STFV Plus Series – Active Tracking® Filtering with Surge Protection

The SolaHD STFV Plus Series combines Active Tracking® filtration for low energy noise and surge protection for high energy transients. It continuously tracks the input AC power line responding instantly into action upon detecting extraneous high frequency noise and high voltage transients caused by everyday events such as turning on machinery, motors, or equipment.

These devices are designed to meet UL 1283 for Electromagnetic Interference Filters. STFV Plus attenuates or reduces the amplitude of high frequency noise to a maximum of 90dB that occurs in a range of 100 kHz to 50 MHz. STFV Plus provides the industry's best IEEE C62.41 Category "A & B" Ringwave protection.

They are built to meet your unique requirements, and are available in hardwired, single phase configuration. They are designed for years of trouble free operation and require little or no operator intervention after installation.

Active Tracking® Filters Plus is one part of a total power quality solution. They can be used alone or in conjunction with other SolaHD products to solve more complex power quality problems.

Applications

- Branch and Control Panels
- Factory Automation Installations
- Point of Use Industrial Service Equipment
- Programmable Logic Controllers
- Dedicated Industrial and Machine Tools
- Telecommunications and IT Equipment

Features

- Non degrading, series filter/TVSS technology for total durability
- UL surge current capacity 25,000 amps
- High impact plastic case, epoxy encapsulated enclosure
- Transient protection in all modes (L-N, L-G, and N-G)
- Single phase applications up to 30 amp
- Operating temperature from -40°C to +60°C
- Hardwired connection
- LED power indication
- Ten year limited warranty









Certifications and Compliances

- Certified
 - CSA C22.2 No. 8
- **N**us UL Recognized Component
 - UL 1283
- RoHS Compliant

Related Products

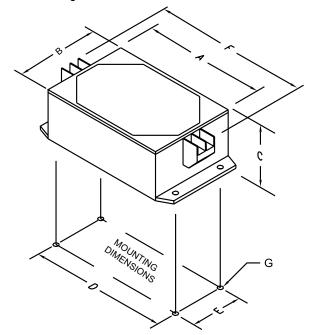
- Power Conditioners
- Uninterruptible Power System
- Power Supplies



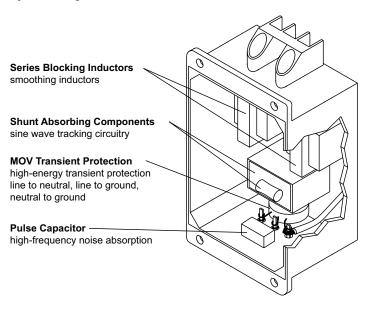
Selection Table

Catalog Number	Amps	Case Dim. in (mm) — A x B x C	Mounting Flange Dim. in (mm) – D x E x F x G	Number Min. Wire Size (AWG Suggested)	Screw Size	Fuse/Circuit Breaker Ampacity		Weight	
						Suggest	Max	lbs (kg)	
Single—Phase Models (120 Vac)									
STFV025-10N	2.5	4.00 x 2.88 x 1.81 (101.6 x 73.2 x 46.0)	4.38 x 2.12 x 5.31 x 0.19 (111.3 x 53.8 x 134.9 x 4.8)	26	#6	2.5	3.125	1.0 (.45)	
STFV050-10N	5.0	4.00 x 2.88 x 1.81 (101.6 x 73.2 x 46.0)	4.38 x 2.12 x 5.31 x 0.19 (111.3 x 53.8 x 134.9 x 4.8)	22	#6	5	6.25	1.3 (.59)	
STFV075-10N	7.5	4.75 x 4.75 x 2.35 (120.7 x 120.7 x 59.7)	5.25 x 3.50 x 6.25 x 0.19 (133.4 x 88.9 x 158.8 x 4.8)	18	#6	7.5	6.25	2.0 (.91)	
STFV150-10N	15.0	6.25 x 4.75 x 2.35 (158.8 x 120.7 x 59.7)	6.75 x 3.50 x 7.75 x 0.19 (171.5 x 88.9 x 196.9 x 4.8)	14	#8	15	18.75	3.5 (1.59)	
STFV300-10N	30.0	7.75 x 4.75 x 2.35 (196.9 x 120.7 x 59.7)	8.25 x 3.50 x 9.00 x 0.19 (209.6 x 88.9 x 228.6 x 4.8)	10	#8	30	37.5	6.0 (2.72)	
Single—Phase Models (240 Vac)									
STFV025-24L	2.5	4.00 x 2.88 x 1.81 (101.6 x 73.2 x 46.0)	4.38 x 2.12 x 5.31 x 0.19 (111.3 x 53.8 x 134.9 x 4.8)	26	#6	2.5	3.125	1.3 (.59)	
STFV050-24L	5.0	4.75 x 4.75 x 2.35 (120.7 x 120.7 x 59.7)	5.25 x 3.50 x 6.25 x 0.19 (133.4 x 88.9 x 158.8 x 4.8)	22	#6	5	6.25	2.0 (.91)	
STFV075-24L	7.5	6.25 x 4.75 x 2.35 (158.8 x 120.7 x 59.7)	6.75 x 3.50 x 7.75 x 0.19 (171.5 x 88.9 x 196.9 x 4.8)	18	#6	7.5	9.375	3.5 (1.59)	
STFV150-24L	15.0	7.75 x 4.75 x 2.35 (196.9 x 120.7 x 59.7)	8.25 x 3.50 x 9.00 x 0.19 (209.6 x 88.9 x 228.6 x 4.8)	14	#8	15	18.75	5.8 (2.63)	
STFV300-24L	30.0	7.75 x 4.75 x 2.35 (196.9 x 120.7 x 59.7)	8.25 x 3.50 x 9.00 x 0.19 (209.6 x 88.9 x 228.6 x 4.8)	10	#8	30	37.5	6.0 (2.72)	

Dimensional Diagram



System Design





STFV Specifications

Description	Value				
	120 Vac Models	0-150 Vrms			
Input Voltage	240 Vac Models	0-275 Vrms			
Line Frequency	50/60 Hz				
Configuration	Single Phase (2 wire + ground)				
Response Time	< 5 ns				
Enclosure	High impact plastic case, 94V-0, Vacuum impregnated magnetics, epoxy encapsulated				
Fusing	External				
Status Indication	Green LED				
Connection/Mounting Type	Series/Panel Mount				
Operating Temperature	-40°C to +60°C at full load Derate Linearly to 60% at +70°C				
Operating Humidity	0% to 95% Non-condensing				
Mean Time Between Failure (MTBF)	Greater than 100,000 hours (Mil. Std. 217F)				
Packaging	High impact plastic case, vacuum impregnated magnetics, epoxy encapsulated				
	Per Phase	25,000 Amps			
Peak Surge Current	Line to Neutral	12,500 Amps			
Capability (8 x 20 µs)	Line to Ground	12,500 Amps			
	Neutral to Ground	12,500 Amps			
	10m sec	5 x Nominal			
Load Surge Current Rating	1 sec	3 x Nominal			
	10 sec	2 x Nominal			
Frequency Response (Forward Reverse)	100 kHz to 50 MHz	90 dB Max			
Transient Reduction *	Typical Category A Ringwave (6 kV, 200A, 100 kHz)	< 10 volts peak			
(IEEE C62.41)	Typical Category B Ringwave (6 kV, 500A, 100 kHz)	< 50 volts peak			
Warranty	10 year limited warranty				

 $^{^{\}star}$ All measurements in volts. IEEE test results with no AC applied.