

Service Entrance Suppressor(B), 320 kA



The nVent ERICO SES320 B Series of Surge Protective Devices (SPD) provides economical protection against damaging transients and surge currents. The B Series is a cUL 1449 listed SPD for Type 1 and Type 2 locations allowing for installation either on the line or load of service panels without requiring circuit breakers. With a 320 kA per phase surge rating, the SES320 B is well suited for category C locations. Typical applications for the nVent ERICO SES320 B Series include service entrances, distribution, branch panels, MCC, lighting panels, HVAC, and more. Featuring a NEMA 4X enclosure rating, the B series is also appropriate for use in outdoor applications.

CERTIFICATIONS



FEATURES

320 kA 8/20 μ s maximum surge rating per phase

Excellent clamping and low UL voltage protection ratings

Features relay alarming for power/phase loss and status of SPD health

Compact design can be directly mounted to panel or installed in a small space

Ground reference monitoring triggers an alarm when N-PE mode exceeds 20 volts

Optional Flush Mounting Plate

10-year limited warranty

SPECIFICATIONS

Catalog Number	SES320B1 20240D	SES320B1 20V	SES320B2 08Y	SES320B2 40D	SES320B2 40V	SES320B4 80D	SES320B4 80Y	SES320B1 20240SP	SES320B6 00Y
Nominal System Voltage (Un)	120/240 V	120 V	120/208 V	240 V	240 V	480 V	277/480 V	120/240 V	347/600 V

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Max Continuous Operating Voltage (Uc)	180/275 V	180 V	150/300 V	275 V	350 V	550 V	350/700 V	180/360 V	440/880 V
Distribution System	3PhΔ 4W+G	1Ph 2W+G	3Ph Y 4W+G	3PhΔ 3W+G 3Ph Corner Gnd Δ 2W+G	1Ph 2W+G	3PhΔ 3W+G	3Ph Y 4W+G	1Ph 3W+G	3Ph Y 4W+G
Frequency	0 - 600 Hz	0 - 600 Hz	0 - 600 Hz	0 - 600 Hz	0 - 600 Hz	0 - 600 Hz	0 - 600 Hz	0 - 600 Hz	0 - 600 Hz
Short Circuit Current Rating (SCCR)	200kA	200kA	200kA	200kA	200kA	200kA	200kA	200kA	200kA
Voltage Protection Rating (VPR), L-G	800V	800V	700V	900V	1200V	1800V	1200V	800V	1500V
Voltage Protection Rating (VPR), L-L	1200V 1500V		1000V	1200V		1800V	2000V	1200V	2500V
Voltage Protection Rating (VPR), L-N	800V 1000V	700V	600V		1200V		1200V	700V	1500V
Voltage Protection Rating (VPR), N-G	700V	600V	700V		1000V		1000V	600V	1500V
Nominal Discharge Current (In), Per Mode	20kA 8/20 μs	20kA 8/20 μs	20kA 8/20 μs	20kA 8/20 μs	20kA 8/20 μs	20kA 8/20 μs	20kA 8/20 μs	20kA 8/20 μs	20kA 8/20 μs
Protection Modes	All modes protected	All modes protected	All modes protected	All modes protected	All modes protected	All modes protected	All modes protected	All modes protected	All modes protected

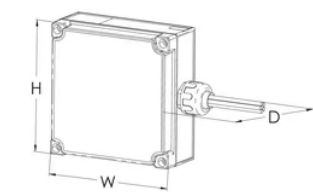
Catalog Number	SES320B1 20240D	SES320B1 20V	SES320B2 08Y	SES320B2 40D	SES320B2 40V	SES320B4 80D	SES320B4 80Y	SES320B1 20240SP	SES320B6 00Y
Status Indication	1 green LED per line Dual color status LED, flashing red for faults Audible alarm	1 green LED per line Dual color status LED, flashing red for faults Audible alarm	1 green LED per line Dual color status LED, flashing red for faults Audible alarm	1 green LED per line Dual color status LED, flashing red for faults Audible alarm	1 green LED per line Dual color status LED, flashing red for faults Audible alarm	1 green LED per line Dual color status LED, flashing red for faults Audible alarm	1 green LED per line Dual color status LED, flashing red for faults Audible alarm	1 green LED per line Dual color status LED, flashing red for faults Audible alarm	1 green LED per line Dual color status LED, flashing red for faults Audible alarm
Remote Contact Switching Capacity	2 A @ 240 V	2 A @ 240 V	2 A @ 240 V	2 A @ 240 V	2 A @ 240 V	2 A @ 240 V	2 A @ 240 V	2 A @ 240 V	2.0 A @ 240 V
Remote Contacts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Max Discharge Current (Imax), Per Phase	320kA 8/20 µs	320kA 8/20 µs	320kA 8/20 µs	320kA 8/20 µs	320kA 8/20 µs	320kA 8/20 µs	320kA 8/20 µs	320kA 8/20 µs	
Lead Length	914.4mm	914.4mm	914.4mm	914.4mm	914.4mm	914.4mm	914.4mm	914.4mm	914.4
Lead Size									6 mm ² Min
Temperature	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C
Enclosure Material	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
Enclosure Rating	NEMA®-4X UL® 50E Type 4	NEMA®-4X UL® 50E Type 4	NEMA®-4X UL® 50E Type 4	NEMA®-4X UL® 50E Type 4	NEMA®-4X UL® 50E Type 4	NEMA®-4X UL® 50E Type 4	NEMA®-4X UL® 50E Type 4	NEMA®-4X UL® 50E Type 4	NEMA®-4X UL® 50E Type 4
Mounting	3/4" straight nipple	3/4" straight nipple	3/4" straight nipple	3/4" straight nipple	3/4" straight nipple	3/4" straight nipple	3/4" straight nipple	3/4" straight nipple	3/4" straight nipple
Unit Weight	0.63 kg	0.63 kg	0.63 kg	0.63 kg	0.63 kg	0.63 kg	0.63 kg	0.63 kg	0.63 kg

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Certification Details	CSA C22.2 No. 269.1 UL® 1449 Edition 5 Type 1/2, 20 kA Mode	CSA C22.2 No. 269.1 UL® 1449 Edition 5 Type 1/2, 20 kA Mode	CSA C22.2 No. 269.1 UL® 1449 Edition 5 Type 1/2, 20 kA Mode	CSA C22.2 No. 269.1 UL® 1449 Edition 5 Type 1/2, 20 kA Mode	CSA C22.2 No. 269.1 UL® 1449 Edition 5 Type 1/2, 20 kA Mode	CSA C22.2 No. 269.1 UL® 1449 Edition 5 Type 1/2, 20 kA Mode	CSA C22.2 No. 269.1 UL® 1449 Edition 5 Type 1/2, 20 kA Mode	CSA C22.2 No. 269.1 UL® 1449 Edition 5 Type 1/2, 20 kA Mode	CSA C22.2 No. 269.1 UL® 1449 Edition 5 Type 1/2, 20 kA Mode
Complies With	ANSI®/IE EE® C62.41.2-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.41.1-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.45-2002 Cat A, Cat B, Cat C	ANSI®/IE EE® C62.41.2-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.41.1-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.45-2002 Cat A, Cat B, Cat C	ANSI®/IE EE® C62.41.2-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.41.1-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.45-2002 Cat A, Cat B, Cat C	ANSI®/IE EE® C62.41.2-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.41.1-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.45-2002 Cat A, Cat B, Cat C	ANSI®/IE EE® C62.41.2-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.41.1-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.45-2002 Cat A, Cat B, Cat C	ANSI®/IE EE® C62.41.2-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.41.1-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.45-2002 Cat A, Cat B, Cat C	ANSI®/IE EE® C62.41.2-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.41.1-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.45-2002 Cat A, Cat B, Cat C	ANSI®/IE EE® C62.41.2-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.41.1-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.45-2002 Cat A, Cat B, Cat C	ANSI®/IE EE® C62.41.2-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.41.1-2002 Cat A, Cat B, Cat C ANSI®/IE EE® C62.45-2002 Cat A, Cat B, Cat C
Depth (D)	76mm	76mm	76mm	76mm	76mm	76mm	76mm	76mm	75.95mm
Height (H)	175 mm	175 mm	175 mm	175 mm	175 mm	175 mm	175 mm	175 mm	175 mm
Width (W)	213 mm	213 mm	213 mm	213 mm	213 mm	213 mm	213 mm	213 mm	212.85 mm
Certifications	cUL, UL	cUL, UL	UL, cUL	cUL, UL	UL, cUL	cUL, UL	UL, cUL	UL, cUL	

ADDITIONAL PRODUCT DETAILS

Optional Flush Plate available: SES320FP

DIAGRAMS



WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at www.nvent.com and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.

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