

PFE500F

SPECIFICATIONS

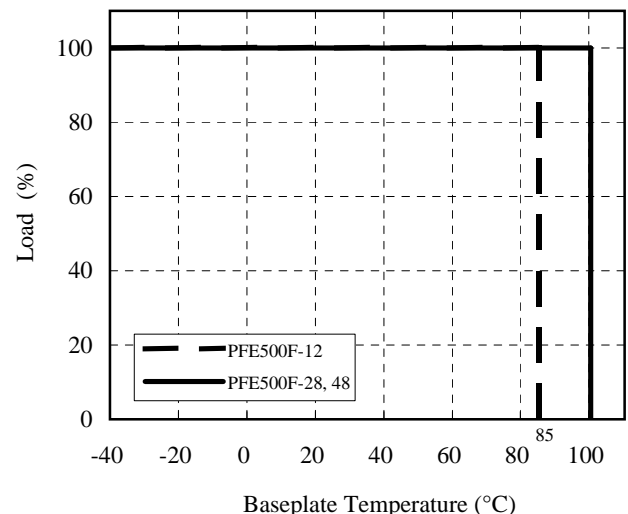
C250-01-01

ITEMS		MODEL	PFE500F-12	PFE500F-28	PFE500F-48
1	Nominal Output Voltage (*1)	V	12	28	48
2	Maximum Output Current	A	42	18	10.5
3	Nominal Output Power	W	504	504	504
4	Efficiency (Typ.) (*1)	%	81 / 83	84 / 86	84 / 86
5	Input Voltage Range (*2) (*5)	-	85 - 265 VAC		
6	Input Frequency (*2)	Hz	47 - 63		
7	Input Current (*1)	A	6.8 / 3.4	6.4 / 3.2	6.4 / 3.2
8	Power Factor (*1)(*5)	-	0.95 min		
9	Output Voltage Accuracy	%	+/-2		
10	Output Voltage Range	%	-20 / +20		
11	Maximum Ripple & Noise (*5)	mV	120	280	480
12	Maximum Line Regulation	mV	48	56	96
13	Maximum Load Regulation	mV	48	56	96
14	Over Current Protection	-	105% - 140% (Automatic recovery method)		
15	Over Voltage Protection (*8)	-	125% - 145% (Inverter shutdown method)		
16	In-rush Current (Typ.) (*1)(*5)	A	20A / 40A peak		
17	Remote Sensing (*6)	-	Possible		
18	Remote ON/OFF Control (*6)	-	Possible		
19	Parallel Operation (*6)	-	Possible		
20	Series Operation (*6)	-	Possible		
21	Operating Temperature (*3)(*7)	-	-40°C - +85°C(Baseplate)	-40°C - +100°C(Baseplate)	
22	Operating Humidity	-	20 - 95%RH (No Dewdrop)		
23	Storage Temperature	-	-40°C - +100°C		
24	Storage Humidity	-	10 - 95%RH (No Dewdrop)		
25	Cooling (*4)	-	Conduction Cooled		
26	Withstand Voltage	-	Input-Baseplate : 2.5kVAC, Input-Output : 3.0kVAC for 1min. Output-Baseplate : 500VDC for 1min.		
27	Isolation Resistance	-	Output-Baseplate 500VDC more than 100MΩ (25°C,70%RH)		
28	Vibration	-	At no operating, 10-55Hz (Sweep for 1min.) Amplitude 0.825mm constant (Maximum 49.0m/s ²) X,Y,Z 1 hour each		
29	Shock	-	196.1m/s ²		
30	Weight (Typ.)	g	300		
31	Size (W x H x D)	mm	70 x 12.7 x 122 (Refer to Outline Drawing)		

Derating Curve

=NOTES=

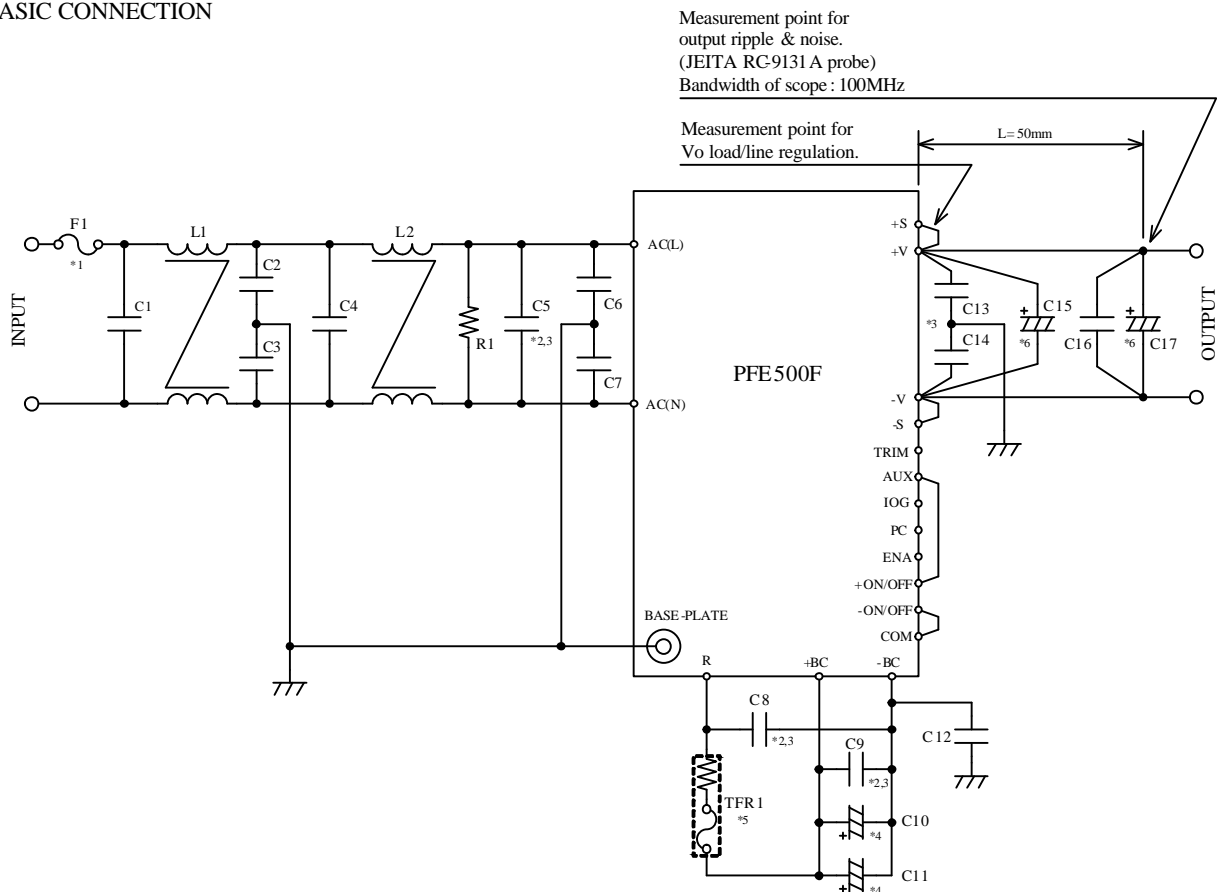
- *1. At 100VAC/200VAC and maximum output power.
(Baseplate Temperature = +25°C.)
- *2. For cases where conformance to various safety specs (UL, CSA, EN) are required, input voltage range will be 100 - 240VAC(50/60Hz).
- *3. Ratings - refer to Derating Curve on the right.
- *4. Heatsink has to be chosen according to Instruction manual.
- *5. External components are needed for operation.
(Refer to basic connection and instruction manual.)
- *6. Refer to Instruction manual.
- *7. Ambient Temperature min=-40°C
- *8. OVP reset : Line off or Control off.
(Refer to instruction manual.)



PFE500F

C250-01-02

BASIC CONNECTION



F1	AC250V 15A	C12	2200pF
R1	0.5W 470kΩ	C13	0.033uF
C1	AC250V 1uF (Film)	C14	0.033uF
C2	2200pF	C15	12V: 25V 1000uF (Elec.)
C3	2200pF		28V: 50V 470uF (Elec.)
C4	AC250V 1uF (Film)		48V: 100V 220uF (Elec.)
C5	AC250V 1uF (Film)	C16	100V 2.2uF (Ceramic)
C6	2200pF	C17	12V: 25V 1000uF (Elec.)
C7	2200pF		28V: 50V 470uF (Elec.)
C8	450V 1uF (Film)		48V: 100V 220uF (Elec.)
C9	450V 1uF (Film)	TFR1	10Ω 139°C (Res., Thermal fuse)
C10	450V 390uF (Elec.)	L1	6mH
C11	450V 390uF (Elec.)	L2	6mH

==NOTES==

- *1. Use an external fuse of fast blow type for each unit.
- *2. The allowable ripple current of capacitor must be more than 3A(rms).
- *3. Put this capacitor near the terminal as close as possible.
- *4. The maximum capacitance that can be used is less than 1200uF(Rated capacitance).
Avoid the connection of capacitance which is more than above, else it will lead to module to damage.
- *5. The inrush current at AC throw in can be suppressed by the external Resistor (Built-in thermal fuse) connected between the R and +BC terminals.
- *6. If the ambient temperature is less than -20°C, use twice the recommended capacitor above.
- *7. Refer to instruction manual for further details.