

Chapter-10

(Understand the construction & working principle of
Power Factor Meter)

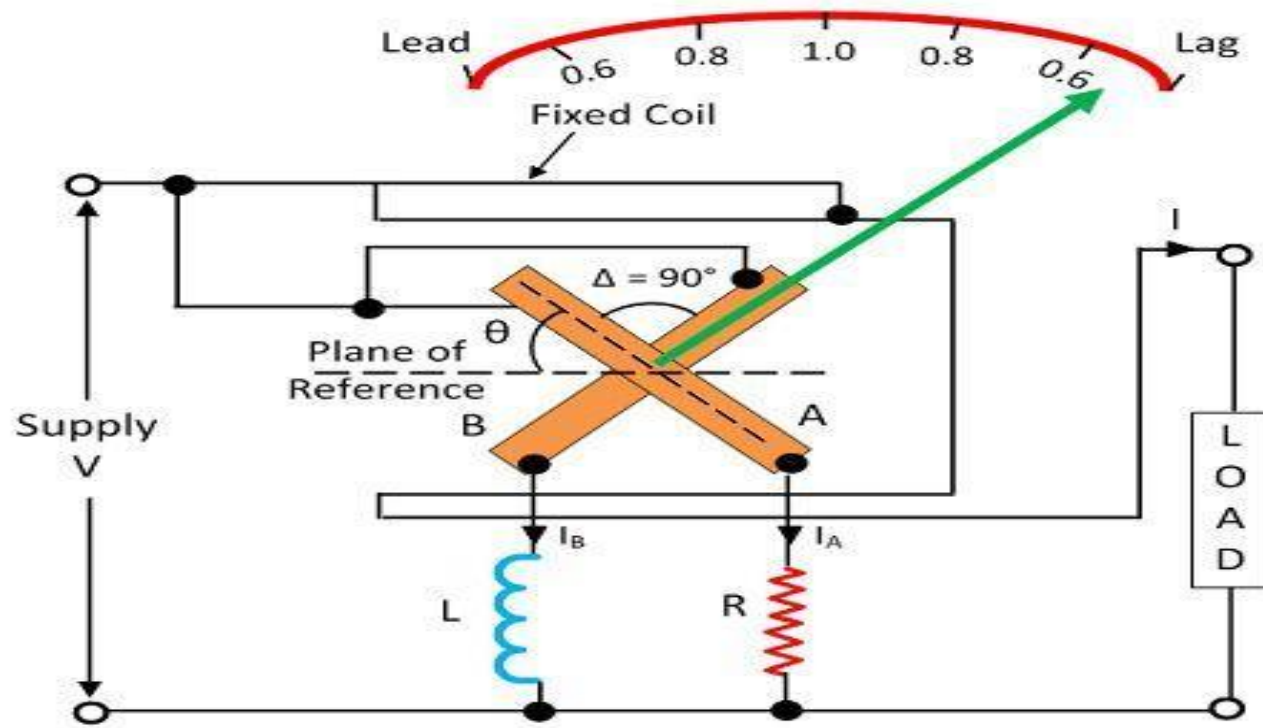
Lecture-1

Introduction of a Power Factor Meter?

- Before we introduce various types of power factor meters it is very essential to understand what are the needs of power factor meter? Why we do not directly calculate power factor in an AC circuit just by dividing the power with product of current and voltage because these readings can be easily obtained from wattmeter, ammeter and voltmeter. Obviously there various limitations of using this method as it may not provide high accuracy, also chances of increment of error is very high. Therefore this method is not adopted in industrial world. Measurement of power factor accurately is very essential everywhere.

- In power transmission system and distribution system we measure power factor at every station and electrical substation using these power factor meters. Power factor measurement provides us the knowledge of type of loads that we are using and helps in calculation of losses happening during the power transmission system and distribution.

Single-Phase Dynamo-type P.F Meter:



Single Phase Electrodynamometer
Type Power Factor Meter