

24V & 48V Input Full brick DC-DC Converters



- ◆ 12V output for driving non-isolated converters
- ◆ Safety Approved
- ◆ Full power at 100°C baseplate
- ◆ Opto Isolated Remote On / Off
- ◆ Wide Adjustable Output Range



Key Market Segments & Applications

Central Office:	ATM, Sonet, DSL, ISDN, Frame Relay
Broadband:	Switching Equipment, Routers
Wireless/Cellular:	Micro Cells (larger in size/10 sq. mi.) Pico Cells (smaller in size/1 to 2 sq. mi.)
Remote Electronics:	Fixed Local Loop, Fiber Optic Transmission, Microwave Transmission, Wireless Local Loop
Base Station Power Amplifiers	

Features and Benefits

Feature	Benefit
◆ Wide Adjustment Range	◆ Reduces need for custom modules
◆ Parallel Pin	◆ Modules can be connected together for higher current
◆ ASIC Design	◆ Reduced component count, increased MTBF
◆ 24V & 48V Inputs	◆ Suitable for remote & central office applications

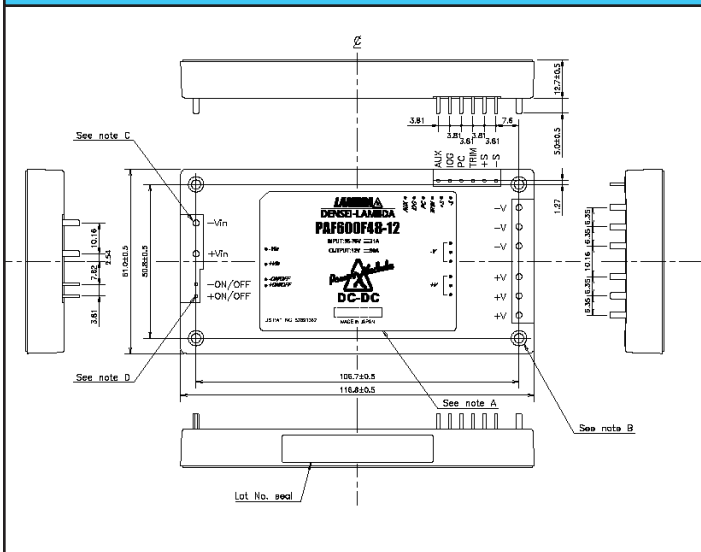
Specifications

MODEL		PAF600F24-12 PAF600F48-12	PAF600F24-28 PAF600F48-28
ITEMS			
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	-	2 years	

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

PAF600F Series

PAF Outline Drawing



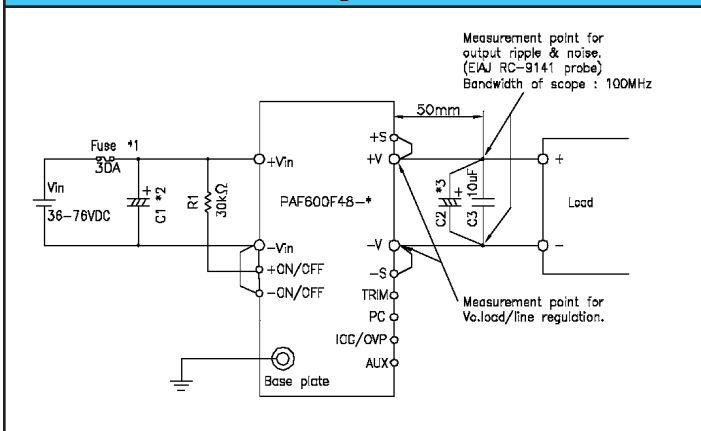
Pinout

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

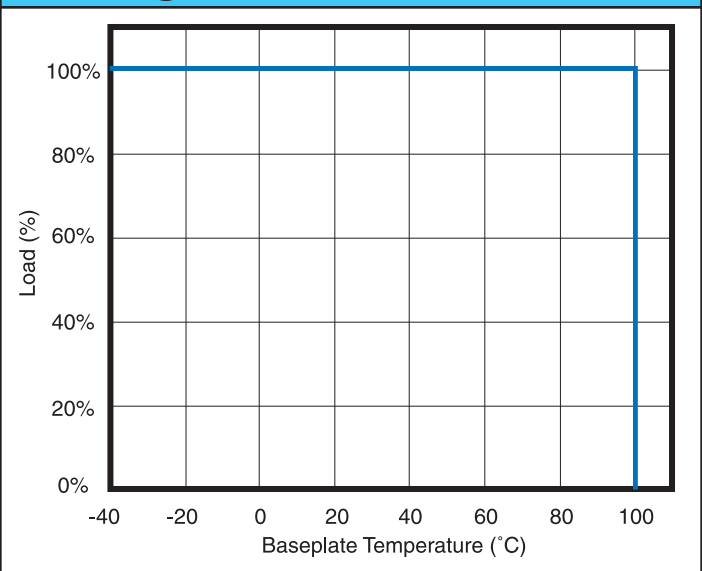
Other DC-DC Products

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.

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

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