TMP92 Series
90 Watts Medical Grade Power Adapters

FEATURES
- 0.87” Slim Case
- Low Cost
- Class I (2MOPP) & Class II (1MOPP) Models Available
- Low Safety Ground Leakage Current
- Compliant with CEC & Energy Star Level V
- 100% Burn-in Tested

INPUT SPECIFICATIONS
Input Voltage Range ............ 90~264 VAC
Input Frequency ............... 47~63Hz
Input Current .................. 1.5A rms @ 90 VAC
Inrush Current ................. 40 A @ 115 VAC or 80 A @ 230 VAC, at 25°C cold start
Earth Leakage Current ........ 160µA max. @ 264 VAC, 63Hz
(for Class I models only)
Touch Current .................. 40µA max. @ 264 VAC, 63Hz
(only for Class I and Class II models)
No Load Power ................. 0.21W typical

OUTPUT SPECIFICATIONS
Output Power Ratings ........... See table
Tolerance ...................... ±5%
Ripple and Noise* ............. 300mV peak to peak max. at full load
Overvoltage Protection ...... 36 Vdc max., Latch off
Overcurrent Protection ....... 6A max., Auto-recovery
Over-Temp. Protection ...... Latch off
Short Circuit Protection ...... Auto-recovery
Temperature Coefficient ...... ±0.04%/°C max.
Turn-On Delay .................. 3 sec. @ 100 VAC, 60Hz
Transient Response .......... Max. excursion of 4% or better on all models, recovering to 1% of final value within 500 µs after a 25% step load change

GENERAL SPECIFICATIONS
Power Factor .................. 0.9 typical @ 115 VAC
Efficiency ...................... 88% minimum at full load
Hold-up Time ................. 10 ms min. @ 115 VAC, 60Hz
Switching Frequency ......... 75~100KHz
Line Regulation ............... ±1% maximum at full load
Operating Temperature ....... 0°C to +40°C
Derating ...................... Derate from 100% at +40°C linearly to 50% at +60°C
Storage Temperature .......... 40°C to +85°C
Relative Humidity ............. 5% to 90% non-condensing
Withstand Voltage .......... 4000 VAC from input to output
1500 VAC from input to ground
MTBF .......................... 100K hours minimum at full load, 25°C ambient, calculated per MIL-HDBK-217F

MODELS LIST

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Output Voltage</th>
<th>Maximum Current</th>
<th>Maximum Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I (IEC 320/C6 Inlet)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>TMP92-12</td>
<td>12 V</td>
<td>7.5 A</td>
<td>90 W</td>
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<tr>
<td>TMP92-18</td>
<td>18 V</td>
<td>5 A</td>
<td>90 W</td>
</tr>
<tr>
<td>TMP92-19</td>
<td>19 V</td>
<td>4.74 A</td>
<td>90 W</td>
</tr>
<tr>
<td>TMP92-24</td>
<td>24 V</td>
<td>3.75 A</td>
<td>90 W</td>
</tr>
<tr>
<td>Class II (IEC 320/C8 Inlet)</td>
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<td></td>
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<tr>
<td>TMP92-12-2R</td>
<td>12 V</td>
<td>7.5 A</td>
<td>90 W</td>
</tr>
<tr>
<td>TMP92-18-2R</td>
<td>18 V</td>
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STANDARDS & COMPLIANCES
IEC/EN 60601-1-2 .......... EMC & Immunity Performance
EN 55011, FCC, VCCI ...... Class B, conducted & radiated
EN 61000-3-2- .......... Harmonic distortion, Class A
EN 61000-3-3- .......... Line flicker
EN 61000-4-2- .......... ESD, ±8 KV air and ±6 KV contact
EN 61000-4-3- .......... Radiated immunity, 3 V/m
EN 61000-4-4- .......... Fast transient/burst, ±2 KV
EN 61000-4-5- .......... Surge, ±1 KV diff., ±2 KV com.
EN 61000-4-6- .......... Conducted immunity, 3 Vrms
EN 61000-4-8- .......... Magnetic field immunity, 3 A/m
EN 61000-4-11 .......... Voltage dip immunity,
30% reduction for 500ms,
60% reduction for 100ms,
>95% reduction for 10ms
Safety Standards .......... IEC/EN/UL 60601-1 3rd Edition,
ANSI/AAMI ES 60601-1 1st Edition,
CSA-C22.2 No. 60601-1 2nd Edition
Agency Approvals .......... UL, TUV, CE, CB
Other Compliances ........ RoHS, CEC & Energy Star Level V

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MECHANICAL SPECIFICATIONS

Unit: inch [mm]
Tolerance: 0.02 [0.5] maximum
Weight:

NOTES:
1. The output connector shown is for reference only. Please contact TRUMPower to order the connector that meets your requirements.