

# **External Portable and Switchboard Shunts**

- Portable Shunts Up to 200DC Amps
- Switchboard Shunts Up to 500DC Amps
- Reduces High DC Current Signal Into Either 50 or 100 Millivolt Drop
- Accuracy ±1% 5 Foot Leads (0.065 ohms) Included
- Shunts Can Be Certified to NIST Standards

Simpson's Portable and Switchboard shunts enable a panel meter to indicate higher DC currents than can be provided with a self-contained internal shunt. A typical shunt installation in series with the load and source is shown in the application section.

These shunts can be used with either digital or analog meters. Most digital DC millivolt meters that Simpson manufactures can be scaled to display the actual current. Simpson can custom design any dial for the analog meters you require. Simpson manufactures two types of external shunts: Portable and Switchboard shunts.

**Portable shunts** are mounted in a phenolic base. This base allows the shunt to be easily installed in many locations. Portable shunts come in a 50 millivolt drop and a 100 millivolt drop. The most commonly used is the 50 millivolt unit

**Switchboard shunts** mount directly onto a buss bar and have a 50 millivolt drop. They have the same quality construction as a portable shunt, but without the phenolic base.

Leads for these shunts are 5 feet long and are rated at 0.065 ohms resistance. Shunts with a 100 amp rating and below can be certified to NIST standards.

#### **Dimensions and Installation**



50mV Shunts Portable 150 amp Catalog No. 06714



Switchboard 100 amp Catalog No. 06500

# 3.59 4.50 5.25 6.00 10-32 SCREW 10-32 SCREW 10-32 SCREW

#### **External Portable Shunts**

\* 10 amp and 100 amp models only

#### Switchboard Shunts Dimension Table

l	Amps	А	В	С	D	E
l	100	4-1/2"	1"	3-1/2"	1/2"	3/8-16x1-1/2
l	125	4-1/2"	1"	3-1/2"	1/2"	3/8-16x1-1/2
l	150	4-1/2"	1"	3-1/2"	1/2"	3/8-16x1-1/2
l	200	4-1/2"	1"	3-1/2"	1/2"	3/8-16x1-1/2
l	300	5-1/2"	1-1/2"	4"	1"	1/2-13x2
l	400	5-1/2"	1-1/2"	4"	1″	1/2-13x2
١	500	5-1/2"	1-1/2"	4"	1″	1/2-13x2

# Switchboard Shunts A C C

# Ordering Information

#### Portable 50mV Shunts

Range	Cat. Number
1	06700
5	06703
10	06704
15	06705
25	06707
30	06708
50	06709
75	06711
100	06713
150	06714
200	06715

#### Switchboard 50mV Shunts

JV	SWILCIDOAIU SOIIIV SIIUIII					
	Range	Cat. Number				
	100	06500				
	150	06503				
	200	06504				
	250	06505				
	300	06506				
	400	06507				
	500	06508				

### Portable 100mV Shunts

Amps	Cat. Number			
10	06716			
100	06717			

5' leads not included

# **Typical Application**

A motor is connected to a 220 Volt power generator, and running requirements call for 100 Amps. This motor is attached to an elevator, and the heavier the weight in the car the higher the current draw. There is a need to monitor the current draw of the motor to insure that an overweight car is not moved and the motor damaged.

A break is made in the common line between the motor and the power

source. A shunt with a ratio of 100 DC amps/50 DC millivolts is installed in this break. An analog or digital panel meter is connected to the small screws on the shunt. The current draw will be converted to a DC millivolt signal for the

If the

If the ratio of Amps to car weight is known, a digital unit can be scaled to indicate the engineering unit you desire. Custom dials are available for analog meters.

