

The STV 100K Series - Surge Protective Devices

SolaHD's STV 100K hardwired surge protective devices are designed for installation at the service entrance, branch panel or a dedicated sensitive electronic load. These units feature all mode protection, LED and audible alarm status indication, sinewave tracking and form "C" dry contacts. The STV 100K series also contains the highest levels of safety built into the product including thermal fusing and a fault current fusing level of 65 kAIC.



Applications

- Distribution Panels (<1200 A)
- Branch, Lighting and Control Panels
- Factory Automation Installations
- Dedicated Industrial Equipment

Features

- 100,000 amp peak current rating provides all mode protection against severe transients
- Low clamping levels for more effective protection
- 65 kAIC fault current fusing level provides safety and NEC conformance
- LED status and audible alarms
- Compact, rugged metal

Certifications and Compliances

-  Listed
 - UL 1449, 3rd Edition, type 2 locations
 -  Listed/NEMA type 12 enclosure
 - CSA C22.2 No. 8, CSA TI I-IIB, TI A-24
- RoHS Compliant

Related Products

- Power Conditioners
- UPS
- Drive Isolation and K-Factor Transformers



Selection Table

Catalog Number	Input Voltage	
	STV 100K-10S	120/240 V
STV 100K-10Y	208Y/120 V	Three Phase Wye 4 wire + Ground
STV 100K-10N	120 V	Single Phase 2 wire + Ground
STV 100K-24L	240 V	Single Phase 2 wire + Ground
STV 100K-23Y	230/400 V	Three Phase Wye 4 wire + Ground
STV 100K-27Y	480Y/277 V	Three Phase Wye 4 wire + Ground
STV 100K-24D	240 V	Three Phase Δ 3 wire + Ground
STV 100K-48D	480 V	Three Phase Δ 3 wire + Ground
STV 100K-10D4	240/120 CT	Three Phase Δ 4 wire + Ground
STV 100K-24D4	480/240 CT	Three Phase Δ 4 wire + Ground

Dimensional Diagram - in. (mm)

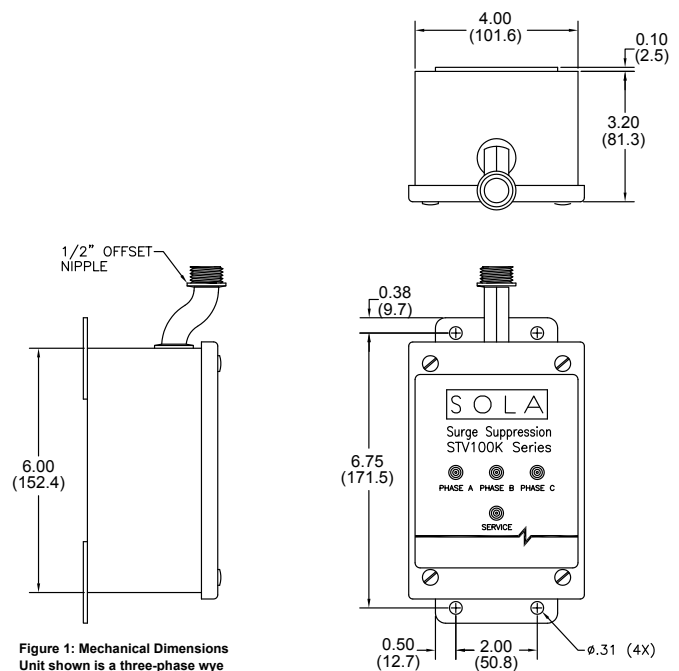


Figure 1: Mechanical Dimensions
Unit shown is a three-phase wye

STV 100K Specifications

Description	Catalog Number									
	STV 100K-10S	STV 100K-10N	STV 100K-24L	STV 100K-10Y	STV 100K-23Y	STV 100K-27Y	STV 100K-24D	STV 100K-48D	STV 100K-10D4	STV 100K-24D4
Nominal Input Vac	120/240 V	120 V	240 V	120/208 V	230/400 V	277/480 V	240 V	480 V	120/240 V	240/480 V
System Configuration	Single Phase 3 wire + Ground	Single Phase 2 wire + Ground		Three Phase Wye 4 wire + Ground			Three Phase Delta 3 wire + Ground		Three Phase Delta High Leg 4 wire + Ground	
Maximum Continuous Operating Voltage (MCOV)	125% of the nominal level for 120 V; 115% for all other voltages									
Line Frequency	47-63 Hz									
Response Time	< 0.5 nsec									
A/C Rating	65 kAIC									
Fusing	Thermal and Fault Current									
Nominal Discharge Current Rating	3 kA									
Modes of Protection	All Mode: L - N, L - L, L - G, N - G									
Operating Temperature	-40°C to +60°C									
Operating Humidity	0% to 95% Non-condensing									
Noise Attenuation	40 dB Max									
Dimensions – W x D x H – in. (mm)	6.00 in. x 4.00 in. x 3.20 in. (152.4 mm x 101.6 mm x 81.3 mm)									
Net Weight – lbs (kg)	8.0 lbs (3.63 kg) max.									
Enclosure	Metal, UL Listed/NEMA Type 12 Enclosure									
Connection/ Mounting Type	Parallel/Flange									
Status Indication	Red and green LED status indicators, audible alarm, Form C contacts									
Warranty	10 year limited warranty									
UL 1449 3rd Edition, Type 2 Voltage Protection Ratings (VPRs) Vpeak										
Line to Neutral	600 V	600 V	N/A	600 V	1200 V	1200 V	N/A	N/A	600 V	1200 V
Line to Line	1000 V	N/A	1000 V	1000 V	2000 V	2000 V	2000 V	2000 V	1000 V	2000 V
Line to Ground	700 V	700 V	1200 V	700 V	1200 V	1200 V	1200 V	2000 V	700 V	1200 V
Neutral to Ground	700 V	700 V	N/A	700 V	1200 V	1200 V	N/A	N/A	700 V	1200 V
High Leg to Neutral	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1200 V	2000 V
High Leg to Line	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1500 V	2500 V
High Leg to Ground	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1200 V	2000 V
Peak Surge Current Capability										
Per Phase	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA
Line to Neutral	50 kA	50 kA	N/A	50 kA	50 kA	50 kA	N/A	N/A	50 kA	50 kA
Line to Line	50 kA	N/A	50 kA	50 kA	50 kA	50 kA	50 kA	50 kA	50 kA	50 kA
Line to Ground	50 kA	50 kA	50 kA	50 kA	50 kA	50 kA	50 kA	50 kA	50 kA	50 kA
Neutral to Ground	50 kA	50 kA	N/A	50 kA	50 kA	50 kA	N/A	N/A	50 kA	50 kA