

ZWS75BAF/A

SPECIFICATIONS

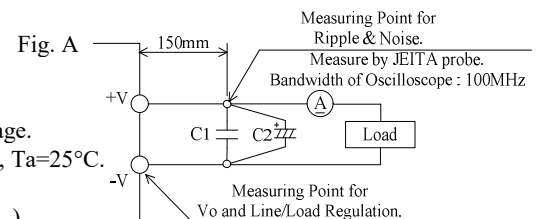
A248-01-01/A-B

ITEMS		MODEL	ZWS75BAF -3/A	ZWS75BAF -5/A	ZWS75BAF -12/A	ZWS75BAF -15/A	ZWS75BAF -24/A	ZWS75BAF -48/A	
1	Nominal Output Voltage	V	3.3	5	12	15	24	48	
2	Maximum Output Current	A	15	15	6.3	5.0	3.2	1.6	
3	Maximum Output Power	W	49.5	75.0	75.6	75.0	76.8	76.8	
4	Efficiency (Typ.) (*1)	100VAC	%	76	82	83	84	84	85
		200VAC	%	78	84	85	86	87	88
5	Input Voltage Range (*2)	-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC						
6	Input Current (Typ.) (*1)	A	0.70/0.35	0.95/0.5					
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	15.7-	15.7-	6.61-	5.25-	3.36-	1.68-	
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 (3.3V, 5V : -10 - +35°C:100%, +50°C:70%, +60°C:50%) (12V-48V : -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 UL62368-1, CSA62368-1, EN62368-1, UL60950-1, CSA60950-1, EN60950-1 (Expire date of 60950-1 : 20/12/2020), EN50178(OV II) Designed to meet DENAN at 100VAC Only.						
32	Conducted Emission	-	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B						
33	Radiated Emission	-	Designed to meet EN55011/EN55032-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	380						
36	Size (W x H x D)	mm	60 x 45 x 180 (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 inrush current to a noise filter for less than 0.2ms.
- *4. Please refer to Fig. A for measurement of output voltage, 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(A248-01-02/A_).
 - About a force air cooling, refer to output derating curve (A248-01-03/A_).
 - Load (%) is percent of maximum output power or maximum output current, whichever is greater.



C1 : Film Cap. 0.1 μF
C2 : Elec. Cap. 100 μF

ZWS75BAF/A

OUTPUT DERATING

A248-01-02/A

*COOLING : CONVECTION COOLING

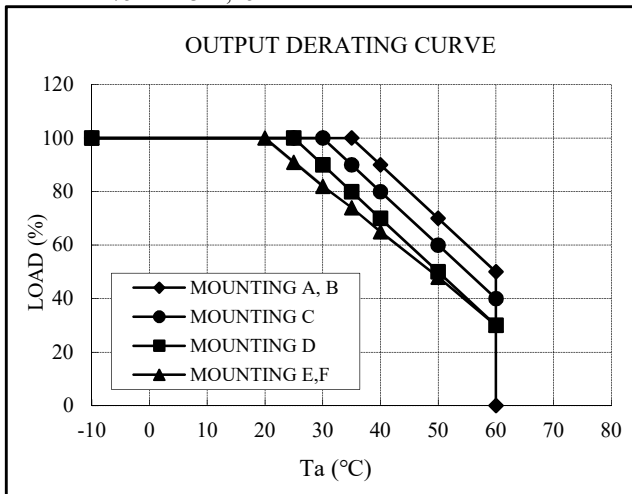
ZWS75BAF-3/A, 5/A

Ta (°C)	LOAD (%)	LOAD (%)	LOAD (%)	LOAD (%)
	MOUNTING A, B	MOUNTING C	MOUNTING D	MOUNTING E, F
-10 - +20	100	100	100	100
25	100	100	100	91
30	100	100	90	82
35	100	90	80	74
40	90	80	70	65
50	70	60	50	48
60	50	40	30	30

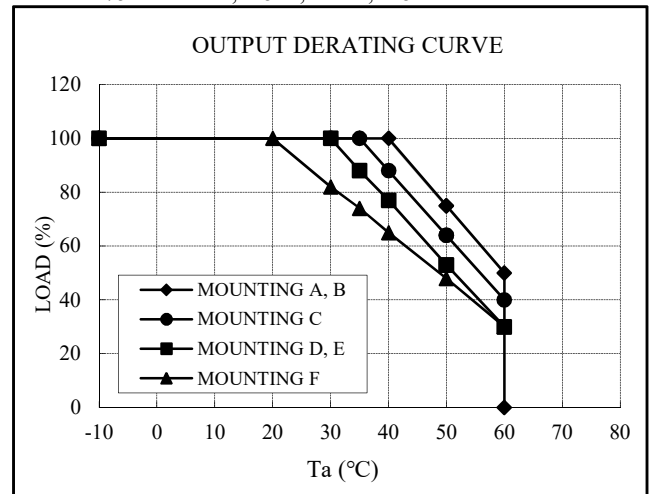
ZWS75BAF-12/A, -15/A, -24/A, -48/A

Ta (°C)	LOAD (%)	LOAD (%)	LOAD (%)	LOAD (%)
	MOUNTING A, B	MOUNTING C	MOUNTING D, E	MOUNTING F
-10 - +20	100	100	100	100
30	100	100	100	82
35	100	100	88	74
40	100	88	77	65
50	75	64	53	48
60	50	40	30	30

ZWS75BAF-3/A, -5/A



ZWS75BAF-12/A, -15/A, -24/A, -48/A



MOUNTING A

MOUNTING B

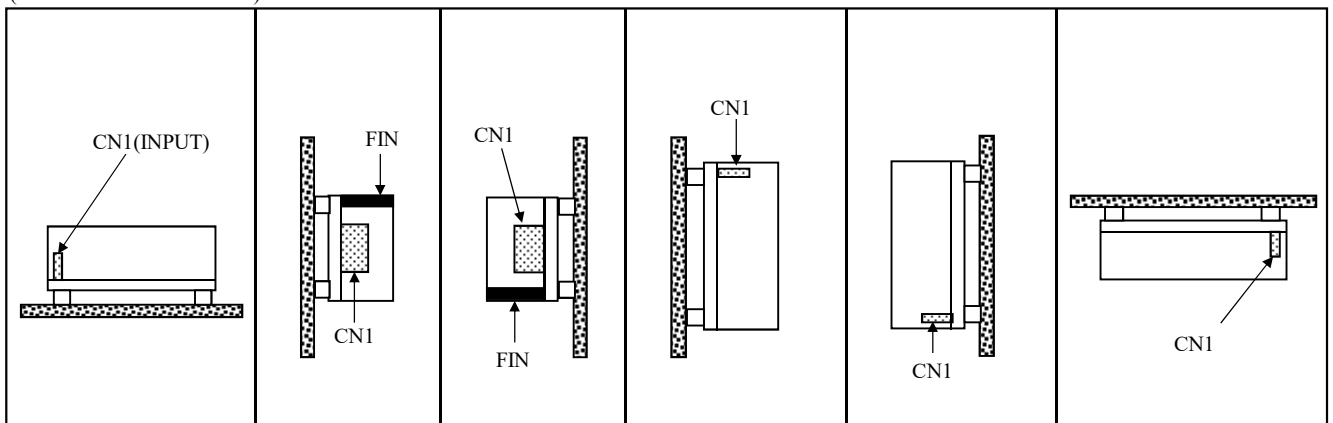
MOUNTING C

MOUNTING D

MOUNTING E

MOUNTING F

(STANDARD MOUNTING)



ZWS75BAF/A

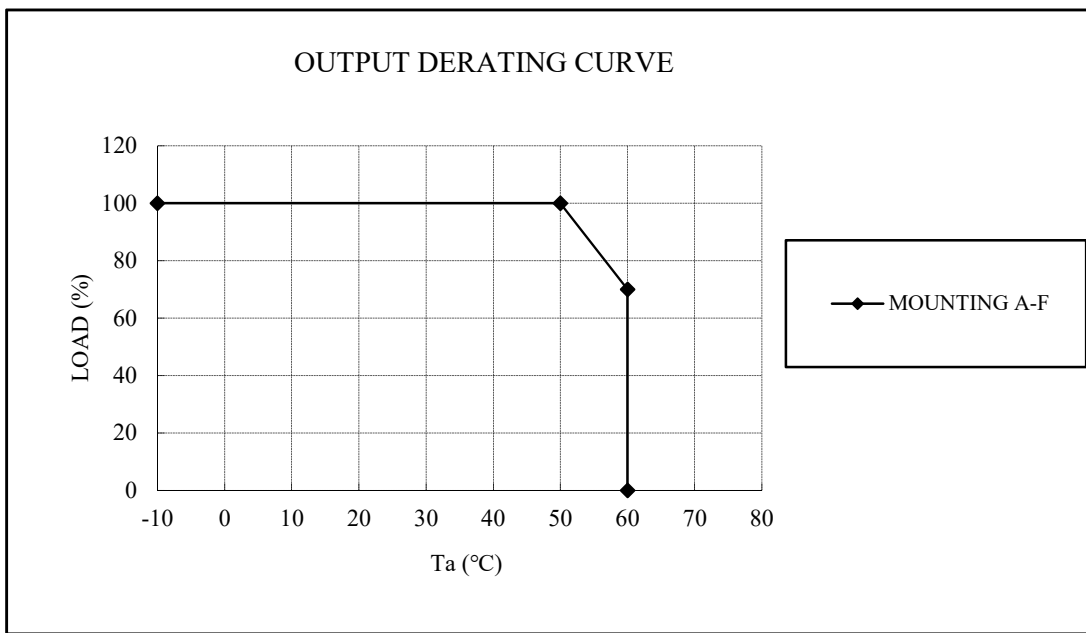
OUTPUT DERATING

A248-01-03/A

*COOLING : FORCED AIR COOLING

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

Air velocity $\geq 0.7\text{m/s}$: Air must flow through component side.



- MOUNTING A
- MOUNTING B
- MOUNTING C
- MOUNTING D
- MOUNTING E
- MOUNTING F

(STANDARD MOUNTING)

