### SPECIFICATION

#### MODEL

<table>
<thead>
<tr>
<th>DC VOLTAGE</th>
<th>RATED CURRENT</th>
<th>CURRENT RANGE</th>
<th>RATED POWER</th>
<th>OUTPUT VOLTAGE ADJ. RANGE</th>
<th>LINE REGULATION</th>
<th>LOAD REGULATION</th>
<th>SETUP, RISE TIME</th>
<th>FREQUENCY RANGE</th>
<th>EFFICIENCY (Typ.)</th>
<th>INRUSH CURRENT (Typ.)</th>
<th>LEAKAGE CURRENT</th>
<th>OVER LOAD</th>
<th>OVER VOLTAGE</th>
<th>OVER TEMPERATURE</th>
<th>FUNCTION</th>
<th>WORKING TEMP.</th>
<th>WORKING HUMIDITY</th>
<th>STORAGE TEMP., HUMIDITY</th>
<th>TEMP. COEFFICIENT</th>
<th>VIBRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>INES-350-3.3</td>
<td>3.3V</td>
<td>3.1A</td>
<td>0 ~ 60A</td>
<td>198W</td>
<td>2.97 ~ 3.7V</td>
<td>±2.0%</td>
<td>±0.5%</td>
<td>2000ms, 50ms/230VAC</td>
<td>47 ~ 63Hz</td>
<td>74%</td>
<td>&lt;3mA / 240VAC</td>
<td>105</td>
<td>3.8 ~ 4.6V</td>
<td>±10%</td>
<td>23.4 ~ 27.8°C</td>
<td>RTH2 ≤ 50°C</td>
<td>-20 ~ +60°C</td>
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<tr>
<td>INES-350-5</td>
<td>5V</td>
<td>5.1A</td>
<td>0 ~ 60A</td>
<td>300W</td>
<td>4.5 ~ 5.6V</td>
<td>±3.0%</td>
<td>±0.5%</td>
<td>1600ms, 50ms/230VAC</td>
<td></td>
<td>78%</td>
<td></td>
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<tr>
<td>INES-350-7.5</td>
<td>7.5V</td>
<td>7.1A</td>
<td>0 ~ 60A</td>
<td>345W</td>
<td>6 ~ 9V</td>
<td>±2.0%</td>
<td>±0.5%</td>
<td>1500ms, 50ms/230VAC</td>
<td></td>
<td>80%</td>
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<tr>
<td>INES-350-12</td>
<td>12V</td>
<td>12.1A</td>
<td>0 ~ 60A</td>
<td>348W</td>
<td>10 ~ 13.5V</td>
<td>±3.0%</td>
<td>±0.5%</td>
<td>1400ms, 50ms/230VAC</td>
<td></td>
<td>83%</td>
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<tr>
<td>INES-350-15</td>
<td>15V</td>
<td>15.1A</td>
<td>0 ~ 60A</td>
<td>348W</td>
<td>13.5 ~ 18V</td>
<td>±3.0%</td>
<td>±0.5%</td>
<td>1300ms, 50ms/230VAC</td>
<td></td>
<td>84%</td>
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<tr>
<td>INES-350-24</td>
<td>24V</td>
<td>24.1A</td>
<td>0 ~ 60A</td>
<td>350W</td>
<td>20 ~ 26.4V</td>
<td>±3.0%</td>
<td>±0.5%</td>
<td>1200ms, 50ms/230VAC</td>
<td></td>
<td>87%</td>
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<tr>
<td>INES-350-27</td>
<td>27V</td>
<td>27.1A</td>
<td>0 ~ 60A</td>
<td>350W</td>
<td>26 ~ 32V</td>
<td>±3.0%</td>
<td>±0.5%</td>
<td>1100ms, 50ms/230VAC</td>
<td></td>
<td>88%</td>
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<tr>
<td>INES-350-36</td>
<td>36V</td>
<td>36.1A</td>
<td>0 ~ 60A</td>
<td>351W</td>
<td>32 ~ 40V</td>
<td>±3.0%</td>
<td>±0.5%</td>
<td>1000ms, 50ms/230VAC</td>
<td></td>
<td>87.5%</td>
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<tr>
<td>INES-350-48</td>
<td>48V</td>
<td>48.1A</td>
<td>0 ~ 60A</td>
<td>351W</td>
<td>32 ~ 40V</td>
<td>±3.0%</td>
<td>±0.5%</td>
<td>900ms, 50ms/230VAC</td>
<td></td>
<td>87.5%</td>
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#### OUTPUT

- Voltage Range: 90 ~ 132 VAC / 180 ~ 264 VAC by switch
- Ripple & Noise: 150 mVp-p
- Voltage Tolerance: ±3% at full load
- Line Regulation: ±0.5%
- Load Regulation: ±2%
- Setup, Rise Time: 1000ms, 50ms/230VAC

#### INPUT

- Voltage Range: 90 ~ 132 VAC / 180 ~ 264 VAC by switch
- Frequency Range: 47 ~ 63 Hz
- Efficiency: 74%
- AC Current: 7 A / 115 VAC
- Leakage Current: <3.5 mA / 240 VAC

#### PROTECTION

- Over Load: 105 ~ 135% rated output power
- Over Voltage: 3.8 ~ 4.6 V
- Over Temperature: 90°C ±5°C (3.3 ~ 7.5 V)

#### FUNCTION

- Fan On/Off Control: RTH2 ≥ 50°C, Fan on; ≤ 45°C, Fan off (3.3 ~ 7.5 V)

#### ENVIRONMENT

- Working Temp.: -20 ~ +60°C
- Working Humidity: 20 ~ 90% RH non-condensing
- Storage Temp., Humidity: -20 ~ +85°C, 10 ~ 95% RH
- Temp. Coefficient: ±0.03%/°C (0 ~ 50°C)
- Vibration: 10 ~ 500 Hz, 3G 10 min./cycle, 60 min. each along X, Y, Z axes

#### FEATURES

- For only industrial type Switching Power Supply
- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- 100% full load burn-in test
- 2 years warranty

#### WARNING

Operation of this equipment in a residential environment could cause radio interference.
**Mechanical Specification**

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Assignment</th>
<th>Pin No.</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ACL</td>
<td>4-6</td>
<td>DC OUTPUT -V</td>
</tr>
<tr>
<td>2</td>
<td>AC/N</td>
<td>7-9</td>
<td>DC OUTPUT +V</td>
</tr>
<tr>
<td>3</td>
<td>FG</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Terminal Pin No. assignment:**

Terminal block diagram with various components labeled.

**Block Diagram**

- I/P
- FG
- EMI FILTER
- RECTIFIERS
- POWER SWITCHING
- PWM CONTROL
- O.L.P.
- O.T.P.
- FAN ON/OFF CONTROL
- RECTIFIERS & FILTER
- RECTIFIERS & FILTER
- O.V.P.
- DETECTION CIRCUIT
- FAN

**Derating Curve**

Graph showing LOAD (%) against AMBIENT TEMPERATURE (°C).

**Static Characteristics**

Graph showing LOAD (%) against INPUT VOLTAGE (VAC) 60Hz.