

SVL Essential DIN Rail Series

SVL Series power supplies are perfect for high volume, controlled environment applications where essential features are the only requirement. When space inside an enclosure is at a premium, their small footprint makes these power supplies an excellent alternative to embedded open frame switchers. The DIN rail mounting capability provides quicker and easier installation while allowing for design flexibility. These power supplies range from 15 to 480 Watts in 5, 12, 24 and 48 Volt combinations.

Applications

- Test and Measure Equipment
- Scanners
- Instrumentation
- Printers Peripheral
- ATM Machines
- Semiconductor Fabrication Equipment
- Vending Machines

Features

- Universal Input
- Protection
 - Short Circuit
 - Over Voltage
 - Overload
 - Over Temperature
- Convection cooling
- DC OK LED
- DC OK Relay for >120 Watts models
- Two year warranty



Certifications and Compliances

All Models

- Listed, Ind. Control Equipment, E61379
 - UL 508, CSA C22.2 No. 107.1
- Recognized Component, ITE, E137632
 - UL 60950-1/CSA C22.2 No. 60950-1, 2nd Edition
- - IEC/EN60950-1, 2nd Edition
 - Model SVL 1-24-100, SVL 3-5-100, SVL 4-12-100, SVL 2-24-100 were evaluated for NEC Class 2 outputs.
- RoHS Compliant

SVL Specifications <120W

Description	Catalog Number				
	SVL 3-5-100	SVL 1-24-100	SVL 6-5-100		
Input					
Input Voltage Range	85-264 Vac				
– AC Range	100-240 Vac				
– DC Range ¹	120-375 Vdc				
– Frequency	50/60 Hz				
Nominal Current	0.5 A @ 115 Vac 0.3 A @ 230 Vac	0.8 A @ 115 Vac 0.4 A @ 230 Vac	0.9 A @ 115 Vac 0.5 A @ 230 Vac		
– Inrush Current max,	35 A @ 115 Vac 65 A @ 230 Vac	35 A @ 115 Vac 60 A @ 230 Vac			
Efficiency	79% typ	88% typ	80% typ		
Leakage Current	<1 mA @ 240 Vac				
Output					
Nominal Voltage	5 V	24 V	5 V		
– Tolerance	+/-2%				
Voltage Adjustable Range	5-5.5 V	24-28 V	5-5.5 V		
– Ripple (25 °C)	<75 mVp-p				
PARD (25 °C)	<75 mVp-p				
Nominal Current	3 A	1.25 A	6 A		
Max. Power	15 W	30 W			
Holdup Time at full load (25 °C)	20 ms typ. @ 115 Vac 100 ms typ. @ 230 Vac				
Rise Time at full load (25 °C)	<100 ms				
Start Up at full load (25 °C)	<3000 ms @ 115 Vac, <1500 ms @ 230 Vac				
Regulation	<0.5% Line and <1% Load				
Environmental Data					
Operating Temperature	-20 °C to +70 °C				
Relative Humidity	5 to 95% RH Non-condensing				
Storage temp	-40 °C to +85 °C				
Power De-rating²	>55 °C de-rate power by 3.33% / °C <-10 °C de-rate power by 2% / °C de-rate to 80% load for operation at -20°C				
Shock	IEC60068-2-27: half sine wave 10 G, single axis for a duration of 11 ms operational and 50 G three axes for duration of 11 ms each non-operational				
Vibration	IEC60068-2-6: sine wave; 10 Hz to 500 Hz at 2 g, 0.35 mm displacement, three axes for 60 min each operational and 5 Hz to 500 Hz at 2.09 grms, three axes for 20 min each non-operational				
Protections					
Overvoltage Protection	6.3-7.4 V, Latching	30-34.8 V, Latching	6.3-7.4 V, Latching		
Overload Protection	Hiccup				
Over Temperature Protection	No Component Damage, Latch Mode				
Short Circuit	Hiccup Mode, Non-Latching (Auto-Recovery when the fault is removed)				
Power Factor Correction	Meets EN61000-3-2 Class A				
Reliability					
MTBF	>350 khrs (115 Vac/230 Vac @ 25 °C) as per Telcordia SR-332 issue 3 Jan 2011.				
EMC					
Galvanic Isolation	I/P to O/P: 3 KVac; I/P to GND: 1.5 KVac; O/P to GND: 0.5 KVac				
Emissions	EN55022 (CISPR22) Class B, EN55011 Class B, EN61000-6-3, EN61000-6-4, EN61000-3-3, EN61204-3, EN61000-3-2 Class A				
Immunity	EN55024, EN61000-6-1, EN61000-6-2 (EN61000-4-2, 3, 4, 5, 6, 8, 11, 12) Level 3, Performance Criteria A				
General					
H x W x D in (mm)	2.95 x 0.82 x 3.52 (75.0 x 21.0 x 89.5)		2.95 x 1.18 x 3.52 (75.0 x 30.0 x 89.5)		
Unit Weight	0.242 lb (110 g)		0.352 lb (160 g)		
LED Signals	GREEN light = DC OK , OCP = blinking				
DC OK Relay Contact	No				
Warranty	2 year				

1. DC input range is not listed in safety file it is only to confirm product functional performance.

2. >120 Watts models measured at 230 VAC input and 25 °C ambient temperature. See manual for further details.

SVL Specifications <120W

Description	Catalog Number				
	SVL 4-12-100	SVL 2-24-100	SVL 4-24-100		
Input					
Input Voltage Range		85-264 Vac			
– AC Range		100-240 Vac			
– DC Range ¹		120-375 Vdc			
– Frequency		50/60 Hz			
Nominal Current	1.0 A @ 115 Vac 0.6 A @ 230 Vac	1.0 A @ 115 Vac 0.6 A @ 230 Vac	1.2 A @ 115 Vac 0.6 A @ 230 Vac		
– Inrush Current max.		35 A @ 115 Vac 60 A @ 230 Vac			
Efficiency	88% typ		89% typ		
Leakage Current	<1 mA @ 240 Vac				
Output					
Nominal Voltage	12 V	24 V	24 V		
– Tolerance		+/-2%			
Voltage Adjustable Range	12-15 V	24-28 V			
– Ripple (25 °C)		<75 mVp-p			
PARD (25 °C)		<75 mVp-p			
Nominal Current	4 A	2.1 A	4 A		
Max. Power	48 W	50 W	96 W		
Holdup Time at full load (25 °C)	20 ms typ. @ 115 Vac 90 ms typ. @ 230 Vac		25 ms typ. @ 115 Vac 50 ms typ. @ 230 Vac		
Rise Time at full load (25 °C)	<100 ms				
Start Up at full load (25 °C)	<3000 ms @ 115 Vac, <1500 ms @ 230 Vac				
Regulation	<0.5% Line and <1% Load				
Environmental Data					
Operating Temperature	-20 °C to +70 °C				
Relative Humidity	5 to 95% RH Non-condensing				
Storage temp	-40 °C to +85 °C				
Power De-rating²	>55 °C de-rate power by 3.33% / °C <-10 °C de-rate power by 2% / °C de-rate to 80% load for operation at -20°C				
Shock	IEC60068-2-27: half sine wave 10 G, single axis for a duration of 11 ms operational and 50 G three axes for duration of 11 ms each non-operational				
Vibration	IEC60068-2-6: 10 Hz to 500 Hz at 2 g, 0.35mm displacement, three axes for 60 min each operational and 5 Hz to 500 Hz at 2.09 grms, three axes for 20 min each non-operational				
Protections					
Overvoltage Protection	16-18.7 V, Latching	30-34.8 V, Latching			
Overload Protection	Current foldforward and then hiccup				
Over Temperature Protection	No Component Damage, Latch Mode				
Short Circuit	Hiccup Mode, Non-Latching (Auto-Recovery when the fault is removed)				
Power Factor Correction	Meets EN61000-3-2 Class A				
Reliability					
MTBF	>350 khrs (115 Vac/230 Vac @ 25 °C) as per Telcordia SR-332 issue 3 Jan 2011.				
EMC					
Galvanic Isolation	I/P to O/P: 3 KVac; I/P to GND: 1.5 KVac; O/P to GND: 0.5 KVac				
Emissions	EN55022 (CISPR22) Class B, EN55011 Class B, EN61000-6-3, EN61000-6-4, EN61000-3-3, EN61204-3, EN61000-3-2 Class A				
Immunity	EN55024, EN61000-6-1, EN61000-6-2 (EN61000-4-2, 3, 4, 5, 6, 8, 11, 12) Level 3, Performance Criteria A				
General					
H x W x D in (mm)	2.95 x 1.18 x 3.52 (75.0 x 30.0 x 89.5)		2.95 x 1.77 x 3.93 (75.0 x 45.0 x 100.0)		
Unit Weight	0.397 lb (180 g)		0.716 lb (325 g)		
LED Signals	GREEN light = DC OK , OCP = blinking				
DC OK Relay Contact	No				
Warranty	2 year				

1. DC input range is not listed in safety file it is only to confirm product functional performance.
2. >120 Watts models measured at 230 VAC input and 25 °C ambient temperature. See manual for further details.

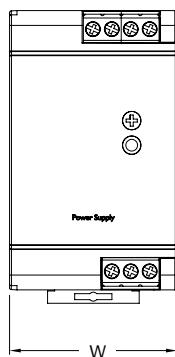
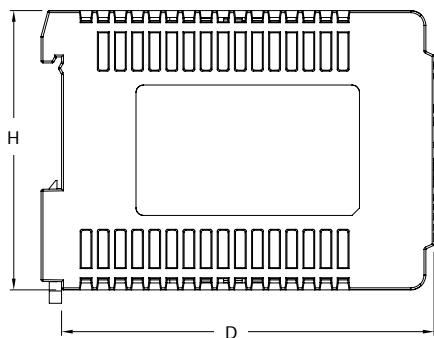
SVL Specifications >120W

Description	Catalog Number						
	SVL 2-48-100	SVL 5-24-100	SVL 10-24-100	SVL 20-24-100			
Input							
Input Voltage Range	85-264 Vac						
– AC Range	100-240 Vac						
– DC Range ¹	120-375 Vdc						
– Frequency	50/60 Hz						
Nominal Current	2.20 A @ 115 Vac 1.20 A @ 230 Vac	2.8 A @ 115 Vac 1.4 A @ 230 Vac	5.4 A @ 115 Vac 2.7 A @ 230 Vac				
– Inrush Current max.	20 A typ. @ 115 Vac 40 A typ. @ 230 Vac			40A typ. @ 115 Vac 80A typ. @ 230 Vac			
Efficiency	88% typ						
Leakage Current	<1 mA @ 240 Vac						
Output							
Nominal Voltage	48V		24V				
– Tolerance	+/-2%						
Voltage Adjustable Range	44-56 V	22-28 V					
– Ripple (25 °C)	<120 mVp-p	<100 mVp-p					
PARD (25 °C)	<150 mVp-p	<120 mVp-p					
Nominal Current	2.5 A	5 A	10 A	20 A			
Max. Power	120 W	120 W	240 W	480 W			
Holdup Time at full load (25 °C)	10 ms typ. @ 115 Vac 16 ms typ @ 230 Vac						
Rise Time at full load (25 °C)	<100 ms						
Start Up at full load (25 °C)	<1000 ms @ 115 Vac & 230 Vac						
Regulation	<0.5% Line and <1% Load						
Environmental Data							
Operating Temperature	-20 °C to +70 °C						
Relative Humidity	5 to 95% RH Non-condensing						
Storage temp	-40 °C to +85 °C						
Power De-rating²	>50 °C de-rate power by 2.5% / °C <-10 °C de-rate power by 2% / °C <100 Vac de-rate power by 1% / Vac						
Shock	IEC60068-2-27: half sine wave 10 G, single axis for a duration of 11 ms operational and 50 G three axes for duration of 11 ms each non-operational						
Vibration	IEC60068-2-6: sine wave; 10 Hz to 500 Hz at 2 g, 0.35 mm displacement, three axes for 60 min each operational and 5 Hz to 500 Hz at 2.09 grms, three axes for 20 min each non-operational						
Protections							
Overvoltage Protection	56-67.2 V, Latching	28.8-35.2 V, Latching					
Overload Protection	105-150% of rated load; constant current at >20 V output and hiccup at <20 V output. SVL 2-48-100: constant current at >40 V output and hiccup at <40 V output.						
Over Temperature Protection	No Component Damage, Latch Mode						
Short Circuit	Hiccup Mode, Non-Latching (Auto-Recovery when the fault is removed)						
Power Factor Correction	Meets EN61000-3-2 Class A						
Reliability							
MTBF	>700 khrs (115 Vac & 230 Vac @ 25 °C) as per Telcordia SR-332 issue 3 Jan 2011.						
EMC							
Galvanic Isolation	I/P to O/P: 3 kVAC; I/P to GND: 2 kVAC; O/P to GND: 0.5 kVAC						
Emissions	EN55022 (CISPR22) Class B, EN55011 Class B, EN61000-6-3, EN61000-6-4, EN61000-3-3, EN61204-3, EN61000-3-2 Class A						
Immunity	EN55024, EN61000-6-1, EN61000-6-2 (EN61000-4-2, 3, 4, 5, 6, 8, 11, 12) Level 3, Performance Criteria A, SEMI F47 @ 200 Vac						
General							
H x W x D in (mm)	4.84 x 1.57 x 4.63 (123.6 x 40.0 x 117.6)	4.87 x 2.36 x 4.63 (123.6 x 60.0 x 117.6)	4.87 x 3.37 x 5.06 (123.6 x 85.5 x 128.5)				
Unit Weight	540 g (1.19 lb)	660 g (1.45 lb)	1150 g (2.53 lb)				
LED Signals	GREEN light = DC OK , OCP = blinking						
DC OK Relay Contact	Yes						
Warranty	2 year						

1. DC input range is not listed in safety file it is only to confirm product functional performance.

2. >120 Watts models measured at 230V AC input and 25°C ambient temperature. See manual for further details.

SVL Series Dimensions



Catalog Number	Dimensions – inches (mm)		
	H	W	D
SVL 3-5-100	2.95 (75.0)	0.82 (21.0)	3.52 (89.5)
SVL 1-24-100	2.95 (75.0)	0.82 (21.0)	3.52 (89.5)
SVL 6-5-100	2.95 (75.0)	1.18 (30.0)	3.52 (89.5)
SVL 4-12-100	2.95 (75.0)	1.18 (30.0)	3.52 (89.5)
SVL 2-24-100	2.95 (75.0)	1.18 (30.0)	3.52 (89.5)
SVL 4-24-100	2.95 (75.0)	1.77 (45.0)	3.93 (100.0)
SVL 2-48-100	4.84 (123.6)	1.57 (40.0)	4.63 (117.6)
SVL 5-24-100	4.84 (123.6)	1.57 (40.0)	4.63 (117.6)
SVL 10-24-100	4.87 (123.6)	2.36 (60.0)	4.63 (117.6)
SVL 20-24-100	4.87 (123.6)	3.37 (85.5)	5.06 (128.5)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Sola/Hevi-Duty](#):

[SVL 3-5-100](#) [SVL 1-24-100](#) [SVL 6-5-100](#) [SVL 2-24-100](#) [SVL 4-12-100](#) [SVL 4-24-100](#) [SVL 2-48-100](#) [SVL 5-24-100](#)
[SVL 10-24-100](#) [SVL 20-24-100](#) [SVL1024100](#)