



1000W Single Output with PFC Function

PSP-1000 series



■ Features :

- Universal AC input / Full range
- AC input active surge current limiting
- Built-in active PFC function
- Protections: Short circuit/Over load/Over voltage/Over temperature
- Built-in constant current limiting circuit
- Current sharing up to 2 units or 2000W
- Built-in remote ON-OFF control
- Built-in remote sense function
- Built-in active current sharing and parallel function
- 3 years warranty



SPECIFICATION

| MODEL | PSP-1000-5 | PSP-1000-12 | PSP-1000-13.5 | PSP-1000-15 | PSP-1000-24 | PSP-1000-27 | PSP-1000-48 | |
|-----------------------|--|---|---------------|--------------|-------------|--------------|-------------|--------------|
| OUTPUT | DC VOLTAGE | 5V | 12V | 13.5V | 15V | 24V | 27V | 48V |
| | RATED CURRENT | 145A | 75A | 67A | 60A | 37.6A | 33.6A | 19A |
| | CURRENT RANGE | 0 ~ 145A | 0 ~ 75A | 0 ~ 67A | 0 ~ 60A | 0 ~ 37.6A | 0 ~ 33.6A | 0 ~ 19A |
| | RATED POWER | 725W | 900W | 904.5W | 900W | 902.4W | 907.2W | 912W |
| | PEAK LOAD <small>Note.4</small> | 800W | 1000W | 1000W | 1000W | 1000W | 1000W | 1000W |
| | RIPPLE & NOISE (max.) <small>Note.2</small> | 100mVp-p | 150mVp-p | 150mVp-p | 150mVp-p | 150mVp-p | 150mVp-p | 200mVp-p |
| | VOLTAGE ADJ. RANGE | 4.75 ~ 5.5V | 10 ~ 13.2V | 12 ~ 15V | 13.5 ~ 18V | 20 ~ 26.4V | 24 ~ 30V | 41 ~ 56V |
| | VOLTAGE TOLERANCE <small>Note.3</small> | ±6.0% | ±3.0% | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% |
| | LINE REGULATION | ±0.5% | ±0.3% | ±0.3% | ±0.3% | ±0.2% | ±0.2% | ±0.2% |
| | LOAD REGULATION | ±2.0% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | SETUP, RISE TIME | 1500ms, 50ms/230VAC 1500ms, 50ms/115VAC at full load | | | | | | |
| | HOLD TIME (Typ.) | 24ms/230VAC 24ms/115VAC at full load | | | | | | |
| INPUT | VOLTAGE RANGE <small>Note.6</small> | 90 ~ 264VAC 127 ~ 370VDC | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | |
| | POWER FACTOR (Typ.) | 0.96/230VAC 0.96/115VAC at full load | | | | | | |
| | EFFICIENCY (Typ.) | 77% | 84% | 84% | 84% | 86% | 86% | 86% |
| | AC CURRENT (Typ.) | 11.2A/115AVC 5.6A/230VAC | | | | | | |
| | INRUSH CURRENT (Typ.) | 32A/115VAC 63A/230VAC | | | | | | |
| LEAKAGE CURRENT | <2mA / 240VAC | | | | | | | |
| PROTECTION | OVER LOAD | 115 ~ 140% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed | | | | | | |
| | OVER VOLTAGE | 5.75 ~ 6.75V | 13.8 ~ 16.2V | 15.5 ~ 18.2V | 18 ~ 21V | 27.6 ~ 32.4V | 31 ~ 36.5V | 57.6 ~ 67.2V |
| | | Protection type : Shut down o/p voltage, re-power on to recover | | | | | | |
| OVER TEMPERATURE | 95°C (TSW1) Detect on the heatsink of PFC MOSFET 90°C (TSW2) Detect the winding of output choke Protection type : Shut down o/p voltage, recovers automatically after temperature goes down | | | | | | | |
| FUNCTION | REMOTE CONTROL | RC+/RC-: 0 ~ 0.8V=power on ; 4 ~ 10V=power off sink current <20mA | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60°C (Refer to output load derating curve) | | | | | | |
| | 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, 60min. each along X, Y, Z axes | | | | | | |
| SAFETY & EMC (Note 5) | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 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 | | | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022 (CISPR22) Class B | | | | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,-3 | | | | | | |
| EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A | | | | | | | |
| OTHERS | MTBF | 59.6K hrs min. MIL-HDBK-217F (25°C) | | | | | | |
| | DIMENSION | 278*129*127mm (L*W*H) | | | | | | |
| | PACKING | 5.2Kg; 3pcs/16.3Kg/1.42CUFT | | | | | | |
| NOTE | <ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. 10% Duty cycle maximum within every 30 seconds(max.). Average output power should not exceed the rated power. 5. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 6. Derating may be needed under low input voltages. Please check the derating curve for more details. | | | | | | | |

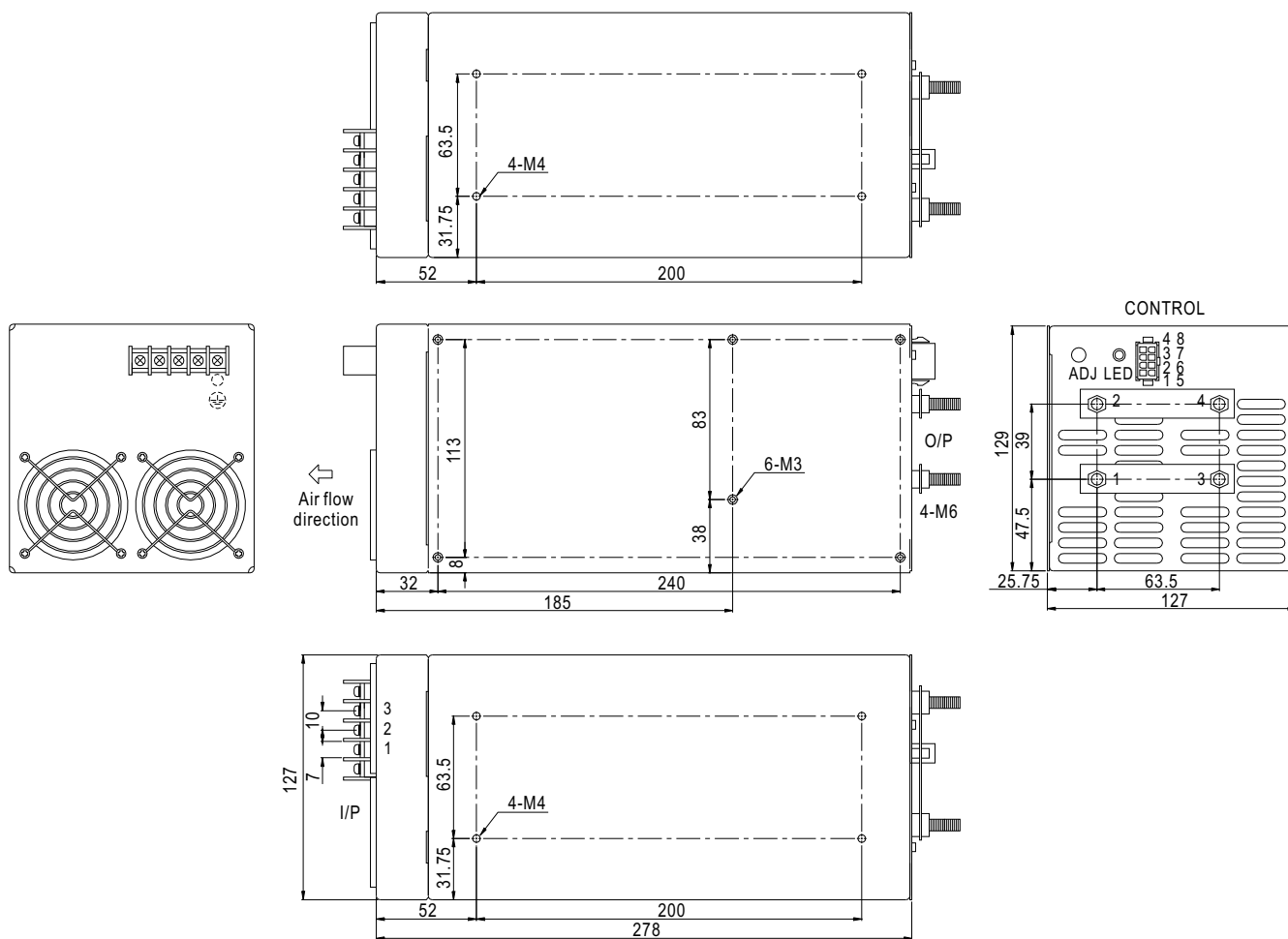


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PSP-1000 series

Mechanical Specification

Case No. 924A Unit:mm



AC Input Terminal Pin. No. Assignment

| Pin No. | Assignment |
|---------|------------|
| 1 | AC/L |
| 2 | AC/N |
| 3 | FG \perp |

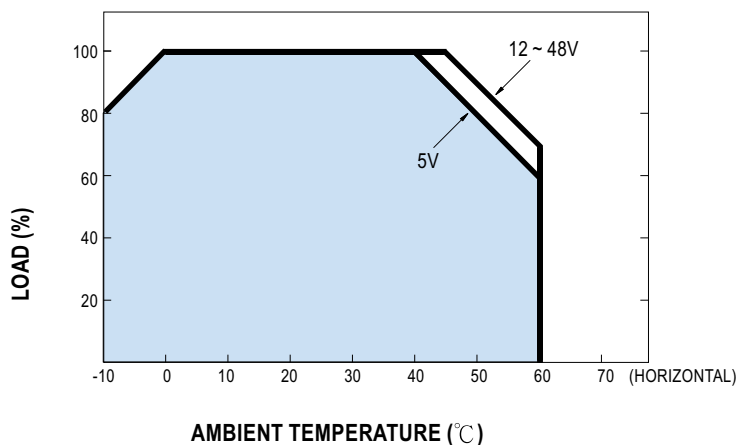
DC Output Terminal Pin. No Assignment

| Pin No. | Assignment |
|---------|--------------|
| 1,3 | DC OUTPUT +V |
| 2,4 | DC OUTPUT -V |

Control Pin. No Assignment : MOLEX 5559-NP uses 5558male crimp terminal

| Pin No. | Assignment | Pin No. | Assignment | Mating connector | Terminal |
|---------|------------------|---------|------------|------------------|---|
| 1 | P(Current share) | 5 | NC | MOLEX 5557-NR | MOLEX 5556 Female crimp Terminal receptacle |
| 2 | -S | 6 | NC | | |
| 3 | G | 7 | +S | | |
| 4 | RC- | 8 | RC+ | | |

Derating Curve



Output Derating VS Input Voltage

