

FEATURES

- Remote Sense
- Power Good Signal
- Remote ON/OFF Control
- 0.98 Typical Power Factor
- Programmable Output Voltage
- Forced Current Sharing at Parallel Operation
- Input Voltage: 90~260VAC (**90 ~ 170VAC Reduced Power**)
- Short Circuit/ Over Load/ Over Voltage/ Over Temperature Protection



SPECIFICATIONS: PS2K0 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 | 90 ~ 260VAC **90 ~ 170 VAC reduced power - see "Output Power vs Input Voltage" derating curve** |
| Input Frequency | 47 to 63Hz |
| Input Current | 11.5A at 230VAC (Typical) |
| Inrush Current | 180A at 230VAC (Typical) |
| Leakage Current | < 10.5mA at 240VAC |
| Remote ON/OFF Control | Compatible with a TTL signal to turn ON/OFF |
| OUTPUT SPECIFICATIONS | |
| Output Voltage | See Table |
| Output Power Range | 2000 Watts max. |
| Output Voltage Adjustability | +3.0% ~ -12% typical adjustment by potentiometer. 20% ~ 100% adjustment by 1 ~ 5VDC external control. |
| Line Regulation | Less than 1% |
| Load Regulation | Less than 1% |
| Output Current | See Table |
| Ripple & Noise (peak to peak) | See Table |
| Setup, Rise, Hold-Up Time | 500ms, 250ms, 12ms at full load |
| Temperature Coefficient | ±0.04% / °C (0 ~ 50°C) |
| Remote Sense | Yes |
| PROTECTION | |
| Over Voltage Protection | 110% ~ 135% follow to output setup point (shutdown output voltage, re-power on to recover) |
| Over Load Protection | 105% ~ 115% rated output power (current limiting, delay shutdown output voltage, re-power on to recover) |
| Over Temperature Protection | > 100°C / measure by heatsink near transformer (shutdown output voltage, recovers automatically after temperature goes down.) |
| GENERAL SPECIFICATIONS | |
| Efficiency | See Table |
| Withstand Voltage | 3KVAC (input to output); 1.5KVAC (input to field ground); 500VAC (output to field ground) |
| Isolation Resistance | 100M ohms / 500VDC (input to output, input to field ground, output to field ground) |
| Power Factor | 0.95 at 230VAC (Typical) |
| Power Good Signal | Open Collector NPN Transistor |
| Special Function | DC voltage Adj., Remote Sensing, Remote Control, Parallel Operation |
| ENVIRONMENTAL SPECIFICATIONS | |
| Working Temperature | 0°C to +50°C @ 100% Load, +65°C @ 50% Load. |
| Storage Temperature | -20°C to +85°C |
| Working Humidity (non-condensing) | 20% to 90% RH |
| Storage Humidity | 10% to 95% RH |
| Vibration | 10 ~ 200Hz, 2g 10 min./1cycle, Period of 60 min. for each axis. |
| Cooling | Power rating and temperature controlled fan. |
| MTBF | 74,900 hrs min. (MIL-HDBK-217F (25°C)) |
| PHYSICAL SPECIFICATIONS | |
| Weight | 8.9kg |
| Dimensions | 320(L) x 212(W) x 124(H) mm |
| SAFETY & EMC | |
| Safety Standards | UL1950, TUV EN60950-1 Approved |
| EMI Conduction & Radiation | Compliance to EN55022 (CISPR22) class A |
| Harmonic Current | Compliance to EN61000-3-2,3 |
| EMS Immunity | Compliance to EN55024 |



Wall Industries, Inc.

PS2K0 Series
2000 Watt Single Output
PFC and Current Sharing
AC/DC Switching Power Supply

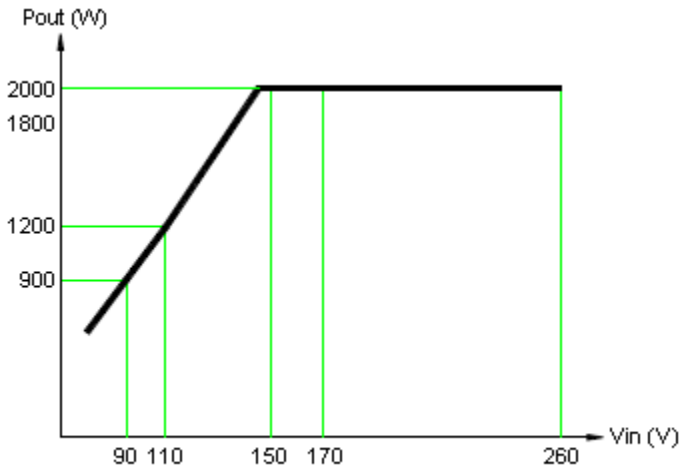
OUTPUT VOLTAGE / CURRENT RATING CHART

| Model Number | Output Voltage | Output Current | Maximum Output Power | Ripple & Noise | Efficiency |
|--------------|----------------|----------------|----------------------|----------------|------------|
| PS2K0-09 | 9 VDC | 222A | 1998W | 150mVp-p | 83% |
| PS2K0-12 | 12 VDC | 166A | 1992W | 150mVp-p | 84% |
| PS2K0-15 | 15 VDC | 133A | 1995W | 150mVp-p | 85% |
| PS2K0-18 | 18 VDC | 111.1A | 2000W | 180mVp-p | 86% |
| PS2K0-24 | 24 VDC | 83A | 1992W | 240mVp-p | 88% |
| PS2K0-36 | 36 VDC | 55.5A | 1998W | 360mVp-p | 88% |
| PS2K0-48 | 48 VDC | 41A | 1968W | 480mVp-p | 89% |
| PS2K0-60 | 60 VDC | 33A | 1980W | 600mVp-p | 90% |

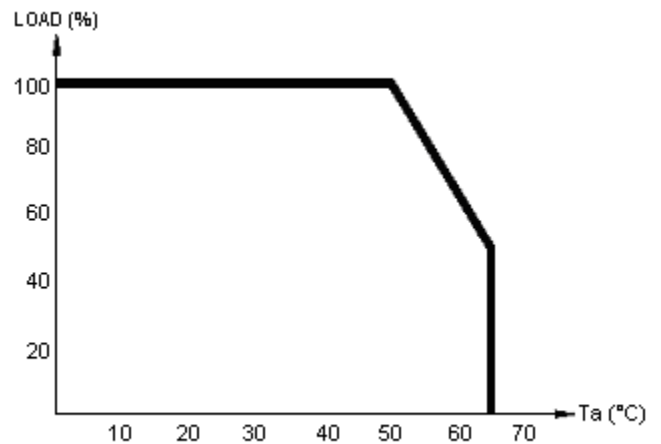
NOTES

1. Input voltage is 90 ~ 260VAC however, the unit does not reach full power until >170VAC. See derating curve below.
2. Dimensions of the mechanical drawing are shown in millimeters and inches.
3. Weight of the unit is 8900 grams.

DERATING CURVES



Output Power vs Input Voltage Derating Curve



Output Power vs Ambient Temperature Derating Curve

CONNECTOR PIN-OUT DRAWINGS

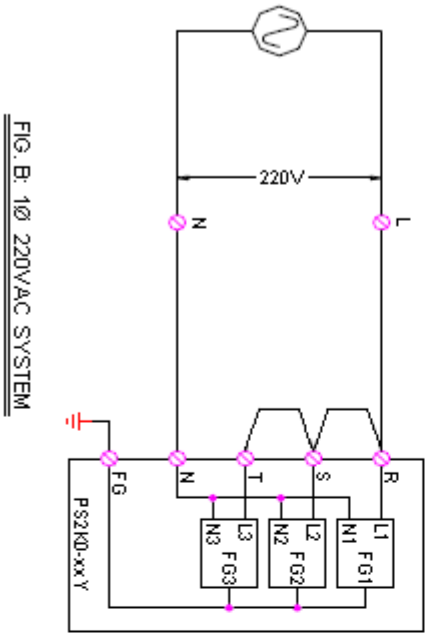


FIG. B: 1Ø 220VAC SYSTEM

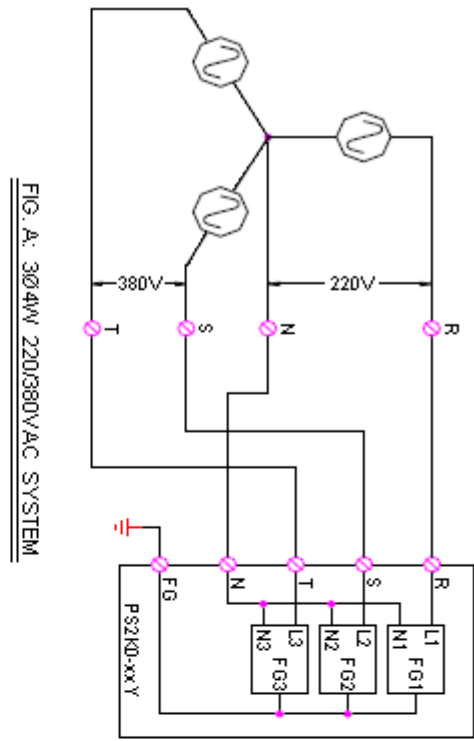


FIG. A: 3Ø4WV 220/380VAC SYSTEM

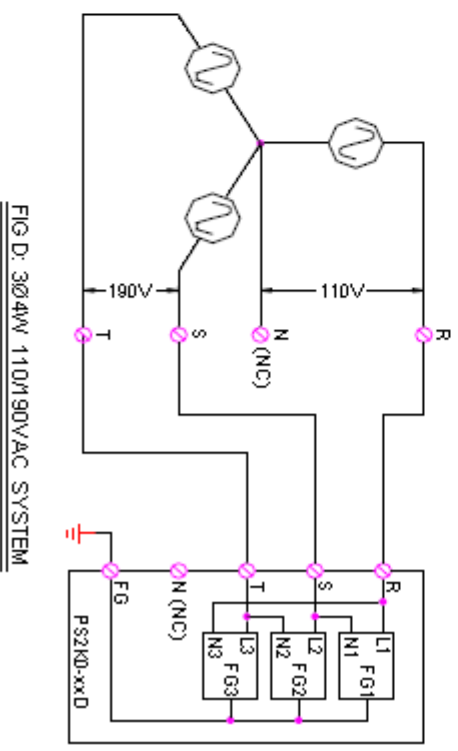


FIG. D: 3Ø4WV 110/190VAC SYSTEM

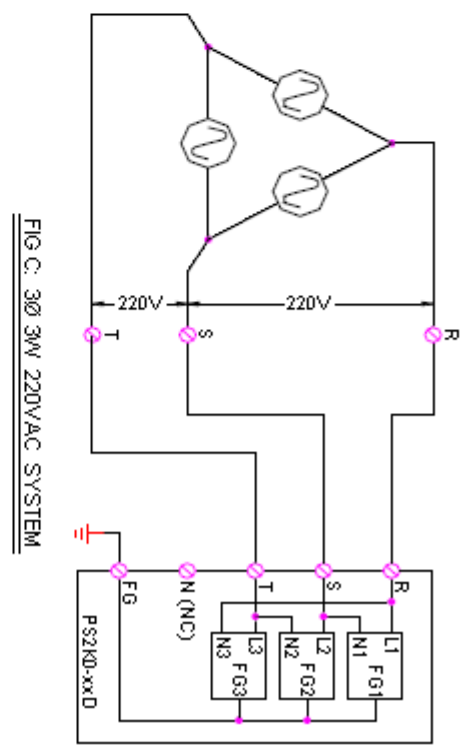
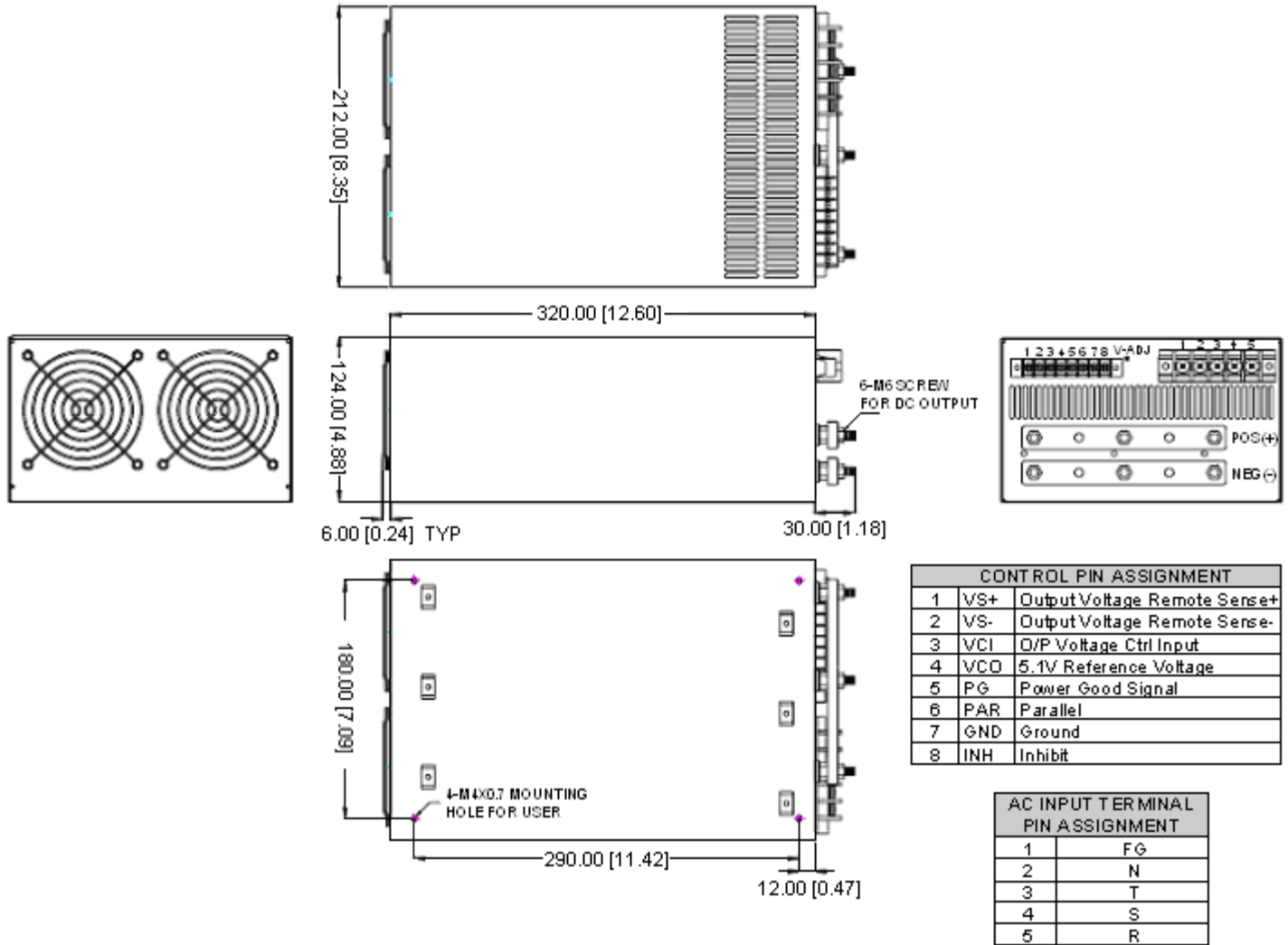


FIG. C: 3Ø 3W 220VAC SYSTEM

MECHANICAL DRAWING



| CONTROL PIN ASSIGNMENT | | |
|------------------------|-----|------------------------------|
| 1 | VS+ | Output Voltage Remote Sense+ |
| 2 | VS- | Output Voltage Remote Sense- |
| 3 | VCI | O/P Voltage Ctrl Input |
| 4 | VCD | 5.1V Reference Voltage |
| 5 | PG | Power Good Signal |
| 6 | PAR | Parallel |
| 7 | GND | Ground |
| 8 | INH | Inhibit |

| AC INPUT TERMINAL PIN ASSIGNMENT | |
|----------------------------------|----|
| 1 | FG |
| 2 | N |
| 3 | T |
| 4 | S |
| 5 | R |