

Enclosed or L Bracket
PCB Mount
Non Isolated

DC-DC Selector

Nominal Input Voltage	# of Outputs	Output Power (W)							
		3	10	30	50	100	150	300	600
5V	Single	CC-E							
		iAC, iBA							
12V	Dual	CC-E							
	Single	CC-E							
		iA, iBC							
			PXD,PXE,PXF						
	Dual	CC-E							
			PXD,PXE,PXF						
24V	Triple			PXF					
	Single	CC-E							
			PXD,PXE,PXF						
					PH-F				
					PH-S				
						iQ		PAH300	
								PAF	
	Dual	CC-E							
			PXD,PXE,PXF						
	Triple				PAH75D*				
48V	Single			PXF					
		CC-E							
			PXD,PXE,PXF						
				iSA, PAE*, iE, iP*					
				iQ, PAQ*					
				PH-F					
				PH-S					
					iH, PAH				
	Dual							PAF	
		CC-E							
			PXD,PXE,PXF						
					PAQ*				
					PAH75D*				
	Triple			PXF					
	Multiple							Vega*	
82-185VDC	Single				PH-F				
					PH-S				
200-400VDC	Single				PH-F				
					PH-S				
								PAF	

* See website

200V to 400VDC Input Full brick DC-DC Converters



- ◆ Output Voltages from 7.2V to 57V
- ◆ 450W to 600W Output Power
- ◆ Current Share
- ◆ Operation to 100°C Baseplate
- ◆ Wide Adjustable Output Range

RoHS

Key Market Segments & Applications

Servers & Rail Systems
High End Computers
Custom Power Supplies

PAF Features and Benefits

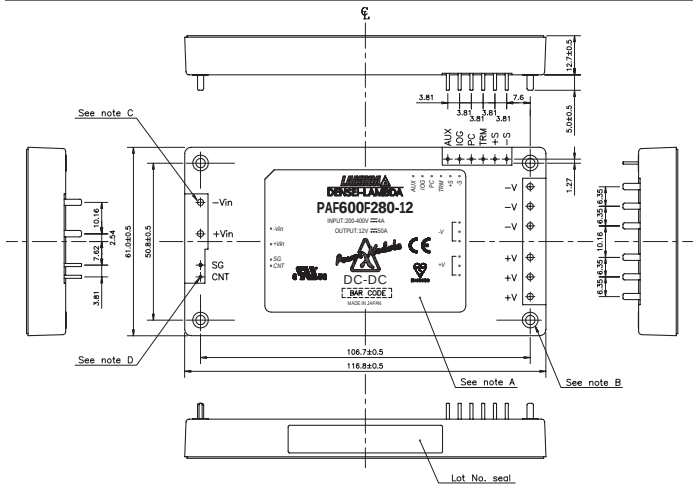
Feature	Benefit
◆ Wide Adjustment Range	◆ Reduces need for custom modules
◆ Parallel Pin	◆ Modules can be connected together for higher current
◆ High Efficiency - up to 91%	◆ Reduced heat losses

Specifications

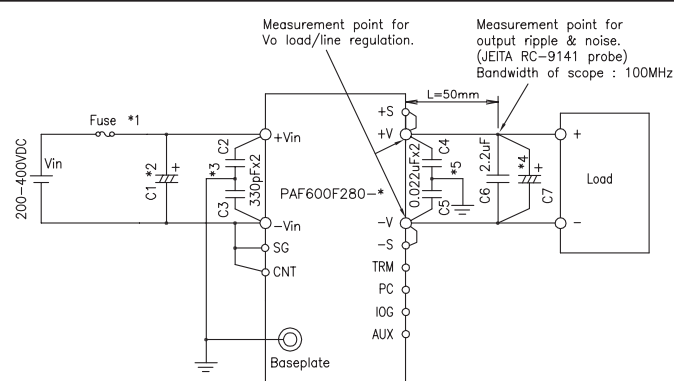
MODEL		PAF450F280-12 PAF600F280-12	PAF450F280-24 PAF600F280-24	PAF450F280-28 PAF600F280-28	PAF450F280-48 PAF600F280-48
ITEMS					
Nominal Output Voltage	VDC	12	24	28	48
Output Current (Max)	450W 600W	38 50	19 25	16.5 21.5	9.5 12.5
Max Output Power	450W 600W	456 600	456 600	462 602	456 600
Efficiency (Typ)	%	89-90	91	91	91
Input Voltage Range	VDC	200-400VDC			
Output Voltage Accuracy	%	±1			
Output Voltage Adjustment	VDC	7.2 - 14.4	14.4 - 28.8	16.8 - 33.6	28.8 - 57.6
Max Ripple & Noise	mV	120	240	280	480
Max Line Regulation	mV	48	56	56	96
Max Load Regulation	mV	48	56	56	96
Temperature Coefficient	°C	0.02%/°C			
Overcurrent Protection	%	105 - 140%			
Overvoltage Protection	%	125 - 145%			
Signals & Control	-	Remote Sense, Remote On/Off, Parallel Pin, Inverter Good, 11-14V Auxiliary voltage			
Baseplate Temperature	-	-40°C to +100°C Baseplate: (See derating chart)			
Humidity (non condensing)	-	5 - 95% RH Operating, 5 - 95% RH Non Operating			
Cooling	-	Conduction (See Installation Manual for heatsink selection)			
Isolation Voltage	-	Input to Baseplate: 2500VAC (20mA); Input to Output 3000VAC for 1 min.; Output to Baseplate: 500VDC 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)	mm	2.4 x 0.5 x 4.6 (61 x 12.7 x 116.8) See outline drawing			
Warranty	yr	2 years			

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

PAF Outline Drawing



Connection Example



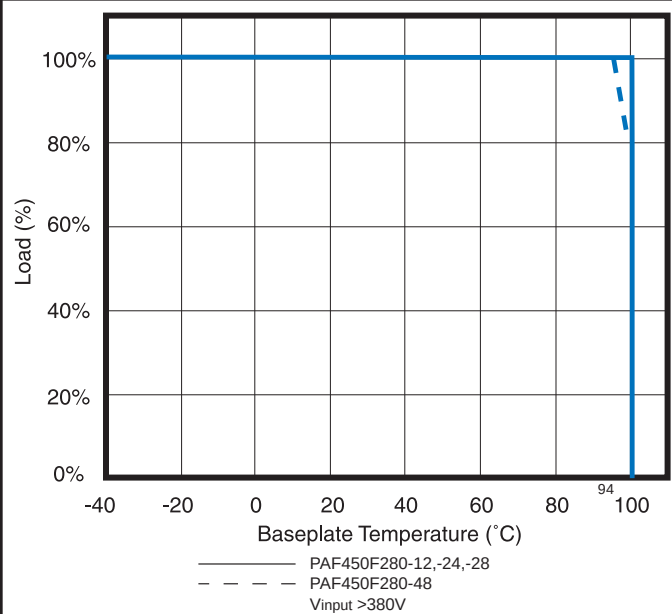
Pinout

Pin Description	Function
-Vin	Negative Input Terminal
+Vin	Positive Input Terminal
CNT	Remote On/Off
+V	Positive Output Terminal
-V	Negative Output Terminal
AUX	11-14V Aux Voltage
PC	Parallel Control Connection
TRIM	Output Adjustment Trim Pin
+S	Positive Remote Sense
-S	Negative Remote Sense
SG	Remote ON/OFF Return

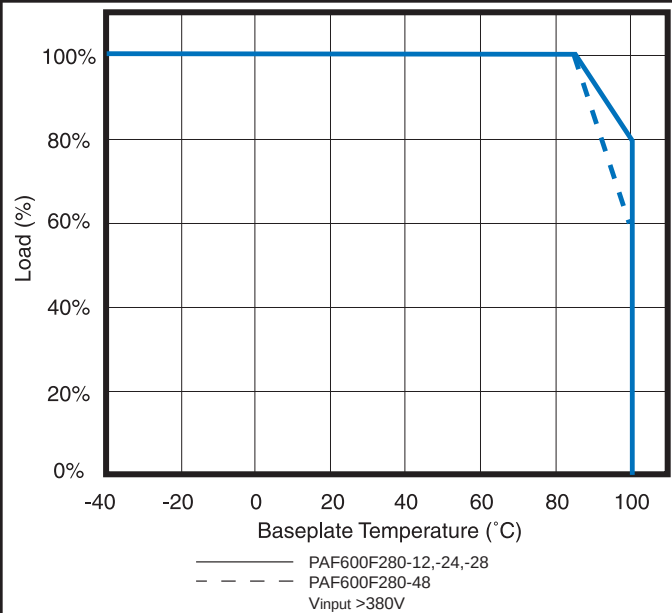
Other Lambda DC-DC Products

PAF	400-700W Full brick DC-DC
PAH300/450	300-450W Half Brick 24 & 48V Input
PH-F	Full function 200-400V Input DC-DC
PH-S	Simple function 200-400V Input DC-DC
PF	Power factor AC - 380VDC Front End
PFE	300-700W, AC-DC Power module

Derating Curve PAF450F280



Derating Curve PAF600F280



Options

Suffix	Description
Blank	M3 tapped mounting 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