



■ 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 ON / OFF control
- Fixed switching frequency at 90KHz
- 3 years warranty

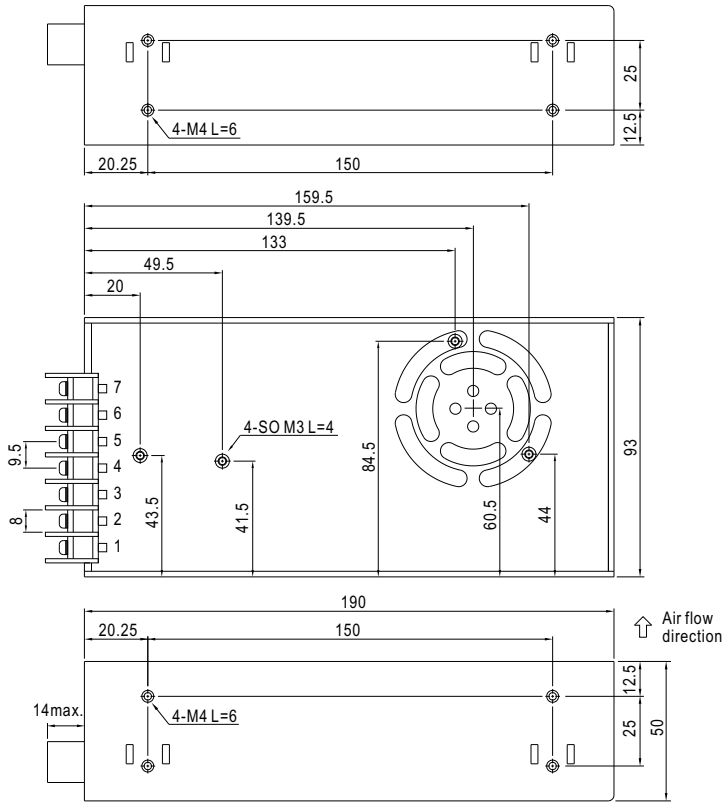


## SPECIFICATION

MODEL		SP-240-5	SP-240-7.5	SP-240-12	SP-240-15	SP-240-24	SP-240-30	SP-240-48
OUTPUT	DC VOLTAGE	5V	7.5V	12V	15V	24V	30V	48V
	RATED CURRENT	45A	32A	20A	16A	10A	8A	5A
	CURRENT RANGE	0 ~ 45A	0 ~ 32A	0 ~ 20A	0 ~ 16A	0 ~ 10A	0 ~ 8A	0 ~ 5A
	RATED POWER	225W	240W	240W	240W	240W	240W	240W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	4 ~ 6V	6 ~ 9V	10 ~ 14V	12 ~ 18V	20 ~ 28V	27 ~ 33V	41 ~ 56V
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%
	LOAD REGULATION	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	800ms, 50ms/230VAC    1500ms, 50ms/115VAC at full load						
HOLD UP TIME (Typ.)	20ms/230VAC    20ms/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.)	79%	83%	86%	86%	88%	88%	89%
	AC CURRENT (Typ.)	3.6A/115VAC    1.8A/230VAC						
	INRUSH CURRENT (Typ.)	25A/115VAC    40A/230VAC						
	LEAKAGE CURRENT	<2mA / 240VAC						
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed						
	OVER VOLTAGE	6.3 ~ 7.5V	9.4 ~ 10.9V	14.7 ~ 17.5V	19 ~ 22.5V	29.5 ~ 35V	34.7 ~ 41V	57.6 ~ 67.2V
	OVER TEMPERATURE	90°C ±5°C (5V,7.5V), 85°C ±5°C (12V,15V,24V,30V,48V) (TSW1 : detect on heatsink of power transistor) Protection type : Shut down o/p voltage, recovers automatically after temperature goes down						
FUNCTION	FAN CONTROL	RTH2 ≥ 40°C FAN ON, ≤ 35°C FAN OFF						
ENVIRONMENT	WORKING TEMP.	-20 ~ +70°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, 60min. each along X, Y, Z axes						
SAFETY & EMC (Note 4)	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°C / 70% RH						
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B						
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3						
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A						
	MTBF	284K hrs min.    MIL-HDBK-217F (25°C)						
	DIMENSION	190*93*50mm (L*W*H)						
	PACKING	0.8Kg; 18pcs/15.4Kg/1.04CUFT						
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>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.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</li> <li>5. Derating may be needed under low input voltages. Please check the derating curve for more details.</li> </ol>							

Case No.987A Unit:mm

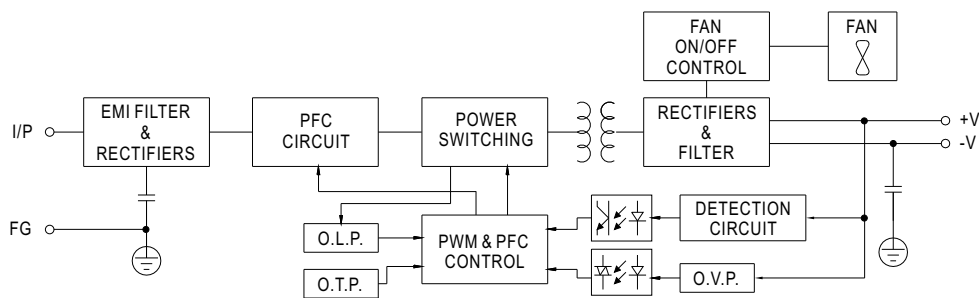
### Mechanical Specification



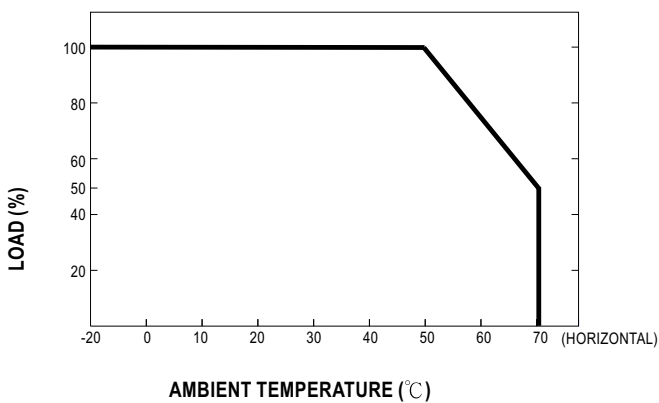
Terminal Pin No. Assignment

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

### Block Diagram



### Derating Curve



### Static Characteristics

