

MODEL		ZWS50AF	ZWS50AF	ZWS50AF	ZWS50AF		
ITEMS		-5/J	-12/J	-15/J	-24/J		
1	Nominal Output Voltage	V	5	12	15	24	
2	Maximum Output Current	A	10	4.3	3.5	2.1	
3	Peak Output Current (*1)	A	-	5.2	4.2	2.6	
4	Maximum Output Power	W	50	51.6	52.5	50.4	
5	Peak Output Power (*1)	W	-	62.4	63	62.4	
6	Efficiency (Typ) (*2)	%	75	78	79	81	
7	Input Voltage Range (*3)	-	85 ~ 265VAC (47-63Hz) or 120 ~ 370VDC				
8	Input Current (100/200VAC)(Typ) (*2)	A	0.8/0.4				
9	Inrush Current(Typ) (*4)	-	14A at 100VAC, 28A at 200VAC, Ta=25°C, Cold Start				
10	PFHC	-	Built to meet EN61000-3-2				
11	Power Factor (100/200VAC)(Typ) (*2)	-	0.99/0.95				
12	Output Voltage Range	V	4.5~5.5	10.8~13.2	13.5~16.5	21.6~26.4	
13	Maximum Ripple & Noise (*5)	0≤Ta≤60°C	mV	120	150	150	150
		-10≤Ta<0°C	mV	160	180	180	180
14	Maximum Line Regulation (*5,*6)	mV	20	48	60	96	
15	Maximum Load Regulation (*5,*7)	mV	40	96	120	150	
16	Temperature Coefficient		Less than 0.02%/°C				
17	Over Current Protection (*8)	A	10.5 ~	5.4 ~	4.4 ~	2.7 ~	
18	Over Voltage Protection (*9)	-	5.75~6.75	13.8~16.2	17.3~20.3	27.6~32.4	
19	Hold-up Time (Typ) (*10)	-	20ms				
18	Leakage Current (*11)	-	0.5mA MAX, 0.1mA(Typ) at 100VAC / 0.16mA(Typ) at 230VAC				
19	Remote ON/OFF Control	-	Possible				
20	Parallel Operation	-	-				
21	Series Operation	-	Possible				
22	Operating Temperature (*12)	-	-10 ~+60°C Convection : -10 ~+50°C:100%,+60°C:70%				
23	Operating Humidity	-	30 ~ 90%RH (No dewdrop)				
24	Storage Temperature	-	-30 ~ +85°C				
25	Storage Humidity	-	10 ~ 95%RH (No dewdrop)				
26	Cooling	-	Convection Cooling				
27	Withstand Voltage	-	Input - FG : 2kVAC (20mA), Input - Output : 3kVAC (20mA) Output - FG : 500VAC (100mA) 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 <sup>2</sup> Constant, X,Y,Z 1hour each.				
30	Shock (In package)	-	Less than 196.1m/s <sup>2</sup>				
31	Safety (*13)	-	Approved by UL1950, CSA950, EN60950, VDE0160. Built to meet DENTORI				
32	EMI	-	Built to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B.				
33	IMMUNITY	-	Built to meet EN61000-4-2, -3, -4, -5, -6, -8, -11				
34	Weight(Typ.)	g	210				
35	Size (WxHxD)	mm	55 x 26 x 195 ( Refer to Outline Drawing )				

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

=NOTES=

- \*1. Operating period at peak output current is less than 10sec.  
(Average output power and current is less than Maximum output power and current)
- \*2. At 100/200VAC, Ta=25°C and maximum output power.
- \*3. For cases where conformance to various safety specs (UL,CSA,EN) are required, to be described as 100~240VAC(50/60Hz).
- \*4. Not applicable for the in-rush current to Noise Filter for less than 0.2ms.
- \*5. Please refer to Fig. A for measurement of line & load regulation and ripple voltage.(Measure with EIAJ RC-9131 probe)
- \*6. 85 ~ 265VAC , constant load.
- \*7. No load-Maximum load, constant input voltage.
- \*8. Constant current limit with automatic recovery.  
Not operate at overload or dead short condition for more than 30 seconds.
- \*9. OVP circuit will shut down output, manual reset.(Line recycle)
- \*10. At 100/200VAC nominal output voltage and maximum output current.
- \*11. Measured by the each measuring method of UL, CSA,EN and DENTORI(at 60Hz).
- \*12. At standard mounting.
  - Load (%) is percent of maximum output power or maximum output current, whichever is greater.
  - For other mountings, refer to derating curve (A193-01-02\_).
  - When forced air cooling, refer to derating curve (A193-01-03\_).
- \*13. As for DENTORI, built to meet at 100VAC.

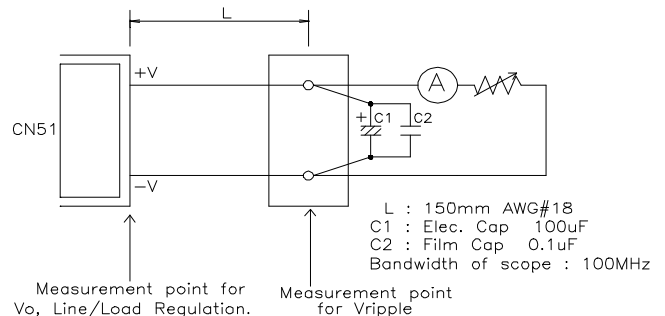


Fig.A