STV100K Specifications

Description	Catalog Number									
	STV100K-10S	STV100K-10N	STV100K-24L	STV100K-10Y	STV100K-23Y	STV100K-27Y	STV100K-24D	STV100K-48D	STV100K-10D4	STV100K-24D4
Nominal Input Vac	120/240 V	120 V	240 V	208Y/120 V	400Y/230 V	480Y/277 V	240 V	480 V	240 D/120 V	480 D/240 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									
Short Circuit Current Rating (SCCR)	100kA									
Fusing	Thermal and Fault Current									
Nominal Discharge Current Rating	20 kA									
Modes of Protection	All Mode: L - N, L - L, L - G, N - G									
Operating Temperature	-40℃ to +60℃									
Operating Humidity	0% to 95% Non-condensing									
Noise Attenuation	40 dB max.									
Dimensions - W x D x H - in. (mm)	6.00 x 4.00 x 3.20 (152.4 x 101.6 x 81.3)									
Net Weight - lbs (kg)	8.0 (3.63) 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, 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	1800 V	1800 V	1000 V	2000 V	1000 V	1800 V
Line to Ground	700 V	700 V	1200 V	700 V	1200 V	1200 V	1200 V	1800 V	700 V	1200 V
Neutral to Ground	600 V	600 V	N/A	600 V	1200 V	1000 V	N/A	N/A	600 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	1800 V
High Leg to Line	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1200 V	1800 V
High Leg to Ground	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1800 V	3000 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

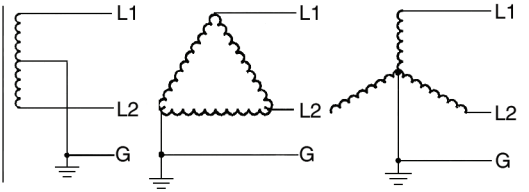
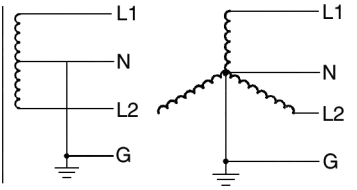
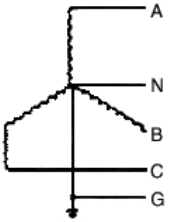
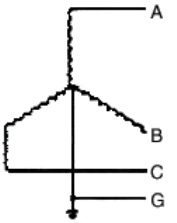
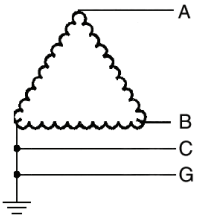
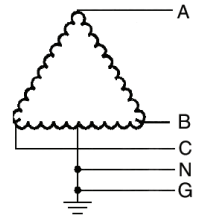
Table 1: Voltage Ratings & Power Source Configurations	
Model: STV100K-10N Nominal Voltage: 120 V	Single-phase, 2W + G
Model: STV100K-24L Nominal Voltage: 240 V	Single-phase, 2W + G 
Model: STV100K-10S Nominal Voltage: 120/208–240 V	Single-phase, 3W + G 
Model: STV100K-10Y Nominal Voltage: 120/208 V Model: STV100K-23Y Nominal Voltage: 230/400 V Model: STV100K-27Y Nominal Voltage: 277/480 V	Three-phase wye, 4W + G 
Model: STV100K-10X* Nominal Voltage: 120/208 V Model: STV100K-23X* Nominal Voltage: 230/400 V Model: STV100K-27X* Nominal Voltage: 277/480 V *Not UL Listed. Contact SolaHD Technical Support for details.	Three-phase wye, 3W + G 

Table 1: Voltage Ratings & Power Source Configurations	
Model: STV100K-20D * Nominal Voltage: 208 V Model: STV100K-24D Nominal Voltage: 240 V Model: STV 100K-48D Nominal Voltage: 480 V *Not UL Listed. Contact SolaHD Technical Support for details.	Three-phase delta, 3W + G 
Model: STV 100K-10D4 Nominal Voltage: 120/240 V Model: STV 100K-24D4 Nominal Voltage: 240/480 V	Three-phase delta high leg, 4W + G 

2.0 Troubleshooting

If any of the diagnostic indicators indicate a problem (e.g. red “Service” LED on and/or green LEDs off), check all connections and voltages to the unit. If all connections are made and reliable, and proper voltages are supplied to the unit, contact SolaHD Technical Support at (800) 377-4384/(847) 268-6651 or by e-mail at solahd.technicalservices@emerson.com.

3.0 Registration & Warranty

3.1 Product Registration

To register your product for updates and information on service and support, visit our Web site at: http://www.solahd.com/support/registration.htm.

3.2 Warranty Information

Please see the “Terms & Conditions of Sale”.

4.0 Specifications

Table 2: Technical Specifications					
Parameters	Model				
	STV100K-10N	STV100K-24L	STV100K-10S	STV100K-10Y	STV100K-23Y
Nominal Input Voltage	120 V	240 V	120/208–240 V	120/208 V	230/400 V
System Configuration	1-phase 2W + G	1-phase 2W + G	1-phase 3W + G	3-phase wye 4W + G	3-phase wye 4W + G
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 ns				
A/C Rating	65 kAIC				
Fusing	Thermal and fault current				
Nominal Discharge Current Rating	3 kA				
Modes of Protection	All Modes: L–N, L–L, L–G, N–G				
Operating Temperature	-40°C to +60°C (-40°F to +140°F)				
Operating Humidity	0 to 95% non-condensing				
Noise Attenuation	40 dBA maximum				
Dimensions, W x D x H	6.00 in. x 4.00 in. x 3.20 in. (152.4 mm x 101.6 mm x 81.28 mm)				
Net Weight	8.0 lb. (3.63 kg)				
Enclosure	Metal, NEMA 12 enclosure				
Connection/Mounting Type	Parallel/Flange				
Status Indication	Red and green LED status indicators, audible alarm, Form C contacts				
Safety Approvals	UL 1449 3rd edition, cULus Listed				
Warranty	10 years				
UL 1449 3rd Edition, Type 2 Voltage Protection Ratings					
Line to Neutral	600 V	N/A	600 V	600 V	1200 V
Line to Line	N/A	1000 V	1000 V	1000 V	2000 V
Line to Ground	700 V	1200 V	700 V	700 V	1200 V
Neutral to Ground	700 V	N/A	700 V	700 V	1200 V
High Leg to Neutral	N/A	N/A	N/A	N/A	N/A
High Leg to Line	N/A	N/A	N/A	N/A	N/A
High Leg to Ground	N/A	N/A	N/A	N/A	N/A
Peak Surge Current Capability					
Per Phase	100 kA	100 kA	100 kA	100 kA	100 kA
Line to Neutral	50 kA	N/A	50 kA	50 kA	50 kA
Line to Line	N/A	50 kA	50 kA	50 kA	50 kA
Line to Ground	50 kA	50 kA	50 kA	50 kA	50 kA
Neutral to Ground	50 kA	N/A	50 kA	50 kA	50 kA

Table 2: Technical Specifications					
Parameters	Model				
	STV100K-27Y	STV100K-24D	STV100K-48D	STV100K-10D4	STV100K-24D4
Nominal Input Voltage	277/480 V	240 V	480 V	120/240 V	240/480 V
System Configuration	3-phase wye 4W + G	3-phase delta 3W + G	3-phase delta 3W + G	3-phase delta high leg 4W + G	3-phase delta high leg 4W + G
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 ns				
A/C Rating	65 kAIC				
Fusing	Thermal and fault current				
Nominal Discharge Current Rating	3 kA				
Modes of Protection	All Modes: 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 dBA maximum				
Dimensions, W x D x H	6.00 in. x 4.00 in. x 3.20 in. (152.4 mm x 101.6 mm x 81.28 mm)				
Net Weight	8.0 lb. (3.63 kg)				
Enclosure	Metal, NEMA 12 enclosure				
Connection/Mounting Type	Parallel/Flange				
Status Indication	Red and green LED status indicators, audible alarm, Form C contacts				
Safety Approvals	UL 1449 3rd edition, cULus Listed				
Warranty	10 years				
UL 1449 3rd Edition, Type 2 Voltage Protection Ratings					
Line to Neutral	1200 V	N/A	N/A	600 V	1200 V
Line to Line	2000 V	2000 V	2000 V	1000 V	2000 V
Line to Ground	1200 V	1200 V	2000 V	700 V	1200 V
Neutral to Ground	1200 V	N/A	N/A	700 V	1200 V
High Leg to Neutral	N/A	N/A	N/A	1200 V	2000 V
High Leg to Line	N/A	N/A	N/A	1500 V	2500 V
High Leg to Ground	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
Line to Neutral	50 kA	N/A	N/A	50 kA	50 kA
Line to Line	50 kA	50 kA	50 kA	50 kA	50 kA
Line to Ground	50 kA	50 kA	50 kA	50 kA	50 kA
Neutral to Ground	50 kA	N/A	N/A	50 kA	50 kA

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