



AC Current Rectangular Style

- UL Recognized
- Phenolic Case
- Glass Window
- Distinctive Case Style
- Six Different Models
- Three Popular Sizes:
2-1/2", 3-1/2", 4-1/2"



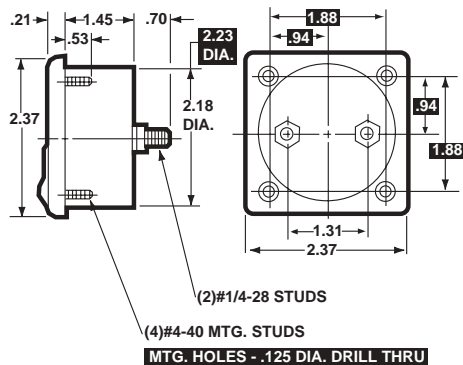
For unsurpassed stability and quality performance, look to Simpson's rectangular style meters. The rectangular style offers a popular look with sharp, beveled edges and glass windows for easy viewing. AC units have either iron-vane or rectifier type movements. All ranges are calibrated to 60 Hz. Iron-vane type current meters have frequency ranges of 25-800 Hz (for $\pm 1\%$ deviation from value at 60 Hz). All rectifier types have 25 Hz to 10 KHz range. Three different standard sizes of 2-1/2", 3-1/2", and 4-1/2" are available to measure various AC current ranges including amps, milliamps, and microamps. This style meter is ideal for many other electrical functions. See the "Function Reference Table."

Model Number	Size	Meter Movement
157	2-1/2"	Iron-Vane
147	2-1/2"	Annular-Rectifier
57	3-1/2"	Iron-Vane
47	3-1/2"	Annular-Rectifier
59	4-1/2"	Iron-Vane
49	4-1/2"	Annular-Rectifier

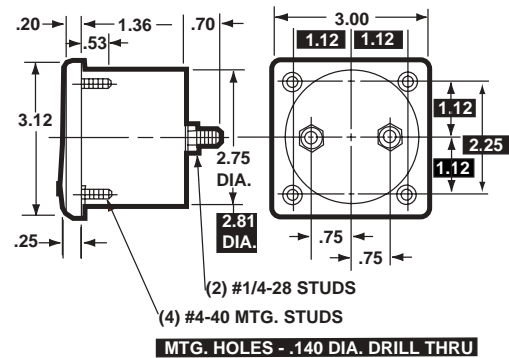
Dimensions and Compatibility

2-1/2"-Model 147 & 157

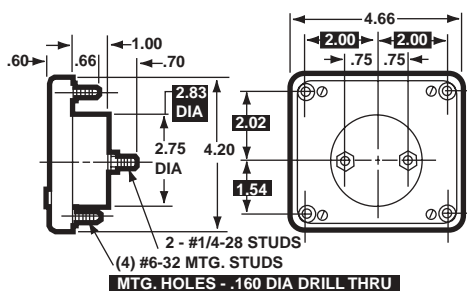
1 = Panel Meter Cut-out Dimensions



3-1/2"-Model 47 & 57



4-1/2"-Model 49 & 59



Compatibility Reference Table

Manufacturer	Size/Model		
	2-1/2"	3-1/2"	4-1/2"
Beede		15	16/458
Hoyt		598	648/684
Modutec PB Series	2PB*	3PB*	4PB
Triplett S Series	227-T	327-*T	420
Yokogawa Big Look	250-2 OPT.	250-3 OPT.	250-4 OPT. 1

*Modutec Meters use a three-stud mount.

Specifications

Accuracy:	±2% full scale (F.S.) (iron-vane), ±3% (rectifier)
Movement:	Models 57, 59, 157: Iron-vane, magnetically damped Models 47, 49, 147: Annular, rectifier type, self-shielding
Suspension:	Pivot and jewel
Tracking:	±3%
Shielding:	Calibration is unaffected by magnetic panel mounting
Response Time:	1.5 seconds maximum
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.

Case:	High density black phenolic
Resistance:	±15%
Operating Temperature:	-4°F to +149°F (-20°C to +65°C)
Pointer:	Spade pointer, with black matte finish
Scale Length:	Model 47: 2.5" (63.5mm); Model 49: 3.9" (99mm) Model 57: 2.3" (58.4mm); Model 59: 3.5" (89.0mm); Model 147: 1.8" (45.7mm); Model 157: 1.6" (40.6mm)
Net Weight:	Models 47 & 59: 8oz (0.23kg) Models 57 & 157: 5oz (0.14kg) Models 147: 7oz (0.20kg) Model 49: 11oz (0.31kg)

Ordering Information

AC Microammeters Rectifier Type, Self-Shielding

Range	Approx. Impedance (ohms) @	Model/Size and Catalog Number		
		2-1/2" Model 147	3-1/2" Model 47	4-1/2" Model 49
0-100	3400	< >	04120	04160
0-200	2400	< >	< >	04170
0-300	1800	< >	04140	04180
0-500	1200	< >	04150	04190

AC Millimeters Iron-Vane Type Movement

Range	Approx. Impedance (ohms) @	Model/Size and Catalog Number		
		2-1/2" Model 157	3-1/2" Model 57	4-1/2" Model 59
0-10	1650.0	< >	05440	05510
0-15	887.0	< >	05499	< >
0-25	270.0	< >	05460	05530
0-50	80.0	06130	05470	05540
0-100	17.2	06140	05480	05550
0-250	3.1	06150	05490	05560
0-500	.9	06152	05500	05570

AC Millimeters Rectifier Type, Self-Shielding

Range	Approx. Impedance (ohms) @	Model/Size and Catalog Number		
		2-1/2" Model 147	3-1/2" Model 47	4-1/2" Model 49
0-1	600	< >	06850	06880
0-2	400	< >	06860	< >
0-5	200	< >	06870	06900

AC Current Meters Iron-Vane Type Movement

Range	Approx. Impedance (ohms) @	Model/Size and Catalog Number		
		2-1/2" Model 157	3-1/2" Model 57	4-1/2" Model 59
0-1	.213	02270	01120	01290
0-1.5	.105	< >	01130	01302
0-2	.065	02290	01140	01310
0-3	.028	02300	01145	01320
0-5	.008	02310	01160	01330
0-10	.004	02320	01170	01340
0-15	.0025	02330	01180	01350
0-25	.002	02340	01190	01360
0-30	.0015	02350	01200	01370
0-50	.001	02360	01210	01380
0-75	.0002	< >	03434	03436
0-75	.008	02370†	< >	< >
0-100	.008	02380†	01230†	01400†
0-150	.008	02390†	01240†	01410†
0-200	.008	< >	01250†	01420†
0-250	.008	02410†	01260†	01430†
0-300	.008	02420†	01270†	01440†
0-500	.008	02422†	01280†	01450†

< > Available on special order.

† These meters are 5 amp meters with scales as indicated and require external donut transformers. Refer to Accessory section or table at the right for detail information.

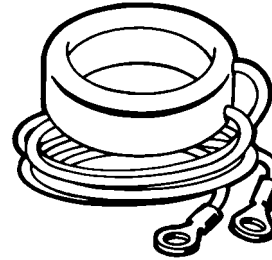
Function Reference Table

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

Function	Section	Page
AC Voltage	E	39
DC Current	E	59
DC Voltage	E	79
Watts	E	111

Accessories

Donut Transformer

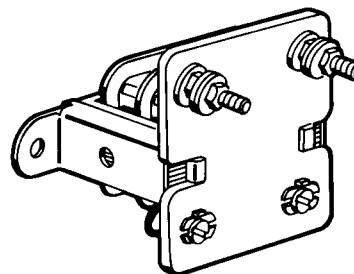


Ordering Information

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

A Donut Current Transformer enables this current Meter to monitor AC current 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.

Model 186 Current Transformer



Ordering Information

Range	VA	Catalog Number
0-5 amp	0.75	01312
0-10 amp	1.45	01314
0-15 amp	1.05	01315
0-20 amp	1.04	01316
0-25 amp	1.50	01317
0-30 amp	1.10	01318
0-40 amp	1.09	01319
0-50 amp	1.90	01321
0-100 mA	0.50	01295
0-500 mA	0.53	01304

Model 186 Current Transformers easily convert a current signal (up to 50A) into a 0-10 AC volt signal and transmit the signal over a long distance. This allows remote monitoring of a process or application. These units can be coupled with a Donut Current Transformer if a high current rating (up to 1000 amps) is to be monitored at a remote location.