



■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.93
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in constant current limiting circuit
- Remote ON-OFF control(Optional)
- LED indicator for power on
- 100% full load burn-in test
- Fixed switching frequency at PFC:67KHz PWM:134KHz
- 3 years warranty

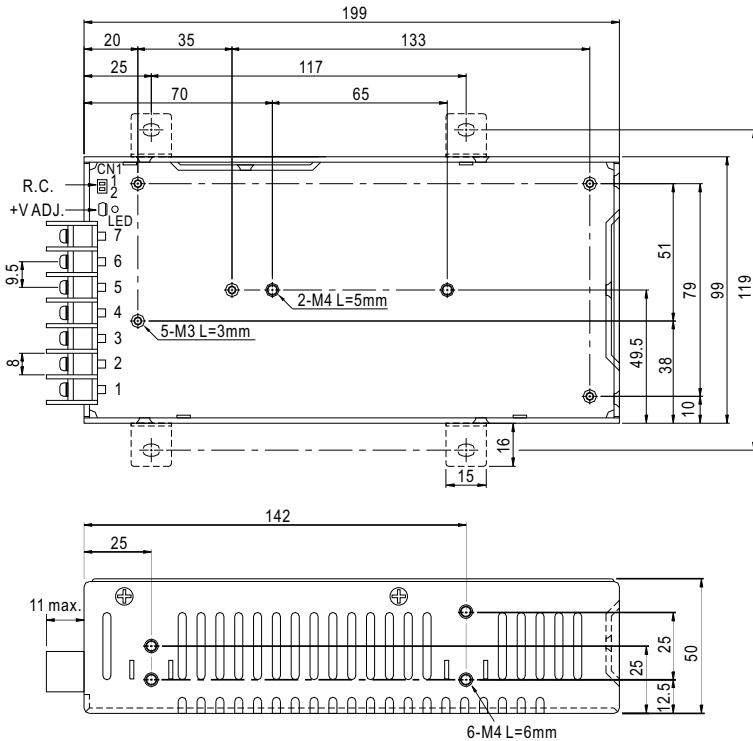


SPECIFICATION

| MODEL                 | SP-150-3.3   | SP-150-5   | SP-150-7.5  | SP-150-12                   | SP-150-13.5  | SP-150-15      | SP-150-24     | SP-150-27    | SP-150-48     |              |
|-----------------------|--|--|-------------|-----------------------------|--------------|----------------|---------------|--------------|---------------|--------------|
| OUTPUT                | DC VOLTAGE   | 3.3V   | 5V          | 7.5V                        | 12V          | 13.5V          | 15V           | 24V          | 27V           | 48V          |
|                       | RATED CURRENT  | 30A  | 30A         | 20A                         | 12.5A        | 11.2A          | 10A           | 6.3A         | 5.6A          | 3.2A         |
|                       | CURRENT RANGE  | 0 ~ 30A  | 0 ~ 30A     | 0 ~ 20A                     | 0 ~ 12.5A    | 0 ~ 11.2A      | 0 ~ 10A       | 0 ~ 6.3A     | 0 ~ 5.6A      | 0 ~ 3.2A     |
|                       | RATED POWER  | 99W  | 150W        | 150W                        | 150W         | 151.2W         | 150W          | 151.2W       | 151.2W        | 153.6W       |
|                       | RIPPLE & NOISE (max.) Note.2   | 100mVp-p   | 100mVp-p    | 100mVp-p                    | 100mVp-p     | 100mVp-p       | 100mVp-p      | 150mVp-p     | 150mVp-p      | 250mVp-p     |
|                       | VOLTAGE ADJ. RANGE   | 3.14 ~ 3.63V   | 4.75 ~ 5.5V | 7.13 ~ 8.25V                | 11.4 ~ 13.2V | 12.8 ~ 14.9V   | 14.3 ~ 16.5V  | 22.8 ~ 26.4V | 25.7 ~ 29.7V  | 45.6 ~ 52.8V |
|                       | VOLTAGE TOLERANCE Note.3   | ±2.0%  | ±2.0%       | ±2.0%                       | ±2.0%        | ±2.0%          | ±2.0%         | ±1.0%        | ±1.0%         | ±1.0%        |
|                       | LINE REGULATION  | ±0.5%  | ±0.5%       | ±0.5%                       | ±0.5%        | ±0.5%          | ±0.5%         | ±0.5%        | ±0.5%         | ±0.5%        |
|                       | LOAD REGULATION  | ±1.0%  | ±1.0%       | ±1.0%                       | ±0.5%        | ±0.5%          | ±0.5%         | ±0.5%        | ±0.5%         | ±0.5%        |
|                       | SETUP, RISE TIME   | 600ms, 30ms at full load   |             |                             |              |                |               |              |               |              |
| HOLD UP TIME (Typ.)   | 20ms at full load  |  |             |                             |              |                |               |              |               |              |
| INPUT                 | VOLTAGE RANGE Note.5   | 85 ~ 264VAC  |             | 120 ~ 370VDC                |              |                |               |              |               |              |
|                       | FREQUENCY RANGE  | 47 ~ 63Hz  |             |                             |              |                |               |              |               |              |
|                       | POWER FACTOR (Typ.)  | PF>0.93/230VAC   |             | PF>0.98/115VAC at full load |              |                |               |              |               |              |
|                       | EFFICIENCY (Typ.)  | 67%  | 75%         | 79%                         | 80%          | 80%            | 81%           | 83%          | 84%           | 84%          |
|                       | AC CURRENT (Typ.)  | 2.5A/115VAC  |             | 1.2A/230VAC                 |              |                |               |              |               |              |
|                       | INRUSH CURRENT (Typ.)  | COLD START 40A/230VAC  |             |                             |              |                |               |              |               |              |
|                       | LEAKAGE CURRENT  | <2mA / 240VAC  |             |                             |              |                |               |              |               |              |
| PROTECTION            | OVERLOAD   | 105 ~ 150% rated output power<br>Protection type : Constant current limiting, recovers automatically after fault condition is removed                    |             |                             |              |                |               |              |               |              |
|                       | OVER VOLTAGE   | 3.63 ~ 4.46V   | 5.5 ~ 6.75V | 8.25 ~ 10.13V               | 13.2 ~ 16.2V | 14.85 ~ 18.2V  | 16.5 ~ 20.25V | 26.4 ~ 32.4V | 29.7 ~ 36.45V | 52.8 ~ 64.8V |
|                       | OVER TEMPERATURE   | 95°C ±5°C (TSW1 : detect on heatsink of power transistor)<br>Protection type : Shut down o/p voltage, recovers automatically after temperature goes down |             |                             |              |                |               |              |               |              |
| FUNCTION              | REMOTE CONTROL(OPTION)   | CN1:4 ~ 10VDC POWER ON, <0 ~ 0.8VDC POWER OFF  |             |                             |              |                |               |              |               |              |
| ENVIRONMENT           | WORKING TEMP.  | -10 ~ +60°C (Refer to "Derating Curve")  |             |                             |              |                |               |              |               |              |
|                       | WORKING HUMIDITY   | 20 ~ 90% RH non-condensing   |             |                             |              |                |               |              |               |              |
|                       | STORAGE TEMP., HUMIDITY  | -20 ~ +85°C, 10 ~ 95% RH   |             |                             |              |                |               |              |               |              |
|                       | TEMP. COEFFICIENT  | ±0.05%/°C (0 ~ 50°C)   |             |                             |              |                |               |              |               |              |
|                       | VIBRATION  | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes   |             |                             |              |                |               |              |               |              |
| SAFETY & EMC (Note 4) | 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 / 25°C / 70% RH   |             |                             |              |                |               |              |               |              |
|                       | EMC EMISSION   | Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3  |             |                             |              |                |               |              |               |              |
|                       | EMC IMMUNITY   | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A  |             |                             |              |                |               |              |               |              |
| OTHERS                | MTBF   | 191.2K hrs min. MIL-HDBK-217F (25°C)   |             |                             |              |                |               |              |               |              |
|                       | DIMENSION  | 199*99*50mm (L*W*H)  |             |                             |              |                |               |              |               |              |
|                       | PACKING  | 0.76Kg; 20pcs/16.4Kg/1.28CUFT  |             |                             |              |                |               |              |               |              |
| NOTE                  | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>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.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. 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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p> <p>5. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> |  |             |                             |              |                |               |              |               |              |

■ Mechanical Specification

Case No. 916A Unit:mm



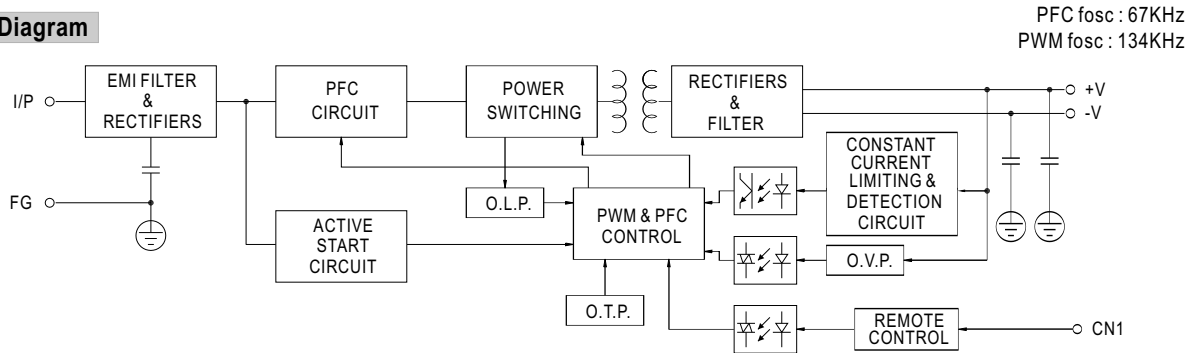
Terminal Pin No. Assignment

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

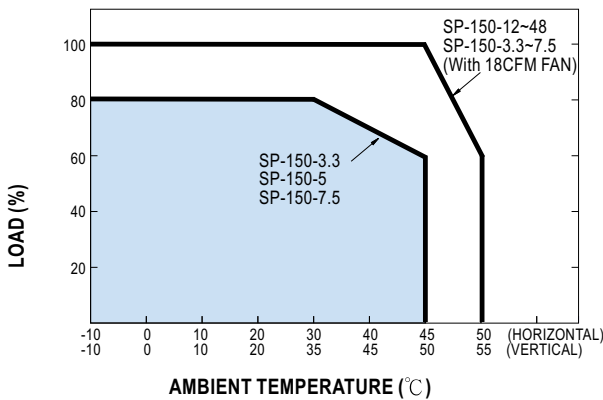
Remote ON/OFF (CN1): JST S2B-XH or equivalent (optional)

| Pin No. | Assignment | Mating Housing        | Terminal                        |
|---------|------------|-----------------------|---------------------------------|
| 1       | RC+        | JST XHP or equivalent | JST SXH-001T-P0.6 or equivalent |
| 2       | RC-        |                       |                                 |

■ Block Diagram



■ Derating Curve



■ Output Derating VS Input Voltage

