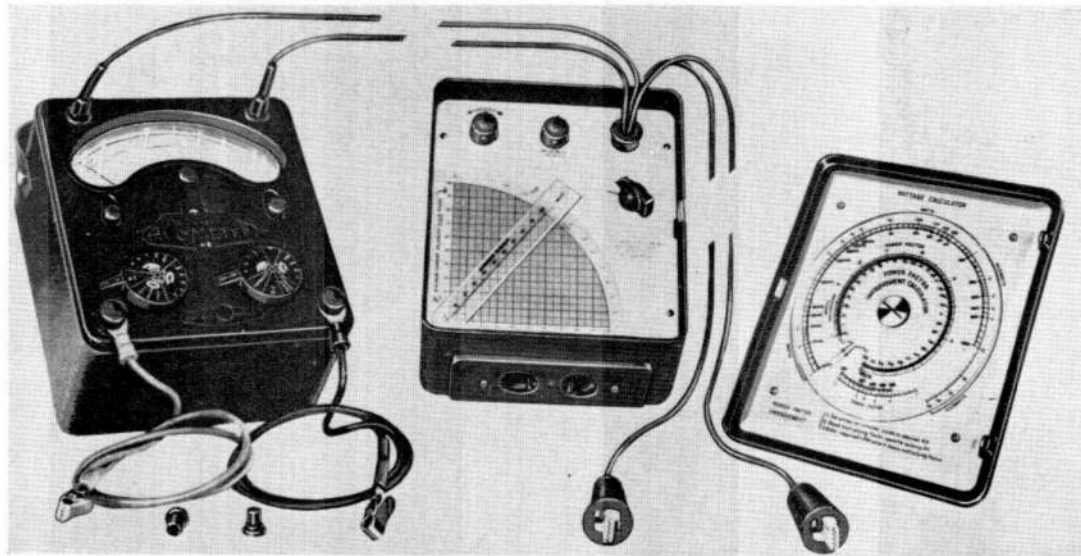


POWER FACTOR AND WATTAGE UNIT



Air Ministry Ref. No. 5Q/25672
Admiralty Pattern No.
Dimensions 8 in. \times 7 $\frac{1}{4}$ in. \times 4 $\frac{3}{8}$ in.
Weight 3 $\frac{1}{4}$ lb
Associated publication A.P.4343S, Vol. 1, Sect. 24, Chap. 4

BRIEF DESCRIPTION

The power factor and wattage unit is an accessory for use with the Testmeter, Type F (Ref. No. 10S/1) to determine the power factor and the a.c. power in single-phase, or balanced two or three phase circuits, having a normal sinusoidal wave form. Unbalanced two or three phase power may be determined as the sum of the powers in the separate phases. The unit consists of the main assembly containing the power factor computer, controls and leads and the detachable lid on the inside of which the wattage and kVAr calculator are mounted.

In operation the unit is connected to the P.F. sockets on the testmeter and across the supply under test to obtain a neutralizing voltage. The testmeter is connected in series with the load and two current indications obtained; one is the normal load current and the other a reduced reading obtained by operation of two controls on the unit. The two readings are set on the computer and the power factor is obtained. The power factor together with the supply voltage and one of the current readings are then set on the wattage calculator to obtain the power being absorbed in the load. The reactive kVA required for power factor improvement is obtainable by multiplying the measured total kW by a figure obtained from the Power Factor Improvement Calculator which is mounted in the centre of the Wattage calculator. Two current transformers are available under Ref. No. 5Q/25670 and 25671 and may be used to extend the range of the unit.

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