

600W, 24V & 48V Input Full brick DC-DC Converters

Features

- ◆ 12V output for driving non-isolated converters
- ◆ Safety Approved
- ◆ Full power at 100°C baseplate
- ◆ Opto Isolated Remote On / Off
- ◆ Wide Adjustable Output Range
- ◆ Parallel Pin
- ◆ ASIC Design
- ◆ 24V & 48V Inputs



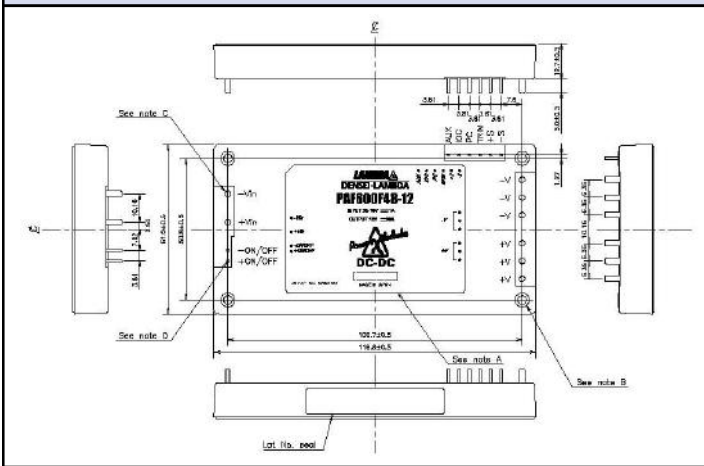
Key Market Segments & Applications



Specifications		PAF600F24-12		PAF600F24-28	
		PAF600F48-12		PAF600F48-28	
Nominal Output Voltage	VDC	12		28	
Output Current (Max)	A	50		21.5	
Output Power (Max)	W	600		602	
Efficiency (Typ)	%	89 to 90%			
Input Voltage Range	VDC	20-36 / 36-76		19-36 / 36-76	
Input Current (Typ) 24/48V input	A	28.9 / 14.2		28.9 / 14.1	
Output Voltage Accuracy	%	±1			
Output Voltage Adjustment	VDC	7.2 - 13.2		16.8 - 30.8	
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	%	115-135%			
Signals & Control	-	Remote sense, remote On/Off, Parallel Pin, DC Good, 7-10V Auxiliary voltage			
Operating Temperature	-	-40°C to +100°C baseplate			
Humidity (operating)	-	30-95% 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 (48V model only)			
Weight (Typ)	g	250			
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



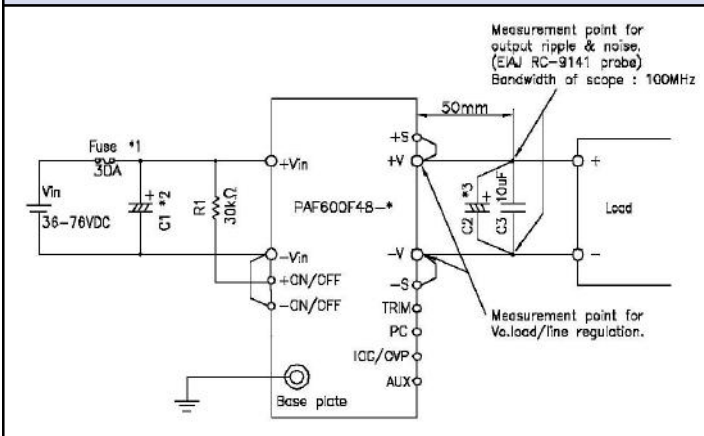
Pinout

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

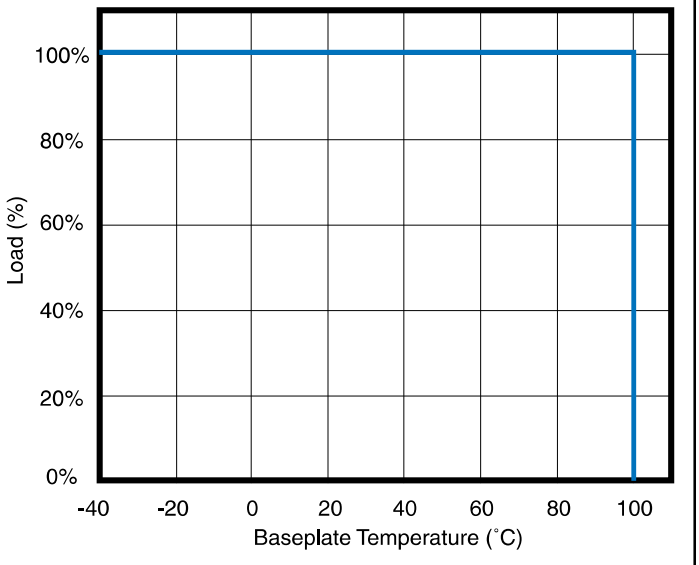
Other DC-DC Products

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	
/T	No thread in mounting holes.

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
<https://product.tdk.com/info/en/products/power/index.html>

