

ZWS75B

SPECIFICATIONS

A244-01-01A

MODEL			ZWS75B -3	ZWS75B -5	ZWS75B -12	ZWS75B -15	ZWS75B -24	ZWS75B -48	
ITEMS									
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	%	80	82	84	85	86	87
			200VAC	%	83	85	86	87	88
5	Input Voltage Range		(*2)	-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC				
6	Input Current (Typ.)		(*1)	A	1.2/0.7	1.7/1.0			
7	Inrush Current (Typ.)		(*1)(*3)	-	14A at 100VAC, 28A at 200VAC, Ta=25°C, Cold Start				
8	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
9	Maximum Ripple & Noise	0≤Ta≤70°C	mV	120	120	150	150	150	200
			(*4)(*5) -10≤Ta≤0°C	mV	160	160	180	180	180
10	Maximum Line Regulation		(*4)(*6)	mV	20	20	48	60	96
11	Maximum Load Regulation		(*4)(*7)	mV	40	40	96	120	150
12	Temperature Coefficient		(*4)	-	Less than 0.02% / °C				
13	Over Current Protection		(*8)	A	15.7-	15.7-	6.61-	5.25-	3.36-
14	Over Voltage Protection		(*9)	V	3.79 - 4.95	5.75 - 7.0	13.8 - 16.2	17.3 - 20.3	27.6 - 32.4
15	Hold-up Time (Typ.)		(*1)	-	15ms(Typ) at 100% Load / 20ms(Typ) at 70% Load				
16	Leakage Current		(*10)	-	Less than 0.5mA. 0.2mA(Typ) at 100VAC / 0.4mA(Typ) at 230VAC				
17	Remote Control		-	-					
18	Parallel Operation		-	-					
19	Series Operation		-	Possible					
20	Operating Temperature		(*11)	-	Convection : -10 - +70°C (-10 - +50°C:100%, +60°C:80%, +70°C:60%)				
21	Operating Humidity		-	30 - 90%RH (No Condensing)					
22	Storage Temperature		-	-30 - +75°C					
23	Storage Humidity		-	10 - 90%RH (No Condensing)					
24	Cooling		-	Convection Cooling					
25	Withstand Voltage		-	Input - FG : 2kVAC (10mA), Input - Output : 3kVAC (10mA) Output - FG : 500VAC (20mA) for 1min					
26	Isolation Resistance		-	More than 100MΩ at 25°C and 70%RH Output - FG : 500VDC					
27	Vibration		-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s ² Constant, X,Y,Z 1hour each.					
28	Shock		-	Less than 196.1m/s ²					
29	Safety		-	Approved by UL60950-1, CSA60950-1, EN60950-1, EN50178(OV II), Designed to meet DENAN at 100VAC Only.					
30	Conducted Emission		-	Designed to meet EN55011/EN55022-B, FCC-B, VCCI-B					
31	Radiated Emission		-	Designed to meet EN55011/EN55022-B, FCC-B, VCCI-B					
32	Immunity		-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11					
33	Weight (Typ.)		g	230					
34	Size (W x H x D)		mm	50 x 33 x 150 (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. For start up at low ambient temperature and low input voltage, output ripple noise might not meet specification.

However, specification can be met after one second.

*6. 85 - 265VAC, constant load.

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

*8. Hiccup with automatic recovery.

Avoid to operate at over load or short circuit condition for more than 30seconds.

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

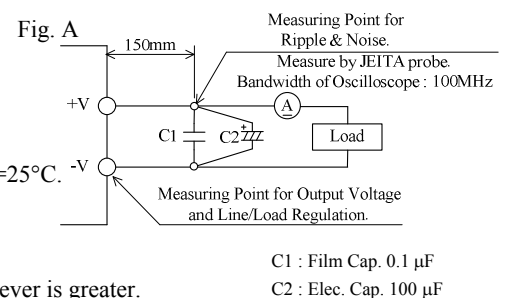
*10. Measured by the each measuring method of UL, CSA, EN and DENAN(at 60Hz), Ta=25°C.

*11. Output Derating

- Derating at standard mounting. Refer to output derating curve(A244-01-02_).

- About a force air cooling, refer to output derating curve (A244-01-03_).

- Load (%) is percent of maximum output power or maximum output current, whichever is greater.



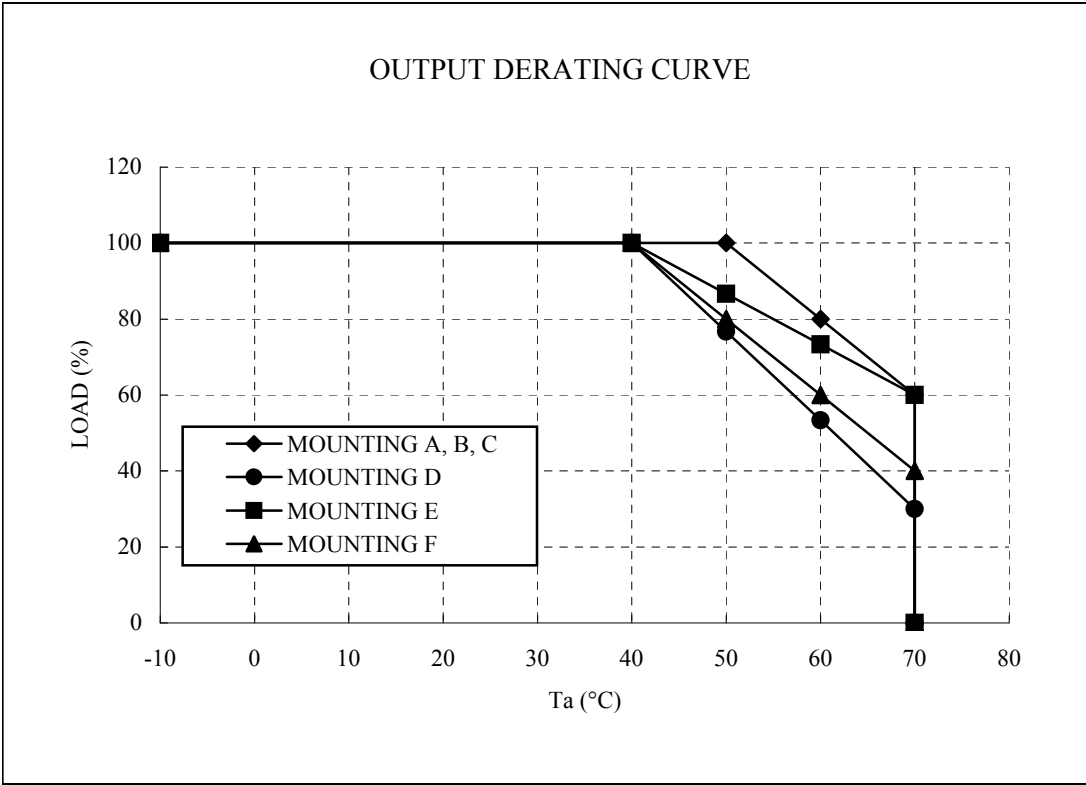
ZWS75B

OUTPUT DERATING

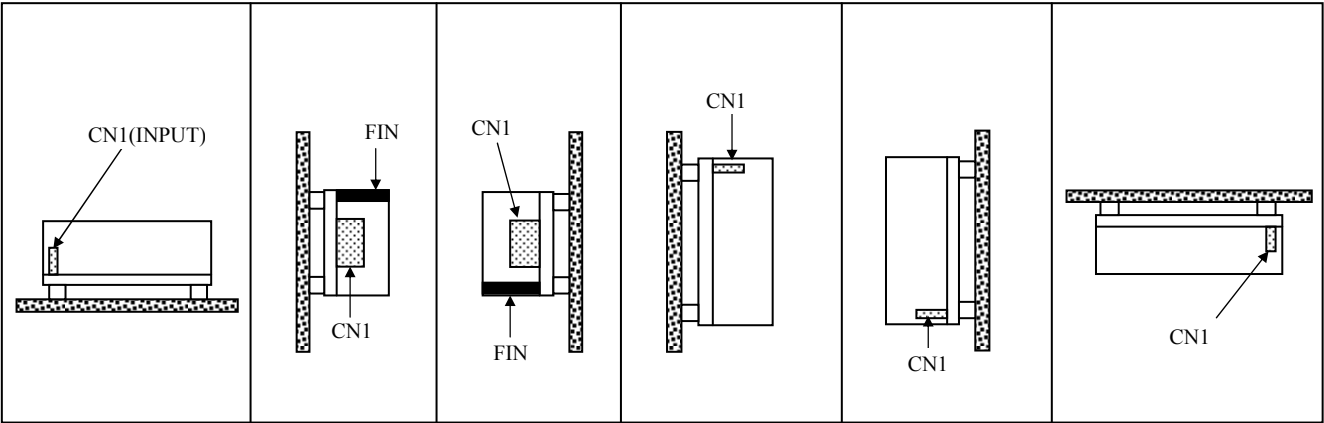
A244-01-02

*COOLING : CONVECTION COOLING

Ta (°C)	LOAD (%)	LOAD (%)	LOAD (%)	LOAD (%)
	MOUNTING A, B, C	MOUNTING D	MOUNTING E	MOUNTING F
-10 - +40	100	100	100	100
50	100	76	86	80
60	80	53	73	60
70	60	30	60	40



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



ZWS75B

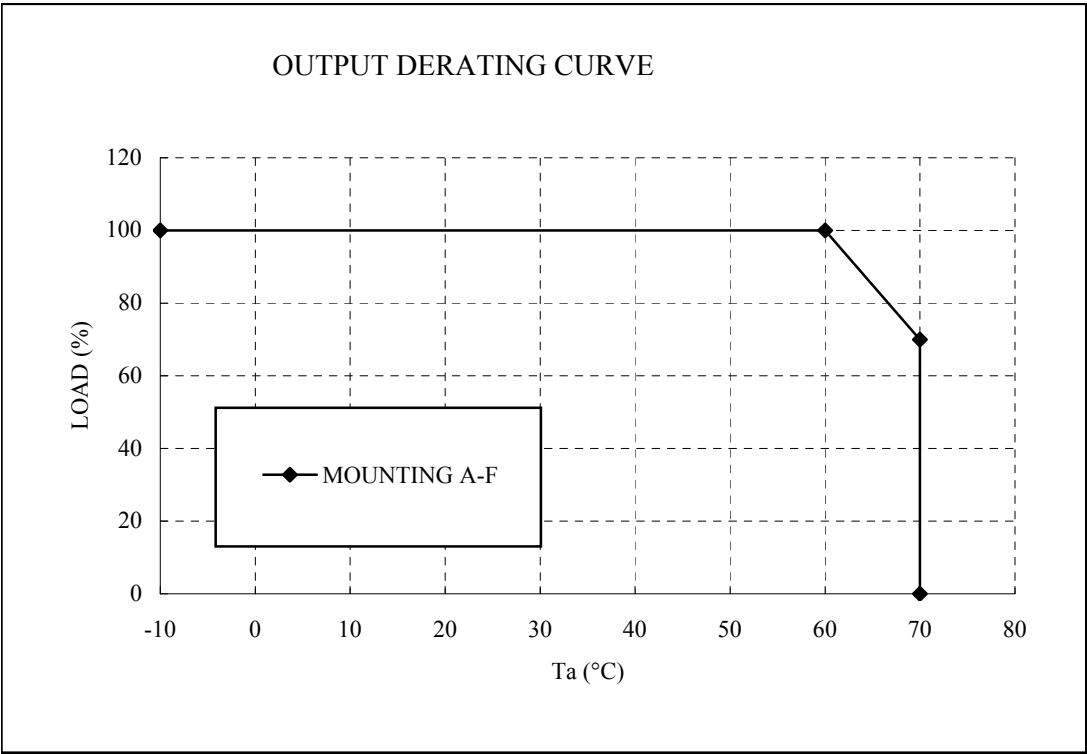
OUTPUT DERATING

A244-01-03

*COOLING : FORCED AIR COOLING

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

