

ADDITIONAL INSTRUCTIONS
APPLYING TO
MODEL 6765 WATTMETER

This sheet supplements the Instruction Book for Series 6100 TERMALINE Wattmeter.

GENERAL

The Model 6765 is a water-cooled type TERMALINE Wattmeter fitted with a 1-5/8 inch Airline coaxial input connector. When operated with water cooling the load capacity is 2.5 KW.

The Model 6765 has copper tubing coiled in the dielectric coolant, outside the tapered coaxial resistor housing. This does not interfere with the input impedance of the TERMALINE. Water flowing thru the copper tubes carries off the heat generated in the oil coolant by thermal contact only. This unit may be used for up to 300 watts of load power air cooled only, when mounted vertically as for water cooling. When positioned horizontally the load will carry 500 watts input power.

METER

The meter scale is calibrated direct reading in watts. Ten feet of meter cord is furnished with a plug on one end and spade lugs on the other. The plug fits into a jack under the rf connection to the wattmeter and the spade lugs connect to the meter. The meter posts are marked positive and negative, and the spade lug of the cord soldered to the outer shield is negative.

WATER FITTINGS

Tap water is used, ordinarily, with connections through light rubber hose (not supplied). Any convenient size of hose (approx. 3/8" I.D.) may be used with hose clamps to suit. The water flows through coiled copper tubing which is placed in the coolant. Water is a thermal medium only, and water impurities are not important except as to scale formation inside the water tubes under prolonged use.

POWER RATINGS

The Model 6765 when water cooled is mounted vertically with the input connector down. It should be water cooled for power levels above 300 watts, when in the vertical position. Flow rate, when connected to tap water source, should be at least 1/2 gallon per minute. When operating the unit above 300 watts, the water should be allowed to flow a short time (15 sec.) prior to application of power. Water flow should be allowed to continue for five minutes after input power is shut off. Horizontal operation of the Model 6765 is permissible (without water cooling) when the power level does not exceed 500 watts. When used in the horizontal position the unit should be placed so as to allow free air circulation (at least 6 inches over and around all sides of equipment).

WATTMETER RANGES

The Model 6765 is supplied with two matched crystals; one inserted in a voltmeter cartridge, and the other stowed away in the spare crystal holder located in the upper right corner of the front radiator fin of the wattmeter. If the wattmeter has more than one range (voltmeter cartridges), it is shipped with the crystal inserted in the highest range and dust inserts in the remaining ranges. Any one of the ranges may be selected by installing the crystal in the voltmeter cartridge marked with the desired range. The cartridges are marked on top with their respective power range in watts. When installing the crystal in the voltmeter cartridge, be certain that it bottoms--push gently until it is felt to stop, then add a slight additional pressure to make certain that it bottomed. (Note: False readings will result if more than one crystal is installed at one time.) When using the Model 6765 as a load alone and power is not being measured, make certain that the crystal is either removed or inserted in the voltmeter cartridges marked with the highest range.

REPLACEMENT PARTS LIST FOR MODEL 6765

<u>PART NO.</u>	<u>DESCRIPTION</u>
676515	Resistor - Voltmeter Set with Crystal - 1-5/8 in Coaxial Input.
81139	Seal, "O" Ring
5030	Coolant, GE 10C Transil Oil - One Gal. Required.
82492-9	Meter Assembly - Includes Housing & Carrying Strap.
200018	Meter, Hickok 48HSR 100ua.
81821-1	Cable, Meter
81895-3	Meter & Cable Assembly
24355	Clamping Band 24343 with #10-32 x 1-1/2 Fil. Hd. Screw

Also, extra or replacement crystals may be procured on special order if desired:

750147	Crystal Rectifier (Specify Model and Serial Number)
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