



ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

EPF400-380



General Description

Application

Industrial

Input

Input Voltage: AC100-240V 5.5A
AC200-240V 4.1A
DC120-220V 4.0A

Input Voltage Range: AC85~264V &
DC120~220V @400W
Output
AC170~264V @630W
Output

Input Current: 2.0-0.9 A
Frequency: 50/60Hz
Input Frequency Range: 45-65Hz
Phase: Single
Inrush Current: *1 25A (typ.) at AC100V
50A (typ.) at AC240V
35A (typ.) at DC220V

Leakage Current: 1mA (maximum) at 25°C
(rated input/output and
rated input frequency)

Features

1. Power Factor Correction

Options

N/A



ETA USA

16170 Vineyard Blvd. Suite 180, Morgan Hill, CA 95037
Phone: 1-800-ETA-POWER, (408) 778-2793 Fax: (408) 779-2753

Visit us at: www.eta-usa.com
email at: sales@eta-usa.com



ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

Output Characteristic	Unit	Models	
		EPF400-380	
Output Power (*De-rating by Input Voltage and Mounting directions will be applied)	W	400W when AC85~264V or DC 120V to 220V input*	630W when AC 170~264V input*
Rated Output Voltage	Vdc	340~380V	
Output Current	A		
Voltage Adjust Range	V	±10% of Rated Output Voltage(at no load within the input range)	
Output Voltage Tolerance	V	350 ± 2[V] At AC 100V input, 400W output	
Ripple&Noise(max)*2	mVpp	30/40 , measured by a Bayonet Probe at the end of the output connector with 20MHz bandwidth scope	
Regulation			
a. Line Regulation	mV	30V Max at PFC operating range or DC120 to 220V input Output voltage will be bridge rectified when AC 255~264V input	
b. Load Regulation *3	mV	50V max at PFC operating range or DC 120 to 220V input Changing load from 0 to the rated value with fixed input voltage	
c. PFC operating range output power		PFC> 0.8 when taking more power than values: When input 100VAC: 20W or more When input 240VAC: 155W or more	
Temperature effect		25V Max at -10 to +50C ambient temperature	
Notes:		This power supply operates in hiccup mode from no-load to some value of load. In this case, output voltage may have some bounce other than the ripple voltage. Output voltage may get up to 390V at that condition. Hiccup operation will stop at some load level, examples: When AC 100V input: Approx 20W or more When AC 240V input: Approx 75W or more	

Conditions:

- *1 cold start
- *2 measured by a bayonet probe at the output connector at a 0 to 100MHz bandwidth
- *3 when output current changed from 50% to 150% of rated output current rapidly at rated input
- *4 at -10 to +50°C
- *5 for 7hour period after 1hour warm-up at 25°C and rated input/output
- *6 safety approved at 25°C





ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

Environmental Specification	
Operating Temperature	-10 to +50 °C
Operating Humidity	20 to 90%/RH(non-condensing)
Storage Temperature	-20 to +85 °C
Storage Humidity	20 to 90%/RH(non-condensing)
Withstanding Voltage	Input-Output: Non-isolated Input-FG (Chassis): AC 2,500V for 1minute Sens-current 20 mA
Isolation Resistance	Primary-Secondary-Frame Ground 50MΩ(minimum) by DC500V insulation tester
Vibration	5-10Hz:10mm,10-55Hz:19.6m/s ² ,3 minute period along X,Y,Z axes(non-operating)
Shock	196m/s ² except for terminals
Cooling	Convection
Mounting Direction	Horizontal (PSU bottom as bottom); Vertical (Q1 side placed as bottom)
Environmental Agencies	
Line Conducted Noise	Built to meet EN55022 Class A, EN55022 Class B using external line filter.
Line Harmonic Distortion	Built to meet IEC61000-3-2
Safety	UL: UL60950-1, C-UL: EN60950-1 and the electrical appliance and material safety law based
Function/Protection	
Over current Protection	None (Overload and output short breaks the power supply down)
Over voltage Protection	More than 395V after detected the overvoltage, shut the output and stop the operation. To restart, remove the cause of failure and turn ON again after shut-off Bridge rectified voltage will appear at Output when operation stopped.)
Remote Sense	not available



ETA USA

16170 Vineyard Blvd. Suite 180, Morgan Hill, CA 95037
Phone: 1-800-ETA-POWER, (408) 778-2793 Fax: (408) 779-2753

Visit us at: www.eta-usa.com
email at: sales@eta-usa.com