

MODEL 40 AVOMETER Mk. II

OPERATING INSTRUCTIONS

Scope of Instrument

The meter should arrive complete with two connecting leads, two clips and a pair of Long Reach Safety Clips Mk.2. The leads are designed to facilitate easy connection to the plug in terminals of the instrument, whilst into the sockets at the remote ends of the leads either the Long Reach Safety Clips Mk.2 or the clips can be fitted. The meter is extremely simple to use; it has a 5" hand calibrated scale, together with an anti-parallax mirror to facilitate accurate readings. The instrument incorporates both an "a.c." and a "d.c." switch, whilst the design is such that only two terminals are required. The whole is compact, self-contained over wide ranges, readily portable, robust, and automatically protected against reasonable overload. It should be noted that in certain instances, instruments are supplied less internal batteries.

The instrument has 40 self-contained ranges, as listed on page 5, covering the measurement of "a.c." current and voltage, "d.c." current and voltage, and resistance.

Although the Avometer is, in the main, self-contained, it should be noted that the ranges of the meter can be even further extended by means of various accessories. Full details of these will be found towards the end of this book.

The highest percentage of accuracy on moving coil instruments is normally presented towards the higher end of the calibrated scale. By the provision of intermediate ranges between those marked on the switch knobs, it has been possible to offset the disadvantages of reading short pointer deflections. These ranges are shown by asterisks in the table on page 5.

Limits of Accuracy

The instrument will produce its highest degree of accuracy when used face upwards, whilst the anti-parallax mirror fitted to the scale enables readings to be made with great precision.

The instrument meets the requirements laid down in Section 6 of the British Standard Specification 89/1954 for 5" (127mm.) scale-length Industrial Portable Instruments. Limits are given below:—

d.c. voltage and current ranges:—1% of full-scale value over effective range.

a.c. voltage and current ranges:—(25-2,000 c/s):—2.25% of full-scale value over effective range.