

Specifications

Ranges: 3 ranges, switch selectable 2A, 20A, and 200A.

Switch: 30° throw, increasing ranges with CW rotation.

Accuracy: ±4% of range at 60Hz with conductor centered in jaws on 2A range. ±3% of range at 60Hz with conductor centered in jaws on 20A and 200A range.

Transfer Function: 0.1V per ampere into 1MΩ load.

Temperature Coefficient: ±0.15%/°C of range from 15°C to 35°C on 2A range. ±0.25%/°C of range from 15°C to 35°C on 20A and 200A range.

Maximum Current: 300A.

Maximum Voltage on Measured Conductor: 600V rms, 60Hz.

Weight: 12 ounces.

Supplied Accessories: 10 ft. set of cables terminated with banana plugs, and Operator's Manual.

WARNING

Carelessness and misuse of this instrument can be dangerous. Before connecting this instrument, carefully read instructions and precautions. Failure to follow instructions can result in a serious or fatal injury.

Do not use this instrument if it is damaged, contaminated, deteriorated, moist or has missing parts.

Do not open this case. No user serviceable parts inside. Refer servicing to qualified personnel only.

Operation Instructions

1. Connect the supplied set of test cables to the Model 1685 Probe housing.
2. Set the RANGE dial on the Model 1685 to 200A range or lower range if the current to be measured is known. For rated accuracy, the current should be greater than 10% of Model 1685 range setting.
3. Connect the test cable from the Model 1685 to the Voltmeter input (HI and LO) terminals.
4. Set the voltmeter to "AC" and the 10V range (or autorange if available).

WARNING

Do not use where voltage exceeds 600V AC 60Hz with respect to ground.

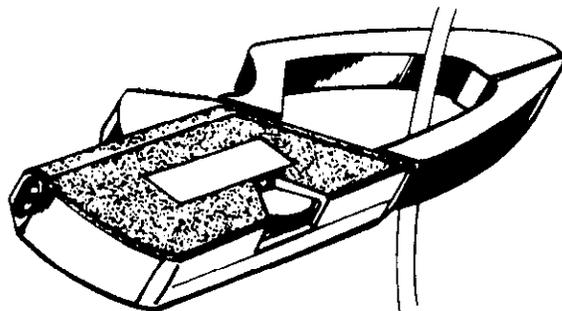
CAUTION

Maximum allowable current is 300A rms. If this current is exceeded damage to the probe (not covered by the warranty) may occur.

5. Turn off power to the conductor to be measured (if possible).
6. Squeeze the probe to open the jaws of the clamp. Position the probe so that the conductor is centered within the probe as shown.

NOTE

Since the probe detects current by sensing the magnetic field set-up by the AC current, only one conductor can be measured. If two conductors are placed within the jaws of the probe, the net magnetic field will be zero. Therefore, a power cord, such as attached to an appliance, motor, or other device, must be split into separate conductors so that the jaws of the probe can surround only one of the two conductors.



7. Apply power to the conductor and record the AC voltage measured by the voltmeter. The probe output is 9.1V AC rms per ampere.

For example:

0.1V AC rms corresponds to 1A AC rms.

1.0V AC rms corresponds to 10A AC rms.

10.0V AC rms corresponds to 100A AC rms.