

# STFE Elite Series - Active Tracking® Filters with Surge Protection



The SolaHD STF Elite DIN Rail Mount Series combines Active Tracking® technology with UL Listed surge protection to protect against the full spectrum of voltage transients and surges. 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 1449 3rd Edition, UL 1283, cUL recognized, and CE. STFE attenuates or reduces the amplitude of normal mode noise to a minimum of 90dB that occurs in a frequency range of 100KHz to 50MHz, and of common mode noise to a minimum of 60dB that occurs in a frequency range of 5MHz to 50MHz. STFE 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 DIN Rail mount, single phase configuration. They are designed for years of trouble free operation and require little or no operator intervention after installation.

#### **Related Products**

- Power Conditioners
- Uninterruptible Power System
- Power Supplies

#### Features

- Series connected DIN Rail mounted filter
- Durable metal mount clip
- UL Listed surge current capacity 45,000 Amps
- Transient protection in all modes (L-N, L-G, and N-G)
- Single Phase applications up to 20 Amp
- Operating Temperature from -40°C to +50°C
- Screw Terminal Connections
  - Reliable and convenient screw clamp connections
  - Accept 10-16 AWG wire
  - Meet IP20 specifications for ingress protection
- LED status indication
- Form C contact for remote monitoring
- UL 1449 3rd Edition, UL 1283, cUL recognized component, CE
- 5 Year Limited Warranty

### **Applications**

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

## **Selection Table**

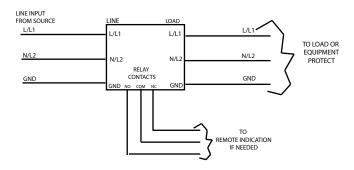
Catalog Number	Input Voltage		
STFE030-10N	120 V	Single Phase 2 Wire + Ground	
STFE050-10N	120 V	Single Phase 2 Wire + Ground	
STFE100-10N	120 V	Single Phase 2 Wire + Ground	
STFE200-10N	120 V	Single Phase 2 Wire + Ground	
STFE030-24L	240 V	Single Phase 2 Wire + Ground	
STFE050-24L	240 V	Single Phase 2 Wire + Ground	
STFE100-24L	240 V	Single Phase 2 Wire + Ground	
STFE200-24L	240 V	Single Phase 2 Wire + Ground	



## **STFE Specifications**

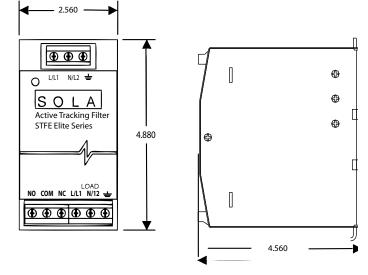
Description	STFEXXX-10N	STFEXXX-24L			
Input Voltage	120 V (0-150 VRMS)	240 V (0-275 VRMS)			
Line Frequency	47 - 63 Hz				
Response Time	< .5 ns normal mode, <5 ns common mode				
Enclosure	Fully Enclosed Metal Housing				
Fusing	Reference Fuse/Circuit Breaker Chart				
Status Indication	Green LED "OK"/Form C Contact/10 Amps @ 250 Vac or 5 Amps @ 100 Vdc				
Connection/Mounting Type	DIN Rail Mount				
Operating Temperature	-40°C to +50°C at full load Derate Linearly to 60% at +70°C				
Weight (Kg)	1.7 lbs (0.7kg)				
Dimensions – in (mm) (H x W x D)	4.88 x 2.56 x 4.56 (124 x 65 x 116)				
Operating Humidity	0% to 95% Non-condensing				
	Per Phase	30,000 Amps			
Peak Surge Current Capability	Line to Neutral	20,000 Amps			
	Line to Ground 10,000 Amps				
	Neutral to Ground	10,000 Amps			
	10m Sec	5 x Nominal			
Load Surge Current Rating	1 sec	3 x Nominal			
	10 sec	2 x Nominal			
Frequency Response					
Normal Mode (Forward–Reverse)	100 kHz to 50 MHz	90 dB Max			
Common Mode (Forward–Reverse)	5 MHz to 50 MHz	60 dB Max			
Transient Reduction (IEEE C62.41)	Typical Category A Ringwave (6 kV, 200A, 100 kHz)	< 60 V Peak			
	Typical Category B Ringwave (6 kV, 500A, 100 kHz)	<100 V Peak UL 1449			
Safety	UL 1449 3rd Edition, UL1283, cUL Recognized Component, CE				

# **Connection Diagram**





### **Dimensional Diagram**



## **Wiring Specifications**

Catalog Number	Amps	Min Wire Size* (AWG Suggested)	Fuse/Circuit Breaker Ampacity				
			Suggest	Max			
Single-Phase Models (120 Vac)							
STFE030-10N	3.0	24	ЗА	3.75A			
STFE050-10N	5.0	22	5A	6.25A			
STFE100-10N	10.0	20	10A	12.5A			
STFE200-10N	20.0	12	20A	25A			
Single-Phase Models (240 Vac)							
STFE030-24L	3.0	24	ЗА	3.75A			
STFE050-24L	5.0	22	5A	6.25A			
STFE100-24L	10.0	20	10A	12.5A			
STFE200-24L	20.0	12	20A	25A			

<sup>\*16</sup> AWG wire or larger may be required by code dependent upon the application.

### **Internal Diagram**

