Surge Reduction Filter N-Series, Single Phase – SRF163N





- High-performance protection incorporating Spark Gap and Transient Discriminating (TD) technologies
- High surge rating ideal for exposed critical service entrance applications
- Reduces let-through voltages and rate-of-voltage rise (dv/dt) and helps provide optimum protection for electronic equipment
- Extreme reliability and simplified design with direct connection from input to output
- Comprehensive front panel status and internal diagnostic LEDs



Nominal System Voltage (Un)220 - 240 VACDistribution System1hb 2W+GSystem CompatibilityTN-C TN-Cs TTRated Load Current (IL)63 AFrequency50 - 60 HzShort Circuit Current Rating (SCCR)43 kAHeat Dissipation25 WRate of Voltage Rise (dV/dt)3V/µs MaxFiltering40 dB @ 100 kHzInput Connection10 - 35 mm²Output Connection25 - 120 mm²Protection ModesAll modes protectedTechnologySpark Gap In-line series low pass sine wave filter To technology with thermal disconnect (50 kA 8/20us secondary stage)Enclosure RatingP65MountingWall mountStatus IndicationKal mountStatus IndicationFort panel LED Intrime afreigan of secondary protection LEDs change-over contact (Form C dry), 250 VAC/30 VDC/5 A, 4kV isolation		
Distribution System 1Ph 2W+G System Compatibility TN-C TN-C-S TN-C-S TT Rated Load Current (IL) 63 A Frequency 50 - 60 Hz Short Circuit Current Rating (SCCR) 43 kA Heat Dissipation 25 W Rate of Voltage Rise (dV/dt) 3 V/µs Max Filtering +00 dB @ 100 kHz Input Connection 10 - 35 mm ² Output Connection 25 - 120 mm ³ Protection Modes All modes protected Technology Spark Gap Inite series low pass sine wave filter TO technology with thermal disconnect (50 kA 8/20us secondary stage) Enclosure Material Metal Enclosure Rating P65 Mounting Wall mount Status Indication Front panel LED Internal diagnostic primary and secondary protection LEDs Change-over contact (Form C dry), 250 VAC/30 VDC/5 A, 4kV isolation	Part Number	SRF163N
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Input Connection10 - 35 mm²Output Connection25 - 120 mm²Protection ModesAll modes protectedTechnologySpark Gap In-line series low pass sine wave filter TD technology with thermal disconnect (50 kA 8/20us secondary stage)Enclosure MaterialMetalEnclosure RatingIP 65MountingWall mountStatus IndicationFront panel LED Internal diagnostic primary and secondary protection LEDs Change-over contact (Form C dry), 250 VAC/30 VDC/5 A, 4 kV isolation	Rate of Voltage Rise (dV/dt)	3 V/μs Max
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Mounting Wall mount Status Indication Front panel LED Internal diagnostic primary and secondary protection LEDs Change-over contact (Form C dry), 250 VAC/30 VDC/5 A, 4 kV isolation	Enclosure Material	Metal
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Internal diagnostic primary and secondary protection LEDs Change-over contact (Form C dry), 250 VAC/30 VDC/5 A, 4 kV isolation	Mounting	Wall mount
Depth (D) 200 mm	Status Indication	Internal diagnostic primary and secondary protection LEDs
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Part Number	SRF163N
Height (H)	300 mm
Width (W)	400 mm
Unit Weight	10.3 kg
Complies With	IEC® 61643-11 Class I, Class II ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C ANSI®/IEEE® C62.41.2-2002 Scenario II, Exposure 3, 100 kA 8/20 μs, 10 kA 10/350 μs
Certifications	CE RCM
Standard Packaging Quantity	1 pc
UPC	78285691538
EAN-13	0782856915386

AS1768 Ratings				
Part Number	SRF163N	SRF1125N		
Max Continuous Operating Voltage	310 VAC			
Maximum Surge Current, L-N	130 kA 8/20 μs 50 kA 10/350 μs			
Maximum Surge Current, N-PE	130 kA 8/20 μs 50 kA 10/350 μs			
Voltage Protection Level, L-N	150 V @ 3 kA 8/20 μs 200 V @ 20 kA 8/20 μs	250 V @ 3 kA 8/20 μs 350 V @ 20 kA 8/20 μs		

IEC 61643-11 Ratings				
Part Number	SRF163N	SRF1125N		
Max Continuous Operating Voltage (Uc)	255 VAC			
Temporary Overvoltage, L-N	442 VAC 2 hours			
Temporary Overvoltage, N-PE	1200 VAC 200 ms			
Impulse Current (limp)	10kA 10/350 μs			
Voltage Protection level (Up), L-N @ limp	450 V			
Nominal Discharge Current (In)	20kA 8/20 μs			
Voltage Protection level (Up), L-N @ In	450 V	500 V		
Voltage Drop	0.1 % Max			

IEC 61643-11 Annex A specifies Max Continuous Operating Voltage (Uc) as 255 VAC.

IEC 61643-11 test procedure limits maximum Impulse Current (limp) to 10kA due to internal product safety fusing.

IEC 61643-11 recommends a maximum preferred value for Nominal Discharge Current (In) of 20 kA.

IEC 61643-11 Temporary Overvoltage tests are passed in withstand mode.

Upstream overcurrent protection not exceeding Rated Load Current (IL) shown above must be installed ahead of the surge reduction filter.

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WARNING

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

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