



200W Single Output with PFC Function

RSP-200 series



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- 1U low profile 30mm
- Optional conformal coating models (RSP-200-□CC)
- LED indicator for power on
- 3 years warranty



SPECIFICATION

MODEL		RSP-200-2.5	RSP-200-3.3	RSP-200-4	RSP-200-5	RSP-200-7.5	RSP-200-12
OUTPUT	DC VOLTAGE	2.5V	3.3V	4V	5V	7.5V	12V
	RATED CURRENT	40A	40A	40A	40A	26.7A	16.7A
	CURRENT RANGE	0 ~ 40A	0 ~ 40A	0 ~ 40A	0 ~ 40A	0 ~ 26.7A	0 ~ 16.7A
	RATED POWER	100W	132W	160W	200W	200.25W	200.4W
	RIPPLE & NOISE (max.) <small>Note.2</small>	100mVp-p	100mVp-p	100mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	2.35 ~ 2.85V	2.97 ~ 3.8V	3.7 ~ 4.3V	4.5 ~ 5.5V	6 ~ 9V	10 ~ 13.2V
	VOLTAGE TOLERANCE <small>Note.3</small>	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.3%
	LOAD REGULATION	±1.5%	±1.5%	±1.0%	±1.0%	±1.0%	±0.5%
	SETUP, RISE TIME	1500ms, 50ms/230VAC 3000ms, 50ms/115VAC at full load					
HOLD UP TIME (Typ.)	8ms at full load 230VAC /115VAC						
INPUT	VOLTAGE RANGE <small>Note.5</small>	88 ~ 264VAC	124 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	PF>0.95/230VAC PF>0.98/115VAC at full load					
	EFFICIENCY (Typ.)	81.5%	84%	85.5%	87%	89%	89%
	AC CURRENT (Typ.)	2A/115VAC	1.1A/230VAC		3.5A/115VAC	1.7A/230VAC	
	INRUSH CURRENT (Typ.)	20A/115VAC 40A/230VAC					
	LEAKAGE CURRENT	<1mA / 240VAC					
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed					
	OVER VOLTAGE	2.88 ~ 3.5V	3.8 ~ 4.62V	4.5 ~ 5.6V	5.75 ~ 7V	9.4 ~ 10.9V	13.8 ~ 16.2V
	OVER TEMPERATURE	120℃ ±5℃, 110℃ ±5℃ (7.5V, 12V) (TSW1) detect on heatsink of power transistor Protection type : Shut down o/p voltage, re-power on to recover					
		Protection type : Shut down o/p voltage, recovers automatically after temperature goes down					
ENVIRONMENT	WORKING TEMP.	-30 ~ +70℃ (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 45℃)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY & EMC <small>(Note 4)</small>	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℃ / 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, EN55024, light industry level, criteria A					
OTHERS	MTBF	K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	215*115*30mm (L*W*H)					
	PACKING	Kg					
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. 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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) 5. Derating may be needed under low input voltages. Please check the derating curve for more details.						



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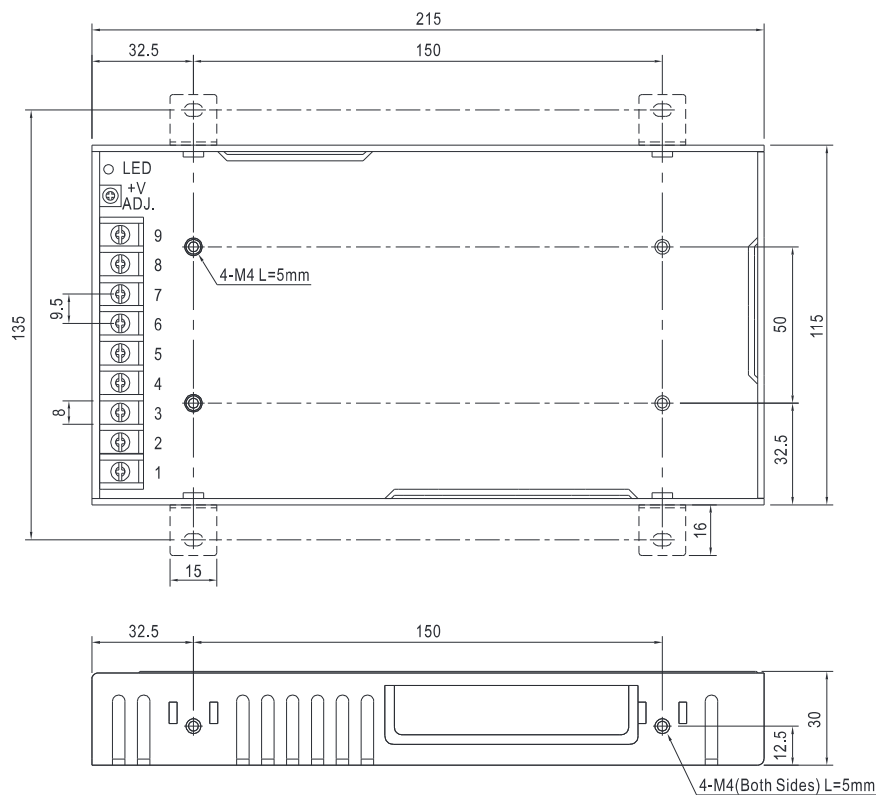


SPECIFICATION

MODEL		RSP-200-13.5	RSP-200-15	RSP-200-24	RSP-200-27	RSP-200-36	RSP-200-48
OUTPUT	DC VOLTAGE	13.5V	15V	24V	27V	36V	48V
	RATED CURRENT	14.9A	13.4A	8.4A	7.5A	5.56A	4.2A
	CURRENT RANGE	0 ~ 14.9A	0 ~ 13.4A	0 ~ 8.4A	0 ~ 7.5A	0 ~ 5.56A	0 ~ 4.2A
	RATED POWER	201.15W	201W	201.6W	202.5W	200.16W	201.6W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	200mVp-p	220mVp-p	240mVp-p
	VOLTAGE ADJ. RANGE	12 ~ 15V	13.5 ~ 18V	20 ~ 26.4V	26 ~ 31.5V	32.4 ~ 39.6V	41 ~ 56V
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%	±0.2%
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	1500ms, 50ms/230VAC 3000ms, 50ms/115VAC at full load					
	HOLD UP TIME (Typ.)	8ms at full load 230VAC /115VAC					
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.)	89%	89.5%	89.5%	89%	90%	90%
	AC CURRENT (Typ.)	3.5A/115VAC	1.7A/230VAC				
	INRUSH CURRENT (Typ.)	20A/115VAC	40A/230VAC				
	LEAKAGE CURRENT	<1mA / 240VAC					
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed					
	OVER VOLTAGE	15.7 ~ 18.4V	18.8 ~ 21.8V	27.6 ~ 32.4V	32.9 ~ 38.3V	41.4 ~ 48.6V	58.4 ~ 68V
	OVER TEMPERATURE	100°C ±5°C, 110°C ±5°C (13.5V, 15V) (TSW1) detect on heatsink of power transistor Protection type : Shut down o/p voltage, recovers automatically after temperature goes down					
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 45°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: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, EN55024, light industry level, criteria A					
OTHERS	MTBF	K hrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	215*115*30mm (L*W*H)					
	PACKING	Kg					
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 & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)</p> <p>5. Derating may be needed under low input voltages. Please check the derating curve for more details.</p>					

Mechanical Specification

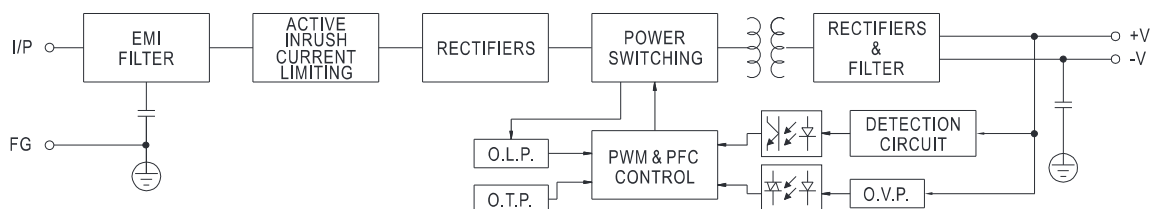
Case No. Unit:mm



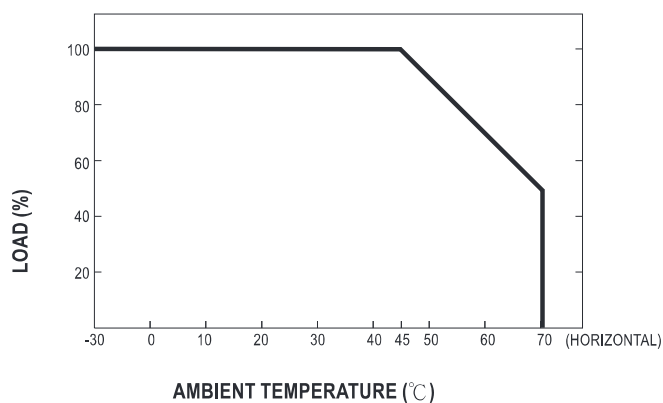
Terminal Pin No. Assignment :

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

Block Diagram

PFC fosc : 100KHz
PWM fosc : 100KHz


Derating Curve



Static Characteristics

