



CB



CE



◆ Features

- Constant voltage
- Universal input voltage 90~264Vac
- High efficiency, high reliability and long lifetime.
- Air cooling
- Working temperature: -30°C ~+70°C
- Protection: over load, over voltage, over temperature, short circuit, etc.
- Typical efficiency up to 89.5%
- No load power consumption <0.2W;
- Compliance to RoHS/REACH Environmental standards
- 100% Full load burn-in test
- 3 years warranty

◆ Application

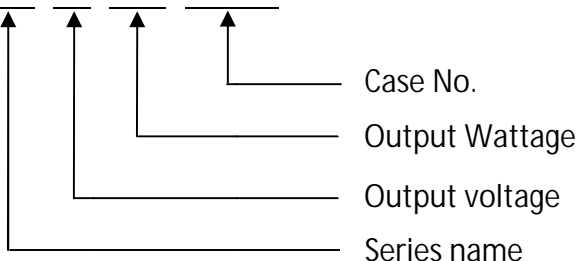
- Industrial Automation Equipment
- Industrial Electrical Equipment
- Handheld Electronic Devices
- Mechanical Equipment

◆ Description

The SVDC-XX035D1770 series is a 35W 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°C to +70°C without a fan. Providing a no-load power consumption of less than 0.2W, 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

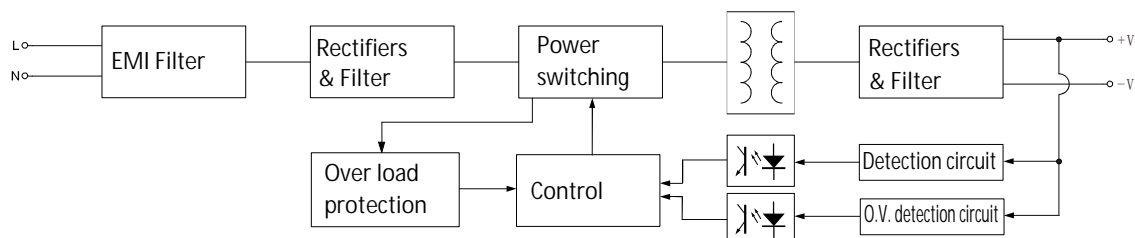
SVDC-XX 035 D1770



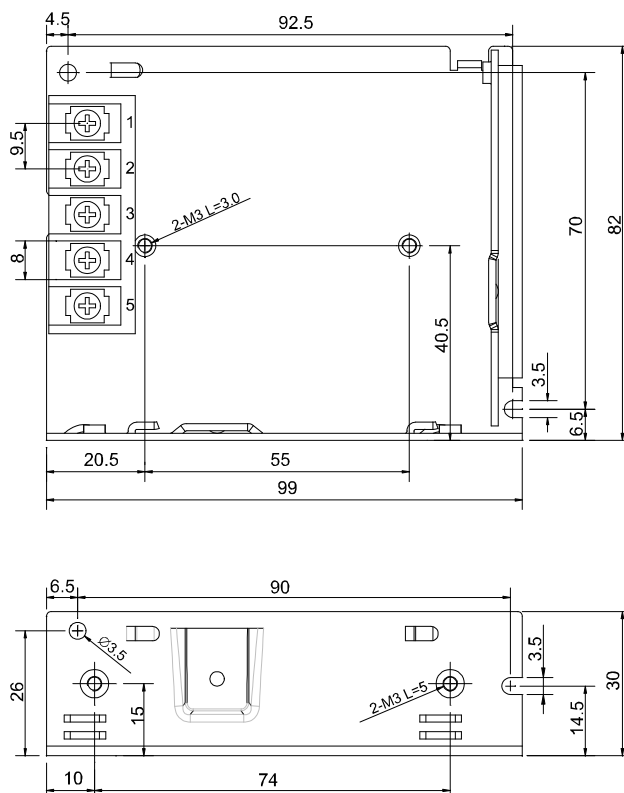
◆ Specification

Model		SVDC-12035D1770	SVDC-12035D1770
Output	DC voltage	12V	24V
	Rated current	2.92A	1.46A
	Current range	0~2.92A	0~1.46A
	Rated power	35W	35W
	Efficiency (Typ.)	87.0%	89.5%
	Voltage adj. range *③	10.2~13.8V	21.6~28.8V
	Max.capacitive load	1500uF	750uF
	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. 0.88A	
	Inrush current (Typ.)	Cold start: 50A/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	99.0mm(L)*82.0mm(W)*30.0mm(H)	
	Packing	460mm*230mm*195mm;0.192kg;9.6kg/50pcs	
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



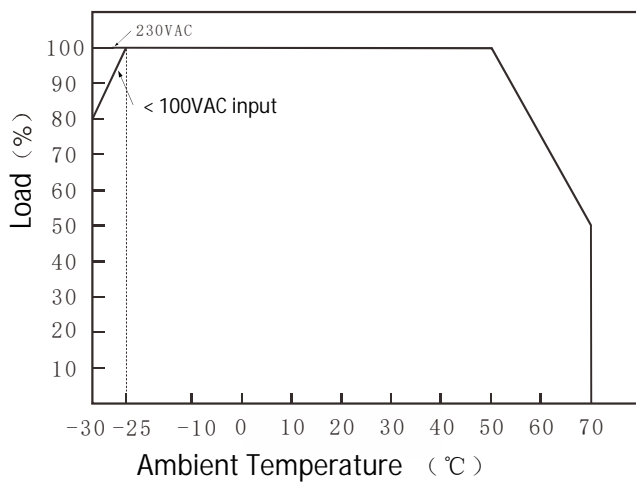
◆ Case Dimension



Pin No.	Pin function	Pin No.	Pin function
1	AC/L	4	-V
2	AC/N	5	+V
3	FG \perp		

Note:
Dimension unit: mm
Unmarked tolerance: ± 1.00

◆ Derating Curve



◆ Input Derating Curve

