

**ZWX240/L1**

## SPECIFICATIONS(1/2)

A235-01-01/L1-B

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

MODEL			ZWX240/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)	A	7.0	6.0	8.0	0.2	1.4
4	Maximum Output Power Each CH (Convection)	W	23.1	30.0	96.0	2.4	7.0
5	Total Output Power (Convection)	W	120				
6	Maximum Output Current (Forced Air)	A	9.8	8.4	11.2	0.3	2.0
7	Maximum Output Power Each CH (Forced Air)	W	32.3	42.0	134.4	3.6	10.0
8	Total Output Power (Forced Air)	W	204				
9	Peak Output Current (*1)	A	14.0	12.0	16.0	0.3	2.0
10	Peak Output Power Each CH (*1)	W	46.2	60.0	192.0	3.6	10.0
11	Total Peak Output Power (*1)	W	240				
12	Efficiency (100/200VAC )(Typ) (*2)	-	81%/84%				
13	Input Voltage Range (*4)	-	85-265VAC (47-63Hz)				
14	Input Current (100/200VAC) (Typ) (*2)	-	2.6A/1.3A				
15	Inrush Current (100/200VAC) (Typ) (*5)	-	14A/28A at Cold Start (Ta=25°C)				
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 (*3,*6)	-10≤Ta<0°C	mV	160	180	180	160
		0≤Ta≤50°C	mV	120	150	150	120
21	Maximum Line Regulation (*3,*6,*7)	mV	20	48	48	20	20
22	Maximum Load Regulation (*3,*6,*8)	mV	100	300	300	100	100
23	Over Current Protection (*9)	A	10.3-	8.82-	11.8-	0.32-	2.1-
24	Over Voltage Protection (*10)	-	V1 : 114%-130%(3.76-4.3V), V2 : 115%-140%(5.74-7V) V3 : 112%-130%(13.4-15.6V)				
25	Hold-up Time (Typ) (*2)	-	20ms at 100VAC				
26	Leakage Current (*3,*11)	-	Less than 0.75mA				
27	Remote Sensing		Possible (V1 only)				
28	ON/OFF Control (PS_ON)	-	TTL compatible (H : Output Inhibit, L : Output Enable) : 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 <sup>3</sup> /min				
35	Withstand Voltage	-	Input-FG : 2kVAC(20mA), Input-Output : 3kVAC(20mA) Output-FG : 500VAC(100mA) for 1min.				
36	Isolation Resistance	-	More than 100MΩ at 25°C and 70%RH Output-FG : 500VDC				
37	Vibration	-	At no operating 10 - 55Hz(Sweep for 1min.) 19.6 m/s <sup>2</sup> Constant, X,Y,Z 1hour each.				
38	Shock	-	Less than 392 m/s <sup>2</sup> at no operating.				
39	Safety	-	Approved by UL60950-1, CSA60950-1, EN60950-1, EN50178(OV II), Designed to meet Den-an Appendix12 (J60950-1)				
40	Conducted Emission (*3)	-	Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B				
41	Radiated Emission (*3)	-	Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B				

# ZWX240/L1

## SPECIFICATIONS(2/2)

A235-01-02/L1

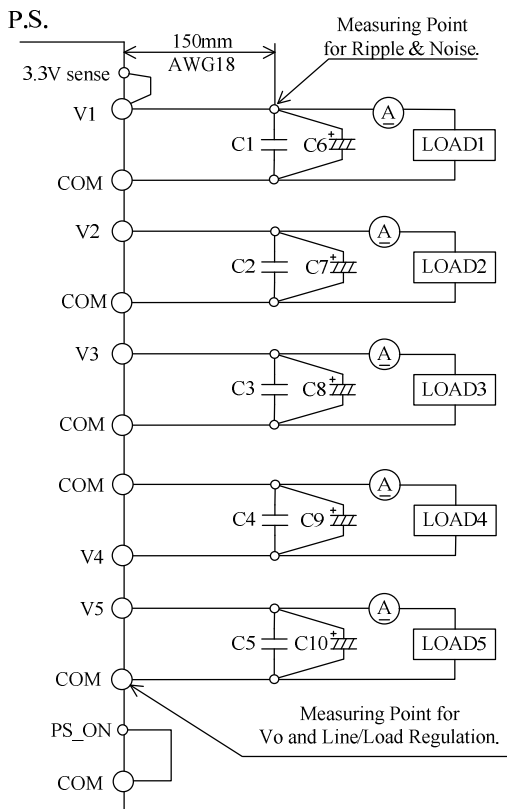
( This specifications sheet also apply to other option model /L2.)

ITEMS			MODEL		ZWX240/L1				
			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	800						
44	Size (W x H x D)	mm	109 x 45.5 x 255 ( 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=9.0A, V2=8.0A, V3=10.6A, 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.(A235-01-03\_, A235-01-04\_)



Measure with EIAJ RC-9131 probe.  
Bandwidth of scope : 100MHz

	Capacitance
C1,C2,C3,C4,C5 : Film Cap.	0.1 $\mu$ F
C6,C7,C8,C9,C10 : Elec. Cap.	100 $\mu$ F

Fig.A