

SURGE REDUCTION FILTER N-SERIES, THREE PHASE, 500 A

CATALOG NUMBER

SRF3500N



CERTIFICATIONS



FEATURES

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

PRODUCT ATTRIBUTES

Nominal System Voltage (Un): 220/380 - 240/415 VAC

Distribution System: 3Ph Y 4W+G

System Compatibility: TN-C;TN-C-S;TN-S;TT

Rated Load Current (IL): 500 A

Frequency: 50 – 60 Hz

Short Circuit Current Rating (SCCR): 43 kA



Heat Dissipation: 215 W

Rate of Voltage Rise (dV/dt): 10 V/ μ s Max

Filtering: -40 dB @ 100 kHz

Input Connection: 10 mm Stud

Output Connection: 10 mm Stud

Technology: Spark Gap;In-line series low pass sine wave filter;TD technology with thermal disconnect (50 kA 8/20us secondary stage)

Protection Modes: All modes protected

Enclosure Material: Metal

Enclosure Rating: IP 32

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

Width: 31 1/2"

Height: 39.370"

Depth: 11.810"

Unit Weight: 168.900 lb

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 μ s, 10 kA 10/350 μ s

ADDITIONAL PRODUCT DETAILS

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

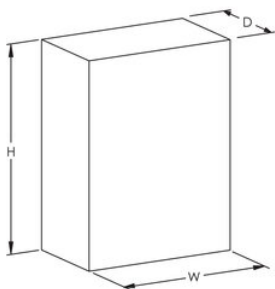
IEC 61643-11 test procedure limits maximum Impulse Current (Iimp) to 10kA due to internal product safety fusing.

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.

DIAGRAMS



AS1768 Ratings					
Part Number	SRF363N	SRF3125N	SRF3250N	SRF3500N	SRF3800N
Max Continuous Operating Voltage	310 VAC				
Maximum Surge Current, L-N	130 kA 8/20 μ s 50 kA 10/350 μ s				
Maximum Surge Current, N-PE	130 kA 8/20 μ s 50 kA 10/350 μ s				
Voltage Protection Level (L-N)	200 V @ 3 kA 8/20 μ s 250 V @ 20 kA 8/20 μ s	300 V @ 3 kA 8/20 μ s 380 V @ 20 kA 8/20 μ s	300 V @ 3 kA 8/20 μ s 500 V @ 20 kA 8/20 μ s	320 V @ 3 kA 8/20 μ s 550 V @ 20 kA 8/20 μ s	320 V @ 3 kA 8/20 μ s 550 V @ 20 kA 8/20 μ s

IEC 61643-11 Ratings					
Part Number	SRF363N	SRF3125N	SRF3250N	SRF3500N	SRF3800N
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 (Iimp)	10kA 10/350 μs				
Voltage Protection level (Up), L-N @ Iimp	450 V		500 V	550 V	
Nominal Discharge Current (In)	20kA 8/20 μs				
Voltage Protection level (Up), L-N @ In	450 V	500 V		650 V	
Voltage Drop	-0.1 % Max				

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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