

PAF-F280 Series

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

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

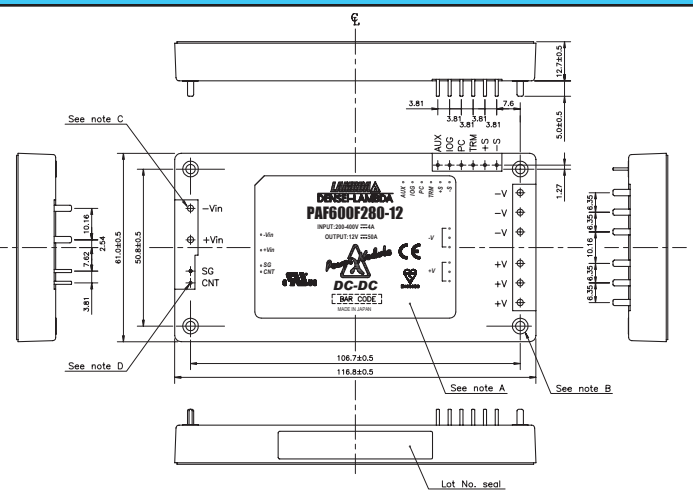
Specifications

MODEL		PAF450F280-12	PAF450F280-24	PAF450F280-28	PAF450F280-48
		PAF600F280-12	PAF600F280-24	PAF600F280-28	PAF600F280-48
ITEMS					
Nominal Output Voltage	VDC	12	24	28	48
Output Current (Max)	450W 600W A	38	19	16.5	9.5
Max Output Power	450W 600W W	50	25	21.5	12.5
Efficiency (Typ)	%	456	456	462	456
Input Voltage Range	VDC	600	600	602	600
Output Voltage Accuracy	%	89-90	91	91	91
Output Voltage Adjustment	VDC	200-400VDC			
Max Ripple & Noise	mV	±1			
Max Line Regulation	mV	7.2 - 14.4	14.4 - 28.8	16.8 - 33.6	28.8 - 57.6
Max Load Regulation	mV	120	240	280	480
Temperature Coefficient	°C	48	56	56	96
Overcurrent Protection	%	48	56	56	96
Overvoltage Protection	%	0.02%/°C			
Signals & Control	-	105 - 140%			
Baseplate Temperature	-	125 - 145%			
Humidity (non condensing)	-	Remote Sense, Remote On/Off, Parallel Pin, Inverter Good, 11-14V Auxiliary voltage			
Cooling	-	-40°C to +100°C Baseplate: (See derating chart)			
Isolation Voltage	-	5 - 95% RH Operating, 5 - 95% RH Non Operating			
Shock	-	Conduction (See Installation Manual for heatsink selection)			
Vibration	-	Input to Baseplate: 2500VAC (20mA); Input to Output 3000VAC for 1 min.; Output to Baseplate: 500VDC for 1 min			
Safety Agency Approvals	-	196.1m/s ²			
Weight (Typ)	g	Non Operating, 10-55Hz (sweep for 1 min.)			
Size (WxHxD)	mm	Amplitude 0.825mm constant (Max 49 m/s ²) X,Y,Z 1 hour each			
Warranty	yr	UL60950-1, CSA60950-1, EN60950-1, CE LVD			
		200			
		2.4 x 0.5 x 4.6 (61 x 12.7 x 116.8) See outline drawing			
		2 years			

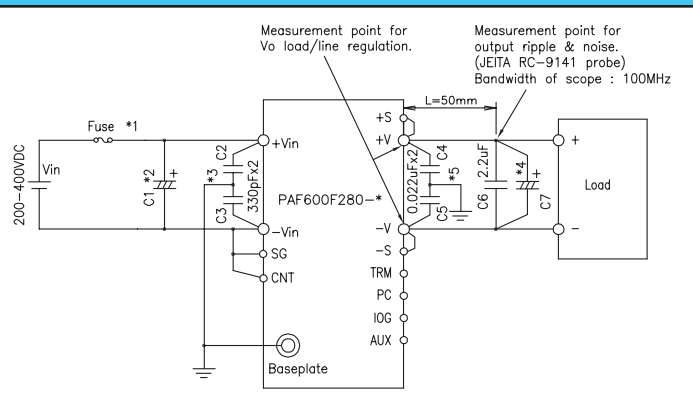
Note: See Installation Manual for full details, test methods of parameters and application notes.

PAF-F280 Series

PAF Outline Drawing



Connection Example



Pinout

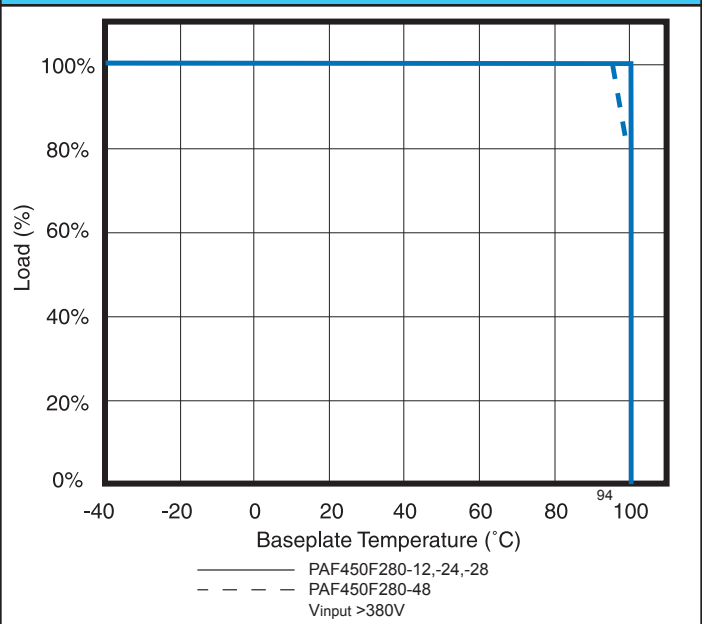
Pin Description	Function
-Vin	Negative Input Terminal
+Vin	Positive Input Terminal
CNT	Remote On/Off
+V	Positive Output Terminal
-V	Negative Output Terminal
AUX	11-14V Aux Voltage
PC	Parallel Control Connection
TRIM	Output Adjustment Trim Pin
+S	Positive Remote Sense
-S	Negative Remote Sense
SG	Remote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

Other DC-DC Products

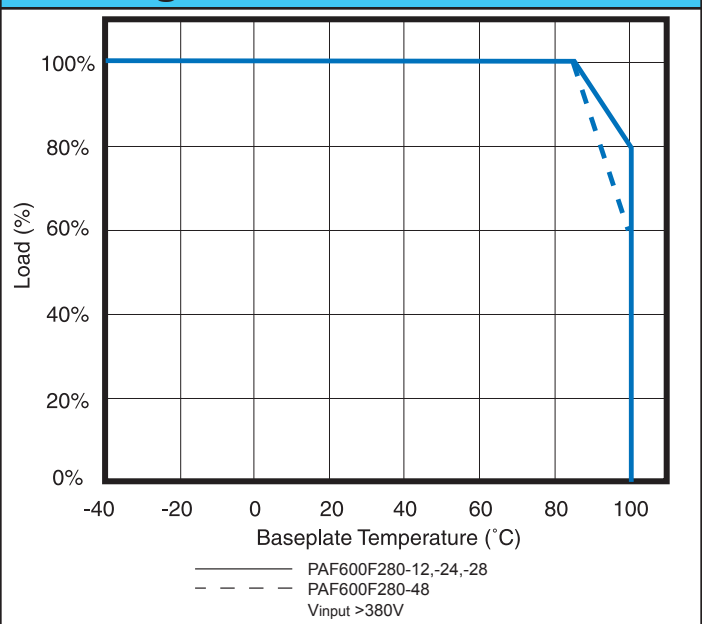
PAF	400-700W Full brick DC-DC
PAH300/450	300-450W Half Brick 24 & 48V Input
PH-F	Full function 200-400V Input DC-DC
PH-S	Simple function 200-400V Input DC-DC
PF	Power factor AC - 380VDC Front End
PFE	300-1000W, AC-DC Power module

For Additional Information, please visit us.tdk-lambda.com/lp/products/paf400-series.htm

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