## ZWS100BAF/L

## **SPECIFICATIONS**

A249-01-01/L-B

	A247-01-01/E-B	MODEL		ZWC100D AE	ZWS100BAF	ZWS100BAF	ZWC100D AE	ZWC100D AE	ZWC100D A E
		MODEL		ZWS100BAF			ZWS100BAF		ZWS100BAF
	ITEMS		_	-3/L	-5/L	-12/L	-15/L	-24/L	-48/L
1	Nominal Output Voltage		V	3.3	5	12	15	24	48
2	Maximum Output Current		Α	20	20	8.5	6.7	4.3	2.1
3	Maximum Output Power		W	66.0	100.0	102.0	100.5	103.2	100.8
4	Efficiency (Typ) (*1)		%	82	84	86	86	87	88
		200VAC	%	84	86	88	88	89	90
5	Input Voltage Range								
6	Input Current (Typ)	(*1)	A	0.9/0.45 1.3/0.65					
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)		-	0.96/0.89 0.98/0.93					
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	0 <u>≤</u> Ta <u>≤</u> 70°C	mV	120	120	150	150	150	200
		-10 <u>≤</u> 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)	-		•		0.02% / °C	•	
15	Over Current Protection	(*7)	Α	21.0 -	21.0 -	8.93 -	7.04 -	4.52 -	2.21 -
16	Over Voltage Protection	(*8)	V	3.79 - 4.95	5.75 - 7.00	13.8 - 16.2	17.3 - 20.3	27.6 - 32.4	55.2 - 64.8
17	Hold-up Time (Typ)	(*1)	-				ms		
18	Leakage Current	(*9)	-	Less than 0.5mA. 0.2mA(Typ) at 100VAC / 0.4mA(Typ) at 230VAC					
19	Parallel Operation		-	-					
20	Series Operation		-	Possible					
21	Operating Temperature	(*10)	-	Convection: -10 - +70°C (-10 - +50°C:100%, +60°C:75%, +70°C:50%)					
22	Operating Humidity		-	30 - 90%RH (No Condensing)					
23	Storage Temperature		-	-30 - +75°C					
24	Storage Humidity		-	10 - 90%RH (No Condensing)					
25	Cooling		-	Convection Cooling					
26	Withstand Voltage		-	Input - FG: 2kVAC (10mA), Input - Output: 3kVAC (10mA)					
				Output - FG : 500VAC (20mA) for 1min					
27	Isolation Resistance			More than 100MΩ at 25°C and 70%RH Output - FG: 500VDC					
28	Vibration		-	At no operating, 10 - 55Hz (Sweep for 1min)					
				19.6m/s <sup>2</sup> Constant, X,Y,Z 1hour each.					
29	Shock		-	Less than 196.1m/s <sup>2</sup>					
30	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.					
31	Conducted Emission		-	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B					
32	Radiated Emission		-	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B					
33	Immunity		-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11					
34	Weight (Typ)		g	430					
35	Size (W x H x D)		mm		72 x 45	x 185 ( Refer	to Outline Dr	rawing)	
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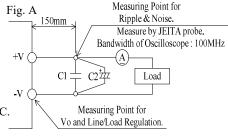
\*Read instruction manual carefully, before using the power supply unit.

=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 the inrush current to 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. 3.3, 5V model: Constant current limit and hiccup with automatic recovery.
  - 12 48V model: Constant current limit with automatic recovery.

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

- \*8. OVP circuit will shut down output, manual reset (Re power on).
- \*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(A249-01-02/L-\_).
  - When forced air cooling, refer to output derating curve(A249-01-03\_).
  - Load (%) is percent of maximum output power or maximum output current, whichever is greater.



C1 : Film Cap. 0.1  $\mu F$  C2 : Elect. Cap. 100  $\mu F$ 

## **OUTPUT DERATING**

A249-01-02/L

\*COOLING: CONVECTION COOLING

- COULTIVE FOOT											
	LOAD (%)	LOAD (%)	LOAD (%)								
Ta (°C)	MOUNTING A,B	MOUNTING C,E	MOUNTING D,F								
-10 - +30	100	100	100								
40	100	100	80								
50	100	80	60								
60	75	60	40								
70	50	40	20								

