



320 Watt 12 Volt, Enclosed, Single Output Power Supply with Active PFC

UNIT CODE	DESCRIPTION
PS-RSP 320-12	320 Watt, 12 Volt, Single Output, 1U Low Profile, Power Supply with an Active PFC Function

SPECIFICATIONS		
Input	Output	Agency Approvals
Universal 88 ~ 264VAC	12VDC @ 0 ~ 26.7	

Features at a Glance:

Priced Economically

Universal AC input - Full Range 88-264VAC

High efficiency (up to 90%)

Active PFC function (PF>0.95)

30mm low profile 1U design

Protections: Short circuit / Overload /
Over voltage / Over temperature

Optional conformal coating

LED indicator for Power ON

Forced air cooling by DC fan with speed control

Safety Standards: UL60950-1, TUV EN60950-1,
CCC GB4943 approved

Certificates: UL, CUL, TUV, CB and CE

MBTF: 206.5K hours min. *MIL-HDBK-217F (25°C)*

Case: 207A

Weight: 1.98 lbs. (0.9 Kgs.)

Dimensions: 8.4" L x 4.5" W x 1.2" H
215L X 115W X 30H mm H

RoHS Compliant

3 year warranty



The PS-RSP 320 Series is an economical, general-purpose, 320 Watt, 1U low profile, enclosed type, switching power supply with universal AC input and an active Power Factor Correction (PFC) function.

Other built-in functions include fan speed control, protection against short circuit, overload, over voltage and over temperature. All versions comply with UL, CUL, TUV, CB, and CE regulations that ensure user and environmental safety. CCC approved.

Wide -30~+70°C (-22~158° F) operating temperature range. Available with an *optional* conformal coating that provides basic protection from moisture and dust.

The PS-RSP-320 Series is widely used and applications include general industrial control systems, mechanical and electrical equipment, instrumentation, LED displays, or any system that requires a low profile, economical power supply.

[Release & Application Notes](#)

Pricing: 1+ \$ 129.95
10+ 107.50
25+ 94.40

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320W Single Output with PFC Function

RSP-320 series



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- High efficiency up to 90%
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC Fan with fan speed control function
- 1U low profile 30mm
- Optional conformal coating models (RSP-320-□CC)
- LED indicator for power on
- 3 years warranty

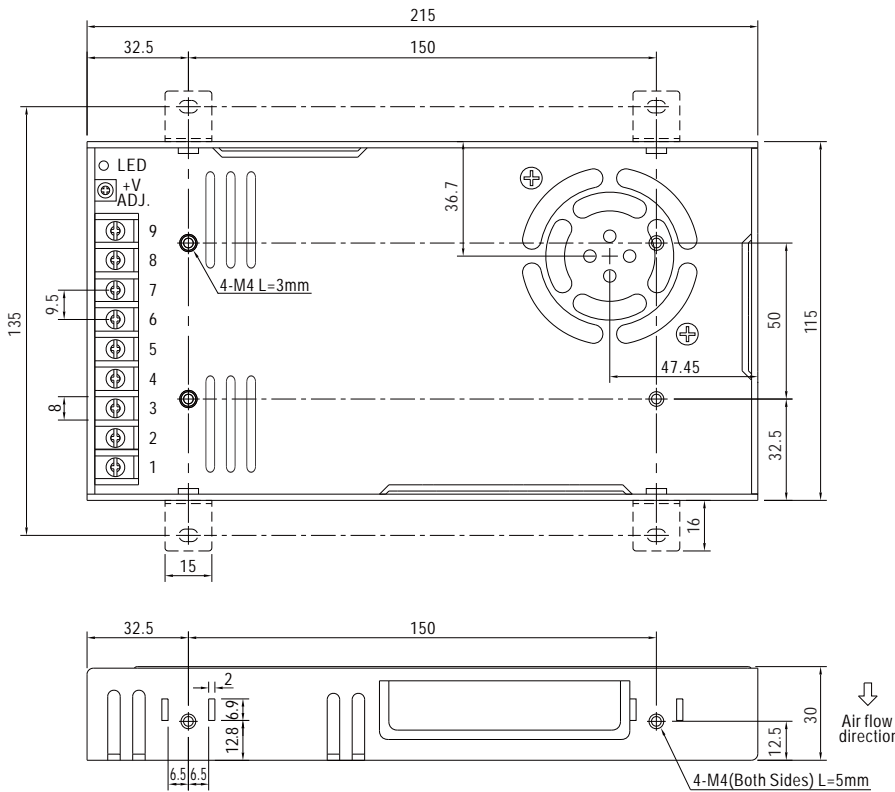


SPECIFICATION

MODEL		RSP-320-2.5	RSP-320-3.3	RSP-320-4	RSP-320-5	RSP-320-7.5	RSP-320-12
OUTPUT	DC VOLTAGE	2.5V	3.3V	4V	5V	7.5V	12V
	RATED CURRENT	60A	60A	60A	60A	40A	26.7A
	CURRENT RANGE	0 ~ 60A	0 ~ 60A	0 ~ 60A	0 ~ 60A	0 ~ 40A	0 ~ 26.7A
	RATED POWER	150W	198W	240W	300W	300W	320.4W
	RIPPLE & NOISE (max.) Note.2	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 Note.3	±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 Note.4	88 ~ 264VAC 124 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	PF>0.95/230VAC PF>0.98/115VAC at full load					
	EFFICIENCY (Typ.)	75.5%	79.5%	81%	83%	88%	88%
	AC CURRENT (Typ.)	2.7A/115VAC	1.5A/230VAC		4A/115VAC	2A/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 ~ 3.38V	3.8 ~ 4.5V	4.5 ~ 5.3V	5.75 ~ 6.75V	9.4 ~ 10.9V	13.8 ~ 16.2V
	OVER TEMPERATURE	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 ~ 50°C)					
SAFETY & EMC (Note 5)	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
	SAFETY STANDARDS	UL60950-1, TUV EN60950-1, CCC GB4943 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 EN55032 (CISPR32) Class B, EN61000-3-2,-3,GB9254 class B,GB17625.1					
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A					
	MTBF	206.5K hrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	215*115*30mm (L*W*H)					
	PACKING	0.9Kg; 15pcs/14.5Kg/0.78CUFT					
NOTE	<ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 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. Derating may be needed under low input voltages. Please check the derating curve for more details. 5. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. 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) 6. For charging related applications, please consult Mean Well for details. 7. Strongly recommended that external output capacitance should not exceed 5000uF. (Only for: RSP-320-2.5/-3.3/-4/-5/-7.5/-12/-13.5/-15) 						

Mechanical Specification

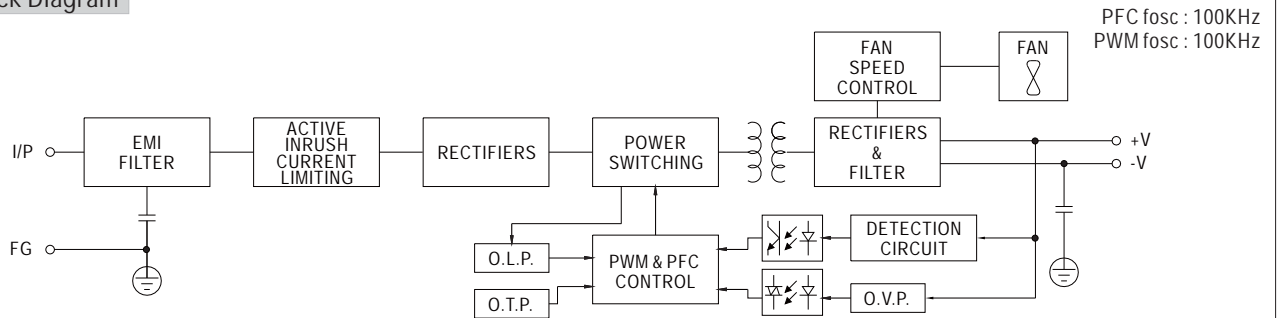
Case No.207A Unit:mm



Terminal Pin No. Assignment :

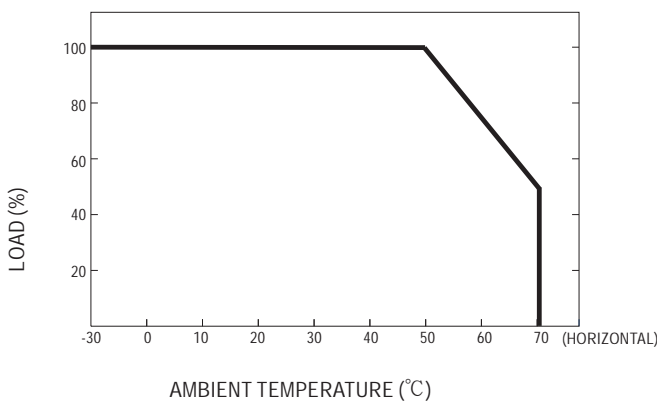
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4~6	DC OUTPUT -V
2	AC/N	7~9	DC OUTPUT +V
3	FG \perp		

Block Diagram



PFC fosc : 100KHz
PWM fosc : 100KHz

Derating Curve



Static Characteristics

