TWC150 Series
150W ITE Grade AC/DC Switching Power Supplies

FEATURES
- 150W in 2" X 4" Footprint
- 90~264 VAC Universal Input
- Efficiency Higher Than 85%
- Power Factor > 0.9
- Open Frame and U-Channel Available

ELECTRICAL SPECIFICATIONS
Input Voltage & Frequency ... 90~264 VAC
Input Frequency ................. 47~63 Hz
Input Current .................... 2.5A (rms) max. @ 115 VAC,
                               1.25A (rms) max. @ 230 VAC
Inrush Current ................... 40A max. @ 115 VAC, 80A max.
                               @ 230 VAC; cold start @ 25°C
Earth Leakage Current .......... <0.25mA
Power Factor ..................... >0.9 @ 115/230VAC, full load
Output Power Ratings .......... See table
Output Voltage Regulation .. See table
Ripple and Noise ............... See table

STANDARDS & COMPLIANCES
EMC Standards ................... EN 55022 Class B, FCC Part 15
                                  Class B, CISPR22 Class B
Safety Standards .................. UL 60950-1, EN/IEC 60950-1,
                                  CSA C22.2 No. 60950-1
Agency Approvals ................. CSA, CUS, TUV, CE, CB, FCC
Other Compliance ............... RoHS

MODELS LIST
<table>
<thead>
<tr>
<th>Product No.</th>
<th>Output Voltage</th>
<th>Min. Load</th>
<th>Max. Load</th>
<th>Output Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWC150-12</td>
<td>+12V</td>
<td>0A</td>
<td>8.33A</td>
<td>12.5A</td>
</tr>
<tr>
<td>TWC150-15</td>
<td>+15V</td>
<td>0A</td>
<td>6.67A</td>
<td>10A</td>
</tr>
<tr>
<td>TWC150-19</td>
<td>+19V</td>
<td>0A</td>
<td>5.26A</td>
<td>7.89A</td>
</tr>
<tr>
<td>TWC150-24</td>
<td>+24V</td>
<td>0A</td>
<td>4.16A</td>
<td>6.25A</td>
</tr>
<tr>
<td>TWC150-28</td>
<td>+28V</td>
<td>0A</td>
<td>2.77A</td>
<td>4.16A</td>
</tr>
<tr>
<td>TWC150-48</td>
<td>+48V</td>
<td>0A</td>
<td>2.08A</td>
<td>3.12A</td>
</tr>
</tbody>
</table>

Notes:
1. Standard form factor is open frame. Add suffix "B", for U-bracket, ie TWC150-24B.
2. R&N are measured at 20 MHz bandwidth with a 10µF electrolytic capacitor and with a 0.1µF ceramic capacitor in parallel at output connector.
3. 100W maximum output power without moving air, 150W maximum with 12 CFM forced air.

GENERAL SPECIFICATIONS
Efficiency ....................... >85% typical @ 115VAC, full load
Switching Frequency ............ 65KHz
Hold-up Time .................... >16 ms at 115 VAC, full load
Operating Temperature .......... 0°C to +60°C for 100W @
                               convection cooling;
                               0°C to +70°C for 150W @
                               12 CFM forced air cooling
Derating ........................ Derate from 100W at +40°C
                               linearly to 50W at +60°C @
                               convection cooling;
                               Derate from 150W at +50°C
                               linearly to 75W at +70°C @ 12
                               CFM forced air cooling
Temperature Coefficient ......... ±0.05% per °C maximum
Operating Humidity ............... 5% to 95% non-condensing
Short-Circuit Protection ......... Auto-recovery
Overload Protection .............. Set at 105% to 160% of the
                               maximum rating, Auto-recovery
Overvoltage Protection .......... Auto-recovery
Withstand Voltage ............... Input to Output: 4,242VDC
                               Input to Ground: 2,121VDC
MTBF .............................. 120K hours at full load and
                               25°C ambient calculated per
                               MIL-HDBK-217F
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MECHANICAL SPECIFICATIONS (Unit: mm)

Open Frame

U-Channel

CONNECTORS & PIN CHART

<table>
<thead>
<tr>
<th>CN1</th>
<th>CN2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pin #</td>
<td>Function</td>
</tr>
<tr>
<td>1</td>
<td>AC Neutral</td>
</tr>
<tr>
<td>2</td>
<td>AC Line</td>
</tr>
<tr>
<td>3</td>
<td>GND</td>
</tr>
<tr>
<td>4</td>
<td>+Vo</td>
</tr>
<tr>
<td>5</td>
<td>+Vo</td>
</tr>
<tr>
<td>6</td>
<td>+Vo</td>
</tr>
</tbody>
</table>

Notes:
1. CN1 (Input Connector): JST B3P VH B, 7.92mm pitch or equivalent, mating with JST VHR-3N or equivalent.
2. CN2 (Output Connector): JST B6P VH B, 3.96mm pitch or equivalent, mating with JST VHR-6N or equivalent.