

FEATURES

- 2 Year Warranty
- Low Cost, High Reliability
- Fixed Switching Frequency
- Compact Size, Light Weight
- 100% Full Load Burn-In Tested
- Cooling Fan ON/OFF Auto Control
- Built-In EMI Filter, Low Ripple Noise
- AC Input Range Selectable by Switch
- Forced Air Cooling by Built-In DC Fan
- High Efficiency, Low Working Temperature
- Soft Start Circuit, Limiting AC Surge Current
- Short Circuit, Overload, Over Voltage, and Over Temperature Protected



SPECIFICATIONS: PSS320 Series

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
 We reserve the right to change specifications based on technological advances.

INPUT SPECIFICATIONS

Input Voltage Range	88 ~ 132VAC / 176 ~ 264VAC auto switch (248 ~ 370VDC)
Input Frequency	47 to 63Hz
AC Current (typical)	6A @ 115VAC 3.5A @ 230VAC
Inrush Current (typical)	18A @ 115VAC 36A @ 230VAC
Leakage Current	< 3.5mA @ 240VAC

OUTPUT SPECIFICATIONS

Output Voltage	See Table
Output Power	See Table
Voltage Tolerance (See Note 3)	5V & 7.5V outputs: ±2.0%; 12V - 48V outputs: ±1.0%
Voltage Adjustment Range	See Table
Line Regulation	±0.5%
Load Regulation	5V & 7.5V outputs: ±1.0%; 12V - 48V outputs: ±0.5%
Output Current	See Table
Ripple & Noise (max) (See Note 2)	5V - 24V outputs: 150mVp-p; 27V output: 200mVp-p; 48V output: 240mVp-p
Setup, Rise Time	2000ms, 20ms @ full load
Hold Up Time (typical)	24ms @ full load
Temperature Coefficient	±0.03%/°C (0 ~ 50°C)

PROTECTION

Overload Protection	105 ~ 135% rated output power Protection Type: Hiccup mode, recovers automatically after fault condition is removed.
Over Voltage Protection	See Table Protection Type: Hiccup mode, recovers automatically after fault condition is removed.
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.

GENERAL SPECIFICATIONS

Switching Frequency	90KHz
Efficiency	See Table
Withstand Voltage	3000VAC (Input to Output), 1500VAC (Input to FG), 500VAC (Output to FG)
Isolation Resistance	100MΩ/500DC (Input to Output, Input to FG, and Output to FG)

ENVIRONMENTAL SPECIFICATIONS

Working Temperature	-10°C to +60°C (refer to output load derating curve)
Storage Temperature	-20°C to +85°C
Working Humidity	20 ~ 90% RH non-condensing
Storage Humidity	10 ~ 95% RH
Cooling	Forced air cooling by built-in DC fan.
Vibration	10 ~ 500Hz, 2G 10min./1 cycle, 60min each along X, Y, Z axes.
MTBF	188,700 hours min. @ 25°C (MIL-HDBK-217F)

PHYSICAL SPECIFICATIONS

Weight	1080 grams
Dimensions	215(L) x 115(W) x 50(H) mm
Warranty	2 years

SAFETY & EMC

Safety Standards	UL60950-1 approved
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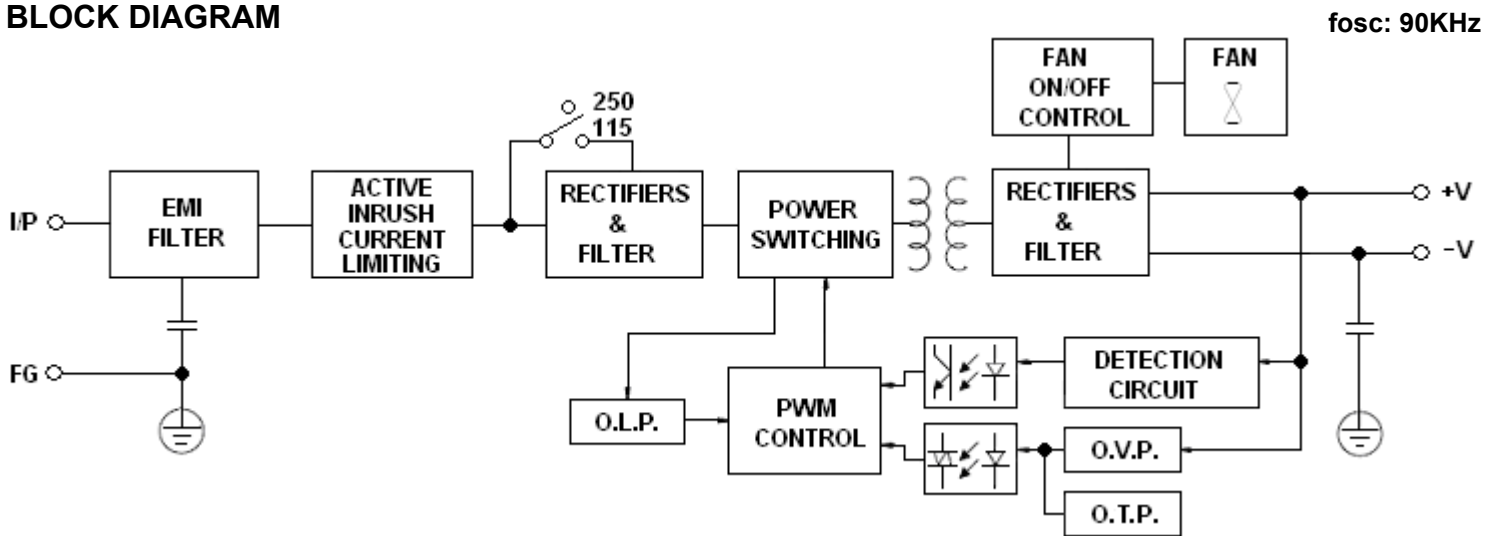
OUTPUT VOLTAGE / CURRENT RATING CHART

Model Number	Input Voltage	Output Voltage	Voltage Adjust. Range	Over Voltage Protection	Output Current	Ripple & Noise	Output Power	Efficiency
PSS-320-5	88 ~ 132 VAC or 176 ~ 264 VAC	5 VDC	4.5 ~ 5.7V	5.75 ~ 6.75V	50A	150mVp-p	250W	77%
PSS-320-7.5		7.5 VDC	6 ~ 9V	9.4 ~ 10.9V	36A	150mVp-p	270W	80%
PSS-320-12		12 VDC	10 ~ 13.2V	13.8 ~ 16.2V	25A	150mVp-p	300W	82%
PSS-320-13.5		13.5 VDC	12 ~ 15V	15.5 ~ 18.2V	22A	150mVp-p	297W	83%
PSS-320-15		15 VDC	13.5 ~ 18V	18 ~ 21V	20A	150mVp-p	300W	84%
PSS-320-24		24 VDC	20 ~ 26.4V	27.6 ~ 32.4V	12.5A	150mVp-p	300W	86%
PSS-320-27		27 VDC	26 ~ 32V	33.7 ~ 39.2V	11A	200mVp-p	297W	86%
PSS-320-48		48 VDC	41 ~ 56V	57.6 ~ 67.2V	6.5A	240mVp-p	312W	87%

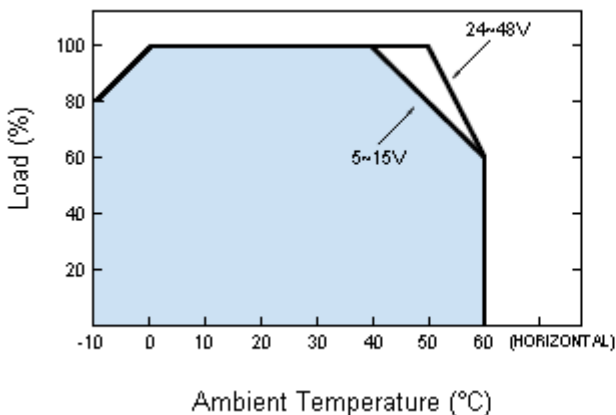
NOTES

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load, and 25°C ambient temperature.
2. Ripple & noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.
3. Tolerances include set up tolerance, line regulation, and load regulation.

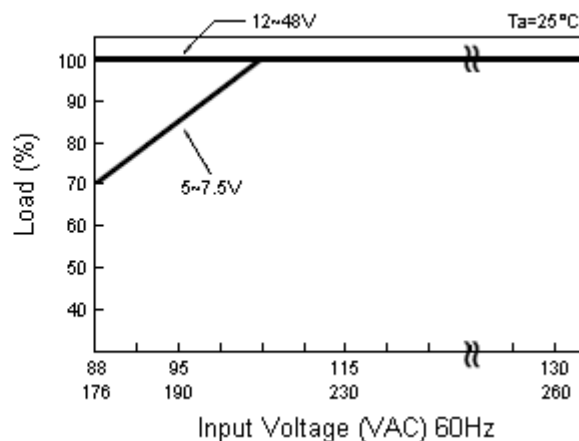
BLOCK DIAGRAM



DERATING CURVE

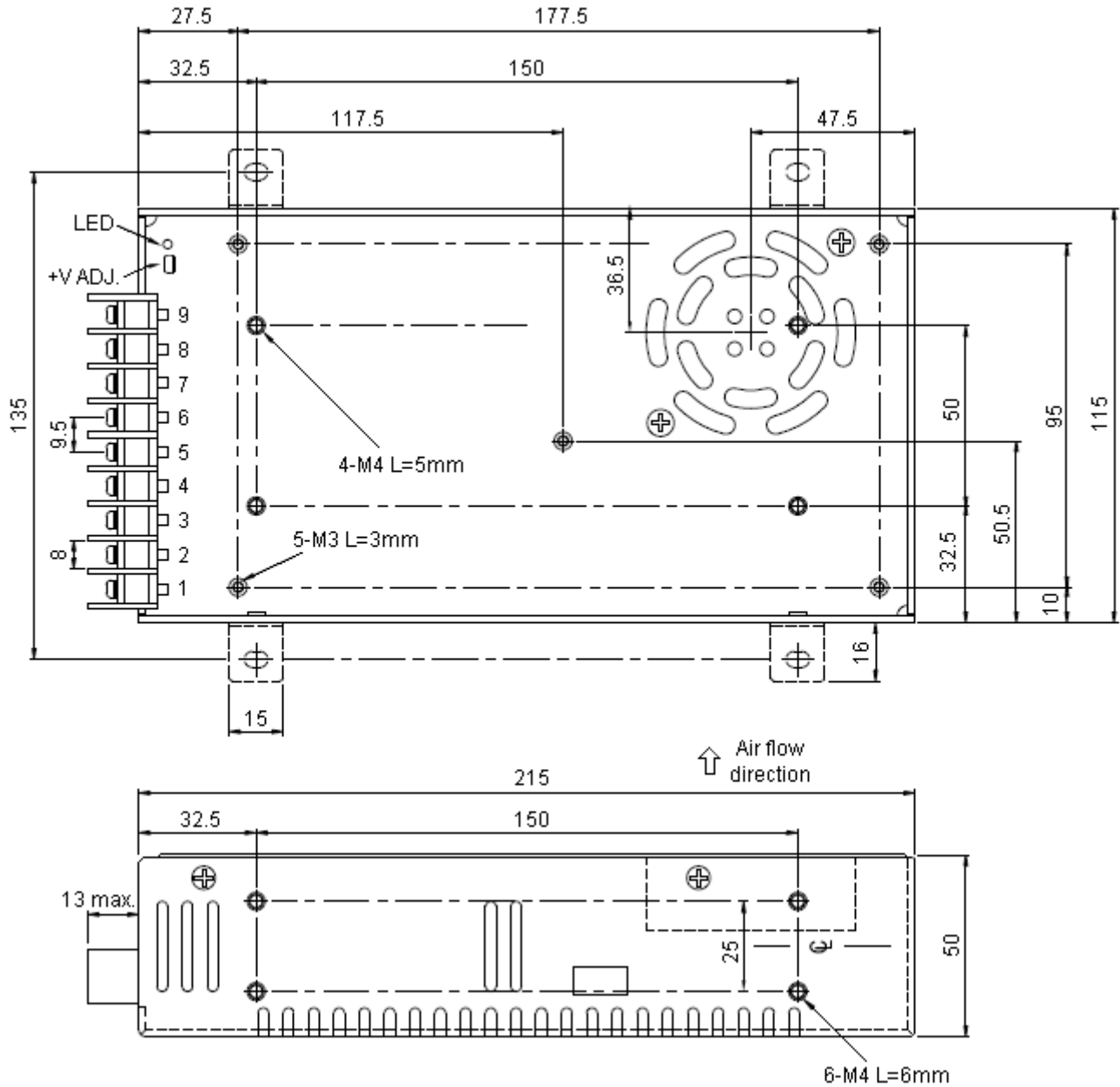


STATIC CHARACTERISTICS



MECHANICAL DRAWING

Unit: mm



Terminal Pin No. Assignment

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