

# LAMBDA PFE500-700 Series



## 500 to 700W Full Brick AC-DC Power Supply

- ◆ Low profile, small size
- ◆ 100°C baseplate temperature
- ◆ High power density
- ◆ High Efficiency

### Features and Benefits

Feature	Benefit
◆ Low profile	◆ Assists system integration
◆ High Efficiency	◆ Easier to cool
◆ Power Factor Corrected (PFC)	◆ Supports Global Use
◆ Operation up to 100°C baseplate	◆ Operates in harsh environments

### Specifications

Preliminary

MODEL		PFE500-12	PFE500-28	PFE500-48	PFE700-48
ITEMS					
AC Input	VAC	85 to 265VAC, 47-63Hz (operation to 440Hz with reduced power factor)			
Input Current (100/220VAC)	A	5.0 / 3.0	6.2 / 3.2	6.2 / 3.2	8.5 / 4.2
Inrush Current (100/200VAC)(1)	A	20 / 40 peak			
Power Factor		0.95 minimum			
Output Voltage (Nominal)	VDC	12V	28V	48V	51V
Output Voltage Setpoint Accuracy	%	±2%			
Output Current	A	33	18	10.5	14
Output Power	W	396	504	504	714
Output Voltage adjustment	VDC	9.6 - 14.4V	22.4 - 33.6V	38.4 - 57.6V	Fixed
Ripple and Noise (1)	mV	120	280	480	4000
Line regulation	mV	48	56	96	-
Load regulation	mV	48	56	96	-
Total Regulation	V	-	-	-	50 - 57
Over Current Protection	%	105 - 140% (Automatic Recovery)			
Over Voltage Protection	-	125 - 145%			
Parallel Operation	-	Requires external circuitry			
Series Operation	-	Yes			
Efficiency (100/200VAC)	%	82 / 83	84 / 86	84 / 86	87 / 90
Overcurrent Protection	-	Yes			
Overvoltage Protection	V	Yes			
Operating Baseplate Temperature	°C	-40 to +85°C (2)	-40 to +100°C (2)		See derating curves
Storage Temperature	°C	-40 to +100°C			
Humidity (non condensing)	-	Operating: 20 - 95%RH, Non Operating: 10 - 95%RH			
Cooling	-	Conduction			
Withstand Voltage	-	Input to Output 3kVAC, Input to Baseplate 2.5kVAC, Output to Baseplate 1.5kVDC			
Isolation Resistance	-	Output to baseplate: 100M Ohm at 500VDC, 25oC ambient, 70%RH			
Vibration (non operating)	-	10-55Hz (1 min sweep), constant amplitude 0.825mm (max 49m/s <sup>2</sup> ), X, Y, Z 1 hour each			
Shock	-	196.1m/s <sup>2</sup>			
Safety Agency Approvals		UL60950-1, CSA60950-1 (cUL), EN60950-1, CE mark (LVD)			
Weight	g	250			
Size (WxHxD)	mm(in)	61 x 12.7 x 116.8mm (2.4 x 0.5 x 4.6)			

Notes: (Consult Installation Manual for detailed specifications, test methods and application notes)

1) External components are required, consult Application Notes

2) Full load, no derating required

