

## 800 Watt Metal Enclosed, Single Output

### INPUT SPECIFICATIONS

All specifications are typical at nominal input, full load.

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Input Voltage	90Vac-264Vac, 127Vdc-370Vdc
Input Frequency	47Hz– 63Hz
Input Current	≤12A
Protection	Internal Primary Current Fuse Inrush Limiting



### OUTPUT SPECIFICATIONS

Output Voltage	See Chart
Efficiency	≥89%
Protection	Over Load Over Temperature Over Voltage Short Circuit
Ripple and Noise	≤200mV
Hold-Up Time	≥8mS (220Vac input, Full load)
Transient Response	0.5mS for 50% Load Change(typ)
Load Regulation	± 2%
Leakage Current	Input-output: ≤0.25mA Input-PG: ≤3.5mA

### GENERAL SPECIFICATIONS

MTBF(MILHDBK-217F)	More than 200,000Hrs (25°C, Full load)
Withstand Voltage	Primary-Secondary: 3,0KVac ≤10mA. Primary-PG: 1.5KVac; ≤10mA. Secondary-PG: 0.5KVac; ≤10mA
EMI Conduction & Radiation	Compliance to EN55022, Class B
Harmonic Current	Compliance to EN61000-3-2, class D
EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; heavy industry level

### FEATURES

- Using ZVS technology to reduce power dissipation
- Built in Fan speed control and over temp. protection
- Built in AC inrush current limiting circuit(<20A)
- Built in constant current limiting circuit
- Built in DC OK signal
- 1U low profile, 41mm

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-30°C ~ +70°C with derating
Storage Temperature	-40°C ~ +85°C
Cooling.	Forced air cooling(Built in fan, the fan speed is controlled by the load and internal temp.)
Operating Humidity	20 – 90% RH No condensing
Storage Humidity	10 – 95% RH

### MECHANICAL SPECIFICATIONS

Case Dimension	L226 x W116.5 x H41mm
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Model Number	Output Voltage	Output Current With fan / without fan	Max Output Power
PNF-800-24	24.0V	27.0A/33A	792.0W
PNF-800-27	27.0V	23.0A/29A	783.0W
PNF-800-48	48.0V	14.0A/16.5	792.0W

**■ Mechanical Specification** Unit:mm

The mechanical drawing shows the following dimensions and features:

- Top View:** Overall width 226mm, mounting hole spacing 152.4mm, distance from edge to mounting hole 40.8mm. Mounting holes are 4-M4. Dimensions for component placement include 9.25mm, 11mm, 63.5mm, 26.5mm, and 12.5mm.
- Side View:** Overall height 116.5mm, fan height 50mm, distance from top edge to fan 33.25mm.
- Front View:** Shows connector CON1 (9 pins), CON2 (2 pins), and S1.
- Detail:** A circular detail shows the output terminal markings: +, 3, 4, and -.

**■ Block Diagram**

The block diagram illustrates the power flow and control components:

- Input:** I/P and PE.
- EMI FILTER** and **ACTIVE INRUSH LIMIT** are connected to the input.
- AUX POWER SUPPLY** provides power to **PFC CONTROL** and **FAN CONTROL**.
- PFC** stage includes **DTP** and **TEMP SENSOR**.
- DC/DC ZVS** stage is connected to the PFC and provides input to **RECTIFIERS & FILTERS**.
- RECTIFIERS & FILTERS** output to +S, DP, and -S terminals.
- REGULATOR** and **DVP** are connected to the DC output line.
- CURRENT LIMITING** is also connected to the DC output line.
- FAN CONTROL** is connected to the DC output line.
- DC-OK** signal is provided from the regulator.

**■ Derating curve**

The derating curve shows the relationship between ambient temperature and load capacity:

- At -30°C to 50°C, the load capacity is constant at 100%.
- Between 50°C and 70°C, the load capacity decreases linearly from 100% to 50%.
- At 70°C and above, the load capacity is 0%.