

# ZWS 50 Specifications

NEMIC-LAMBDA

\*:For delivery, contact to our sales office.

A156-01-01B

ITEMS		MODEL	ZWS50 -3	ZWS50 -5	ZWS50 -12	ZWS50 -15	ZWS50 -24	ZWS50 -36	ZWS50 -48	
1	Nominal Output Voltage	V	3.3	5	12	15	24	36	48	
2	Minimum Output Current	A	0	0	0	0	0	0	0	
3	Maximum Output Current	A	10	10	4.3	3.5	2.1	1.4	1.1	
4	Maximum Peak Output Current (*1)	A	12	12	5.16	4.2	2.52	1.68	1.32	
5	Maximum Output Power	W	33	50	51.6	52.5	50.4	50.4	52.8	
6	Maximum Peak Output Power (*1)	W	39.6	60	61.92	63	60.48	60.48	63.36	
7	Efficiency (Typ) (*2)	%	73	77	80	81	82	82	82	
8	Input Voltage Range (*3)	-	85 - 265VAC ( 47 - 440Hz ) or 110 - 330VDC							
9	Input Current (Typ)	-	1.4 at 100VAC, 0.7A at 200VAC							
10	Inrush Current(Typ)	-	15A at 100VAC, 30A at 200VAC ( Ta = 25°C Cold Start )							
11	Output Voltage Range	-	±10%							
12	Maximum Ripple & Noise (*10)	0 - +60°C	mV	120	120	150	150	200	300	400
		-10 - 0°C	mV	160	160	180	180	200	300	400
13	Maximum Line Regulation (*4,10)	mV	20	20	48	60	96	144	192	
14	Maximum Load Regulation (*5,10)	mV	40	40	96	120	150	240	300	
15	Maximum Temperature Drift (*6)	mV	60	60	140	180	280	420	560	
16	Over Current Protection (*7)	-	125% -							
17	Over Voltage Protection (*8)	-	115 - 135%							
18	Hold-up Time (Typ) (*2)	-	17mS at 100VAC, 50W, Ta = 25°C							
19	Parallel Operation	-	Impossible							
20	Series Operation (*9)	-	Possible							
21	Operating Temperature (*11)	-	-10 - +50°C( 100% ), +60°C ( 70% )							
22	Operating Humidity	-	30 - 90%RH (No dewdrop)							
23	Storage Temperature	-	-30 - +85°C							
24	Storage Humidity	-	10 - 95%RH (No dewdrop)							
25	Cooling	-	Convection Cooling							
26	Withstand Voltage	-	Input - FG : 2KVAC (20mA), Input - Output : 3KVAC (20mA) Output - FG : 500VAC (100mA) for 1min							
27	Isolation Resistance	-	More than 100MΩ at 25°C and 70%RH , Output - FG : 500VDC							
28	Vibration	-	10 - 55Hz Amplitude (Sweep for 1min). Less than 2G, X,Y,Z 1hour each.							
29	Shock	-	Less than 20G							
30	Safety	UL1950	-	Approved					Built to meet	
		CSA950	-	Approved					Built to meet	
		EN60950	-	Approved					Built to meet	
		DENTORI	-	Built to meet						
31	Conducted Noise	-	Built to meet EN55011-B,EN55022-B, FCC-ClassB, VCCI-2.							
32	Weight (Typ)	g	360							
33	Size (WxHxD)	mm	55 x 26 x 195 ( Refer to Outline Drawing )							

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

=NOTES=

- \*1. Operating time at peak output is less than 10sec. ( Duty = 0.35 )
- \*2. At 100VAC and maximum output current, Ta=25°C.
- \*3. For cases where conformance to various safety specs (UL, CSA, EN) are required, to be described as 100-240VAC, 50/60Hz on name plate.
- \*4. From 85 - 265VAC , constant load.
- \*5. From Min load-Full load ( Maximum power ), constant input voltage.
- \*6. From -10 - +50°C, constant input voltage and load.
- \*7. Current limiting with automatic recovery. Avoid to operate over load or dead short for more than 30 seconds.
- \*8. OVP circuit will shutdown output, manual reset.
- \*9. Refer to Instruction Manual.
- \*10. Please refer to Fig A for measurement of line & load regulation and output ripple voltage.
- \*11. At standard mounting method, Fig B.

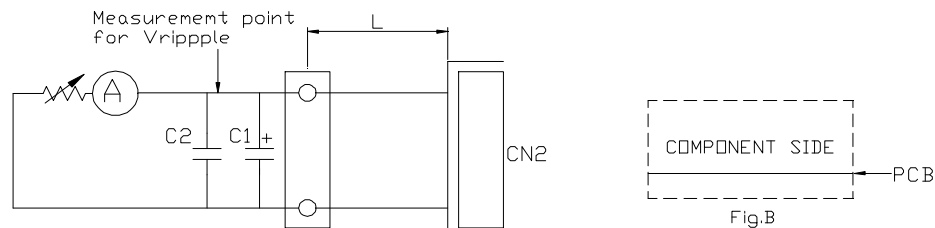


Fig.A L:150mmAWG #18X2  
C1:Elec.Cap 100uF  
C2:Film Cap 1uF  
Bandwidth of scope:100MHz

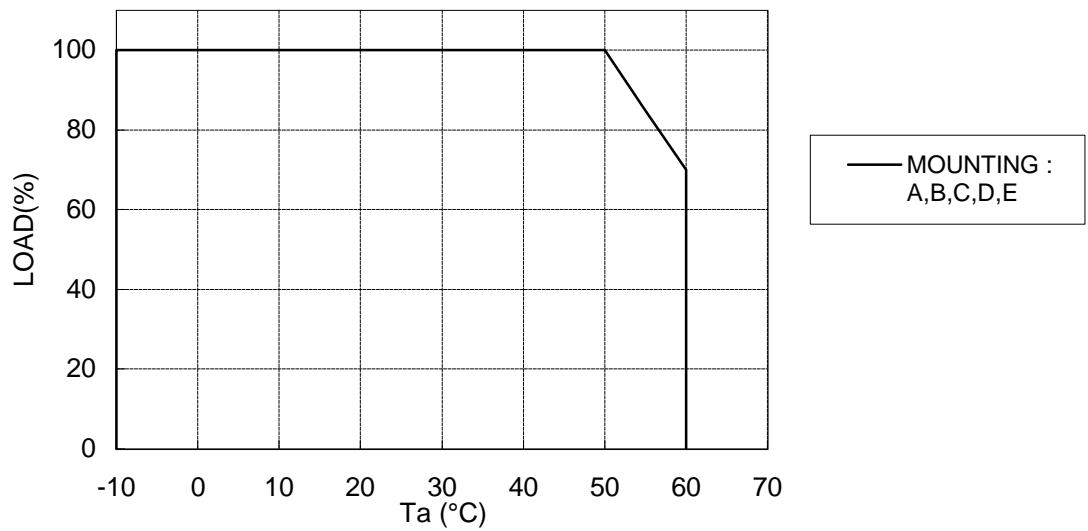
Measurement point for Vo.  
Line/Load Regulation.

# ZWS 50 OUTPUT DERATING

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Ta (°C)	LOAD (%)				
	MOUNTING : A	MOUNTING : B	MOUNTING : C	MOUNTING : D	MOUNTING : E
-10 - +30	100	100	100	100	100
40	100	100	100	100	100
45	100	100	100	100	100
50	100	100	100	100	100
55	85	85	85	85	85
60	70	70	70	70	70

OUTPUT DERATING CURVE



- MOUNTING : A
- MOUNTING : B
- MOUNTING : C
- MOUNTING : D
- MOUNTING : E
- DON'T USE

(STANDARD MOUNTING)

