TDK·Lambda PAF-F280 Series

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

Features

- Output Voltages from 7.2V to 57V
- 450W to 600W Output Power
- Current Share
- Operation to 100°C Baseplate
- Wide Adjustable Output Range
- Parallel Pin
- High Efficiency - up to 91%



Key Market Segments & Applications

Industrial COTS Test COMM

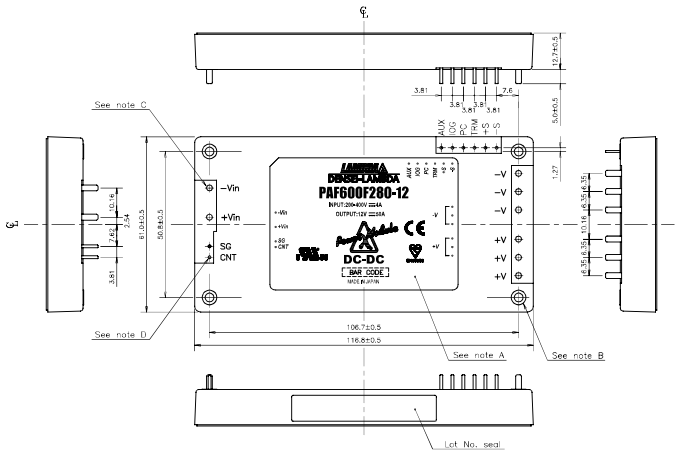
RoHS

Specifications

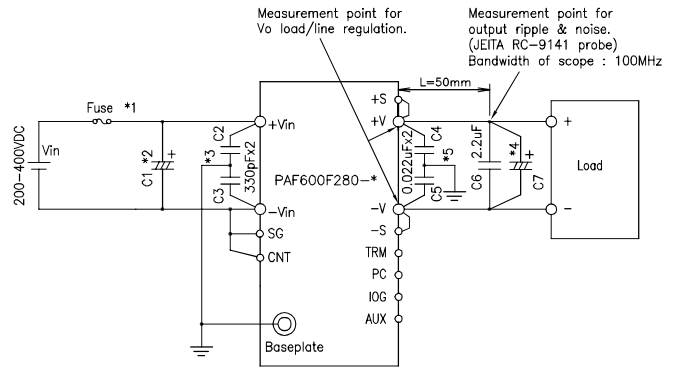
Model			PAF450F280-12 PAF600F280-12	PAF450F280-24 PAF600F280-24	PAF450F280-28 PAF600F280-28	PAF450F280-48 PAF600F280-48
Nominal Output Voltage		VDC	12	24	28	48
Output Current (Max)	450W	A	38	19	16.5	9.5
	600W		50	25	21.5	12.5
Max Output Power	450W	W	456	456	462	456
	600W		600	600	602	600
Efficiency (Typ)		%	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		yrs	2 years			

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

PAF Outline Drawing



Connection Example



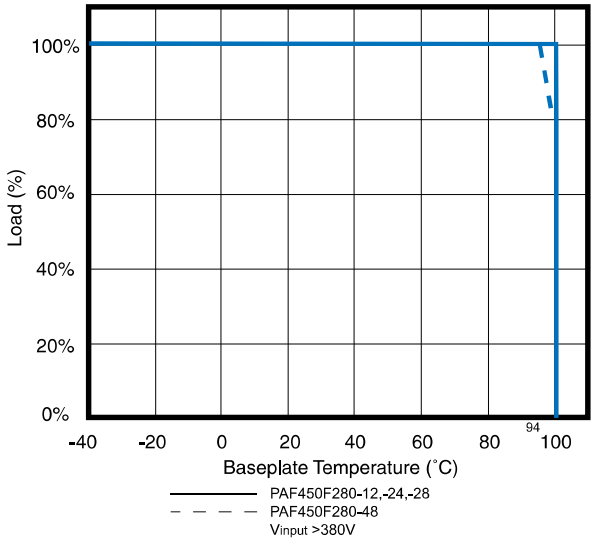
Pinout

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

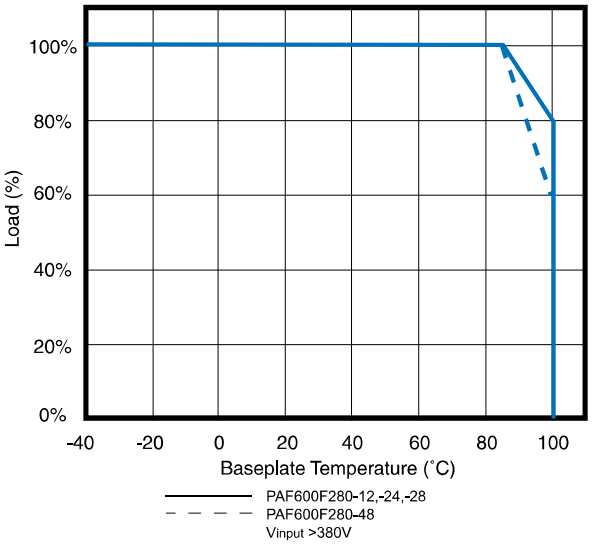
Other DC-DC Products

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

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

For Additional Information, please visit
https://product.tdk.com/info/en/products/power/index.html