◆ Features

- Constant voltage
- Universal input voltage 90~264Vac
- High efficiency, high reliability and long lifetime.
- Air cooling
- Working temperature:-30℃~+70℃
- Protection: over load, over voltage,over temperature,short circuit,etc.
- Typical efficiency up to 91.0%
- No load power comsumption <0.3W;
- Compliance to RoHS/REACH Environmental standards
- 100% Full load burn-in test
- 3 years warranty

◆ Application

- Industrial Automation Equipment
- Industrial Electrical Equipment
- Handheld Electronic Devices
- Mechanical Equipment

◆ Description

The SVDC-XX100D1772 series is a100W single output industrial power supply with height at 30mm. This series has a wide input voltage range and can be used for both AC and DC. The metal mesh shell structure enhances the heat dissipation capability and can work normally in a temperature range of -30℃ to +70℃ without a fan. Providing a no-load power consumption of less than 0.3W, the terminal system can easily meet international energy standards. It provides multiple protection and anti-5G vibration capabilities, built-in EMI filter components, complies with CISPR32/EN55032 CLASS B. Good electromagnetic compatibility (EMC) characteristics protect terminal electronic equipment from electromagnetic interference.

◆ Model Encoding

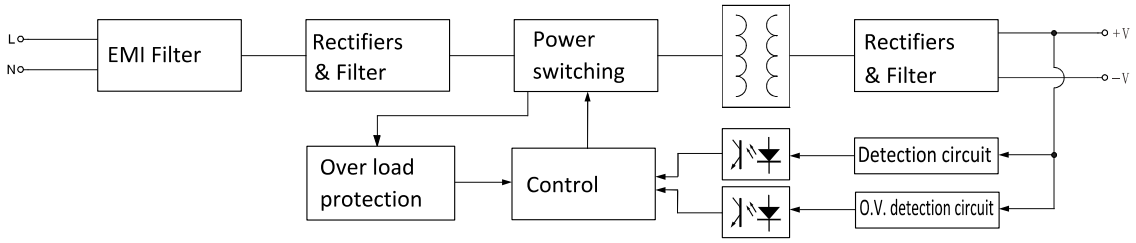
SVDC–XX 100 D1772

- D1772 — Case No.
- 100 — Output Wattage
- XX — Output voltage
- SVDC — Series name

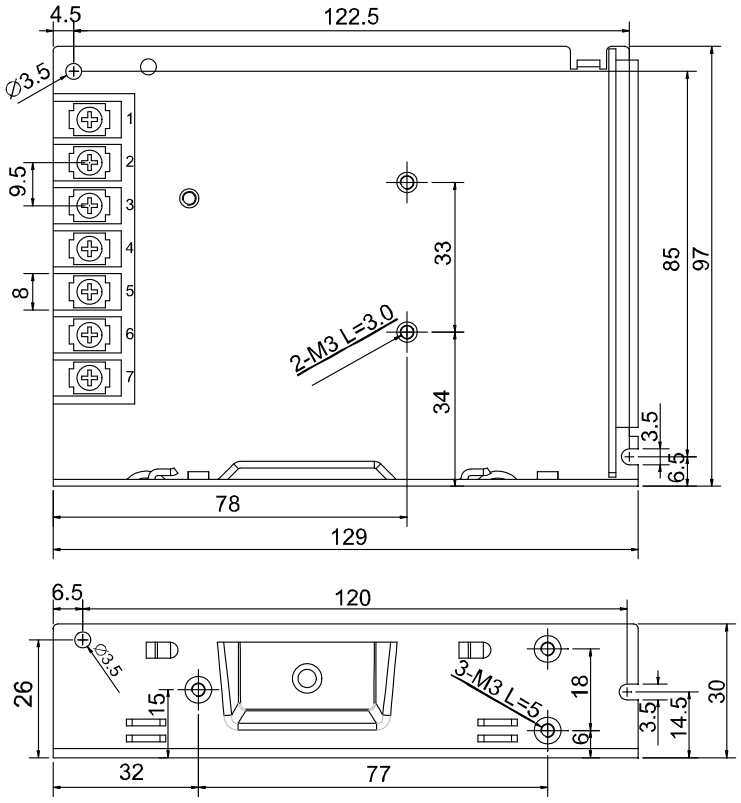
◆ Specification

Model		SVDC-12100D1772	SVDC-24100D1772
Output	DC voltage	12V	24V
	Rated current	8.33A	4.17A
	Current range	0~8.33A	0~4.17A
	Rated power	100W	100W
	Efficiency (Typ.)	89.5%	91.0%
	Voltage adj. range ＊⑧	10.2~13.8V	21.6~28.8V
	Max.capacitive load	6800uF	2200uF
	Voltage tolerance ＊③	±4.0%	±2.0%
	Line regulation	±1.0%	±0.5%
	Load regulation	±2.0%	±1.0%
	Ripple & noise (max.) ＊④	120mVp-p	240mVp-p
	Setup, rise time ＊⑥	2000ms, 30ms (at full load)	
	Hold up time (Typ.)	15ms 230VAC/115VAC (at full load)	
Input	Voltage range ＊②	90~264VAC or 127~374VDC	
	Frequency range	47~63Hz	
	AC current	Max.2.46A	
	Inrush current (Typ.)	Cold start: 60A/230VAC	
	Leakage current	<0.75mA/240VAC	
Protection	Over load	105%~155% of the rated power	
		Protection type: hiccup mode, recovers automatically after load reduced.	
	Over voltage	13.8~18.0V	28.8~36.0V
		Protection type: hiccup mode, recovers automatically after fault condition removed.	
	Over temperature	100℃±10℃ RTH2	
		Protection type: shut down O/P voltage, recovers automatically after temperature goes down.	
Environment	Working temp.	-30~+70℃ Refer to " Derating curve"	
	Working humidity	20~90% RH, non-condensing	
	Storage temp.,humidity	-40~+85℃, 10~95% RH	
	Temp. coefficient	±0.05% ℃ (-30℃~+50℃)	
	Vibration	10~500Hz, 5G 10 min./1 cycle, 60 min. each along X. Y, Z axes.	
	Soldering temp.	Wave soldering: 265℃, 5s (max.); manuel welding: 390℃,3s (max.)	
	Operation height ＊⑨	2000 meters	
Safety	Safety standards	Compliance to IEC/EN/UL/BS62368-1, GB4943.1,EN61558-1,EN60335-1	
	Withstand voltage	I/P-O/P:4KVAC	
	Isolation resistance	I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH	
EMC Emission	Conduct emission	CISPR32/EN55032 CLASS B	
	Radiated emission	CISPR32/EN55032 CLASS B	
	Harmonic current	IEC/EN61000-3-2 Class A	
EMC Immunity	Electrostatic Discharge	IEC/EN61000-4-2 Contact:±6KV/AIR:±8KV perf.Criteria A	
	Radiated immunity	IEC/EN61000-4-3 10V/m perf.Criteria A	
	Electrical Fast Transient/Burst Immunity	IEC/EN61000-4-4 ±2KV perf.Criteria A	
	Surge immunity	IEC/EN61000-4-5 L_N±2KV L/N/P_G ±4KV perf.Criteria A	
	Conducted interference immunity	IEC/EN61000-4-6 10Vr.m.s perf.criteria A	
	Voltage dips, sags and short interruptions immunity	IEC/EN61000-4-11 0%,70% perf. Criteria B	
Others	MTBF	>200K	
	Warranty	3 years	
	Dimension	129.0mm(L)*97.0mm(W)*30.0mm(H)	
	Packing	420mm*340mm*200mm; 0.30kg; 13.5kg/45pcs	
Notes	① All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. ② Derating may be needed under low input voltages. Please check the static characteristics for more details. ③ Tolerance: includes set up tolerance, line regulation and load regulation. ④ Ripple & noise are measured at 20MHZ of bandwidth by using twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. ⑤ The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-confirm EMC Directive on the complete installation. ⑥ The start time was tested under the situation of cold start, continuous switching on/off may raise the start time. ⑦ Input current and safety requirements have slightly different parameters due to different certifications. ⑧ When the total power remains unchanged and the output voltage is increased, the output current should be reduced accordingly. ⑨ When the altitude exceeds 2000 m (6500ft), the operating environment temperature decreases at a rate of 3.5℃ /1000 m.		

◆ Block Diagram



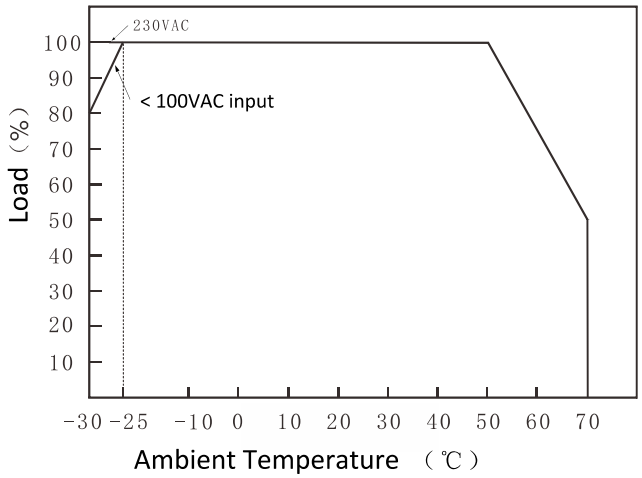
◆ Case Dimension



Pin No.	Pin function	Pin No.	Pin function
1	AC/L	4,5	-V
2	AC/N	6,7	+V
3	FG ⏚		

Note:
Dimension unit: mm
Unmarked tolerance: ± 1.00

◆ Derating Curve



◆ Input Derating Curve