**JWS 300**

# SPECIFICATIONS

A161-01-01F

| | ITEMS \ MODEL | | | JWS300 -2 | JWS300 -3 | JWS300 -5 | JWS300 -12 | JWS300 -15 | JWS300 -24 | JWS300 -48 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Nominal Output Voltage | | V | 2 | 3.3 | 5 | 12 | 15 | 24 | 48 |
| 2 | Maximum Output Current | | A | 60 | 60 | 60 | 27 | 22 | 14 | 6.5 |
| 3 | Maximum Output Power | | W | 120 | 198 | 300 | 324 | 330 | 336 | 312 |
| 4 | Efficiency (Typ.) | (*1) | % | 60 | 68 | 74 | 76 | 77 | 80 | 80 |
| 5 | Input Voltage Range | (*2) | - | 85 - 265VAC (47-63Hz) or 120 - 330VDC | | | | | | |
| 6 | Input Current (100/200VAC)(Typ.) | (*1) | A | 2.1/1.1 | 3.0/1.5 | 4.4/2.2 | | | | |
| 7 | Inrush Current(Typ.) | (*3) | - | 20A at 100VAC, 40A at 200VAC | | | | | | |
| 8 | PFHC | | - | Designed to meet EN61000-3-2 | | | | | | |
| 9 | Power Factor (100/200VAC)(Typ.) | (*1) | - | 0.99/0.95 | | | | | | |
| 10 | Output Voltage Range | | V | 1.80-2.40 | 2.97-3.96 | 4.50-6.00 | 10.8-14.4 | 13.5-18.0 | 21.6-28.8 | 43.2-52.8 |
| 11 | Maximum Ripple & Noise | 0 - +65°C | mV | 120 | 120 | 120 | 150 | 150 | 150 | 350 |
| | (*4) | -10 - 0°C | mV | 180 | 180 | 180 | 200 | 200 | 200 | 400 |
| 12 | Maximum Line Regulation | (*5) | mV | 20 | 20 | 20 | 48 | 60 | 96 | 192 |
| 13 | Maximum Load Regulation | (*6) | mV | 30 | 30 | 30 | 72 | 90 | 144 | 288 |
| 14 | Temperature Coefficient | | - | Less than 0.02%/°C | | | | | | |
| 15 | Over Current Protection | (*7) | A | 63.0 - | 63.0 - | 63.0 - | 28.4 - | 23.1 - | 14.7 - | 6.82 - |
| 16 | Over Voltage Protection | (*8) | V | 2.50-3.00 | 4.12-4.95 | 6.25-7.25 | 15.0-17.4 | 18.7-21.8 | 30.0-34.8 | 55.2-64.8 |
| 17 | Hold-up Time (Typ.) | (*9) | - | 20ms | | | | | | |
| 18 | Leakage Current | (*10) | - | 0.75mA MAX, 0.2mA (Typ.) at 100VAC / 0.44mA (Typ.) at 230VAC. | | | | | | |
| 19 | Remote Sensing | | - | Possible | | | | | | |
| 20 | Remote ON/OFF control | | - | Possible | | | | | | |
| 21 | Monitoring Signal | | - | PF (Open Collector Output) | | | | | | |
| 22 | Parallel Operation | | - | Possible | | | | | | |
| 23 | Series Operation | | - | Possible | | | | | | |
| 24 | Operating Temperature | (*11) | - | -10 - +65°C ( -10 - +50°C:100%, +60°C:70%, +65°C:55%) | | | | | | |
| 25 | Operating Humidity | | - | 10 - 90%Rh (No dewdrop) | | | | | | |
| 26 | Storage Temperature | | - | -30 - +85°C | | | | | | |
| 27 | Storage Humidity | | - | 10 - 95%Rh (No dewdrop) | | | | | | |
| 28 | Cooling | | - | Forced Air By Blower Fan | | | | | | |
| 29 | Withstand Voltage | | - | Input - FG:2kVAC(20mA), Input - Output:3kVAC (20mA)<br>Output - FG:500VAC(100mA), Output-CNT:100VAC(100mA) for 1min. | | | | | | |
| 30 | Isolation Resistance | | - | More than 100Mohm Output - FG...500VDC<br>More than 10Mohm Output - CNT... 100VDC at 25°C and 70%Rh | | | | | | |
| 31 | Vibration | | - | At no operating, 10 - 55Hz (Sweep for 1min.)<br>19.6m/s$^2$ Constant, X,Y,Z 1h each. | | | | | | |
| 32 | Shock (In package) | | - | Less than 196.1m/s$^2$ | | | | | | |
| 33 | Safety | (*12) | - | Approved by UL60950-1, CSA C22.2 No.60950 & EN60950-1.<br>Designed to meet DENAN. | | | | | | |
| 34 | Conducted Emission | | - | Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-ClassB. | | | | | | |
| 35 | Radiated Emission | | - | Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-ClassB. | | | | | | |
| 36 | Weight(Typ.) | | - | 1900g | | | | | | |
| 37 | Size (WxHxD) | | mm | 120 x 92 x 190 ( Refer to Outline Drawing ) | | | | | | |

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

=NOTES=

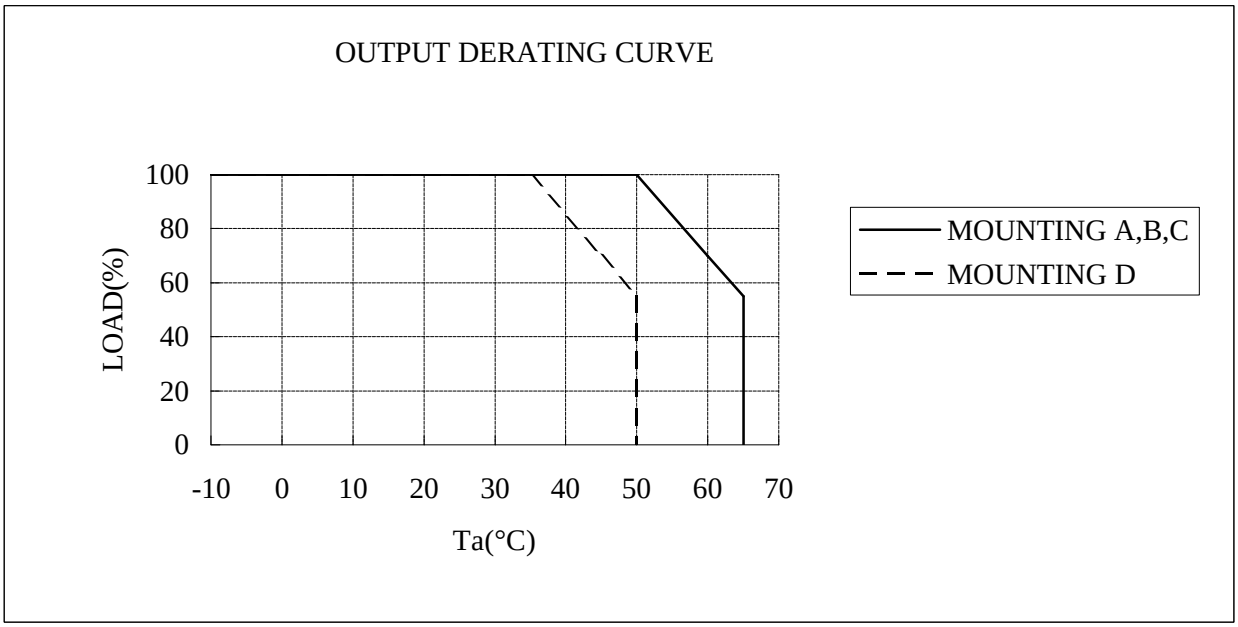
*1. At 100/200VAC, Ta=25°C and maximum output power.
*2. For cases where conformance to various safety specs (UL, CSA, EN) are required, input voltage range will be 100-240VAC(50/60Hz).
*3. Not applicable for the in-rush current to Noise Filter less than 0.2ms.
*4. Measure with JEITA RC-9131 probe, Bandwidth of scope :100MHz.
*5. 85 - 265VAC , constant load.
*6. No load-Full load, constant input voltage.
*7. Constant current limit with automatic recovery.
*8. OVP circuit will shut down output, manual reset (Line recycle).
*9. At 100/200VAC nominal output voltage and maximum output current.
*10. Measured by the each measuring method of UL,CSA,EN and DENAN(at 60Hz),Ta=25°C.
*11. 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 (A161-01-02).
*12. As for DENAN, designed to meet at 100VAC.

**JWS 300**

## OUTPUT DERATING

A161-01-02

| Ta(°C) | LOAD(%) | | | |
|---|---|---|---|---|
| | MOUNTING A | MOUNTING B | MOUNTING C | MOUNTING D |
| -10 ~+35 | 100 | 100 | 100 | 100 |
| 45 | 100 | 100 | 100 | 70 |
| 50 | 100 | 100 | 100 | 55 |
| 60 | 70 | 70 | 70 | - |
| 65 | 55 | 55 | 55 | - |

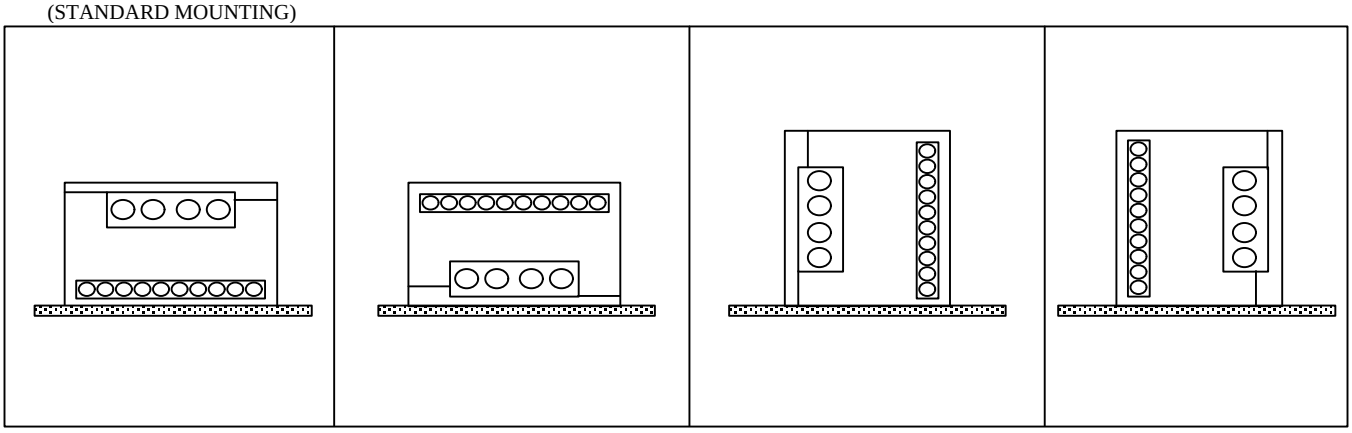



MOUNTING A
(STANDARD MOUNTING)

MOUNTING B

MOUNTING C

MOUNTING D



JWS 300

# SPECIFICATIONS

A161-01-03D

| | ITEMS / MODEL | | | JWS300 -6 | JWS300 -9 | JWS300 -18 | JWS300 -28 |
|---|---|---|---|---|---|---|---|
| 1 | Nominal Output Voltage | | V | 6 | 9 | 18 | 28 |
| 2 | Maximum Output Current | | A | 50 | 34 | 18 | 12 |
| 3 | Maximum Output Power | | W | 300 | 306 | 324 | 336 |
| 4 | Efficiency (Typ.) | (*1) | % | 74 | 76 | 78 | 80 |
| 5 | Input Voltage Range | (*2) | - | 85 - 265VAC (47 - 63Hz) or 120 - 330VDC | | | |
| 6 | Input Current (100/200VAC) (Typ.) | (*1) | - | 4.4 / 2.2A | | | |
| 7 | Inrush Current (Typ.) | (*3) | - | 20A at 100VAC, 40A at 200VAC | | | |
| 8 | PFHC | | - | Designed to meet EN61000-3-2 | | | |
| 9 | Power Factor (100/200VAC) (Typ.) | (*1) | - | 0.99 / 0.95 | | | |
| 10 | Output Voltage Range | | V | 5.4 - 7.2 | 8.10 - 10.8 | 16.2 - 21.6 | 25.2 - 33.6 |
| 11 | Maximum Ripple & Noise | 0 - +65°C | mV | 150 | 150 | 150 | 150 |
| | | (*4) -10 - 0°C | mV | 200 | 200 | 200 | 200 |
| 12 | Maximum Line Regulation | (*5) | mV | 24 | 36 | 72 | 112 |
| 13 | Maximum Load Regulation | (*6) | mV | 36 | 54 | 114 | 168 |
| 14 | Temperature Coefficient | | - | Less than 0.02%/°C | | | |
| 15 | Over Current Protection | (*7) | A | 52.5 - | 35.7 - | 18.9 - | 12.6 - |
| 16 | Over Voltage Protection | (*8) | V | 7.5 - 8.7 | 11.25 - 13.05 | 22.5 - 27.0 | 35.0 - 40.6 |
| 17 | Hold-up Time (Typ.) | (*9) | - | 20ms | | | |
| 18 | Leakage Current | (*10) | - | 0.75mA MAX, 0.2mA (Typ.) at 100VAC / 0.44mA (Typ.) at 230VAC. | | | |
| 19 | Remote Sensing | | - | Possible | | | |
| 20 | Remote ON/OFF control | | - | Possible | | | |
| 21 | Monitoring Signal | | - | PF (Open Collector Output) | | | |
| 22 | Parallel Operation | | - | Possible | | | |
| 23 | Series Operation | | - | Possible | | | |
| 24 | Operating Temperature | (*11) | - | -10 - +65°C ( -10 - +50°C:100%, +60°C:70%, +65°C:55%) | | | |
| 25 | Operating Humidity | | - | 10 - 90%RH (No dewdrop) | | | |
| 26 | Storage Temperature | | - | -30 - +85°C | | | |
| 27 | Storage Humidity | | - | 10 - 95%RH (No dewdrop) | | | |
| 28 | Cooling | | - | Forced Air By Blower Fan | | | |
| 29 | Withstand Voltage | | - | Input - FG:2kVAC(20mA), Input - Output:3kVAC (20mA)<br>Output - FG:500VAC(100mA), Output-CNT:100VAC(100mA) for 1min. | | | |
| 30 | Isolation Resistance | | - | More than 100MΩ Output - FG … 500VDC<br>More than 10MΩ Output - CNT … 100VDC at 25°C and 70%RH | | | |
| 31 | Vibration | | - | At no operating, 10 - 55Hz (Sweep for 1min.)<br>19.6m/s$^2$ Constant, X,Y,Z 1h each. | | | |
| 32 | Shock (In package) | | - | Less than 196.1m/s$^2$ | | | |
| 33 | Safety | (*12) | - | Approved by UL60950-1, CSA C22.2 No.60950 & EN60950-1.<br>Designed to meet DENAN. | | | |
| 34 | Conducted Emission | | - | Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-ClassB. | | | |
| 35 | Radiated Emission | | - | Designed to meet EN55011/EN55022-B, FCC-ClassB, VCCI-ClassB. | | | |
| 36 | Weight (Typ.) | | - | 1900g | | | |
| 37 | Size (W x H x D) | | mm | 120 x 92 x 190 ( Refer to Outline Drawing ) | | | |

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*9. At 100/200VAC nominal output voltage and maximum output current.
*10. Measured by the each measuring method of UL, CSA, EN and DENAN(at 60Hz), Ta=25°C.
*11. Ratings - Derating at standard mounting.
- Load (%) is percent of maximum output power or maximum output current, whichever is greater.
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*12. As for DENAN, designed to meet at 100VAC.