## RWS300B/CO2I

## **SPECIFICATIONS**

## A261-01-01/CO2I

| 2 Max 3 Max 4 Effic 5 Inpu 6 Inpu 7 Inrus 8 PFH 9 Powe    | minal Output Voltage kimum Output Current kimum Output Power ciency (Typ) (*1)(*11)  at Voltage Range at Current (Typ) (*1)(*11) | 200/230VAC<br>(*2)(*11)<br>100/115VAC  | -<br>V<br>A<br>W<br>% | RWS300B-12/CO2I<br>12<br>25<br>300<br>79/79.5                         | RWS300B-24/CO2I<br>24<br>12.5<br>300 | RWS300B-48/CO2I<br>48<br>6.3<br>302.4 |
|---|--|--|-----------------------|---|--------------------------------------|---------------------------------------|
| 2 Max 3 Max 4 Effic 5 Inpu 6 Inpu 7 Inrus 8 PFH 9 Powe    | ximum Output Current ximum Output Power ciency (Typ) (*1)(*11) at Voltage Range at Current (Typ) (*1)(*11)                       | 200/230VAC<br>(*2)(*11)<br>100/115VAC  | A<br>W<br>%           | 25<br>300<br>79/79.5  | 12.5<br>300                          | 6.3                                   |
| 2 Max 3 Max 4 Effic 5 Inpu 6 Inpu 7 Inrus 8 PFH 9 Powe    | ximum Output Current ximum Output Power ciency (Typ) (*1)(*11) at Voltage Range at Current (Typ) (*1)(*11)                       | 200/230VAC<br>(*2)(*11)<br>100/115VAC  | W<br>%                | 300<br>79/79.5  | 300                                  |                                       |
| 3 Max 4 Effic 5 Inpu 6 Inpu 7 Inrus 8 PFH 9 Powe          | ximum Output Power ciency (Typ) (*1)(*11) ut Voltage Range ut Current (Typ) (*1)(*11)  | 200/230VAC<br>(*2)(*11)<br>100/115VAC  | %<br>%                | 300<br>79/79.5  | 300                                  |                                       |
| 4 Effic<br>5 Inpu<br>6 Inpu<br>7 Inrus<br>8 PFH<br>9 Powe | ciency (Typ) (*1)(*11)  It Voltage Range It Current (Typ) (*1)(*11)  | 200/230VAC<br>(*2)(*11)<br>100/115VAC  | %                     |   | 0.510.5                              | JU2.4                                 |
| 5 Inpu<br>6 Inpu<br>7 Inrus<br>8 PFH<br>9 Powe            | at Voltage Range<br>at Current (Typ)<br>(*1)(*11)  | 200/230VAC<br>(*2)(*11)<br>100/115VAC  |                       |   | 85/85                                | 85/85                                 |
| 6 Inpu  7 Inrus  8 PFH  9 Powe                            | nt Current (Typ) (*1)(*11)   | (*2)(*11)<br>100/115VAC  | -                     | 82/82.5   | 88/88                                | 88/88                                 |
| 6 Inpu  7 Inrus  8 PFH  9 Powe                            | nt Current (Typ) (*1)(*11)   | 100/115VAC   |                       | 85 - 265VAC (47 - 63Hz) or 120 - 370VDC                               |                                      |                                       |
| 7 Inrus<br>8 PFH<br>9 Powe                                | (*1)(*11)  |  | Α                     | 3.8 / 3.6   |                                      |                                       |
| 8 PFH<br>9 Powe   |  | 200/230VAC   | Α                     | 2.1 / 1.9   |                                      |                                       |
| 8 PFH<br>9 Powe   | Inrush Current (Typ) (*1)(*3)(*11)   |  | -                     | 17A at 100VAC, 34A at 200VAC, Ta=25°C, Cold Start                     |                                      |                                       |
|   | PFHC   |  | -                     | Designed to meet IEC61000-3-2   |                                      |                                       |
| 10 0 4  | Power Factor (Typ) (*1)(*11)   |  | -                     | 0.95 at 100VAC, 0.90 at 200VAC  |                                      |                                       |
| 10 Outp   | put Voltage Range  |  | V                     | 10.8 - 13.8   | 21.6 - 27.6                          | 43.2 - 52.8                           |
|   | kimum Ripple & Noise   | 0 <ta<70°c< td=""><td>mV</td><td>150</td><td>150</td><td>200</td></ta<70°c<> | mV                    | 150   | 150                                  | 200                                   |
|   | (*4)   | -20 <u>&lt;</u> Ta<0°C   | mV                    | 180   | 180                                  | 500                                   |
| 12 Max  | kimum Line Regulation  | (*5)(*11)  | mV                    | 48  | 96                                   | 192                                   |
|   | kimum Load Regulation  | (*6)(*11)  | mV                    | 96  | 192                                  | 384                                   |
|   | Temperature Coefficient  |  | -                     | Less than 0.02% / °C  |                                      |                                       |
|   | er Current Protection  | (*7)   | Α                     | 26.25 <u>≤</u>  | 13.13 <u>≤</u>                       | 6.62 <u>&lt;</u>                      |
|   | r Voltage Protection   | (*8)   | V                     | 14.4 - 16.8   | 28.8 - 33.6                          | 55.2 - 64.8                           |
|   | d-up Time (Typ)  | (*12)  | _                     | 20ms  |                                      |                                       |
|   | kage Current   | (*9)   | _                     | Less than 0.75mA  |                                      |                                       |
|   | allel Operation  |  | -                     | -   |                                      |                                       |
|   | es Operation   |  | -                     | Possible  |                                      |                                       |
|   | rating Temperature   | (*10)(*11)   | -                     | -20 to +70°C (-20°C: 50%, -10 to +50°C: 100%, +60°C: 85%, +70°C: 50%) |                                      |                                       |
|   | rating Humidity  |  | -                     | 30 to 90%RH (No Condensing)   |                                      |                                       |
|   | Storage Temperature  |  | _                     | -30 to +75°C  |                                      |                                       |
|   | Storage Humidity   |  | _                     | 10 to 90%RH (No Condensing)   |                                      |                                       |
| 25 Cool   |  |  | _                     | Forced Air Cooling  |                                      |                                       |
|   |  |  | -                     | Input - FG: 2kVAC (20mA), Input - Output: 3kVAC (20mA)                |                                      |                                       |
|   |  |  |                       | Output - FG: 500VAC (100mA) for 1min                                  |                                      |                                       |
| 27 Isola  | ation Resistance   |  | -                     | More than 100MΩ at 25°C and 70%RH Output - FG: 500VDC                 |                                      |                                       |
|   | ration   |  | -                     | At no operating, 10 - 55Hz (Sweep for 1min)                           |                                      |                                       |
|   |  |  |                       | 19.6m/s <sup>2</sup> Constant, X,Y,Z 1hour each.                      |                                      |                                       |
| 29 Shoc   | ck   |  | -                     | Less than 196.1m/s <sup>2</sup>                                       |                                      |                                       |
|   | Safety   |  | -                     | Approved by UL62368-1, CSA62368-1, EN62368-1, UL60950-1, CSA60950-1,  |                                      |                                       |
|   |  |  |                       | UL508, CSA C22.2 No.107.1-01, IS13252 (Part 1).                       |                                      |                                       |
|   |  |  |                       | Designed to meet Den-an Appendix 8 at 100VAC only.                    |                                      |                                       |
| 31 Line   | e DIP  |  | -                     | Designed to meet SEMI-F47 (200VAC Line only)                          |                                      |                                       |
| 32 Cond   | ducted Emission  | (*13)  | -                     | Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B                     |                                      |                                       |
| 33 Radi   | iated Emission   | (*13)  | -                     | Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B                     |                                      |                                       |
|   | nunity   | (*13)  | -                     | Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11   |                                      |                                       |
|   | Weight (Typ) g   |  |                       |   | 900                                  |                                       |
|   | Size (W x H x D) mm 41 x 102 x 170 ( Refer to Outline Drawing )  |  |                       |   | rawing)                              |                                       |
| 37 Othe   |  | (*14)  | -                     |   | ng on component side and             |                                       |

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

## =NOTES=

- \*1. At 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.

\*10. Output Derating

- \*6. No load-Full load, constant input voltage.
- \*7. 12V 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.

- 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.
- \*14. For "/CO2I" model, both sides of PCB are coated. However, some areas on PCB are not coated.



