

# **AC Current**

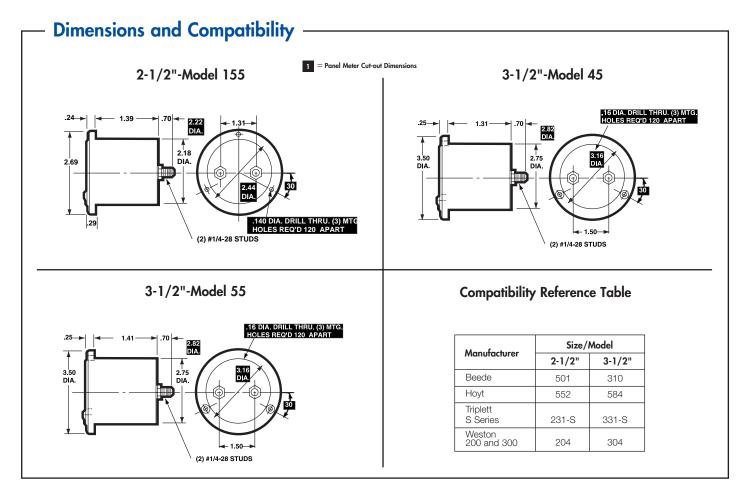
# **Round Style**

- UL Recognized
- Phenolic Cases and Glass Windows
- Distinctive Case Style
- Two Popular Sizes: 2-1/2" and 3-1/2"

For industrial or commercial applications, the Round style panel meter offers maximum reliability and  $\pm 2\%$  full scale (F.S.) accuracy for iron-vane movements, and  $\pm 3\%$  for rectifier types. With a black phenolic case and glass window for optimum viewing, the Round style meter is a popular selection for industrial applications because the cover extends to the back of the case. AC units have either iron-vane type or rectifier type movements and are calibrated at 60Hz. Iron-vane type current meters have a frequency range of 25 to 800Hz (for  $\pm 1\%$  deviation from value at 60Hz). All rectifier types have a 25Hz to 10KHz range. Two different standard sizes of 2-1/2" and 3-1/2" are available to measure various current ranges. This style meter is ideal for many other electrical functions. See the "Function Reference Table."



Model Number	Size	Meter Movement
155	2-1/2"	Iron-Vane
45	3-1/2"	Annular-Rectifier
55	3-1/2"	Iron-Vane



### **Specifications** -

Accuracy: Movement:

Shielding:

Dial:

±2% F.S. (Iron-Vane), ±3% F.S. (Rectifier) Models 55, 155: Iron-vane, magnetically damped Models 45, 145: Annular, rectifier type Suspension: Tracking: Pivot and jewel +3%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% Sharp clear scale. Each dial arc is calibrated to track the specific type of movement used

## **Ordering Information** -

#### AC Microammeters Rectifier Type, Self-Shielding

	Approx.	Model/Size and	l Catalog Number
Range	Impedance (ohms) @ 60Hz	2-1/2" Model 145	3-1/2" Model 45
0-100	3400	< >	04080
0-200	2400	< >	< >
0-300	1800	< >	< >
0-500	1200	< >	< >

#### **AC Millammeters Iron-Vane Type Movement**

Deres	Approx.	Model/Size and Catalog Number	
Range	Impedance (ohms) @ 60Hz	2-1/2" Model 155	3-1/2" Model 55
0-10	1650.0	< >	< >
0-15	887.0	< >	05380
0-25	270.0	< >	< >
0-50	80.0	< >	05400
0-100	17.2	< >	05410
0-250	3.1	06080	05420
0-500	.9	< >	05430

#### AC Millammeters Rectifier Type, Self-Shielding

Denne	Approx.	Model/Size and	Catalog Number
Range	Impédance (ohms) @ 60Hz	2-1/2" Model 145	3-1/2" Model 45
0-1	600	< >	06820
0-2	400	< >	< >
0-5	200	< >	06840

#### AC Current Meters Iron-Vane Type Movement

	Approx.	Model/Size and	Catalog Number
Range	Approx. Impedance (ohms) @ 60Hz	2-1/2" Model 155	3-1/2" Model 55
0-1	.213	02100	00950
0-1.5	.105	<>	00960
0-2	.065	02120	00970
0-3	.028	02130	00980
0-5	.008	02140	00990
0-10	.004	02150	01001
0-15	.0025	02160	01010
0-25	.002	02170	01020
0-30	.0015	02180	01030
0-50	.001	02190	01040
0-75	.0002	<>	03432
0-75	.008	02200†	< >
0-100	.008	02210†	01060†
0-150	.008	02220†	01070†
0-200	.008	<>	01080†
0-250	.008	02240†	01090†
0-300	.008	<>	01100†
0-500	.008	02260†	01110†

#### Available on special order. $\langle \rangle$

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

Case: Resistance: Operating Temperature: Pointer:	High density black phenolic ±15% -4°F to +149°F (-20°C to +65°C) Spade pointer, with black matte finish	
Scale Length:	Model 145: 1.8" (45.7mm)   Model 155: 1.6" (40.6mm)   Model 45: 2.5" (63.5mm)   Model 55: 2.3" (58.4mm)	
Net Weight:	Models 55 & 155: 5oz (0.14kg) Models 145 & 45: 7oz (0.20kg)	

# Accessories -

### **Donut Transformer**



Ordering Information		
Rang	Range/Amps	
Primary	Secondary	Number
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

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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 50 A) 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.

### - Function Reference Table -

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

Function	Section	Page
AC Voltage	E	37
DC Current	E	57
DC Voltage	E	77
Watts	E	109