ZWS150BAF/CO2

SPECIFICATIONS

A250-01-01/CO2-B

		MODEL		ZWS150BAF	ZWS150BAF	ZWS150BAF	ZWS150BAF	ZWS150BAF	ZWS150BAF
	ITEMS			-3/CO2	-5/CO2	-12/CO2	-15/CO2	-24/CO2	-48/CO2
1	Nominal Output Voltage		V	3.3	5	12	15	24	48
2	Maximum Output Current		A	30	30	12.5	10.0	6.3	3.2
3	Maximum Output Power		W	99.0	150.0	150.0	150.0	151.2	153.6
4		100VAC	%	82	85	85	86	88	89
		200VAC	%	84	87	88	89	90	91
5	Input Voltage Range	(*2)	-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC					
6	Input Current (Typ)	(*1)	A	1.3/0.65 1.9/0.95					
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		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)	-	Less than 0.02% / °C					
15	Over Current Protection	(*7)	A	31.5 -	31.5 -	13.13 -	10.5 -	6.62 -	3.36 -
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)	-	20ms					
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 to +70°C (-10 to +50°C:100%, +60°C:75%, +70°C:50%)					
22	Operating Humidity		-	30 to 90%RH (No Condensing)					
23	Storage Temperature		-	-30 to +75°C					
24	Storage Humidity		-	10 to 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 ² Constant, X,Y,Z 1hour each.					
29	Shock		-	Less than 196.1m/s ²					
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)					
2.1	G 1 + 1F : :			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)								
35	Size (W x H x D) mm 75 x 37 x 160 (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 the in-rush 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.

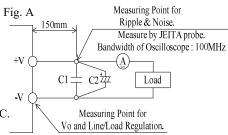
- *6. No load-Full load, constant input voltage.
- *7. 3.3, 5V model: Constant current limit and hiccup with automatic recovery.
 - 12 48V model: Constant current limit with automatic recovery.

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 (A250-01-02_).
- When forced air cooling, refer to output derating curve (A250-01-03).
- 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