

**SP-T Series****KGCOMP  
PRODUCTS**

Models

General Specification

Block Diagram

**Operation Manual**[Product Guide](#)>[SP-T Series Top](#)>Operation Manual

Selection Guide

## Operation Manual

### 1. Inrush Current

These power supplies are equipped with a inrush protection circuit, but when multiple power supply units are in use, care must be exercised in the selection of switches, etc.

---

### 2. Over Current Protection

If output current exceeds the rated output of the power supply, the overcurrent protection will activate and output voltage will drop. The power supply will function normally once the overcurrent condition has been removed.

Using too large of capacitor on your load may prevent the power supply from providing the rated output voltage. Please consider load capacitance in your application.

Don't leave power supply in overcurrent condition or short mode more than 30 seconds, Power supply will be damaged.

---

### 3. Over Voltage Protection

When output voltage becomes greater than regulated output voltage, the overvoltage protection will activate.

Caution should be taken to assure that voltage is not adjusted greater than recommended  $\pm 10\%$  tolerance level.

The 15W, 30W models utilize Zener limiter for overvoltage protection.

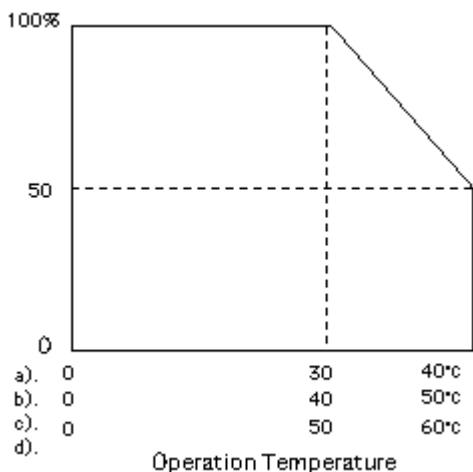
The 50W, 80W models uses inverter circuit for overvoltage protection. If overvoltage protection activates, turn off the power supply for approx 1 minute; check power supply, and recycle on. The power supply will resume normal operation.

---

### 4. Output Voltage Adjustment

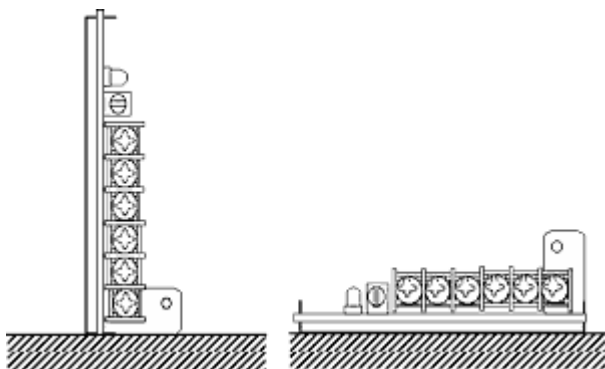
The output voltage (5V) can be adjusted  $\pm 5\%$  by adjusting the trim pot on the PCB. Turning the trim pot clockwise will increase the output voltage. Turning the trim pot counterclockwise will decrease the output voltage. The output voltage can be adjusted greater than  $\pm 5\%$ , but the limitations are set by the built-in overvoltage protection circuit.

### 5. Operation Temperature and Output Capability



The range of temperature over which a power supply can be operated safely is critical to the overall life of the power supply. Operate the power supply in safe ambient conditions by considering the necessary convection or forced air cooling requirements.

- a). Enclosed, Horizontal Mounted
- b). Enclosed, Vertical Mounted
- c). Open Frame, Horizontal Mounted
- d). Open Frame, Vertical Mounted



### 6. Input Fuse

Input fuse prevents secondary trouble. Don't try to change fuse. If fuse blows, contact your sales representative immediately.

### 7. Warranty

We offers a three year warranty and we will repair or replace the power supply at no charge to the customer, provided the power supply has not been determined damaged or defective as a direct result of misuse or mishandling by the user.

---

#### 8.Others

These power supplies are our standard products and designed for general purpose applications. They are not designed for use in life support systems, equipment used in hazardous environments, or nuclear control systems.