### 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

#### OUTPUT

<table>
<thead>
<tr>
<th>MODEL</th>
<th>OUTPUT NUMBER</th>
<th>DC VOLTAGE</th>
<th>RATED CURRENT</th>
<th>CURRENT RANGE</th>
<th>RATED POWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH1</td>
<td>CH1</td>
<td>5V</td>
<td>4A</td>
<td>0.5 ~ 5A</td>
<td>46.5W</td>
</tr>
<tr>
<td>CH2</td>
<td>CH2</td>
<td>12V</td>
<td>2A</td>
<td>0.2 ~ 2.5A</td>
<td>50W</td>
</tr>
<tr>
<td>CH3</td>
<td>CH3</td>
<td>-5V</td>
<td>0.5A</td>
<td>0.1 ~ 1A</td>
<td>50W</td>
</tr>
</tbody>
</table>

| CH2   | CH2           | 12V        | 0.5A          | 0.2 ~ 2.5A    | 50W         |
| CH3   | CH3           | -12V       | 0.5A          | 0.1 ~ 1A      | 50W         |

#### VOLTAGE ADJ. RANGE

<table>
<thead>
<tr>
<th>CH1</th>
<th>CH1-CH2</th>
<th>4.75 ~ 5.5V</th>
<th>CH1-CH3</th>
<th>4.75 ~ 5.5V</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH2</td>
<td>CH2-CH3</td>
<td>4.75 ~ 5.5V</td>
<td>CH2-CH3</td>
<td>4.75 ~ 5.5V</td>
</tr>
</tbody>
</table>

#### RIPPLE & NOISE (max.)

<table>
<thead>
<tr>
<th>CH1</th>
<th>CH1</th>
<th>50mVp-p</th>
<th>CH2</th>
<th>120mVp-p</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH3</td>
<td>CH3</td>
<td>100mVp-p</td>
<td>CH1-CH2</td>
<td>120mVp-p</td>
</tr>
</tbody>
</table>

#### SETUP, RISE TIME

- 500ms, 20ms/230VAC
- 1200ms, 30ms/115VAC at full load

#### HOLD TIME (Typ.)

- 60ms/230VAC
- 10ms/115VAC at full load

### INPUT

<table>
<thead>
<tr>
<th>MODEL</th>
<th>VOLTAGE RANGE</th>
<th>FREQUENCY RANGE</th>
<th>EFFICIENCY (Typ.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT-50A</td>
<td>88 ~ 264VAC</td>
<td>47 ~ 63Hz</td>
<td>77%</td>
</tr>
<tr>
<td>RT-50B</td>
<td>125 ~ 373VDC</td>
<td></td>
<td>77%</td>
</tr>
<tr>
<td>RT-50C</td>
<td>125 ~ 373VDC</td>
<td></td>
<td>78%</td>
</tr>
<tr>
<td>RT-50D</td>
<td>125 ~ 373VDC</td>
<td></td>
<td>80%</td>
</tr>
</tbody>
</table>

#### AC CURRENT (Typ.)

- 1.3A/115VAC
- 0.8A/230VAC

#### INRUSH CURRENT (Typ.)

- COLD START 36A/230VAC

#### LEAKAGE CURRENT

- <2mA / 240VAC

### PROTECTION

#### OVER LOAD

- Protection type: Hiccup mode, recovers automatically after fault condition is removed
- CH1: 5.75 ~ 6.75V

#### OVER VOLTAGE

- 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；±5%℃＜50℃

#### VIBRATION

- 10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes

### SAFETY & EMC

#### 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

- 169.2Khrs min. MIL-HDBK-217F (25°C)

#### DIMENSION

- 99*97*36mm (L*W*H)

#### PACKING

- 0.41Kg; 45pcs/19.5Kg/0.9CUFT

### NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. Line regulation is measured from low line to high line at rated load.
5. Load regulation is measured from 0% to 100% rated load.
6. 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.
**Mechanical Specification**

**Case No.** 905B  Unit:mm

**Terminal Pin. No Assignment**

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Assignment</th>
<th>Pin No.</th>
<th>Assignment</th>
<th>Pin No.</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AC/L</td>
<td>4</td>
<td>NC</td>
<td>7</td>
<td>DC OUTPUT COM</td>
</tr>
<tr>
<td>2</td>
<td>AC/N</td>
<td>5</td>
<td>DC OUTPUT V3</td>
<td>8</td>
<td>DC OUTPUT +V1</td>
</tr>
<tr>
<td>3</td>
<td>FG ±</td>
<td>6</td>
<td>DC OUTPUT +V2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Output Derating**

**Output Derating VS Input Voltage**

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File Name: RT-50-SPEC  2006-04-12