

# Power Guard Phidget



The new generation of motor controllers from Phidgets Inc. are able to rapidly change motor directions, strongly brake the motor, and produce power with regenerative braking. Battery powered systems can easily absorb these surges of power – but most Power Supplies will immediately fail if a power surge is detected on the output.

The SAF2000\_0 has three functions:

- Prevent power on the output from flowing back to the input
- Clamp the output at 37 Volts during power surges, to protect the motor controllers
- Conveniently convert a 5.5×2.1mm Power Jack to a terminal block

We strongly recommend using this Phidget according to the table below:

## **Recommended Use**

### **Controller Motor Rated Current Suggested Power Guard**

STC1000	Less than 1.5A	None
STC1000	1.5A to 5A	SAF2000
STC1000	Greater than 5A	SAF1000
DCC1000	Less than 1A	None
DCC1000	1A to 5A	SAF2000
DCC1000	Greater than 5A	SAF1000

## **Product Specifications**

### **Electrical Properties**

Trip Voltage 37 V DC

Continuous Current 5 A

### **Physical Properties**

Operating Temperature Max 85 °C

Operating Temperature Min -40 °C

Recommended Wire Size 16 – 26 AWG

Power Jack 5.5×2.1mm, Center Positive