# **Surge Protection Devices**

Catalog September



Class 6671



#### CONTENTS

Description	Page
Whole House Surge Protector	3
Secondary Surge Arresters	7
Plug-on Surge Arresters	8
Hard-Wired Surge Arresters	10
Warranties	14





Courtesy of Steven Engineering, Inc. • 230 Ryan Way, South San Francisco, CA 94080-6370 • General Inquiries: (800) 670-4183 • www.stevenengineering.com



SDSB1175C UL and C-UL Listed 1449 File #E81066

#### **PRODUCT DESCRIPTION**

The Surgebreaker<sup>®</sup> Plus device, model SDSB1175C, is a UL<sup>®</sup> Listed 1449, Second Edition 2005 transient voltage surge suppressor (TVSS). This device is also C-UL Listed for use in Canada. It is tested to ANSI/IEEE C62.41 Standards Category B and C for use in service entrance locations. The device provides AC line protection for the whole house and protects up to eight telephone lines and two coaxial lines. It is designed for use on single-phase, three-wire, 120/240 Vac, 50/60 Hz electrical service.

#### Features

- Design allows for field replacement of components
- AC line protection for the whole house
- Protects up to four telephone lines (eight with optional Telco unit; Cat. No. SDSA4P)
- Protects up to two coaxial lines with Gas Discharge Tube (GDT) technology (Silicon Avalanche Diode (SAD) protection optional; Cat. No. SDSA2VD)
- All modes protected (L–L, L–N, L–G, N–G)
- UL 1449 Second Edition 2005 Listed
- Meets ANSI/IEEE C62.41 standards for Category B and C locations
- LED indicates AC section operational status of each AC line protection
- Flush (Type 1 housing only) or surface mounting installation
  - Hybrid technology thermal-fuse metal oxide varistor and gas discharge tube (GDT) design
- Excellent clamping voltage performance
- · Fast response time
- Ride-through sustained overvoltage up to 240 Vac

#### Service Entrance Design

The product is suitable for connection to power systems whose available short-circuit capacity does not exceed 25,000 A symmetrical short-circuit current when protected by the recommended branch circuit protective devices.

#### Metal Oxide Varistor Technology

Metal oxide varistors (MOVs) provide voltage surges with a low-resistance path line-to-line, line-to-neutral, line-to-ground, or neutral-to-ground, while providing a high resistance path to the 50/60 Hz power source.

#### **Robust Protection**

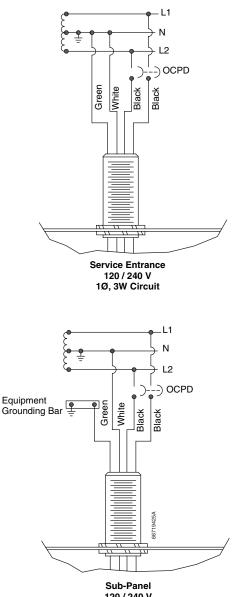
Each MOV is protected by a combination of fault current fuse and thermal fuse that open in the event of a damaging varistor overload. The MOVs are protected against damage due to sustained overvoltage conditions by gas discharge tubes. Additionally, the varistors are secured in a silica-filled, sealed molded plastic housing contained within the enclosure.

#### **LED Indicators**

The LEDs on the face of the AC module indicate the operational status of the AC protection. If the LEDs for each line are on, the device is fully operational. If either of the LEDs go off, the AC module should be replaced.

BGUARE D

© 1997–2006 Schneider Electric All Rights Reserved



120 / 240 V 1Ø, 3W Circuit

## **APPLICATION DATA**

The Surgebreaker<sup>®</sup> Plus device is tested to ANSI/IEEE C62.41 Standards Category B and C for use in service entrance locations. It is designed for use on single-phase, three-wire, 120/240 Vac, 50/60 Hz electrical service. It provides protection for the AC line, up to four telephone lines (eight optional), and two coaxial video lines.

The Surgebreaker Plus device can be surface or flush (Type 1 only) mounted, depending on the power panel installation. If the power panel enclosure is hidden behind a wall it is flush mounted; if the entire power panel is exposed, it is surface mounted.

### **AC** Wiring

Connecting the AC portion of the Surgebreaker Plus device to a power panel requires a 30 A or less 2-pole circuit breaker for fusible overcurrent protective device (OCPD).

Circuit breakers (30 A or less) recently manufactured by Schneider Electric are UL Listed for one or two wires per terminal. If the Surgebreaker Plus device is to be connected to another brand of power panel, a UL Listed circuit breaker or OCPD may need to be installed. Current limiting fuses should not be used when installing a fusible OCPD.

The current consumption of the device during normal operation is negligible. However, at the end of serviceable life, the device may cause the circuit breaker on which it is connected to trip and prevent resetting, until the surge device is replaced. Do not connect the Surgebreaker Plus device on the same branch circuit as critical appliances that require uninterrupted power. When the AC wiring is complete, the AC portion of the Surgebreaker Plus device should be connected according to one of the wiring diagrams.

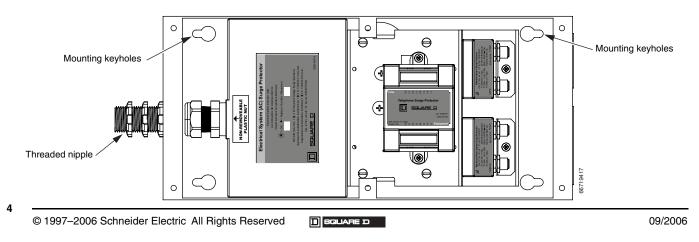
## **Telephone Surge Protector Wiring**

Up to four (eight optional) analog telephone lines, four Digital Subscriber Lines (DSL), or any combination totaling four lines, can be connected to the Surgebreaker Plus device. Two wires (one pair) are required for each telephone line to function. Most phone cables provide two or more pairs of wires to allow the service to be easily expanded.

## **Coaxial (Television) Surge Modules**

- Protection for two coaxial connections from CATV or master antenna
- Either coaxial module is suitable for use with any CATV service
- Suitable for use on all state-of-the-art television and hybrid fiber/coaxial systems

Surgebreaker® Plus Whole House Surge Protector (shown without cover)



## Specifications

Physical			
Environmental Rating	Type 1		
Operating Conditions	-25 to +55 °C (-13 to +131 °F), 0–95% humidity		
Enclosure Style	Steel enclosure with integral field wiring compartments for telephone and cable connections		
Separation of Circuits	AC mains protection is completely barriered and isolated from the telephone and cable by means of a sand-filled, hard plastic package		
Dimensions (length x width x depth)	15.14 x 6.88 x 3.58 in. (length dimension includes nipple)		
Weight	Type 1: 9.66 lbs		
Mounting	Mounting hardpoints provided for anchoring to studs or wall		
Mounting	0.5 in. NPT metallic nipple provided for connection to a load center		
Warranty	5 year, up to \$50,000 limited warranty (see Warranty on page 13)		
Technology			
AC Mains Protection	Hybrid protection utilizing Metal Oxide Varistor with Thermal-fuse, Gas Discharge Tube (GDT)		
Telephone and Cable Protection	Gas Discharge Tube (GDT), Silicon Avalanche Diode (SADs), SiBod™ Technology		
AC Protection			
Operating Frequency	50/60 Hz		
Modes Protected	L1-N, L1-G, L2-N, L2-G, N-G; L1-L2		
Nominal Input Voltage	120/240 Vac, 1¢3W, 50–60 Hz		
Short Circuit Current Rating	25,000 A rms symmetrical		
	400 V Line-to-Neutral, Line-to-Ground		
Suppressed Voltage Rating	400 V Neutral-to-Ground		
Varistor Surge Current Rating Per Phase	80 kA		
Connection Method	Four 36 in. #12 AWG stranded wire leads for ground, neutral, L1, and L2		
Maximum Single Impulse Surge Current Withstand Rating Per Phase	25 kA		
Alarms and Indicators			
Protection status indication	TVSS operation status LEDs (for each AC line)		
Approvals and Test Standards			
Overall product (including AC protection)	UL 1449, Second Edition, 2005 Revision; C-UL per CSA C22.2 No. 8-M1986, ECN 516/TIL A-24 and TIL I-11E		
Telephone/cable protection	Evaluated to UL 497A (telephone) and UL497B (coaxial)		
Surge category	ANSI/IEEE C62.41-1991—all categories through C3		
Telephone			
Туре	Secondary protector (tip and ring to ground, tip to ring)		
Shunt overvoltage protection	3-element SiBod thyristor protector for balanced voltage limiting		
DC breakdown voltage	270 Vdc		
Impulse voltage	330 Vdc		
	Positive Temperature Coefficient (PTC) thermistor, self-resetting		
	Positive Temperature Coefficient (PTC) thermistor, self-resetting		
Series overcurrent protection	NOTE: The series overcurrent protection and SiBod thyristor protector are coordinated to withstand the surge current remnant from a Network Interface Device (NID) whose primary telephone protector is rated for not more than an 8/20 kA current surge.		
Series overcurrent protection Maximum line current	NOTE: The series overcurrent protection and SiBod thyristor protector are coordinated to withstand the surge current remnant from a Network Interface Device (NID) whose primary telephone protector is rated for not more		
	NOTE: The series overcurrent protection and SiBod thyristor protector are coordinated to withstand the surge current remnant from a Network Interface Device (NID) whose primary telephone protector is rated for not more than an 8/20 kA current surge.		
Maximum line current Connection method	<ul> <li>NOTE: The series overcurrent protection and SiBod thyristor protector are coordinated to withstand the surge current remnant from a Network Interface Device (NID) whose primary telephone protector is rated for not more than an 8/20 kA current surge.</li> <li>100 mA</li> </ul>		
Maximum line current	<ul> <li>NOTE: The series overcurrent protection and SiBod thyristor protector are coordinated to withstand the surge current remnant from a Network Interface Device (NID) whose primary telephone protector is rated for not more than an 8/20 kA current surge.</li> <li>100 mA</li> </ul>		
Maximum line current Connection method Coaxial Surge Modules Type	NOTE: The series overcurrent protection and SiBod thyristor protector are coordinated to withstand the surge current remnant from a Network Interface Device (NID) whose primary telephone protector is rated for not more than an 8/20 kA current surge.         100 mA         IDC Connector (tool-less termination)         Secondary protector (center conductor to shield)		
Maximum line current Connection method Coaxial Surge Modules	NOTE: The series overcurrent protection and SiBod thyristor protector are coordinated to withstand the surge current remnant from a Network Interface Device (NID) whose primary telephone protector is rated for not more than an 8/20 kA current surge.         100 mA         IDC Connector (tool-less termination)         Secondary protector (center conductor to shield)         1 operation @ 20 kA (8x20 µs);		
Maximum line current Connection method Coaxial Surge Modules Type Peak surge current	NOTE: The series overcurrent protection and SiBod thyristor protector are coordinated to withstand the surge current remnant from a Network Interface Device (NID) whose primary telephone protector is rated for not more than an 8/20 kA current surge.         100 mA         IDC Connector (tool-less termination)         Secondary protector (center conductor to shield)         1 operation @ 20 kA (8x20 µs);         10 operations @ 5 kA (8x20µs)		
Maximum line current Connection method Coaxial Surge Modules Type Peak surge current Protection mode	NOTE: The series overcurrent protection and SiBod thyristor protector are coordinated to withstand the surge current remnant from a Network Interface Device (NID) whose primary telephone protector is rated for not more than an 8/20 kA current surge.         100 mA         IDC Connector (tool-less termination)         Secondary protector (center conductor to shield)         1 operation @ 20 kA (8x20 µs);         10 operations @ 5 kA (8x20µs)         Line to shield (ground)		
Maximum line current Connection method Coaxial Surge Modules Type Peak surge current Protection mode Technology	NOTE: The series overcurrent protection and SiBod thyristor protector are coordinated to withstand the surge current remnant from a Network Interface Device (NID) whose primary telephone protector is rated for not more than an 8/20 kA current surge.         100 mA         IDC Connector (tool-less termination)         Secondary protector (center conductor to shield)         1 operation @ 20 kA (8x20 µs);         10 operations @ 5 kA (8x20 µs)         Line to shield (ground)         GDT protection for CATV module; SAD protection for optional satellite module (SAD protection optional)		
Maximum line current Connection method Coaxial Surge Modules Type Peak surge current Protection mode	NOTE: The series overcurrent protection and SiBod thyristor protector are coordinated to withstand the surge current remnant from a Network Interface Device (NID) whose primary telephone protector is rated for not more than an 8/20 kA current surge.         100 mA         IDC Connector (tool-less termination)         Secondary protector (center conductor to shield)         1 operation @ 20 kA (8x20 µs);         10 operations @ 5 kA (8x20µs)         Line to shield (ground)		

09/2006

BGUARE D

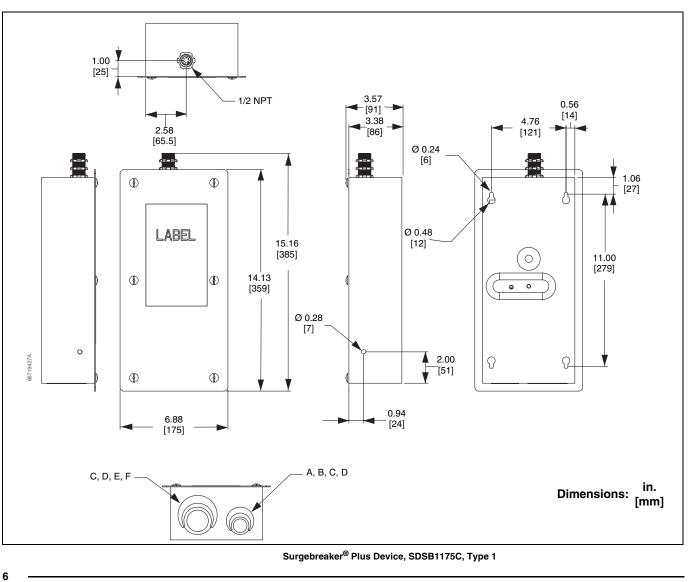
© 1997–2006 Schneider Electric All Rights Reserved

#### **Replacement Parts**

Description	Part Number
TVSS for AC line protection	SDSA1AC
Four-line telephone protector	SDSA4P
Coaxial surge module	GDT Protection—SDSA2V; SAD protection—SDSA2VD

## Knockouts

Symbol	Conduit Size		Diameter		
Symbol	in.	mm	in.	mm	
А	0.50	13	0.88	22	
В	0.75	19	1.13	29	
С	1.00	25	1.38	35	
D	1.25	32	1.75	44	
E	1.50	38	2.00	51	
F	2.00	51	2.50	64	



© 1997–2006 Schneider Electric All Rights Reserved

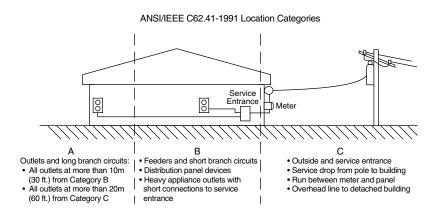
## **PRODUCT DESCRIPTION**

Electrical surges are brief, unpredictable, transient overvoltage anomalies with a duration of less than one-half an AC cycle, and an amplitude that exceeds two times the nominal peak voltage of the electrical system. These high energy electrical spikes can damage a home's electrical system, electrical appliances and electronic equipment. An electrical surge can break down the insulation on the wiring in your electrical system and the connected equipment, leaving your system and equipment susceptible to failure. This damage can happen all at once or over a period of time, depending on the surge frequency and magnitude. Typically, lightning, inductive switching, or power switching cause surges, which can damage the insulation in building wiring, electrical appliances, or electronic equipment. At service entrance locations, voltage surges can also produce high currents, requiring the installation of rugged surge arresters.

Secondary surge arresters from Square D<sup>®</sup> use a technology that can handle these high transient currents. When a surge causes the voltage to exceed its normal value, the surge arrester holds or "clamps" the voltage. At the same time, the surge arrester dissipates and diverts the transient current until the surge passes. After the surge, no parts need to be replaced or reset on the surge arrester. Surge arresters provide excellent clamping voltage performance. The lower the clamping voltage of the surge arrester, the better the protection.

## **APPLICATION DATA**

Secondary surge arresters will protect most secondary distribution wiring against surge-related damage and are suitable for use in Category C locations, as shown in the figure below. The overvoltage risk at these locations is defined in ANSI/IEEE Standard C62.41-1991 as a 20,000 Vac potential and a 10,000 A current. However, secondary surge arresters *may not protect solid-state or electronic equipment from all lightning-induced or other high voltage surges*. When combined with transient voltage surge suppressors (TVSS), secondary surge arresters can help protect sensitive electronic equipment, as long as the suppressors are installed in Category A or B locations. Electronic equipment may need additional protection by installing plug-in TVSS devices at the point of use.



Note; Demarcation between Location Categories B and C is arbitrarily taken to be at the meter or at the mains disconnect (ANSI/NFPA 70-1990 [2], Article 230-70) for low-voltage service, or at the secondary of the service transformer if the service is provided to the user at a higher voltage.

BGUARE D



QO2175SB UL and C-UL Listed File #E81066



HOM2175SB UL and C-UL Listed File #E81066



QO2175SB Installed in a QO Load Center

### **PRODUCT DESCRIPTION**

The QO2175SB and HOM2175SB are UL and C-UL Listed secondary surge arresters and TVSS. Both are designed for use on single-phase, three-wire 120/240 Vac, 50/60 Hz electrical service. Two QO2175SB secondary surge arresters can be installed to protect 208Y/120 Vac three-phase, four-wire service.

#### Features

The QO2175SB and the HOM2175SB surge arresters offer the following distinctive features:

- UL and C-UL Listed secondary surge arresters
- UL and C-UL Listed to UL1449, Second Edition as a TVSS
- Meets ANSI/IEEE C62.11-1987
- Suitable for use in Category B and C locations
- · LED indicates operational status
- Quick plug-on installation
- Metal oxide varistor (MOV) design
- Excellent clamping voltage performance
- Fast response time
- Maintenance-free, long life

#### **Plug-on Design**

The QO2175SB plugs on to the branch circuit spaces of the interior of a  $QO^{\textcircled{R}}$  Load Center, NQO or NQOD Panelboard, or combination service entrance device (CSED) from Square  $D^{\textcircled{R}}$ . Installation is completed by the connection of the single white wire of the QO2175SB to the panel's neutral bar. The HOM2175SB is installed similarly in Homeline<sup>(\textcircled{R})</sup> load centers and combination service entrance devices.

#### **MOV Technology**

MOVs provide voltage surges with a low resistance path line-to-line, line-toneutral, or line-to-ground while providing a high resistance path to the 50/60 Hz power source. The MOV responds faster and has a lower clamping voltage because it does not have a gap structure.

#### **Fuse Links and Thermal Cut-Offs**

Individual non-replaceable internal fuse links and thermal cut-offs protect each MOV and open in the event of a varistor-damaging overload. Silica inside the arrester housing reduces the risk of one fuse damaging another when it opens.

#### **LED Indicator**

The LED on the face of the device indicates operational status of the arrester. If the light is on the device is fully operational. When the LED indicator goes off, the device should be replaced.

## Specifications

Physical	
White wire length	QO2175SB: 18 in. (457 mm)
	HOM2175SB: 12 in. (305 mm)
	QO2175SB: 0.54 lbs.
Product weight	HOM2175SB: 0.64 lbs.
Mounting	The QO2175SB and HOM2175SB both require 2 adjacent one-pole panel spaces per device.
Electrical	
Maximum Continuous Operating Voltage (MCOV)	150 Vac maximum phase-to-neutral
Short circuit current rating	22,000 A rms symmetrical, 240 Vac maximum
Joule rating	900 Joules (8/20 µs wave)
Maximum surge current	27,000 A per phase
Typical clamping voltages	For 8/20 µs combination wave surge current for each phase to ground with specified lead length.
	See table below.
Minimum life	2500 operations (for 1.5 kA 8/20µs wave for each line-to-neutral)
Thermal fusing	Yes
Operating frequency	50/60 Hz
Power consumption per phase	550 milliwatts
Diagnostics	Green status LED
Operating temperature	-20 to +65 °C (-4 to +150 °F)

# **Typical Clamping Voltages**

	1 in. (25 mm) lead	3 in. (76 mm) lead	6 in. (152 mm) lead	12 in. (305 mm) lead	18 in. (457 mm) lead
1500 A surge current	475 Vac	475 Vac	475 Vac	500 Vac	500 Vac
5000 A surge current	500 Vac	600 Vac	625 Vac	700 Vac	775 Vac
10,000 A surge current	600 Vac	800 Vac	850 Vac	1025 Vac	1250 Vac

# Specifications



SDSA1175 UL and C-UL Listed 58J4 (TVSS) File #E81066 UL and C-UL Listed 60Y6 (SA) File # E148456



SDSA3650 UL Listed 58J4 (TVSS) File #E81066 UL and C-UL Listed 60Y6 (SA) File # E148456



QOSAMK Surge Arrester Mounting Kit



MMSAMK Surge Arrester Mounting Kit

#### **PRODUCT DESCRIPTION**

The SDSA1175 is UL and C-UL Listed as TVSS and secondary surge arrester. The SDSA3650 is UL Listed as a TVSS and has UL and C-UL Listings as a secondary surge arrester. The SDSA1175 is designed for use on 120/240 Vac, 50/60 Hz electrical services. Two of these devices can be used to protect 208Y/120 Vac three-phase, four-wire services. The SDSA3650 is designed to be used where maximum phase-to-ground system voltage does not exceed 600 Vac. The device may also be used for surge protection of irrigation pumps, oil pumps, and motors operating below 600 Vac.

NOTE: Do not use either the SDSA1175 or SDSA3650 on ungrounded systems.

#### Features

The SDSA1175 and the SDSA3650 secondary surge arresters offer the following distinctive features:

- UL and C-UL Listed as TVSS and secondary surge arresters (for SDSA1175 only)
- UL Listed as TVSS; UL and C-UL as secondary surge arrester (for SDSA3650 only)
- Meets ANSI/IEEE C62.11-1987
- Suitable for use in Category B and C locations
- Metal oxide varistor (MOV) design
- LED indicates operational status
- Fast response time
- Maintenance-free, long life

#### Housing

The arrester housing is made of high temperature thermoplastic. The cover is permanently bonded to the housing by an ultrasonic welding process, and the wire exit is sealed using a potting compound. The arrester can be used for both indoor and outdoor applications.

### **MOV Technology**

MOVs provide voltage surges with a low resistance path line-to-neutral while providing high resistance to the 50/60 Hz power source. Traditional gas tube arresters suffer from slow response time, high clamping voltages, and crowbarring effects (the reduction of voltages during conduction in order to short circuit the load). The MOV responds faster and has a lower clamping voltage because it does not have a gap structure.

#### **Fuse Links and Thermal Cut-offs**

Individual non-replaceable internal fuse links and thermal cut-offs protect the MOVs and open in the event of a varistor-damaging overload. Silica inside the arrester housing reduces the risk of one fuse damaging another when it opens.

#### **LED Indicator**

The LED on the face of the device indicates operational status of the arrester. If the light is on the device is fully operational. When the LED indicator goes off, the device should be replaced.

10

#### **Available Mounting Kits**

The SDSA1175 can be installed inside a QO or Homeline load center using the QOSAMK surge arrester mounting kit.

The SDSA1175 or SDSA3650 can be installed inside Square D<sup>®</sup> Series M or later Multi-Metering Equipment (MP Meter-Pak<sup>™</sup> or EZ Meter-Pak<sup>®</sup> Main Devices Series M\_\_) using the MMSAMK surge arrester mounting kit.

Both surge arrester mounting kits are sold separately.

## **APPLICATION DATA**

These secondary surge arresters are suitable for use in Category B and C locations. The threat at these locations is characterized by ANSI/IEEE C62.41-1991 as a 20,000 Vac potential and a 10,000 A current. The device clamps the voltage during surges while diverting transient current. Electronic equipment may need to be additionally protected at the point of use with transient voltage surge suppressors.

#### **Electrical Characteristics**

- Voltage rating:
  - SDSA1175 : 150 Vac maximum phase-to-ground at 50/60 Hz NOTE: Do not use on ungrounded systems.
  - SDSA3650 : 600 Vac maximum phase-to-ground at 50/60 Hz NOTE: Do not use on ungrounded systems.
- Typical clamping voltages: For 8/20µs combination wave surge current for each phase-to-ground with specified lead length:

	1 in. (25 mm) lead	3 in. (76 mm) lead	1 6 in. (152 mm) leac	
SDSA1175				
1500 A surge current	500 Vac	550 Vac	575 Vac	
5000 A surge current	625 Vac	675 A	725 A	
10,000 A surge current	750 Vac	900 Vac	1075 Vac	
SDSA3650			•	
1500 A surge current	1525 Vac	1750 Vac	1775 Vac	
5000 A surge current	1700 Vac	2100 Vac	2125 Vac	
10,000 A surge current	1925 Vac	2375 Vac	2400 Vac	
	12 in. (305 m	m) lead 18	in. (457 mm) lead	
SDSA1175		· · · · · · · · · · · · · · · · · · ·		
1500 A surge current	600 Va	IC	625 Vac	
5000 A surge current	875 Va	IC	1050 Vac	
10,000 A surge current	1250 Va	IC	1500 Vac	
SDSA3650		· · · · · · · · · · · · · · · · · · ·		
1500 A surge current	1800 Va	iC	1825 Vac	
5000 A surge current	2325 Va	IC	2425 Vac	
10,000 A surge current	2700 Va	IC	3000 Vac	

© 1997–2006 Schneider Electric All Rights Reserved

BQUARE D

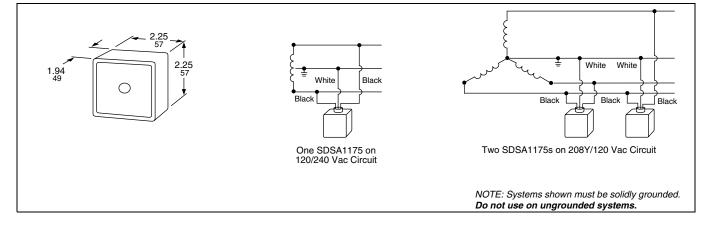
## **Dimensions and Wiring Diagrams**

#### Specifications

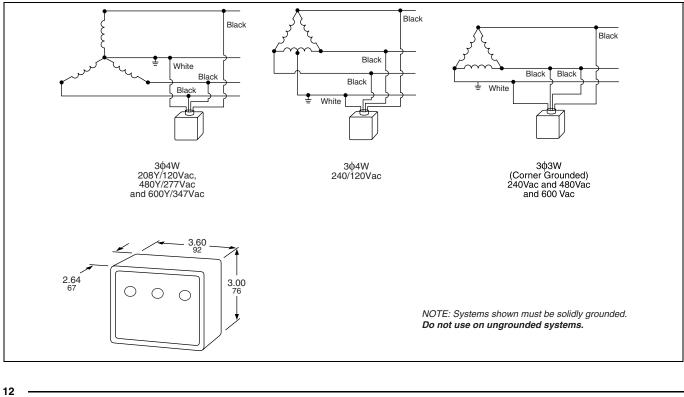
.

Electrical	
Minimum life	2500 operations (for 1.5 kA 8/20µs wave for each line-to-ground)
Varistor surge current rating per phase	SDSA1175: 36,000 A peak (8/20µs wave)
	SDSA3650: 40,000 A peak (8/20µs wave)
Power consumption per phase	SDSA1175: Less than 500 milliwatts
	SDSA3650: Less than 600 milliwatts
Operating temperature range	-40 to +70 °C (-40 to +160 °F)
Surge energy capability per phase	SDSA1175: 560 Joules (8/20µs wave)
	SDSA3650: 2100 Joules (8/20µs wave)
Short circuit current rating	SDSA1175 - 22 kA SDSA3650 - 200 kA

#### SDSA1175



SDSA3650



© 1997–2006 Schneider Electric All Rights Reserved

BQUARE D

# WARRANTIES

# Surgebreaker<sup>®</sup> Plus Warranty

## **Protection Limits**

With regard to any Surgebreaker Plus device (catalog number SBSB1175C) from Square D<sup>®</sup> that has been properly installed in a residential home in compliance with the current National Electrical Code (NEC) requirements, Square D warrants to the homeowner at the time of such installation (or the initial homeowner if installed as part of new construction) that Square D shall accept responsibility for any damage to that homeowner's major household connected equipment, as defined below, up to the limits provided herein, to the extent such damage is caused by the failure of such surge protection device to protect against electrical power surges caused by lightning or a utility company (electric, coaxial or telephone). As used herein, "connected household equipment" shall mean major household appliances and electronic devices, including refrigerators, freezers, air conditioners, stoves, oven, microwave oven, clothes washer, clothes dryer, dishwasher, audio and stereo components, video equipment, televisions and computers.

The limit of Square D's liability under this warranty shall be the lesser of \$25,000 or the deductible amount of customer's insurance policy covering such connected household equipment, except that when the Surgebreaker Plus device is used in conjunction with both a point of use surge protective device and a Square D QO<sup>®</sup> or Homeline<sup>®</sup> Load Center device, then the limit of Square D's liability under this warranty shall be the lesser of \$50,000 or the deductible amount of customer's insurance policy covering such major connected household equipment. As used herein, "point of use surge protective device" shall mean a surge protective device that is listed to UL 1449 Listed (with a clamping voltage of 330 volts for solid state devices) and that is located at and connected to the connected household equipment for which a damage claim is made.

#### Warranty Period

This warranty shall be in effect three (3) years following the date of purchase of the Surgebreaker Plus device, except that when the Surgebreaker Plus device is used in conjunction with both a point of use surge protective device and a Square D QO or Homeline Load Center device, then this warranty shall be in effect for five (5) years following the date of purchase of the Surgebreaker Plus device.

#### Warranty Not Transferable

This warranty may not be transferred from the homeowner who initially receives this warranty to any other party.

#### Warranty Limitations

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

This warranty excludes damage or loss arising from any of the following events or sources: unauthorized product modification or alteration, force major events such as flood or earthquake, war, insurrection, vandalism, theft, normal-use wear and tear, erosion, depletion, obsolescence, abuse, defective software and computer virus infection.

Square D shall not be liable for any indirect, incidental, consequential damages.

With respect to products purchased by consumers in the United States for personal use, implied warranties, including but not limited to the warranties of merchantability and fitness for a particular purpose, are not excluded but are limited to the extent allowed by law to the duration of the warranty period set forth above.

No claim under this warranty will be honored unless the homeowner has reported the damage within thirty (30) days after its occurrence in accordance with the claims procedure below.

#### **Claims Procedure**

To make a claim under this warranty, please follow these steps:

- 1. Retain the original dated sales receipts of the Surgebreaker Plus from Square D, and if applicable, the UL 1449 approved secondary surge protector(s).
- 2. Ask an independent repairman to write a report on the cause of the damage. Retain all related repair receipts.
- 3. File a claim under homeowner's insurance.
- 4. File a claim with the manufacturer of the UL 1449 secondary surge device, if applicable.
- 5. Within thirty (30) days of the occurrence of the damage and prior to repairing the damaged equipment, contact Schneider Electric at (859) 243-8220, Monday through Friday 8:00 a.m. to 4:00 p.m. Eastern Standard Time (EST).
- 6. Send the purchase receipt, repair receipt, damage report, any homeowner's insurance report and any secondary surge manufacturer's report along with the damaged Surgebreaker Plus component(s) (electrical, telephone and/or coaxial cable) to Schneider Electric, 1601 Mercer Road, Lexington, KY 40511, Attn: Surgebreaker Plus Warranty. (If no claim is filed with the UL 1449 secondary surge device manufacturer, any warranty claim here under will be subject to three (3) year / \$25,000 limitations stated here in.)

09/2006

BGUARE D

# Surgebreaker Surge Protection Devices

# Surgebreaker<sup>®</sup> Surge Protection Devices Warranty

#### **Protection Limits**

With regard to any Surgebreaker surge protection device (catalog numbers QO2175SB and HOM2175SB) from Square D<sup>®</sup> that has been properly installed in a residential home in compliance with the current National Electrical Code (NEC) requirements, Square D warrants to the homeowner at the time of such installation (or the initial homeowner if installed as part of new construction) that Square D shall accept responsibility for any damage to that homeowner's major household appliances, as defined below, up to the limits provided herein, to the extent such damage is caused by the failure of such surge protection device to protect against electrical power surges caused by lightning or the electric utility. As used herein, "major household appliances" shall mean: refrigerators, freezers, air conditioners, stoves, ovens (except microwave), clothes washers, clothes dryers, and dishwashers.

Major household appliances specifically shall NOT include electronic devices such as: microwave ovens, audio and stereo components, video equipment, televisions, and computers.

The limit of Square D's liability under this warranty shall be \$10,000 or the deductible amount of customer's insurance policy covering such major household appliances, whichever is less.

#### Warranty Period

This warranty shall be in effect until three (3) years following the date of purchase of the Surgebreaker surge protection device, or until two (2) years following the date of installation, whichever occurs earlier.

#### Warranty Not Transferable

This warranty may not be transferred from the homeowner who initially receives this warranty to any other party.

#### Warranty Limitations

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

This warranty excludes damage or loss arising from any of the following events or sources: unauthorized product modification or alteration, force major events such as flood or earthquake, war, insurrection, vandalism, theft, normal-use wear and tear, erosion, depletion, obsolescence, abuse, defective software and computer virus infection.

Square D shall not be liable for any indirect, incidental, consequential damages.

With respect to products purchased by consumers in the United States for personal use, implied warranties, including but not limited to the warranties of merchantability and fitness for a particular purpose, are not excluded but are limited to the extent allowed by law to the duration of the warranty period set forth above.

No claim under this warranty will be honored unless the homeowner has reported the damage within thirty (30) days after its occurrence in accordance with the claims procedure below.

#### **Claims Procedure**

To make a claim under this warranty, please follow these steps:

- 1. Retain the original dated sales receipts of the Surgebreaker surge protection device from Square D.
- 2. Prior to repairing the damaged appliance, contact Square D at (859) 243-8220, Monday through Friday 8:00 a.m. to 4:00 p.m. Eastern Standard Time (EST).
- 3. Ask the appliance repairer to write a report on the cause of the damage. Retain all related repair receipts.
- 4. File a claim under homeowner's insurance.
- Send the purchase receipt, repair receipt, damage report, any homeowners insurance report along with the damaged Surgebreaker surge protection device to Schneider Electric, 1601 Mercer Road, Lexington, KY 40511, Lexington, KY 40503, Attn: Surgebreaker Surge Protection Device Warranty.

14

© 1997–2006 Schneider Electric All Rights Reserved

**Surgebreaker Surge Protection Devices** 

09/2006

BGUARE D

© 1997–2006 Schneider Electric All Rights Reserved

Schneider Electric USA

1601 Mercer Road Lexington, KY 40511 USA 1-888-SquareD (1-888-778-2733) www.us.SquareD.com Schneider Electric Canada 19 Waterman Avenue, M4B 1 Y2 Toronto, Ontario 1-800-565-6699

www.schneider-electric.ca

6671CT9701R9/06 © 1997–2006 Schneider Electric All Rights Reserved Replaces 6671CT9701R6/06

09/2006