

SPECIFICATIONS

A159-01-01A

| ITEMS | | MODEL | JWS100 -3 | JWS100 -5 | JWS100 -12 | JWS100 -15 | JWS100 -24 | JWS100 -48 | |
|-------|--------------------------------------|-----------|---|--------------|---------------|---------------|---------------|---------------|-----|
| 1 | Nominal Output Voltage | V | 3.3 | 5 | 12 | 15 | 24 | 48 | |
| 2 | Maximum Output Current | A | 20 | 20 | 8.5 | 7 | 4.5 | 2.1 | |
| 3 | Maximum Output Power | W | 66 | 100 | 102 | 105 | 108 | 100.8 | |
| 4 | Efficiency (Typ) (*1) | % | 67 | 75 | 76 | 77 | 79 | 79 | |
| 5 | Input Voltage Range (*2) | - | 85 ~ 265VAC (47 ~ 63Hz) or 120 ~ 330VDC | | | | | | |
| 6 | Input Current (100/200VAC)(Typ) (*1) | A | 1.0/0.5 | | 1.4/0.7 | | | | |
| 7 | Inrush Current(Typ) | - | 14A at 100VAC, 28A 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 (*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 | 21 ~ | 21 ~ | 8.92 ~ | 7.35 ~ | 4.72 ~ | 2.2 ~ | |
| 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 ² Constant, X,Y,Z 1hour 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 | 650 | | | | | | |
| 35 | Size (W x H x D) | mm | 50 x 92 x 188 (Refer to Outline Drawing) | | | | | | |

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

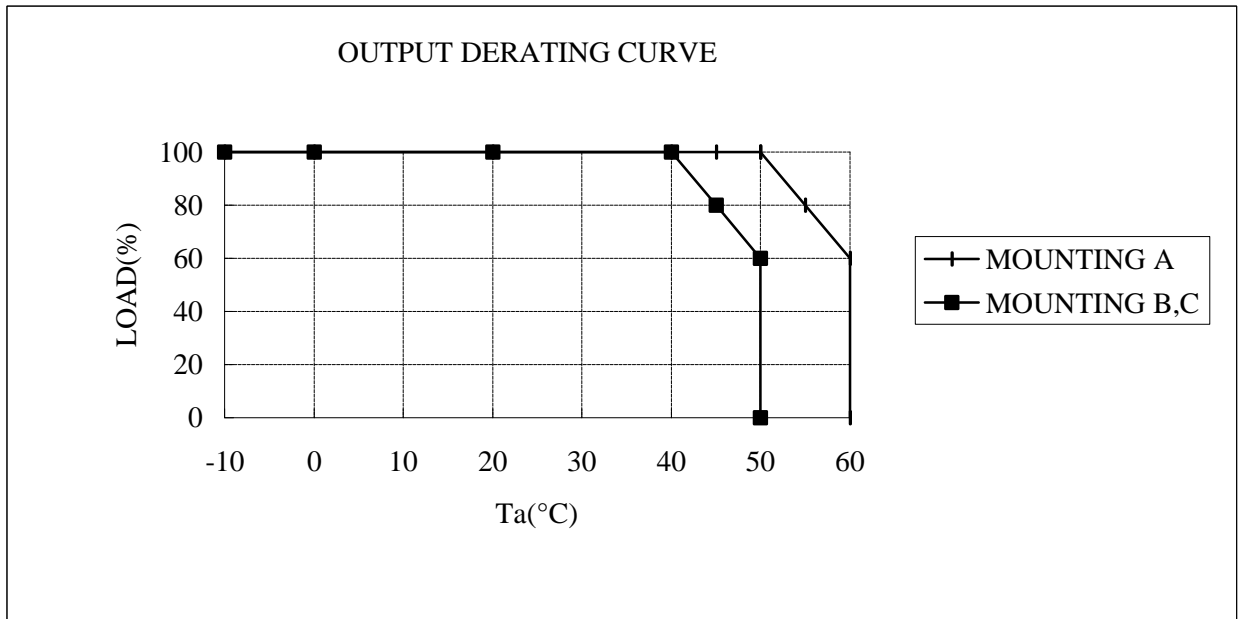
=NOTES=

- *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 (A159-01-02_).
- *11. As for DENTORI, built to meet at 100VAC.

OUTPUT DERATING

A159-01-02

| 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

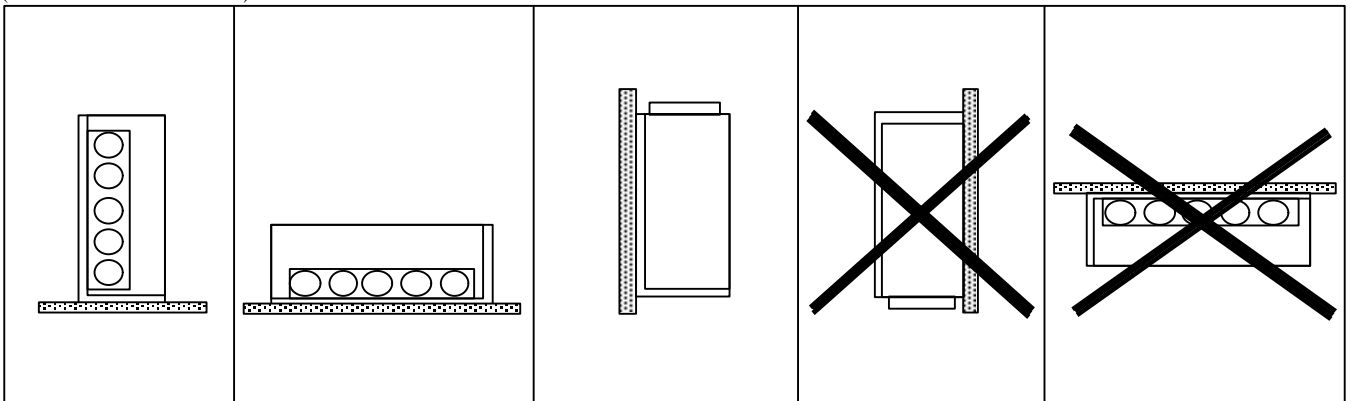
MOUNTING B

MOUNTING C

DON'T USE

DON'T USE

(STANDARD MOUNTING)



JWS 100**SPECIFICATIONS**

A159-01-03C

| ITEMS | | MODEL | JWS100 -6 | JWS100 -9 | JWS100 -28 | |
|-------|-----------------------------------|-----------|---|--------------|---------------|-----|
| 1 | Nominal Output Voltage | V | 6 | 9 | 28 | |
| 2 | Maximum Output Current | A | 16.7 | 11.2 | 3.6 | |
| 3 | Maximum Output Power | W | 100.2 | 100.8 | 100.8 | |
| 4 | Efficiency (Typ.) | (*1) % | 75 | 75 | 79 | |
| 5 | Input Voltage Range | (*2) - | 85 ~ 265VAC (47 ~ 63Hz) or 120 ~ 330VDC | | | |
| 6 | Input Current (100/200VAC) (Typ.) | (*1) - | 1.4 / 0.7A | | | |
| 7 | Inrush Current (Typ.) | - | 14A at 100VAC, 28A 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 | 5.4 ~ 6.6 | 8.1 ~ 9.9 | 25.2 ~ 30.8 | |
| 11 | Maximum Ripple & Noise (*3) | 0 ~ +60°C | mV | 120 | 150 | 150 |
| | | -10 ~ 0°C | mV | 160 | 180 | 180 |
| 12 | Maximum Line Regulation | (*4) mV | 24 | 36 | 112 | |
| 13 | Maximum Load Regulation | (*5) mV | 48 | 72 | 160 | |
| 14 | Temperature Coefficient | - | Less than 0.02%/°C | | | |
| 15 | Over Current Protection | (*6) A | 17.5 ~ | 11.8 ~ | 3.78 ~ | |
| 16 | Over Voltage Protection | (*7) V | 6.9 ~ 8.1 | 10.4 ~ 12.2 | 32.2 ~ 37.8 | |
| 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 | | | |
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| 30 | Shock (In package) | - | Less than 196.1m/s ² | | | |
| 31 | Safety | (*11) - | Approved by UL1950, CSA950, EN60950, VDE0160. Built to meet DENTORI. | | | |
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| 33 | Radiated Emission | - | Built to meet EN55011/EN55022-B, FCC-ClassB, VCCI-B. | | | |
| 34 | Weight (Typ.) | - | 650g | | | |
| 35 | Size (W x H x D) | mm | 50 x 92 x 188 (Refer to Outline Drawing) | | | |

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- *7. OVP circuit will shut down output, manual reset (Line recycle).
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