

■ Features :

- Universal AC input / Full range
- Protections: Short circuit/Over load/Over voltage
- Battery low and battery polarity protection
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at PFC 67KHz, PWM 134KHz
- 2 years warranty

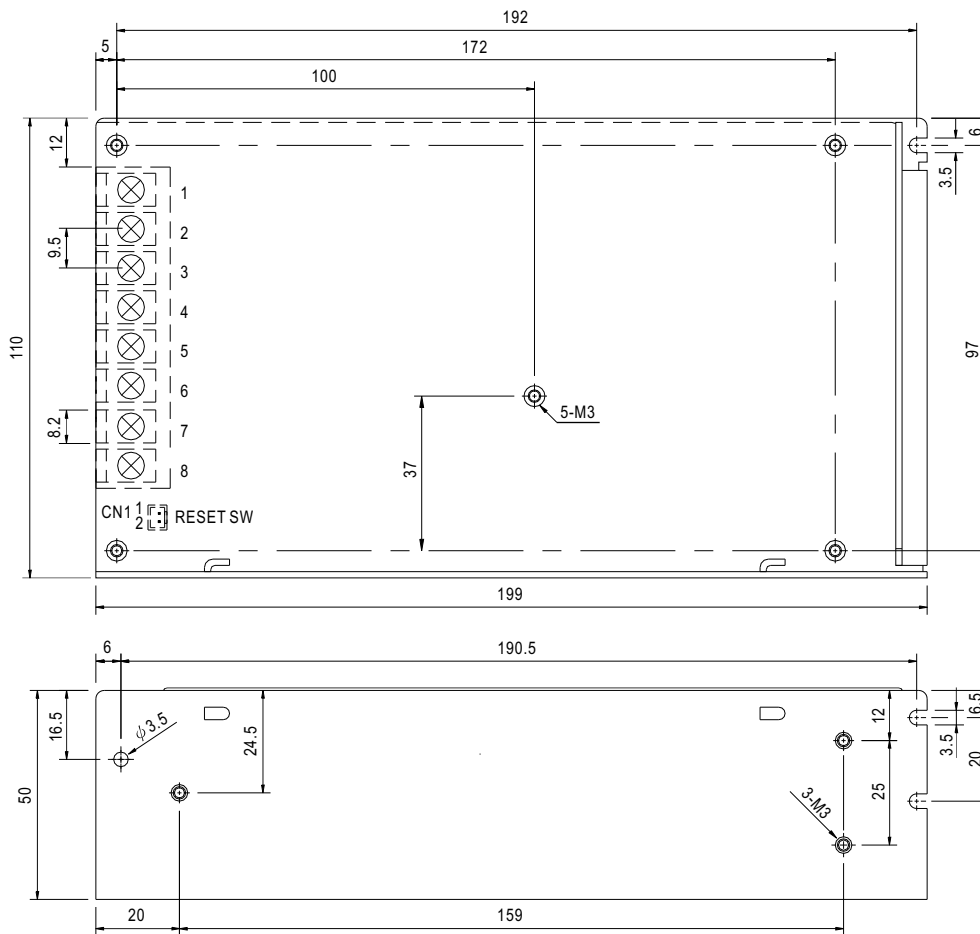


SPECIFICATION

| MODEL | AD-155A | | AD-155B | | AD-155C | | |
|-----------------------|---|---|--------------------------|------------------------------------|----------|------------------|----------|
| OUTPUT | OUTPUT NUMBER | CH1 | CH2 | CH1 | CH2 | CH1 | CH2 |
| | DC VOLTAGE | 13.8V | 13.3V | 27.6V | 27.1V | 54V | 53.5V |
| | RATED CURRENT | 10.5A | 0.5A | 5A | 0.5A | 2.7A | 0.2A |
| | CURRENT RANGE | 0 ~ 11.5A | 0 ~ 0.5A | 0 ~ 5.5A | 0 ~ 0.5A | 0 ~ 2.7A | 0 ~ 0.5A |
| | RATED POWER | 151.55W | | 151.55W | | 156.5W | |
| | RIPPLE & NOISE (max.) Note.2 | 150mVp-p | | 150mVp-p | | 240mVp-p | |
| | VOLTAGE ADJ. RANGE | CH1: 12 ~ 14.5V | | CH1: 24 ~ 29V | | CH1: 48 ~ 58V | |
| | VOLTAGE TOLERANCE Note.3 | ±2.0% | | ±1.0% | | ±1.0% | |
| | LINE REGULATION | ±0.5% | | ±0.5% | | ±0.5% | |
| | LOAD REGULATION | ±0.5% | | ±0.5% | | ±0.5% | |
| | SETUP, RISE TIME | 1000ms, 90ms/230VAC | | 2000ms, 90ms/115VAC at full load | | | |
| HOLD TIME (Typ.) | 24ms/230VAC | | 20ms/115VAC at full load | | | | |
| INPUT | VOLTAGE RANGE | 88 ~ 264VAC | | 124 ~ 370VDC | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | |
| | POWER FACTOR (Typ.) | PF>0.92 at full load | | | | | |
| | EFFICIENCY (Typ.) | 80% | | 84% | | 84% | |
| | AC CURRENT (Typ.) | 2.5A/115VAC | | 1.5A/230VAC | | | |
| | INRUSH CURRENT (Typ.) | COLD START 20A/115VAC | | 40A/230VAC | | | |
| | LEAKAGE CURRENT | <1mA / 240VAC | | | | | |
| PROTECTION | OVER LOAD | CH1:105 ~ 135% | | CH2:0.51 ~ 0.9A rated output power | | | |
| | | Protection type : Constant current limiting, recovers automatically after fault condition is reoved | | | | | |
| | OVER VOLTAGE | CH1:15.87 ~ 18.63V | | CH1:31.74 ~ 37.26V | | CH1:62.1 ~ 72.9V | |
| | Protection type : Shut down o/p voltage, re-power on to recover | | | | | | |
| BATTERY LOW | 10V±0.8V | | 19.5V(+1.5V,-1V) | | 39V±2V | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60°C (Refer to output load derating curve) | | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85°C, 10 ~ 95% RH | | | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0 ~ 50°C) | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | | | |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 Approved | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC | | I/P-FG:1.5KVAC | | O/P-FG:0.5KVAC | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC | | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022 (CISPR22) Class B | | | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,-3 | | | | | |
| | EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A | | | | | |
| OTHERS | MTBF | 183.3K hrs min. | | MIL-HDBK-217F (25°C) | | | |
| | DIMENSION | 199*110*50mm (L*W*H) | | | | | |
| | PACKING | 0.88Kg; 16pcs/15Kg/0.95CUFT | | | | | |
| NOTE | <ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. | | | | | | |

Mechanical Specification

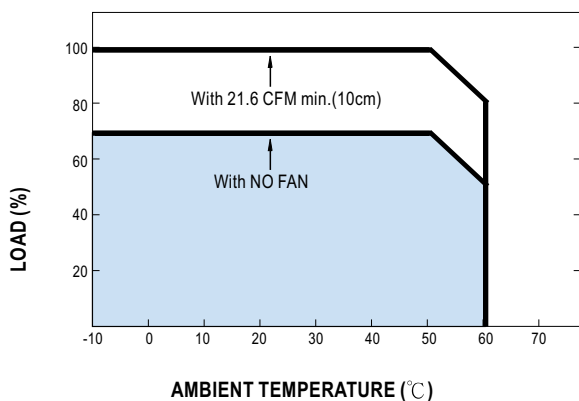
Case No. 906B Unit:mm



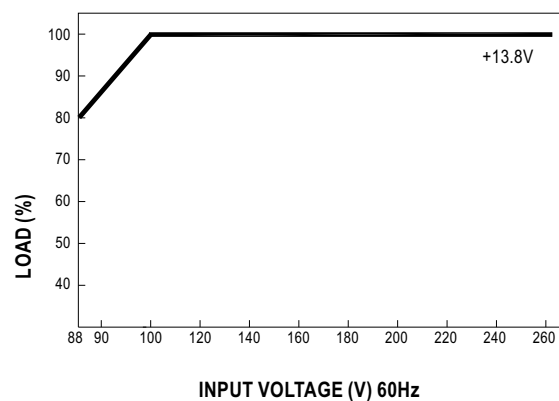
Terminal Pin. No Assignment

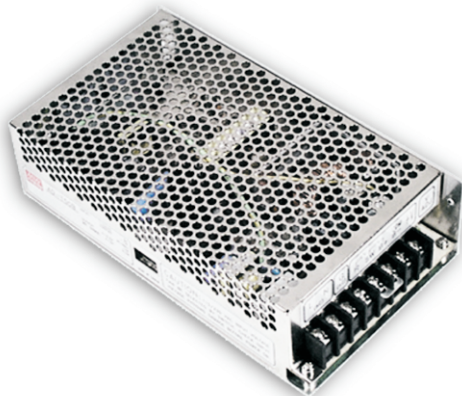
| Pin No. | Assignment | Pin No. | Assignment | Pin No. | Assignment |
|---------|------------|---------|------------|---------|---------------|
| 1 | AC/L | 4 | NC | 7 | DC OUTPUT COM |
| 2 | AC/N | 5 | BAT. + | 8 | DC OUTPUT +V |
| 3 | FG \perp | 6 | BAT. -/COM | | |

Derating Curve



Output Derating VS Input Voltage (A)





■ Features :

- Universal AC input / Full range
- Built-in active PFC function
- Protections: Short circuit/Over load/Over voltage
- Battery low/battery polarity protections
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at PFC 67KHz, PWM 134KHz
- 2 years warranty

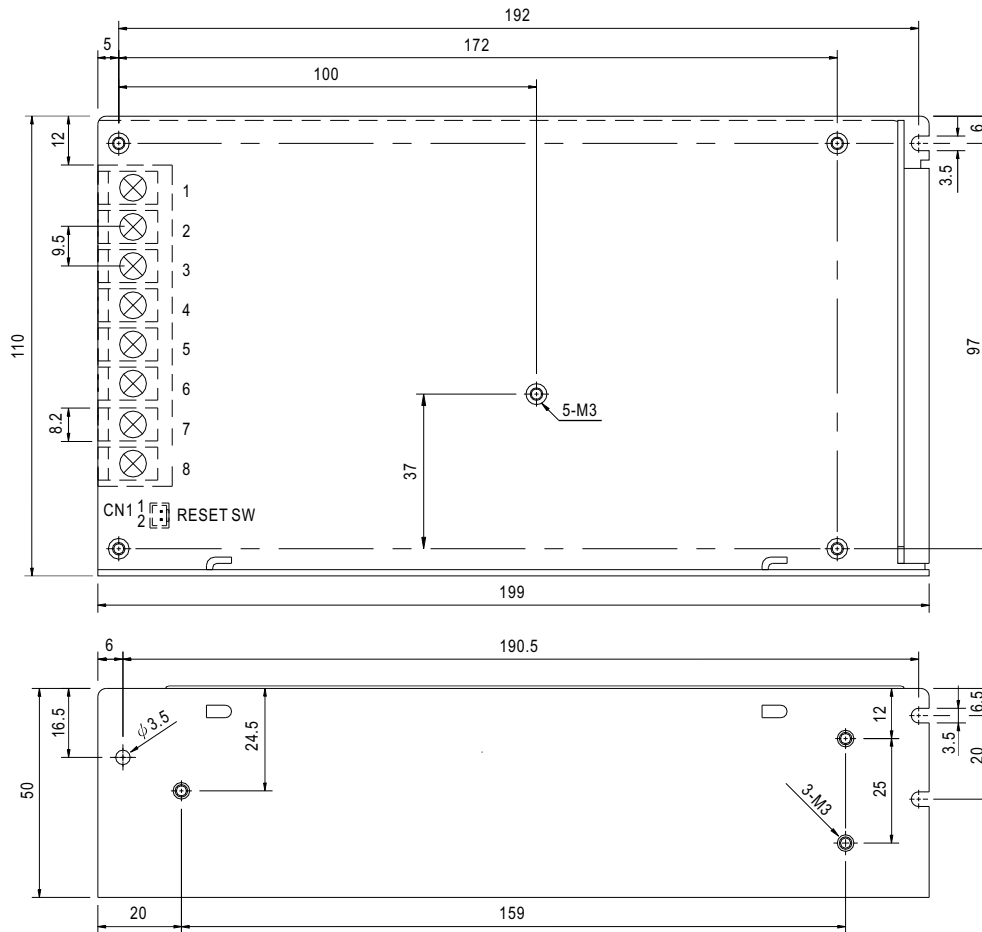


SPECIFICATION

| MODEL | | ADD-155A | | | ADD-155B | | | ADD-155C | | |
|-----------------------|---|---|--------------------------|----------------|------------------------------------|----------------|-------|---|----------|-------|
| OUTPUT | OUTPUT NUMBER | CH1 | CH2 | CH3 | CH1 | CH2 | CH3 | CH1 | CH2 | CH3 |
| | DC VOLTAGE | 13.8V | 5V | 13.3V | 27.6V | 5V | 27.1V | 54V | 5V | 53.5V |
| | RATED CURRENT | 9.5A | 3A | 0.5A | 4.5A | 3A | 0.5A | 2.3A | 3A | 0.2A |
| | CURRENT RANGE | 0 ~ 10.5A | 0 ~ 3A | ----- | 0 ~ 5A | 0 ~ 3A | ----- | 0 ~ 2.5A | 0 ~ 3A | ----- |
| | RATED POWER | 152.75W | | | 152.75W | | | 149.9W | | |
| | RIPPLE & NOISE (max.) Note.2 | 150mVp-p | 100mVp-p | ----- | 200mVp-p | 100mVp-p | ----- | 240mVp-p | 100mVp-p | ----- |
| | VOLTAGE ADJ. RANGE | CH1: 12 ~ 14.5V | | | CH1: 24 ~ 29V | | | CH1: 48 ~ 58V | | |
| | VOLTAGE TOLERANCE Note.3 | ±2.0% | ±3.0% | ----- | ±1.0% | ±3.0% | ----- | ±1.0% | ±5.0% | ----- |
| | LINE REGULATION | ±1.0% | ±0.5% | ----- | ±1.0% | ±0.5% | ----- | ±1.0% | ±0.5% | ----- |
| | LOAD REGULATION | ±1.0% | ±2.0% | ----- | ±1.0% | ±2.0% | ----- | ±1.0% | ±2.0% | ----- |
| | SETUP, RISE TIME | 1000ms, 90ms/230VAC | | | 2000ms, 90ms/115VAC at full load | | | | | |
| HOLD TIME (Typ.) | 24ms/230VAC | | 20ms/115VAC at full load | | | | | | | |
| INPUT | VOLTAGE RANGE | 88 ~ 264VAC | | 124 ~ 370VDC | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | |
| | POWER FACTOR (Typ.) | PF>0.92 at full load | | | | | | | | |
| | EFFICIENCY (Typ.) | 78% | | | 81% | | | 81% | | |
| | AC CURRENT (Typ.) | 2.5A/115VAC | | 1.5A/230VAC | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 20A/115VAC | | 40A/230VAC | | | | | | |
| | LEAKAGE CURRENT | <1mA / 240VAC | | | | | | | | |
| PROTECTION | OVER LOAD | CH1,CH2:105 ~ 135% | | | CH3:0.51 ~ 0.9A rated output power | | | Protection type : Constant current limiting, recovers automatically after fault condition is reoved | | |
| | OVER VOLTAGE | CH1:15.87 ~ 18.63V | | | CH1:31.74 ~ 37.26V | | | CH1:62.1 ~ 72.9V | | |
| | BATTERY LOW | 10V±0.8V | | | 19.5V(+1.5V,-1V) | | | 39V±2V | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60°C (Refer to output load derating curve) | | | | | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85°C, 10 ~ 95% RH | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0 ~ 50°C) on +5V ouput | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | | | | | | |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 Approved | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC | | I/P-FG:1.5KVAC | | O/P-FG:0.5KVAC | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC | | | | | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022 (CISPR22) Class B | | | | | | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,-3 | | | | | | | | |
| | EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A | | | | | | | | |
| OTHERS | MTBF | 164.2K hrs min. | | | MIL-HDBK-217F (25°C) | | | | | |
| | DIMENSION | 199*110*50mm (L*W*H) | | | | | | | | |
| | PACKING | 1Kg; 16pcs/16Kg/0.95CUFT | | | | | | | | |
| NOTE | <ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. | | | | | | | | | |

Mechanical Specification

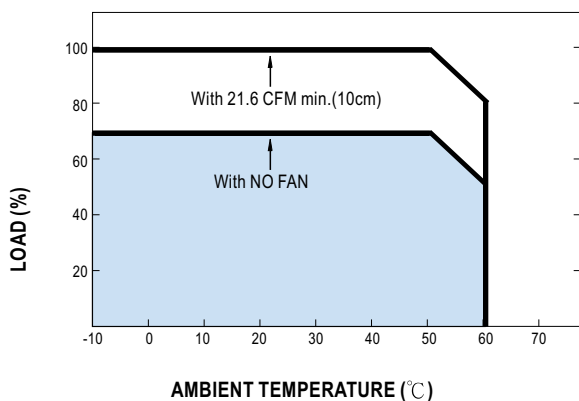
Case No. 906B Unit:mm



Terminal Pin. No Assignment

| Pin No. | Assignment | Pin No. | Assignment | Pin No. | Assignment |
|---------|------------|---------|------------|---------|---------------|
| 1 | AC/L | 4 | +5V | 7 | DC OUTPUT COM |
| 2 | AC/N | 5 | BAT. + | 8 | DC OUTPUT +V |
| 3 | FG \perp | 6 | BAT. -/COM | | |

Derating Curve



Output Derating VS Input Voltage (A)

