Overview
- Universal Input: 85 – 264VAC
- Output: 48VDC - isolated, regulated (SELV)
- Power: 330W - over entire input voltage range
- Isolated AC-DC converter with active Power Factor Correction (PFC)
- Integrated rectification, filtering and transient protection
- Peak efficiency: >92%
- EN55022, Class B EMI conducted emissions with a few components
- EN61000-3-2 harmonic limits
- –40 to 100°C baseplate operation.

Features & Benefits
- Compact and robust package
  ■ Low profile, 9.55mm height above board
  ■ Small footprint
  ■ Flanged aluminum package for secure mounting and thermal management
- Consistent high efficiency across the worldwide mains (flat efficiency curve)
- Integrated solution streamlines design, reduces time to market
  ■ Module includes PFC, regulation, isolated 48V output (SELV), filtering, rectification, transient protection, agency approvals, simplified thermal management
  ■ Simple design, requires few external components
- Full-feature module with high power density
  ■ Module power density, 121W/in³
  ■ Complete solution including hold-up capacitors, 54W/in³

Typical Application

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Input Voltage</th>
<th>Output Voltage</th>
<th>Output Power</th>
<th>Operating Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>FE175D480C033FP-00</td>
<td>85 – 264VAC</td>
<td>48VDC</td>
<td>330W</td>
<td>–20 to 100</td>
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<td>FE175D480T033FP-00</td>
<td></td>
<td></td>
<td></td>
<td>–40 to 100</td>
</tr>
</tbody>
</table>
Performance

DC output safe operating area

Full-load efficiency vs. line voltage, $T_{\text{CASE}} = 25^\circ\text{C}$

Efficiency & Power Dissipation 25°C Case

Vin to VOut efficiency and power dissipation vs. Vin and IOut, $T_{\text{CASE}} = 25^\circ\text{C}$

Typical EMI spectrum, quasi-peak scan, 90% load, Vin = 230V, Cout = 6800μF

Product Dimensions

Accessories

- Common-Mode Inductor
  P/N: 37052-601
- Low-profile (10 x 50mm) capacitors
  P/N: 34837-108
- ThermMate Pad
  P/N: 36967
- Longitudinal Heat Sink (31.7mm)
  P/N: 38145
- Transverse Heat Sink (31.7mm)
  P/N: 38146
- Longitudinal Heat Sink (17.7mm)
  P/N: 39068
- Transverse Heat Sink (17.7mm)
  P/N: 39069
- Standoffs:
  See website for part numbers

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