



- Features :
- 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
  - Built-in remote ON-OFF control
  - Built-in remote sense function
  - 3 years warranty

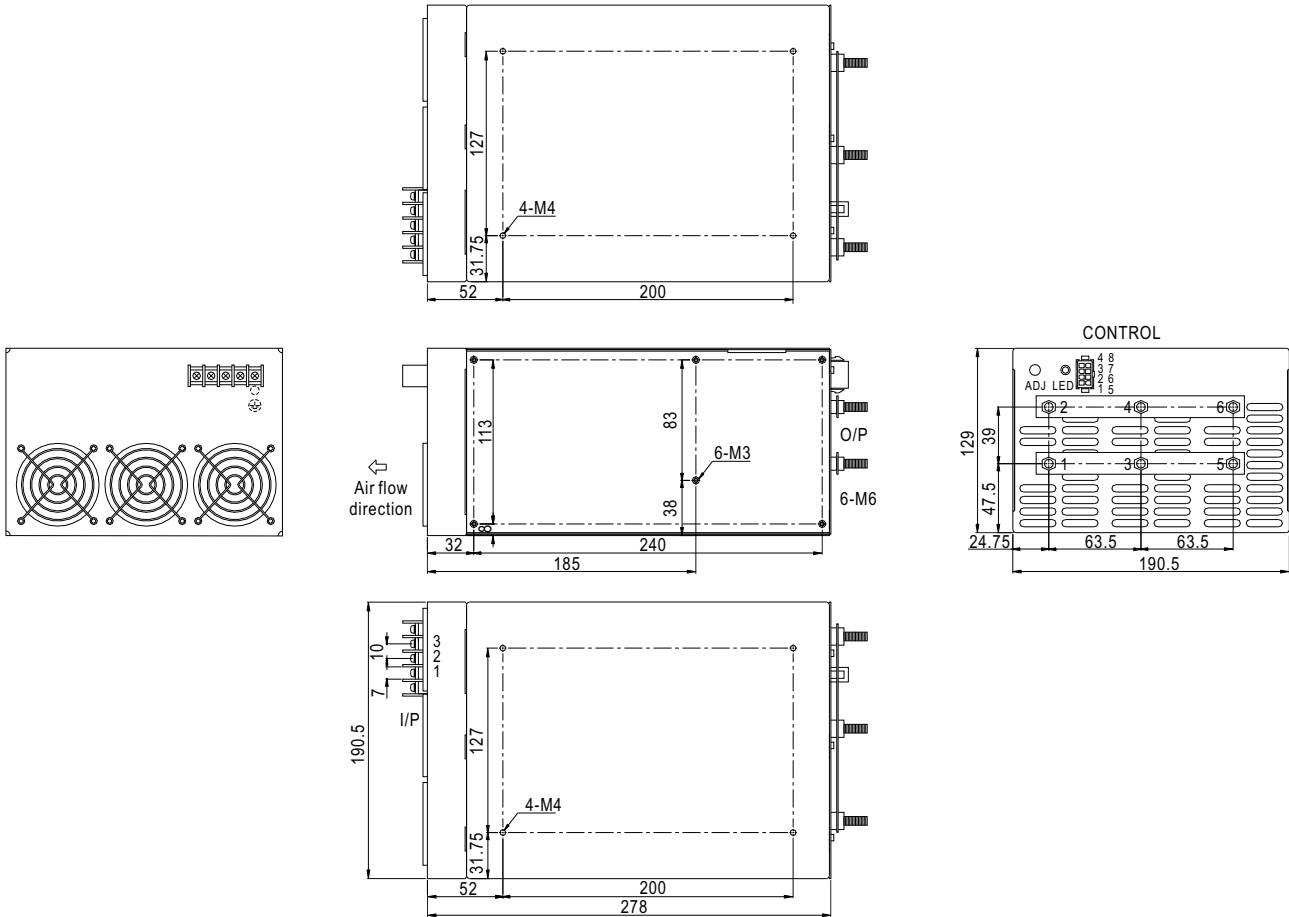


## SPECIFICATION

| MODEL                      | PSP-1500-5  | PSP-1500-12  | PSP-1500-13.5                     | PSP-1500-15  | PSP-1500-24 | PSP-1500-27  | PSP-1500-48 |              |
|----------------------------|---|--|-----------------------------------|--------------|-------------|--------------|-------------|--------------|
| OUTPUT                     | DC VOLTAGE  | 5V   | 12V                               | 13.5V        | 15V         | 24V          | 27V         | 48V          |
|                            | RATED CURRENT   | 217.5A   | 112.5A                            | 100.5A       | 90A         | 56.4A        | 50.4A       | 28.5A        |
|                            | CURRENT RANGE   | 0 ~ 217.5A   | 0 ~ 112.5A                        | 0 ~ 100.5A   | 0 ~ 90A     | 0 ~ 56.4A    | 0 ~ 50.4A   | 0 ~ 28.5A    |
|                            | RATED POWER   | 1087.5W  | 1350W                             | 1356.75W     | 1350W       | 1353.6W      | 1360.8W     | 1368W        |
|                            | PEAK LOAD <small>Note.4</small>   | 1200W  | 1500W                             | 1500W        | 1500W       | 1500W        | 1500W       | 1500W        |
|                            | 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 at full load   |                                   |              |             |              |             |              |
| HOLD TIME (Typ.)           | 24ms/230VAC at full load  |  |                                   |              |             |              |             |              |
| INPUT                      | VOLTAGE RANGE   | 176 ~ 264VAC 248 ~ 370VDC  |                                   |              |             |              |             |              |
|                            | FREQUENCY RANGE   | 47 ~ 63Hz  |                                   |              |             |              |             |              |
|                            | POWER FACTOR (Typ.)   | 0.96/230VAC at full load   |                                   |              |             |              |             |              |
|                            | EFFICIENCY (Typ.)   | 77%  | 84%                               | 84%          | 84%         | 85%          | 85%         | 86%          |
|                            | AC CURRENT (Typ.)   | 8.4A/230VAC  |                                   |              |             |              |             |              |
|                            | INRUSH CURRENT (Typ.)   | 80A/230VAC   |                                   |              |             |              |             |              |
|                            | LEAKAGE CURRENT   | <3.5mA / 240VAC  |                                   |              |             |              |             |              |
| PROTECTION                 | OVER LOAD   | 115 ~ 140% rated output power<br>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 |
|                            | OVER TEMPERATURE  | 95°C (TSW1) Detect on the heatsink of PFC MOSFET 90°C (TSW2) Detect the winding of output choke<br>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 <30mA  |                                   |              |             |              |             |              |
|                            | WORKING TEMP.   | -10 ~ +60°C (Refer to output load derating curve)  |                                   |              |             |              |             |              |
| ENVIRONMENT                | 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   |                                   |              |             |              |             |              |
| OTHERS                     | EMMUNITY  | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A  |                                   |              |             |              |             |              |
|                            | MTBF  | 43.4K hrs min. MIL-HDBK-217F (25°C)  |                                   |              |             |              |             |              |
|                            | DIMENSION   | 278*129*190.5mm (L*W*H)  |                                   |              |             |              |             |              |
|                            | PACKING   | 7.4Kg; 2pcs/15.5Kg/1.28CUFT  |                                   |              |             |              |             |              |
| NOTE                       | <ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. 10% Duty cycle maximum within every 30 seconds(max.). Average output power should not exceed the rated power.</li> <li>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.</li> </ol> |  |                                   |              |             |              |             |              |

**Mechanical Specification**

Case No. 925A Unit:mm



AC Input Terminal Pin. No Assignment

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

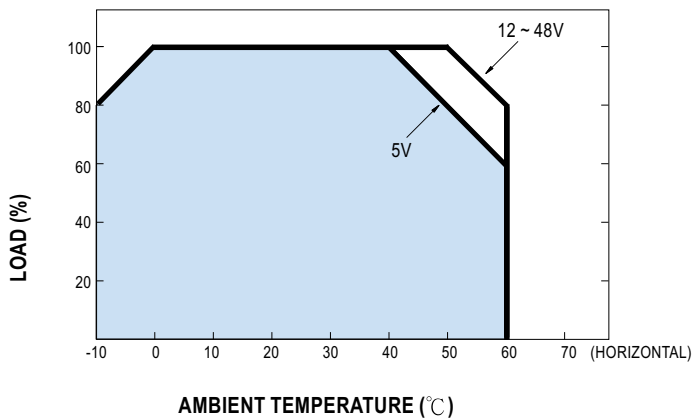
DC Output Terminal Pin. No Assignment

| Pin No. | Assignment   |
|---------|--------------|
| 1,3,5   | DC OUTPUT +V |
| 2,4,6   | DC OUTPUT -V |

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

| Pin No. | Assignment | Pin No. | Assignment | Mating connector | Terminal                                    |
|---------|------------|---------|------------|------------------|---|
| 1       | NC         | 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**

