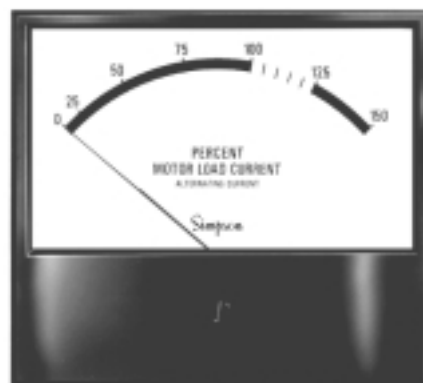




- Provides Visual Monitoring of Load Conditions of AC or DC Motors
- $\pm 2\%$ of Full Scale Accuracy
- Used with All AC Motors of Any Horsepower, Voltage, Frequency (50 or 60 Hz) or Phase
- Two Popular Sizes: 3-1/2" and 4-1/2"
- Phenolic Cases and Glass Windows



Simpson's Percent Motor Load panel meters, housed in century style case, are available in 3-1/2" and 4-1/2" sizes. An attractive design with phenolic case and glass windows, the century style provides visual monitoring of load conditions of AC & DC motors while running. This monitoring can prevent overloading and motor burn-out and establish and maintain optimum operating load conditions. Scales show percent load from 0 to 150%. Scale is green from 0 to 100%, yellow from 100 to 125%, and red from 125 to 150%. AC Load meters can be used with all AC motors of any horsepower, voltage, frequency or phase. DC load meters require an external shunt and potentiometers while AC load

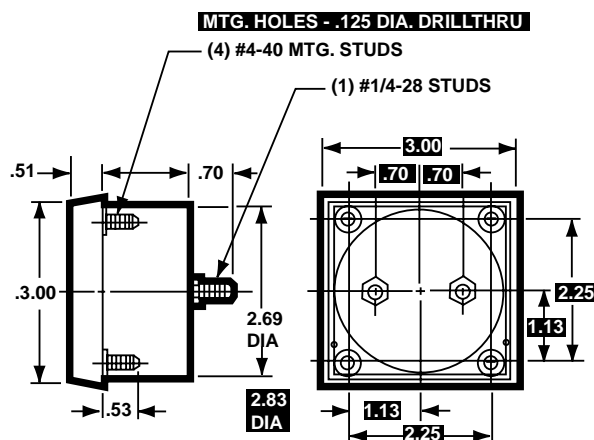
Model Number	Size	Meter Movement
2123	3-1/2"	Annular
2153	3-1/2"	Iron Vane
2124	4-1/2"	Annular
2154	4-1/2"	Iron Vane

meters require an external current transformer. Simpson's external shunts and transformers are sold separately. All AC meters have iron-vane movements that are magnetically damped and can be used for non-sinusoidal wave forms. DC units have annular movements that are stable even under the most severe shock and vibration conditions.

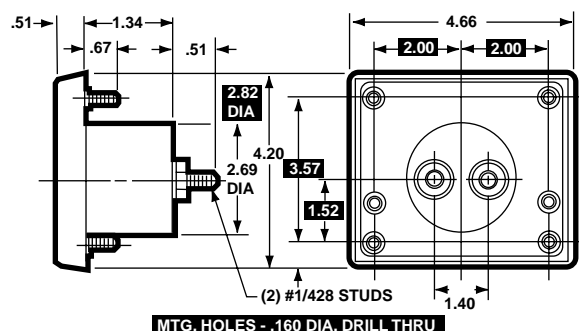
Dimensions and Compatibility

1 = Panel Meter Cut-out Dimensions

3-1/2"-Model 2123 & 2153



4-1/2"-Model 2124 & 2154



Specifications

Accuracy:	+2% F.S.
Movement:	Models 2153, 2154: Iron vane, magnetically damped Models 2123, 2124: Annular, self-shielding
Suspension:	Pivot and jewel
Tracking:	±3%
Shielding:	Calibration is unaffected by magnetic panel mounting.
Response Time:	1.5 seconds maximum above 10mA
Overload (1 sec.):	10 times F.S.
Overload (Continuous):	1.5 times F.S.
Repeatability:	2%
Dial:	Sharp clear scale. Each dial arc is calibrated to track the specific type of movement used.

Resistance:	±15%
Operating Temperature:	-4 °F to +149 °F (-20 °C to +65 °C)
Case:	High density black phenolic
Pointer:	Knife-edge, with black matte finish
Scale Length:	Models 2123, 2153: 2.75" (69.8mm) Models 2124, 2154: 4.09" (103.9mm)
Net Weight:	Model 2123: 8oz (0.23kg) Model 2124: 11oz (0.31kg) Model 2153: 6oz (0.17kg) Model 2154: 9oz (0.26kg)
NOTE:	Meters meet ANSI specification C-39.1

Ordering Information

Percent Motor Load Panel Meters

Type	Rating	Model/Size and Catalog Number			
		3-1/2" Model #	Catalog #	4-1/2" Model #	Catalog #
DC (Note 1)	30 mV	2123	17564	2124	17637
AC (Note 2)	5 amps	2153	17711	2154	17756

Note 1: DC load meters require an external shunt and an 8 to 10 Ω , 2 watt wire-wound potentiometer (customer supplied). The appropriate shunt should be selected from the Accessories section and ordered separately. To select the proper shunt, first obtain the full-load current rating of your motor from the name plate, manufacturer's specifications of N.E.C. listing. Multiply that rating by 1.25 and select and order the shunt with an "amps" rating as large or slightly larger than the calculated value.

Note 2: AC load meters must be used with external donut transformers listed below.

If assistance in selecting the appropriate transformer and determining the correct primary/secondary turns ratio is required, contact a Simpson technical service representative or authorized service center by calling (708) 697-2260.

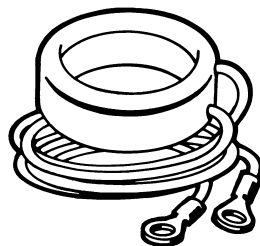
Function Reference Table

For your convenience, the table below lists Century models for other electrical monitoring functions and page reference.

Function	Section	Page
AC Current	E	15
AC Voltage	E	35
DC Current	E	55
DC Voltage	E	75
Watts	E	107

Accessories

Donut Current Transformer

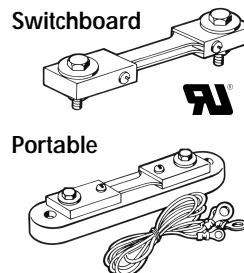


A Donut Current Transformer enables this meter to monitor motors with current ratings up to 1000 amps. The Donut (also known as a "Toroid") is placed around one of the legs of the device being monitored, and emits up to a 5 amp signal. Each Donut Transformer, rated at 2 volt amps, comes with 2' long secondary leads.

Ordering Information

Range/Amps		Catalog Number
Primary	Secondary	
50	5	01293
75	5	01306
100	5	01297
150	5	01298
200	5	01299
250	5	01313
300	5	01300
400	5	01305
500	5	01301
600	5	02303
750	5	02459
1000	5	02304

External Portable and Switchboard Shunts



These shunts are adjusted for a 50 millivolt drop for use with switchboard and panel current meters where external shunts are required. Portable shunts have a phenolic base and accept up to 200 amperes. Accuracy $\pm 1\%$, 5' leads (0.065 Ω resistance) included.

NOTE: 5' leads not included

Portable Shunts 50 mV

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

Portable Shunts 100 mV

Amps	Cat. Number
10	06716
100	06717

Switchboard Shunts 50 mV

Amps	Cat. Number
100	06500
150	06503
200	06504
250	06505
300	06506
400	06507
500	06508