THC35 Series
35 Watts AC/DC Medical Grade Power Supplies

FEATURES
- BF Rated
- 5,000 Meters Operating Altitude
- 2" x 3" x 1.12" Compact Size
- Efficiency up to 89%
- Class II Insulation

INPUT SPECIFICATIONS
- Input Voltage Range .............. 85-264 VAC
- Input Frequency ..................... 47-63Hz
- Input Current .......................... 0.8A rms @ 115 VAC,
                                         0.4A rms @ 230 VAC
- Inrush Current ....................... 25A @ 115 VAC or 50A @ 230
                                         VAC, at 25°C cold start
- Touch Current ........................ 100µA max. @ 264 VAC, 63Hz
- No Load Input Power ............. 0.3W max.

OUTPUT SPECIFICATIONS
- Output Power Ratings ........... See table
- Output Voltage ....................... See table
- Tolerance ............................... ±3%
- Ripple and Noise* .................... 1% peak to peak max.
- Over Voltage Protection ............ Latch off
- Over Current Protection .......... Auto-recovery
- Short Circuit Protection .......... Auto-recovery
- Over Temp. Protection .............. Latch off
- Temperature Coefficient ......... ±0.04%/°C max.
- 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
- Efficiency ......................... 87% typical @ 115 VAC,
                                89% typical @ 230 VAC
- Operating Altitude .............. 5.000 meters max.
- Hold-up Time ....................... 12ms min. @ 110 VAC
- Line Regulation ..................... ±1% max. @ full load
- Operating Temperature ........... -20°C to +70°C
- Storage Temperature .............. -40°C to +85°C
- Derating ............................. Derate from 100% @ +50°C
                                 linearly to 70% @ +70°C
- Relative Humidity ................. 5% to 95% non-condensing
- Withstand Voltage ............... 4,000 VAC input-output (2MOPP)
- MTBF ................................. 250K 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>Max. Current</th>
<th>Max. Power</th>
<th>Ripple &amp; Noise*</th>
</tr>
</thead>
<tbody>
<tr>
<td>THC35-05</td>
<td>5V</td>
<td>6A</td>
<td>30W</td>
<td>100mV</td>
</tr>
<tr>
<td>THC35-12</td>
<td>12V</td>
<td>2.92A</td>
<td>35W</td>
<td>120mV</td>
</tr>
<tr>
<td>THC35-15</td>
<td>15V</td>
<td>2.33A</td>
<td>35W</td>
<td>150mV</td>
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<tr>
<td>THC35-18</td>
<td>18V</td>
<td>1.94A</td>
<td>35W</td>
<td>150mV</td>
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<tr>
<td>THC35-24</td>
<td>24V</td>
<td>1.45A</td>
<td>35W</td>
<td>200mV</td>
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</tbody>
</table>

STANDARDS & COMPLIANCES
- IEC/EN 60601-1-2 .......... EMC & Immunity Performance
- EN 55011 ...................... Class B, conducted & radiated
- EN 55022 ...................... Class B, conducted & radiated
- FCC, VCCI ...................... Class B, conducted & radiated
- EN61000-3-2 .................... Harmonic distortion, Class A & D
- EN61000-3-3 .................... Line fluctuations & flicker
- EN61000-4-2 .................... ESD, ±15 KV air and ±8 KV contact
- EN61000-4-3 .................... Radiated immunity, 10V/m
- EN61000-4-4 .................... Fast transient/burst, ±2 KV
- EN61000-4-5 .................... Surge, ±1 KV dif., ±2 KV com.
- EN61000-4-6 .................... Conducted immunity, 6 Vrms
- EN61000-4-8 .................... Magnetic field immunity, 30A/m
- EN61000-4-11 ................. Voltage dip immunity,
                                 30% reduction for 500ms,
                                 60% reduction for 100ms,
                                 >95% reduction for 10ms

Safety Standards ............. UL/IEC/EN 60601-1 (3rd Edition)
- ANSI/AAMI ES 60601-1:2005
- CSA C22.2 No. 60601-1:2005

Agency Approvals* ............ UL, cUL, TUV, CB, CE
Other Compliance ............... RoHS

*UL / cUL Approvals Pending

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MECHANICAL SPECIFICATIONS

CONNECTORS & SIGNALS

<table>
<thead>
<tr>
<th>CONNECTOR</th>
<th>PIN</th>
<th>FUNCTION</th>
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</thead>
<tbody>
<tr>
<td>CN1</td>
<td>N</td>
<td>NEUTRAL</td>
</tr>
<tr>
<td></td>
<td>L</td>
<td>LINE</td>
</tr>
<tr>
<td>CN2</td>
<td>1</td>
<td>RETURN</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>+V</td>
</tr>
</tbody>
</table>

NOTES:
1. Dimensions: mm [inches].
2. Tolerance: 0.02 [0.5] maximum.
3. Input Connector CN1: JST P/N B3P-VH or equivalent, mating with JST VHR series housing with terminal P/N SVH-21T-P1.1 or equivalent.
4. Output Connector CN2: JST P/N B2P-VH or equivalent, mating with JST VHR series housing with terminal P/N: SVH-21T-P1.1 or equivalent.
5. Weight: 96g (0.21 lbs.) approx.