMA12 QMB4IMA16 QMB4IMA24	— PIU4IMA16 PIU4IMA24	MCC4IMA12 MCC4IMA16 MCC4IMA24
480 V, 3-phase, 3-wire + ground, Delta	120 kA 160 kA 240 kA	HL5IMA12C( ) HL5IMA16C( ) HL5IMA24C( )	HR5IMA12C( ) HR5IMA16C( ) HR5IMA24C( )	— —	— —	— —
600Y/347 V, 3-phase, 4-wire + ground ✈ Wye	120 kA 160 kA 240 kA	— —	HR8IMA12C( ) HR8IMA16C( ) HR8IMA24C( )	QMB8IMA12 QMB8IMA16 QMB8IMA24	— PIU8IMA16 PIU8IMA24	MCC8IMA12 MCC8IMA16 MCC8IMA24
600V, 3-phase, 3-wire + ground, Delta	120 kA 160 kA 180 kA	— —	HR9IMA12C( ) HR9IMA16C( ) HR9IMA18C( )	— —	— —	— —

Requires 13.5-inch mounting height.
Requires 9-inch mounting height.
⤮ Requires 6-inch mounting height.
✈ Can be used on 4-wire or 3-wire grounded neutral system.
➲ 208Y/120 series also applies to the following voltage 220Y/127.
◊ 480Y/277 series applies to the following voltages 380Y/220, 400Y/230, and 415Y/240.

( ) For a Type 1 SPD, add a “1” suffix to the catalog number.

Note: 480 V Delta series also applies to the following voltage: 480 V Wye HRG.
600 V Delta series also applies to the following voltage: 600 V Wye HRG.

OEM Kit

OEM/Assembler Kits

OEM/assembler kits allow manufacturers to add industry-leading surge suppression directly to customized equipment. Manufacturers bene t from shorter wire lengths that optimize the clamping voltage of the SPD. Products come with a backplane-mounted SPD, mounting hardware and diagnostic display with 36-inch cables. Audible alarm, silence switch, remote monitoring contacts, and surge counter are standard. Available as UL 1449 Type 2 (or 1 with optional suf x in catalog number).

US and Canadian UL® Recognized to UL 1449 3rd Edition and UL 1283 5th Edition. Complies with requirements of NEC® Article 285 and CSA 22.2 No. 8-M1986 as appropriate. Complies with UL 96A 12th Edition Master Label requirements for Lightning Protection Systems.

OEM/Assembler Kits

Service Voltage	Peak Surge Current Rating per Phase (kA)	Cat. No.
120/240 V, 1-phase, 3-wire + ground	120	TVS1IMA12O( )
	160	TVS1IMA16O( )
	240	TVS1IMA24O( )
208Y/120 V, 3-phase, 4-wire + ground 🔔⤮	120	TVS2IMA12O( )
	160	TVS2IMA16O( )
Wye	240	TVS2IMA24O( )
240/120 V, 3-phase, 4-wire + ground	120	TVS3IMA12O( )
	160	TVS3IMA16O( )
High-leg Delta	240	TVS3IMA24O( )
240 V, 3-phase, 3-wire + ground 🔔★	120	TVS6IMA12O( )
	160	TVS6IMA16O( )
Delta	240	TVS6IMA24O( )
480Y/277 V, 3-phase, 4-wire + ground 🔔★	120	TVS4IMA12O( )
	160	TVS4IMA16O( )
Wye	240	TVS4IMA24O( )
480 V Wye, 3-phase, 3-wire + ground 🔔★	120	TVS4HIMA12O( )
	160	TVS4HIMA16O( )
High-Resistance Ground	240	TVS4HIMA24O( )
480 V, 3-phase, 3-wire + ground	120	TVS5IMA12O( )
	160	TVS5IMA16O( )
Delta	240	TVS5IMA24O( )
600Y/347 V, 3-phase, 4-wire + ground 🔔	120	TVS8IMA12O( )
	160	TVS8IMA16O( )
Wye	240	TVS8IMA24O( )
600 V Wye, 3-phase, 3-wire + ground 🔔	120	TVS8HIMA12O( )
	160	TVS8HIMA16O( )
High Resistance Ground	180	TVS8HIMA18O( )
600 V, 3-phase, 3-wire + ground	120	TVS9IMA12O( )
	160	TVS9IMA16O( )
Delta	180	TVS9IMA18O( )

( ) For a Type 1 SPD, add a "1" suffix to the catalog number.
Note the last character of the catalog number is the letter "O", not a zero.
🔔 Can be used on 4-wire or 3-wire grounded neutral system.
⤮ 208Y/120 series also applies to the following voltage 220Y/127.
★ 480Y/277 series applies to the following voltages 380Y/220, 400Y/230, and 415Y/240.

SDSA1175

SDSA1175 Surge Protective Devices

SDSA1175 SPDs are designed and listed for indoor or outdoor installation and surge suppression for single-phase three-wire 120/240 Vac or two-wire 120 Vac 60 Hz electrical services. This product is ideal for panel builders as well as manufacturers and integrators of instrumentation cabinets for industrial, commercial, and residential applications for single-phase power systems. Two SDSA1175 surge protection devices can be installed to provide suppression for 208Y/120 Vac three-phase four-wire services.

Listings and Performance: US and Canadian UL®Listed as Type 1 SPD to UL 1449 3rd Edition. Complies with requirements of NEC®Article 285, CSA 233.1-87, and CSA C22.2 No. 8-M1986 as appropriate.

- LED indicates operational status
- Short circuit current rating 25 kA
- Suitable for indoor and outdoor applications (NEMA Type 4X rated)
- Convenient back-nipple mounting

SDSA1175 Surge Protective Devices

System Voltage	Peak Surge Current Rating per Phase (kA)	Cat. No.
120/240 V, 1-phase, 3-wire	36	SDSA1175
120 V, 1-phase, 2-wire	36	SDSA1175T

SDSA 3-Phase Series

SDSA 3-Phase Surge Protective Devices

SDSA 3-Phase Surge Protective Devices are designed and listed for indoor or outdoor installation and surge suppression for three-phase grounded electrical services up to 600 Vac, including delta services. The SDSA 3-Phase series is used extensively in service entrance panels to provide an efficient and economical means of surge suppression.

Listings and Performance: US and Canadian UL®Listed as a Type 1 SPD to UL 1449 3rd Edition. Complies with requirements of NEC®Article 285, CSA 233.1-87, and CSA C22.2 No. 8-M1986 as appropriate.

- LEDs indicate operational status
- Short circuit current rating 200 kA 3-Phase
- Suitable for indoor and outdoor applications (NEMA Type 4X rated)
- Convenient back-nipple mounting

SDSA Surge Protective Devices

Description	Peak Surge Current Rating per Phase (kA)	Cat. No.
208Y/120 V, 3-phase, 4-wire ⚠✈	40	SDSA2040
240 V Delta, 3-phase, 3-wire ⟲	40	SDSA2040D
480Y/277 V, 3-phase, 4-wire ⚠◊	40	SDSA4040
480 V Delta, 3-phase, 3-wire	40	SDSA4040D
600Y/347 V, 3-phase, 4-wire ⚠	40	SDSA3650
600 V Delta, 3-phase, 3-wire	40	SDSA3650D

⚠ Do not use on ungrounded systems. Systems must be solidly grounded.
✈ Applicable voltages: 220Y/127V, 208Y/120V.
⟲ Applicable voltages: 240V Delta, 240/120V High-Leg Delta.
◊Applicable voltages: 480Y/277V, 415Y/240V, 400Y/230V, 380Y/220V.

XR Series

XR Surge Protective Devices

The XR SPD provides high-quality surge suppression in a compact and versatile package. This product is ideal for panel builders as well as manufacturers and integrators of instrumentation cabinets for industrial, commercial, and residential applications for single-phase power systems.

Listings and Performance: US and Canadian UL® Listed as Type 1 SPD to UL 1449 3rd Edition. Complies with requirements of NEC® Article 285, CSA 233.1-87, and CSA C22.2 No. 8-M1986 as appropriate.

- LEDs indicate operational status
- Short circuit current rating 25 kA
- Convenient side nipple mounting
- Suitable for indoor and outdoor applications (NEMA Type 4X rated)
- Optional ush mount kit TVSXRFMK

XR Nipple-Mounted Surge Protective Devices

System Voltage	Peak Surge Current Rating per Phase (kA)	Cat. No.
120/240 V, 1-phase, 3-wire + ground	50	TVS120XR50S
	80	TVS120XR80S

HWA Series

HWA Surge Protective Devices

HWA surge protective devices are compact, nipple-mounted parallel-connected surge suppressors that come in a variety of voltage configurations, including Delta. A surge suppression path is provided for each mode, and the product is rated NEMA Type 4X. Internal diagnostics continuously monitor the device status.
US and Canadian UL®Listed as a Type 2 SPD to UL 1449 3rd Edition and UL 1283 5th Edition. Complies with requirements of NEC®Article 285 and CSA C22.2 No. 8-M1986 as appropriate. Complies with UL 96A 12th Edition Master Label requirements for Lightning Protection Systems.

- LEDs indicate operational status
- Short circuit current rating 200 kA
- Suitable for indoor and outdoor applications (NEMA Type 4X rated)
- Convenient side-nipple mounting
- Compact design provides easy mounting inside or outside the equipment cabinets
- -54 dB EMI/RFI ltering
- Sine wave tracking
- Audible alarm indicates loss of suppression (does not contain alarm enable/disable switch)
- Dry contacts
- Optional ush-mount kit TVSHWAFMK

HWA Surge Protective Devices

Service Voltage	Peak Surge Current Rating per Phase (kA)	NEMA 4X Cat. No.
120/240 V, 1-phase, 3-wire + ground	50	TVS1HWA50X
	80	TVS1HWA80X
	100	TVS1HWA10X
208Y/120 V, 3-phase, 4-wire + ground	50	TVS2HWA50X
	80	TVS2HWA80X
	100	TVS2HWA10X
240/120 V, 3-phase, 4-wire + ground High-leg Delta	50	TVS3HWA50X
	80	TVS3HWA80X
	100	TVS3HWA10X
240 V, 3-phase, 3-wire + ground Delta	50	TVS6HWA50X
	80	TVS6HWA80X
	100	TVS6HWA10X
480Y/277 V, 3-phase, 4-wire + ground	50	TVS4HWA50X
	80	TVS4HWA80X
	100	TVS4HWA10X
480 V, 3-phase, 3-wire + ground Delta	50	TVS5HWA50X
	80	TVS5HWA80X
	100	TVS5HWA10X
600Y/347 V, 3-phase, 4-wire + ground	50	TVS8HWA50X
	80	TVS8HWA80X
	100	TVS8HWA10X
600 V, 3-phase, 3-wire + ground Delta	50	TVS9HWA50X
	80	TVS9HWA80X
	100	TVS9HWA10X

Can be used on 4-wire or 3-wire grounded neutral system.
208Y/120 series also applies to the following voltage 220Y/127.
480Y/277 series applies to the following voltages 380Y/220, 400Y/230, and 415Y/240.

QOSAMK

Mounting Brackets and Flush Mount Kits

The nipple products shown in this catalog provide a convenient means of incorporating surge suppression within a new or existing cabinet. The mounting bracket and flush-mount kits are designed for easy mounting of nipple products.

Mounting Brackets for Enclosures

Description	Cat. No.
Mounting bracket for QO™ and HomeLine™ Loadcentres and other enclosures	QOSAMK
Flush-mount kit for XR SPDs	TVSXRFMK
Flush-mount kif for HWA SPDs	TVSHWAFMK

SDSB80111C

Surgebreaker Plus Whole House Surge Protective Device

The Surgebreaker Plus Whole House device is designed to deliver surge suppression that addresses the entire home. AC modules are connected to the circuit breaker load center and provide suppression for all equipment connected to the power system. This Whole House system incorporates AC modules as well as modules for other metallic lines coming into the home including telephone/DSL and coaxial video/data.
Listings and Performance: US and Canadian UL® Listed as Type 2 SPD to the UL 1449 standard. Complies with requirements of NEC® Article 285, CSA 233.1-87 and CSA C22.2 No. 8-M1986 as appropriate. Telephone and coaxial video modules US and Canadian UL® Recognized to UL 497A 4th Edition and UL 497B 4th Edition.

- 120/240 Vac, 80 KA/phase AC surge suppression
- LED status indicators for AC surge suppression
- Telephone, ethernet and coaxial surge suppression module
- 5 years limited warranty and up to $100,000 in coverage.

Description	Included Modules	Cat. No.
Whole House SPD NEMA 1	AC, Telephone, Ethernet and Coaxial Video Lines	SDSB80111C

Replacement Modules

The Whole House SPD is designed to provide years of reliable operation. If a surgeoccurs and exceeds the suppression ratings of the device, there is no need to replace theentire device. AC, telephone, television and network surge modules can be individuallyreplaced.

Description	Cat. No.
AC Surge Suppression Module	HEPD80C
Telephone Surge Suppression Module	PTEL2R
Video Surge Suppression Module	PVR
Network Surge Suppression Module	PNETR6

HEPD50C

HEPD80C

HEPD80MKF

HEPD58MKF

HEPD Whole House Surge Protective Device

HEPD Whole House devices are designed to deliver superior AC surge protection for the entire AC power system in a home. HEPDs are compact in size and are designed to protect AC wires in the home from surges that could affect home electronics and appliances not connected to surge strips.
Listings and Performance: cULus Listed to UL 1449 Type 1 SPD, CSA C22.2 No. 269.1-14, C233.1-87.

- 120/240 Vac
- HEPD50C provides 50KA max surge current
- HEPD80C provides 80KA max surge current
- NEMA 4X for indoor and outdoor installations
- LED status indicators
- Compatible with all brands of loadcentres
- HEPD50C: 3 years limited warranty and up to $50,000 in coverage
- HEPD80C: 5 years limited warranty and up to $75,000 in coverage

Description	Surge Current Rating	Cat. No.
50kA Home Electronics Protective Device	50 KA	HEPD50C
80kA Home Electronics Protective Device	80 KA	HEPD80C

Accessories

Description	Cat. No.
Flush Mounting Kit for HEPD50/80C White	HEPD58MKF
Flush Mounting Kit for HEPD80C Grey	HEPD80MKF

CQO250PSPD

CHOM250PSPD

Plug-on Neutral QO™ and HomeLine™ Loadcentre Surge Protective Devices

The industry's first exclusive Plug-on Neutral (PoN) Surge Protective Device. Square D™ loadcentre surge protective devices are faster and easier to install than a standard circuit breaker. No wires are needed, it installs as quickly as snap, click, done. The PoN SPD simply plugs on to the bus and neutral bar. It uses two-pole space in a QO™ or HomeLine™ loadcentre.

Listings and Performance: cULus Listed per UL 1449 Type 1 SPD, CSA C22.2 No.269.1, C233.1

- Whole house protection
- CQO250PSPD for QO™ loadcentres
- CHOM250PSPD for HomeLine™ loadcentres
- Plug-on design requires two pole spaces
- LED indicates operational status
- 50KA per phase surge suppression
- 5 years limited warranty and up to $50,000 in coverage

Description	Cat. No.
Plug on Neutral QO™ Surgebreaker	CQO250PSPD
Plug on Neutral HomeLine™ Surgebreaker	CHOM250PSPD

QO2175SB

CHOM2175SB

QO™ and HomeLine™ Loadcentre Surge Protective Devices

Square D™ loadcentre surge protective devices are easy to install plug-in units that install as quickly as a standard circuit breaker. The surge suppressors use two pole spaces in a QO™ or HomeLine™ loadcentre.

Listings and Performance: cULus Listed per UL 1449 3rd edition Type 2 SPD, CSA C22.2 No. 8-M1986, C233.1-87

- QO2175SB for QO™ loadcentres
- CHOM2175SB for HomeLine™ loadcentres
- Plug-on design requires two pole spaces
- LED indicates operational status
- 22.5kA per phase surge suppression
- 3 year limited warranty and up to $10,000 in coverage

Description	Cat. No.
QO™ Surgebreaker	QO2175SB
HomeLine™ Surgebreaker	CHOM2175SB