

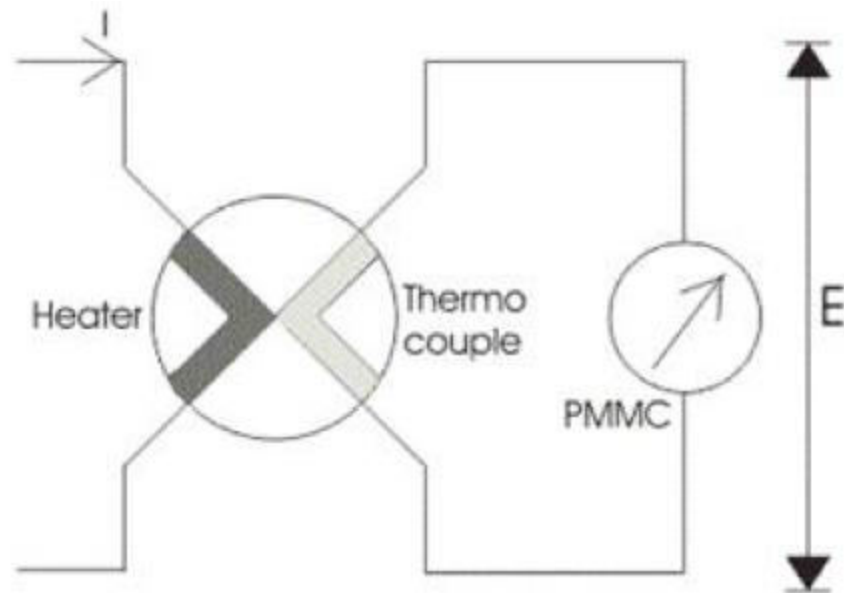
ELECTRICAL MEASUREMENT & MEASURING INSTRUMENTS

UNIT 1 Part B

Analog Measurement of Electrical Quantities

Thermocouple type Instruments

- Basically thermocouple consists of two different metals which are placed in contact with each other as shown in the diagram.



Advantages of Thermocouple Type Instruments

- The thermocouple type of instruments accurately indicates the root mean square value of electric current and voltages irrespective of the waveform. There is a wide varieties of range of thermocouple instruments are available in the market.
- Thermocouple type of instruments give very accurate reading even at high frequency, thus these types of instruments are completely free from frequency errors.
- The measurement of quantity under these instruments is not affected by stray magnetic fields.
- These instruments are known for their high sensitivity.

Cont.

Electrodynamic Type Instruments

- Electrodynamic type instruments are similar to the PMMC-type elements except that the magnet is replaced by two serially connected fixed coils that produce the magnetic field when energized

