## **ZWD100PAF/L SPECIFICATIONS**

#### PA572-01-01/L-B

#### (This specifications sheet also apply to option model /JL, /TL.)

MODEL			ZWD100PAF-0524/L		
ITEMS			V1	V2	
1 Nominal Output Voltage		V	5	24	
2 Maximum Output Current		Α	5	4	
3 Peak Output Current (100/200VAC)	(*1)	Α	-	7 / 8	
Total Average Output Power		W	100		
		W	- 168 / 192		
6 Total Peak Output Power (100/200V	VAC) (*1)	W	172	2/196	
7 Efficiency (100/200VAC)	(Typ) (*2)	%	79 / 81		
8 Input Voltage Range	(*3)	-	85 - 265VAC (47-63Hz) or 120 - 370VDC		
9 Input Current (100/200VAC)	(Typ) (*2)	Α	1.28 / 0.65		
10 Inrush Current	(Typ) (*4)	-	15A at 100VAC, 30A at 200VAC, Ta=25°C, Cold Start		
11 PFHC		-	Designed to meet IEC61000-3-2		
2 Power Factor (100/200VAC)	(Typ) (*2)	-	0.99/0.95		
13 Output Voltage Accuracy	(*2)	V	4.9 - 5.1	23.52 - 24.48	
14 Output Voltage Adjustable Range		V	4.5 - 5.5	22.8 - 27.6	
15 Maximum Ripple & Noise	0≤Ta≤70°C	mV	120	150	
	(*5) -10 <u>&lt;</u> Ta<0°C		160	180	
6 Maximum Line Regulation	(* 5, 6)		20	96	
7 Maximum Load Regulation	(*5,7)		40	150	
8 Temperature Coefficient	( 3, 7)	-	0.02%/°C		
9 Over Current Protection	(*8)	%	> 105	> 205	
20 Over Voltage Protection	(*9)	%	120 - 145	120 - 145	
21 Hold-Up Time	(Typ) (*2)	ms	40	20	
22 Leakage current	(* 10)			vailable> /FG. Refer to application note	
23 Remote ON/OFF Control	( 10)	mA	-	Possible	
24 Parallel Operation			Not possible		
Parallel Operation     -       5 Series Operation     -		Not possible			
1			-10  to  + 70  °C		
20 Operating reinperature	(*11)	-	-10  to  + 70  °C Convection: -10 to +50°C : 100%, +60°C : 50%, +70°C : 0%		
27 Operating Humidity		-	20 - 90 %RH (No dewdrop)		
28 Storage Temperature		-	- 30 to +85°C		
29 Storage Humidity		-	10 - 95%RH (No dewdrop)		
30 Cooling		-	Convection cooling		
31 Withstand Voltage		-	Input - Output : 3.0kVAC (20mA), Input - FG : 2.0kVAC (20mA) Output - FG : 500VAC (100mA) for 1min.		
32 Isolation Resistance		-	More than $100M\Omega$ at Ta=25°C and 70%RH, Output - FG : 500VDC		
33 Vibration (Non-Operating)		-	10 - 55Hz ( sweep for 1min )		
()			Less than 19.6m/s <sup>2</sup> Constant, X, Y, Z 1hour each		
34 Shock (In package)		-		n 196.1m/s <sup>2</sup>	
34 Shock (in package) 35 Safety		-		1, EN62368-1,UL60950-1, CSA60950-1,	
		-		0950-1 : 20/12/2020), EN50178,	
				EN-AN at 100VAC only	
36 EMI		-			
36 EMI 37 Immunity		-		Complies with FCC-B, CISPR22-B, EN55032-B, VCCI-B	
			Designed to meet EN61000-4-2,-3,-4,-5,-6,-8,-11 680		
38 Weight (Typ)		g			
39 Size (W.H.D.)		mm	85 x 41 x 252 (Refe	er to Outline Drawing)	

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

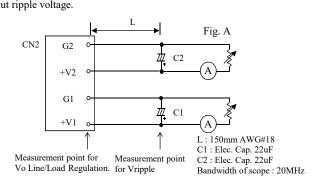
 \* 1 : Operating period at peak output current is less than 10sec; Duty ≤ 0.35. (Average output power and current is less than maximum output power and current) For peak load derating method, please refer to instruction manual for details.

\* 2 : At 100/200VAC and total average output power,  $Ta = 25^{\circ}C$ .

\* 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 : Not applicable for the in-rush current to Noise Filter for less than 0.2ms.

- \* 5 : Please refer to Fig A for measurement of line & load regulation and output ripple voltage.
- (Measure with normal probe)
- \* 6 : 85 132VAC and 170 265VAC, constant load.
- \* 7 : No load Full load, constant input voltage.
- \* 8 : Current limiting with automatic recovery. Avoid to operate at overload or dead short for more than 30seconds.
- \* 9 : OVP circuit will shutdown output, manual reset. (Line recycle) (OVP for V1, V1 & V2 shutdown, OVP for V2, only V2 shutdown)
- \*10: Measured by each measuring method of UL, CSA, EN and DEN-AN (at 60Hz).
- \*11: At standard mounting method, Fig B.
  - Load(%) is percent of maximum output load (Item 2 and 4), do not exceed derating in both Maximum Output Current and Power.
    For other mountings, refer to derating curve PA572-01-02/L\_
  - When forced air cooling, refer to derating curve PA572-01-03/L



Component side

Fig. B

Π

# **OUTPUT DERATING**

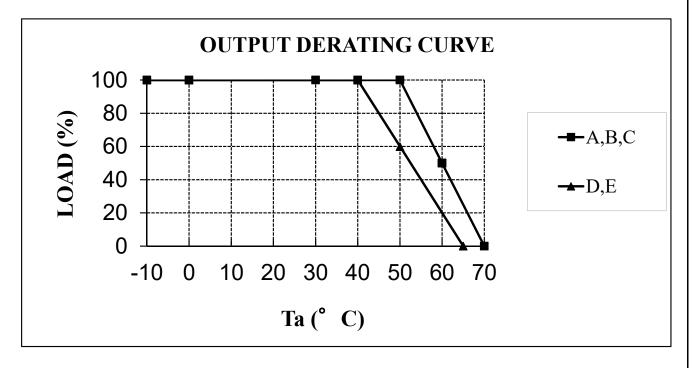
### PA572-01-02/L

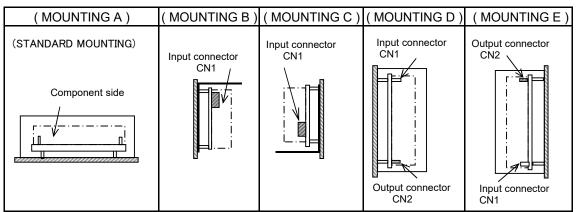
(This specifications sheet also apply to option model /JL, /TL.)

## ZWD100PAF-0524/L

### **\*COOLING: CONVECTION COOLING**

LOADING CONDITION(%)						
Ta (°C)	Mounting A,B,C	Mounting D,E				
-10~40	100	100				
50	100	60				
60	50	20				
65	25	0				
70	0	-				





# **TDK-Lambda**

# **OUTPUT DERATING**

### PA572-01-03/L

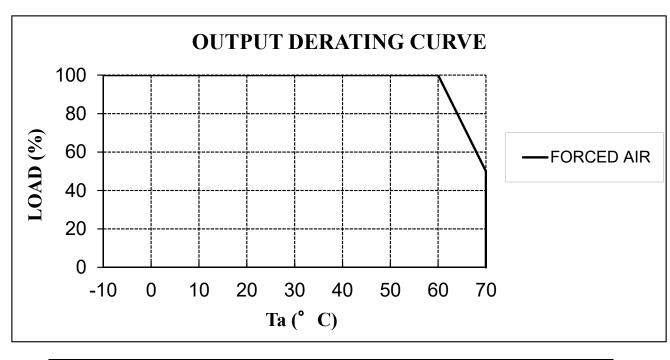
(This specifications sheet also apply to option model /JL, /TL.)



\*COOLING: FORCED AIR COOLING

	LOADING CONDITION (%)		
Ta (°C)	Mounting A,B,C,D,E		
-10~60	100		
70	50		

Recommended Minimum Air Velocity:0.7m/s (Measured at component side of PCB, Air must flow through component side.)



( MOUNTING A )	( MOUNTING B )	( MOUNTING C )	( MOUNTING D )	( MOUNTING E )
(STANDARD MOUNTING)	Input connector CN1 ,	Input connector CN1	Input connector CN1	Output connector CN2
			Output connector CN2	Input connector CN1