### Specification

#### Features:
- Universal AC input / Full range
- Built-in active PFC function, PF>0.94
- High efficiency up to 89%
- Withstand 3000VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in constant current limiting circuit
- Built-in cooling fan ON-OFF control
- Built-in DC OK signal
- Built-in remote sense function
- All using 105°C long life electrolytic capacitors
- 5 years warranty

#### Output

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DC VOLTAGE</th>
<th>RATED CURRENT</th>
<th>CURRENT RANGE</th>
<th>RATED POWER</th>
<th>RIPPLE &amp; NOISE (max.)</th>
<th>VOLTAGE ADJ. RANGE</th>
<th>VOLTAGE TOLERANCE</th>
<th>LINE REGULATION</th>
<th>LOAD REGULATION</th>
<th>SETUP, RISE TIME</th>
<th>HOLD UP TIME (Typ.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRP-600-3.3</td>
<td>3.3V</td>
<td>120A</td>
<td>0~120A</td>
<td>396W</td>
<td>100mVp-p</td>
<td>2.8~3.8V</td>
<td>±2.0%</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>1000ms</td>
<td>16ms/230VAC</td>
</tr>
<tr>
<td>HRP-600-5</td>
<td>5V</td>
<td>120A</td>
<td>0~120A</td>
<td>600W</td>
<td>100mVp-p</td>
<td>4.3~5.8V</td>
<td>±2.0%</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>16ms</td>
<td>16ms/115VAC</td>
</tr>
<tr>
<td>HRP-600-7.5</td>
<td>7.5V</td>
<td>80A</td>
<td>0~80A</td>
<td>600W</td>
<td>100mVp-p</td>
<td>6.8~9V</td>
<td>±1.0%</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>2500ms</td>
<td>16ms/115VAC</td>
</tr>
<tr>
<td>HRP-600-12</td>
<td>12V</td>
<td>53A</td>
<td>0~53A</td>
<td>636W</td>
<td>120mVp-p</td>
<td>10.2~13.8V</td>
<td>±1.0%</td>
<td>±0.3%</td>
<td>±1.0%</td>
<td>1000ms</td>
<td>16ms/230VAC</td>
</tr>
<tr>
<td>HRP-600-15</td>
<td>15V</td>
<td>43A</td>
<td>0~43A</td>
<td>645W</td>
<td>150mVp-p</td>
<td>13.5~18V</td>
<td>±1.0%</td>
<td>±0.2%</td>
<td>±1.0%</td>
<td>1000ms</td>
<td>16ms/115VAC</td>
</tr>
<tr>
<td>HRP-600-24</td>
<td>24V</td>
<td>27A</td>
<td>0~27A</td>
<td>648W</td>
<td>150mVp-p</td>
<td>21.6~28.8V</td>
<td>±1.0%</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>1000ms</td>
<td>16ms/115VAC</td>
</tr>
<tr>
<td>HRP-600-36</td>
<td>36V</td>
<td>17.5A</td>
<td>0~17.5A</td>
<td>630W</td>
<td>200mVp-p</td>
<td>28.8~39.6V</td>
<td>±1.0%</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>1000ms</td>
<td>16ms/115VAC</td>
</tr>
<tr>
<td>HRP-600-48</td>
<td>48V</td>
<td>13A</td>
<td>0~13A</td>
<td>624W</td>
<td>240mVp-p</td>
<td>40.8~55.2V</td>
<td>±1.0%</td>
<td>±0.5%</td>
<td>±1.0%</td>
<td>1000ms</td>
<td>16ms/115VAC</td>
</tr>
</tbody>
</table>

#### Input

<table>
<thead>
<tr>
<th>MODEL</th>
<th>VOLTAGE RANGE</th>
<th>FREQUENCY RANGE</th>
<th>POWER FACTOR (Typ.)</th>
<th>EFFICIENCY (Typ.)</th>
<th>AC CURRENT (Typ.)</th>
<th>INRUSH CURRENT (Typ.)</th>
<th>LEAKAGE CURRENT</th>
<th>OVERLOAD</th>
<th>OVER VOLTAGE</th>
<th>OVER TEMPERATURE</th>
<th>DC OK SIGNAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRP-600-3.3</td>
<td>85~264VAC</td>
<td>47~63Hz</td>
<td>PF&gt;0.94/230VAC</td>
<td>78.5%</td>
<td>8.5A/115VAC</td>
<td>35A/230VAC</td>
<td>&lt;1.2mA</td>
<td>105~135%</td>
<td>3.96~4.62V</td>
<td>80°C~15°C (TSW1)</td>
<td>PSU turn on: 3.3<del>5.6V, PSU turn off: 0</del>1V</td>
</tr>
<tr>
<td>HRP-600-5</td>
<td>120~370VDC</td>
<td></td>
<td>PF&gt;0.99/115VAC</td>
<td>82%</td>
<td>5A/230VAC</td>
<td>70A/230VAC</td>
<td></td>
<td></td>
<td>90°C~15°C (TSW2)</td>
<td>PSU turn on: 3.3<del>5.6V, PSU turn off: 0</del>1V</td>
<td></td>
</tr>
<tr>
<td>HRP-600-7.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100°C~15°C (TSW2)</td>
<td></td>
</tr>
<tr>
<td>HRP-600-12</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>105°C~15°C (TSW2)</td>
<td></td>
</tr>
<tr>
<td>HRP-600-15</td>
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<td></td>
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<td></td>
<td>115°C~15°C (TSW2)</td>
<td></td>
</tr>
<tr>
<td>HRP-600-24</td>
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<td></td>
<td>135°C~15°C (TSW2)</td>
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</tr>
<tr>
<td>HRP-600-36</td>
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<td></td>
<td></td>
<td></td>
<td>140°C~15°C (TSW2)</td>
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</tr>
<tr>
<td>HRP-600-48</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>150°C~15°C (TSW2)</td>
<td></td>
</tr>
</tbody>
</table>

#### Protection

- Overload: 105~135% rated output power
- Overvoltage: 3.96~4.62V, 8~7V
- Over temperature: 80°C~15°C (TSW1) detect on heatsink of power transistor
- Over temperature: 90°C~15°C (TSW2) detect on heatsink of power diode for 3.3V,5V,7.5V; 100°C~15°C (TSW2) detect on main power output choke for others
- DC OK signal: PSU turn on: 3.3~5.6V, PSU turn off: 0~1V
- Fan control: Load 35±15% or RTH2≥50°C Fan on
- Working temperature: -40~+70°C (Refer to "Derating Curve")
- Working humidity: 20~90% RH non-condensing
- Storage temperature: -40~+85°C, 10~95% RH
- Temp. coefficient: ±0.03%/C (0~50°C)
- Vibration: 5G, 50Hz, 1cycle, 60min.
- Safety standards: UL60950-1,TUV EN60950-1 approved
- Safety standards: IEC/EN60950-1
- Safety standards: IEC/EN60950-1
- Safety standards: EN55022 (CISPR22) Class B
- Safety standards: EN61000-3-2
- Safety standards: EN61000-3-3
- Safety standards: EN61000-3-3
- Safety standards: EN61000-3-3
- Power factor: 0.98
- Efficiency: 87%
- Inrush current: 100mVp-p
- Ripple & noise: 100mVp-p
- Voltage tolerance: ±0.5%
- Overload: 105~135% rated output power
- Derating: 0~120A
- Line regulation: 100mVp-p
- Load regulation: 100mVp-p
- Hold-up time: 100ms, 50ms/230VAC
- Hold-up time: 2500ms, 50ms/115VAC at full load

#### 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 of bandwidth by using a 1/2 twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Protection: includes set up tolerance, line regulation and load regulation.
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.”
   (as available on http://www.meanwell.com)
5. Derating may be needed under low input voltages. Please check the derating curve for more details.
**Mechanical Specification**

- **Case No. 977A**
- **Unit:mm**

**AC Input Terminal Pin No. Assignment**

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AC/L</td>
</tr>
<tr>
<td>2</td>
<td>AC/N</td>
</tr>
<tr>
<td>3</td>
<td>FG</td>
</tr>
</tbody>
</table>

**DC Output Terminal Pin No. Assignment**

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-V</td>
</tr>
<tr>
<td>2</td>
<td>+V</td>
</tr>
</tbody>
</table>

**Connector Pin No. Assignment (CN100):**

- HRS DF11-4DP-2DS or equivalent
- HRS DF11**SC** FG

**Block Diagram**

- EMI FILTER
- ACTIVE INRUSH CURRENT LIMITING
- RECTIFIERS & PFC
- POWER SWITCHING
- DETECTION CIRCUIT
- PWM CONTROL

**Derating Curve**

- Load (%)
- Ambient Temperature (°C)
- Input Voltage (V) 60Hz

**Output Derating VS Input Voltage**

- Load (%)
- Input Voltage (V) 60Hz
Mouser Electronics

Authorized Distributor

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Mean Well:

HRP-600-12  HRP-600-15  HRP-600-24  HRP-600-3.3  HRP-600-36  HRP-600-48  HRP-600-5  HRP-600-7.5  HRP-600-24CC