

# TOTAL POWER INT'L

200W Single Output with PFC Function

**SP-200 series**



■ Features :

- Universal AC input / full range
- Built-in active PFC function, PF>0.93
- Protections:Short circuit/Over load/Over voltage/Over temperature
- Built-in cooling fan speed control
- Built-in constant current limiting circuit
- Built-in fan speed control
- Remote ON-OFF control(Optional)
- LED indicator for power on
- 100% full load burn-in test
- Fixed switching frequency at PFC:67KHz PWM:134KHz
- 3 years warranty

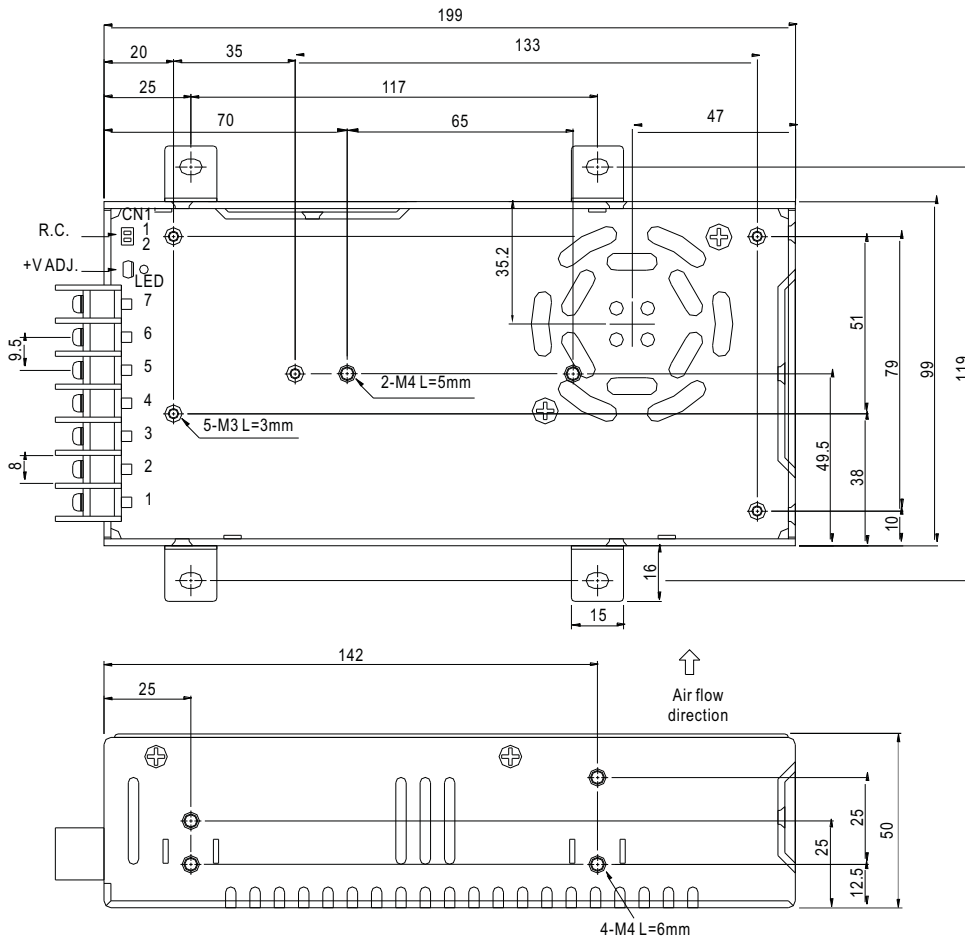


**SPECIFICATION**

MODEL	SP-200-3.3	SP-200-5	SP-200-7.5	SP-200-12	SP-200-13.5	SP-200-15	SP-200-24	SP-200-27	SP-200-48	
OUTPUT	DC VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V
	RATED CURRENT	40A	40A	26.7A	16.7A	14.9A	13.4A	8.4A	7.5A	4.2A
	CURRENT RANGE	0 ~ 40A	0 ~ 40A	0 ~ 26.7A	0 ~ 16.7A	0 ~ 11.2A	0 ~ 13.4A	0 ~ 8.4A	0 ~ 7.5A	0 ~ 4.2A
	RATED POWER	132W	200W	200.2W	200.4W	201.1W	201W	201.6W	202.5W	201.6W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p	250mVp-p
	VOLTAGE ADJ. RANGE	3.14 ~ 3.63V	4.75 ~ 5.5V	7.13 ~ 8.25V	11.4 ~ 13.2V	12.8 ~ 14.9V	14.3 ~ 16.5V	22.8 ~ 26.4V	25.7 ~ 29.7V	45.6 ~ 52.8V
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
SETUP, RISE, HOLD TIME	600ms, 30ms, 20ms at full load									
INPUT	VOLTAGE RANGE	85 ~ 264VAC		120 ~ 370VDC						
	FREQUENCY RANGE	47~63Hz								
	POWER FACTOR	PF>0.93/230VAC		PF>0.98/115VAC at full load						
	EFFICIENCY (Typ.)	65%	71%	76%	79%	80%	81%	83%	83%	84%
	AC CURRENT	3.5A/115VAC		1.7A/230VAC						
	INRUSH CURRENT (max.)	COLD START 40A/230VAC								
	LEAKAGE CURRENT	<2mA / 240VAC								
PROTECTION	OVER LOAD	105 ~ 150% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed								
	OVER VOLTAGE	3.63 ~ 4.46V	5.5 ~ 6.75V	8.25 ~ 10.13V	13.2 ~ 16.2V	14.85 ~ 18.2V	16.5 ~ 20.25V	26.4 ~ 32.4V	29.7 ~ 36.45V	52.8 ~ 64.8V
	OVER TEMPERATURE	95°C ±5°C (TSW1 : Detect on heatsink of power transistor) Protection type : Shut down o/p voltage, recovers automatically after temperature goes down								
FUNCTION	REMOTE CONTROL(OPTION)	CN1:4 ~ 10VDC POWER ON, <0 ~ 0.8VDC POWER OFF								
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.05%/°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 and S-MARK J60950 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								
	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	183.8K hrs min.		MIL-HDBK-217F (25°C)						
	DIMENSION	199*99*50mm (L*W*H)								
	PACKING	0.85Kg; 20pcs/17.9Kg/1.28CUFT								
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. 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.</p>									

**Mechanical Specification**

Case No. 916B Unit:mm



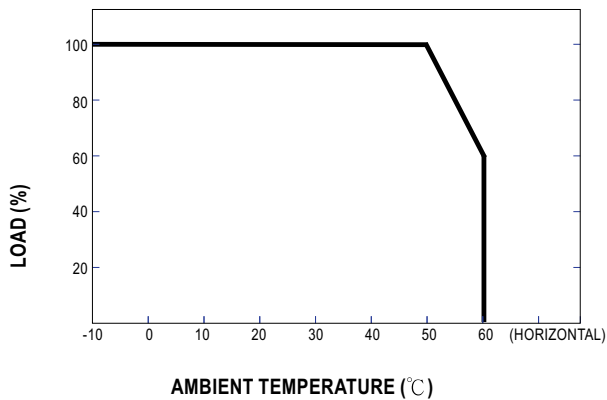
Terminal pin number assignment :

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

Remote ON/OFF(CN1):JST S2B-XH or equivalent(optional)

Pin No.	Assignment	Mating Housing	Terminal
1	RC+	JST XHP or equivalent	JST SXH-001T-P0.6 or equivalent
2	RC-		

**Derating Curve**



**Output Derating VS Input Voltage**

