



■ Features :

- Universal AC input / Full range
- Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- Output voltage programmable from 20~110% by 1~5.5VDC external control signal
- With DC OK Signal output
- Built-in remote ON-OFF control
- Fixed switching frequency at PFC:88KHz PWM:100KHz



**SPECIFICATION**

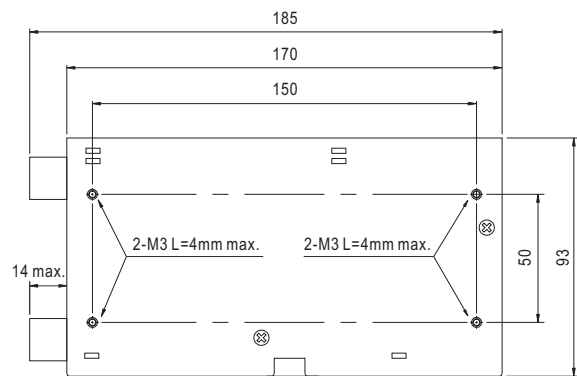
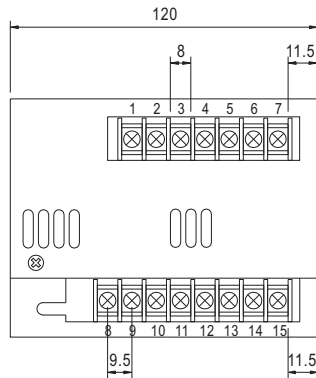
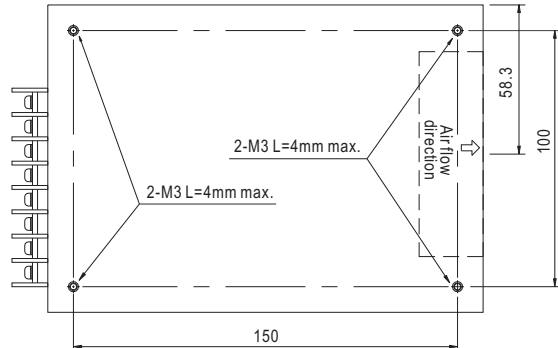
MODEL	SPV-600-12	SPV-600-24	SPV-600-48	
OUTPUT	DC VOLTAGE	12V	24V	48V
	RATED CURRENT	50A	25A	12.5A
	CURRENT RANGE	0 ~ 50A	0 ~ 25A	0 ~ 12.5A
	RATED POWER	600W	600W	600W
	RIPPLE & NOISE (max.) Note.2	240mVp-p	240mVp-p	300mVp-p
	VOLTAGE ADJ. RANGE	10 ~ 13.2V	20 ~ 26.4V	41 ~ 56V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	1500ms, 50ms at full load		
HOLD UP TIME (Typ.)	20ms at full load			
INPUT	VOLTAGE RANGE Note.4	88 ~ 264VAC	124 ~ 370VDC	
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	0.95/230VAC	0.99/115VAC at full load	
	EFFICIENCY(Typ.)	84%	86%	87%
	AC CURRENT (Typ.)	6.8A/115VAC	3.4A/230VAC	
	INRUSH CURRENT (Typ.)	20A/115VAC	40A/230VAC	
	LEAKAGE CURRENT	<1.3mA/240VAC		
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed		
	OVER VOLTAGE	13.8 ~ 16.2V	27.6 ~ 32.4V	57.6 ~ 67.2V
	OVER TEMPERATURE	85°C (TSW1) detect on heatsink of power transistor; 80°C (TSW51) detect on heatsink of power diode Protection type : Shut down o/p voltage, re-power on to recover		
FUNCTION	REMOTE CONTROL	RC+/RC-: Short = power on ; Open = power off		
	POK SIGNAL	PSU turn on: 3.3V ~ 5.6V    PSU turn off: 0V ~ 1V		
	OUTPUT VOLTAGE TRIM	2.4 ~ 13.2V	4.8 ~ 26.4V	9.6 ~ 52.8V
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°C (Refer to output load derating curve)		
	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)		
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes		
SAFETY	SAFETY STANDARDS	Design refer to UL60950-1, TUV EN60950-1		
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC    I/P-FG:1.5KVAC    O/P-FG:0.5KVAC		
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH		
OTHERS	MTBF	116.4K hrs min.    MIL-HDBK-217F (25°C)		
	DIMENSION	170*120*93mm (L*W*H)		
	PACKING	1.9Kg; 8pcs/15.5Kg/1.06CUFT		
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Derating may be needed under low input voltages. Please check the derating curve for more details.</p>			

**Mechanical Specification**

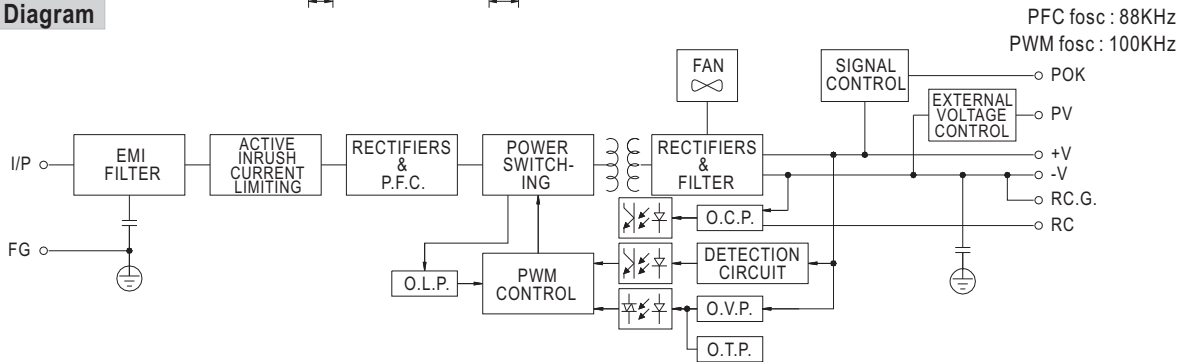
Case No.910A Unit:mm

Terminal Pin No. Assignment

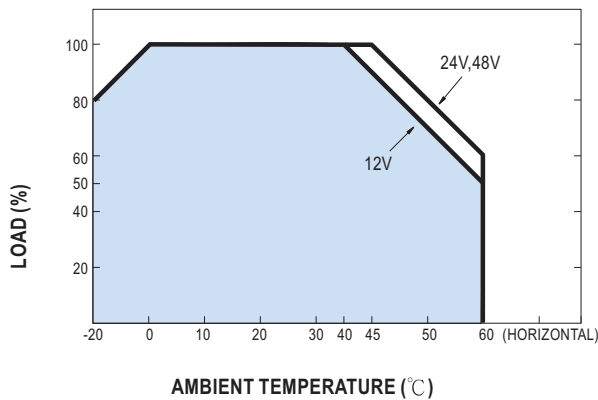
Pin No.	Assignment
1	AC/L
2	AC/N
3	FG $\perp$
4	PV
5	POK
6	R.C. G
7	R.C.
8~11	DC OUTPUT +V
12~15	DC OUTPUT -V



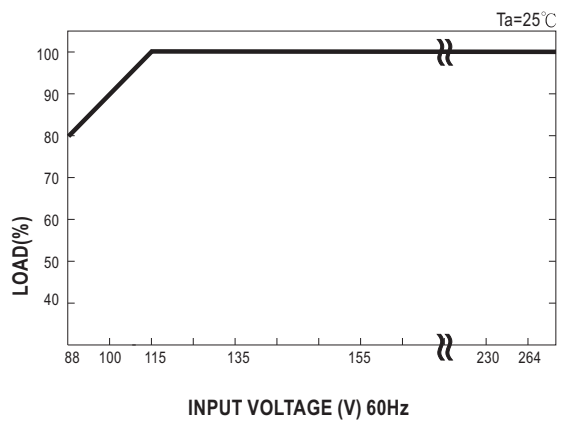
**Block Diagram**



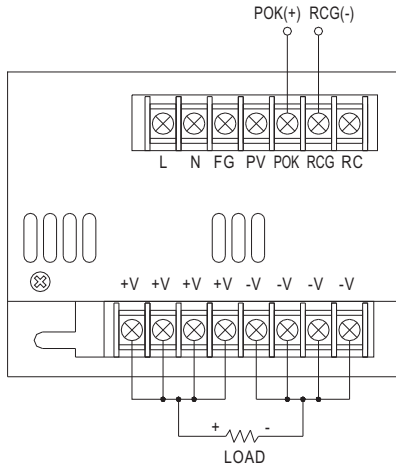
**Derating Curve**



**Output Derating VS Input Voltage**

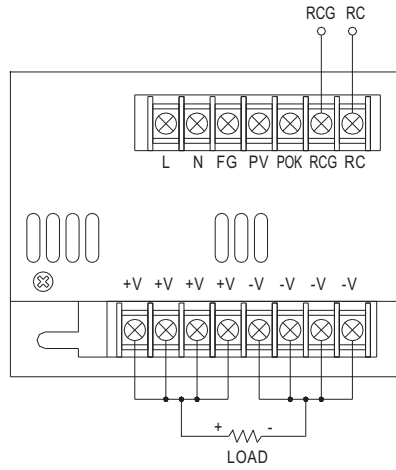


Control Terminal Instruction Manual



**POK Signal**

POK Signal is the voltage difference between "RCG" and "POK" pin output POK Signal for TTL level signal  
 PSU turn on: 3.3V ~ 5.6V  
 PSU turn off: 0V ~ 1V



**Remote Control**

Power ON: RCG and RC for short  
 Power OFF: RCG and RC for open

Function Manual

1.External Voltage Control

