

SP-200 Series

200W Single Output Enclosed Power Supply with PFC Function



Case No: 8018JV
199 x 99 x 50mm

Features

- Universal AC input / Full range
- Built-in active PFC function, PF>0.93
- Protections: Short circuit / Overload / Over Voltage / Over Temperature
- Built-in cooling fan speed control
- Built-in constant current limiting circuit
- 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

INPUT	Voltage	85V ~ 264VAC 120 ~ 370VDC								
	Frequency	47 ~ 63 Hz								
	Power Factor	PF>0.93/230VAC PF>0.97/115VAC at full load								
	Efficiency	69%	76%	78.5%	84%	84%	85%	85%	85%	85%
	AC Current	3.5A/115VAC		1.7A/230VAC						
	Inrush Current (Typ.)	Cold Start 50A/230VAC								
	Leakage Current	<2mA@240V								
OUTPUT	MODEL No.	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
	Voltage	3.3V	5V	7.5V	12V	13.5	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 ~ 14.9A	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.	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	150Vp-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	± 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 Time	600ms, 40ms at full load								
Holdup Time (Typ.)	20ms at full load									
PROTECTION	Overload	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	55.8 ~ 64.8V
	Over temperature	80°C ±5°C (TSW1: detect on heat sink 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 "Derating Curve")								
	Working Humidity	20 ~ 90% RH non-condensing								
	Storage Temp., Humidity	-20 ~ +85°C, 10~95% RH								
	Temp. Co-efficient	±0.05% / °C (0~50°C)								
	Vibration	10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes								
SAFETY & EMC	Safety Standards	UL60950-1, TUV EN60950-1 approved								
	Withstand Voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC								
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/70% RH								
	EMC Emission	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3								
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN55024, light industry level, criteria A								
OTHERS	M.T.B.F.	183.8K hrs min. MIL-HDBK-217F (25°C)								
	Packaging	0.85Kg; 20pcs/17.9Kg/1.28CUFT								

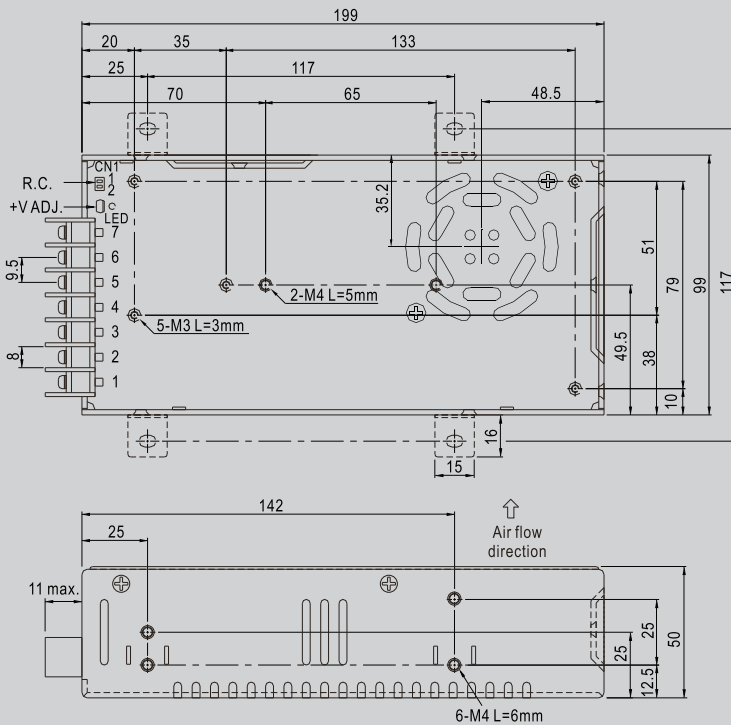
1. All measurements not specially mentioned are based on 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerance: Includes set up tolerance, line regulation and load regulation
4. The power supply is considered a component which will be installed into final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."

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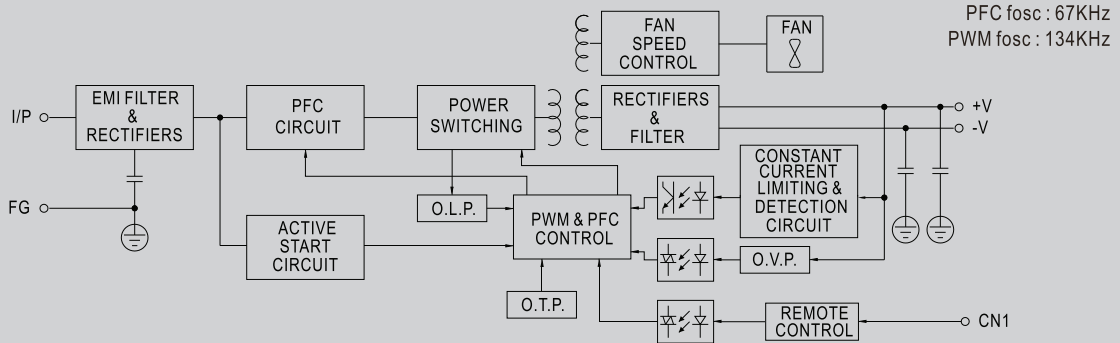
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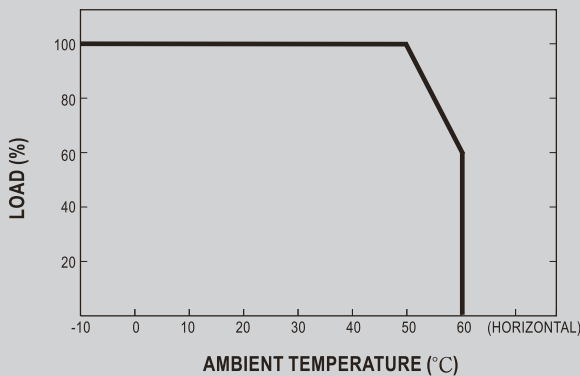
Mechanical Specification



Block Diagram



De-Rating Curve



Static Characteristics

