



■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / 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

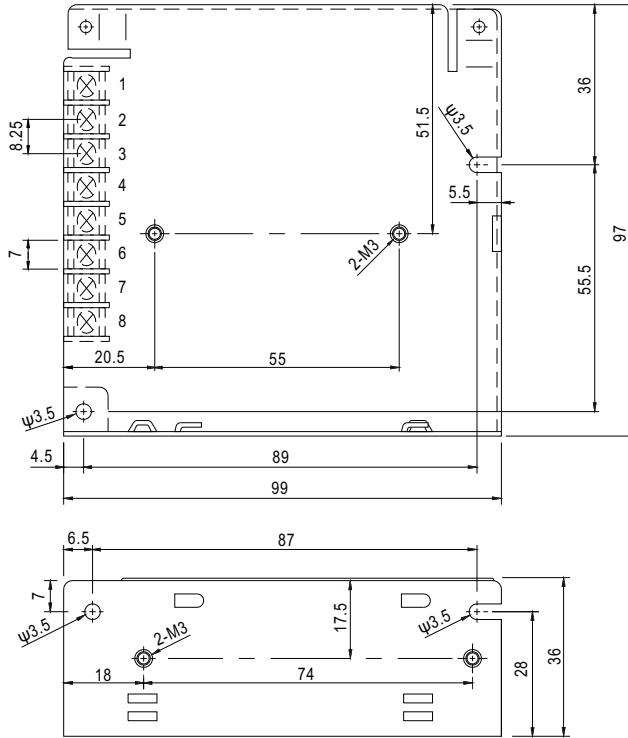


**SPECIFICATION**

| 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.) <small>Note.2</small> | 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 <small>Note.3</small>     | ±2.0%  | ±6.0%      | ±3.0%  | ±3.0%                            | ±2.0%            | ±6.0%      | ±3.0%    | ±3.0%   | ±2.0%            | ±6.0%      | +7,-5%   | ±3.0%   |
|                                      | LINE REGULATION <small>Note.4</small>       | ±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 <small>Note.5</small>       | ±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 UP 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                           | OVERLOAD                                    | 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 "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   |            |  |                                  |                  |            |          |         |                  |            |          |         |
| SAFETY & EMC <small>(Note 6)</small> | VIBRATION                                   | 10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes  |            |  |                                  |                  |            |          |         |                  |            |          |         |
|                                      | SAFETY STANDARDS                            | UL60950-1, TUV EN60950-1, EAC TP TC 004 approved   |            |  |                                  |                  |            |          |         |                  |            |          |         |
|                                      | WITHSTAND VOLTAGE                           | I/P-O/P:3KVAC 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 EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020   |            |  |                                  |                  |            |          |         |                  |            |          |         |
| OTHERS                               | EMC IMMUNITY                                | Compliance to EN61000-4-2,3,4,5,6,8,11, EN61000-6-2 (EN50082-2), heavy industry level, criteria A, EAC TP TC 020   |            |  |                                  |                  |            |          |         |                  |            |          |         |
|                                      | MTBF  | 162.9Khrs min. MIL-HDBK-217F (25°C)  |            |  |                                  |                  |            |          |         |                  |            |          |         |
|                                      | DIMENSION                                   | 99*97*36mm (L*W*H)   |            |  |                                  |                  |            |          |         |                  |            |          |         |
| NOTE                                 | PACKING                                     | 0.41Kg; 45pcs/19.5Kg/0.9CUFT   |            |  |                                  |                  |            |          |         |                  |            |          |         |
|                                      |   | <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. Line regulation is measured from low line to high line at rated load.</li> <li>5. Load regulation is measured from 0% to 100% rated load.</li> <li>6. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. 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>)</li> <li>7. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</li> </ol> |            |  |                                  |                  |            |          |         |                  |            |          |         |

■ Mechanical Specification

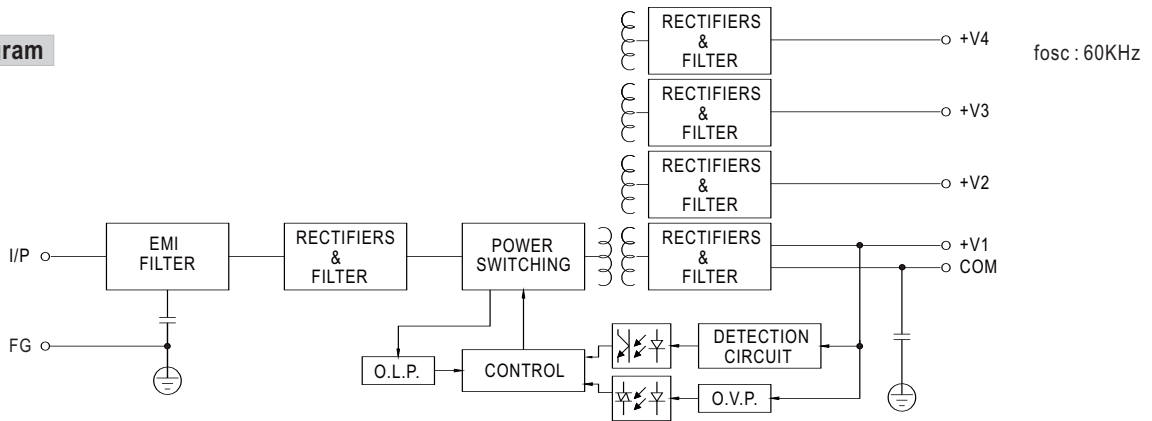
Case No. 905B Unit:mm



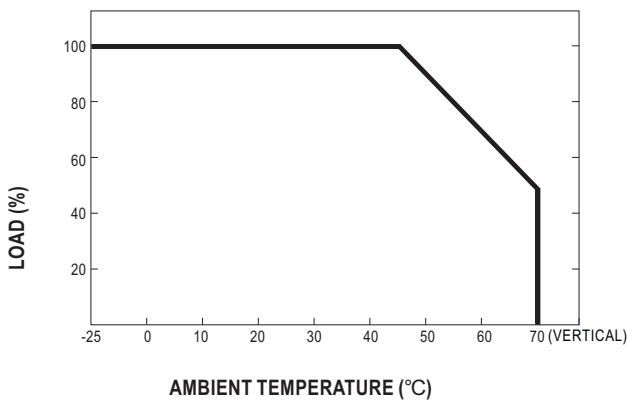
Terminal Pin No. Assignment

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

■ Block Diagram



■ Derating Curve



■ Output Derating VS Input Voltage

