



- Wide-Angle Visibility
- Provides Visual Monitoring of Load Conditions of AC or DC Motors
- Can Be Used with All AC Motors of Any Horsepower, Voltage, Frequency, or Phase
- Two Popular Sizes: 3-1/2" and 4-1/2"
Optional Bezel and Illumination Kits



| Model Number | Size | Meter Movement |
|--------------|--------|----------------|
| 1327 | 3-1/2" | Annular |
| 1357 | 3-1/2" | Iron Vane |
| 1329 | 4-1/2" | Annular |
| 1359 | 4-1/2" | Iron Vane |

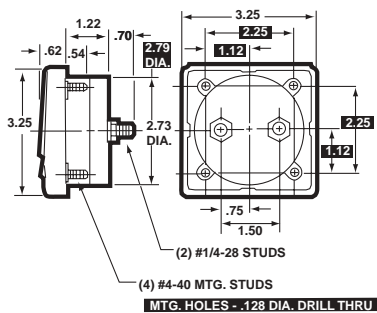
Simpson's Wide-Vue Style Percent Motor Load panel meters are available in 3-1/2" and 4-1/2" sizes. An attractive design with wide-angle visibility, the Wide-Vue Style provides visual monitoring of load conditions of AC and DC motors while running. Such monitoring can prevent overload and motor burn out and establish and maintain optimum operating load conditions. This style meter can either be surface mounted or bezel mounted (semi-flush mount) with one of Simpson's Wide-Vue bezel kits. 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 potentiometer, while AC load meters require an external current transformer. Simpson's external shunts and transformers are sold separately. All AC meters have moving iron vane movements that are magnetically damped and can be used for non-sinusoidal wave forms and where economy is essential. DC units have annular movements that are stable even under the most severe shock and vibration conditions.

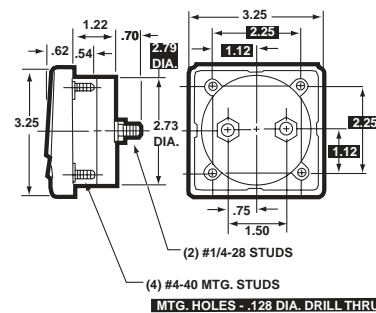
Dimensions and Compatibility

1 = Panel Meter Cut-out Dimensions

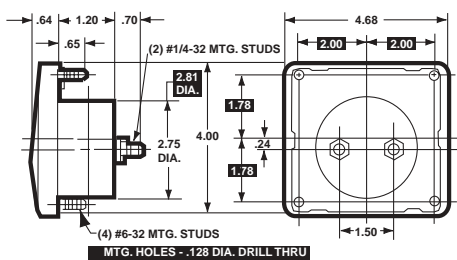
3-1/2"-Model 1327 (DC)



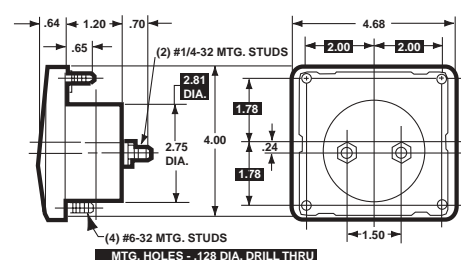
3-1/2"-Model 1357 (AC)



4-1/2"-Model 1329 (DC)



4-1/2"-Model 1359 (AC)



Specifications

| | |
|-------------------------------|--|
| Accuracy: | ±2% full scale (F.S.) |
| Movement: | Models 1357, 1359: Iron vane, magnetically damped Models 1327,1329: Annular, self-shielding |
| Suspension: | Pivot and jewel |
| Tracking: | 3% |
| Repeatability: | 2% |
| 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. |
| Dial: | Sharp clear scale. Each dial arc is calibrated to track the specific type of movement used. |
| Case: | High density black phenolic |

| | |
|-------------------------------|---|
| Operating Temperature: | -20 °C to +65 °C (-4 °F to +149 °C) |
| Resistance: | ±15% |
| Scale Arc: | 90° |
| Pointer: | Spade pointer, with black matte finish |
| Scale Length: | Model 1327: 3.14"(79.7mm) Model 1329: 3.93"(100.0mm) |

| | |
|--------------------|--|
| Net Weight: | Model 1327: 8oz (0.23kg) Model 1329: 9oz (0.26kg) Model 1357: 5oz (0.37kg) Model 1359: 6oz (0.17kg) |
|--------------------|--|

NOTE: Meters meet ANSI specification C-39.1

Ordering Information

Percent Motor Load Wide-Vue Panel Meters

| Type | Rating | Model/Size and Catalog Number | | | |
|-------------|--------|-------------------------------|-----------|----------------|-----------|
| | | 3-1/2" Model # | Catalog # | 4-1/2" Model # | Catalog # |
| DC (Note 1) | 30mV | 1327 | 07028 | 1329 | 07029 |
| AC (Note 2) | 5 amps | 1357 | 03171 | 1359 | 03301 |

Note 1: DC load meters require an external shunt and potentiometer (not supplied). Use 8 to 10 W, 2 watt wire-wound potentiometer. The appropriate shunt should be selected from accessory 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. Installation and calibration instructions are included with the meter.

Note 2: AC load meters must be used with external donut transformers listed below. Complete instructions for proper selection are included with each AC load meter. Advance assistance in selecting the appropriate transformer and determining the correct primary/secondary turns ratio can be obtained from a Simpson technical service representative or authorized service center.

Function Reference Table

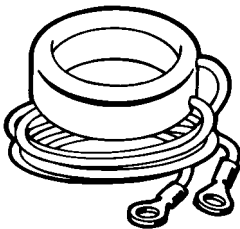
For your convenience, the table below lists Wide-Vue models for other electrical monitoring functions and page reference.

| Function | Section | Page |
|------------|---------|------|
| AC Current | E | 11 |
| AC Voltage | E | 31 |
| DC Current | E | 51 |
| DC Voltage | E | 71 |
| Watts | E | 105 |

Accessories

AC Motors

Donut Transformer



Ordering Information

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

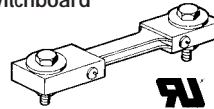
A Donut Current Transformer enables this meter to monitor motors with current ratings up to 1000 amps. The Donut (also known as a "Toroid") is placed around one of the legs of the device being monitored, and emits up to a 5 amp signal. Each Donut Transformer, rated at 2 volt amps, comes with 2' long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

Wide-Vue Bezel Kits

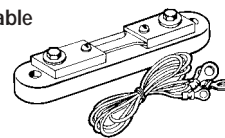
Bezels are available for Wide-Vue style meters to give your equipment a modern appearance. Bezels are die cast with an attractive black satin finish and are designed for behind panel mounting on material thickness of 1/8" to 3/16". Bezel kits include all mounting hardware and can be ordered separately.

External Portable and Switchboard Shunts

Switchboard



Portable



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 phenolic base and accept up to 200 amperes. Accuracy 61%, 5' leads (0.065 V resistance) included.

Portable Shunts 50mV

| 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 100mV

| Amps | Cat. Number |
|------|-------------|
| 10 | 06716 |
| 100 | 06717 |

NOTE: 5' leads not included

Switchboard Shunts 50mV

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

Ordering Information

| Model Number | Catalog Number |
|---------------------|----------------|
| 1357 (3-1/2") Bezel | 01253 |
| 1359 (4-1/2") Bezel | 01123 |