

FEATURES

- 1 Year Warranty
- Low Cost, High Reliability
- Fixed Switching Frequency
- Compact Size, Light Weight
- AC Input Selectable by Switch
- 100% Full Load Burn-In Tested
- Cooling by Free Air Convection
- EN55022, IEC801-2,3,4 and IEC555-2
- UL1950 and TUV EN60950 Approved
- Short Circuit and Overload Protected
- Built-In EMI Filter, Low Ripple and Noise
- High Efficiency, Low Working Temperature
- Soft Start Circuit, Limiting AC Surge Current



| SPECIFICATIONS: PSS100 Series | | | | | |
|-----------------------------------|--|--|--|--|--|
| All specifications are base | d on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted. | | | | |
| | rve the right to change specifications based on technological advances. | | | | |
| INPUT SPECIFICATIONS | | | | | |
| Input Voltage Range | 85 ~ 132VAC / 180 ~ 264VAC selected by switch (255 ~ 370VDC) | | | | |
| Input Frequency | 47 to 63Hz | | | | |
| AC Current | 2.4A @ 115VAC 1.2A @ 230VAC | | | | |
| Inrush Current (max) | Cold Start 30A @ 115VAC 60A @ 230VAC | | | | |
| Leakage Current | < 1mA @ 240VAC | | | | |
| OUTPUT SPECIFICATIONS | | | | | |
| Output Voltage | See Table | | | | |
| Output Power | See Table | | | | |
| Voltage Tolerance (See Note 3) | PSS-100-3 & PSS-100-5: ±2.0%; Other Models: ±1.0% | | | | |
| Voltage Adjustment Range | See Table | | | | |
| Line Regulation | See Table | | | | |
| Load Regulation | See Table | | | | |
| Output Current | See Table | | | | |
| Ripple & Noise (max) (See Note 2) | 100mVp-p | | | | |
| Setup, Rise Time | 200ms, 80ms @ full load | | | | |
| Hold Up Time (typical) | 20ms @ full load | | | | |
| Temperature Coefficient | ±0.03%/°C (0 ~ 50°C) | | | | |
| PROTECTION | | | | | |
| Overload Protection | 105 ~ 150% rated output power (150 ~ 200% rated output power for S-100-7.5 only) Protection Type: Shutdown output voltage, re-power on to recover. | | | | |
| GENERAL SPECIFICATIONS | | | | | |
| Switching Frequency | 25KHz | | | | |
| Efficiency | See Table | | | | |
| Withstand Voltage | 1500VAC (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 | Free air convection | | | | |
| Vibration | 10 ~ 500Hz, 2G 10min./1 cycle, 60min each along X, Y, Z axes. | | | | |
| MTBF | 322,400 hours min. @ 25°C (MIL-HDBK-217F) | | | | |
| PHYSICAL SPECIFICATIONS | | | | | |
| Weight | 620 grams | | | | |
| Dimensions | 199(L) x 98(W) x 38(H) mm | | | | |
| Warranty | 1 year | | | | |
| SAFETÝ & EMC | | | | | |
| Safety Standards | Design refer to UL1012 | | | | |
| EMI Conduction & Radiation | Design refer to FCC Part15 J Conduction Class B | | | | |



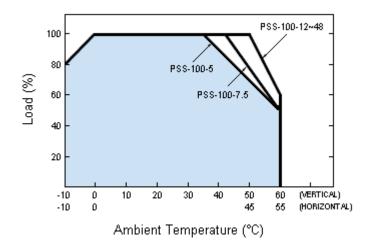
OUTPUT VOLTAGE / CURRENT RATING CHART

| Model Number | Input Voltage | Output Voltage | Voltage Adjust. Range | Output Current | Line Regulation | Load Regulation | Output Power | Efficiency |
|-----------------|-------------------------------------|-------------------|--------------------------|-------------------|--------------------|--------------------|-----------------|------------|
| PSS-100-3 | 85 ~ 132 VAC or 180 ~ 264 VAC | 3VDC | 2.85 ~ 3.3V | 20A | ±0.5% | ±0.5% | 60W | 70% |
| PSS-100-5 | | 5 VDC | 4.75 ~ 5.5V | 20A | ±0.5% | ±0.5% | 100W | 78% |
| PSS-100-7.5 | | 7.5 VDC | 6.75 ~ 8.25V | 13.6A | ±0.5% | ±0.5% | 102W | 80% |
| PSS-100-10 | | 10VDC | 9 ~ 11V | 10A | ±0.3% | ±0.3% | 100W | 80% |
| PSS-100-12 | | 12 VDC | 10.8 ~ 13.2V | 8.5A | ±0.3% | ±0.3% | 102W | 81% |
| PSS-100-15 | | 15 VDC | 13.5 ~ 16.5V | 6.7A | ±0.3% | ±0.3% | 100.5W | 81% |
| PSS-100-18 | | 18VDC | 16.2 ~ 19.8V | 5.6A | ±0.3% | ±0.3% | 100.8W | 82% |
| PSS-100-24 | | 24 VDC | 21.6 ~ 26.4V | 4.5A | ±0.2% | ±0.2% | 108W | 84% |
| PSS-100-27 | | 27VDC | 26 ~ 32V | 3.7A | ±0.2% | ±0.2% | 99.9W | 84% |
| PSS-100-48 | | 48 VDC | 43.2 ~ 52.8V | 2A | ±0.2% | ±0.2% | 96W | 84% |

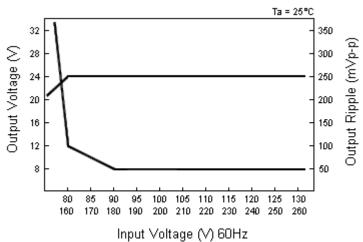
NOTES

- 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.

DERATING CURVE



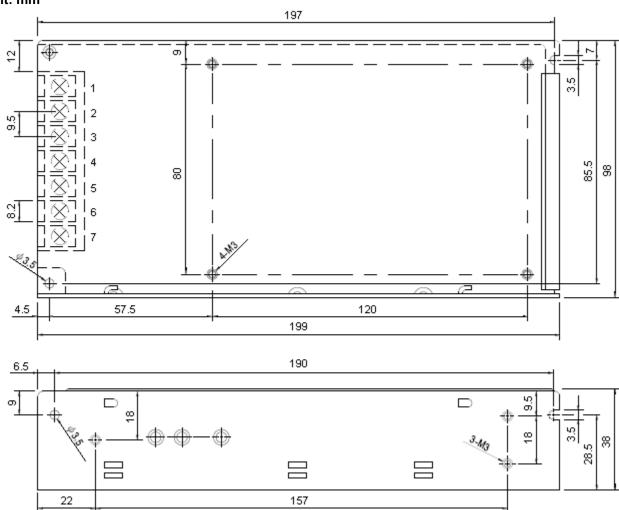
STATIC CHARACTERISTICS (24V)





MECHANICAL DRAWING





Terminal Pin No. Assignment

| Pin No. | Assignment | | | |
|---------|----------------|--|--|--|
| 1 | AC/L | | | |
| 2 | AC/N | | | |
| 3 | FG | | | |
| 4,5 | DC OUTPUT (-V) | | | |
| 6,7 | DC OUTPUT (+V) | | | |