

“MAXIMIZE PROTECTION”

SOLA HD





STFE ELITE SERIES ACTIVE TRACKING[®] FILTER WITH SURGE PROTECTION

FEATURES

- Series connected DIN Rail mounted filter
- Patented durable metal mounting 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, UL 1283, cUL recognized component, CE
- 5 Year Limited Warranty

VERSATILE APPLICATIONS

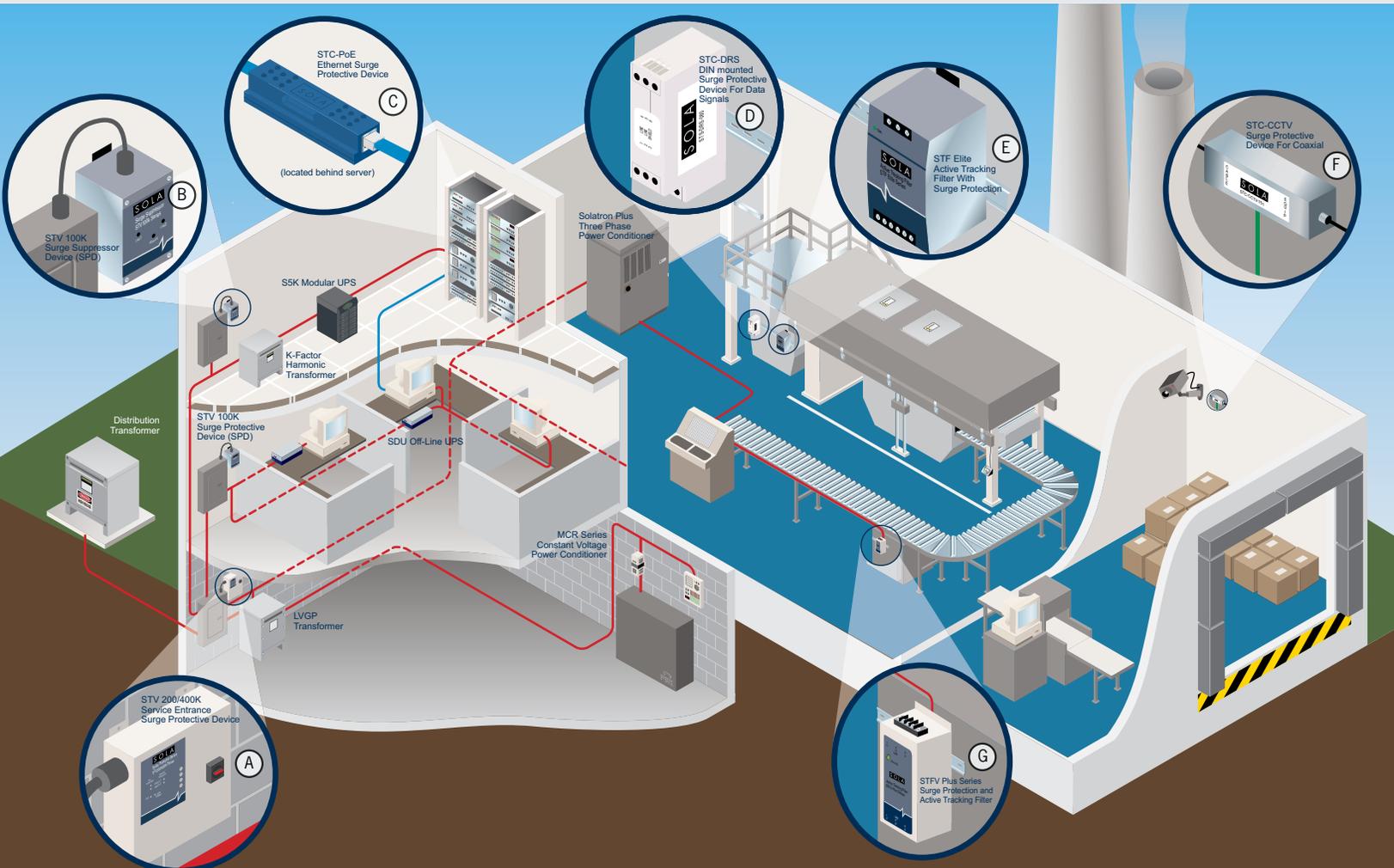
- Control Panels
- Factory Automation Installations
- Point of Use Industrial Equipment
- Programmable Logic Controllers
- Dedicated Industrial and Machine Tools Equipment

ADVANTAGES

The SolaHD STFE Elite DIN Rail Mount Series combines Active Tracking[®] technology with UL Listed surge protection 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. They are designed for years of trouble free operation and require little or no operator intervention after installation.

HOW DO YOU PROTECT YOUR POWER?

Employing an entire facility protection strategy will safeguard the electrical system against most transients. Multi-stage protection involves clamping the initial high-energy surge, filtering any remaining noise or transients to the protected sensitive equipment and finally, protecting the data/signal lines entering or leaving the control panel or the factory floor. This coordination of devices provides the lowest possible let through voltage to the equipment.

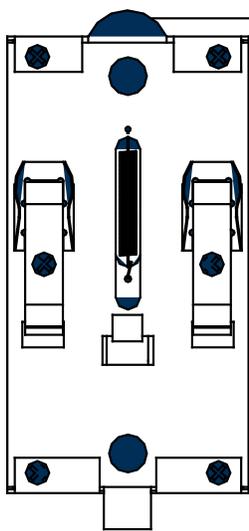


- A STV200/400K:** Surge protective devices capable of handling the high-impulse, potentially damaging transients commonly found at the service entrance, distribution panels, and placement in the most severe exposure locations.
- B STV100K:** Surge protective devices designed to protect sensitive equipment and microprocessor-based systems from transients on distribution and sub-distribution panels, or any medium exposure locations.
- C STC-POE:** Surge protective devices designed to work on Power-over-Ethernet Category 5 PoE transmission lines as well as Category 6 applications.
- D STC-DRS:** DIN Rail mountable, single pair, low voltage data, surge protective devices. The hybrid design of these data/signal line suppressors allows them to respond quickly.
- E STFE Elite:** DIN Rail Mountable high-frequency noise filter/surge suppressors that offers the original active tracking technology with UL approved transient protection to guard against commonly occurring, but very damaging transients, plus provides excellent noise reduction.
- F STC-CCTV:** Surge protective devices tailored to protect CCTV, data, audio and cable applications.
- G STFV:** High-frequency noise filter/surge suppressors that offers the original active tracking technology with transient protection to guard against commonly high voltage transients, plus provides excellent noise reduction.

STFE ELITE SERIES



Internal Diagram



Rear View

DIN Connector
Strong all metal for horizontal or vertical mounting

MOV Array
provides high-energy all mode protection

Series Blocking Inductor
blocks voltage, smooths current

Silicone Avalanche Diodes
fast responding surge suppressor

Pulse Capacitor
high-frequency noise absorption

Screw Terminal Connections

Green LED Unit Status Indicator

Form C Relay Contacts
DC OK signal

Internal View of Components

Selection Table

Catalog Number	Input Voltage		Amps	Min Wire Size* (AWG Suggested)	Fuse/Circuit Breaker Ampacity	
					Suggest	Max
STFE030-10N	120 V	Single Phase 2 Wire + Ground	3.0	24	3A	3.75A
STFE050-10N	120 V	Single Phase 2 Wire + Ground	5.0	22	5A	6.25A
STFE100-10N	120 V	Single Phase 2 Wire + Ground	10.0	20	10A	12.5A
STFE200-10N	120 V	Single Phase 2 Wire + Ground	20.0	12	20A	25A
STFE030-24L	240 V	Single Phase 2 Wire + Ground	3.0	24	3A	3.75A
STFE050-24L	240 V	Single Phase 2 Wire + Ground	5.0	22	5A	6.25A
STFE100-24L	240 V	Single Phase 2 Wire + Ground	10.0	20	10A	12.5A
STFE200-24L	240 V	Single Phase 2 Wire + Ground	20.0	12	20A	25A

* 16 AWG wire or larger may be required by code dependent upon application.

For a full listing of SolaHD's Filters and Surge Suppressors, visit our website at www.solahd.com or consult our full line catalog.

Technical Specifications

DESCRIPTION	CATALOG NUMBER			
	STFEXXX-10N		STFEXXX-24L	
	INPUT			
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			
	PHYSICAL			
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			
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)			
	ENVIRONMENT			
Operating Temperature	-40°C to +50°C at full load Derate Linearly to 60% at +70°C			
Operating Humidity	0% to 95% Non-condensing			
	SURGE PROTECTION			
Peak Surge Current Capability	Per Phase	30,000 Amps		
	Line to Neutral	20,000 Amps		
	Line to Ground	10,000 Amps		
	Neutral to Ground	10,000 Amps		
Load Surge Current Rating	10m Sec	5 x Nominal		
	1 sec	3 x Nominal		
	10 sec	2 x Nominal		
	ACTIVE TRACKING PROTECTION			
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		
	UL 1449 (2nd EDITION) SUPPRESSOR CLASSIFICATION			
	120 V, 3-5A Models	120 V, 10-20A Models	240 V, 3-5A Models	240 V, 10-20A Models
L-N	330 V	330 V	N/A	N/A
L-L	N/A	N/A	600 V	600 V
L-G	500 V	400 V	1000 V	900 V
N-G	400 V	400 V	N/A	N/A
	GENERAL			
Safety	UL 1449, UL1283, cUL Recognized Component, CE			
Warranty	5 Year Limited Warranty			

SolaHD is our line of premium power conversion and power quality brands. Our proven technologies power and protect throughout your facility for improved operational efficiency and productivity.

Emerson Industrial Automation brings integrated manufacturing solutions to diverse industries worldwide. Our comprehensive product line, extensive experience, world-class engineering and global presence enable us to implement solutions that give our customers the competitive edge.

For over 150 years, our electrical product brands have been providing a rich tradition of long-term, practical, high quality solutions with applications ranging from the construction and safe operation of petrochemical and process plants to providing quality power that precisely controls automotive robotic production.

Engineers, distributors, contractors, electricians and site maintenance professionals around the world trust Emerson Industrial Automation brands to make electrical installations safer, more productive and more reliable.

EGS is organized into three focused businesses that provide distributors and end-users expert knowledge and excellent service.

Electrical Construction Materials

This group manufactures a broad range of electrical products including conduit and cable fittings, plugs and receptacles, enclosures and controls, conduit bodies, and industrial lighting. Whether the application is hazardous location, industrial, or commercial, the ECM group has the products to meet your needs.

Power Quality Solutions

This group offers the broadest power quality line including UPS, power conditioners, voltage regulators, shielded transformers, surge suppression devices and power supplies.

Heating Cable Systems

This group offers a broad range of electrical heating cable products for residential, commercial, and industrial applications.

Electrical Construction Materials

 **Appleton**[®]

OZGEDNEY

A.T.X.[®]

Power Quality Solutions

SOLAHD

Heating Cable Systems

EASYHEAT[®]

NELSON

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