

**JWS 150**

**SPECIFICATIONS**

A160-01-01B

MODEL		JWS150	JWS150	JWS150	JWS150	JWS150	JWS150		
ITEMS		-3	-5	-12	-15	-24	-48		
1	Nominal Output Voltage	V	3.3	5	12	15	24	48	
2	Maximum Output Current	A	30	30	13	10	6.5	3.3	
3	Maximum Output Power	W	99	150	156	150	156	158.4	
4	Efficiency (Typ) (*1)	%	67	75	77	78	80	80	
5	Input Voltage Range (*2)	-	85 - 265VAC (47 - 63Hz) or 120 - 330VDC						
6	Input Current (100/200VAC)(Typ) (*1)	A	1.5/0.75	2.0/1.0					
7	Inrush Current(Typ)	-	25A at 100VAC, 50A at 200VAC, Ta=25°C, Cold Start						
8	PFHC	-	Designed 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 (*3)	0 - +60°C	mV	120	120	150	150	150	200
		-10 - 0°C	mV	160	160	180	180	180	240
12	Maximum Line Regulation (*4)	mV	20	20	48	60	96	192	
13	Maximum Load Regulation (*5)	mV	40	40	96	120	150	240	
14	Temperature Coefficient	-	Less than 0.02%/°C						
15	Over Current Protection (*6)	A	31.5 -	31.5 -	13.65 -	10.5 -	6.82 -	3.46 -	
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	-	Possible						
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 100MΩ 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 1h each.						
30	Shock (In package)	-	Less than 196.1m/s <sup>2</sup>						
31	Safety (*11)	-	Approved by UL60950-1, CSA C22.2 No.60950-1 & EN60950-1. Designed to meet DENAN.						
32	Conducted Emission	-	Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B.						
33	Radiated Emission	-	Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B.						
34	Weight(Typ.)	-	850g						
35	Size (W x H x D)	mm	65 x 92 x 198 ( Refer to Outline Drawing )						

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

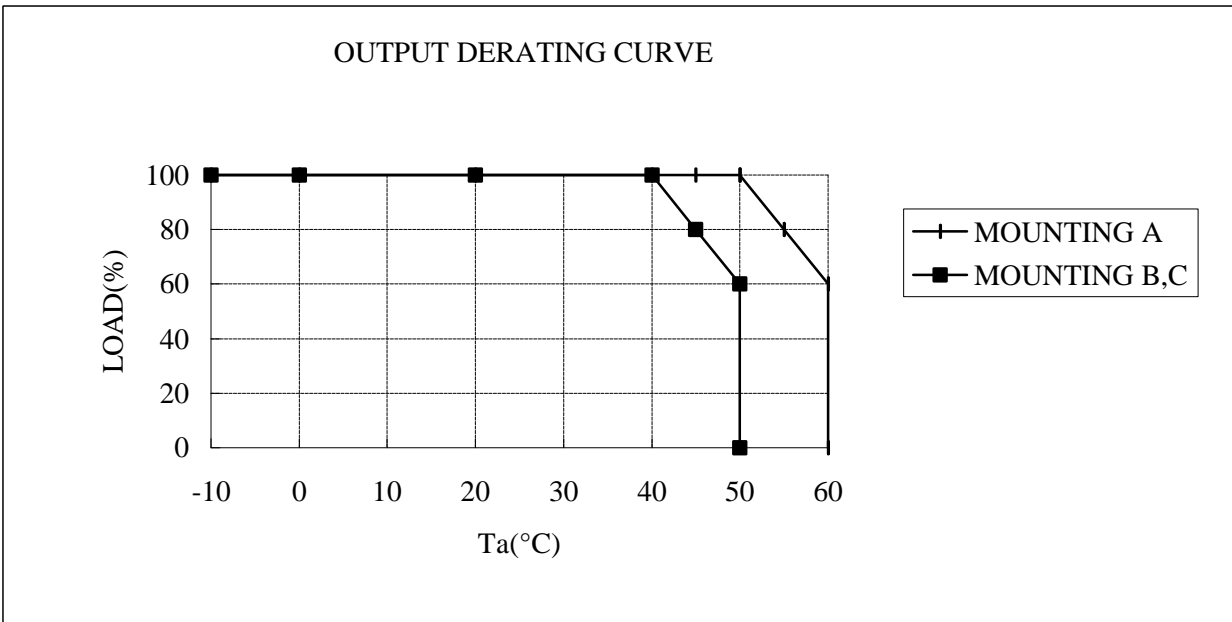
=NOTES=

- \*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 JEITA 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 DENAN (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 (A160-01-02\_).
- \*11. As for DENAN, designed to meet at 100VAC.

**OUTPUT DERATING**

A160-01-02

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



MOUNTING A

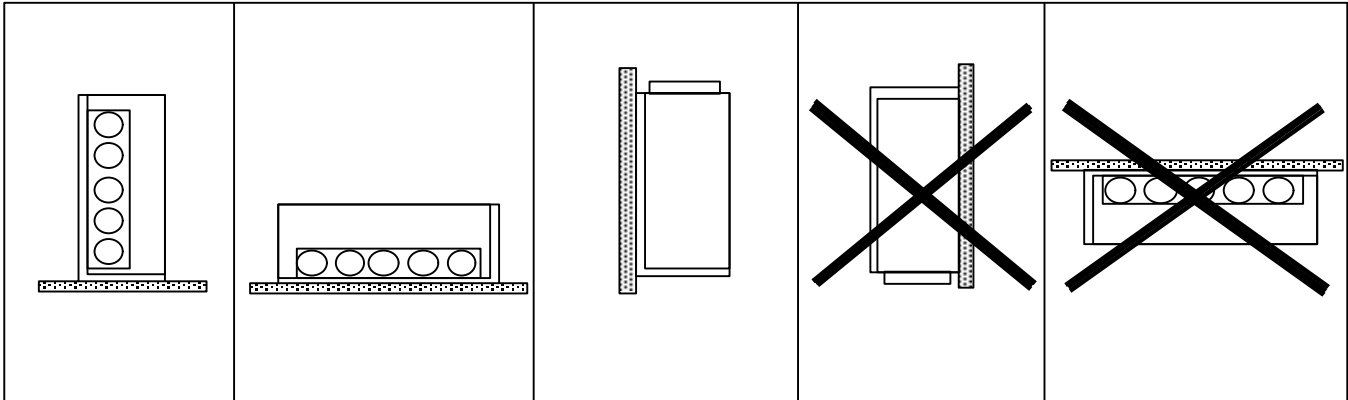
MOUNTING B

MOUNTING C

DON'T USE

DON'T USE

(STANDARD MOUNTING)



**JWS 150**

**SPECIFICATIONS**

A160-01-03A

ITEMS		MODEL	JWS150 -28
1	Nominal Output Voltage	-	28V
2	Maximum Output Current	-	5.5A
3	Maximum Output Power	-	154W
4	Efficiency (Typ.) (*1)	-	80%
5	Input Voltage Range (*2)	-	85 - 265VAC (47 - 63Hz) or 120 - 330VDC
6	Input Current (100/200VAC)(Typ.) (*1)	-	2.0/1.0A
7	Inrush Current (Typ.)	-	25A at 100VAC, 50A at 200VAC, Ta=25°C, Cold Start
8	PFHC	-	Designed to meet EN61000-3-2
9	Power Factor (100/200VAC)(Typ.) (*1)	-	0.99/0.95
10	Output Voltage Range	-	25.2 - 30.8V
11	Maximum Ripple & Noise (*3)	0 - +60°C	150mV
		-10 - 0°C	180mV
12	Maximum Line Regulation (*4)	-	112mV
13	Maximum Load Regulation (*5)	-	160mV
14	Temperature Coefficient	-	Less than 0.02%/°C
15	Over Current Protection (*6)	-	5.77A-
16	Over Voltage Protection (*7)	-	32.2 - 37.8V
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	-	Possible
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 100MΩ 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 1h each.
30	Shock (In package)	-	Less than 196.1m/s <sup>2</sup>
31	Safety (*11)	-	Approved by UL60950-1, CSA C22.2 No.60950-1 & EN60950-1. Designed to meet DENAN.
32	Conducted Emission	-	Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B.
33	Radiated Emission	-	Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B.
34	Weight (Typ.)	-	850g
35	Size (W x H x D)	mm	65 x 92 x 198 ( Refer to Outline Drawing )

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