

300 to 1008W AC-DC Power Module



Features	Benefits
• Low Profile	• Assists System Integration
• High Efficiency	• Easier to Cool
• Power Factor Corrected	• Supports Global Use
• Operation up to 100°C Baseplate	• Suitable for Conduction Cooling

Specification		PFE300SA PFE500SA	PFE700SA (semi-regulated)	PFE500F	PFE1000FA
AC Input	VAC	85 to 265VAC, 47-63Hz (up to 440Hz) (4)			
Input Current (100-200VAC)	A	3.8 / 1.8	8.0 / 4.0	6.8 / 3.4	12.4 / 6.0
Model dependant		6.0 / 2.9			
Inrush Current (100-200VAC) (1)	A	20 / 40 peak			
Power Factor	-	0.95 minimum, meets 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			
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/s ²), 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)

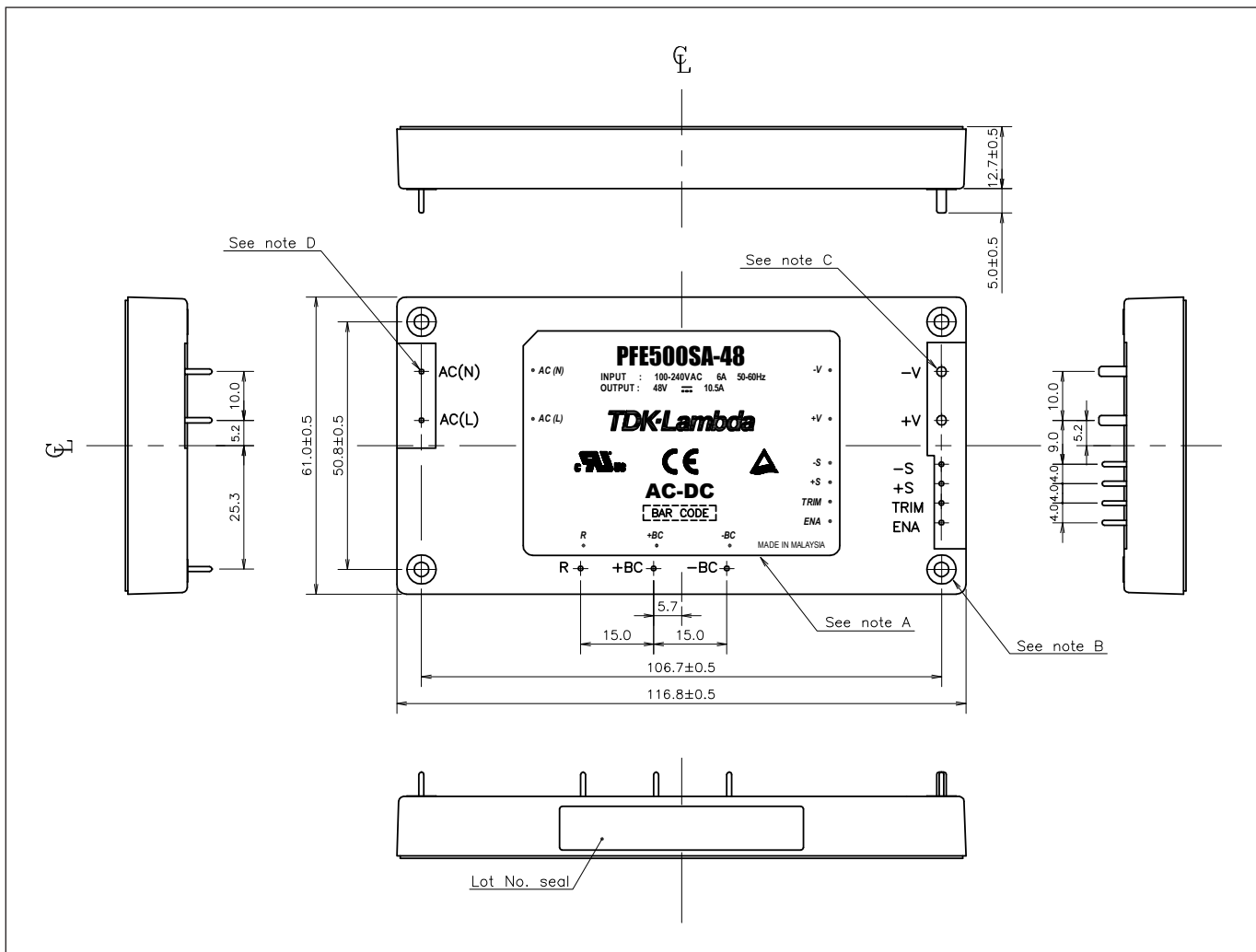
- External components are required, consult Application Notes
- PFE500SA-12, PFE500F-12: -40 to 85°C. See instruction manuals for derating curves
PFE1000FA28 & PFE1000FA48: -40 to 85°C below 170VAC input voltage. See instruction manuals for derating curves
- PFE500F, PFE1000FA: 500VDC Output to baseplate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

Model Selector

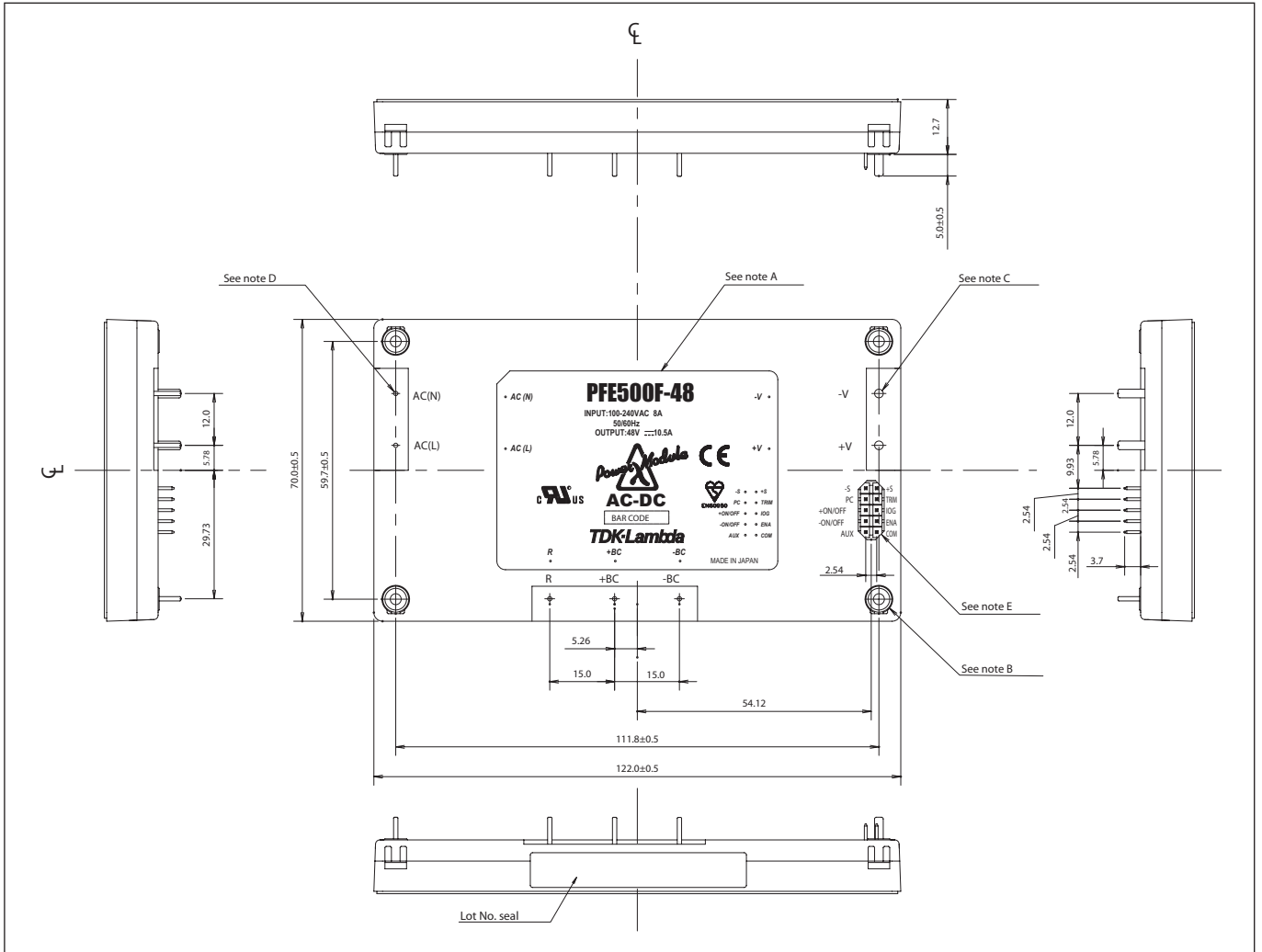
Model	Output Voltage (V)	Adjust. Range (V)	Maximum Current (A)	Maximum Wattage (W)	Load Reg. (mV)	Line Reg. (mV)	Efficiency typ (4)
PFE300SA-12	12	9.6 - 14.4	25	300	48	48	84 / 85
PFE500SA-12	12	9.6 - 14.4	33	396	48	48	84 / 86
PFE500F-12	12	9.6 - 14.4	42	504	48	48	81 / 83
PFE1000FA-12	12	9.6 - 14.4	60	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

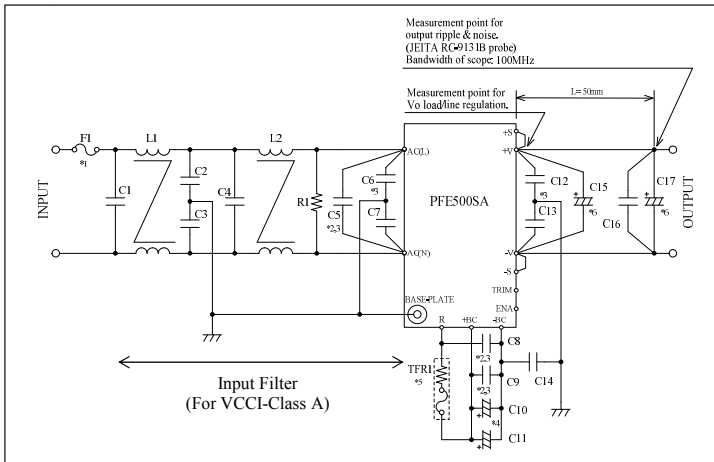
Outline Drawing PFE300SA & PFE500SA



Outline Drawing PFE500F



Basic Connection PFE500SA



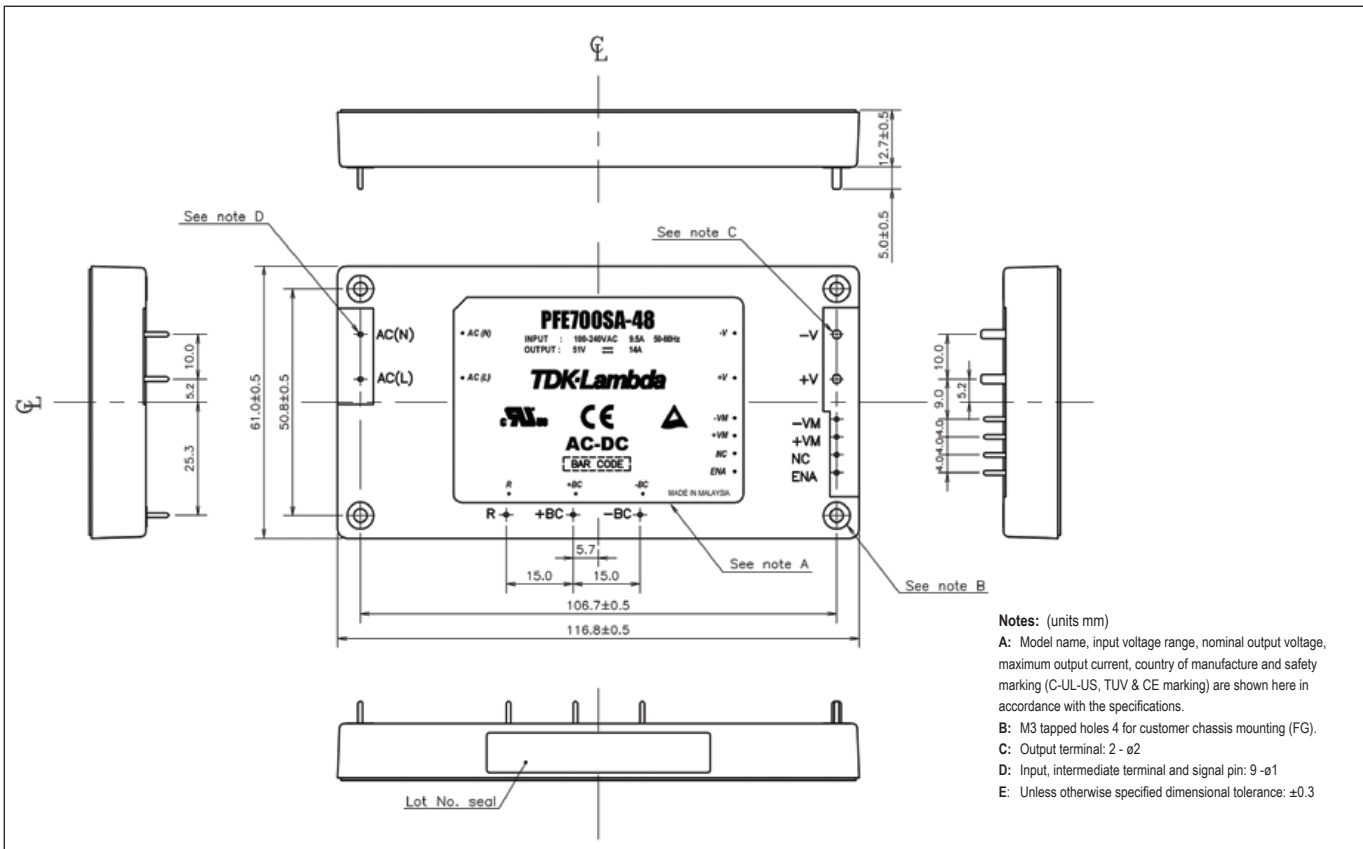
Heatsink Table

Heatsink	Size (mm)	PFE Module
HAF-10L	116.8 x 25.4 x 61	PFE300/500/700SA
HAF-15L	116.8 x 38.1 x 61	PFE300/500/700SA
HAF-15T	116.8 x 38.1 x 61	PFE300/500/700SA
HAL-F12T	122 x 35 x 69.9	PFE500F
HAM-F10T	160 x 33.4 x 100	PFE1000FA

Options

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

Outline Drawing PFE700SA



Outline Drawing PFE1000FA

