450W Single Output Power Supply

<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>SE-450-3</td>
<td>3.3V</td>
<td>75A</td>
<td>0 ~ 75A</td>
<td>247.5W</td>
<td>200mVp-p</td>
<td>2.97 ~ 3.63V</td>
<td>±0.3%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>1500ms, 50ms/230VAC</td>
<td>16ms/230VAC</td>
</tr>
<tr>
<td>SE-450-5</td>
<td>5V</td>
<td>75A</td>
<td>0 ~ 75A</td>
<td>375W</td>
<td>200mVp-p</td>
<td>4.5 ~ 5.5V</td>
<td>±1.0%</td>
<td>±1.0%</td>
<td>±1.0%</td>
<td>1500ms, 50ms/230VAC</td>
<td>12ms/115VAC</td>
</tr>
<tr>
<td>SE-450-12</td>
<td>12V</td>
<td>37.5A</td>
<td>0 ~ 37.5A</td>
<td>450W</td>
<td>200mVp-p</td>
<td>10.8 ~ 13.5V</td>
<td>±1.0%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SE-450-15</td>
<td>15V</td>
<td>30A</td>
<td>0 ~ 30A</td>
<td>450W</td>
<td>200mVp-p</td>
<td>13.5 ~ 16.5V</td>
<td>±1.5%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SE-450-24</td>
<td>24V</td>
<td>18.8A</td>
<td>0 ~ 18.8A</td>
<td>451.2W</td>
<td>200mVp-p</td>
<td>21.8 ~ 28.5V</td>
<td>±1.5%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SE-450-36</td>
<td>36V</td>
<td>12.5A</td>
<td>0 ~ 12.5A</td>
<td>450W</td>
<td>200mVp-p</td>
<td>32.4 ~ 39.6V</td>
<td>±1.5%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SE-450-48</td>
<td>48V</td>
<td>9.4A</td>
<td>0 ~ 9.4A</td>
<td>451.2W</td>
<td>200mVp-p</td>
<td>43.2 ~ 52.8V</td>
<td>±1.5%</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**INPUT**

- **VOLTAGE RANGE**: 90 ~ 132VAC / 180 ~ 264VAC selected by SW 254 ~ 370V DC
- **FREQUENCY RANGE**: 47 ~ 63Hz
- **EFFICIENCY (Typ.)**: 74% / 83% / 84% / 86% / 86% / 88%
- **AC CURRENT (Typ.)**: 10A/115VAC / 8A/230VAC
- **INRUSH CURRENT (Typ.)**: 35A/115VAC / 55A/230VAC
- **LEAKAGE CURRENT**: <2.5mA / 240VAC

**PROTECTION**

- **OVERLOAD**: 105 ~ 150% rated output power
- **OVER VOLTAGE**: 3.8 ~ 4.6V / 5.75 ~ 6.75V / 13.8 ~ 16.2V / 18 ~ 21V / 32 ~ 36V / 45 ~ 52V / 57.8 ~ 67.2V
- **TEMPERATURE**: Shut down o/p voltage, scalars automatically after temperature goes down

**ENVIRONMENT**

- **TEMPERATURE**: -10 ~ +60°C (Refer to "Derating Curve")
- **HUMIDITY**: 20 ~ 90% RH non-condensing
- **TEMPERATURE**: -40 ~ +85°C; 10 ~ 95% RH
- **HUMIDITY**: 0 ~ 50°C
- **TEMPERATURE**: 20 ~ 50Hz, 2G 10min./cycle, 60min. each along X, Y, Z axes

**SAFETY**

- **STORAGE TEMPERATURE**: -40 ~ +85°C; 10 ~ 95% RH
- **TEMPERATURE**: 0 ~ 50°C
- **HUMIDITY**: 0 ~ 50Hz, 2G 10min./cycle, 60min. each along X, Y, Z axes
- **TEMPERATURE**: 20 ~ 50°C
- **HUMIDITY**: 0 ~ 50Hz, 2G 10min./cycle, 60min. each along X, Y, Z axes
- **SAFETY STANDARDS**: UL62368-1, EAC TP TC 004, BSMI CNS14336-1 approved; Design refer to BS EN/EN62368-1
- **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:100Mohm / 500VAC / 25/℃ / 70% RH

**OTHERS**

- **MTBF**: 200kHz min. MIL-HDBK-217F (25℃)
- **DIMENSION**: 225*124*50mm (L"W"H)
- **PACKING**: 1.25Kg/12PCS/16Kg/ CUFT

**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 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. The ambient temperature derating of 3.5% /1000m with fanless models and of 5% /1000m with fan models for operating altitude higher than 2000m (6500ft).
5. The power supply does not meet the harmonic current requirements outlined by BS EN/EN61000-3-2. Please do not use this power supply under the following conditions:
   a) the end-devices is used within the European Union, and
   b) the end-devices is connected to public mains supply with 220VAC or greater rated nominal voltage, and
   c) the power supply is: - installed in end-devices with average or continuous input power greater than 75W, or - belong to part of a lighting system
   Exception: Power supplies used within the following end-devices do not need to fulfill BS EN/EN61000-3-2
      a) professional equipment with a total rated input power greater than 1000W;
      b) symmetrically controlled heating elements with a rated power less than or equal to 200W

* Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

File Name: SE-450-SPEC 2021-09-24
**Mechanical Specification**

- **Case No.986A**
- **Unit:mm**

<table>
<thead>
<tr>
<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>4~6</td>
<td>DC OUTPUT -V</td>
</tr>
<tr>
<td>2</td>
<td>AC/N</td>
<td>7~9</td>
<td>DC OUTPUT +V</td>
</tr>
<tr>
<td>3</td>
<td>FG</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Terminal Pin No. Assignment**

- **Air flow direction**

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Status</th>
<th>Mating Housing</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3</td>
<td>+S</td>
<td>HRS DF11-4DS</td>
<td></td>
</tr>
<tr>
<td>2,4</td>
<td>-S</td>
<td>or equivalent</td>
<td>or equivalent</td>
</tr>
</tbody>
</table>

**Function Connector(CN102):**
- HRS DF11-4DP-2DS or equivalent

**Block Diagram**

- **fosc**: 100kHz

**Derating Curve**

- **Static Characteristics**