

**JWS 50/A**

A157-01-01/A-A

**SPECIFICATIONS**

ITEMS		MODEL	JWS50 -3/A	JWS50 -5/A	JWS50 -12/A	JWS50 -15/A	JWS50 -24/A	JWS50 -48/A					
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 ~ +55°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	192					
13	Maximum Load Regulation	(*5)	mV	40	40	96	120	240					
14	Temperature Coefficient	-	Less than 0.02% /°C										
15	Over Current Protection	(*6)	A	10.5 ~	10.5 ~	4.5 ~	3.6 ~	2.3 ~ 1.15 ~					
16	Over Voltage Protection	(*7)	V	3.79-4.95	5.75-6.75	13.8-16.2	17.3-20.3	27.6-32.4 55.2-64.8					
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 ~ +55°C (-10 ~ +45°C:100%, +55°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 100MΩ at 25°C and 70%RH Output - FG...500VDC										
29	Vibration	-	At no operating, 10-55Hz (Sweep for 1min) 19.6m/s² Constant, X,Y,Z 1h each.										
30	Shock (In package)	-	Less than 196.1m/s²										
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	400										
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.

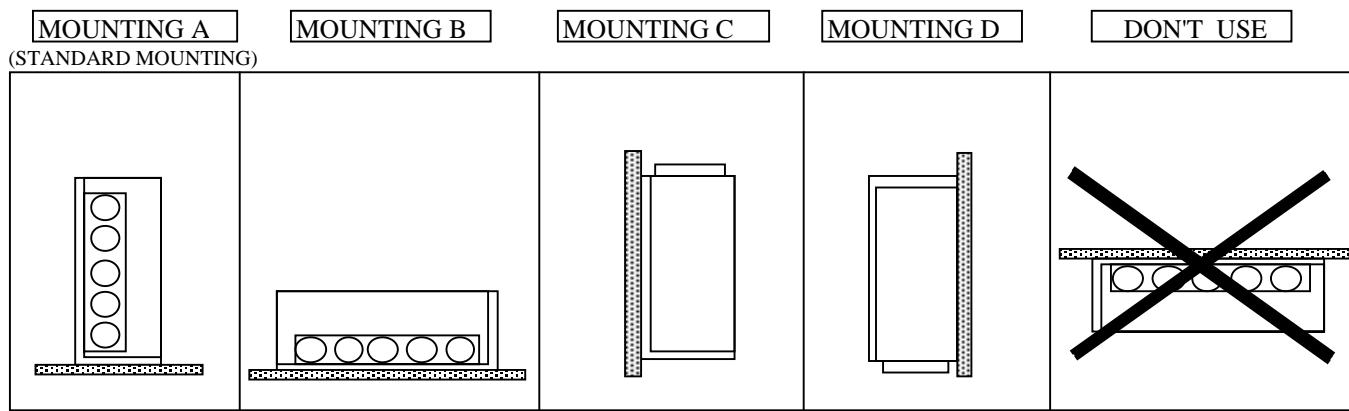
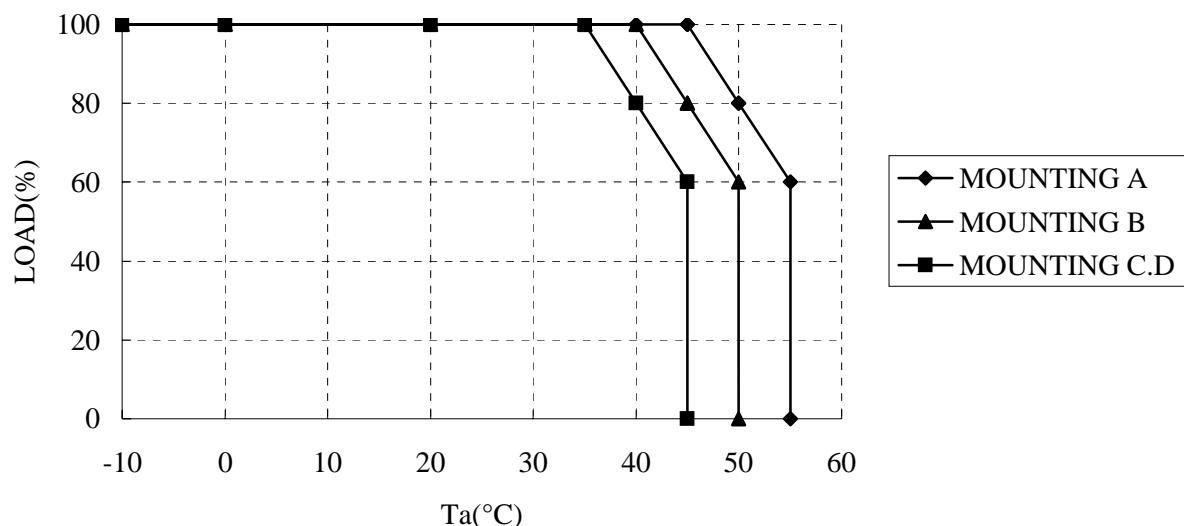
- As for other mountings, refer to derating curve (A157-01-02/A\_).

\*11. As for DENTORI, built to meet at 100VAC.

**OUTPUT DERATING**

A157-01-02/A

Ta(°C)	LOAD(%)			
	MOUNTING A	MOUNTING B	MOUNTING C	MOUNTING D
-10 ~+35	100	100	100	100
40	100	100	80	80
45	100	80	60	60
50	80	60	-	-
55	60	-	-	-

**OUTPUT DERATING CURVE**

ITEMS		MODEL	JWS50 -9/A	JWS50 -28/A
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 0 ~ +55°C	mV	150	150
	(*3) -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% / °C	
15	Over Current Protection (*6)	A	5.88 ~	2.10 ~
16	Over Voltage Protection (*7)	V	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 ~ +55°C (-10 ~ +45°C:100%, +55°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	
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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	400	
35	Size (W x H x D)	mm	37 x 85 x 159 ( Refer to Outline Drawing )	

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- \*8. At 100/200VAC nominal output voltage and maximum output current.
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