

ZWS50B/FV

SPECIFICATIONS

A243-01-01/FV-B

ITEMS		MODEL	ZWS50B-12/FV	ZWS50B-24/FV	ZWS50B-48/FV
1	Nominal Output Voltage	V	12	24	48
2	Maximum Output Current	A	4.3	2.1	1.1
3	Maximum Output Power	W	51.6	50.4	52.8
4	Efficiency (Typ.) (*1)	100VAC	83	85	86
		200VAC	86	87	88
5	Input Voltage Range (*2)	-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC		
6	Input Current (Typ.) (*1)	A	1.1/0.7		
7	Inrush Current (Typ.) (*1)(*3)	-	14A at 100VAC, 28A at 200VAC, Ta=25°C, Cold Start		
8	Output Voltage Range	-	Fixed		
9	Output Voltage Accuracy	V	11.5 - 12.5	23.0 - 25.0	46.0 - 50.0
10	Maximum Ripple & Noise (*4)(*5)	0≤Ta≤70°C	150	150	200
		-10≤Ta<0°C	180	180	240
11	Maximum Line Regulation (*4)(*6)	mV	48	96	192
12	Maximum Load Regulation (*4)(*7)	mV	96	150	240
13	Temperature Coefficient (*4)	-	Less than 0.02% / °C		
14	Over Current Protection (*8)	A	4.51-	2.20-	1.15-
15	Over Voltage Protection (*9)	V	13.8 - 16.2	27.6 - 32.4	55.2 - 64.8
16	Hold-up Time (Typ.) (*1)	-	15ms(Typ) at 100% Load / 20ms(Typ) at 70% Load		
17	Leakage Current (*10)	-	Less than 0.5mA. 0.2mA(Typ) at 100VAC / 0.4mA(Typ) at 230VAC		
18	Remote Control	-	-		
19	Parallel Operation	-	-		
20	Series Operation	-	Possible		
21	Operating Temperature (*11)	-	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) 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	165		
35	Size (W x H x D)	mm	50 x 26 x 132 (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 (A243-01-02 _).
 - About a force air cooling, refer to output derating curve (A243-01-03 _).
 - Load (%) is percent of maximum output power or maximum output current, whichever is greater.

