**SPECIFICATION**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>MS-15-5</th>
<th>MS-15-12</th>
<th>MS-15-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC VOLTAGE</td>
<td>15V</td>
<td>15V</td>
<td>15V</td>
</tr>
<tr>
<td>RATED CURRENT</td>
<td>3A</td>
<td>3A</td>
<td>3A</td>
</tr>
<tr>
<td>CURRENT RANGE</td>
<td>3 ~ 7.5A</td>
<td>3 ~ 7.5A</td>
<td>3 ~ 7.5A</td>
</tr>
<tr>
<td>RATED POWER</td>
<td>15W</td>
<td>15W</td>
<td>15W</td>
</tr>
<tr>
<td>RIPPLE &amp; NOISE (typ.)</td>
<td>50mVpp</td>
<td>50mVpp</td>
<td>50mVpp</td>
</tr>
<tr>
<td>VOLTAGE ADJ. RANGE</td>
<td>4.5 V ~ 5.5 V</td>
<td>4.5 V ~ 5.5 V</td>
<td>4.5 V ~ 5.5 V</td>
</tr>
<tr>
<td>VOLTAGE TOLERANCE</td>
<td>±1.0%</td>
<td>±1.0%</td>
<td>±1.0%</td>
</tr>
<tr>
<td>LINE REGULATION</td>
<td>±0.5%</td>
<td>±0.5%</td>
<td>±0.5%</td>
</tr>
<tr>
<td>LOAD REGULATION</td>
<td>±0.8%</td>
<td>±0.8%</td>
<td>±0.8%</td>
</tr>
<tr>
<td>SETUP, RISE TIME</td>
<td>20ms/5% (230VAC)</td>
<td>30ms/5% (230VAC)</td>
<td>50ms/5% (230VAC)</td>
</tr>
<tr>
<td>HOLD-UP TIME (Typ.)</td>
<td>10ms (230VAC)</td>
<td>15ms (230VAC)</td>
<td>15ms (230VAC)</td>
</tr>
</tbody>
</table>

**INPUT**

- VOLTAGE RANGE: 85 ~ 264VAC
- FREQUENCY: 47 ~ 63Hz
- EFFICIENCY (Typ.): 87% (230VAC) 87% (115VAC)
- AC CURRENT (Typ.): 0.64A (230VAC) 0.35A (115VAC)
- INRUSH CURRENT (Typ.): 1.5A (230VAC) 0.75A (115VAC)
- LEAKAGE CURRENT: ≤0.75mA (230VAC)

**PROTECTION**

- OVERLOAD: 105 ~ 110% rated output power
- OVERTEMP: 85 ~ 100°C (Ambient)
- SHORT CIRCUIT: Immediate shutdown
- OVERVOLT: 110% of rated output
- UNDERVOLT: 90% of rated output
- VIBRATION: 0.1g, 50 ~ 80Hz
- TEMPERATURE: 0 ~ 40°C

**SAFETY & ENR**

- NOMINAL VOLTAGE: 270VAC
- ISOLATION RESISTANCE: 500VAC, 1min.
- EMI REJECTION: 80dB (kHz)
- EMI INQUITY: ≤59dB (kHz)
- OTHERS: IEC 61000-3-2, EN55022, 10% RH

**NOTE**

1. All parameters not specifically mentioned are measured at 230VAC, rated load, and 25°C of ambient temperature.
2. Ripple & noise are measured at 230VAC input, rated load, and 25°C of ambient temperature.
3. Tolerance includes set up tolerance, line regulation, and load regulation.

**Block Diagram**

- ENI FILTER
- RECTIFIERS & FILTER
- POWER SWTICHING
- RECTIFIERS & FILTER
- DETECTION CIRCUIT

**Output Derating VS Input Voltage**

- AMBIENT TEMPERATURE (°C)
- INPUT VOLTAGE (VAC) 60Hz
- LOAD (%)