

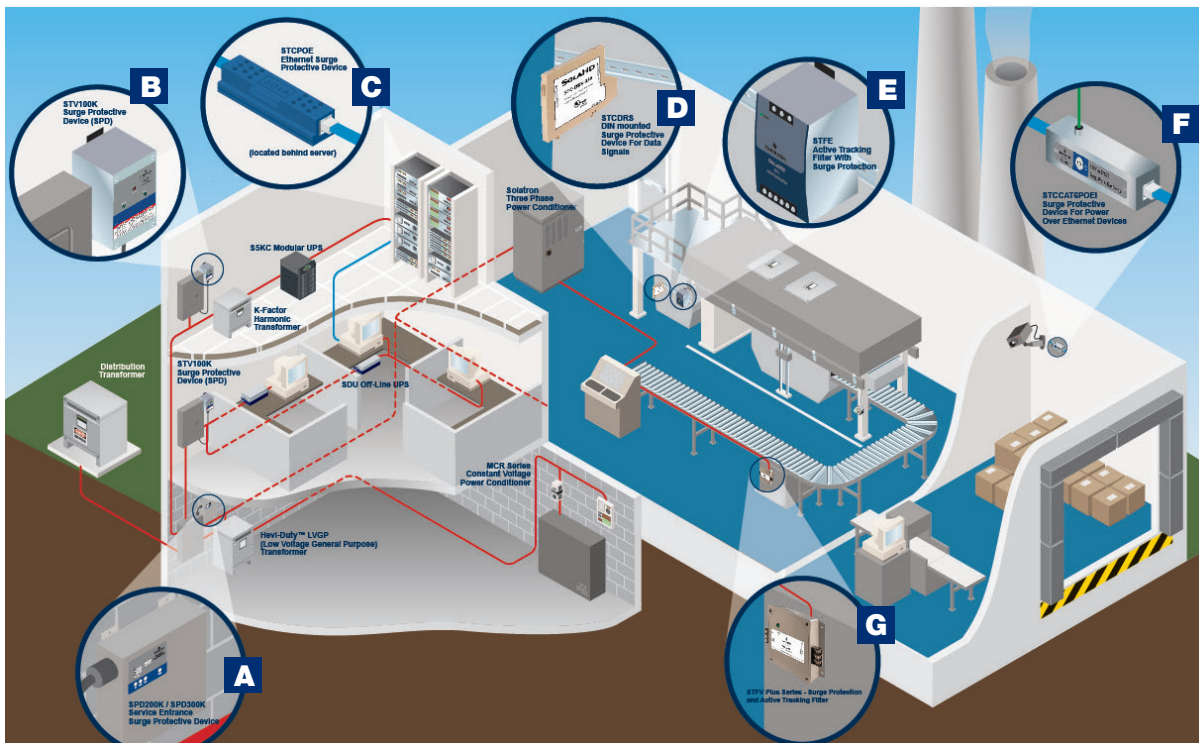


Din Rail Mounted SolaHD Tracking Filters with Surge Protection

SolaHD™ STFE Elite DIN Rail Mount Series
Product Guide



Facility Wide Protection Strategy



A SPD200K AND SPD300K

Surge protective devices designed for severe exposure locations. They are capable of handling the high-impulse, potentially damaging transients commonly found at the service entrance or distribution panels.

B STV100K

Surge protective devices designed for medium exposure locations. They are capable of protecting sensitive equipment and microprocessor-based systems from transients on distribution and sub-distribution panels.

C STCPOE

Surge protective devices designed to work on Category 5 Power-over-Ethernet (POE) transmission lines as well as Category 6 applications.

D STCDRS

DIN Rail mountable, single pair, surge protective device featuring three stage hybrid technology designed to mollify low-voltage data line surges.

E STFE

DIN Rail mounted device that combines sinewave tracking technology with surge protection to attenuate or reduce the amplitude of normal mode noise to a minimum.

F STCCAT6POEI

Premium surge protective device tailored to protect Power Over Ethernet devices like security cameras.

G STV Plus

DIN Rail mounted device that combines sinewave tracking technology with surge protection to protect against the full spectrum of voltage transients and surges. Designed to continuously track AC power input and respond to high-voltage transients and high-frequency noise.

STFE Elite Series - SolaHD Tracking

The SolaHD™ STFE Elite DIN Rail Mount Series by Emerson™, combines SolaHD 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.

Applications


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



Standard Features

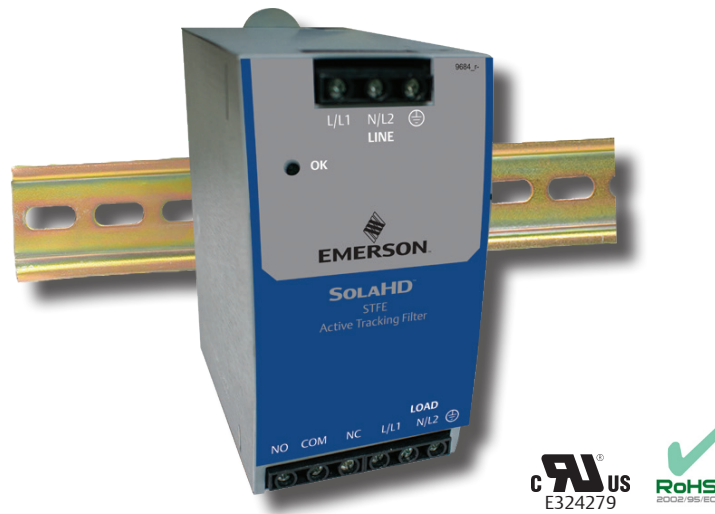
- Series connected DIN Rail mounted filter
- Durable metal mount clip
- Transient protection in all modes (L-N, L-G, and N-G)
- Single phase applications up to 20 Amps
- Operating temperature from -40 °C to +50 °C (-40 °F to +122 °F)
- Screw terminal connections
 - Reliable and convenient screw clamp connections
 - Accept 10-16 AWG wire
 - Meet IP20 specifications for ingress protection
- LED status indication
- Form C contact for remote monitoring
- Five year limited warranty

Certifications and Compliances

-  UL Recognized Component
 - UL 1449, Type 4 locations
 - UL 1283
 - CSA C22.2 No. 8
- ABS Type Approval (Pending)
- CE Compliance (Pending)
- RoHS Compliant

STFE Elite Series

The SolaHD™ STFE Elite DIN Rail Mount Series is 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.



Selection Table

Catalog Number	Input Voltage	
STFE03010N	120 V	Single Phase, 2 Wire + Ground
STFE05010N	120 V	Single Phase, 2 Wire + Ground
STFE10010N	120 V	Single Phase, 2 Wire + Ground
STFE20010N	120 V	Single Phase, 2 Wire + Ground
STFE03024L	240 V	Single Phase, 2 Wire + Ground
STFE05024L	240 V	Single Phase, 2 Wire + Ground
STFE10024L	240 V	Single Phase, 2 Wire + Ground
STFE20024L	240 V	Single Phase, 2 Wire + Ground

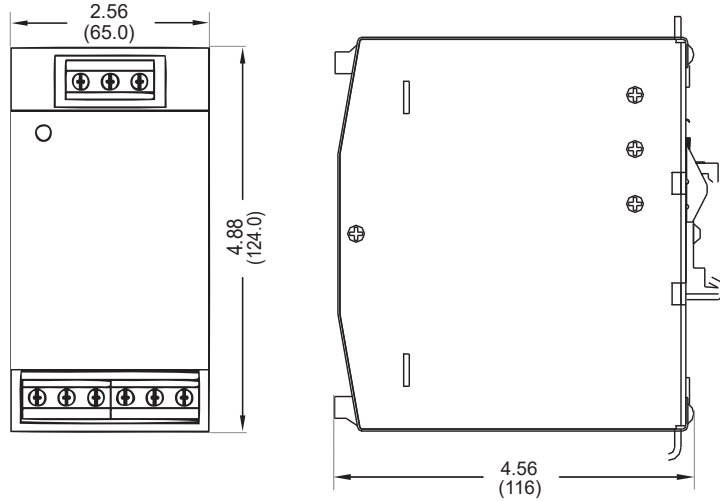
Wide Industrial Control Applications

Specifications

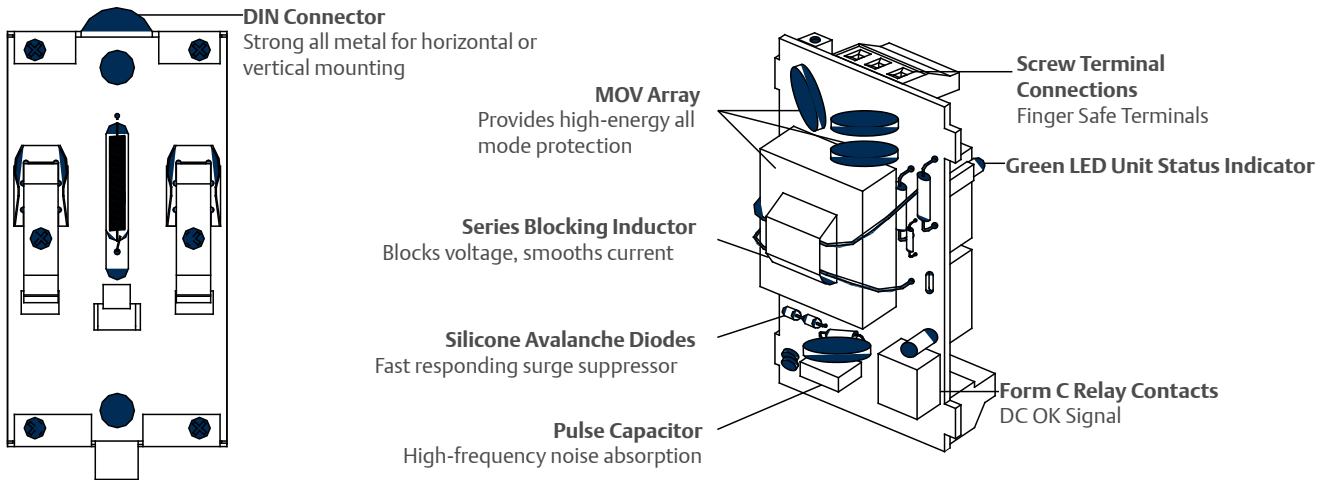
Catalog Number	STFEXXX10N	STFEXXX24L		
Input Voltage	120 V (0-150 Vrms)	240 V (0-275 Vrms)		
Line Frequency	47-63 Hz			
Response Time	< .5 nanoseconds normal mode, <5 nanoseconds common mode			
Physical				
Enclosure	Fully Enclosed Metal Housing			
Fusing	Reference Fuse/Circuit Breaker Chart			
Status Indication	Green LED "OK"/Form C Contact/ 10 Amps @ 250 Vac or 5 Amps @ 100 Vdc			
Connection/Mounting Type	DIN Rail Mount			
Weight lbs (kg)	1.7 (0.70)			
Dimensions - in (mm) H x W x D	4.88 x 2.56 x 4.56 (124.0 x 65.0 x 116.0)			
Environment				
Operating Temperature	-40 °C to +50 °C (-40 °F to +122 °F) at full load Derate Linearly to 60% at +70 °C (+158 °F)			
Operating Humidity	0% to 95% Non-condensing			
Surge Protection				
Peak Surge Current Capability	Per Phase	19,500 Amps		
	Line to Neutral	13,000 Amps		
	Line to Ground	6,500 Amps		
	Neutral to Ground	6,500 Amps		
Load Surge Current Rating	10 milliseconds	5 x Nominal		
	1 second	3 x Nominal		
	10 seconds	2 x Nominal		
SolaHD 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 (Latest 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	400 V	400 V	N/A	N/A
L-L	N/A	N/A	800 V	800 V
L-G	600 V	500 V	1200 V	1000 V
N-G	600 V	500 V	N/A	N/A
General				
Safety	UL 1449, UL1283, cUL Recognized Component, CE (Pending), ABS Type Approval (Pending)			
Warranty	5 Year Limited Warranty			

Illustrated Features

Dimensional Diagram - in. (mm)



Internal Diagram



Rear View

Internal View of Components

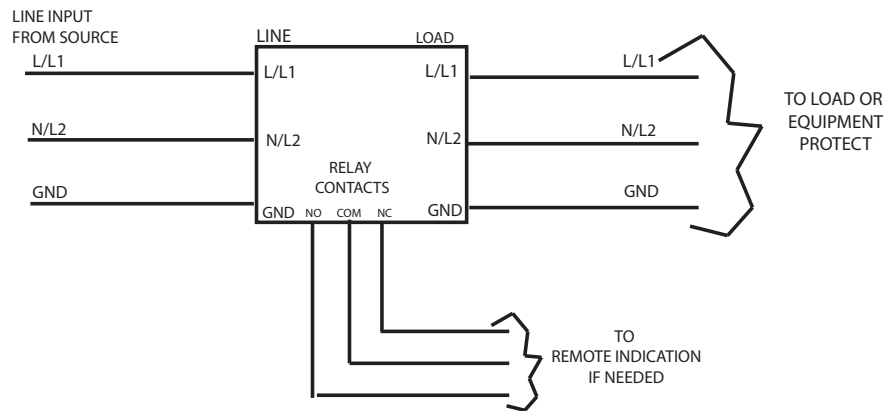
Wiring Information

Wiring Specifications

Catalog Number	Amps	Min Wire Size ① (AWG Suggested)	Fuse/Circuit Breaker Ampacity	
			Suggest	Max
Single Phase Models (120 Vac)				
STFE03010N	3.0	24	3 A	3.75 A
STFE05010N	5.0	22	5 A	6.25 A
STFE10010N	10.0	20	10 A	12.5 A
STFE20010N	20.0	12	20 A	25 A
Single Phase Models (240 Vac)				
STFE03024L	3.0	24	3 A	3.75 A
STFE05024L	5.0	22	5 A	6.25 A
STFE10024L	10.0	20	10 A	12.5 A
STFE20024L	20.0	12	20 A	25 A

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

Connection Diagram



Effective solutions in critical equipment protection within harsh industrial environments



SolaHD™ is the cornerstone brands of Emerson's Electrical Apparatus and Lighting business; trusted worldwide to power your process control applications in the most demanding applications worldwide.

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