ZWS50BAF/A

SPECIFICATIONS

A247-01-01/A-A

	ITEMS / MODEL			ZWS50BAF -3/A	ZWS50BAF -5/A	ZWS50BAF -12/A	ZWS50BAF -15/A	ZWS50BAF -24/A	ZWS50BAF -48/A
1	Nominal Output Voltage		V	3.3	5	12	15	24	48
2	Maximum Output Current		A	10	10	4.3	3.5	2.1	1.1
3	Maximum Output Power		W	33.0	50.0	51.6	52.5	50.4	52.8
4	Efficiency (Typ.) (*1)	100VAC	%	76	82	83	83	84	84
		200VAC	%	78	84	85	86	87	86
5	Input Voltage Range (*2)		-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC					
6	Input Current (Typ.) (*1)		A	0.45/0.25	0.65/0.35				
7	Inrush Current (Typ.) (*1)(*3)		-	14A at 100VAC, 28A at 200VAC, Ta=25°C, Cold Start					
8	PFHC		-	Designed to meet IEC61000-3-2					
9	Power Factor (Typ.) (*1)		-	0.96/0.85	0.97/0.91				
10	Output Voltage Range		V	2.97 - 3.63	4.5 - 5.5	10.8 - 13.2	13.5 - 16.5	21.6 - 26.4	39.5 - 52.8
11	Maximum Ripple & Noise (*4)	0≤Ta≤70°C	mV	120	120	150	150	150	200
		-10≤Ta<0°C	mV	160	160	180	180	180	240
12	Maximum Line Regulation (*4)(*5)		mV	20	20	48	60	96	192
13	Maximum Load Regulation (*4)(*6)		mV	40	40	96	120	150	240
14	Temperature Coefficient (*4)		-	Less than 0.02% / °C					
15	Over Current Protection (*7)		A	10.5-	10.5-	4.51-	3.67-	2.20-	1.15-
16	Over Voltage Protection (*8)		V	3.79 - 4.95	5.75 - 7.0	13.8 - 16.2	17.3 - 20.3	27.6 - 32.4	55.2 - 64.8
17	Hold-up Time (Typ.) (*1)		-	20ms					
18	Leakage Current (*9)		-	Less than 0.5mA. 0.2mA(Typ) at 100VAC / 0.4mA(Typ) at 230VAC					
19	Remote Control		-	-					
20	Parallel Operation		-	-					
21	Series Operation		-	Possible					
22	Operating Temperature (*10)		-	Convection : -10 - +60°C (-10 - +40°C:100%, +50°C:75%, +60°C:50%)					
23	Operating Humidity		-	30 - 90%RH (No Condensing)					
24	Storage Temperature		-	-30 - +75°C					
25	Storage Humidity		-	10 - 90%RH (No Condensing)					
26	Cooling		-	Convection Cooling					
27	Withstand Voltage		-	Input - FG : 2kVAC (10mA), Input - Output : 3kVAC (10mA) Output - FG : 500VAC (20mA) for 1min					
28	Isolation Resistance		-	More than 100MΩ at 25°C and 70%RH Output - FG : 500VDC					
29	Vibration		-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s^2 Constant, X,Y,Z 1hour each.					
30	Shock		-	Less than 196.1m/s^2					
31	Safety		-	Approved by UL60950-1, CSA60950-1, EN60950-1, EN50178(OV II), Designed to meet DENAN at 100VAC only.					
32	Conducted Emission		-	Designed to meet EN55011/EN55022-B, FCC-B, VCCI-B					
33	Radiated Emission		-	Designed to meet EN55011/EN55022-B, FCC-B, VCCI-B					
34	Immunity		-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11					
35	Weight (Typ.)		g	295					
36	Size (W x H x D)		mm	60 x 36 x 162 (Refer to Outline Drawing)					

*Read instruction manual carefully, before using the power supply unit.

=NOTES=

*1. At 100VAC/200VAC, Ta=25°C, nominal output voltage and maximum output power.

*2. For cases where conformance to various safety specs (UL, CSA, EN) are required, to be described as 100 - 240VAC(50/60Hz).

*3. Not applicable for insush current to a noise filter for less than 0.2ms.

*4. Please refer to Fig. A for measurement of Vo, line & load regulation and ripple voltage.

*5. 85 - 265VAC, constant load.

*6. No load-Full load, constant input voltage.

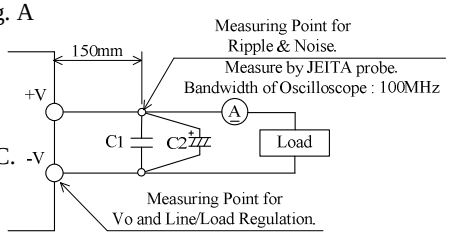
*7. Hiccup with automatic recovery.
Avoid to operate at over load or short circuit condition for more than 30seconds.

*8. OVP circuit shut down the output, manual reset (Re power on) to get output voltage.

*9. Measured by the each measuring method of UL, CSA, EN and DENAN(at 60Hz), Ta=25°C.

*10. Output Derating
- Derating at standard mounting. Refer to output derating curve(A247-01-02/A_).
- About a force air cooling, refer to output derating curve (A247-01-03/A_).
- Load (%) is percent of maximum output power or maximum output current, whichever is greater.

Fig. A



C1 : Film Cap. 0.1 µF

C2 : Elec. Cap. 100 µF

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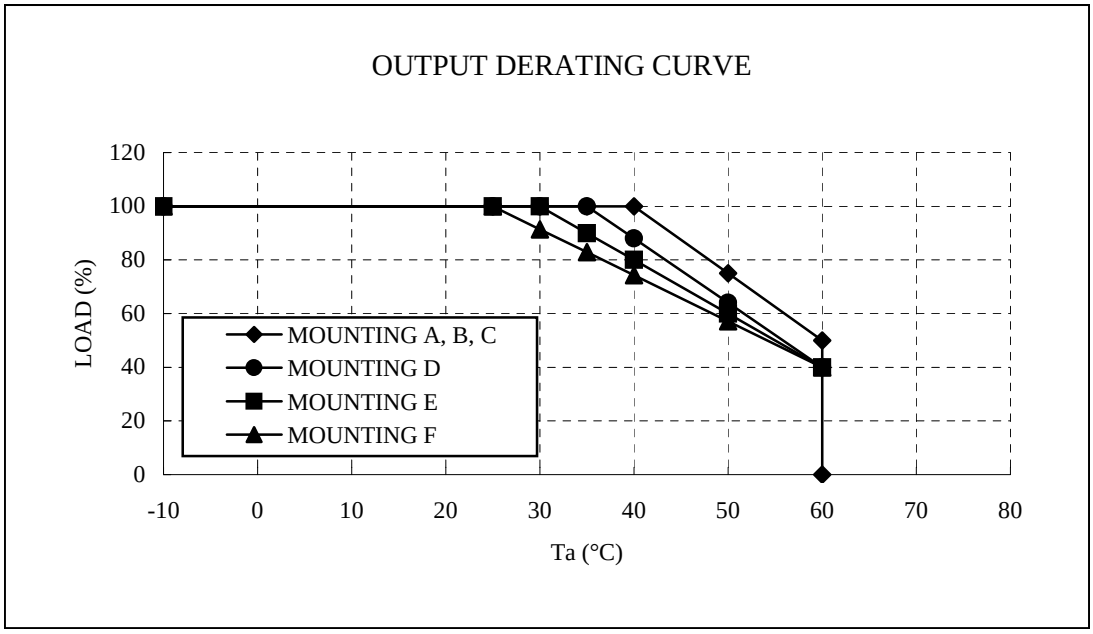
OUTPUT DERATING

A247-01-02/A

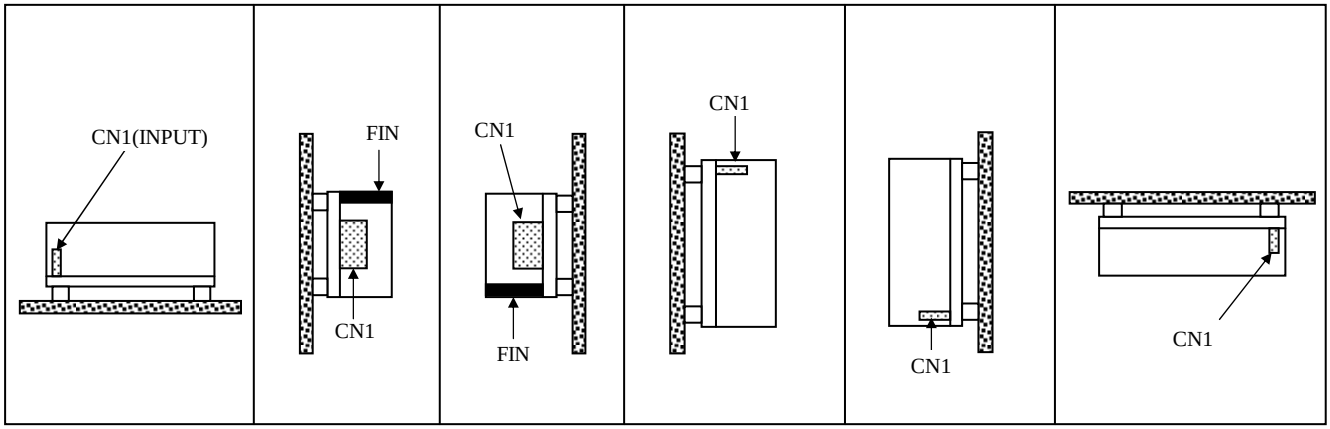
*COOLING : CONVECTION COOLING

Ta (°C)	LOAD (%) MOUNTING A, B, C	LOAD (%) MOUNTING D	LOAD (%) MOUNTING E	LOAD (%) MOUNTING F
-10 - +25	100	100	100	100
30	100	100	100	91
35	100	100	90	83
40	100	88	80	74
50	75	64	60	57
60	50	40	40	40



MOUNTING A | MOUNTING B | MOUNTING C | MOUNTING D | MOUNTING E | MOUNTING F

(STANDARD MOUNTING)



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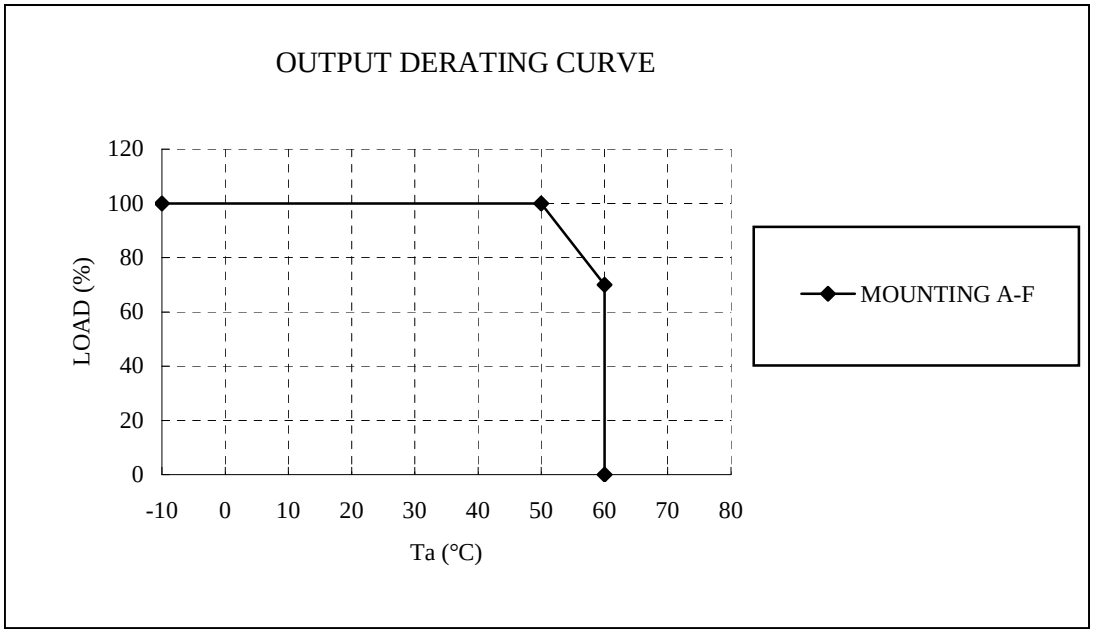
OUTPUT DERATING

A247-01-03/A

*COOLING : FORCED AIR COOLING

Ta (°C)	LOAD (%)
	MOUNTING A-F
-10 - +50	100
60	70

Air velocity ≧ 0.7m/s : Air must flow through component side.



MOUNTING A (STANDARD MOUNTING) | MOUNTING B | MOUNTING C | MOUNTING D | MOUNTING E | MOUNTING F