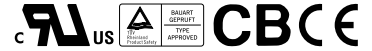


■ Features :

- Universal AC input / Full range
- **Optional L-Bracket and cover**
- Protections: Short circuit / Overload / Over voltage
- Battery low protection / Battery polarity protection by fuse
- Alarm signal for AC OK and Battery low
- Cooling by free air convection
- 100% full load burn-in test
- 2 years warranty

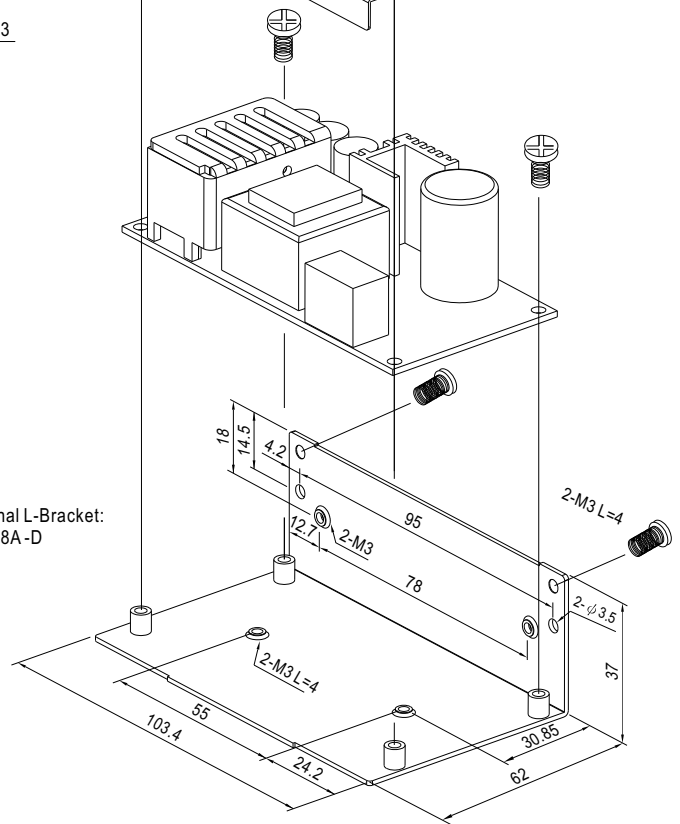
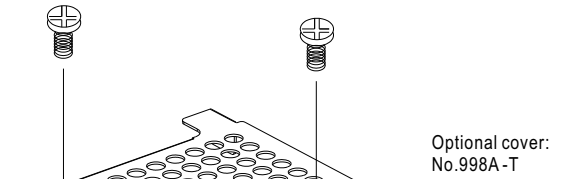
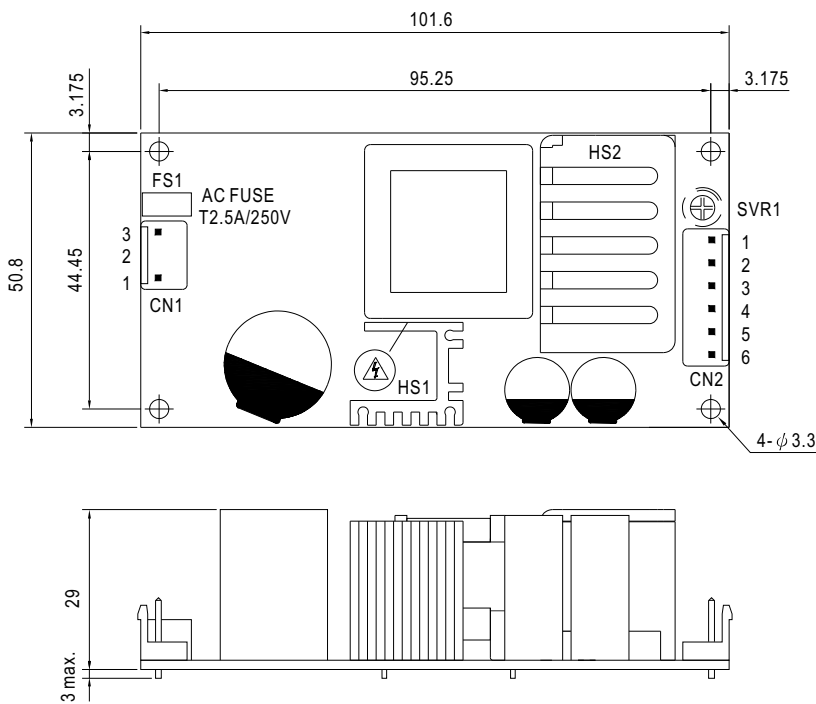


SPECIFICATION

| MODEL | | PSC-60A | | PSC-60B | |
|-------------------------|---|---|--------------|-----------------------------|-------|
| OUTPUT | OUTPUT NUMBER | CH1 | CH2 | CH1 | CH2 |
| | DC VOLTAGE | 13.8V | 13.8V | 27.6V | 27.6V |
| | RATED CURRENT | 2.8A | 1.5A | 1.4A | 0.75A |
| | CURRENT RANGE | 0 ~ 4.3A | ----- | 0 ~ 2.15A | ----- |
| | RATED POWER | 59.34W | | 59.34W | |
| | RIPPLE & NOISE (max.) Note.2 | 120mVp-p | ----- | 240mVp-p | ----- |
| | VOLTAGE ADJ. RANGE | CH1: 12 ~ 15V | | CH1: 24 ~ 29V | |
| | VOLTAGE TOLERANCE Note.3 | ±1.0% | ----- | ±1.0% | ----- |
| | LINE REGULATION | ±0.5% | ----- | ±0.5% | ----- |
| | LOAD REGULATION | ±0.5% | ----- | ±0.5% | ----- |
| SETUP, RISE TIME Note.5 | 800ms, 50ms/230VAC | 1600ms, 50ms/115VAC at full load | | | |
| HOLD UP TIME (Typ.) | 50ms/230VAC | 10ms/115VAC at full load | | | |
| INPUT | VOLTAGE RANGE | 90 ~ 264VAC | 127 ~ 370VDC | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | |
| | EFFICIENCY (Typ.) | 84% | | 84% | |
| | AC CURRENT (Typ.) | 1.6A/115VAC | 1A/230VAC | | |
| | INRUSH CURRENT (Typ.) | COLD START 30A/115VAC | 60A/230VAC | | |
| LEAKAGE CURRENT | <1mA / 240VAC | | | | |
| PROTECTION | OVERLOAD | 105 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | |
| | OVER VOLTAGE | CH1:14.49 ~ 18.63V | | CH1:28.98 ~ 37.26V | |
| | BATTERY CUT OFF | 10.5±0.5V | | 21±1V | |
| FUNCTION | AC OK | TTL open collector output, ON : AC OK ; OFF : AC Fail ; Ice : max. 30mA@ 50VDC | | | |
| | BATTERY LOW | TTL open collector output, ON : Battery Low ; OFF : Battery OK ; Ice : max. 30mA@ 50VDC Battery low voltage : < 11V | | Battery low voltage : < 22V | |
| ENVIRONMENT | WORKING TEMP. | -20 ~ +70°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 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°C / 70% RH | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022 (CISPR22) Class B | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,-3 | | | |
| OTHERS | EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A | | | |
| | MTBF | 589.7K hrs min. MIL-HDBK-217F (25°C) | | | |
| | DIMENSION | PCB:101.6*50.8*29mm (L*W*H) ; with optional CASE:103.4*62*37mm (L*W*H) | | | |
| | PACKING | PCB:0.13Kg; 96pcs/13.5Kg/0.89CUFT ; with optional CASE:0.3Kg; 45pcs/14.5Kg/0.67CUFT | | | |
| 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. 5. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time. 6. Heat sink HS1,HS2 can not be shorted. 7. Heat sink HS1 must have safety isolation distance with system case. | | | | |

■ Mechanical Specification

Unit:mm



- 1.HS1,HS2 can not be shorted.
- 2.HS1 must have safety isolation distance with system case.

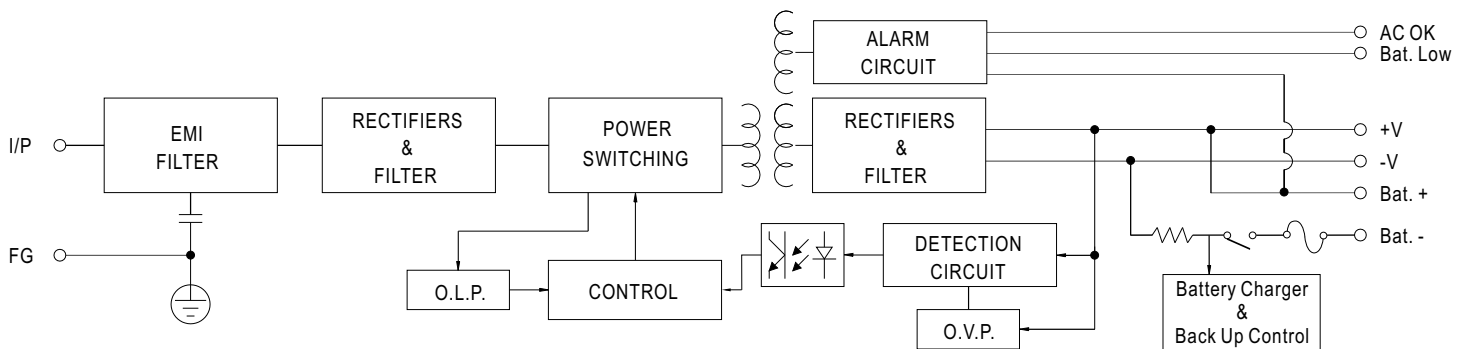
AC Input Connector (CN1) : JST B3P-VH or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1 | AC/N | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2 | No Pin | | |
| 3 | AC/L | | |

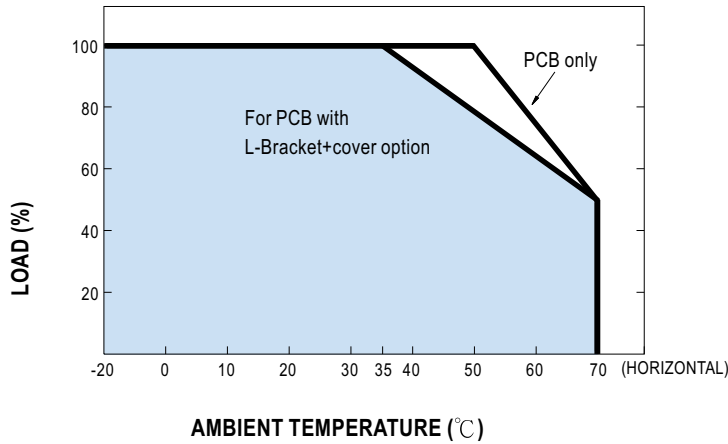
DC Output Connector (CN2) : JST B6P-VH or equivalent

| Pin No. | Assignment | Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|---------|---------------|-----------------------|--------------------------------|
| 1 | Bat. Low | 4 | Battery + | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2 | AC OK | 5 | DC Output + | | |
| 3 | Battery - | 6 | DC Output COM | | |

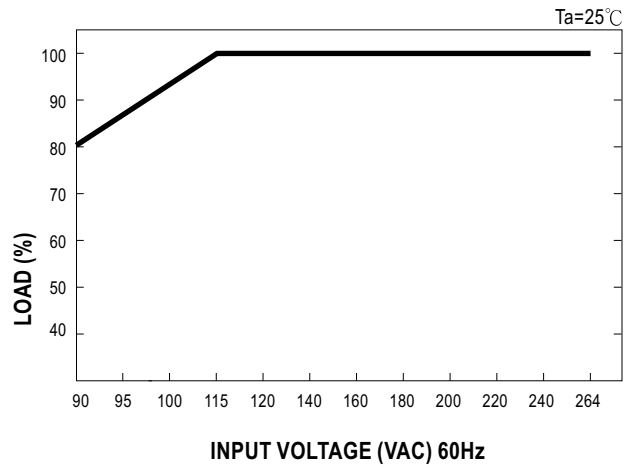
■ Block Diagram



Output Derating



Output Derating VS Input Voltage



Suggested Application

1.Back up connection for AC interruption

(1) Please refer to the Fig.1.1 for suggested connection.

The power supply charge the battery and provide energy to the load in the same time when the AC main is OK.
The battery start to supply power to the load when the AC main fails.

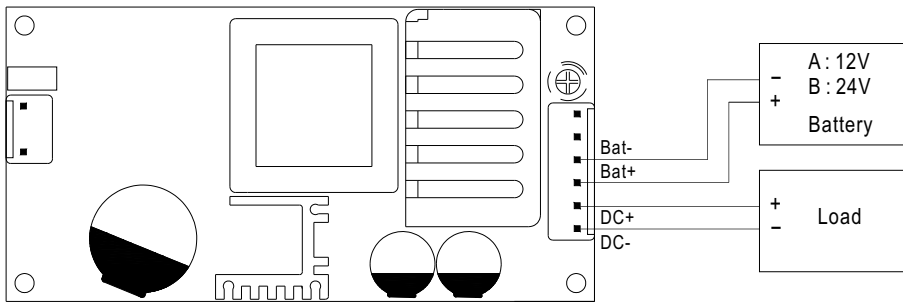


Fig 1.1 Suggested system connection

2.Alarm Signal for AC OK and Battery Low

(1) Alarm Signal is sent out through " AC OK " & " Battery Low " pins.

(2) An external voltage source is required for this function. The maximum applied voltage is 50V and the maximum sink current is 30mA.

(3) Table2.1 explain the alarm function built-in the power supply

| Function | Description | Output of alarm |
|-------------|--|--|
| AC OK | The signal is "Low" when the power supply turns on | Low (0.3V max. at 30mA) |
| | The signal turns to be "High" when the power supply turns OFF | High or open(External applied voltage 30mA max.) |
| Battery Low | The signal is "Low" when the voltage of battery is under A:11V, B:22V | Low (0.3V max. at 30mA) |
| | The signal is "High" when the voltage of battery is above A:11V, B:22V | High or open(External applied voltage 30mA max.) |

Table 2.1 Explanation of Alarm Signal

AC OK (Battery low)

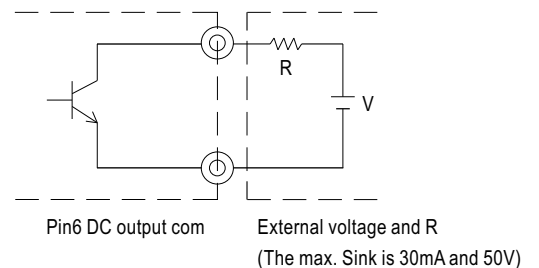


Fig 2.2 Internal circuit of AC OK (Battery Low)