

SPECIFICATIONS

A160-01-01/A-A

ITEMS		MODEL	JWS150 -3/A	JWS150 -5/A	JWS150 -12/A	JWS150 -15A	JWS150 -24/A	JWS150 -48/A	
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)	-	1.5/0.75	2.0/1.0A					
7	Inrush Current(Typ)	-	25A at 100VAC, 50A 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 (*2)	0 ~ +50°C	mV	120	120	150	150	150	200
		-10 ~ 0°C	mV	160	160	180	180	180	240
12	Maximum Line Regulation (*3)	mV	20	20	48	60	96	192	
13	Maximum Load Regulation (*4)	mV	40	40	96	120	150	240	
14	Temperature Coefficient	-	Less than 0.02%/°C						
15	Over Current Protection (*5)	A	31.5~	31.5~	13.65~	10.5~	6.82~	3.46~	
16	Over Voltage Protection (*6)	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) (*7)	-	20ms						
18	Leakage Current (*8)	-	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 (*9)	-	-10 ~+50°C (-10 ~+40°C:100%, +50°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 ² Constant, X,Y,Z 1h each.						
30	Shock (In package)	-	Less than 196.1m/s ²						
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	900						
35	Size (W.H.D)	mm	65 x 92 x 198 (Refer to Outline Drawing)						

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

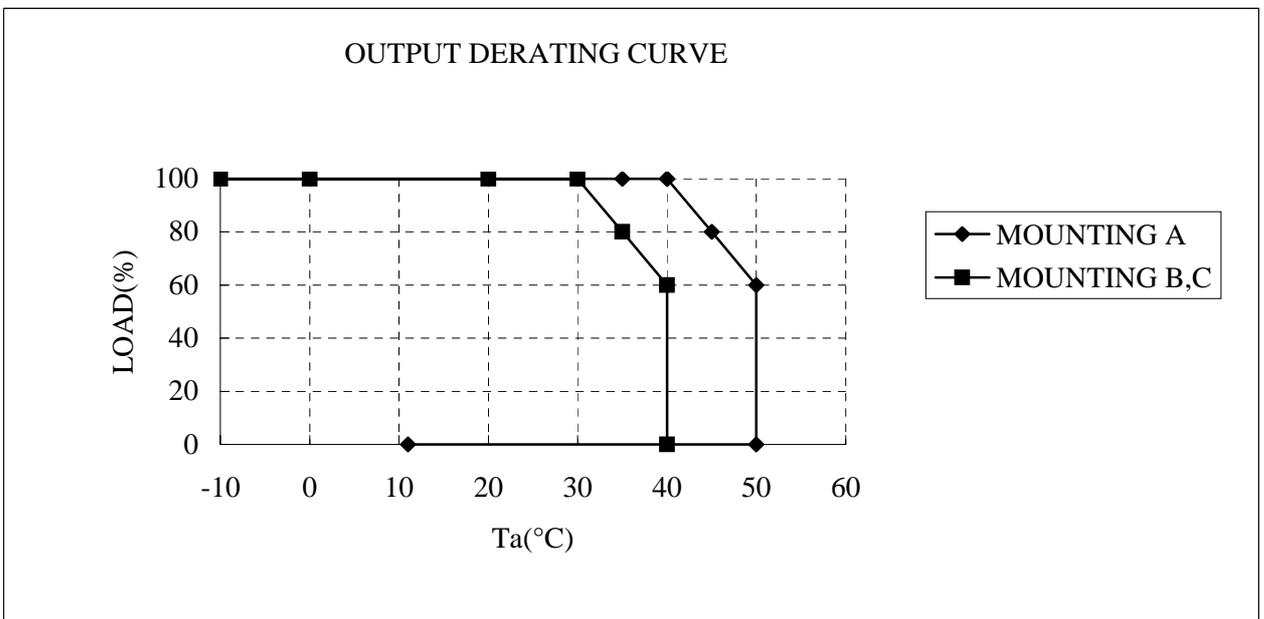
=NOTES=

- *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 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 (A160-01-02/A_).
- *11. As for DENTORI, built to meet at 100VAC.

OUTPUT DERATING

A160-01-02/A

Ta(°C)	LOAD(%)		
	MOUNTING A	MOUNTING B	MOUNTING C
-10 ~+30	100	100	100
35	100	80	80
40	100	60	60
45	80	-	-
50	60	-	-



MOUNTING A

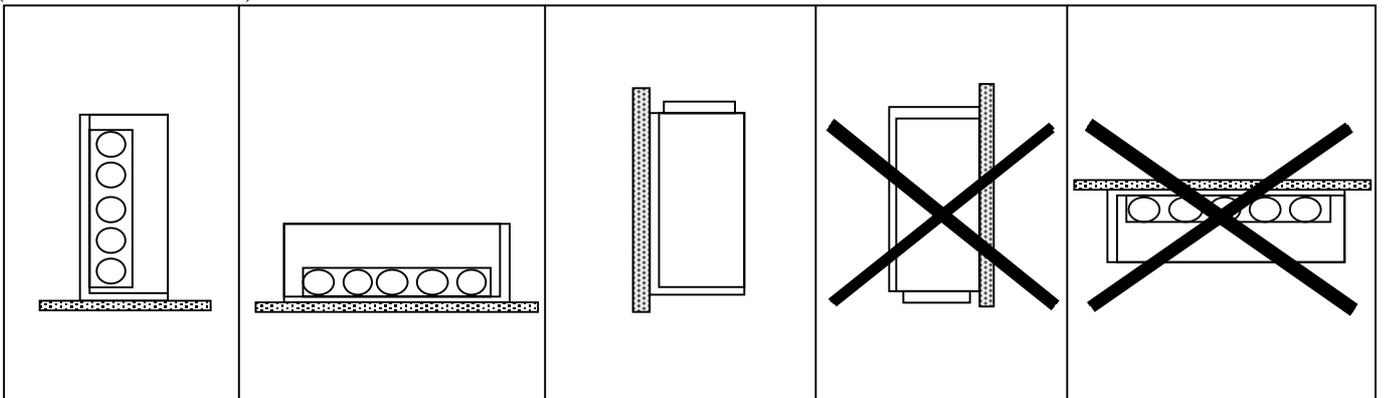
MOUNTING B

MOUNTING C

DON'T USE

DON'T USE

(STANDARD MOUNTING)



SPECIFICATIONS

A160-01-03/A

ITEMS		MODEL	JWS150 -28/A
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	-	Built 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 ~ +50°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 ~ +50°C (-10 ~ +40°C:100%, +50°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 ² Constant, X,Y,Z 1h each.
30	Shock (In package)	-	Less than 196.1m/s ²
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.)	-	900g
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 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 (A160-01-02/A_).
- *11 As for DENTORI, built to meet at 100VAC.