



600W Single Output with PFC Function

SPV-600 series



■ 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
- 3 years warranty



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℃(TSW1) detect on heatsink of power transistor; 80℃(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℃ (Refer to output load derating curve)					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)					
	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℃ / 70% RH					
OTHERS	MTBF	116.4K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	170*120*93mm (L*W*H)					
	PACKING	1.9Kg; 8pcs/15.5Kg/1.06CUFT					
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Derating may be needed under low input voltages. Please check the derating curve for more details.						

勝特力材料 886-3-5753170
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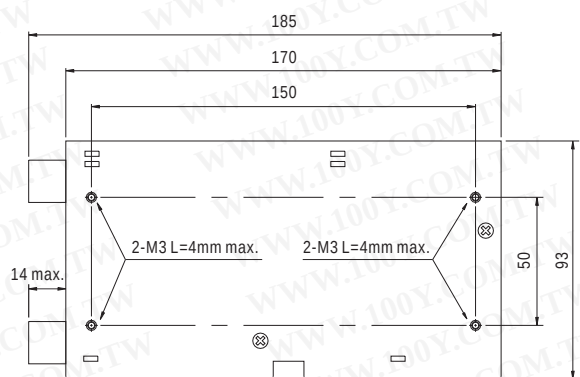
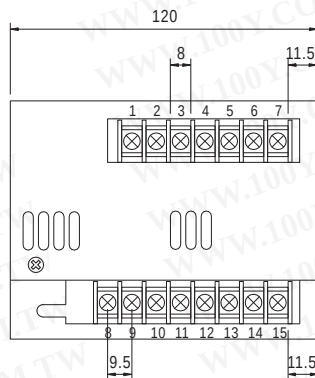
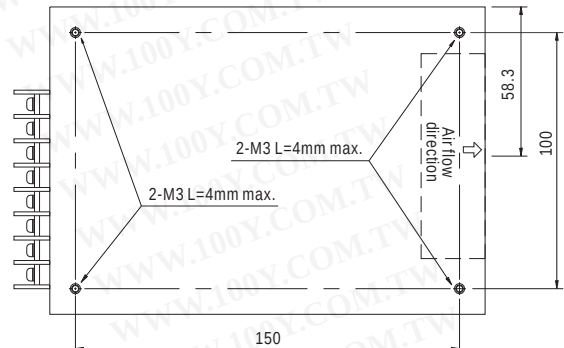
SPV-600 series

Case No.910A Unit:mm

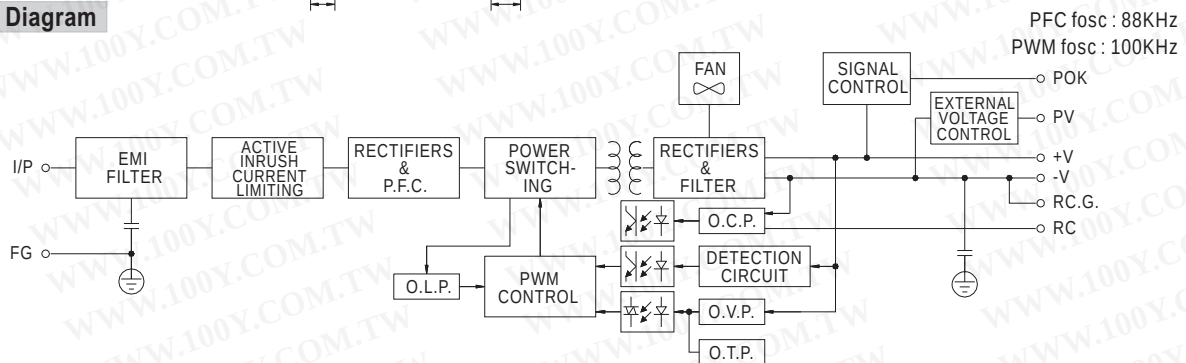
Mechanical Specification

Terminal Pin No. Assignment

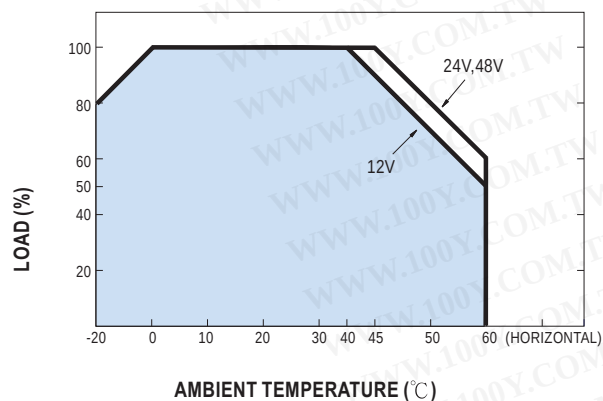
Pin No.	Assignment
1	AC/L
2	AC/N
3	FG $\perp$
4	PV
5	POK
6	R.C. G
7	R.C.
8~11	DC OUTPUT +V
12~15	DC OUTPUT -V



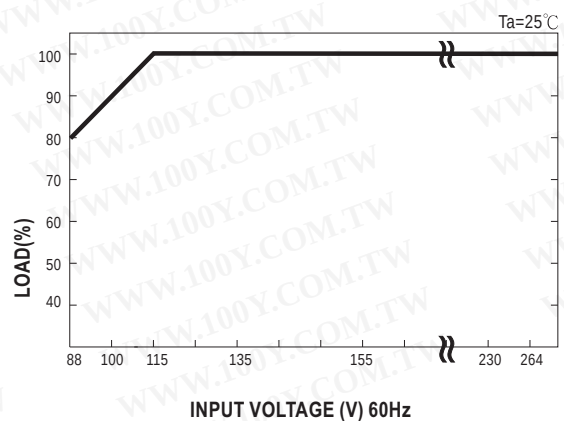
Block Diagram



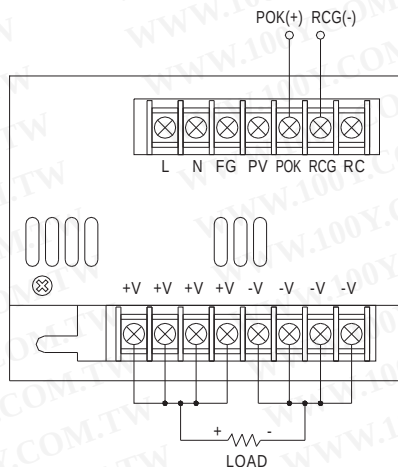
Derating Curve



Output Derating VS Input Voltage

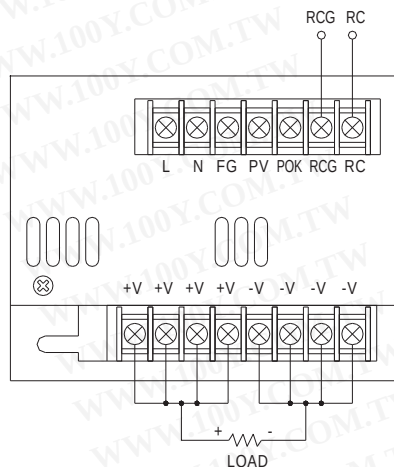


Control Terminal Instruction Manual



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

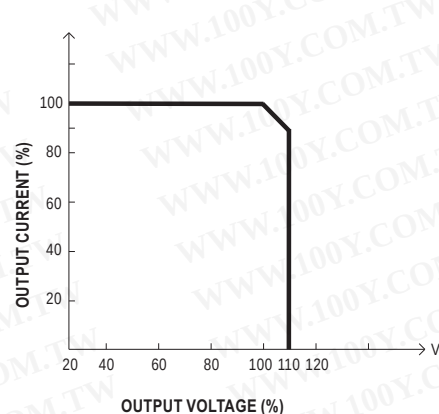
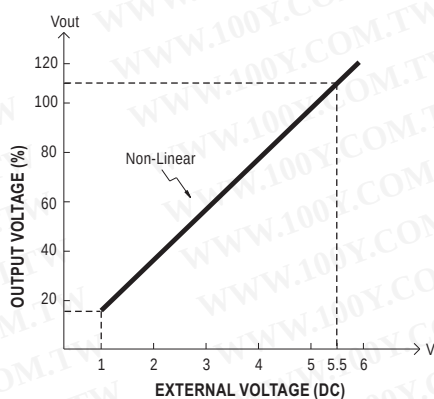
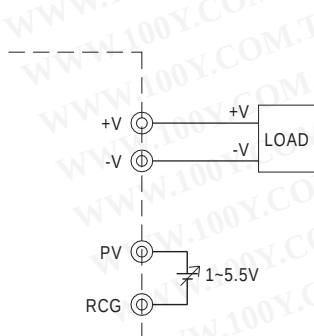


Remote Control

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

Function Manual

1.External Voltage Control



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