RBM SERIES
SINGLE OUTPUT MEDICAL SWITCHERS
40-65 Watts Open Frame, 2” x 4” Footprint

FEATURES

- Compact 2” x 4” Footprint
- Universal AC Input
- Active PFC
- Outputs from 5VDC to 48VDC
- Full Medical Approvals
- Class B EMI

SAFETY CERTIFICATIONS

UL60601-1 3rd Edition
CSA22.2, No. 60601-1 3rd Edition
EN60601-1 3rd Edition

TWO YEAR WARRANTY

STANDARD MODELS

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Output Voltage</th>
<th>Output Current</th>
<th>Output Power</th>
<th>Total Regulation</th>
<th>Ripple &amp; Noise (Vp-p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBM-040U-S05</td>
<td>5V</td>
<td>8.00A</td>
<td>40W</td>
<td>±5%</td>
<td>50mV</td>
</tr>
<tr>
<td>RBM-050U-S12</td>
<td>12V</td>
<td>5.00A</td>
<td>60W</td>
<td>±3%</td>
<td>120mV</td>
</tr>
<tr>
<td>RBM-060U-S15</td>
<td>15V</td>
<td>4.00A</td>
<td>60W</td>
<td>±3%</td>
<td>150mV</td>
</tr>
<tr>
<td>RBM-065U-S19</td>
<td>19V</td>
<td>3.43A</td>
<td>65W</td>
<td>±3%</td>
<td>190mV</td>
</tr>
<tr>
<td>RBM-065U-S24</td>
<td>24V</td>
<td>2.71A</td>
<td>65W</td>
<td>±3%</td>
<td>240mV</td>
</tr>
<tr>
<td>RBM-065U-S36</td>
<td>36V</td>
<td>1.81A</td>
<td>69W</td>
<td>±2%</td>
<td>360mV</td>
</tr>
<tr>
<td>RBM-065U-S48</td>
<td>48V</td>
<td>1.36A</td>
<td>65W</td>
<td>±2%</td>
<td>480mV</td>
</tr>
</tbody>
</table>

Note: All ratings for convection cooling.

SPECIFICATIONS

Typical at Nominal Line, Full Load and 25°C Unless Otherwise Noted. Subject to change without notice.

INPUT SPECIFICATIONS

- Input Operating Range: 90-264VAC
- Power Factor, full load: >0.95 @ 115VAC, >0.90 @ 230VAC
- Input Frequency: 47-63Hz
- Input Current, RMS: <2A @ 115VAC, <1A @ 230VAC
- Inrush Current, cold start @ 25°C: <40A Peak @ 115VAC, <80A Peak @ 230VAC
- Input EMI Filter: EN55022 Curve B, FCC20780 pt. 15J Curve B
- Input Protection: Internal Fuse
- Leakage Current: <300µA @ 264VAC

OUTPUT SPECIFICATIONS

- Total Output Power, Convection: 40-65 Watts
- Total Regulation: see model listing
- Ripple & Noise, Pk-Pk: see model listing
- Holdup Time, Full Load @ 115VAC: 10ms
- Dynamic Response: 300µS
- Temperature Coefficient: ±0.05%°C
- Minimum Load: 0A
- Overload Protection: 110-180% Full Load, Auto Recovery
- Overvoltage Protection: Shutdown & Latch off, AC recycle
- Short Circuit Protection: Auto Recovery

GENERAL SPECIFICATIONS

- Efficiency: 80% typical at Full Load, 115VAC
- Switching Frequency: 65kHz
- MTBF: 100,000 Hours

ENVIRONMENTAL SPECIFICATIONS

- Operating Temperature: 0°C to 70°C Ambient
- Derating: 2.5%/°C, 51°C to 70°C
- Storage Temperature: -40°C to +85°C
- Humidity: 10% to 95%, non-condensing
- Cooling: Natural Convection

PHYSICAL SPECIFICATIONS

- Format: Open PCB
- Dimensions, Inches/mm: 4.0 L x 2.0 W x 1.08 H (101.6 x 50.8 x 27.5)
- Weight: 0.35 lbs (0.16 kg)

NOTES:
1. No load to full load, including line regulation and load regulation.
2. 20MHz bandwidth. Measure with 0.1µF ceramic and 10µF tantalum capacitors in parallel across the output.
3. <4% deviation recovering to within 1% for 25% load change.
MECHANICAL SPECIFICATIONS & CONNECTION DETAILS

.CONNECTOR PINOUTS
- **CN1**: See outline drawing
- **CN2**: Pin 1 Output -Ve, Pin 2 Output +Ve, Pin 3 Output +Ve, Pin 4: Output +Ve
- **CN3**: Pin 1: Sense -Ve, Pin 2: Sense +Ve

MATING CONNECTORS
- **CN1**: Housing: Molex 09-76-1020 or equivalent, Pins (2): Molex 08-70-0012 or equivalent
- **CN2**: Housing: Molex 09-52-4044 or equivalent, Pins (4): Molex 08-70-0012 or equivalent
- **CN3**: Housing: JST XHP-2 or equivalent, Pins (2): JST SXH-001T-PO6(N) or equivalent

Note: Use of the sense connections is optional.

A kit containing one each housing and indicated number of pins is supplied with each unit as standard.

ALL DIMENSIONS IN INCHES (mm).