

Surgebreaker™ SPDs

Square D Whole House Surge Protective Devices

Square D™ brand Surgebreaker™ Whole House Surge Protective Devices (SPDs) provide suppression of electrical surges to AC power, telephone, and television cables.

Installed near circuit breaker power panels, the device is hard-wired to the electrical panel and accommodates up to four telephone lines (eight with additional SDSA4P unit) and one coaxial television line (two with additional SDSA2V unit). The Surgebreaker device can be surface or flush mounted, depending on the power panel installation.



by Schneider Electric

Surgebreaker Whole House SPDs Features



Square D brand Surgebreaker Surge Protective Devices (SPDs) for residential applications provide a superior design and service life. Surgelogic SPDs offer surge suppression for demanding service locations, and today's sensitive electronics. These may include: advanced lighting controls, home entertainment systems, computers and game consoles, telephone and cable systems, and appliances with microprocessor circuits.

Performance

The whole house AC module utilizes a high-energy suppression circuit that provides 80,000 peak Amps of surge current rating per phase.

Installation

Surgelogic offers two configurations to meet challenging home layouts. The SDSB1175R is rated NEMA Type 3R and is suitable for indoor or outdoor installation. The SDSB1175C is rated NEMA Type 1 and is designed to be installed inside the home, right next to the loadcenter. It can be surface or flush mounted. Each Surgebreaker SPD is tested at the factory before shipment.

Warranty

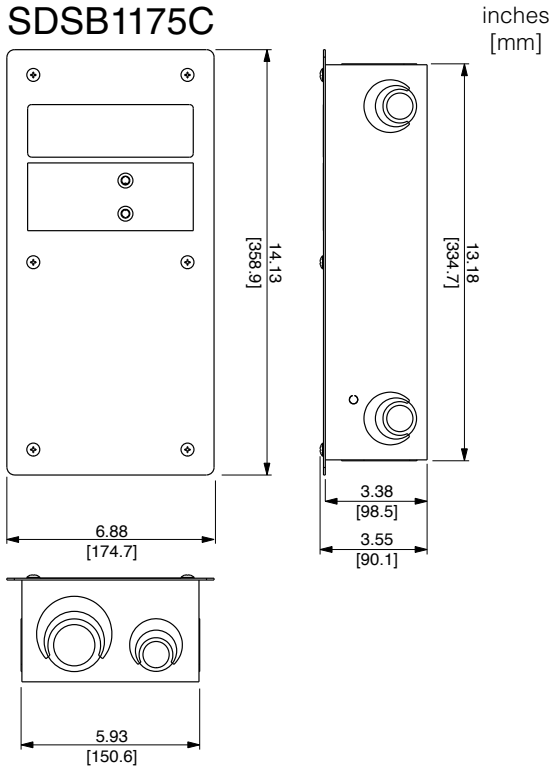
The SDSB1175C and SDSB1175R warranty is 3 years.

FEATURES	ADVANTAGES	BENEFITS
Multi -path surge suppression capability	Covers all electrical entrance points to the home	Delivers high levels of SPD performance
80,000 Amp surge current capacity	Longer service life and suppression of high-energy surges	High performance surge suppression even in severe electrical conditions
LED Status Indicator	Allows for visual indication of the suppressor's functionality	Provides immediate response if suppressor is damaged
Hardwire connection method	Provides direct connection means to the electrical panel	Reduces wire length and improves performance
Coordinated Fuse Technology	Coordinated fusing allows disconnection methods for thermal and high-current events	Provides premium surge suppression while managing both thermal and high-current end-of-life events

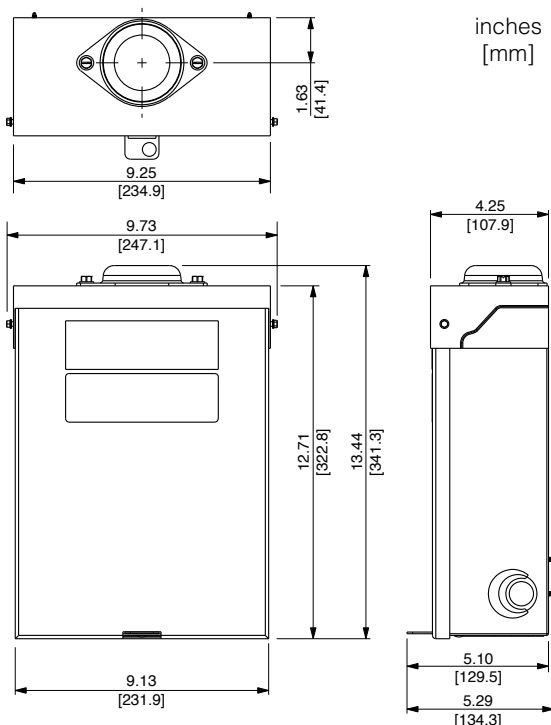
Surgebreaker Whole House SPDs

Features (continued)

SDSB1175C



SDSB1175R



Surgebreaker SPDs



Performance

Surge Current Rating per Phase	80kA
Short Circuit Current Rating	25kA
Modes of Protection	6
Fusing	Individually fused MOVs
Thermal Fusing	Yes
Overcurrent Fusing	Yes
Operating Frequency	50/60 Hz

Mechanical Description

Enclosure	Carbon Steel
NEMA Rating	
SDSB1175C	NEMA 1
SDSB1175R	NEMA 3R
Connection Method	#12 AWG, Stranded
Weight	
SDSB1175C	10.5 lbs
SDSB1175R	15.3 lbs
Mounting Method	3-screw, #10
Circuit Type	Parallel
Operating Altitude	Sea Level-12,000' (3,658 m)
Storage Temperature	-40° F to +149° F (-40° C to +65° C)
Operating Temperature	-40° F to +149° F (-40° C to +65° C)

Diagnostics

Green status LEDs

Listings and Performance

cULus Listed to UL 1449 3rd edition Type 2 SPD,
CSA C22.2 No. 8-M1986, C233.1-87
UL Recognized to UL 497A 3rd edition, UL 497B
4th edition, CSA C22.2 No. 226-92

Surgebreaker Whole House SPDs

Features (continued)

Multi-Path Suppression

Damaging surges may enter the home in multiple ways:

1. The Electrical System

Externally and internally created surges are common. Without proper suppression, these surges can be distributed throughout the home and damage expensive electronic equipment.

2. The Telephone System

Surges generated externally can carry through telephone lines and damage computers, answering machines and telephones.

3. Television, Cable, and Satellite Systems

Surges generated externally can transmit through coaxial cables and damage televisions, receivers, cable and satellite systems, high-speed internet modems, routers, and computers.

Whole house Surgebreaker SPDs are ideal for addressing these concerns.

Whole House Solutions

All Square D brand Surgebreaker Whole House SPDs install via a two pole breaker within the loadcenter and are rated for AC suppression up to 80,000 Amps. Additionally the Surgebreaker whole house comes with suppression for four lines of telephone connected equipment (SDSA4P) and one line of television coaxial connected equipment (SDSA2V).

SDSB1175C



The SDSB1175C is NEMA Type 1 rated and designed to be installed inside the home right next to the electrical service loadcenter. The SDSB1175C can be surface or flush mounted.

SDSB1175R



The SDSB1175R is NEMA Type 3R-rated, suitable for indoor or outdoor installations. This version is ideal when the electrical service panel is mounted on the exterior of the building or when telephone and cable systems are not conveniently placed close together, requiring the need to make connections on the outside of the home.

Surgebreaker Whole House SPDs Specifications

SDSB1175

Voltage	Surge Current	Modes of Protection	Configuration	Model Number	MCOV	SCCR	I_n	VPR			
								L-N	L-G	L-L	N-G
120/240V	80kA	6	1 Ø, 3-wire+G	SDSB1175C	150V L-N, L-G 300V L-L	25kA	10kA	600V	700V	1000V	1000V
120/240V	80kA	6	1 Ø, 3-wire+G	SDSB1175R	150V L-N, L-G 300V L-L	25kA	10kA	600V	700V	1000V	1000V

Replacement Modules

For expanding systems or replacement of existing modules. Install up to three cable lines, or add a second telephone suppressor.



SDSA2V

SDSA2V provides suppression of both internally and externally generated surges. Uses dual F-type coaxial connectors compatible with video, audio, and high-speed cable internet lines.

Voltage: 140-200 Vdc Frequency Range: 3 GHz



SDSA4P

SDSA4P provides suppression of both internally and externally generated surges. Each accommodates up to four lines, using tool-less IDC terminations for quick connection. Compatible with telephone and high-speed DSL or dial-up internet lines.

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