MEAN WELL

320W Single Output with PFC Function

RSP-320-3.3

User's Manual

Dimension

L	*	W	*	H	
215	*	115	*	30	mm
8.46	*	4.53	*	1.18	inch

R33100 RoHS CNS14336-1 | IS13252 (except 2.5V,48V) | AS/NZS60950-1 | UL62368-1 | BS EN/EN62368-1 | (only for 5V)

GB4943.1 | TPTC004 | IEC61558-1/2-16 (for 12V or higher models) IEC62368-1 | EN61558-1/2-16 (for 12V or higher models)

Industrial | Automate | Telecom | Network | EV

■ Features

- Universal AC input / Full range
- Built-in active PFC function
- High efficiency up to 90%
- Forced air cooling by built-in DC Fan with fan speed control function
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Optional conformal coating
- LED indicator for power on
- 3 years warranty

■ Applications

- Factory control or automation apparatus
- Test and measurement instrument
- Laser related machine
- Burn-in facility
- RF application

■ GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

■ Description

RSP-320-3.3 is a 320W single output enclosed type AC/DC power supply. This series operates for 88~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each modelis cooled by the built-in fan with fan speed control, working for the temperature up to 70℃.

■ Model Encoding / Order Information

RSP - 320 - 3.3

- 3.3 — Output voltage
- 320 — Output wattage
- RSP — Series name

320W Single Output with PFC Function

RSP-320-3.3

SPECIFICATION

MODEL		RSP-320-3.3	
OUTPUT	DC VOLTAGE	3.3V	
	RATED CURRENT	60A	
	CURRENT RANGE	0 ~ 60A	
	RATED POWER	198W	
	RIPPLE & NOISE (max.) Note.2	100mVp-p	
	VOLTAGE ADJ. RANGE	2.97 ~ 3.8V	
	VOLTAGE TOLERANCE Note.3	±2.0%	
	LINE REGULATION	±0.5%	
	LOAD REGULATION	±1.5%	
	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.)	79.5%	
	AC CURRENT (Typ.)	2.7A/115VAC 1.5 A/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	3.8 ~ 4.5V	
		Protection type : Shut down o/p voltage, re-power on to recover	
	OVER TEMPERATURE	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 ~ 50℃)	
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes	
SAFETY & EMC (Note 5)	SAFETY STANDARDS	UL62368-1,TUV BS EN/EN62368-1,EAC TP TC 004, CCC GB4943.1,BSMI CNS14336-1, AS/NZS 60950.1, IS13252(Part1)/ IEC60950-1(except for 2.5V,48V),Dekra EN 61558-1/2-16,IEC 61558-1/2-16(for 12V or higher models) 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 BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020, CNS13438, GB9254 Class B, GB17625.1	
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, light industry level, EAC TP TC 020	
OTHERS	MTBF	1826.4K hrs min. Telcordia SR-332 (Bellcore) ; 192.9K hrs min. MIL-HDBK-217F (25℃)	
	DIMENSION	215*115*30mm (L*W*H)	
	PACKING	0.9Kg; 15pcs/14.5Kg/0.67CUFT	

NOTE

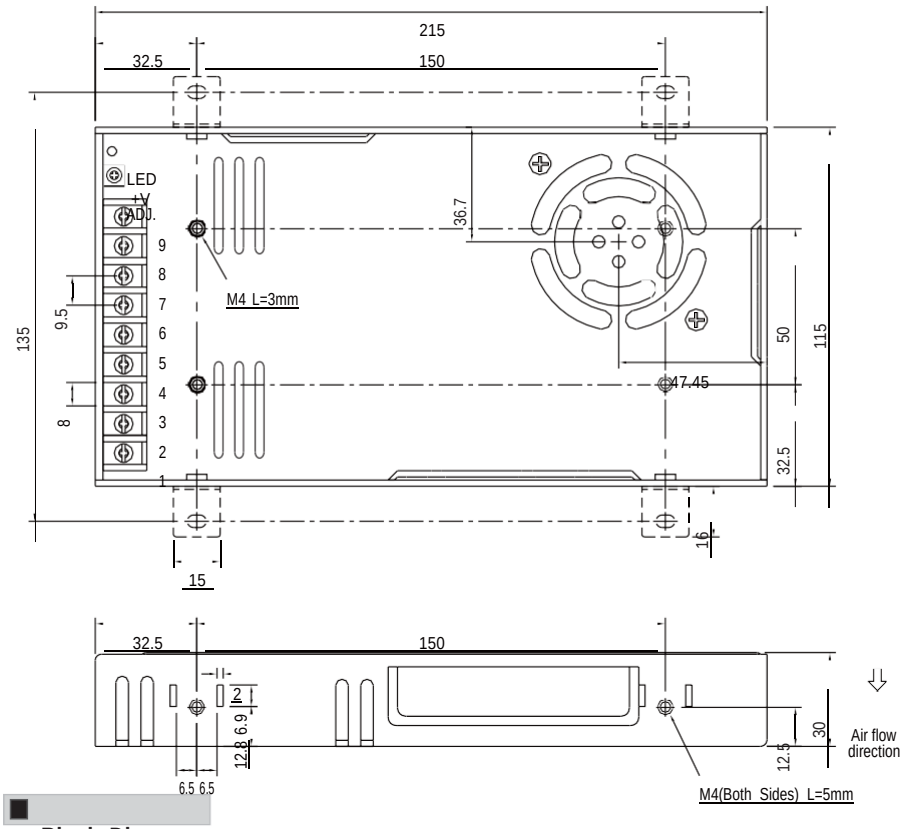
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μF & 47 μF parallel capacitor.
3. Tolerance : includes set up tolerance, line 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 https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)
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)
8. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).

※ Product Liability Disclaimer：For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

SPECIFICATION

Mechanical Specification

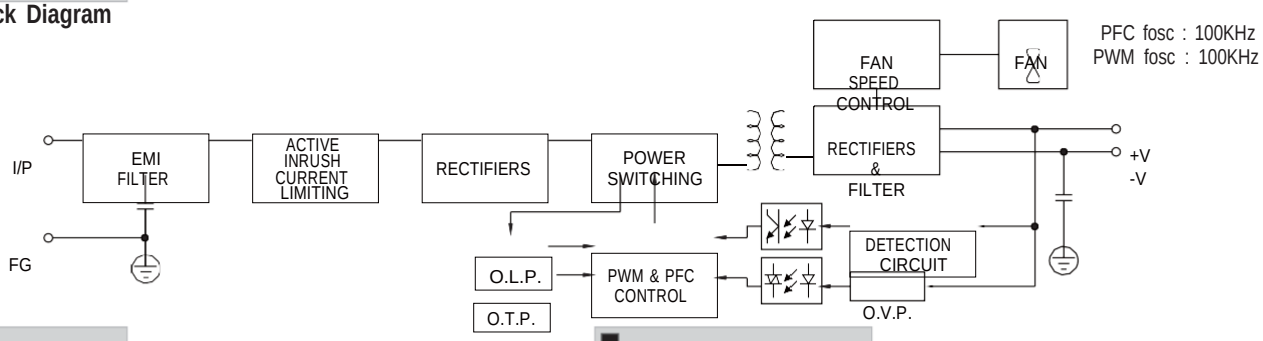
Case No.207A Unit:mm



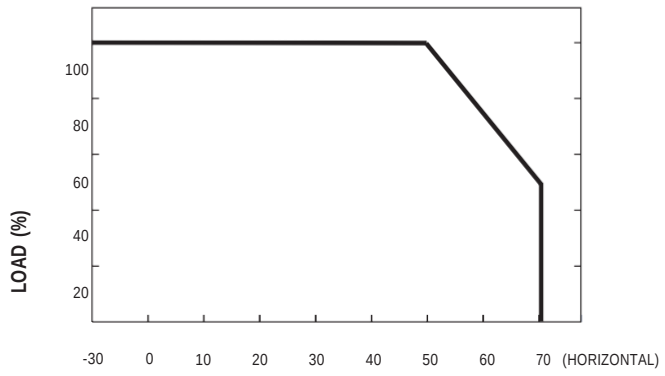
Terminal Pin No. Assignment :

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

Block Diagram



Derating Curve



Static Characteristics