



300W Single Output with PFC Function

SPV-300 series



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC Fan
- Built-in fan speed control
- Fixed switching frequency at 100KHz
- Output voltage programmable from 20~110% by 1~5.5VDC external control signal
- 3 years warranty



SPECIFICATION

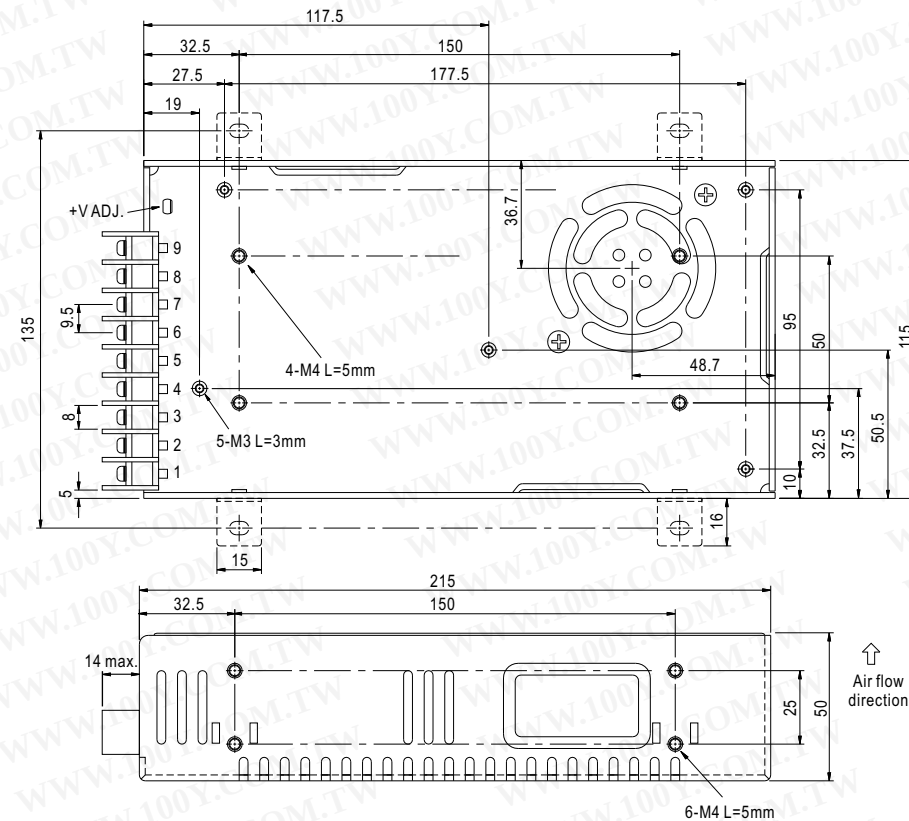
MODEL		SPV-300-12		SPV-300-24		SPV-300-48	
OUTPUT	DC VOLTAGE	12V		24V		48V	
	RATED CURRENT	25A		12.5A		6.25A	
	CURRENT RANGE	0 ~ 25A		0 ~ 12.5A		0 ~ 6.25A	
	RATED POWER	300W		300W		300W	
	RIPPLE & NOISE (max.) Note.2	150mVp-p		150mVp-p		240mVp-p	
	VOLTAGE ADJ. RANGE	10 ~ 13.2V		20 ~ 26.4V		41 ~ 52.8V	
	VOLTAGE TOLERANCE Note.3	±1.0%		±1.0%		±1.0%	
	LINE REGULATION	±0.3%		±0.2%		±0.2%	
	LOAD REGULATION	±0.5%		±0.5%		±0.5%	
	SETUP, RISE TIME	800ms, 50ms/230VAC		2500ms, 50ms/115VAC at full load			
	HOLD UP TIME (Typ.)	16ms/230VAC		16ms/115VAC at full load			
INPUT	VOLTAGE RANGE Note.5	88 ~ 264VAC		124 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	PF>0.95/230VAC		PF>0.98/115VAC at full load			
	EFFICIENCY (Typ.)	83.5%		85%		86.5%	
	AC CURRENT (Typ.)	115VAC	5A				
		230VAC	2.5A				
	INRUSH CURRENT (Typ.)	20A/115VAC		40A/230VAC			
LEAKAGE CURRENT		<1mA / 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	
		Protection type : Shut down o/p voltage, re-power on to recover					
OVER TEMPERATURE	80℃ ±5℃ (TSW1 : detect on heatsink of power transistor)						
	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down						
FUNCTION	REMOTE CONTROL	4~6VDC power off, <0~0.8VDC power on					
	OUTPUT VOLTAGE TRIM	2.4 ~ 13.2V		4.8 ~ 26.4V		9.6 ~ 52.8V	
ENVIRONMENT	WORKING TEMP.	-20 ~ +65℃ (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℃)					
SAFETY EMC (Note 4)	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved					
	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					
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B					
	HARMONIC CURRENT	Compliance to EN61000-3-2, -3					
	EMS IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; ENV50204, EN55024, light industry level, criteria A					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC					
OTHERS	MTBF	207K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	215*115*50mm (L*W*H)					
	PACKING	1.1Kg; 12pcs/14Kg/0.92CUFT					
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. Mean Well reserves the right to adjust this spec when deemed appropriate. 5. Derating may be needed under low input voltages. Please check the derating curve for more details.					

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Mechanical Specification

Case No. 912G Unit:mm

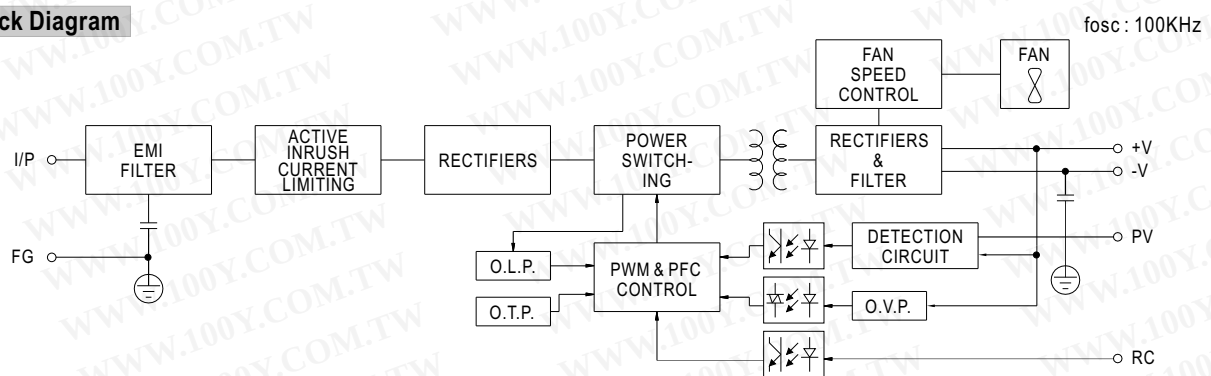


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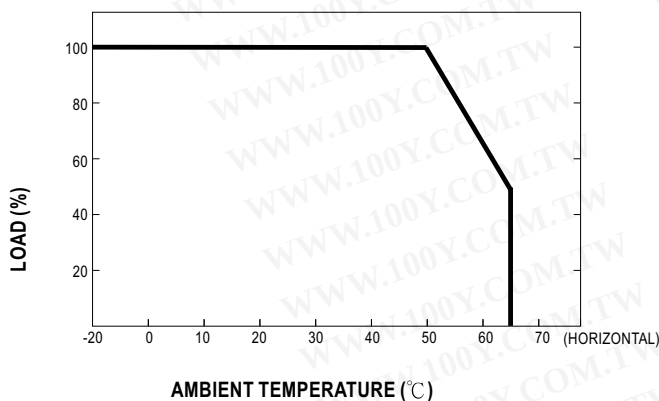
Terminal Pin No. Assignment :

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	PV
2	AC/N	6~7	DC OUTPUT -V
3	FG $\perp$	8~9	DC OUTPUT +V
4	RC		

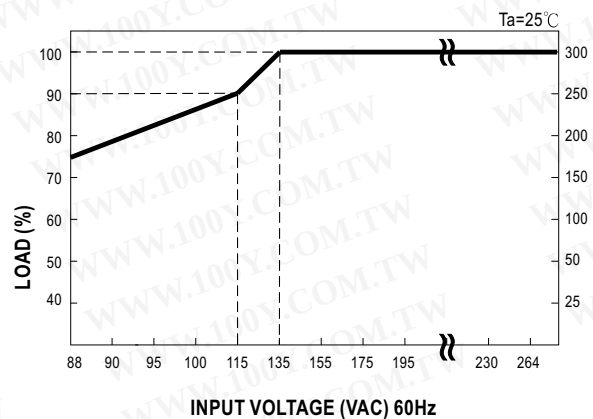
Block Diagram



Derating Curve



Static Characteristics



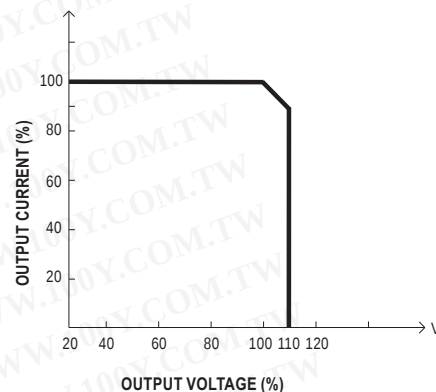
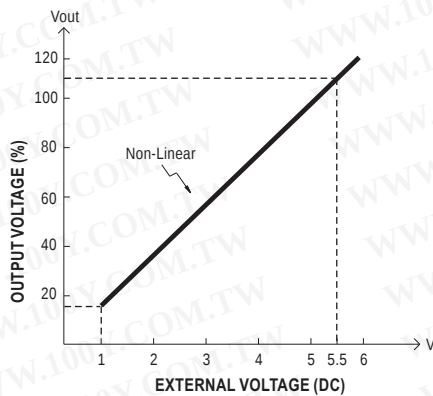
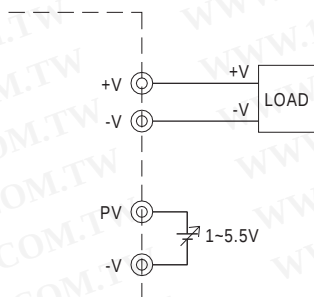


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Function Manual

1.External Voltage Control



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