

Service Entrance Suppressor(B), 160 kA



The nVent ERICO SES160B Series of Surge Protective Devices (SPD) provide economical protection against damaging transients and surge currents. cUL® 1449 Listed SPD for Type 1 or Type 2 locations. Allows for installation on the line or load of the service panels, circuit breakers not required. With a 160 kA per phase surge rating, the SES160B is well suited for category C locations. Applications include service entrance, distribution, branch panels, MCC, lighting panels, HVAC, and more. With a NEMA® 4X enclosure rating this product series is also well suited for outdoor applications.

CERTIFICATIONS



FEATURES

160 kA 8/20 µs 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

Optional Flush Mounting Plate

10-year limited warranty

SPECIFICATIONS

Catalog Number	SES160B1 20V	SES160B2 08Y	SES160B2 40D	SES160B2 40V	SES160B4 80D	SES160B4 80Y	SES160B1 20240SP	SES160B1 20240D	SES160B6 00Y
Nominal System Voltage (Un)	120 V	120/208 V	240 V	240 V	480 V	277/480 V	120/240 V	120/240 V	347/600 V

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Distribution System	1Ph 2W+G	3Ph Y 4W+G	3Ph Corner Gnd Δ 2W+G	1Ph 2W+G	3PhΔ 3W+G	3Ph Y 4W+G	1Ph 3W+G	3PhΔ 4W+G	3Ph Y 4W+G
Max Continuous Operating Voltage (Uc)	180 V	150/300 V	275 V	350 V	550 V	350/700 V	180/360 V	180/275 V	440/880 V
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	200	200
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
Max Discharge Current (Imax), Per Phase	160kA 8/20 μs	160kA 8/20 μs	160kA 8/20 μs	160kA 8/20 μs	160kA 8/20 μs	160kA 8/20 μs	160kA 8/20 μs		
Voltage Protection Rating (VPR), N-PE	600V	500V		1000V		1000V	600V	700 1000	1500
Voltage Protection Rating (VPR), L-N	700V	600V		1200V		1200V	700V	700 900	1500
Voltage Protection Rating (VPR), L-PE	700V	700V	1000V	1000V	1800V	1000V	700V	700 1000	1500
Voltage Protection Rating (VPR), L-L		1000V	1200V		1800V	2000V	1200V	1200 1500	2500

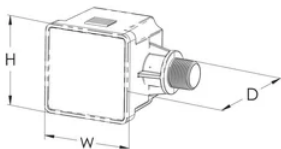
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Protection Modes	All modes protected	All modes protected	All modes protected	All modes protected	All modes protected	All modes protected	All modes protected	All modes protected	All modes protected
Status Indication	1 green LED per line Audible alarm Change-over contact (Form C dry), 240 VAC/2A	1 green LED per line Audible alarm Change-over contact (Form C dry), 240 VAC/2A	1 green LED per line Audible alarm Change-over contact (Form C dry), 240 VAC/2A	1 green LED per line Audible alarm Change-over contact (Form C dry), 240 VAC/2A	1 green LED per line Audible alarm Change-over contact (Form C dry), 240 VAC/2A	1 green LED per line Audible alarm Change-over contact (Form C dry), 240 VAC/2A	1 green LED per line Audible alarm Change-over contact (Form C dry), 240 VAC/2A	1 green LED per line Audible alarm	1 green LED per line 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	2.0 A @ 240 V	2.0 A @ 240 V
Remote Contacts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lead Length	457mm	457mm	457mm	457mm	457mm	457mm	457mm	457.2mm	457.2mm
Lead Size	3.31 mm ²	3.31 mm ²	3.31 mm ²	3.31 mm ²	3.31 mm ²	3.31 mm ²	3.31 mm ²	3 - 35	3 - 35
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 - 85	-40 - 85
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	0.53 kg	0.53 kg	0.53 kg	0.53 kg	0.53 kg	0.53 kg	0.53 kg	0.53 kg	0.53 kg
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

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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)	74.4mm	74.4mm	74.4mm	74.4mm	74.4mm	74.4mm	74.4mm	74.42mm	74.42mm
Height (H)	106.7 mm	106.7 mm	106.7 mm	106.7 mm	106.7 mm	106.7 mm	106.7 mm	106.68	106.68
Width (W)	82.6 mm	82.6 mm	82.6 mm	82.6 mm	82.6 mm	82.6 mm	82.6 mm	82.55	82.55
Certifications	UL, cUL	cUL, UL	UL, cUL	cUL, UL	UL, cUL	cUL, UL	cUL, UL		

ADDITIONAL PRODUCT DETAILS

Optional Flush Plate available: SES160BFP

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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