

PFE300-700 SERIES

AC / DC Single Output: 300~700 Watts



Features

- Full brick AC/DC Power Module in one package
- Harmonic input correction: EN61000-3-2
- Universal input 85~264vac with PFC
- Fully regulated outputs:– PFE300S, PFE500S / F
- Unregulated 50-57vdc output: PFE700
- Single wire power share / parallel capability-PFE500F
- Wide baseplate temperature -40°C to +100°C
- OVP, OCP and Over temperature protection
- Safety UL1950, EN60950
- Fully isolated input-output
- External components required for operation, refer to instruction manual.
- PCB mounting
- Suitable for battery charging applications.

General Specifications

Input Voltage	85 ~ 264 VAC, 47 ~ 63Hz
Power Factor	Typically 0.95
Output Voltage	12V, 28V, 48V
Output Voltage Range	See table PFE700: Unregulated (50-57)
Output Power	300 ~ 700 watts
Efficiency	Model dependant 82~88%
Load Regulation (PFE300-500)	12v: 48mV 28v: 56mV 48v: 96mV
Load Regulation (PFE700)	50 ~57V
Ripple & Noise	12V: 120mV, 28V: 280mV, 48V: 480mV
Protection	Overload Constant current, with auto recovery Over voltage protection. Over temperature.
Isolation Voltage	Input-Output: 3000VAC
Safety	UL60950-1, EN60950-1, CSA60950-1
EMC	N / A
Parallel Operation	PFE700S: Droop Mode) PFE500F: Single wire power share) PFE300S / PFE500S: N/A
Remote Sense	Yes
Operating Temp.	12V: -40°C to +85°C Baseplate temperature 24 / 48V: -40°C to +100°C Baseplate temperature
Operating Humidity	20-95% RH (No Dewdrop)
Cooling	Conduction cooled
Isolation Voltage	Input-Output/ Baseplate: 3000VAC / 2500VAC Output-Baseplate: 500Vdc
Size & Weight	PFE300S / 500S: 117 x 61 x 12.7mm 250g PFE700S: 117 x 61 x 12.7mm 250g PFE500F: 122 x 70 x 12.7mm 300g

Description

The innovative **PFE** series is a “Full Brick” AC input power supply module , capable of operating up to +100°C base plate temperature.

It offers a **single device** containing power factor correction, regulation and primary secondary isolation, offering up to 50% space savings over previous power module solutions. These power modules meet the needs of many industrial, datacom and telecom applications particularly where high operating temperatures are required and space is at a premium.

The fully regulated PFE300 & PFE500-watt models are available in 12, 28 and 48 volt nominal outputs and can be adjusted over a ±20% range.

A semi-regulated **PFE700-48** is also available, delivering 714 watts with a nominal output of 51volts and can be operated as an intermediate bus converter powering regulated DC-DC converters for multiple output applications.

The PFE series modules, allows design engineers to design and manufacture their end product, containing a PFE power module, as an integral part of the product.especially for applications requiring a sealed assembly.

- **Manual & Full Application notes on PFE series, visit our website**

Options

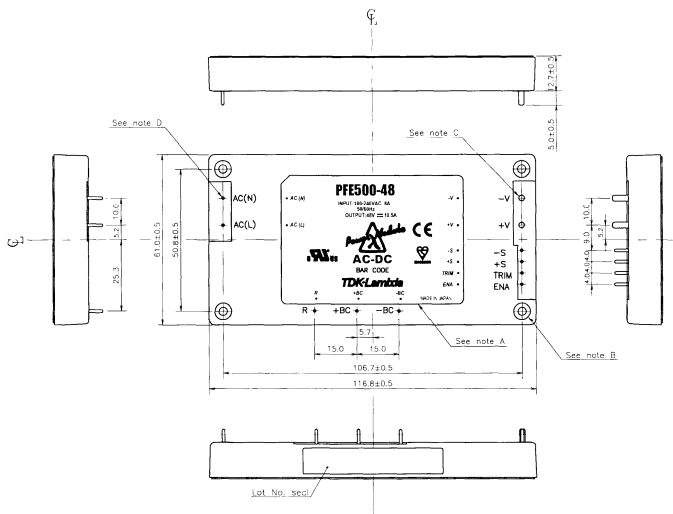
PFE1000F	1000W unit under development
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Model	Output		Voltage Range	Power W
	V	A		
PFE300S-12	12V	25.0A	9.6 ~ 14.4V	300W
PFE500S-12	12V	33.0A	9.6 ~ 14.4V	396W
PFE500F-12	12V	42A	9.6 ~ 14.4V	504W
PFE300S-28	28V	10.8A	22.4 ~ 33.6V	302W
PFE500S-28	28V	18.0A	22.4 ~ 33.6V	504W
PFE500F-28	28V	18.0A	22.4 ~ 33.6V	504W
PFE300S-48	48V	6.3A	38.4 ~ 57.6V	302W
PFE500S-48	48V	10.5A	38.4 ~ 57.6V	504W
PFE500F-48	48V	10.5A	38.4 ~ 57.6V	504W
PFE700S-48	51V	14.0A	N/A	714W

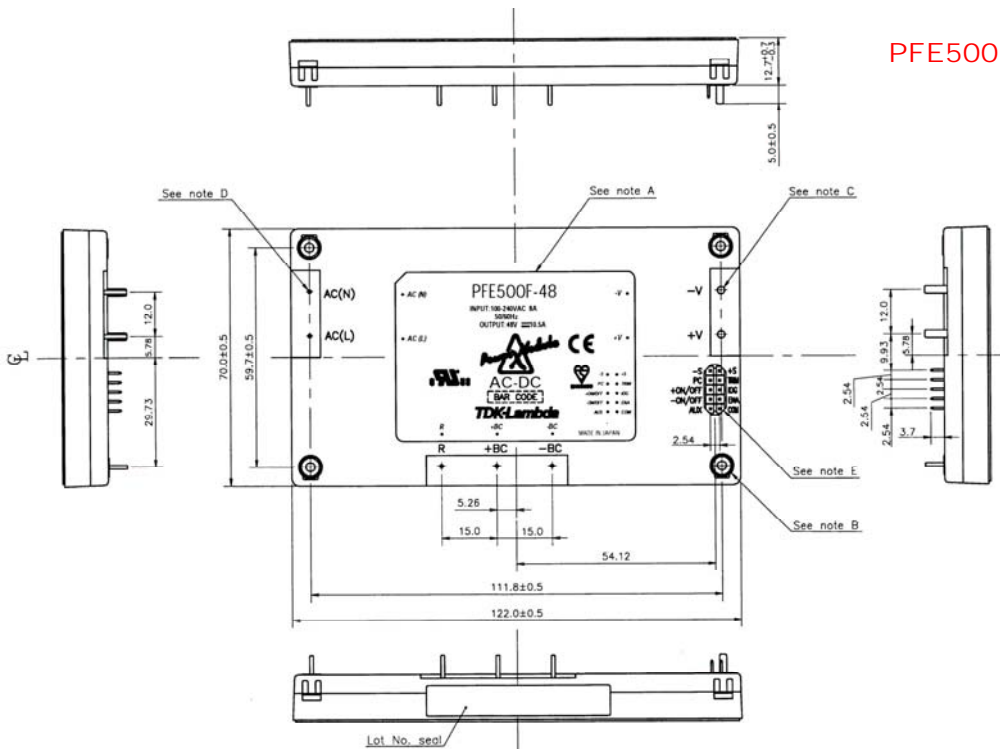
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PFE300S / 500S / PFE700S



PFE500F



● Basic Connection

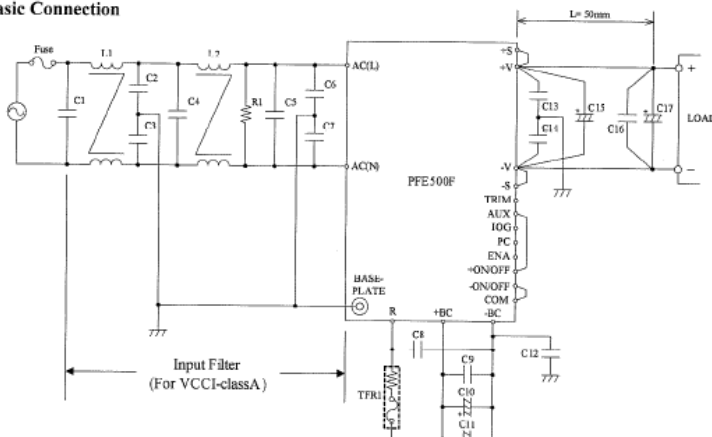


Fig. 1-1 Basic Connection