

## PF500A-360

## SPECIFICATIONS

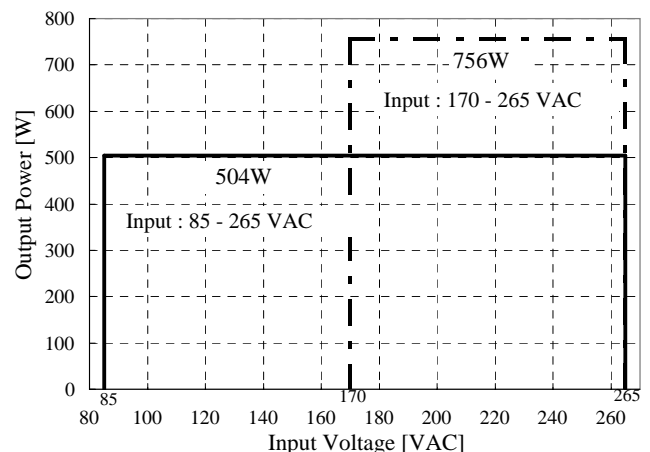
C108-01-01D

ITEMS		MODEL	PF500A-360	
1	Nominal Output Voltage	V	360	
2	Nominal Input Voltage	-	100 - 240 VAC	200 - 240 VAC
3	Available Input Voltage Range (*7)	-	85 - 265 VAC	170 - 265 VAC
4	Input Voltage Range with PFHC (*11)	-	85 - 255 VAC	170 - 255 VAC
5	Maximum Output Current	A	1.4	2.1
6	Maximum Output Power	W	504	756
7	Efficiency (Typ.) (*1)	%	90	94
8	Input Frequency (*3)	Hz	47 - 63	
9	Input Current (Typ.) (*1)	A	5.6	4.0
10	In-rush Current (Typ.) (*2,9)	-	30 / 60 A peak	
11	Power Factor (Min.) (*1)	-	0.95	
12	Output Voltage Accuracy	%	±2	
13	Maximum Ripple Voltage (*2,9)	-	20 (Vp-p)	
14	Maximum Line Regulation (*4)	V	5	
15	Maximum Load Regulation (*5)	V	10	
16	Over-Voltage Protection (*6)	V	390 - 420	
17	Over-Temperature Protection (*6)	°C	100 ± 15	
18	Auxiliary Voltage	V	12 - 20	
19	Auxiliary Current (Max.)	mA	10	
20	Parallel Operation (*9)	-	Possible	
21	Series Operation	-	No	
22	Alarm Signal (*9)	-	IOG (Inverter Operation Good) Signal	
23	Function Signals (*9)	-	ENA (Enable), PC (Parallel Current)	
24	Operating Temperature	-	-20°C - +85°C (Baseplate) , Ambient Temp. Min. = -20°C	
25	Operating Humidity	-	30 - 95 %RH (No Dewdrop)	
26	Storage Temperature	-	-40°C - + 85°C	
27	Storage Humidity	-	10 - 95 %RH (No Dewdrop)	
28	Cooling (*8,9)	-	Conduction Cooled	
29	Temperature Coefficient	-	0.02 %/°C	
30	Withstand Voltage	-	Terminals - Baseplate : 3.0kVAC for 1min (20mA)	
31	Isolation Resistance	-	More than 100M Ohm at 25°C and 70%RH Terminals - Baseplate : 500VDC	
32	Vibration	-	At No Operating, 10-55Hz (Sweep for 1min.) Amplitude 0.825mm(p-p) Constant (Maximum 49.0m/s <sup>2</sup> ) X,Y,Z 1 hour each	
33	Shock	-	Less than 196.1m/s <sup>2</sup> (in Package)	
34	Weight (Typ.)	g	160	
35	Size (W.xH.xD.)	mm	83 x 12.7 x 86 (Refer to the Outline Drawing)	

= NOTES =

- \*1. At 100VAC/200VAC and Maximum Output Power.
- \*2. Additional Output Capacitor, Fuse and In-rush Current Limit Resistor are required.
- \*3. For cases where conformance to various safety specs (UL, CSA, IEC) are required, to be described as 50/60 Hz on the name plate.
- \*4. At input range with PFHC, constant Load.
- \*5. No-Load to Full Load, constant input voltage.
- \*6. Inverter Shut-down method, Manual-reset.
- \*7. Ratings - Refer to the Derating Curve on the right.
- \*8 Heat sink has to be chosen according to Instruction Manual.
- \*9. Refer to Instruction Manual for details.
- \*10. Refer to C108-01-02\_ for the Test Circuit.
- \*11. PFHC Range : At 255 - 265 VAC, This module operates as a rectifier.

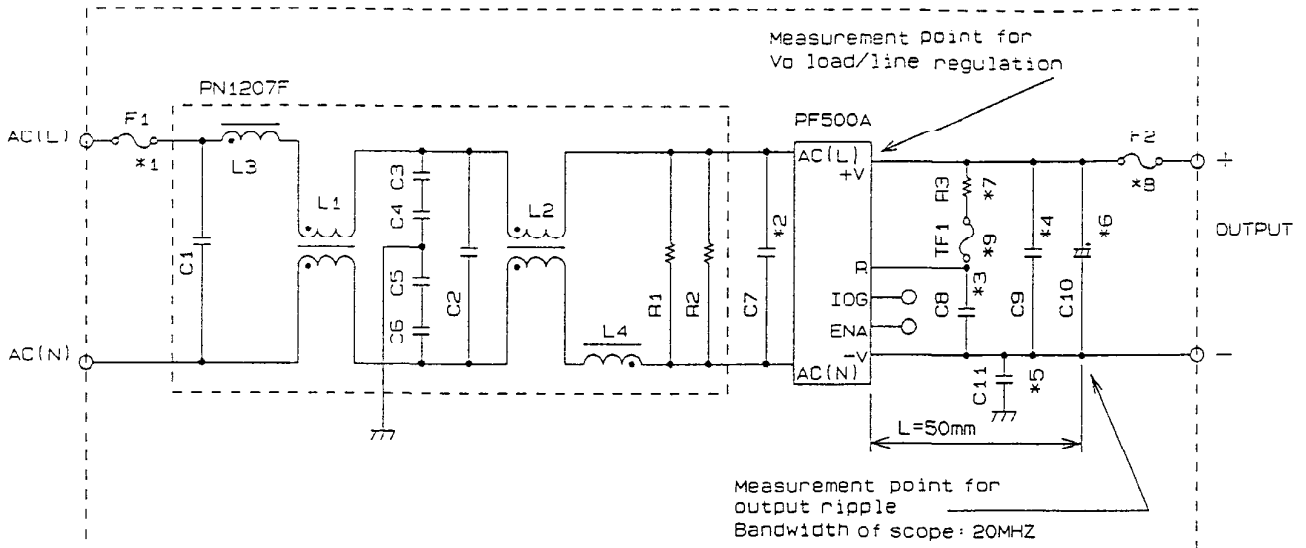
PF500A-360 Derating Curve  
at Baseplate Temperature = 85°C



## PF500A-360

## BASICAL CONNECTION

C108-01-02



C1	AC250V	0.47 $\mu$ F	C9	630V	0.47 $\mu$ F	L1	2.8mHx2
C2	AC250V	1.5 $\mu$ F	C10	450V	220 $\mu$ Fx3	L2	2.8mHx2
C3	AC250V	10000pF	C11	AC400V	4700pF	L3	150 $\mu$ H
C4	AC250V	10000pF	F1	AC250V	10A	L4	150 $\mu$ H
C5	AC250V	10000pF	F2	DC600V	3A	R1	1/2W 470k $\Omega$ m
C6	AC250V	10000pF	TF1	THERMAL FUSE		R2	1/2W 470k $\Omega$ m
C7	AC250V	1 $\mu$ Fx2		130 $^{\circ}$ C 250V 2A		R3	10W 5.1 $\Omega$ m
C8	630V	0.82 $\mu$ F					

## = NOTE =

- \*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)/pc. Put this capacitor near the terminal as close as possible.
- \*3. Same as \*2
- \*4. The allowable ripple current of capacitor must be more than 1.9A(rms)/pc. Put this capacitor near the terminal as close as possible.
- \*5. This capacitor is for EMC, determined by the characteristics of the leakage current, EMC(EMI, EMS) and output noise of the whole system.
- \*6. The maximum capacitance that can be used is less than 1200 $\mu$ F(Rated Capacitance).  
Prohibit the connection of capacitance which is more then above, else it will lead the module to defect.
- \*7. The inrush current at AC throw in can be suppressed by the external resistor connected between the R and +V terminals.
- \*8. Use an external fuse of fast blow type for protecting the load.
- \*9. Thermal fuse(TF1) and R3 need to have good thermal contact.
- \*10. Refer to instruction manual for further details.