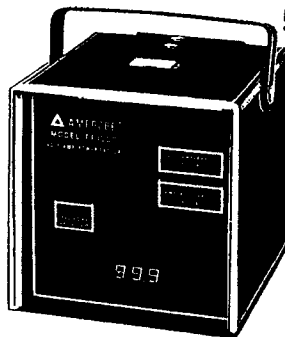


AMPROBE[®]

POWER FACTOR / VOLTMETER / AMMETER

MODEL: PF 1000 (60 Hz)

MODEL: PF 1050 (50 Hz)



RANGES AND ACCURACY:

30-99.9% Power Factor**

0-99.9%999 A.C. Volts $\pm 1\%$ ± 2 LSD.

0-99.9%999 A.C. Amps $\pm 2\%$ ± 2 LSD.

**BASED ON SINUSOIDAL WAVEFORM

** POWER FACTOR ACCURACY (80V-550V) (10A-1000A)

30.0% to 40.0% $\pm 4\%$ of reading ± 5 LSD.

40.0% to 50.0% $\pm 3\frac{1}{2}\%$ of reading

50.0% to 70.0% $\pm 3\%$ of reading ± 2 LSD.

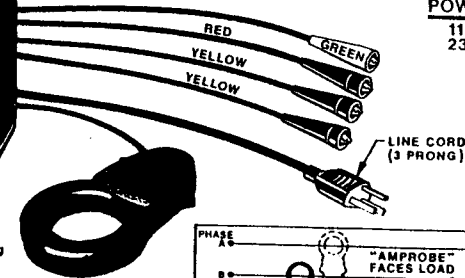
70.0% to 90.0% $\pm 2\%$ of reading ± 2 LSD.

90.0% to 99.9% $\pm 1\%$ of reading

POWER REQUIREMENTS:

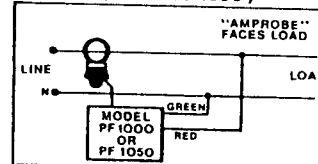
115 Volts - 60Hz (Model PF 1000)

230 Volts - 50Hz (Model PF 1050)

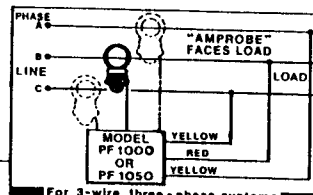


Ampran CT-50-1 or 2 may be used when measuring current or power factor. Accuracy may be affected up to $\pm 1\%$ of reading when PF is above 80%, up to $\pm 2\%$ if PF is below 80%. Volt-O-Verter A1-2 or A1-3 may be used to power the instrument from 12 VDC battery source. The ADV-220 Voltage adaptor may be used to power the PF-1000 by 200 to 280 volts AC.

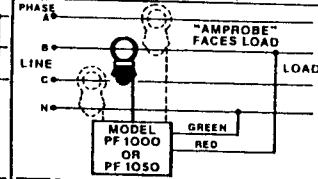
NOTE: RED VOLTAGE LEAD AND CURRENT TRANSDUCER MUST BE ON THE SAME PHASE LEG



For 2-wire, single-phase systems



For 3-wire, three-phase systems



For 4-wire, three-phase systems

PRECAUTIONS FOR PERSONAL AND INSTRUMENT SAFETY

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 contact with any uninsulated current-carrying surfaces. Appropriate insulating gloves and clothing should be worn.
3. Before connecting or disconnecting the instrument to or from the circuit to be tested, turn off all power to the circuit where practical.
4. Before applying test leads to the circuit under test, make certain selector switch is set to the proper range.
5. Before using this instrument for actual testing, the unit should be checked on a known live line to make certain it is operating properly.
6. Do not connect this instrument to circuits above 1000 volts. Models PF1000 and PF1050 may be used as a power factor meter, a voltmeter or an ammeter. As a power factor meter they can be used to determine the power factors (leading or lagging) of single or three phase systems, balanced or unbalanced.

HOW TO USE AS A POWER FACTOR METER - SEE PRECAUTIONS

1. Connect line cord to proper line voltage and frequency.
2. Set "AMPS-VOLTS-PF" switch to "PF".
 - a) Single phase: Connect red and green voltage test leads to the circuit under test. Leave other test leads in storage compartment. With the name "AMPROBE" on the current transducer facing toward the load, clamp the jaws around the circuit conductor to which the red voltage lead has been connected. Read the power factor in % from the display, eg. 85.8% PF.
 - b) Three phase - four wire: Connect the green test lead to the neutral line. Connect the red test lead to the phase under test. Leave the two yellow test leads in the storage compartment. With the name "AMPROBE" on the current transducer facing toward the "LOAD"

- c) Three phase three wire: Store the green test lead in the storage compartment. Connect the red test lead to the phase under test. Connect the two yellow test leads to the other two phases. With the name "AMPROBE" on the current transducer facing toward the "LOAD" clamp jaws around the conductor to which the red test lead is connected. Repeat this procedure to test the other two phases. Read % PF on the display. NOTE: When "LEADING P F INDICATOR" is illuminated, the % power factor displayed is leading. When the indicator is off the % power factor is lagging.

HOW TO MEASURE VOLTAGE - SEE PRECAUTIONS

1. Connect line cord to proper line voltage and frequency.
2. Set "AMPS-VOLTS-PF" switch to "VOLTS".
3. Set "VOLTS/AMPS RANGE" switch to 0-999.
4. Connect the red and green voltage test leads to the circuit under test.
5. If the voltage indicated by the display is less than 100 volts, set "VOLTS/AMPS RANGE" switch to 0-99.9.
6. A blinking display indicates that the voltage being measured is in excess of the range setting.

HOW TO MEASURE AMPERES - SEE PRECAUTIONS

1. Connect line cord to proper line voltage and frequency.
2. Set "AMPS-VOLTS-PF" switch to "AMPS".
3. Set "VOLTS/AMPS RANGE" switch to 0-999.
4. Clamp current transducer around one of the conductors to the load.
5. If the current indicated by the display is less than 100 amps, set "VOLTS/AMPS RANGE" switch to 0-99.9.
6. A blinking display indicates that the current being measured is in excess of the range setting.

FOR FACTORY SERVICE: AMPROBE INSTRUMENT, LYNBROOK, N.Y. 11563

Part No. 981670 Rev. A

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