Note

Single phase. The voltage should be taken across the mains.

Balanced 2 *phase.* The current is measured in one line, the voltage being taken from across the other line to the neutral.

Balanced 3 *phase.* The current is measured in one line and the voltage is taken across the other two lines.

Unbalanced 3 *phase.* Regard each phase as a single phase test.

A summary of the operating instructions, including the use of the calculators, appears below:

Preliminary Settings of the Unit

(1) Remove the leads from the drawer in the Unit and plug into the appropriate socket.
(2) Set the voltage switch at a value to suit the supply. (For voltages below 100V. set to "100-160V" position.)
(3) Set the movement reversing switch at its mid-position.
(4) Set the adjusting knob at the position marked "START".
(5) Connect the short leads to the sockets marked P.F. at the top of the Avometer.
(6) Connect the long leads to points which will attain the required voltage when the load is switched on.

Test

The Avometer should be set to a suitable a.c. current range for the load and connected in series with it. The supply should then be switched on and a note made of the current flowing. The object is then to reduce the pointer indication on the Avometer to a minimum by rotating the adjusting knob upon the Unit (after having moved the reversing switch to the side which allows the reduction to take place). The minimum reading should be taken, the power factor being dependent on the ratio of the two readings. After tests, the knob and the reversing switch should be returned to their initial positions.

Never switch to a lower current range on the Avometer when adjusting for the minimum pointer indication, but the divide-by-two button can be used throughout the test if desired to increase the pointer deflection. Circuits carrying current in excess of 12 amps can be dealt with by using a suitable external current transformer connected to the Avometer in the normal manner.