

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

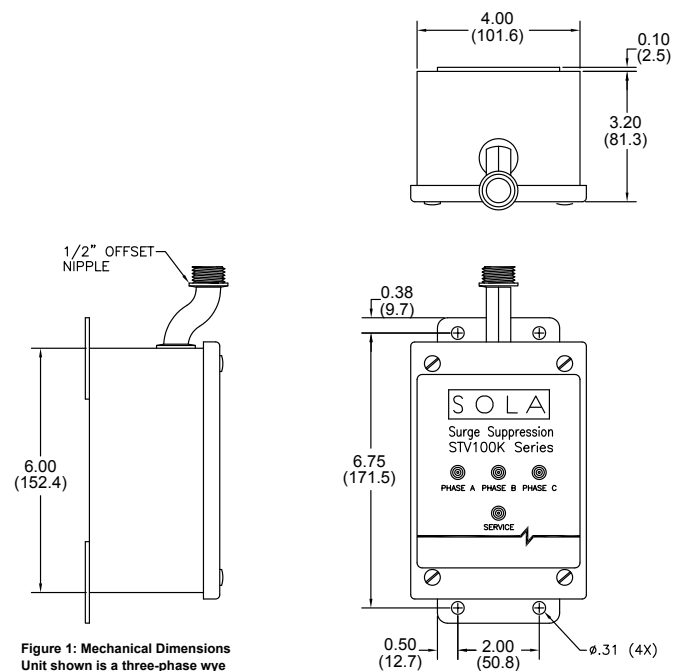
- Power Conditioners
- UPS
- Drive Isolation and K-Factor Transformers



Selection Table

| Catalog Number | Input Voltage | |
|----------------------|---------------|---------------------------------|
| STV 100K-10S | 120/240 V | Single Phase 3 wire + Ground |
| 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)



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 3 rd 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 |

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