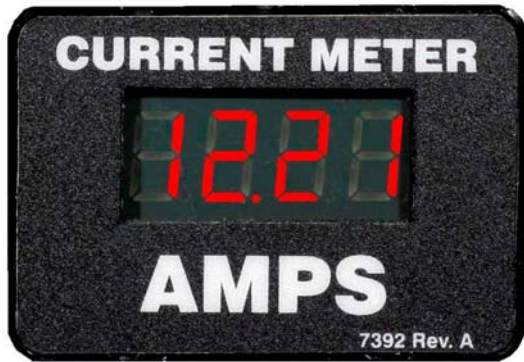




# CM-3 Three Channel Current Meter



## SPECIFICATIONS

### DESCRIPTION

The CM-3 current meter is a low-power, high accuracy meter capable of measuring true RMS Current on three channels. These values are individually shown on an easy to read, 4-digit LED Display, which continuously scrolls through the three different channels.

The CM-3 meter uses three current transformers to measure the true RMS Current in a three phase AC circuit. Simply pass the Line Input conductor of the circuit to be measured through the current transformer and connect the same circuit to the meter power.

The CM-3 meter is a component designed to be built into the enclosure of an end product. The meter is intended to be panel mounted and comes standard with a plastic lens, overlay and mounting screws to provide a clean, professional look after installation.

### FEATURES

- Three channel true RMS ammeter (0-32A)
- Auto-sensing voltage (85-250V)
- Low power consumption (5W)
- Auto-scrolling between 3 channels
- CM-3: factory programmed three channel meter
- Easy to Read 4 digit display, 0.37" (9.4mm) digits

### KIT INCLUDES

- Board with 3 Current Transformers (CTs)
- Lens
- Securing screws
- Meter Face Overlay

Electrical	MIN	TYP	MAX
Operating Voltage	85VAC	120-230VAC	250VAC
Input frequency	47Hz	50-60Hz	63Hz
Power usage	-	5W	-
CT Readings	MIN	TYP	MAX
Current	0	-	32A
Environmental	MIN	TYP	MAX
Operating Temperature	-10°C	25°C	65°C
Storage Temperature	-40°C	25°C	75°C
Humidity (non-condensing)	0%	-	95%
Physical Dimensions			
PCBA			
Width	3.58" (9.10cm)		
Length	1.425" (3.62cm)		
Depth	1.10" (2.80cm)		
Weight*	2.0oz (57g)		
*includes three CTs with 4.5" leads			
CT			
Inner Diameter	0.35" (0.89cm)		
Outer Diameter	0.875" (2.25cm)		
Display			
Width	1.175" (3.00cm)		
Length	0.55" (1.40cm)		
Digit Height	0.37" (0.95cm)		
Digit Color	Red		
Accuracy*			
Current	+/- 3.5%		
* @50&60Hz, Full Scale up to 32A			
Sampling			
Sampling Rate	14kHz		
Display update @ 60Hz	3.0s		
Display update @ 50Hz	3.6s		
Approvals			
UL File Number	E258702		
UL Standard	UL 61010-1, 2 <sup>nd</sup> Ed.		
IEC Standard	IEC 61010-1, 2 <sup>nd</sup> Ed.		
CB Test Certificate	Available upon request		
CE	Compliant		
RoHS	Compliant		

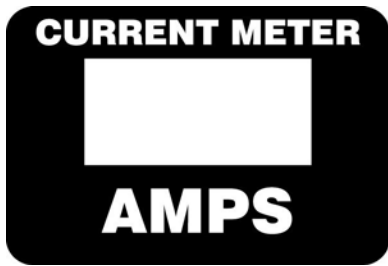
### WARRANTY

Geist warrants that CM-3 meters will be free of defects for 1 year from the date of purchase.



## CURRENT METER

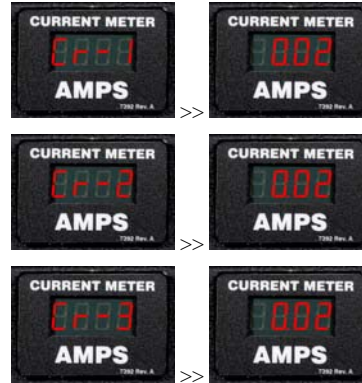
CM-3 Kit # 11691



(actual size)

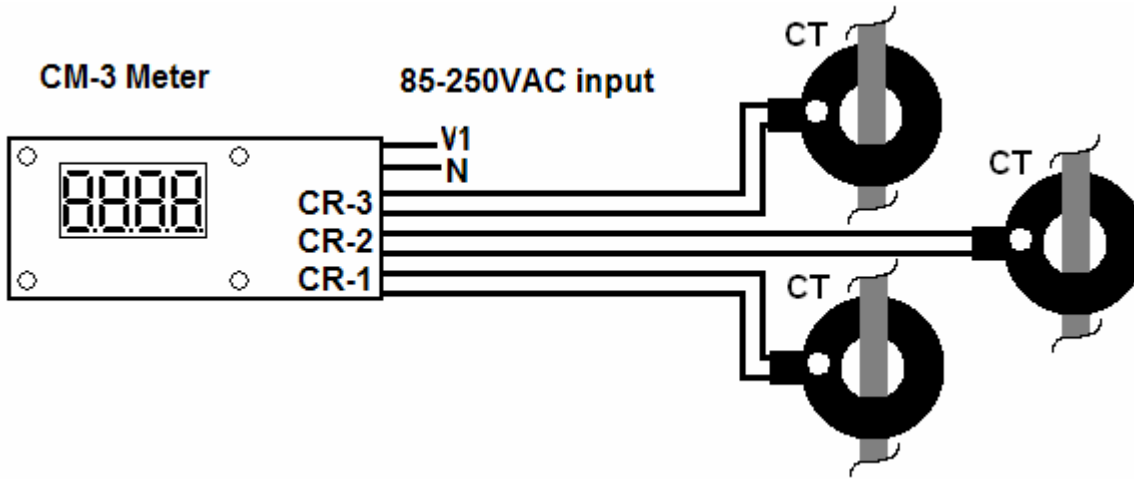
Auto-scrolling meter displays Amps of three channels. Leading description identifies channel.

## DISPLAY SCROLL



CM-3 meter displays the circuit name followed by the circuit reading. All three circuits are displayed and the cycle is continuously repeated.

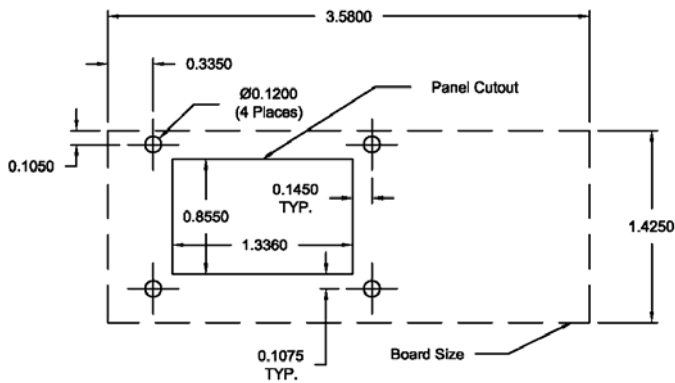
## WIRING DIAGRAM



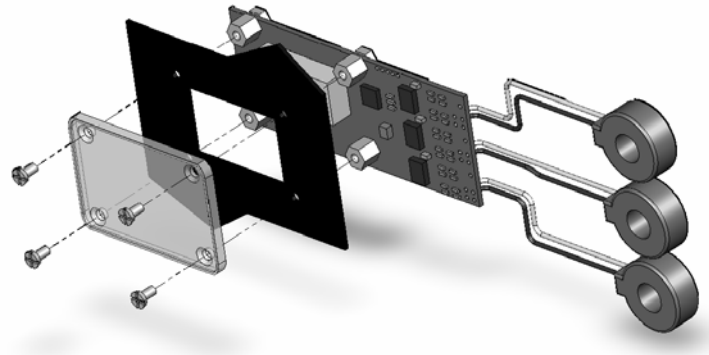
Note: Meter and current transformer are not polarity sensitive. Meter power is connected via V1 and N. V2 and V3 are not used.

## RECOMMENDED PANEL CUTOUT

All dimensions in inches



## ASSEMBLY



## Technical Notes

- 1. Installation:** All components on the CM-3 are considered in the primary circuit and should not be exposed.
- 2. Wiring:** Use 20-28 Gauge AWG stranded wire to solder to board, connect V1 and N, Note that V2 and V3 are not used.
- 3. Calibration:** CM-3 meters do not require calibration.
- 4. Fusing:** CM-3 contains a non-resettable, non-user serviceable fuse. No additional fusing is required.
- 5. Polarity:** The CM-3 is not polarity sensitive.