SPECIFICATIONS

A254-01-01/R-C

11237	F-01-01/IC-C							
		MODEL		ZWS300BAF	ZWS300BAF	ZWS300BAF	ZWS300BAF	ZWS300BAF
	ITEMS			-12/R	-15/R	-24/R	-36/R	-48/R
1	Nominal Output Voltage		V	12	15	24	36	48
2	Maximum Output Current		Α	25.0	20.0	12.5	8.4	6.3
3	Maximum Output Power		W	300.0	300.0	300.0	302.4	302.4
4	Efficiency (Typ)	100VAC	%	8	86		88	
	(*1) 200VAC %		89		91			
5	Input Voltage Range	(*2)(*3)	-	85 - 265VA		C (47 - 63Hz) or 120 - 370VDC		
6	Input Current (Typ)	(*1)	Α	3.7/1.9		3.6/1.8		
7	Inrush Current (Typ)	(*1)(*4)	-	15A at 100VAC, 30A at 200VAC, Ta=25°C, Cold Start				
8	PFHC		-	Designed to meet IEC61000-3-2				
9	Power Factor (Typ)	(*1)	-	0.97/0.93				
10	Output Voltage Range		V	9.6 - 13.2	13.5 - 16.5	21.6 - 27.5	32.4 - 39.6	39.5 - 52.8
11	Maximum Ripple & Noise	0 <u>≤</u> Ta <u>≤</u> 70°C	mV	150	150	150	250	250
) -10 <u><</u> Ta<0°C	mV	180	180	180	300	300
12	Maximum Line Regulation	(*5)(*6)	mV	48	60	96	144	192
13	Maximum Load Regulation	(*5)(*7)	mV	100	120	150	240	240
14	Temperature Coefficient	(*5)	-	Less than 0.02% / °C				
15	Over Current Protection	(*8)	Α	26.25 -	23.1-	14.7 -	9.87 -	7.35 -
16	Over Voltage Protection	(*9)	V	13.8 - 16.2	17.3 - 20.3	28.8 - 33.6	41.4 - 48.6	55.2 - 64.8
17	Hold-up Time (Typ)	(*1)	-	18ms(typ) at 100VAC & Rated O/P Power, 20ms(typ) at 100VAC & 80% Load				
18	Leakage Current	(*10)	-	Less than 0.5mA. 0.2mA (Typ) at 100VAC / 0.4mA (Typ) at 230VAC				
19	Remote Control	(*11)	-	Possible				
20	Parallel Operation		-	-				
21	Series Operation		-			Possible		
22	Operating Temperature		-	-10 to +70°C		-10 to +70°C		
				(-10 to +40°C:100%, +50°C:80%,		(-10 to +45°C:100%, +50°C:88%,		
		(*12)		+60°C:60%, 70°C:40%)		+60°C:64%, 70°C:40%)		
23	Operating Humidity		-	30 to 90%RH (No Condensing)				
24	Storage Temperature		-	-30 to +75°C				
25	Storage Humidity		-	10 to 90%RH (No Condensing)				
26	Cooling		-	Convection Cooling				
27	Withstand Voltage		-	Input - FG: 2kVAC (10mA), Input - Output: 3kVAC (10mA)				
L				Output - FG : 500VAC (20mA) for 1min				
28	Isolation Resistance		-	More than $100\text{M}\Omega$ at 25°C and 70%RH Output - FG : 500VDC				
29	Vibration		-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s² 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	540				
36	Size (W x H x D)		mm		84 x 42 x 18	30 (Refer to Outlin	ne Drawing)	
	d instruction manual carefully be	. f				•	<u> </u>	

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

=NOTES=

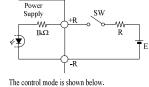
- *1. At 100VAC/200VAC, Ta=25°C, nominal output voltage and maximum output power.
- *2. For cases where conformance to various safety specs (UL, CSA, EN) are required, to be described as 100 240VAC(50-60Hz).
- *3. Output derating needed when input voltage less than 90VAC.

 Refer to LOAD vs. INPUT VOLTAGE (24V/36V/48V: A254-01-02_, 12V/15V: A254-01-06_).
- *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 Vo, line & load regulation and ripple voltage.

*6. 90 - 265VAC, constant load.

- *7. No load-Full load, constant input voltage.
- *8. Constant current limit with automatic recovery.

 Avoid to operate at over load or short circuit condition.
- *9. OVP circuit will shut down output, manual reset (Re power on).
- *10. Measured by the each measuring method of UL, CSA, EN and DENAN(at 60Hz), Ta=25°C.
- *11. As for Remote control mode, refer to Fig. B.
- *12. Output Derating
 - Derating at standard mounting.
 - Refer to LOAD vs. AMBIENT TEMPERATURE (24V/36V/48V: A254-01-02_, 12V/15V: A254-01-06_).
 - When forced air cooling, refer to forced air cooling specifications (A254-01-03/R-_, 24V/36V/48V: A254-01-04_, 12V/15V: A254-01-08_).
 - Load (%) is percent of maximum output power or maximum output current, do not exceed its derating of maximum load.



Measuring Point for Ripple & Noise. Measure by JEITA probe.

C2#

Measuring Point for

C1: Film Cap. 0.1 µF

Fig. A

C2 : Elect. Cap. 100 µF

and Line/Load Regulation.

-V

Bandwidth of Oscilloscope: 100MHz

Load

External voltage level: E	External resistance: R
4.5 ~ 12.5VDC	No required
12.5~24.5VDC	1.5kΩ

Fig. B