



320W Single Output Switching Power Supply

S-320 series

Authorized Distributor: Total Power International, Inc. Toll Free: 877-646-0900(US) PH# (978)453-7272 www.total-power.com



■ Features :

- AC input range selectable by switch
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Forced air cooling by built-in DC fan
- Cooling Fan ON-OFF auto control
- 100% full load burn-in test
- Fixed switching frequency at 90KHz
- 2 years warranty

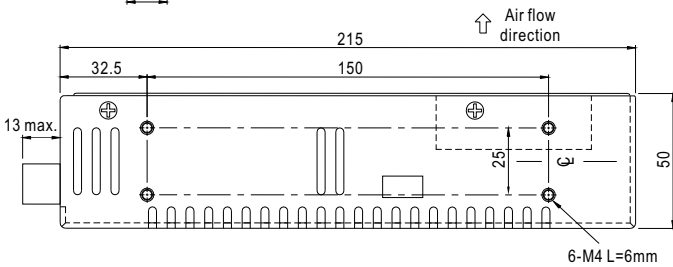
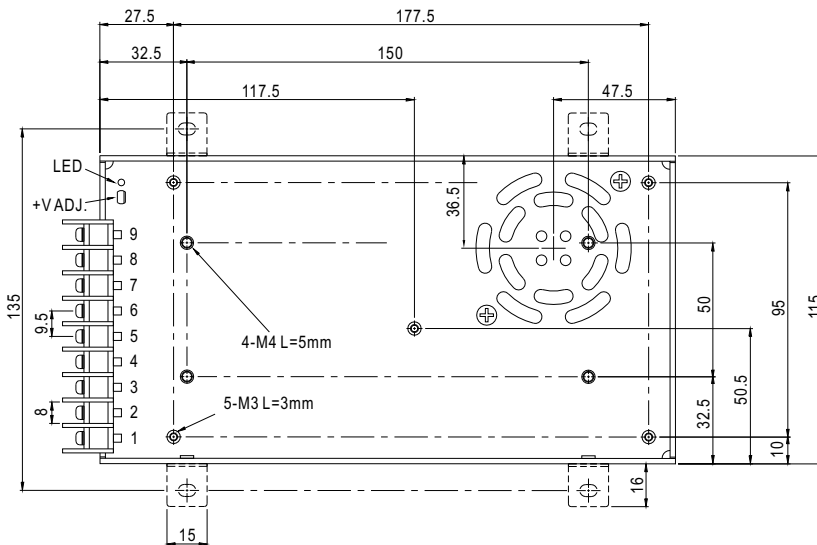


SPECIFICATION

MODEL	S-320-5	S-320-7.5	S-320-12	S-320-13.5	S-320-15	S-320-24	S-320-27	S-320-48	
OUTPUT	DC VOLTAGE	5V	7.5V	12V	13.5V	15V	24V	27V	48V
	RATED CURRENT	50A	36A	25A	22A	20A	12.5A	11A	6.5A
	CURRENT RANGE	0 ~ 50A	0 ~ 36A	0 ~ 25A	0 ~ 22A	0 ~ 20A	0 ~ 12.5A	0 ~ 11A	0 ~ 6.5A
	RATED POWER	250W	270W	300W	297W	300W	300W	297W	312W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	240mVp-p
	VOLTAGE ADJ. RANGE	4.5 ~ 5.7V	6 ~ 9V	10 ~ 13.2V	12 ~ 15V	13.5 ~ 18V	20 ~ 26.4V	26 ~ 32V	41 ~ 56V
	VOLTAGE TOLERANCE Note.3	2.0%	2.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	LINE REGULATION	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
	LOAD REGULATION	1.0%	1.0%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
	SETUP, RISE TIME	2000ms, 20ms at full load							
HOLD UP TIME (Typ.)	24ms at full load								
INPUT	VOLTAGE RANGE	88 ~ 132VAC / 176~264VAC by switch 248 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz							
	EFFICIENCY(Typ.)	77%	80%	82%	83%	84%	86%	86%	87%
	AC CURRENT (Typ.)	6A/115VAC 3.5A/230VAC							
	INRUSH CURRENT (Typ.)	18A/115VAC 36A/230VAC							
	LEAKAGE CURRENT	<3.5mA / 240VAC							
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed							
	OVER VOLTAGE	5.75 ~ 6.75V	9.4 ~ 10.9V	13.8 ~ 16.2V	15.5 ~ 18.2V	18 ~ 21V	27.6 ~ 32.4V	33.7 ~ 39.2V	57.6 ~ 67.2V
	FAN CONTROL O.T.P.	RTH1 ≥ 65°C FAN ON, ≤ 55°C FAN OFF, ≥ 70°C (5 ~ 15V) RTH1 ≥ 70°C FAN ON, ≤ 65°C FAN OFF, ≥ 80°C (24 ~ 48V) Protection type : Hiccup mode, recovers automatically after fault condition is removed							
	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)							
ENVIRONMENT	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH							
	TEMP. COEFFICIENT	0.03%/°C (0 ~ 50°C)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes							
SAFETY & EMC	SAFETY STANDARDS	UL60950-1 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							
OTHERS	MTBF	188.7K hrs min. MIL-HDBK-217F (25°C)							
	DIMENSION	215*115*50mm (L*W*H)							
	PACKING	1.08Kg; 12pcs/13.8Kg/0.92CUFT							
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>								

Mechanical Specification

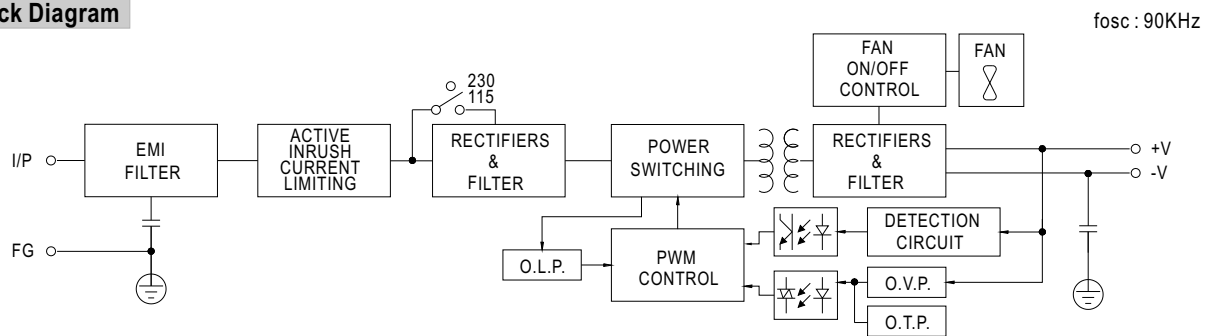
Case No. 912A Unit:mm



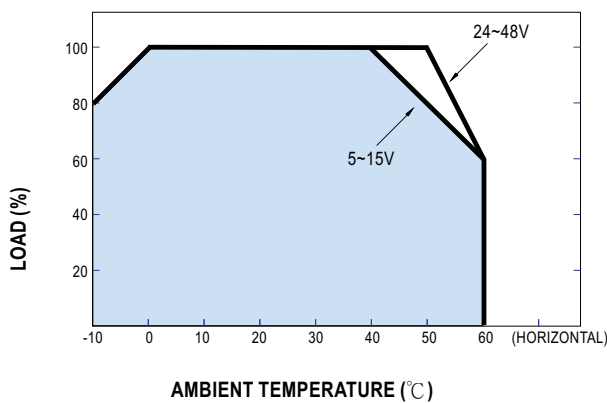
Terminal Pin No. Assignment

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

Block Diagram



Derating Curve



Static Characteristics

