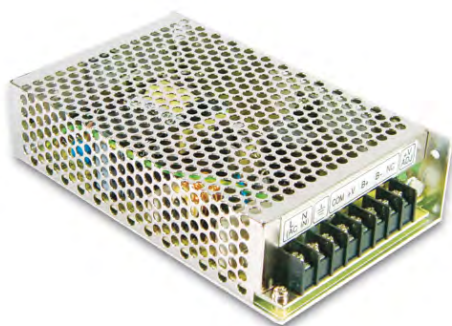
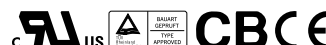




■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Battery low protections
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 45KHz
- Optional DIN Rail Attachment - Page 3

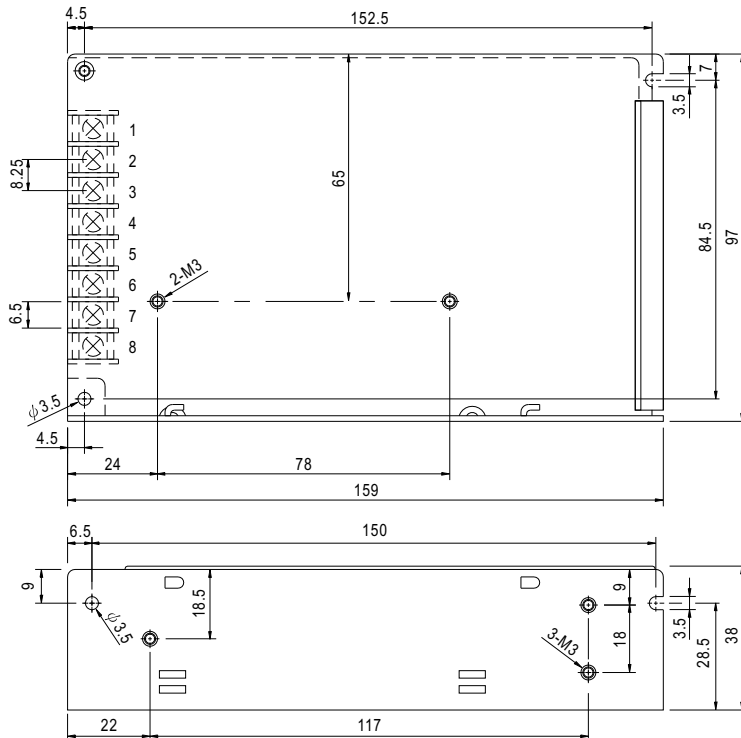


SPECIFICATION

| MODEL                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ADD55-A                                                                                                                                                                             |          |              | ADD55-B       |                    |       |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------|---------------|--------------------|-------|
| OUTPUT                | OUTPUT NUMBER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | CH1                                                                                                                                                                                 | CH2      | CH3          | CH1           | CH2                | CH3   |
|                       | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 13.8V                                                                                                                                                                               | 5V       | 13.4V        | 27.6V         | 5V                 | 26.5V |
|                       | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2.5A                                                                                                                                                                                | 3A       | 0.23A        | 1.3A          | 3A                 | 0.16A |
|                       | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0 ~ 3.5A                                                                                                                                                                            | 0 ~ 4A   | -----        | 0 ~ 2A        | 0 ~ 4A             | ----- |
|                       | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 52.58W                                                                                                                                                                              |          |              | 55.12W        |                    |       |
|                       | RIPPLE & NOISE (max.) Note.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 100mVp-p                                                                                                                                                                            | 100mVp-p | -----        | 150mVp-p      | 150mVp-p           | ----- |
|                       | VOLTAGE ADJ. RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CH1: 12 ~ 14.5V                                                                                                                                                                     |          |              | CH1: 24 ~ 29V |                    |       |
|                       | VOLTAGE TOLERANCE Note.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ±1.0%                                                                                                                                                                               | ±3.0%    | -----        | ±1.0%         | ±3.0%              | ----- |
|                       | LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ±1.0%                                                                                                                                                                               | ±0.5%    | -----        | ±1.0%         | ±0.5%              | ----- |
|                       | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ±1.0%                                                                                                                                                                               | ±0.5%    | -----        | ±1.0%         | ±0.5%              | ----- |
|                       | SETUP, RISE TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 800ms, 50ms/230VAC      1600ms, 50ms/115VAC at full load                                                                                                                            |          |              |               |                    |       |
| HOLD UP TIME (Typ.)   | 80ms/230VAC      16ms/115VAC at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                     |          |              |               |                    |       |
| INPUT                 | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 88 ~ 264VAC                                                                                                                                                                         |          | 124 ~ 370VDC |               |                    |       |
|                       | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 47 ~ 63Hz                                                                                                                                                                           |          |              |               |                    |       |
|                       | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 71%                                                                                                                                                                                 |          |              |               | 74%                |       |
|                       | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.6A/115VAC      1A/230VAC                                                                                                                                                          |          |              |               |                    |       |
|                       | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | COLD START 20A/115VAC      40A/230VAC                                                                                                                                               |          |              |               |                    |       |
|                       | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <1mA / 240VAC                                                                                                                                                                       |          |              |               |                    |       |
| PROTECTION            | OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 105 ~ 150% rated output power<br>Protection type : AC Charging Mode : Hiccup mode, recovers automatically after fault condition is removed<br>UPS Mode : Protected by internal fuse |          |              |               |                    |       |
|                       | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | CH1:14.49 ~ 18.63V                                                                                                                                                                  |          |              |               | CH1:28.98 ~ 37.26V |       |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Protection type : Hiccup mode, recovers automatically after fault condition is removed                                                                                              |          |              |               |                    |       |
| FUNCTION              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | AC fail CN1 PIN2                                                                                                                                                                    |          |              |               |                    |       |
|                       | DC ALARM SIGNAL(OPTIONAL)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Battery low under charge voltage 82.5%±2% CN1 PIN1                                                                                                                                  |          |              |               |                    |       |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Normal 0.8V max. Abnormal 5V±0.5V                                                                                                                                                   |          |              |               |                    |       |
| ENVIRONMENT           | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | -10 ~ +60℃ (Refer to "Derating Curve")                                                                                                                                              |          |              |               |                    |       |
|                       | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 20 ~ 90% RH non-condensing                                                                                                                                                          |          |              |               |                    |       |
|                       | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -20 ~ +85℃, 10 ~ 95% RH                                                                                                                                                             |          |              |               |                    |       |
|                       | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ±0.03%/℃ (0 ~ 50℃) on CH1 output                                                                                                                                                    |          |              |               |                    |       |
|                       | 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 / 25℃ / 70% RH                                                                                                                           |          |              |               |                    |       |
|                       | EMC EMISSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3                                                                                                                             |          |              |               |                    |       |
|                       | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A                                                                                                   |          |              |               |                    |       |
| OTHERS                | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 241.3K hrs min.      MIL-HDBK-217F (25℃)                                                                                                                                            |          |              |               |                    |       |
|                       | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 159*97*38mm (L*W*H)                                                                                                                                                                 |          |              |               |                    |       |
|                       | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.57Kg; 24pcs/13.7Kg/0.75CUFT                                                                                                                                                       |          |              |               |                    |       |
| NOTE                  | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>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**

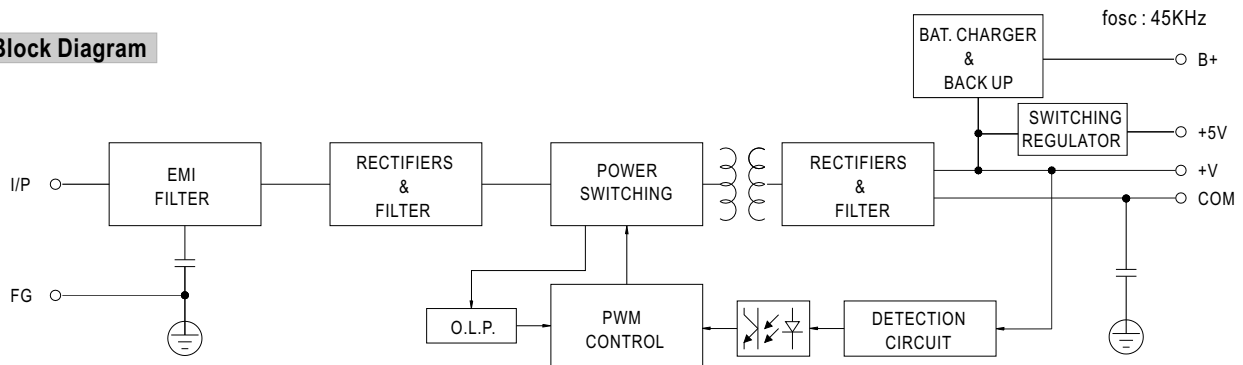
Case No. 901 Unit:mm



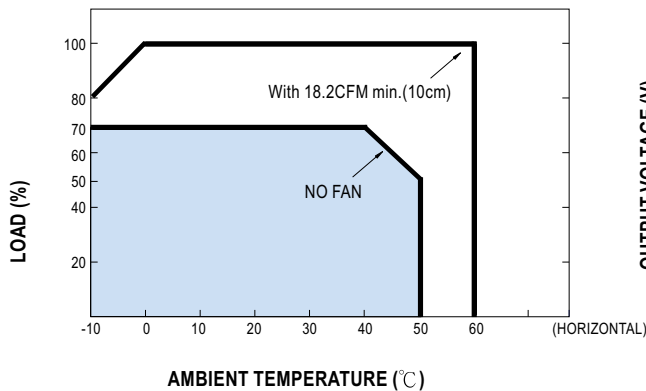
Terminal Pin No. Assignment

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

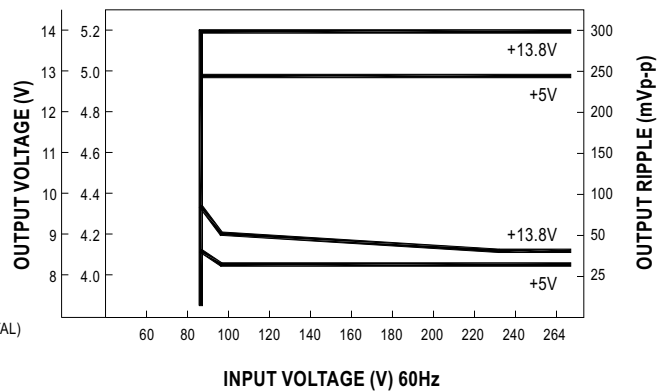
**Block Diagram**



**Derating Curve**



**Static Characteristics (A)**



**OPTIONAL DIN RAIL MOUNTING KIT**

SIMPLY ADD THE SUFFIX “/DRL” TO THE END OF THE MODEL NUMBER. I.E. “ADD55-A/DRL”

