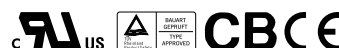




### ■ Features :

- Universal AC input / Full range
- Protections: Short circuit/Over load/Over voltage
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- All using 105°C long life electrolytic capacitors
- Withstand 300VAC surge input for 5 second
- High operating temperature up to 70°C
- Withstand 5G vibration test
- High efficiency, long life and high reliability
- 3 years warranty

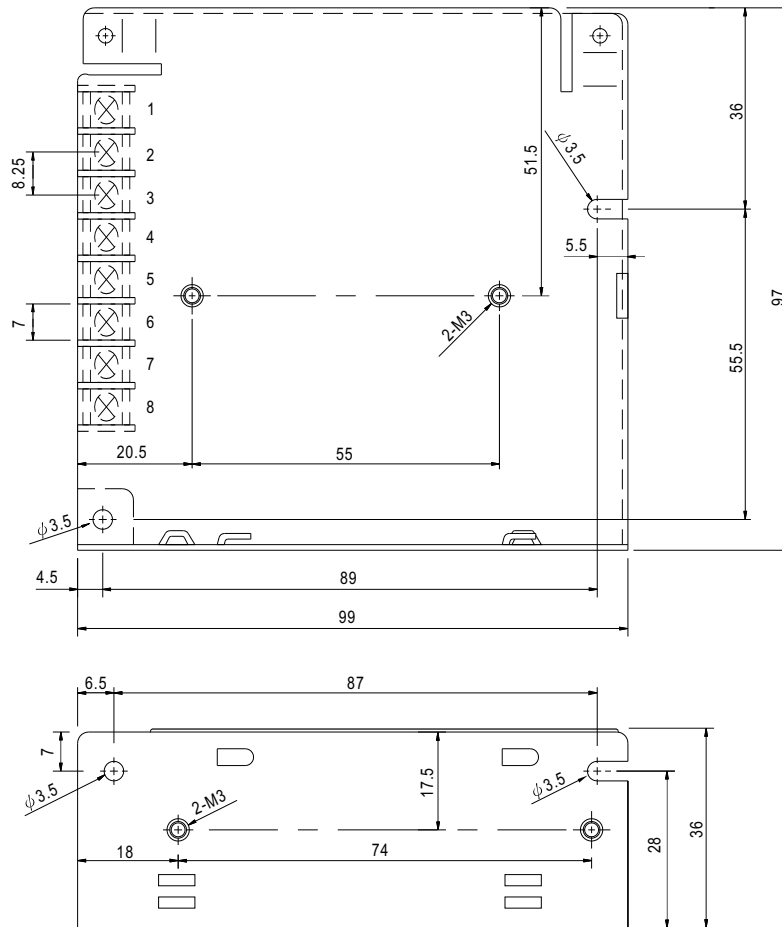


### SPECIFICATION

| MODEL                 |   | RQ-50B  |            |  |                                  | RQ-50C           |            |          |         | RQ-50D           |            |          |         |
|-----------------------|---|---|------------|--|----------------------------------|------------------|------------|----------|---------|------------------|------------|----------|---------|
| OUTPUT                | OUTPUT NUMBER   | CH1   | CH2        | CH3  | CH4                              | CH1              | CH2        | CH3      | CH4     | CH1              | CH2        | CH3      | CH4     |
|                       | DC VOLTAGE  | 5V  | 12V        | -5V  | -12V                             | 5V               | 15V        | -5V      | -15V    | 5V               | 12V        | 24V      | -12V    |
|                       | RATED CURRENT   | 5A  | 1A         | 0.5A   | 0.5A                             | 5A               | 1A         | 0.5A     | 0.5A    | 3A               | 0.9A       | 0.9A     | 0.5A    |
|                       | CURRENT RANGE   | 0.5 ~ 6A  | 0.2 ~ 1.5A | 0 ~ 1A   | 0 ~ 1A                           | 0.5 ~ 6A         | 0.2 ~ 1.5A | 0 ~ 1A   | 0 ~ 1A  | 0.5 ~ 6A         | 0.2 ~ 1.5A | 0.1 ~ 1A | 0 ~ 1A  |
|                       | RATED POWER   | 45.5W   |            |  |                                  | 50W              |            |          |         | 53.4W            |            |          |         |
|                       | RIPPLE & NOISE (max.) Note.2  | 80mVp-p   | 120mVp-p   | 100mVp-p   | 80mVp-p                          | 80mVp-p          | 120mVp-p   | 100mVp-p | 80mVp-p | 80mVp-p          | 120mVp-p   | 180mVp-p | 80mVp-p |
|                       | VOLTAGE ADJ. RANGE  | CH1: 4.75 ~ 5.5V  |            |  |                                  | CH1: 4.75 ~ 5.5V |            |          |         | CH1: 4.75 ~ 5.5V |            |          |         |
|                       | VOLTAGE TOLERANCE Note.3  | ±2.0%   | ±6.0%      | ±2.0%  | ±2.0%                            | ±2.0%            | ±6.0%      | ±2.0%    | ±2.0%   | ±2.0%            | ±6.0%      | +7,-5%   | ±2.0%   |
|                       | LINE REGULATION   | ±0.5%   | ±1.5%      | ±0.5%  | ±0.5%                            | ±0.5%            | ±1.5%      | ±0.5%    | ±0.5%   | ±0.5%            | ±1.5%      | ±2.0%    | ±0.5%   |
|                       | LOAD REGULATION   | ±0.5%   | ±3.0%      | ±1.0%  | ±1.0%                            | ±0.5%            | ±3.0%      | ±1.0%    | ±1.0%   | ±0.5%            | ±3.0%      | ±3.0%    | ±1.0%   |
| SETUP, RISE TIME      | 500ms, 20ms/230VAC  |   |            |  | 1200ms, 30ms/115VAC at full load |                  |            |          |         |                  |            |          |         |
| HOLD TIME (Typ.)      | 60ms/230VAC   |   |            |  | 10ms/115VAC at full load         |                  |            |          |         |                  |            |          |         |
| INPUT                 | VOLTAGE RANGE   | 88 ~ 264VAC   |            | 125 ~ 373VDC (Withstand 300VAC surge for 5sec. Without damage) |                                  |                  |            |          |         |                  |            |          |         |
|                       | FREQUENCY RANGE   | 47 ~ 63Hz   |            |  |                                  |                  |            |          |         |                  |            |          |         |
|                       | EFFICIENCY (Typ.)   | 74%   |            |  |                                  | 75%              |            |          |         | 79%              |            |          |         |
|                       | AC CURRENT (Typ.)   | 1.3A/115VAC   |            | 0.8A/230VAC  |                                  |                  |            |          |         |                  |            |          |         |
|                       | INRUSH CURRENT (Typ.)   | COLD START 36A/230VAC   |            |  |                                  |                  |            |          |         |                  |            |          |         |
| LEAKAGE CURRENT       | <2mA / 240VAC   |   |            |  |                                  |                  |            |          |         |                  |            |          |         |
| PROTECTION            | OVER LOAD   | 110 ~ 150% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |            |  |                                  |                  |            |          |         |                  |            |          |         |
|                       | OVER VOLTAGE  | CH1: 5.75 ~ 6.75V<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed             |            |  |                                  |                  |            |          |         |                  |            |          |         |
| ENVIRONMENT           | WORKING TEMP.   | -25 ~ +70°C (Refer to output load derating curve)   |            |  |                                  |                  |            |          |         |                  |            |          |         |
|                       | WORKING HUMIDITY  | 20 ~ 90% RH non-condensing  |            |  |                                  |                  |            |          |         |                  |            |          |         |
|                       | STORAGE TEMP., HUMIDITY   | -40 ~ +85°C, 10 ~ 95% RH  |            |  |                                  |                  |            |          |         |                  |            |          |         |
|                       | TEMP. COEFFICIENT   | ±0.03%/°C (0 ~ 50°C) on +5V output  |            |  |                                  |                  |            |          |         |                  |            |          |         |
| VIBRATION             | 10 ~ 500Hz, 5G 10min./1cycle, period for 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  |            |  |                                  |                  |            |          |         |                  |            |          |         |
|                       | 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, EN61000-6-2 (EN50082-2) heavy industry level, criteria A  |   |            |  |                                  |                  |            |          |         |                  |            |          |         |
| OTHERS                | MTBF  | 162.9Khrs min. MIL-HDBK-217F (25°C)   |            |  |                                  |                  |            |          |         |                  |            |          |         |
|                       | DIMENSION   | 99*97*36mm (L*W*H)  |            |  |                                  |                  |            |          |         |                  |            |          |         |
|                       | PACKING   | 0.41Kg; 45pcs/19.5Kg/0.9CUFT  |            |  |                                  |                  |            |          |         |                  |            |          |         |
| 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

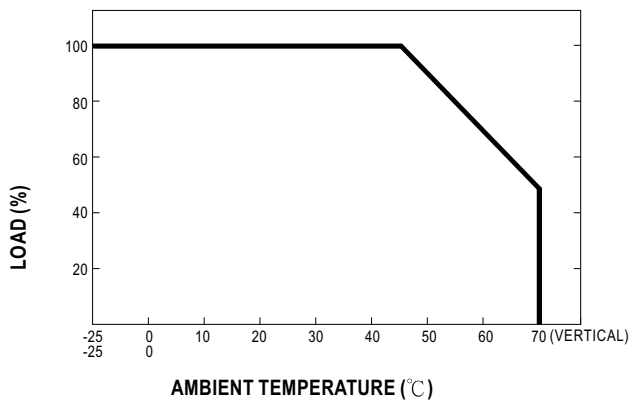
Case No. 905B Unit:mm



Terminal Pin. No Assignment

| Pin No. | Assignment | Pin No. | Assignment    | Pin No. | Assignment    |
|---------|------------|---------|---------------|---------|---------------|
| 1       | AC/L       | 4       | DC OUTPUT -V4 | 7       | DC OUTPUT COM |
| 2       | AC/N       | 5       | DC OUTPUT V3  | 8       | DC OUTPUT +V1 |
| 3       | FG $\perp$ | 6       | DC OUTPUT +V2 |         |               |

### Output Derating



### Output Derating VS Input Voltage

