**145W Single Output Switching Power Supply**

**Mechanical Specification**

- Terminal Pin No. Assignment
  - Pin No.: 1, 2, 3, 4, 5, 6, 7, 8
  - Assignment: ACL, ACGN, Vcc, Vcc, GND, DC OUTPUT (+), DC OUTPUT (-)

**Block Diagram**

- EMI FILTER
- RECTIFIERS & FILTER
- POWER SWITCHING
- RECTIFIERS & FILTER
- DRIVER
- O.C.P.
- O.V.P.
- LOAD REGULATION
- LINE REGULATION
- LINE REGULATION
- VOLTAGE TOLERANCE
- VOLTAGE TOLERANCE
- RIPPLE & NOISE (max.)
- RIPPLE & NOISE (max.)
- CURRENT RANGE
- CURRENT RANGE
- RATED CURRENT
- RATED CURRENT
- RATED POWER
- RATED POWER
- OUTPUT VOLTAGE
- OUTPUT VOLTAGE
- OUTPUT Ripple (max.)
- OUTPUT Ripple (max.)
- SETUP, RISE, HOLD TIME
- SETUP, RISE, HOLD TIME
- VOLTAGE RANGE
- VOLTAGE RANGE
- FREQUENCY RANGE
- FREQUENCY RANGE
- EFFICIENCY (Typ.)
- EFFICIENCY (Typ.)
- EFFICIENCY (Typ.)
- POWER SUPPLY
- POWER SUPPLY
- OVER LOAD
- OVER LOAD
- PROTECTION
- PROTECTION
- INPUT
- INPUT
- AC CURRENT
- AC CURRENT
- INRUSH CURRENT (max.)
- INRUSH CURRENT (max.)
- LEAKAGE CURRENT
- LEAKAGE CURRENT
- INPUT
- INPUT
- OUTPUT
- OUTPUT
- OUTPUT
- OUTPUT
- OVERVOLTAGE
- OVERVOLTAGE
- WORKING TEMPERATURE
- WORKING TEMPERATURE
- WORKING TEMPERATURE
- WORKING HUMIDITY
- WORKING HUMIDITY
- ENVIRONMENT
- ENVIRONMENT
- ENVIRONMENT
- VIBRATION
- VIBRATION
- VIBRATION
- SAFETY STANDARDS
- SAFETY STANDARDS
- SAFETY STANDARDS
- ISOLATION RESISTANCE
- ISOLATION RESISTANCE
- ISOLATION RESISTANCE
- EMI CONDUCTIVE RADIATION
- EMI CONDUCTIVE RADIATION
- EMI CONDUCTIVE RADIATION
- OTHERS
- OTHERS
- OTHERS
- NOTES

**Features:**
- AC input range selectable by switch
- Protection: Short circuit, Over load, Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 77 KHz
- LED indicator for power on
- Made in China for low cost
- High reliability

**SPECIFICATION**

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<tbody>
<tr>
<td>DC VOLTAGE</td>
<td>5V</td>
<td>7.5V</td>
<td>12V</td>
<td>15V</td>
<td>24V</td>
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<tr>
<td>RATED CURRENT</td>
<td>25A</td>
<td>16A</td>
<td>12A</td>
<td>9.5A</td>
<td>6A</td>
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<td>CURRENT RANGE</td>
<td>3 - 5A</td>
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<tr>
<td>RATED POWER</td>
<td>125W</td>
<td>155W</td>
<td>144W</td>
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<tr>
<td>RIPPLE &amp; NOISE</td>
<td>100mVp-p</td>
<td>120mVp-p</td>
<td>120mVp-p</td>
<td>120mVp-p</td>
<td>120mVp-p</td>
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<tr>
<td>VOLTAGE TOLERANCE</td>
<td>±2%</td>
<td>±1.5%</td>
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<td>±1.5%</td>
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<tr>
<td>OVERVOLTAGE</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>LOAD REGULATION</td>
<td>±5%</td>
<td>±5%</td>
<td>±5%</td>
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<td>LINE REGULATION</td>
<td>±5%</td>
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<td>±5%</td>
<td>±5%</td>
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<tr>
<td>INPUT</td>
<td>-47°C~+85°C</td>
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<td>FREQUENCY RANGE</td>
<td>50Hz</td>
<td>60Hz</td>
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<td>EFFICIENCY (Typ.)</td>
<td>80%</td>
<td>80%</td>
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<td>POWER SUPPLY</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>OVER LOAD</td>
<td>120%</td>
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<td>PROTECTION</td>
<td>Protection type: Built in over voltage, re-power on to recover</td>
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<tr>
<td>OVERVOLTAGE</td>
<td>8.6 ~ 8.8V</td>
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<td>WORKING TEMPERATURE</td>
<td>-10°C ~ +60°C</td>
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<td>WORKING HUMIDITY</td>
<td>20 ~ 80%</td>
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<td>ENVIRONMENT</td>
<td>20 ~ 40°C</td>
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<td>SAFETY STANDARDS</td>
<td>UL/CE/EMC</td>
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<td>ISO 12358-1 TO 12358-6</td>
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<td>DIMENSION</td>
<td>198mm x 198mm x 33mm</td>
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**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 1200A Current-tapped toroid-wire terminated with a 0.1µF & 47µF parallel capacitor.
3. Tolerance includes setup tolerance, line regulation and load regulation.
4. 65.4, 72.2, 83.5, 140, 141 must be removed.
5. Refer to output derating curve & input voltage.

**Derating Curve**

- Load (%) vs. OUTPUT VOLTAGE (V) vs. AMBIENT TEMPERATURE (°C)

**Static Characteristics (24V)**

- DC VOLTAGE 24V
- RIPPLE & NOISE (max.) 100mVp-p
- VOLTAGE TOLERANCE ±2%
- LOAD REGULATION ±5%
- LINE REGULATION ±5%
- INPUT -47°C~+85°C
- OUTPUT Ripple (max.) 100mVp-p