

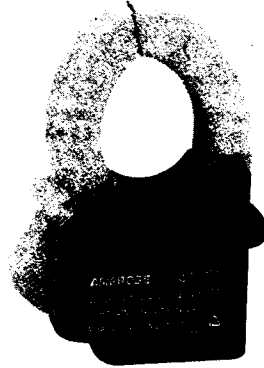
CE

Part No 973758  
5/95.

OPERATING INSTRUCTIONS  
for

**AMPROBE.**

AC Current Transducer  
Model PMM-C



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See "PRECAUTIONS FOR PERSONAL AND INSTRUMENT  
PROTECTION" on Pg. 3

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See "LIMITED WARRANTY" on Pg. 2

## LIMITED WARRANTY

Congratulations! You are now the owner of an AMPROBE® instrument. It has been crafted according to the highest standards of quality and workmanship. This instrument has been inspected for proper operation of all of its functions. It has been tested by qualified factory technicians according to the long-established standards of AMPROBE INSTRUMENT.

Your AMPROBE instrument has a limited warranty against defective materials and/or workmanship for one year from the date of purchase provided the seal is unbroken or, in the opinion of the factory, the instrument has not been opened, tampered with, or taken apart.

*Should your instrument fall due to defective materials, and/or workmanship during the one year warranty period, return it along with a copy of your dated bill-of-sale which must identify the instrument by model number and serial number.*

**IMPORTANT:** For your protection, please use the instrument as soon as possible. If damaged, or should the need arise to return your instrument, place it in a shipping carton packed with sufficient cushioning material. It must be securely wrapped, Amprobe is not responsible for damage in transit. Be sure to include a packing slip (indicating model and serial number) along with a brief description of the problem. Make certain your name and address appears on the box, as well as packing slip.

Ship prepaid via Air Parcel Post insured or U.P.S. (where available) to:

Service Division - AMPROBE INSTRUMENT  
630 Merrick Road (use for U.P.S.)  
P.O. Box 329 (use for or Parcel Post)  
Lynbrook, NY 11563-0329

Outside the U.S.A. the local Amprobe representative will assist you. Above limited warranty covers repair and replacement only and no other obligation is stated or implied.

## PRECAUTIONS FOR PERSONAL AND INSTRUMENT PROTECTION

- 1) Read these instructions thoroughly and follow them carefully.
- 2) In many instances, you will be working with dangerous levels of voltage and/or current. Therefore, it is important that you avoid direct contact with any uninsulated, current carrying surfaces. Appropriate insulating gloves, clothing and eye protection should be worn.
- 3) To avoid electrical shock to the user and/or damage to the instrument, do not apply any voltage to the output terminals.
- 4) Before applying the instrument to circuit under test, make certain that the PMM-C is plugged into proper jacks and switches are set to proper range and function.
- 5) Before using any electrical instruments or tester for actual testing, the unit should be checked on a low energy high impedance source. **Do not use power distribution lines or any other high energy sources.**

**IMPORTANT:** Plug in only one accessory probe or set of test leads at any one time, except as directed.

**IMPORTANT:** Failure to follow these instructions and/or observe the above precautions may result in personal injury and/or damage to the instrument and/or accessories

## SAFETY

This Instruction Manual has warnings and safety precautions which must be followed in order to ensure safe operating conditions.

## CAUTION

To avoid damage to the meter:

- 1) Disconnect the PMM-C from circuit under test before changing functions.

## INTRODUCTION

Amprobes' Model PMM-C AC Current Transducer is designed to insert into the input terminals of the PMM-1 Digital Pen Multimeter. This allows the PMM-1 to measure AC Current from 0.4 amps through 300A AC.

Features Include;

300 amp AC capability, 1.9% basic accuracy, accomodates conductors 1.14" in diameter (29mm), hand guard design.

### 1-1 Unpacking and Inspection

Upon removing your new current transducer from its' packing, you should have the following items;

1. PMM-C Current transducer
2. Instruction Manual

### 1-2 Front View

Refer to Figure 1 and to the following numbered steps to familiarize yourself with the PMM-C.

1. Transformer Jaws - Designed to pick up the AC Current flowing through a conductor.
2. Hand Guard - Designed to protect the user.
3. Trigger - Press the lever to open the transformer jaws.

## SPECIFICATIONS

**Current Range:** 0.4 A to 300 Amps AC RMS

**Output Voltage:** 1mV AC per 0.1 Amp AC

**Working Voltage:** 600 V Cat. II per IEC 1010-1

**Operating Temperature:** 0 Degree C to 45 Degree C < 75% R.H.

**Storage Temperature:** -20 Degree C to 60 Degree C

**Temperature Coefficient:** 0.2 x ( Spec Acc'y)/ degree C, <18 Degree C or >28 DegreeC

**Warning: THIS INSTRUMENT MUST NOT BE USED ON UNINSULATED CONDUCTORS AT A VOLTAGE GREATER THAN 250V AC/DC.**

**Maximum Output Impedance:** 120 ohms

**Maximum Jaw Opening:** 30 mm (1.18")

**Maximum Conductor Size:** 29 mmDia. (1.14")

**Size:** 72mm(W) x 102 mm(L) x 36mm(D), 2.83"(W) x 4.02"(L) x 1.42"(D)

**Weight:** 150 grams

**Accessories:** Instruction Manual

### Precautions and Preparations for Measurement

1. Do not apply a voltage to the output Plugs of the PMM-C.
2. Do not use or store this unit in a high temperature, high humidity environment or in direct sunlight.
3. The unit must be firmly inserted into the PMM-1.

### ELECTRICAL SPECIFICATIONS

Accuracy is +/- (reading + number of Amps) at 23 Degree C +/- 5 Degree C, less than 75% R.H.

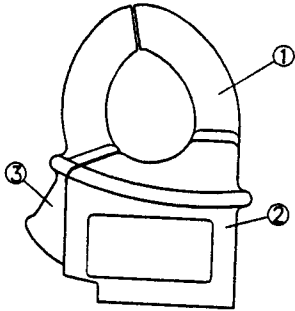


Fig 1.

### 1-3 Bottom View

Refer to Figure 2 and to the numbered steps to familiarize yourself with the transducer.

1. Output Plugs - Output terminals, these are inserted into the PMM-1 input terminals.
2. Adjusting Hole - For service personnel use only.

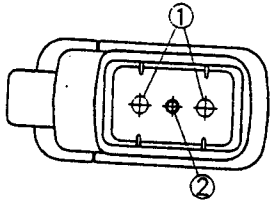


Fig 2.  
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RANGE	MEASURE	OUTPUT
300A	4 Amps	0.040 V
	30 Amps	0.300 V
	300 Amps	3.000 V

Accuracy on all of the above is; +/- ( 1.9% + 0.5 A) 50-60 Hz

## OPERATION

### 3-1 AC CURRENT MEASUREMENT

1. Set the PMM-1 to the " $\tilde{V}$   $\bar{V}$ " position by moving the yellow slide switch.
2. Push the Yellow key until you see the AC and V annunciators in the LCD. You will also be in the 3.2 VAC range.
3. Insert the PMM-C transducer into the PMM-1 input terminals firmly so the transducer trigger is to your left while the display is facing you.
4. Press the trigger to open the transformer jaws and clamp around one conductor only, make sure that the jaw is firmly closed around the conductor, then observe the reading on the display.
5. The output voltage is 1mV per 0.1 AAC. For examples, refer to the chart under **ELECTRICAL SPECIFICATION**.

**\*\*NOTE:** The offset on turn on (PMM-1) can be .004 VAC or less when used with the PMM-C. The offset does not affect the readings above 0.4 amps through 300 amps AC.