

Multipurpose Power Line RFI Filter for Emission Control

S Series



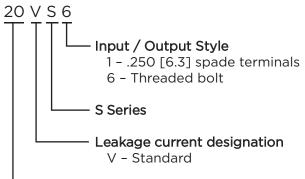
UL Recognized CSA Certified VDE Approved



S Series

- Combines Line to Ground interference rejection filters with additional circuitry to reduce Line to Line noise and transients
- Designed for use when equipment impedance at RF frequencies is high
- Effective for use with switch-mode power supplies
- Effective when used to control emissions in equipment using SCR and T2L circuits for compliance with FCC Part 15, Subpart J and EN55022, Level A, down to 150kHz

Ordering Information



Current Rating
3, 6, 10, 20 or 60A

Available Part Numbers

3VS1	20VS1
6VS1	20VS6
10VS1	60VS6

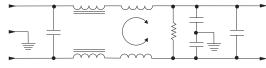
Specifications

Maximum leakage current each Line to Ground:									
	<u>3 & 20A</u>	<u>60A</u>							
@120 VAC 60 Hz:	.4 mA	.75 mA							
@250 VAC 50 Hz:	.7 mA	1.25 mA							
Hipot rating (one minute):									
Line to Ground:		2250 VDC							
Line to Line:		1450 VDC							
Rated Voltage (max):		250 VAC							
Operating Frequency:		50/60 Hz							
Rated Current:		3 to 60A							
Operating Ambient Temperatu	re Range								
(at rated current I _r):	-10°	°C to +40°C							
In an ambient temperature	(T) higher	than +10°C							

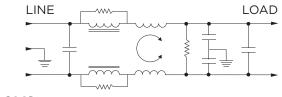
In an ambient temperature (T_a) higher than +40°C the maximum operating current (I₀) is calculated as follows: $I_0 = I_r \sqrt{(85-Ta)/45}$

Electrical Schematics

3, 6, 10VS LINE



20VS



60VS



Dimensions are in inches and millimeters unless otherwise specified. Values in italics are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.

LOAD

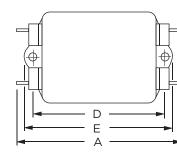


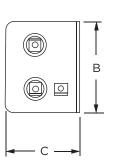
Multipurpose Power Line RFI Filter for Emission Control (continued)

S Series

Case Styles

S1 (3, 6, 10A)



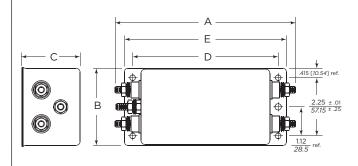


Typical Dimensions:

Line/Load Terminals (4): Ground Terminal (1): Mounting Holes (2):

.250 [6.3] with .07 [1.8] Dia. hole .250 [6.3] with .07 x .16 [1.8 x 3.8] slot .188 [4.78] Dia.

60VS6



Typical Dimensions: Terminals (5): Mounting Holes (5):

1/4-20, Torque 56 lbf-in. [6.32 N-m] max. ± 2 [.22] .218 [5.53] Dia. ± .006 [.152]

Case Dimensions

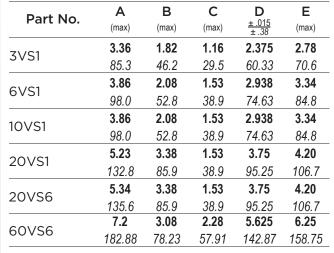
20VS1	
A►	+ ⊢ C→

Typical Dimensions:

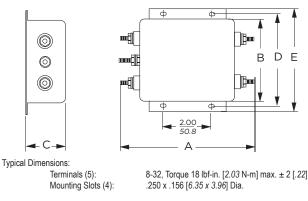
Line/Load Terminals (4): Ground Terminal (1): Mounting Slots (4):

.250 [6.3] with .07 [1.8] Dia. hole .250 [6.3] with .07 x .16 [1.8 x 3.8] slot .250 x .156 [6.35 x 3.96] Dia.

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20VS6



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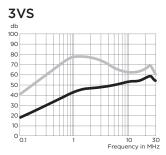
Multipurpose Power Line RFI Filter for Emission Control (continued)

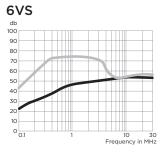
S Series

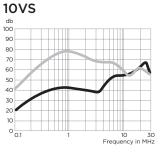
Performance Data

Typical Insertion Loss

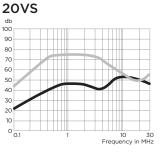
Measured in closed 50 Ohm system



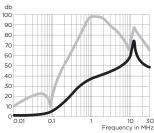




Differential Mode / Symmetrical (Line to Line)







Common Mode / Asymmetrical (L-G) Differential Mode / Symmetrical (L-L)

Minimum Insertion Loss

Measured in closed 50 Ohm system

									Emerentian road / Symmethear (Emere Emer											
	Current Frequency – MHz								Current	Frequency – MHz										
	Rating	.15	.5	1	2	5	10	20	30		Rating	.15	.3	.5	1	2	5	10	20	30
	3A	15	27	35	40	32	44	47	47		3A	35	50	65	65	65	60	50	40	45
	6A	15	27	35	40	32	44	47	47		6A	35	50	65	65	65	60	45	48	48
	10A	15	27	35	40	32	44	47	47		10A	35	50	65	65	65	60	50	40	45
	20A	15	30	38	38	32	43	42	40		20A	35	50	65	65	65	60	45	48	48
	60A	7	27	34	38	45	54	44	40		60A	37	-	77	93	86	70	54	64	54

Common Mode / Asymmetrical (Line to Ground)