

**JWS 50****SPECIFICATIONS**

A157-01-01A

ITEMS		MODEL	JWS50 -3	JWS50 -5	JWS50 -12	JWS50 -15	JWS50 -24	JWS50 -48				
1	Nominal Output Voltage	V	3.3	5	12	15	24	48				
2	Maximum Output Current	A	10	10	4.3	3.5	2.2	1.1				
3	Maximum Output Power	W	33	50	51.6	52.5	52.8	52.8				
4	Efficiency (Typ)	(*1) %	65	74	76	77	79	79				
5	Input Voltage Range	(*2)	-	85 - 265VAC (47-63Hz) or 120 - 330VDC								
6	Input Current (100/200VAC)(Typ)	(*1)	A	0.6/0.3	0.8/0.4							
7	Inrush Current(Typ)	-	14A at 100VAC, 28A at 200VAC, Ta=25°C, Cold Start									
8	PFHC	-	Built to meet EN61000-3-2									
9	Power Factor (100/200VAC)(Typ)	(*1)	-	0.99/0.95								
10	Output Voltage Range	V	2.85-3.63	4.5-5.5	10.8-13.2	13.5-16.5	21.6-26.4	43.2-52.8				
11	Maximum Ripple & Noise	0 ~ +60°C	mV	120	120	150	150	200				
		(*3) -10 ~ 0°C	mV	160	160	180	180	240				
12	Maximum Line Regulation	(*4)	mV	20	20	48	60	96				
13	Maximum Load Regulation	(*5)	mV	40	40	96	120	150				
14	Temperature Coefficient			Less than 0.02% / °C								
15	Over Current Protection	(*6)	A	10.5 ~	10.5 ~	4.5 ~	3.6 ~	2.3 ~				
16	Over Voltage Protection	(*7)	-	3.79-4.95	5.75-6.75	13.8-16.2	17.3-20.3	27.6-32.4				
17	Hold-up Time (Typ)	(*8)	-	20ms								
18	Leakage Current	(*9)	-	0.75mA MAX, 0.2mA(Typ) at 100VAC / 0.44mA(Typ) at 230VAC								
19	Remote Sensing	-		-								
20	Parallel Operation	-		-								
21	Series Operation	-		Possible								
22	Operating Temperature	(*10)	-	-10 ~ +60°C (-10 ~ +50°C:100%, +60°C:60%)								
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 - FG : 2KVAC (20mA), Input - Output : 3KVAC (20mA) Output - FG : 500VAC (100mA) for 1min								
28	Isolation Resistance	-		More than 100Mohm at 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 (In package)	-		Less than 196.1m/s <sup>2</sup>								
31	Safety	(*11)	-	Approved by UL1950, CSA950, EN60950, VDE0160. Built to meet DENTORI								
32	Conducted Emission	-		Built to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B.								
33	Radiated Emission	-		Built to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B.								
34	Weight(Typ.)	g		350								
35	Size (WxHxD)	mm		37 x 85 x 159 ( Refer to Outline Drawing )								

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

## =NOTES=

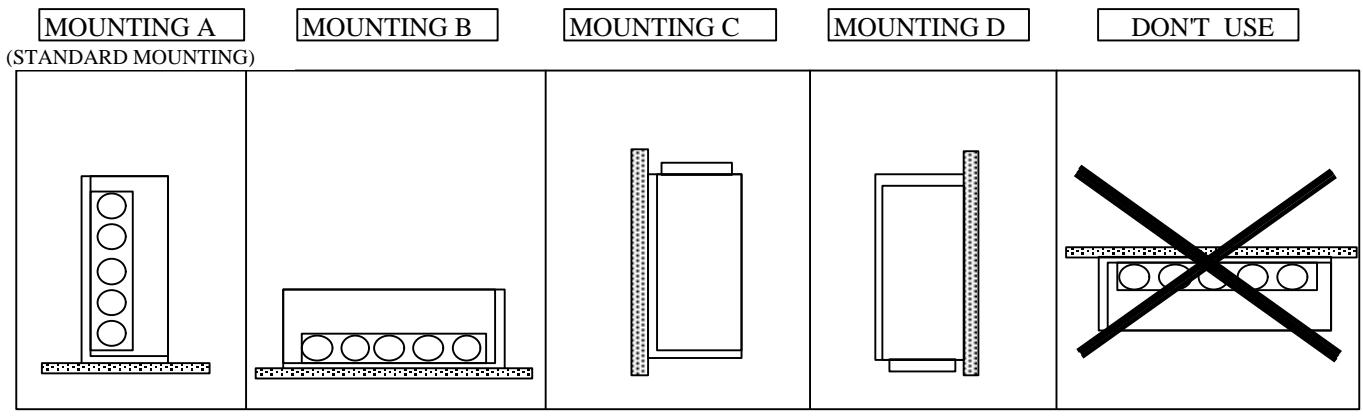
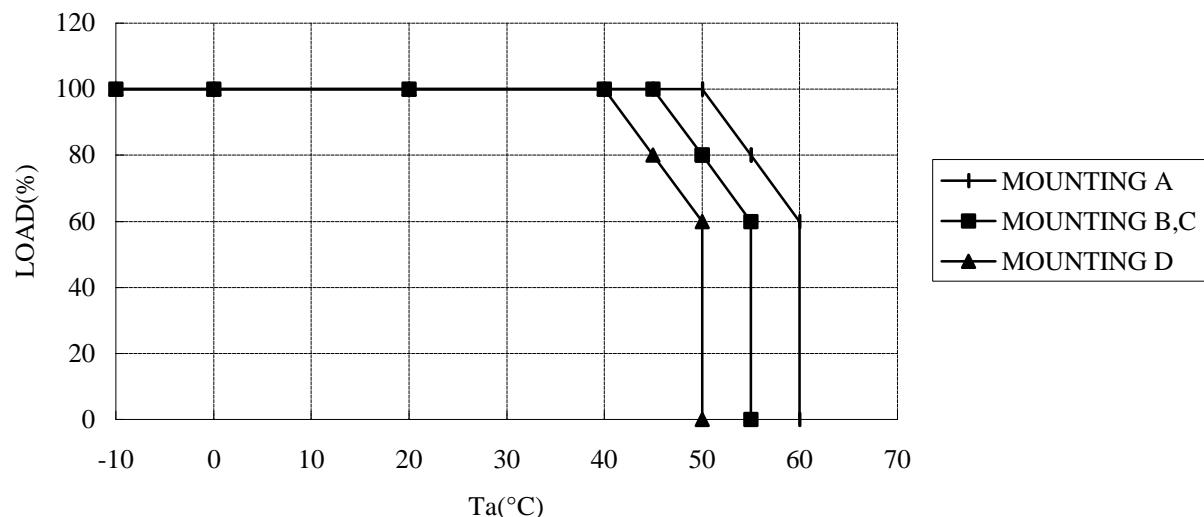
- \*1. At 100/200VAC, Ta=25°C and maximum output power.
- \*2. For cases where conformance to various safety specs (UL, CSA, EN) are required, input voltage range will be 100-240VAC(50/60Hz).
- \*3. Measure with EIAJ RC-9131 probe, Bandwise of scope :100MHz.
- \*4. 85 - 265VAC , constant load.
- \*5. No load-Full load, constant input voltage.
- \*6. Constant current limit with automatic recovery.
- \*7. OVP circuit will shut down output, manual reset (Line recycle).
- \*8. At 100/200VAC nominal output voltage and maximum output current.
- \*9. Measured by the each measuring method of UL,CSA,EN and DENTORI(at 60Hz).
- \*10. Ratings - Derating at standard mounting.
  - Load (%) is percent of maximum output power or maximum output current, whichever is greater.
  - As for other mountings, refer to derating curve (A157-01-02\_).
- \*11. As for DENTORI, built to meet at 100VAC.

**JWS 50****OUTPUT DERATING**

A157-01-02

Ta(°C)	LOAD(%)			
	MOUNTING A	MOUNTING B	MOUNTING C	MOUNTING D
-10 ~+40	100	100	100	100
45	100	100	100	80
50	100	80	80	60
55	80	60	60	-
60	60	-	-	-

OUTPUT DERATING CURVE



**JWS 50****SPECIFICATIONS**

A157-01-03B

ITEMS		MODEL	JWS50 -9	JWS50 -28
1	Nominal Output Voltage	V	9	28
2	Maximum Output Current	A	5.6	2.0
3	Maximum Output Power	W	50.4	56.0
4	Efficiency (Typ) (*1)	%	74	79
5	Input Voltage Range (*2)	-	85 - 265VAC (47-63Hz) or 120 - 330VDC	
6	Input Current (100/200VAC)(Typ) (*1)	A		0.8/0.4
7	Inrush Current(Typ)	-	14A at 100VAC, 28A at 200VAC, Ta=25°C, Cold Start	
8	PFHC	-	Built to meet EN61000-3-2	
9	Power Factor (100/200VAC)(Typ) (*1)	-	0.99/0.95	
10	Output Voltage Range	V	8.1-9.9	25.2-30.8
11	Maximum Ripple & Noise (*3)	0 ~ +60°C mV	150	150
		-10 ~ 0°C mV	180	180
12	Maximum Line Regulation (*4)	mV	36	112
13	Maximum Load Regulation (*5)	mV	76	160
14	Temperature Coefficient		Less than 0.02%/ $^{\circ}$ C	
15	Over Current Protection (*6)	A	5.88 ~	2.10 ~
16	Over Voltage Protection (*7)	-	10.4-12.2	32.2-37.8
17	Hold-up Time (Typ) (*8)	-	20ms	
18	Leakage Current (*9)	-	0.75mA MAX, 0.2mA(Typ) at 100VAC / 0.44mA(Typ) at 230VAC	
19	Remote Sensing	-	-	
20	Parallel Operation	-	-	
21	Series Operation	-	Possible	
22	Operating Temperature (*10)	-	-10 ~+60°C (-10 ~+50°C:100%, +60°C:60%)	
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 - FG : 2kVAC (20mA), Input - Output : 3kVAC (20mA) Output - FG : 500VAC (100mA) for 1min	
28	Isolation Resistance	-	More than 100Mohm at 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 (In package)	-	Less than 196.1m/s <sup>2</sup>	
31	Safety (*11)	-	Approved by UL1950, CSA950, EN60950, VDE0160. Built to meet DENTORI	
32	Conducted Emission	-	Built to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B.	
33	Radiated Emission	-	Built to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B.	
34	Weight(Typ.)	g	350	
35	Size (WxHxD)	mm	37 x 85 x 159 ( Refer to Outline Drawing )	

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- \*3. Measure with EIAJ RC-9131 probe, Bandwise of scope :100MHz.
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- \*9. Measured by the each measuring method of UL,CSA,EN and DENTORI(at 60Hz).
- \*10. Ratings - Derating at standard mounting.
  - Load (%) is percent of maximum output power or maximum output current, whichever is greater.
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- \*11. As for DENTORI, built to meet at 100VAC.