

Electric Motors BEE401



**-Presented By
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Module-2

Three phase Induction motors: Concept and generation of rotating magnetic field, Principle of operation, construction, classification and types; squirrel-cage, slip-ring. Slip, Torque equation, torque-slip characteristic covering motoring, generating and braking regions of operation. Maximum torque, significance of slip. Numerical as applicable

Rotating Magnetic field (R.M.F.)

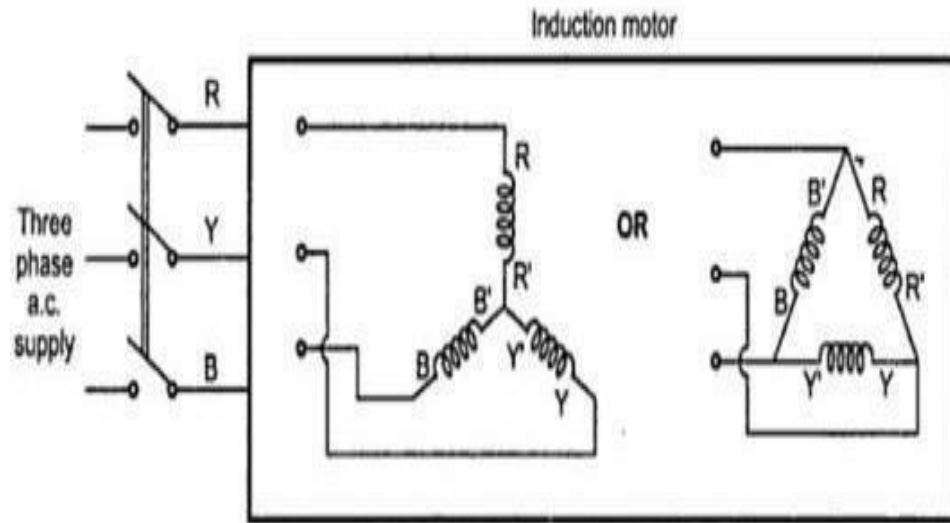


Fig. 1 Star or delta connected 3phase winding

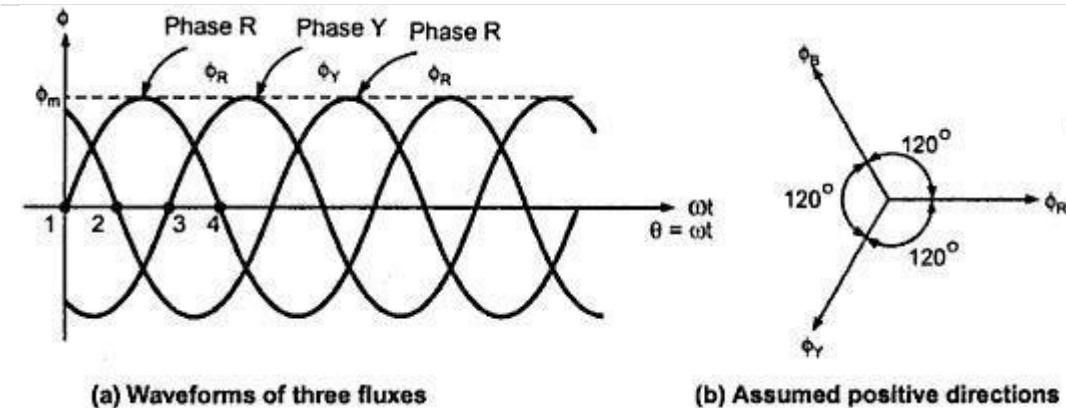
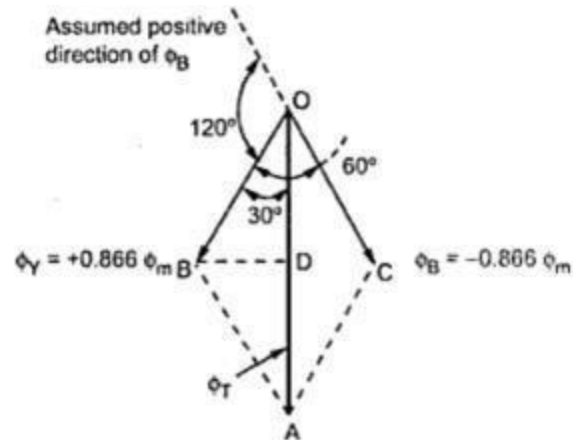
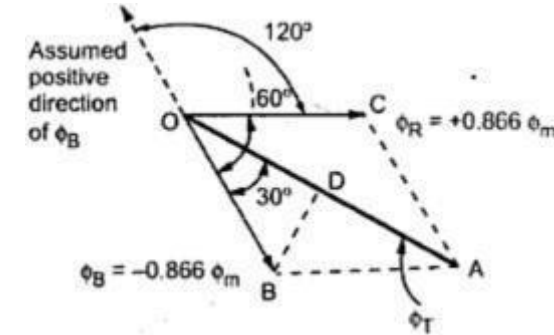
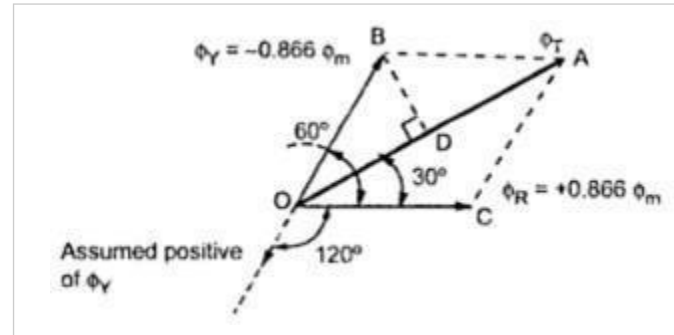
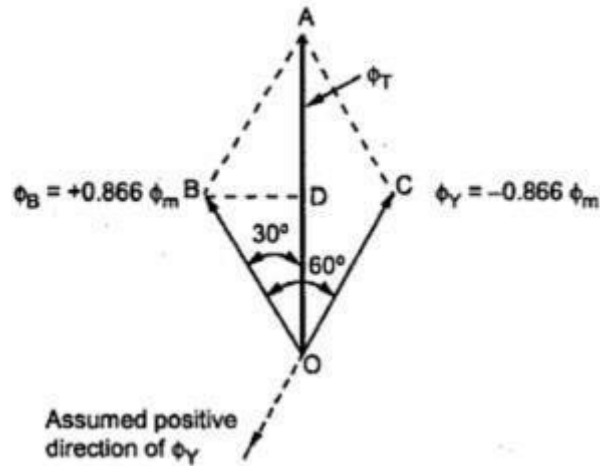
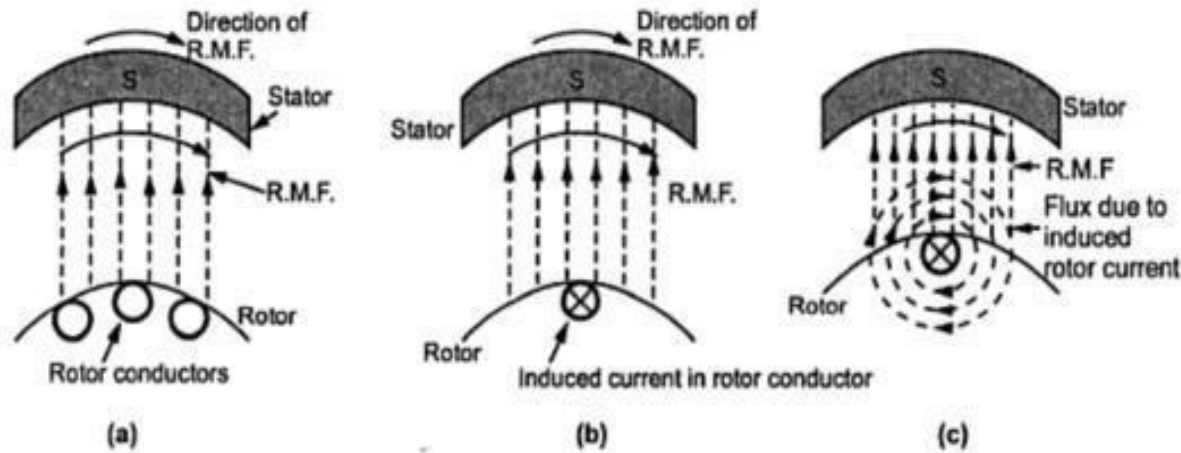


Fig. 2



Working Principle of 3-Phase Induction Motor:



Construction of Three Phase Induction motor:

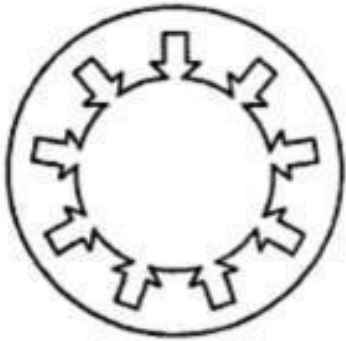
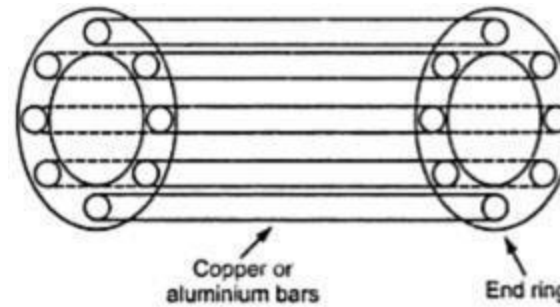
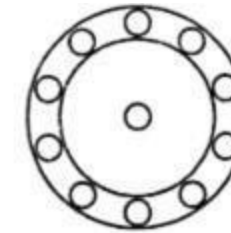


Fig. 1 Stator lamination

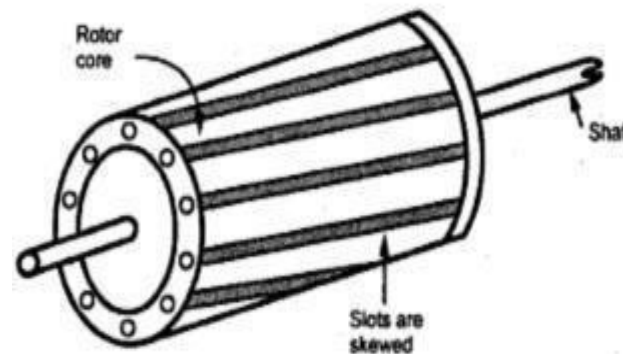
Squirrel Cage Rotor



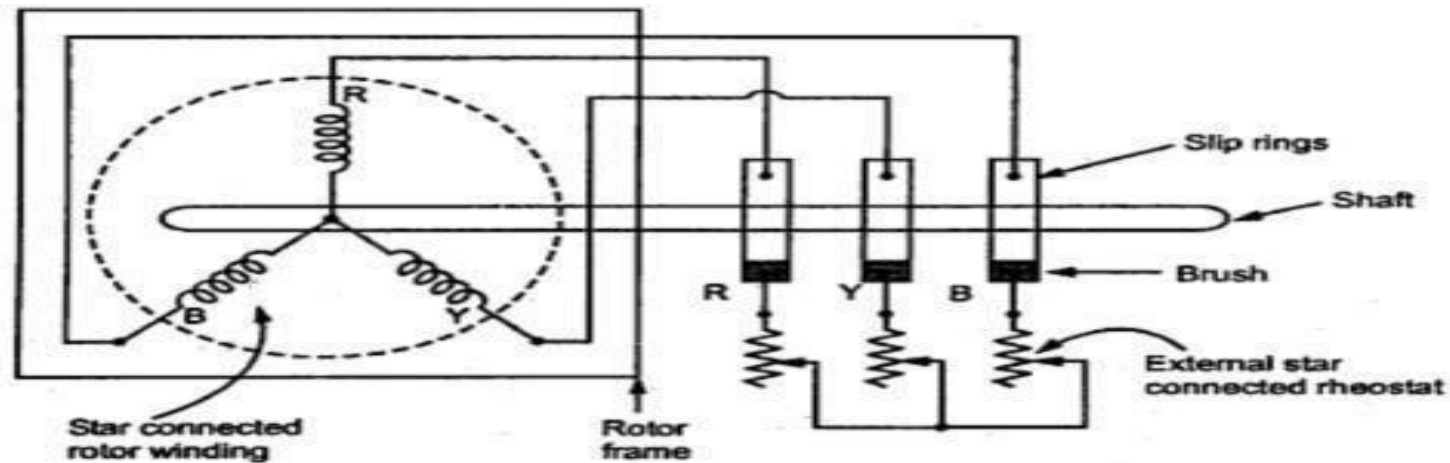
(a) Cage type structure of rotor



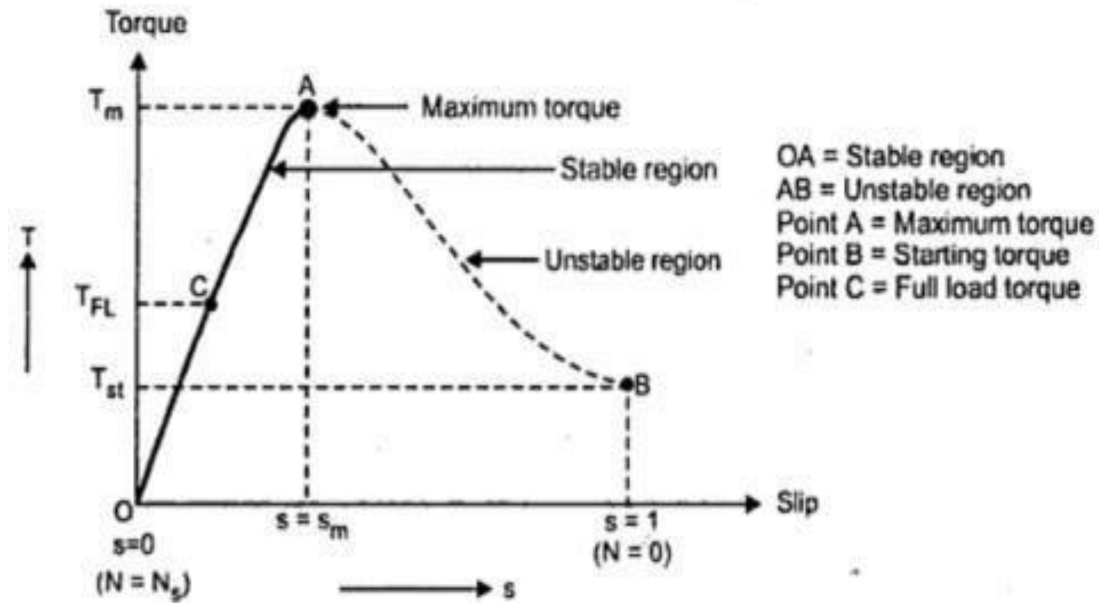
(b) Symbolic representation

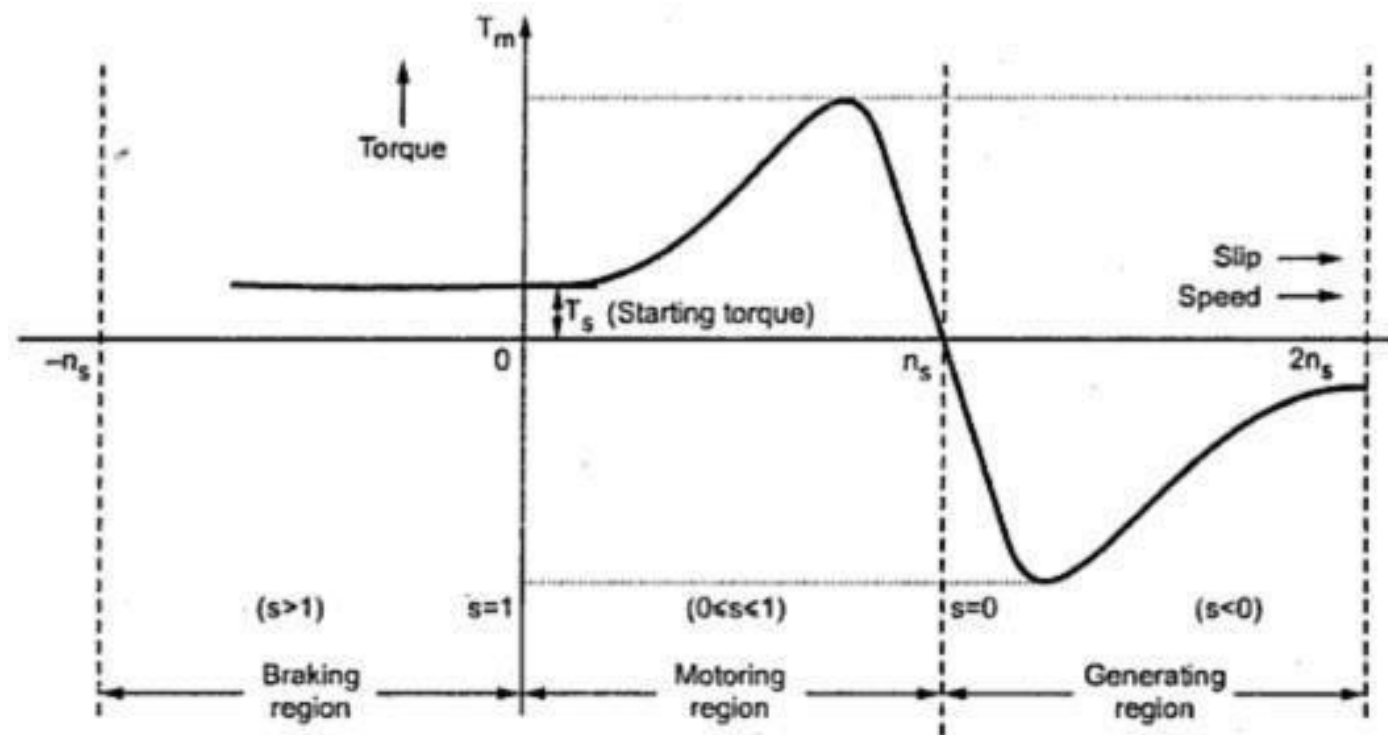


Slip Ring Rotor or Wound Rotor



Torque-Slip Characteristics







thank
you