### Features:
- Universal AC input / Full range
- Optional L-Bracket and cover (PSC-60x-C, x=A,B)
- 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

<table>
<thead>
<tr>
<th>MODEL</th>
<th>OUTPUT VOLTAGE ADJ. RANGE</th>
<th>MODEL</th>
<th>OUTPUT VOLTAGE ADJ. RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

**Output**

- **Model:** PSC-60A
- **Model:** PSC-60B
- **Output Number:** CH1, CH2
- **DC Voltage:** 13.8V, 13.8V
- **Rated Current:** 2.8A, 1.5A
- **Current Range:** 0 ~ 4.3A, 0 ~ 2.15A
- **Rated Power:** 59.34W, 59.34W
- **Ripple & Noise (max.)** 120mVp-p, 240mVp-p
- **Voltage ADJ. Range:** CH1: 12 ~ 15V, CH1: 24 ~ 29V
- **Voltage Tolerance:** ±1.0%, ±0.5%
- **Line Regulation:** ±0.5%
- **Load Regulation:** ±0.5%
- **Setup, Rise Time:** Note.2
- **Hold Up Time (Typ.)** 800ms, 50ms/230VAC, 1600ms, 50ms/115VAC at full load
- **Input Voltage Range:** 90 ~ 264VAC, 127 ~ 370VDC
- **Frequency Range:** 47 ~ 63Hz
- **Efficiency (Typ.)** 84%
- **Leakage Current:** <1mA / 240VAC
- **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±0.2V, 21±1V
- **Function**
  - **AC OK:** TTL open collector output, ON: AC OK, OFF: AC Fail
  - **Battery Low:** TTL open collector output, ON: Battery Low, OFF: Battery OK
  - **Battery Low Voltage:** < 11V, Battery low voltage: < 22V
- **Environment**
  - **Working Temp.** -20 ~ +70°C (Refer to "Derating Curve")
  - **Working Humidity:** 20 ~ 90% RH non-condensing
  - **Temperature Coefficient:** ±0.03%/°C (0~50°C) on CH1 output
  - **Vibration:** 10 ~ 500Hz, 2G 10min./cycle, 60min. each along X, Y, Z axes
- **Safety Standards**
  - UL60950-1, TUV EN60950-1 approved
- **EMC Emission**
  - Compliance to EN55022 (CISPR22) Class B, EN61000-3-2,-3
- **EMC Immunity**
  - Compliance to EN61000-4-2,3,4,5,8,11, EN55024, light industry level, criteria A
- **Others**
  - **MTBF:** 589.7h 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)
  - **Packaging:** PCB: 0.13kg, 69pcs/13.5kg/0.89CUFT; with optional CASE: 0.29kg, 45pcs/14kg/0.67CUFT

**Note:**
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 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-certified that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)
5. Length of setup time is measured at cold start. Turning ON/OFF the power supply may lead to increase of the setup time.
6. Heat sink HS1,HS2 can not be shorted.
7. Heat sink HS1 must have safety isolation distance with system case.
## Mechanical Specification

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

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

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Assignment</th>
<th>Mating Housing</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AC/N</td>
<td>JST VHR or equivalent</td>
<td>JST SVH-21T-P1.1 or equivalent</td>
</tr>
<tr>
<td>2</td>
<td>No Pin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>AC/L</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Assignment</th>
<th>Mating Housing</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bat. Low</td>
<td>JST VHR or equivalent</td>
<td>JST SVH-21T-P1.1 or equivalent</td>
</tr>
<tr>
<td>2</td>
<td>AC OK</td>
<td>JST SVH-21T-P1.1 or equivalent</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Battery -</td>
<td>JST SVH-21T-P1.1 or equivalent</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Battery +</td>
<td>JST SVH-21T-P1.1 or equivalent</td>
<td></td>
</tr>
</tbody>
</table>

## Block Diagram

- **EMI FILTER**
- **RECTIFIERS & FILTER**
- **POWER SWITCHING**
- **RECTIFIERS & FILTER**
- **CONTROL**
- **ALARM CIRCUIT**
- **DETECTION CIRCUIT**
- **O.L.P.**
- **O.V.P.**

- **Battery Charger & Back Up Control**
- **AC OK**
- **Bat. Low**
- **+V**
- **-V**
- **Bat. +**
- **Bat. -**

Optional L-Bracket: No.998A-D

Optional cover: No.998A-T

Mylar film

Unit:mm

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File Name: PSC-60-SPEC 2011-08-18
### Suggested Application

1. **Backup connection for AC interruption**
   (1) Please refer to 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.

[Diagram showing 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) Table 2.1 explain the alarm function built-in the power supply

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
<th>Output of alarm</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC OK</td>
<td>The signal is &quot;Low&quot; when the power supply turns on</td>
<td>Low (0.3V max. at 30mA)</td>
</tr>
<tr>
<td></td>
<td>The signal turns to be &quot;High&quot; when the power supply turns OFF</td>
<td>High or open (External applied voltage 50V max.)</td>
</tr>
<tr>
<td>Battery Low</td>
<td>The signal is &quot;Low&quot; when the voltage of battery is under A:11V, B:22V</td>
<td>Low (0.3V max. at 30mA)</td>
</tr>
<tr>
<td></td>
<td>The signal is &quot;High&quot; when the voltage of battery is above A:11V, B:22V</td>
<td>High or open (External applied voltage 50V max.)</td>
</tr>
</tbody>
</table>

Table 2.1 Explanation of Alarm Signal

[Diagram showing Internal circuit of AC OK (Battery Low)]