

Service Entrance Suppressor(F), 160 kA



The nVent ERICO SES160F Series is an enhanced version of the SES160B Series. The SES160F Surge-Filter is robust, with a 160 kA per phase surge rating. The high surge rating increases both survivability and life cycle. With the addition of a filter nuisance high frequency transients on the power distribution system are attenuated, protecting sensitive equipment. cUL® 1449 Listed SPD for Type 2 locations. Applications include service entrance, distribution, branch panels, MCC, lighting panels, HVAC, A/V systems, IT equipment, and more.

CERTIFICATIONS



FEATURES

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

Front-facing design eases installation and performance monitoring

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

Up to 57 dB attenuation (10 kHz to 100 MHz)

Optional Flush Mounting Plate

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

10-year limited warranty

SPECIFICATIONS

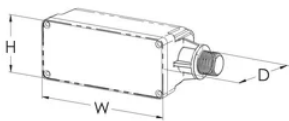
Catalog Number	SES160F1 20V	SES160F2 08Y	SES160F2 40D	SES160F2 40V	SES160F4 80D	SES160F4 80Y	SES160F1 20240SP	SES160F1 20240D	SES160F6 00Y
Nominal System Voltage (Un)	120 V	120/208 V	240 V	240 V	480 V	277/480 V	120/240 V	120/240 V	347/600 V

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Distribution System	3PhΔ 3W+G	3Ph Y 4W+G	3PhΔ 3W+G	1Ph 2W+G	3PhΔ 3W+G	3Ph Y 4W+G	1Ph 3W+G	3PhΔ 3W+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
Filtering	-40 dB @ 100 kHz	-40 dB @ 100 kHz	-40 dB @ 100 kHz	-40 dB @ 100 kHz	-40 dB @ 100 kHz	-40 dB @ 100 kHz	-40 dB @ 100 kHz	-40 dB @ 100 kHz	-40 dB @ 100 kHz
Frequency	0 - 600 Hz	0 - 600 Hz	0 - 600 Hz	0 - 600 Hz	0 - 600 Hz	0 - 600 Hz	0 - 600 Hz	0 - 600	0 - 600
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), L-L		1200V	1200V		1800V	2500V	1200V	1500 1500	2500
Voltage Protection Rating (VPR), L-N	700V	700V		1200V		1200V	700V	800 1000	1500
Voltage Protection Rating (VPR), L-PE	700V	700V	1000V	1200V	1800V	1200V	700V	700 1000	1500
Voltage Protection Rating (VPR), N-PE	700V	600V		1200V		1200V	700V	700 1000	1500

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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 Flashing red status LED	1 green LED per line Audible alarm Flashing red status LED
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	457.2	457.2
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	3.31 Min	3.31 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 - 185	-40 - 185
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 Min	0.63 Min
Certification Details	CSA C22.2 No. 269.2 UL® 1283 Edition 7 UL® 1449 Edition 5 Type 2, 20 kA Mode	CSA C22.2 No. 269.2 UL® 1283 Edition 7 UL® 1449 Edition 5 Type 2, 20 kA Mode	CSA C22.2 No. 269.2 UL® 1283 Edition 7 UL® 1449 Edition 5 Type 2, 20 kA Mode	CSA C22.2 No. 269.2 UL® 1283 Edition 7 UL® 1449 Edition 5 Type 2, 20 kA Mode	CSA C22.2 No. 269.2 UL® 1283 Edition 7 UL® 1449 Edition 5 Type 2, 20 kA Mode	CSA C22.2 No. 269.2 UL® 1283 Edition 7 UL® 1449 Edition 5 Type 2, 20 kA Mode	CSA C22.2 No. 269.2 UL® 1283 Edition 7 UL® 1449 Edition 5 Type 2, 20 kA Mode	CSA C22.2 No. 269.2 UL® 1283 Edition 7 UL® 1449 Edition 5 Type 2, 20 kA Mode	CSA C22.2 No. 269.2 UL® 1283 Edition 7 UL® 1449 Edition 5 Type 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)	77.7mm	77.7mm	77.7mm	77.7mm	77.7mm	77.7mm	77.7mm	77.72mm	77.72mm
Height (H)	69.9 mm	69.9 mm	69.9 mm	69.9 mm	69.9 mm	69.9 mm	69.9 mm	69.85	69.85
Width (W)	202 mm	202 mm	202 mm	202 mm	202 mm	202 mm	202 mm	201.93	201.93
Certifications	cUL, UL	UL, cUL	cUL, UL	UL, cUL	cUL, UL	UL, cUL	UL, cUL		

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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