



## ■ Features :

- Universal AC input / Full range
- Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Built-in constant current limiting circuit
- 1U low profile 30mm
- Remote ON-OFF control
- LED indicator for power on
- 100% full load burn-in test
- 3 years warranty

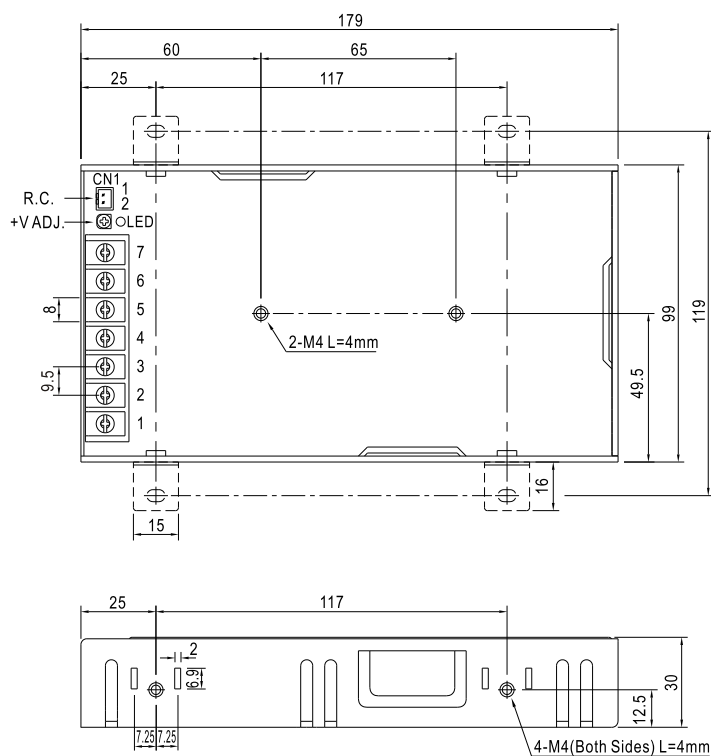


## SPECIFICATION

| MODEL                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | RSP-100-3.3                                                                                                                           | RSP-100-5   | RSP-100-7.5                 | RSP-100-12   | RSP-100-13.5   | RSP-100-15    | RSP-100-24   | RSP-100-27    | RSP-100-48   |  |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------|--------------|----------------|---------------|--------------|---------------|--------------|--|
| OUTPUT                   | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3.3V                                                                                                                                  | 5V          | 7.5V                        | 12V          | 13.5V          | 15V           | 24V          | 27V           | 48V          |  |
|                          | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 20A                                                                                                                                   | 20A         | 13.5A                       | 8.5A         | 7.5A           | 6.7A          | 4.2A         | 3.8A          | 2.1A         |  |
|                          | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0 ~ 20A                                                                                                                               | 0 ~ 20A     | 0 ~ 13.5A                   | 0 ~ 8.5A     | 0 ~ 7.5A       | 0 ~ 6.7A      | 0 ~ 4.2A     | 0 ~ 3.8A      | 0 ~ 2.1A     |  |
|                          | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 66W                                                                                                                                   | 100W        | 101.25W                     | 102W         | 101.25W        | 100.5W        | 100.8W       | 102.6W        | 100.8W       |  |
|                          | RIPPLE & NOISE (max.) <small>Note.2</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 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 <small>Note.3</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ± 2.0%                                                                                                                                | ± 2.0%      | ± 2.0%                      | ± 1.0%       | ± 1.0%         | ± 1.0%        | ± 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.)      | 16ms 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.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 83%                                                                                                                                   | 86%         | 87%                         | 86%          | 86.5%          | 87%           | 87%          | 87%           | 88%          |  |
|                          | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.1A/115VAC                                                                                                                           |             | 0.55A/230VAC                |              |                |               |              |               |              |  |
|                          | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | COLD START 30A/230VAC                                                                                                                 |             |                             |              |                |               |              |               |              |  |
|                          | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <2mA / 240VAC                                                                                                                         |             |                             |              |                |               |              |               |              |  |
| PROTECTION               | OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 105 ~ 135% 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 ~ 18.23V | 16.5 ~ 20.25V | 26.4 ~ 32.4V | 29.7 ~ 36.45V | 52.8 ~ 64.8V |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Protection type : Shut down o/p voltage, re-power on to recover                                                                       |             |                             |              |                |               |              |               |              |  |
|                          | OVER TEMPERATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Shut down o/p voltage, recovers automatically after temperature goes down                                                             |             |                             |              |                |               |              |               |              |  |
| FUNCTION                 | REMOTE CONTROL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | CN1: < 0~0.8VDC POWER ON , 4~10VDC POWER OFF                                                                                          |             |                             |              |                |               |              |               |              |  |
| ENVIRONMENT              | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | -30 ~ +70°C (Refer to "Derating Curve")                                                                                               |             |                             |              |                |               |              |               |              |  |
|                          | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 20 ~ 90% RH non-condensing                                                                                                            |             |                             |              |                |               |              |               |              |  |
|                          | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -40 ~ +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<br>(Note 4) | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | UL60950-1, TUV EN60950-1, EN61558-1, EN61558-2-16, CCC GB4943 approved                                                                |             |                             |              |                |               |              |               |              |  |
|                          | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | I/P-O/P:3.75KVAC I/P-FG:2KVAC 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, GB9254 class B                                                               |             |                             |              |                |               |              |               |              |  |
|                          | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A                                                     |             |                             |              |                |               |              |               |              |  |
| OTHERS                   | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 288.5K hrs min. MIL-HDBK-217F (25°C)                                                                                                  |             |                             |              |                |               |              |               |              |  |
|                          | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 179*99*30mm (L*W*H)                                                                                                                   |             |                             |              |                |               |              |               |              |  |
|                          | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.52Kg; 24pcs/14.5Kg/0.84CUFT                                                                                                         |             |                             |              |                |               |              |               |              |  |
| NOTE                     | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>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."<br>(as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> ) |                                                                                                                                       |             |                             |              |                |               |              |               |              |  |

Case No.227A Unit:mm

## Mechanical Specification



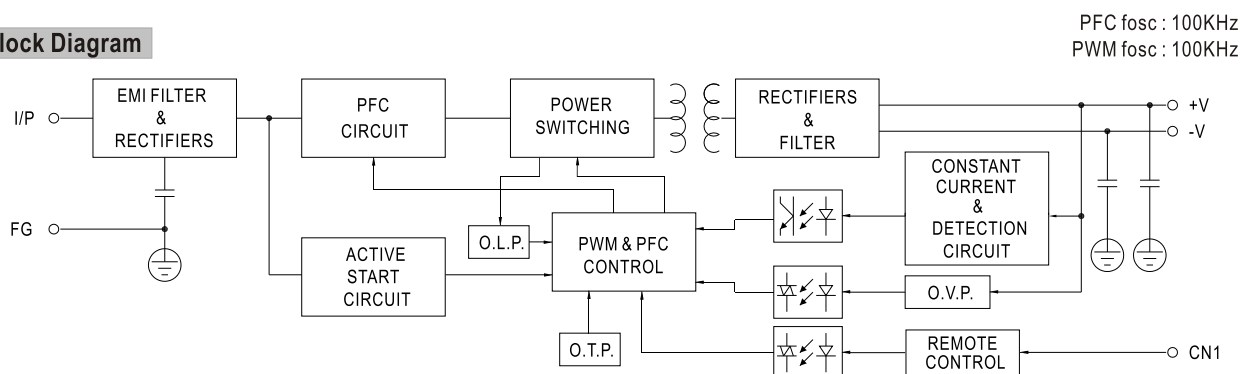
### Terminal Pin No. Assignment

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

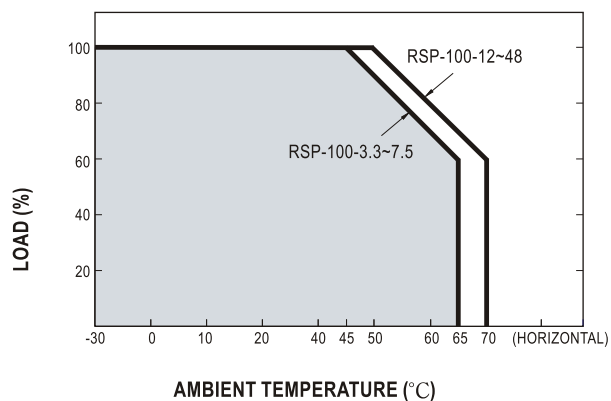
Remote ON/OFF(CN1): JST S2B-XH or equivalent(optional)

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

## Block Diagram



## Derating Curve



## Output Derating VS Input Voltage

