



- Low Profile, Small Size
- 100°C Baseplate Temperature
- High Power Density
- High Efficiency

### Key Market Segments & Applications

Custom Fanless Power Supplies

LED Signs      Traffic Signalling      Toll Equipment

Bulk DC Power for DC-DC Converters & POL Converters

## PFE300-700 Series

### 300 to 714W Full Brick AC-DC Power Supply

#### PFE300-700 Features and Benefits

##### Features

- Low Profile
- High Efficiency
- Power Factor Corrected (PFC)
- Operation up to 100°C Baseplate

##### Benefits

- Assists System integration
- Easier to Cool
- Supports Global Use
- Operates in Harsh Environments

#### Specifications

MODEL		PFE300-12 PFE500-12	PFE300-28 PFE500-28	PFE300-48 PFE500-48	PFE700-48
AC Input	VAC	85 to 265VAC, 47-63Hz			
Input Current (100/220VAC)	A	4.0 / 2.0 5.0 / 3.0	4.0 / 2.0 6.2 / 3.2	4.0 / 2.0 6.2 / 3.2	8.8 / 4.4
Inrush Current (100/200VAC)(1)	A	20 / 40 peak			
Power Factor		0.95 minimum			
Output Voltage (Nominal)	VDC	12V	28V	48V	51V
Output Voltage Setpoint Accuracy	-	±2%			±1V
Output Current	A	25 33	10.8 18	6.3 10.5	14
Output Power	W	396	504	504	714
Output Voltage adjustment	VDC	9.6 - 14.4V	22.4 - 33.6V	38.4 - 57.6V	Fixed
Ripple and Noise (1)	mV	120	280	480	4000
Line regulation	mV	48	56	96	-
Load regulation	mV	48	56	96	-
Total Regulation	V	-	-	-	50 - 57
Over Current Protection	%	105 - 140% (Automatic Recovery)			
Over Voltage Protection	-	125 - 145%			60 - 69.6V
Parallel Operation	-	No			Yes
Power On Signal (ENA)	-	Open collector (10mA sink current). Low (on) when output is present			
Efficiency (200VAC typ)	%	83	86	86	89
Operating Baseplate Temperature	°C	-40 to +100°C (2) -40 to +85°C (2)	-40 to +100°C (2)		See derating curves
Storage Temperature	°C	-40 to +100°C			
Humidity (non condensing)	-	Operating: 20 - 95%RH, Non Operating: 10 - 95%RH			
Cooling	-	Conduction			
Withstand Voltage	-	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 <sup>2</sup> ), X, Y, Z 1 hour each			
Shock	-	196.1m/s <sup>2</sup>			
Safety Agency Approvals		UL60950-1, CSA60950-1 (cUL), EN60950-1, CE mark (LVD)			
Weight	g	250			
Size (WxHxD)	mm(in)	61 x 12.7 x 116.8mm (2.4 x 0.5 x 4.6)			
Warranty	yrs	2 years			

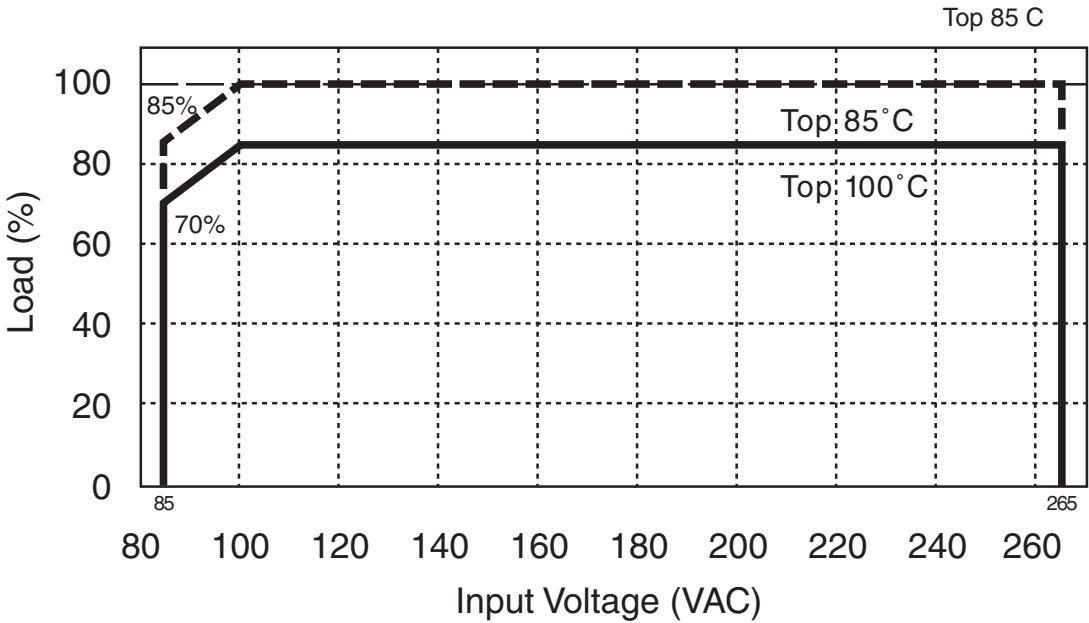
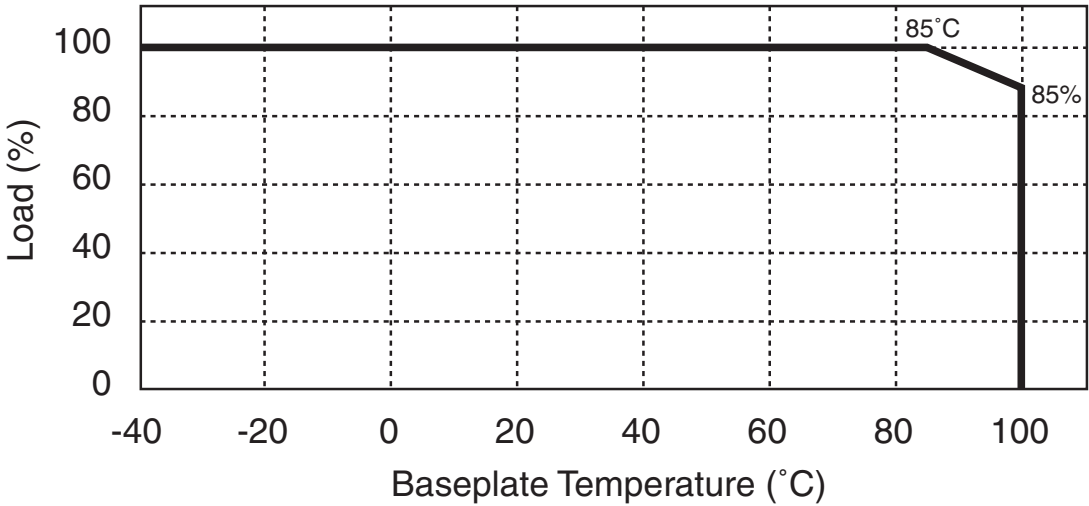
Notes: (Consult Installation Manual for detailed specifications, test methods and application notes)

1) External components are required, consult Application Notes

2) Full load, no derating required

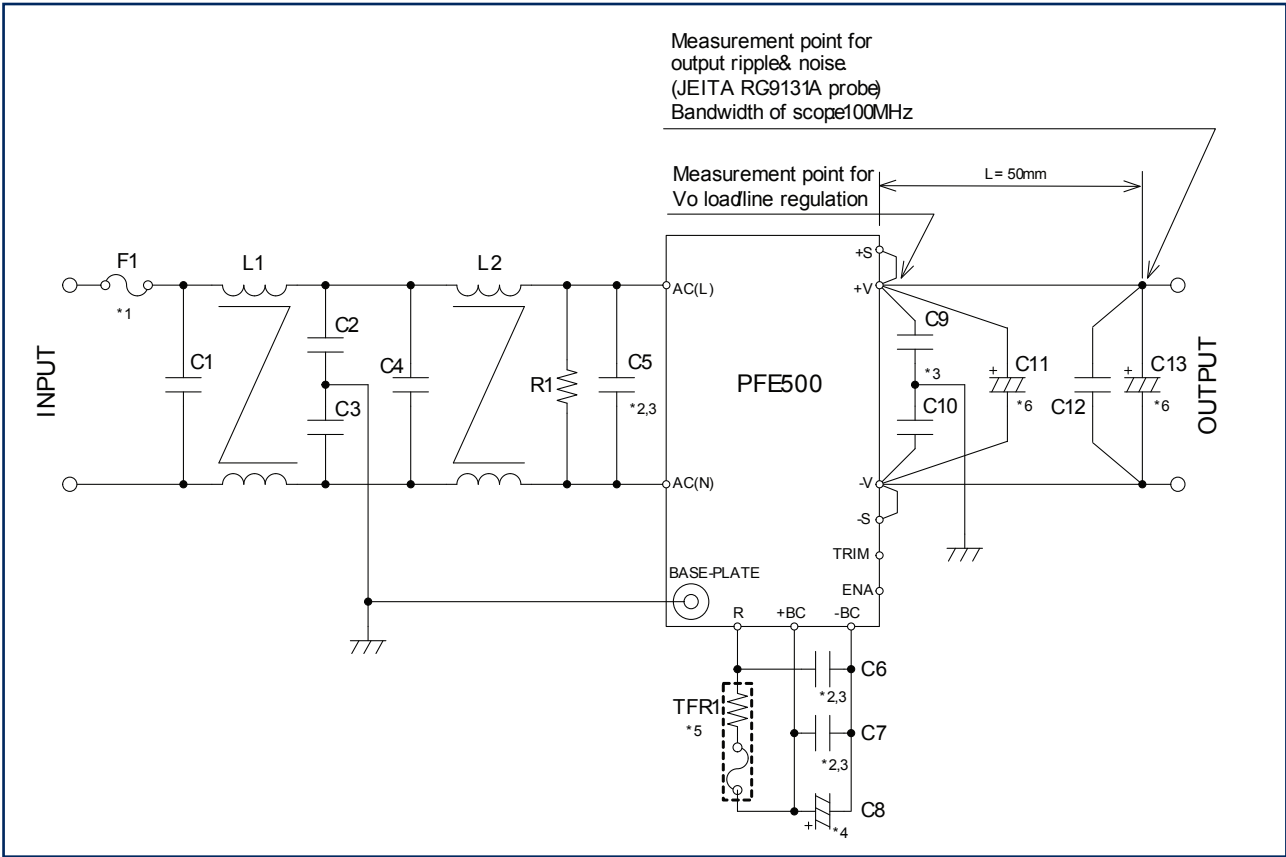
**PFE700-48 Derating Curve**

**Derating Curve**

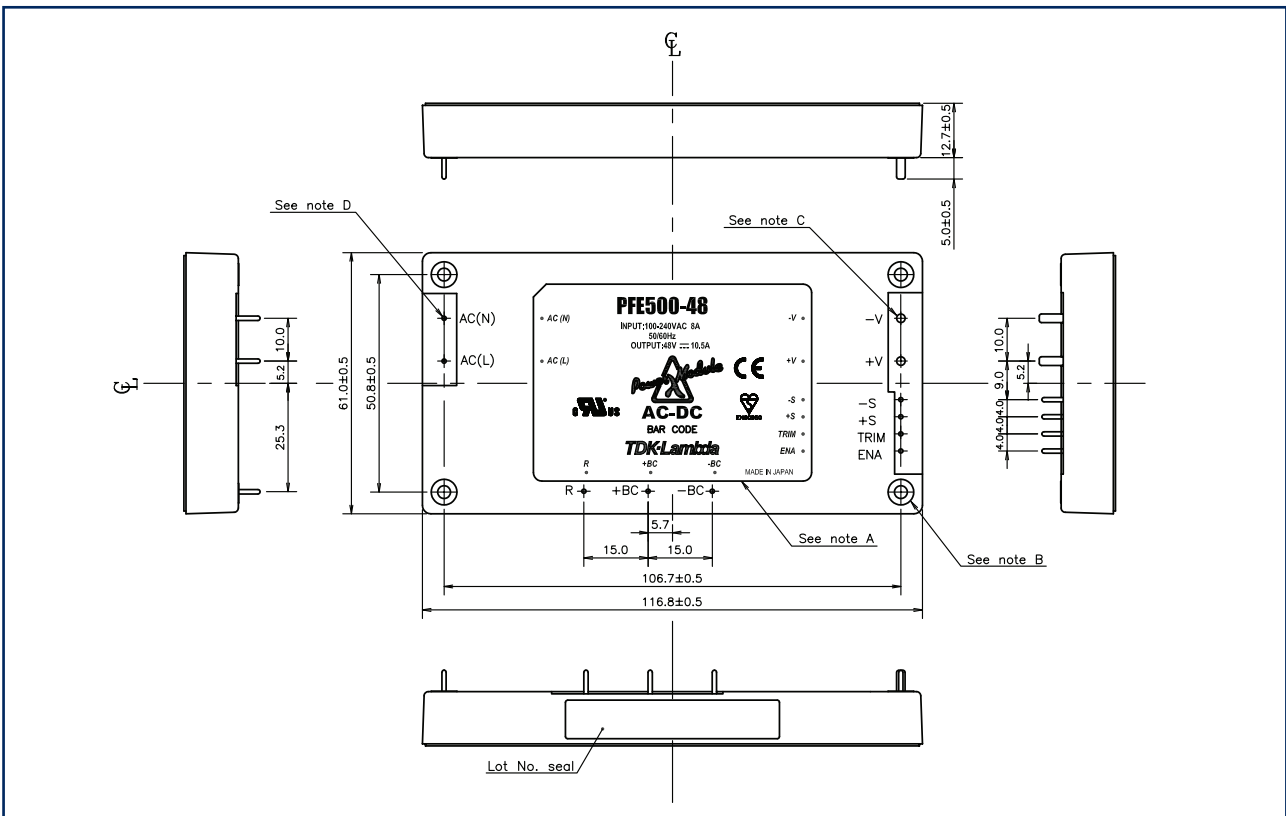


<b>Options</b>	
Suffix	Description
Blank	M3 tapped mounting inserts (4)
/T	3.3mm non-threaded inserts (4)

**PFE500 Basic connection**



**Outline Drawing**



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