

48V Input Full brick DC-DC Converters

Features

- ◆ 12V output for driving non-isolated converters
- ◆ Safety Approved
- ◆ Full power at 85°C baseplate, operation to 100°C
- ◆ Opto Isolated Remote On / Off
- ◆ Wide Adjustable Output Range
- ◆ Parallel Pin
- ◆ ASIC Design



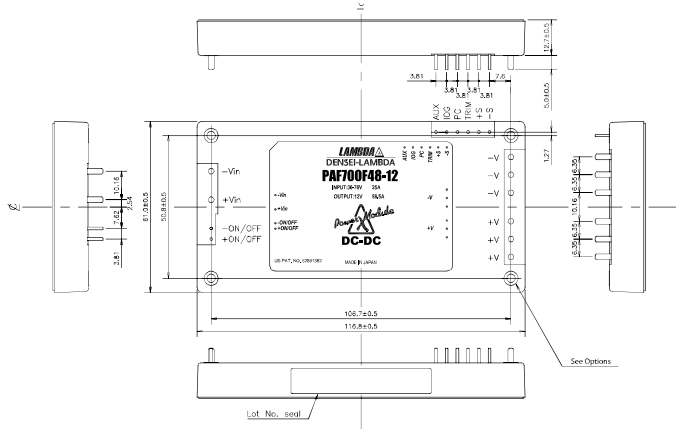
Key Market Segments & Applications



Specifications				
Model		PAF700F48-12		PAF700F48-28
Nominal Output Voltage	VDC	12		28
Output Current (Max)	A	58.5		25
Output Power (Max)	W	702		700
Efficiency (Typ)	%	90 to 91%		
Input Voltage Range	VDC	36-76		
Input Current (Typ)	A	16.5		16.4
Output Voltage Accuracy	%	±1		
Output Voltage Adjustment	VDC	7.2 - 13.8		16.8 - 32.2
Ripple & Noise (Max)	mV	200		280
Line Regulation (Max)	mV	24		56
Load Regulation (Max)	mV	24		56
Temperature Coefficient	-	0.02%/°C		
Overcurrent Protection	%	105 - 140%		
Overvoltage Protection	%	120 - 135%		
Signals & Control	-	Remote sense, remote On/Off, Parallel Pin, DC Good, 7-10V Auxiliary voltage		
Operating Temperature	°C	-40°C to +100°C baseplate		
Humidity (operating)	-	20-95% RH Non condensing		
Humidity (storage)	-	10-95% RH Non condensing		
Cooling	-	Conduction (See Installation Manual for heatsink selection)		
Isolation Voltage	VDC	Input - Baseplate 1500V, Input - Output 1500V, Output-Baseplate 500V (for 1 min.)		
Shock	-	196.1m/s ²		
Vibration	-	Non Operating, 10-55Hz (sweep for 1 min.) Amplitude 0.825mm constant (Max 49 m/s ²) X,Y,Z 1 hour each		
Safety Agency Approvals	-	UL60950-1, CSA60950-1, EN60950-1, CE LVD		
Weight (Typ)	g	200		
Size (WxHxD)	in(mm)	2.4 x 0.5 x 4.6 (61 x 12.7 x 116.8) See outline drawing		
Warranty	yrs	2 years		

Note: See Installation Manual for full details, test methods of parameters and application notes.

PAF Outline Drawing



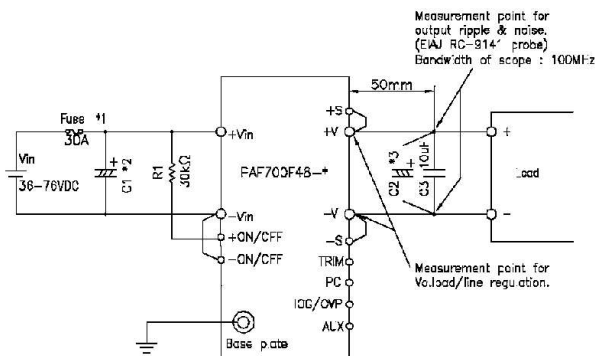
Pinout

Pin Description	Function
-Vin	Negative Input Terminal
+Vin	Positive Input Terminal
- ON/OFF	Remote On/Off Negative Terminal
+ON/OFF	Remote On/Off Positive Terminal
+V	Positive Output Terminal
-V	Negative Output Terminal
AUX	7-10V Aux Voltage
IOG	DC Good
PC	Parallel Control Connection
TRIM	Output Adjustment Trim Pin
+S	Positive Remote Sense
-S	Negative Remote Sense

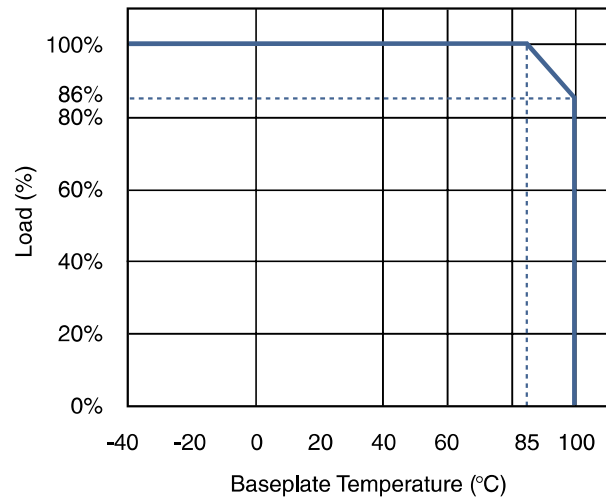
Other DC-DC Products

PAF	Full brick 400-700W DC-DC
PAH	Half brick DC-DC
PAQ	Quarter brick DC-DC
PX	10-60W, 12-48V DC-DC

Connection Example



Derating Curve



Options

Suffix	Description
Blank	M3 tapped inserts (4)
/T	3.3mm non-threaded inserts (4)

Heatsink Table

Heatsink	Size (mm)	Thermal Resistance
HAF-10L	116.8 x 25.4 x 61	2.2°C/W
HAF-15L	116.8 x 38.1 x 61	1.9°C/W
HAF-15T	116.8 x 38.1 x 61	1.5°C/W

For Additional Information, please visit
us.tdk-lambda.com/lp/products/paf700-series.htm

