

PFE300SA-1000FA Series





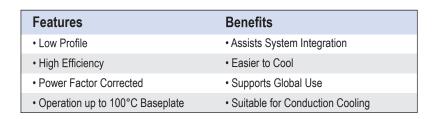








300 to 1008W AC-DC Power Module





Specification						
Model		PFE300SA PFE500SA	PFE700SA (semi-regulated)	PFE500F	PFE1000FA	
AC Input	VAC	85 to 265VAC, 47-63Hz (up to 440Hz) (4)				
Input Current (100-200VAC) Model dependant	A	3.8 / 1.8 6.0 / 2.9	8.0 / 4.0	6.8 / 3.4	12.4 / 6.0	
Inrush Current (100-200VAC) (1)	А	20 / 40 peak				
Power Factor	-		0.95 minimum, me	eets EN61000-3-2		
Output Voltage Setpoint Accuracy	-	±2%	±1V	±2%	±2%	
Ripple and Noise (1)	-	1%	4V	1%	1%	
Over Current Protection	%	105 - 140% (Automatic Recovery)			105 - 140% Manual reset	
Over Voltage Protection	-	125 - 145%	60 - 69.6V	125 - 145%	125 - 145%	
Series Operation	-	Yes				
Parallel Operation	-	No	Yes (Droop mode)	Yes (Single wire)	Yes (Single wire)	
Power On Signal (ENA)	-	Open collector (10mA sink current). Low (on) when output is present			t is present	
Auxiliary Supply	-	None	None	10 - 14V, 20mA	10 - 14V, 20mA	
Remote On/Off (Opto isolated)	-	None	None	High = On	High = On	
Overtemperature Protection	-	Yes				
Operating Baseplate Temp.	°C	-40°C to +100°C (2)				
Storage Temperature	°C	-40°C to +100°C				
Humidity (non condensing)	-	Operating: 20 - 95%RH, Non Operating: 10 - 95%RH				
Cooling	-	Conduction				
Withstand Voltage (1 min) (3)	-	Input to Output 3kVAC, Input to Baseplate 2.5kVAC, Output to Baseplate 1.5kVDC				
Isolation Resistance	-	Output to baseplate: 100M Ohm at 500VDC, 25°C ambient, 70%RH				
Vibration (non operating)	-	10-55Hz (1 min sweep), constant amplitude 0.825mm (max 49m/s²), X, Y, Z 1 hour each				
Shock	-	196.1m/s ²				
Safety Certifications	-	UL60950-1, CSA60950-1 (cUL), EN60950-1, CE mark (LVD)				
Weight	g	200	200	300	420	
Size (WxHxL)	mm	61 x 12.7 x 116.8 70 x 12.7 x 122		100 x 13.4 x 160		
Warranty	yrs	5				

Notes: (Consult Installation Manual for detailed specifications, test methods and application notes)

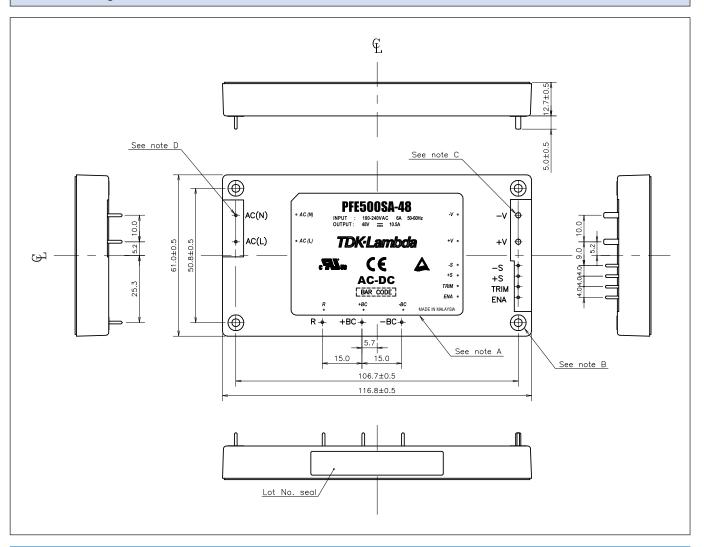
- 1) External components are required, consult Application Notes
- 2) PFE500SA-12, PFE500F-12: -40 to 85°C. See instruction manuals for derating curves PFE1000FA28 & PFE1000FA48: -40 to 85°C below 170VAC input voltage. See instruction manuals for derating curves
- 3) PFE500F, PFE1000FA: 500VDC Output to baseplate
- 4) Reduced PFC above 63Hz. Contact technical support for 440Hz operation.



Model Selector							
Model	Output A Voltage (V)	djust. Maximum Range (V)	Maximum Load Current (A)	Wattage(W)	Reg(mV)	Line Reg. (mV)	Efficiency typ ⁽⁴⁾
PFE300SA-12	12	9.6 - 14.4	25	300	48	48	84 / 85
PFE500SA-12	12	9.6 - 14.4	33	396	48	48	84 / 86
PFE500F-12	12	9.6 - 14.4	42	504	48	48	81 / 83
PFE1000FA-12	12	9.6 - 14.4	60	720	48	48	84 / 86
PFE300SA-28	28	22.4 - 33.6	10.8	302	56	56	87 / 89
PFE500SA-28	28	22.4 - 33.6	18	504	56	56	87 / 89
PFE500F-28	28	22.4 - 33.6	18	504	56	56	84 / 86
PFE1000FA-28	28	22.4 - 33.6	36	1008	56	56	86 / 89
PFE300SA-48	48	38.4 - 57.6	6.3	302	96	96	88 / 90
PFE500SA-48	48	38.4 - 57.6	10.5	504	96	96	89 / 91
PFE500F-48	48	38.4 - 57.6	10.5	504	96	96	84 / 86
PFE1000FA-48	48	38.4 - 57.6	21	1008	96	96	87 / 90
PFE700SA-48	51	None	14	714	50 - 57V ⁽⁵⁾		89 / 91

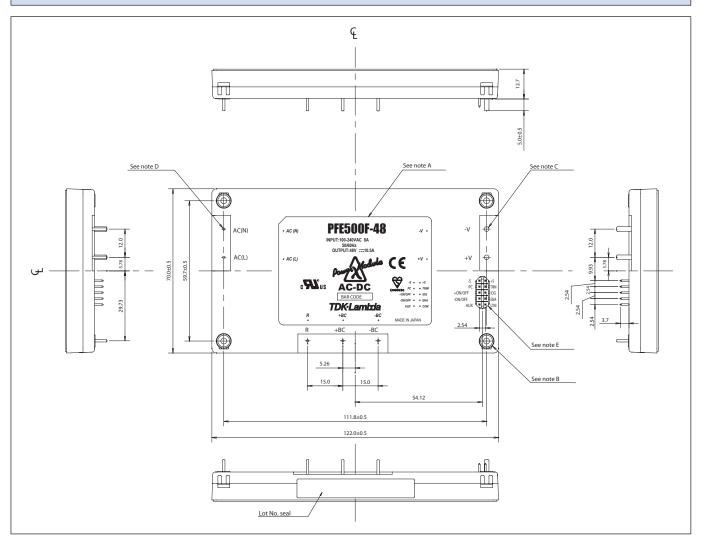
Notes: (4) 100 / 200VAC. (5) Total regulation range

Outline Drawing PFE300SA & PFE500SA

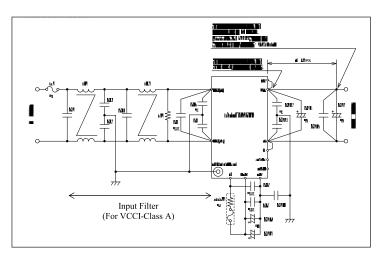




Outline Drawing PFE500F



Basic Connection PFE500SA

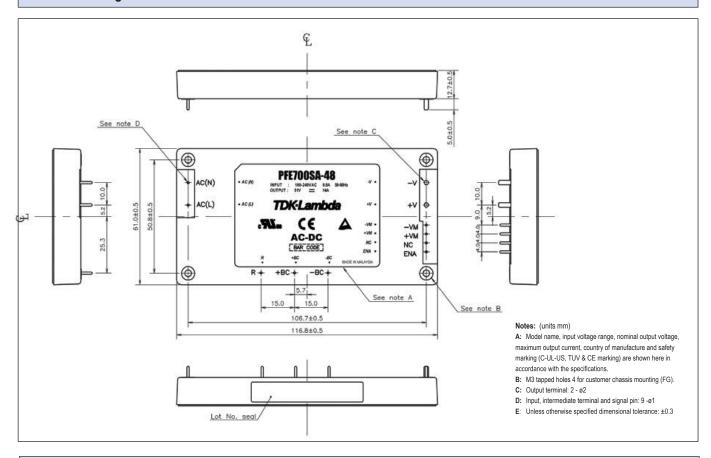


Heatsink Table				
Heatsink	Size (mm)	PFE	Module	
HAF-10L	116.8 x 25.4 x	c 61	PFE300/500/700SA	
HAF-15L	116.8 x 38.1 x	c 61	PFE300/500/700SA	
HAF-15T	116.8 x 38.1 x	c 61	PFE300/500/700SA	
HAL-F12T	122 x 35 x 69	.9	PFE500F	
HAM-F10T	160 x 33.4 x 1	100	PFE1000FA	

Options		
Suffix	Description	
Blank	M3 tapped mounting inserts (4)	
/T	3.3mm non-threaded inserts (4)	



Outline Drawing PFE700SA



Outline Drawing PFE1000FA

