ZWX180/L1

SPECIFICATIONS(1/2)

A234-01-01/L1-A

(This specifications sheet also apply to other option model /L2.)

	(This specifications sheet also apply to	other	option model /1	32.)	ZWX180/L1		
	ITEMS		V1	V2	V3	V4	V5 (5V SB)
1	Nominal Output Voltage	V	+3.3	+5	+12	-12	+5
2	Minimum Output Current	A	0	0	0	0	0
3	Maximum Output Current (Convection)	Α	6.0	5.0	6.0	0.2	1.4
4	Maximum Output Power Each CH	W	19.8	25.0			
	(Convection)		Combined 32W		72.0	2.4	7.0
5	Total Output Power (Convection)	W	90			<u>.</u>	
6	Maximum Output Current (Forced Air)	Α	8.4	7.0	9.0	0.3	2.0
7	Maximum Output Power Each CH	W	27.7	35.0	100.0	2.6	10.0
	(Forced Air)		Combined 54W 108.0 3.6 10.0				10.0
8	Total Output Power (Forced Air)	W	153				
9	Peak Output Current (*1)	Α	12.0	10.0	13.0	0.3	2.0
10	Peak Output Power Each CH (*1)	W	39.6	50.0	156.0	3.6	10.0
			Combi	ned 63W	130.0	5.0	10.0
11	Total Peak Output Power (*1)	W	180				
12	Efficiency (100/200VAC)(Typ) (*2)	-	81%/84%				
13	Input Voltage Range (*4)	-	85-265VAC (47-63Hz)				
14	Input Current (100/200VAC) (Typ) (*2)	-	1.9A/1.0A				
15	Inrush Current (100/200VAC) (Typ) (*5)	-	14A/28A at Cold Start (Ta=25)				
16	PFHC	-	Designed to meet IEC61000-3-2				
17	Power Factor (100/200VAC)(Typ) (*2)	-	0.99/0.93				
18	Output Voltage Accuracy	%	±5	±5	±5	±5	±5
19	Output Voltage Range	-	Fixed	Fixed	Fixed	Fixed	Fixed
20	Maximum Ripple & Noise -10 \(\frac{10}{2}\)Ta<0°C	mV	160	180	180	160	160
21	(*3,*6) 0≤Ta≤50°C	mV	120	150	150	120	120
21	Maximum Line Regulation (*3,*6,*7)		20	48	48	20	20
22	Maximum Load Regulation (*3,*6,*8)		100	300	300	100	100
23	Over Current Protection (*9) Over Voltage Protection (*10)	A -	8.82-	7.35-	9.45-	0.32-	2.1-
24	Over Voltage Protection (*10)	_	V1:114%-130%(3.76-4.3V), V2:115%-140%(5.74-7V)				
25	Hold-up Time (Typ) (*2)		V3 : 112%-130%(13.4-15.6V) 20ms at 100VAC				
26	Leakage Current (*3,*11)	_	20ms at 100VAC Less than 0.75mA				
27	Remote Sensing		Possible (V1 only)				
28	ON/OFF Control (PS_ON)		TTL compatible (H : Output Inhibit, L : Output Enable)				
	00 % 00 0 0 000000 (0 2 = 00 %)	-	: Designed to meet ATX standard.				
29	Series / Parallel Operation	-	-				
30	Operating Temperature (*12)	_	-10 - +50°C : 100%, 60°C : 60%, 70°C : 20%				
31	Operating Humidity	-	30 - 90%RH (No Dewdrop)				
32	Storage Temperature	-	-30 - +85°C				
33	Storage Humidity	-	10 - 95%RH (No Dewdrop)				
34	Cooling (*12)	-	Convection Cooling / Forced air Cooling (System air Cooling): 0.85 m ³ /min				
35	Withstand Voltage	-	Input-FG: 2kVAC(20mA), Input-Output: 3kVAC(20mA)				
			Output-FG: 500VAC(100mA) for 1min.				
36	Isolation Resistance	-	More than $100 \text{M}\Omega$ at 25°C and $70\%\text{RH}$ Output-FG : 500VDC				
37	Vibration	-	At no operating 10 - 55Hz(Sweep for 1min)				
		- 19.6 m/s ² Constant, X,Y,Z 1hour each.					
38	Shock	-	Less than 392 m/s ² at no operating.				
39	Safety	-	Approved by UL60950-1, CSA60950-1, EN60950-1, EN50178(OV II),				
40	Conducted Emission (*3)	_	Designed to meet DENAN (Section 2) at 100VAC only. Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B				
41	Radiated Emission (*3)		Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B				
41	Radiated Limission (13) - Designed to meet Enjourizensjudzen, PCC-Classe, VCCI-B						

SPECIFICATIONS(2/2)

A234-01-02/L1

(This specifications sheet also apply to other option model /L2.)

MODEL		DEL	ZWX180/L1				
	ITEMS		V1	V2	V3	V4	V5 (5V SB)
42	Immunity	-	Designed to meet IEC61000-4-2, -3, -4, -5, -6, -8, -11				
43	Weight (Typ.)	g	700				
44	Size (W x H x D)	mm	98 x 45.5 x 240 (Refer to Outline Drawing)				

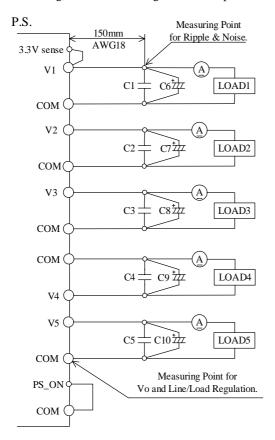
^{*}Read instruction manual carefully, before using the power supply unit.

=NOTE=

- *1. Operating time at peak output is less than 5sec.
 - (Average output power and current are less than Maximum output power and current.)
- *2. At total output power (Forced air) (V1=6.5A, V2=6.5A, V3=7.7A, V4=0.2A, V5=1.0A), Ta=25°C.
- *3. At total output power (Forced air).
- *4. For cases where conformance to various safety specs (UL, CSA, EN) are required, to be described as 100 240VAC (50/60Hz).
- *5. Not applicable for the inrush current to Noise Filter for less than 0.2ms.
- *6. Please refer to Fig. A for measurement of line & load regulation and ripple voltage.
- *7. 85 265VAC, constant load.
- *8. No load-Full load, constant input voltage.
- *9. Avoid to operate at overload or short circuit condition for more than 30 seconds.

V1,V2 and V3

- : OCP circuit will shut down output except V5 with delay (more than 5s), manual reset (PS_ON reset or re power on.).
- V4: Constant current limit with automatic recovery.
- V5: Constant current limit in conjunction with all output with automatic recovery.
- *10. OVP circuit will shut down output, manual reset (PS_ON reset or re power on.).
- *11. Measured by the each measuring method of UL, CSA, EN and DENAN (at 60Hz), Ta=25°C.
- *12. At forced air cooling, standard mounting. Refer to output derating curve.(A234-01-03_, A234-01-04_)



Measure with EIAJ RC-9131 probe.

Bandwidth of scope: 100MHz

	Capacitance
C1,C2,C3,C4,C5 : Film Cap.	0.1 μF
C6,C7,C8,C9,C10 : Elec. Cap.	100 μF

Fig.A