

**RWS300B/CO2**

SPECIFICATIONS

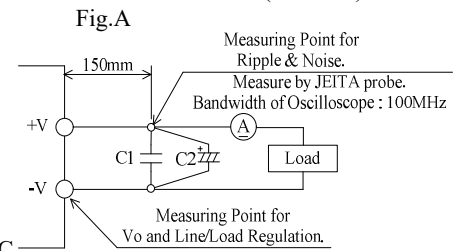
A261-01-01/CO2-G

ITEMS		MODEL	RWS300B -5/CO2	RWS300B -12/CO2	RWS300B -15/CO2	RWS300B -24/CO2	RWS300B -36/CO2	RWS300B -48/CO2	
1	Nominal Output Voltage	V	5	12	15	24	36	48	
2	Maximum Output Current	A	50	25	20	12.5	8.4	6.3	
3	Maximum Output Power	W	250	300	300	300	302.4	302.4	
4	Efficiency (Typ) (*1)(*11)	100VAC	%	75	79	81	85	85	
		200VAC	%	78	82	84	88	88	
5	Input Voltage Range (*2)(*11)	-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC						
6	Input Current (Typ) (*1)(*11)	A	3.3/1.8		3.8/2.1				
7	Inrush Current (Typ) (*1)(*3)(*11)	-	17A at 100VAC, 34A at 200VAC, Ta=25°C, Cold Start						
8	PFHC	-	Designed to meet IEC61000-3-2						
9	Power Factor (Typ) (*1)(*11)	-	0.95/0.90						
10	Output Voltage Range	V	4.50 - 5.75	10.8 - 13.8	13.5 - 17.2	21.6 - 27.6	32.4 - 41.4	43.2 - 52.8	
11	Maximum Ripple & Noise (*4)	0≤Ta<70°C	mV	120	150	150	150	200	200
		-20≤Ta<0°C	mV	160	180	180	180	240	500
12	Maximum Line Regulation (*5)(*11)	mV	20	48	60	96	144	192	
13	Maximum Load Regulation (*6)(*11)	mV	40	96	120	192	288	384	
14	Temperature Coefficient	-	Less than 0.02% / °C						
15	Over Current Protection (*7)	A	52.50 ≤	26.25 ≤	21.00 ≤	13.13 ≤	8.82 ≤	6.62 ≤	
16	Over Voltage Protection (*8)	V	6.0 - 7.0	14.4 - 16.8	18.0 - 21.0	28.8 - 33.6	43.2 - 50.4	55.2 - 64.8	
17	Hold-up Time (Typ) (*12)	-	20ms						
18	Leakage Current (*9)	-	Less than 0.75mA						
19	Parallel Operation	-	-						
20	Series Operation	-	Possible						
21	Operating Temperature (*10)(*11)	-	-20 to +70°C ( -20°C : 50%, -10 to +50°C : 100%, +60°C : 85%, +70°C : 50% )						
22	Operating Humidity	-	30 to 90%RH (No Condensing)						
23	Storage Temperature	-	-30 to +75°C						
24	Storage Humidity	-	10 to 90%RH (No Condensing)						
25	Cooling	-	Forced Air Cooling						
26	Withstand Voltage	-	Input - FG : 2kVAC (20mA), Input - Output : 3kVAC (20mA) Output - FG : 500VAC (100mA) for 1min						
27	Isolation Resistance	-	More than 100MΩ at 25°C and 70%RH Output - FG : 500VDC						
28	Vibration	-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s <sup>2</sup> Constant, X,Y,Z 1hour each.						
29	Shock	-	Less than 196.1m/s <sup>2</sup>						
30	Safety	-	Approved by UL62368-1, CSA62368-1, EN62368-1, UL60950-1, CSA60950-1, EN60950-1 (Expire date of 60950-1 : 20/12/2020) UL508 (Except 5V), CSA C22.2 No.107.1-01. (Except 5V). Designed to meet Den-an Appendix 8 at 100VAC only.						
31	Line DIP	-	Designed to meet SEMI-F47 (200VAC Line only)						
32	Conducted Emission (*13)	-	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B						
33	Radiated Emission (*13)	-	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B						
34	Immunity (*13)	-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11						
35	Weight (Typ)	g	900						
36	Size (W x H x D)	mm	41 x 102 x 170 ( Refer to Outline Drawing )						

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

=NOTES=

- \*1. At 100VAC/200VAC, Ta=25°C, nominal output voltage and maximum output power.
- \*2. For cases where conformance to various safety specs (UL, CSA, EN) are required, to be described as 100 - 240VAC (50-60Hz).
- \*3. Not applicable for the inrush current to Noise Filter for less than 0.2ms.
- \*4. Please refer to Fig. A for measurement of Vo, line & load regulation and ripple voltage.
- \*5. 85 - 265VAC, constant load.
- \*6. No load-Full load, constant input voltage.
- \*7. 5V - 15V model: Constant current limit and hiccup with automatic recovery.  
24V - 48V model: Constant current limit with automatic recovery.  
Avoid to operate at over load or short circuit condition.
- \*8. OVP circuit will shut down output, manual reset (Re power on).
- \*9. Measured by the each measuring method of UL, CSA, EN and Den-an (at 60Hz), Ta=25°C.
- \*10. Output Derating
  - Derating at standard mounting. Refer to LOAD vs. AMBIENT TEMPERATURE (A261-01-02\_).
  - Load (%) is percent of maximum output power or maximum output current, do not exceed its derating of maximum load.
- \*11. Output derating needed when input voltage less than 110VAC. Refer to LOAD vs. INPUT VOLTAGE (A261-01-02\_).
- \*12. At 110VAC/200VAC, Ta=25°C, nominal output voltage and maximum output power.
- \*13. The power supply is considered a component which will be installed into a final equipment.  
The final equipment should be re-evaluated that it meets EMC directives.



C1 : Film Cap. 0.1μF  
C2 : Elect. Cap. 100μF

**RWS300B/CO2**

SPECIFICATIONS

A261-01-03/CO2-A

ITEMS		MODEL	RWS300B-28/CO2
1	Nominal Output Voltage	V	28
2	Maximum Output Current	A	11
3	Maximum Output Power	W	308
4	Efficiency (Typ) (*1)(*11)	100VAC	% 84
		200VAC	% 87
5	Input Voltage Range (*2)(*11)	-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC
6	Input Current (Typ) (*1)(*11)	A	3.8/2.1
7	Inrush Current (Typ) (*1)(*3)(*11)	-	17A at 100VAC, 34A at 200VAC, Ta=25°C, Cold Start
8	PFHC	-	Designed to meet IEC61000-3-2
9	Power Factor (Typ) (*1)(*11)	-	0.95/0.90
10	Output Voltage Range	V	25.2 - 32.2
11	Maximum Ripple & Noise (*4)	0≤Ta≤70°C	mV 150
		-20≤Ta<0°C	mV 220
12	Maximum Line Regulation (*5)(*11)	mV	112
13	Maximum Load Regulation (*6)(*11)	mV	224
14	Temperature Coefficient	-	Less than 0.02% / °C
15	Over Current Protection (*7)	A	11.55<
16	Over Voltage Protection (*8)	V	33.6 - 39.2
17	Hold-up Time (Typ) (*12)	-	20ms
18	Leakage Current (*9)	-	Less than 0.75mA
19	Parallel Operation	-	-
20	Series Operation	-	Possible
21	Operating Temperature (*10)(*11)	-	-20 to +70°C ( -20°C : 50%, -10 to +50°C : 100%, +60°C : 85%, +70°C : 50% )
22	Operating Humidity	-	30 to 90%RH (No Condensing)
23	Storage Temperature	-	-30 to +75°C
24	Storage Humidity	-	10 to 90%RH (No Condensing)
25	Cooling	-	Forced Air Cooling
26	Withstand Voltage	-	Input - FG : 2kVAC (20mA), Input - Output : 3kVAC (20mA) Output - FG : 500VAC (100mA) for 1min
27	Isolation Resistance	-	More than 100MΩ at 25°C and 70%RH Output - FG : 500VDC
28	Vibration	-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s <sup>2</sup> Constant, X,Y,Z 1hour each.
29	Shock	-	Less than 196.1m/s <sup>2</sup>
30	Safety	-	Approved by UL62368-1, CSA62368-1, EN62368-1, UL60950-1, CSA60950-1, EN60950-1 (Expire date of 60950-1 : 20/12/2020) UL508, CSA C22.2 No.107.1-01. Designed to meet Den-an Appendix 8 at 100VAC only.
31	Line DIP	-	Designed to meet SEMI-F47 (200VAC Line only)
32	Conducted Emission (*13)	-	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B
33	Radiated Emission (*13)	-	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B
34	Immunity (*13)	-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11
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- \*4. Please refer to Fig. A for measurement of Vo, line & load regulation and ripple voltage.
- \*5. 85 - 265VAC, constant load.
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