



■ Features :

- Universal AC input / full range
- Built-in active PFC function, PF>0.93
- Protections:Short circuit/Over load/Over voltage/Over temperature
- Built-in cooling fan speed control
- Built-in constant current limiting circuit
- Built-in fan speed control
- 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

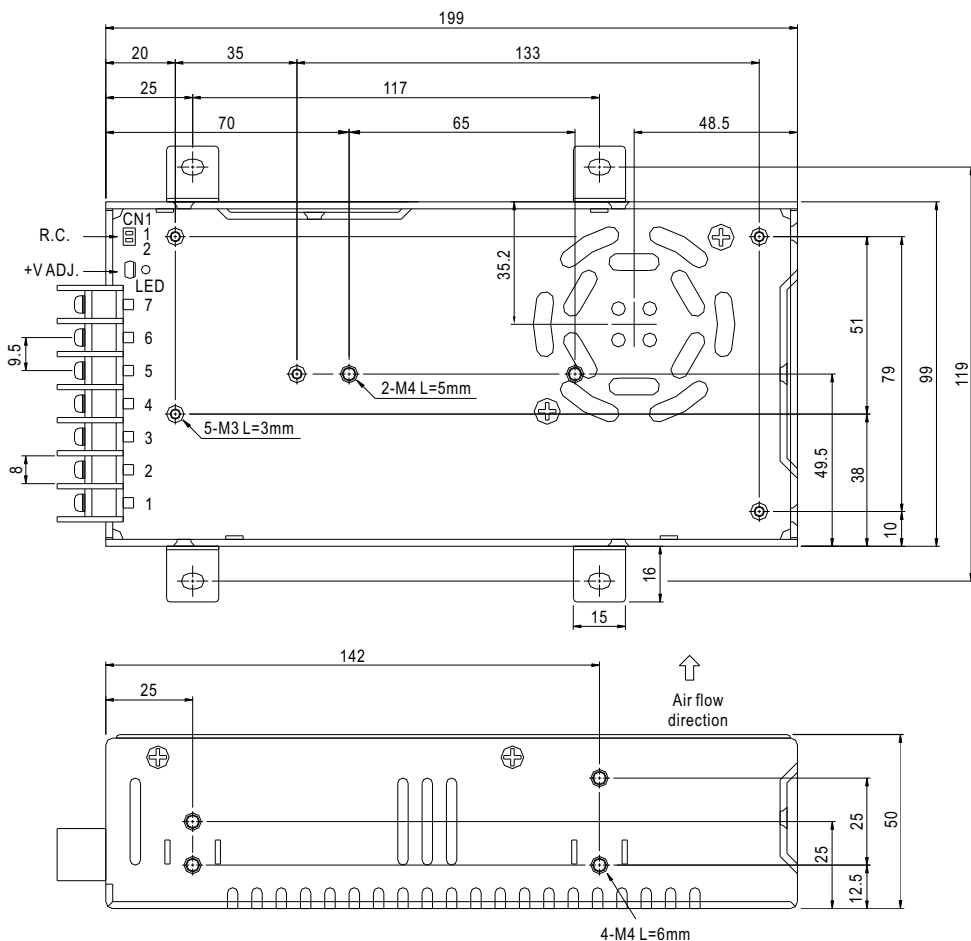


SPECIFICATION

| MODEL                 |   | SP-200-3.3   | SP-200-5    | SP-200-7.5                  | SP-200-12    | SP-200-13.5    | SP-200-15     | SP-200-24    | SP-200-27     | SP-200-48    |  |
|-----------------------|---|--|-------------|-----------------------------|--------------|----------------|---------------|--------------|---------------|--------------|--|
| OUTPUT                | DC VOLTAGE  | 3.3V   | 5V          | 7.5V                        | 12V          | 13.5V          | 15V           | 24V          | 27V           | 48V          |  |
|                       | RATED CURRENT   | 40A  | 40A         | 26.7A                       | 16.7A        | 14.9A          | 13.4A         | 8.4A         | 7.5A          | 4.2A         |  |
|                       | CURRENT RANGE   | 0 ~ 40A  | 0 ~ 40A     | 0 ~ 26.7A                   | 0 ~ 16.7A    | 0 ~ 14.9A      | 0 ~ 13.4A     | 0 ~ 8.4A     | 0 ~ 7.5A      | 0 ~ 4.2A     |  |
|                       | RATED POWER   | 132W   | 200W        | 200.2W                      | 200.4W       | 201.1W         | 201W          | 201.6W       | 202.5W        | 201.6W       |  |
|                       | 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 TIME (Typ.)      | 20ms at full load   |  |             |                             |              |                |               |              |               |              |  |
| INPUT                 | VOLTAGE RANGE   | 85 ~ 264VAC 120 ~ 370VDC   |             |                             |              |                |               |              |               |              |  |
|                       | FREQUENCY RANGE   | 47 ~ 63Hz  |             |                             |              |                |               |              |               |              |  |
|                       | POWER FACTOR (Typ.)   | PF>0.93/230VAC   |             | PF>0.98/115VAC at full load |              |                |               |              |               |              |  |
|                       | EFFICIENCY (Typ.)   | 65%  | 71%         | 76%                         | 79%          | 80%            | 81%           | 83%          | 83%           | 84%          |  |
|                       | AC CURRENT (Typ.)   | 3.5A/115VAC 1.7A/230VAC  |             |                             |              |                |               |              |               |              |  |
|                       | INRUSH CURRENT (Typ.)   | COLD START 40A/230VAC  |             |                             |              |                |               |              |               |              |  |
| LEAKAGE CURRENT       | <2mA / 240VAC   |  |             |                             |              |                |               |              |               |              |  |
| PROTECTION            | OVER LOAD   | 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 output load 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 and S-MARK J60950 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  | 183.8K hrs min. MIL-HDBK-217F (25°C)   |             |                             |              |                |               |              |               |              |  |
|                       | DIMENSION   | 199*99*50mm (L*W*H)  |             |                             |              |                |               |              |               |              |  |
|                       | PACKING   | 0.85Kg; 20pcs/17.9Kg/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. 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. 916B Unit:mm



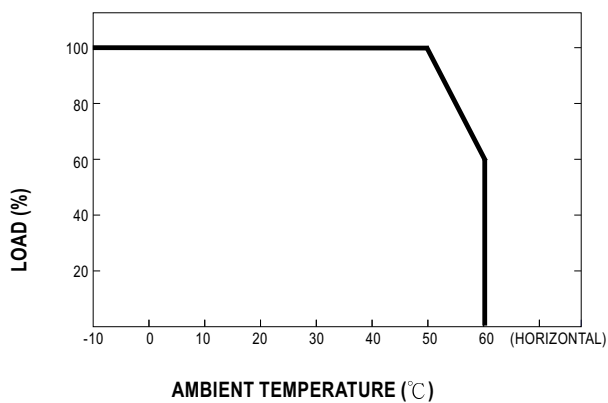
Terminal pin number assignment :

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

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-        |                       |                                 |

**Derating Curve**



**Output Derating VS Input Voltage**

