

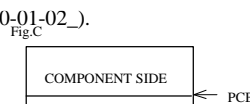
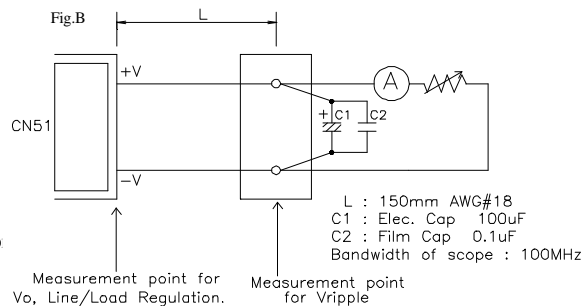
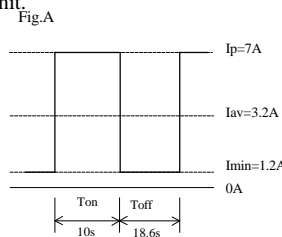
A220-01-01-A

MODEL		VS75P-24	
ITEMS			
1	Nominal Output Voltage	-	24V
2	Minimum Output Current	-	0A
3	Average Output Current	-	3.2A
4	Peak Output Current (*1)	-	7.0A
5	Average Output Power	-	76.8W
6	Peak Output Power (*1)	-	168W
7	Efficiency (Typ) (*2)	-	83.0%
8	Input Voltage Range (*3)	-	85-132VAC (47-440Hz) or 110-175VDC
9	Input Current (Typ) (*2)	-	1.9A
10	Inrush Current (Typ) (*4)	-	30A at 100VAC, cold start Ta:25°C
11	Output Voltage Range	-	21.6 ~ 26.4
12	Maximum Ripple & Noise (*5)	0≤Ta≤60°C	180mV
		-10≤Ta<0°C	240mV
13	Maximum Line Regulation (*5,6)	-	96mV
14	Maximum Load Regulation (*5,7)	-	150mV
15	Maximum Temperature Drift (*5,8)	-	240mV
16	Over Current Protection (*9)	-	7.1A ~ at Ta:25°C
17	Over Voltage Protection (*10)	-	115% ~ 135%
18	Hold-Up Time (Typ) (*2,13)	-	17ms
19	Leakage Current (*11)	-	Less than 0.75mA
20	Parallel Operation		-
21	Series Operation		Possible
22	Operating Temperature (*12)	-	Convection: -10~50°C:100%, 60°C:70%
23	Operating Humidity	-	30 ~ 90%RH (No dewdrop)
24	Storage Temperature	-	-30 ~ +85°C
25	Storage Humidity	-	10 ~ 95%RH (No dewdrop)
26	Cooling	-	Convection Cooling
27	Withstand Voltage	-	Input-Output : 2kVAC(20mA), Input-FG : 2kVAC(20mA) Output-FG : 500VAC(100mA) 1min.
28	Isolation Resistance	-	More than 100MΩ at Ta:25°C and 70%RH Output-FG 500VDC
29	Vibration	-	At no operating, 10-55Hz (sweep for 1min) 19.6m/s <sup>2</sup> Constant, X,Y,Z 1hour each
30	Shock	-	Less than 196.1m/s <sup>2</sup>
31	Safety	-	Approved by UL60950, CSA60950, EN60950 & Built to meet DENAN
32	EMI (*13)	-	Built to meet VCCI-B & FCC class B
33	Weight (Typ)	-	280g
34	Size (WxHxD)	mm	50 x 29 x 222

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

==NOTES==

- \*1. Operating time at peak output current is less than 10sec. with average output power and current (Duty=0.35). Please refer to Fig.A.& A220-01-03\_.
- \*2. At 100VAC and average output power, Ta=25°C.
- \*3. For cases where conformance to various safety specs are required to be described as 100-120VAC, 50/60Hz on name plate.
- \*4. Not applicable for the inrush current to Noise Filter for less than 0.2ms.
- \*5. Please refer to Fig B for measurement determination of line & load regulation and output ripple voltage.
- \*6. 85-132VAC, constant load.
- \*7. Min load - full load (Average output power), constant input voltage.
- \*8. -10 ~ +50°C constant input voltage and load.
- \*9. Current limiting with automatic recovery. Avoid to operate at over load or dead short for more than 30 seconds.
- \*10. OVP circuit will shutdown output, manual reset (Re power o
- \*11. Measured by each measuring method of UL, CSA, EN and DENAN (at 60Hz).
- \*12. At standard mounting method Fig C, Refer to derating curve (A220-01-02\_).  
- Load(%) is percent of average output load.  
Do not exceed derating in both average output power and current.
- \*13. At 3.2A continuous output current condition.



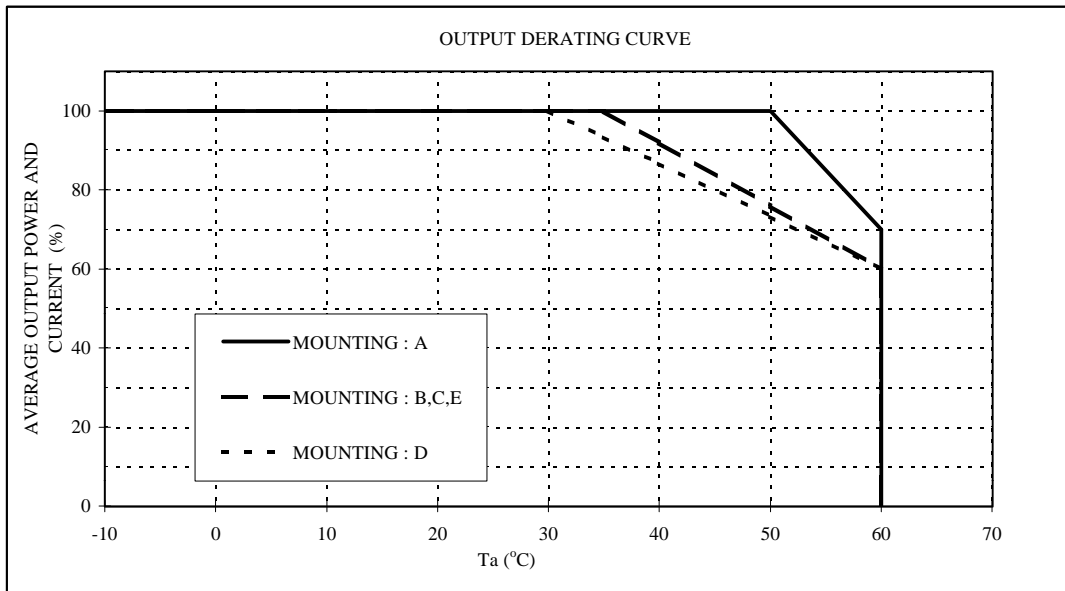
Probe: JEITA RC-9131

**VS75P**

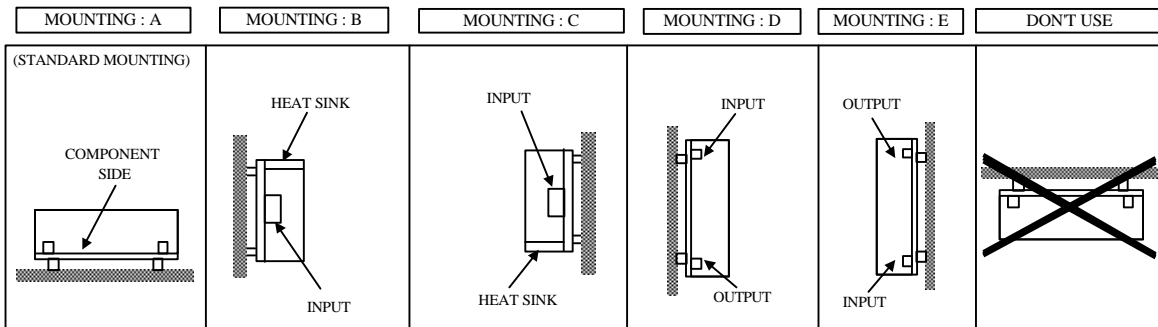
**OUTPUT DERATING**

A220-01-02-A

Ta (°C)	AVERAGE OUTPUT POWER AND CURRENT (%)		
	MOUNTING : A	MOUNTING : B,C,E	MOUNTING : D
-10	100	100	100
0	100	100	100
30	100	100	100
35	100	100	93.3
50	100	76	73.3
60	70	60	60

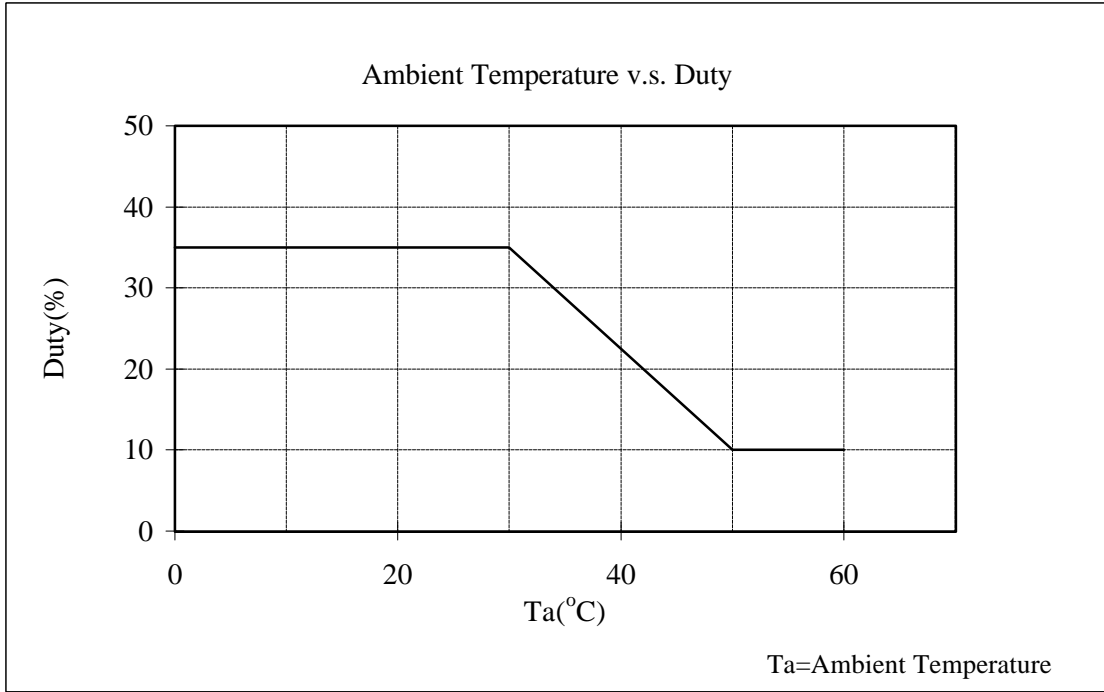


\*PEAK OUTPUT CURRENT DOES NOT NEED



**Peak Output Current Condition**

A220-01-03



**Peak Output Current**

Relation between average output current and peak output current must satisfy formulas below. Also operating time at peak output current should be less than 10 sec.

$I_p$  : Peak output current (A)  
 $I_{av}$  : Average output current of Specification (A)  
 $I_m$  : Average output current (A)  
 $t$  : Pulse width of peak output current (sec)  
 (Operating time at peak output)  
 $T$  : Period (sec)

$$I_{av} \geq I_m = \frac{I_p \times t}{T}$$

$I_p$   
 $aA$   
 $0A$

$$I_{av} \geq I_m = \frac{(I_p - a) \times t}{T} + a$$