

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 |

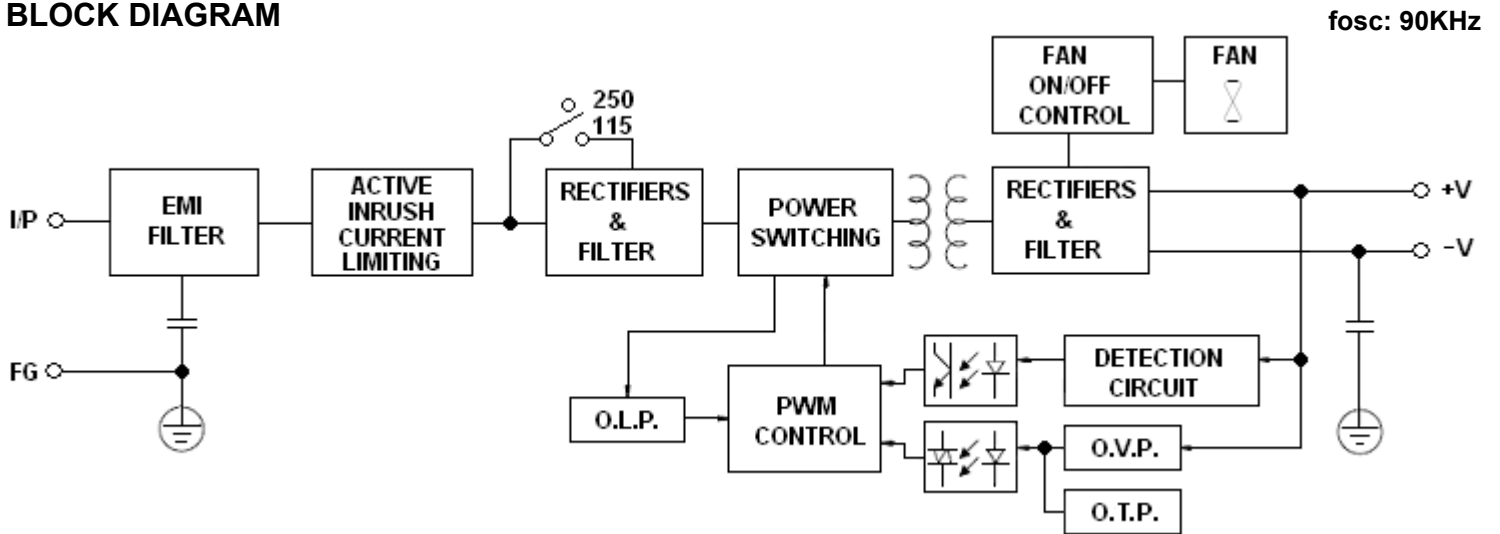
OUTPUT VOLTAGE / CURRENT RATING CHART

| 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% |

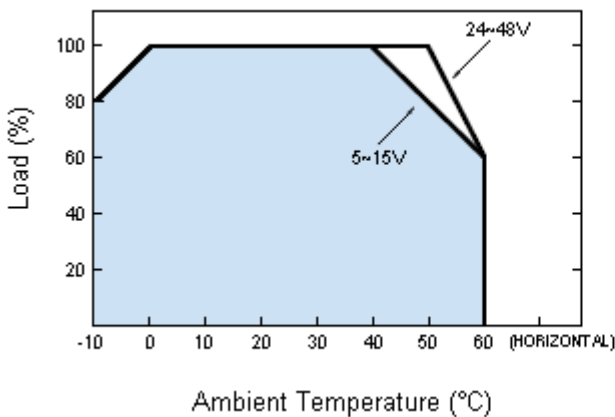
NOTES

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.

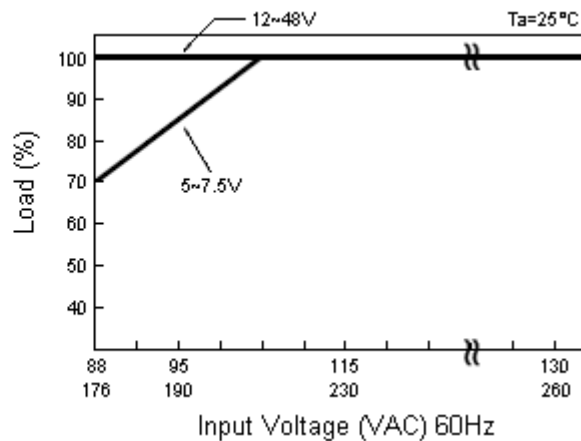
BLOCK DIAGRAM



DERATING CURVE

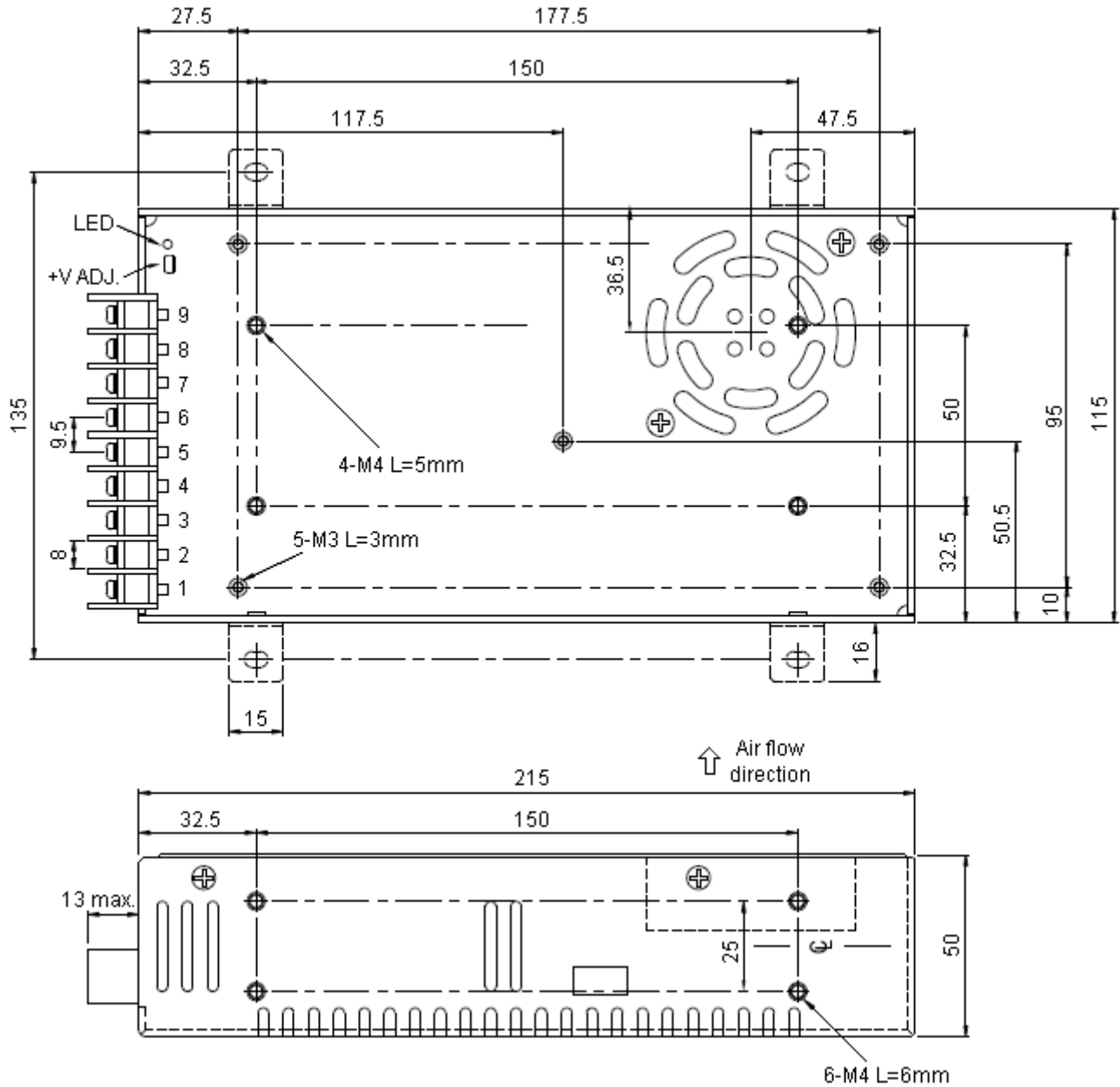


STATIC CHARACTERISTICS



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) |