

SNS COLLEGE OF ENGINEERING



Kurumbapalayam (Po), Coimbatore – 641 107

An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A' Grade Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF COMPUTER SCIENCE AND DESIGN

COURSE NAME: 19EE01 BASIC ELECTRICAL AND ELECTRONICS ENGINEERING

I YEAR /II SEMESTER - COMPUTER SCIENCE AND DESIGN

Unit 2 – ELECTRICAL MACHINES

Topic 1 : Induction Motor

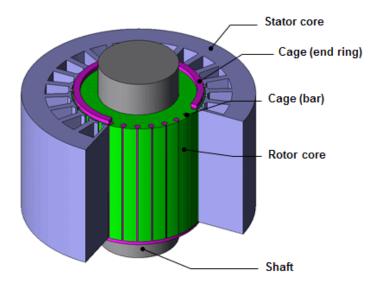


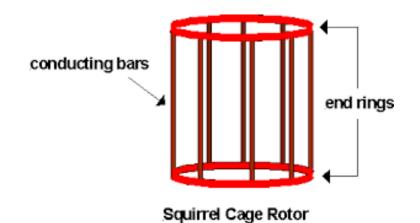


CONSTRUCTION OF INDUCTION MOTOR





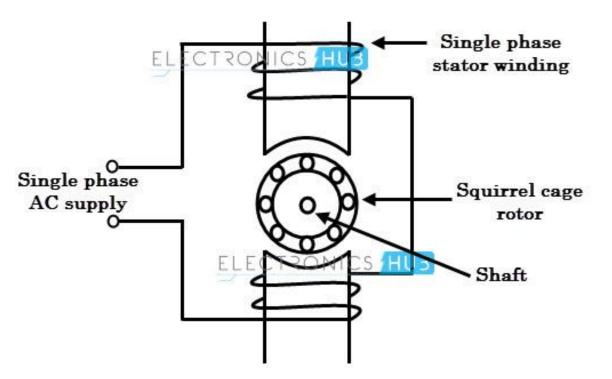






SINGLE PHASE IM WORKING PRINCIPLE





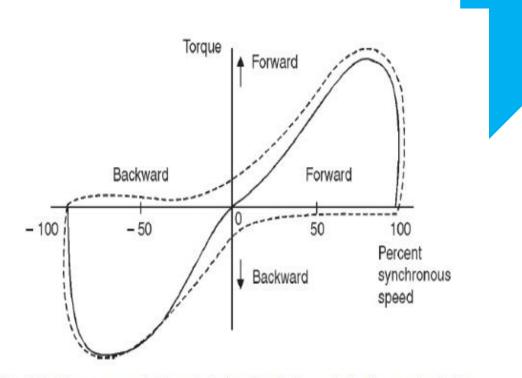
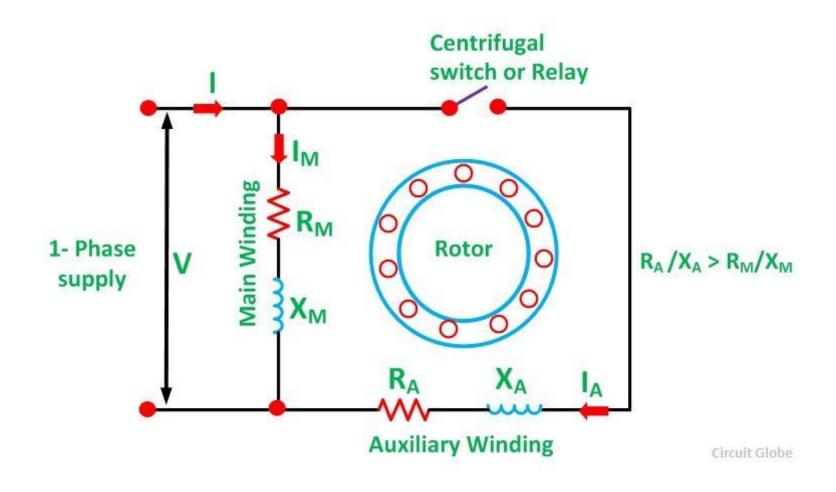


Fig. 9.4. Torque-speed characteristic of a 1-phase induction motor taking into account changes in the flux waves.



SPLIT PHASE 1PH INDUCTION MOTOR

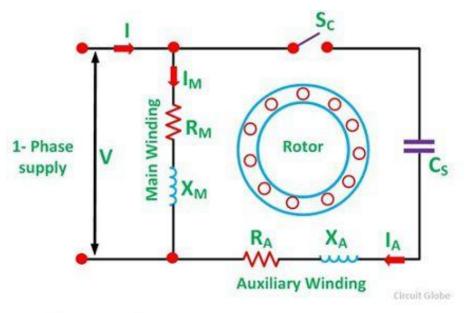


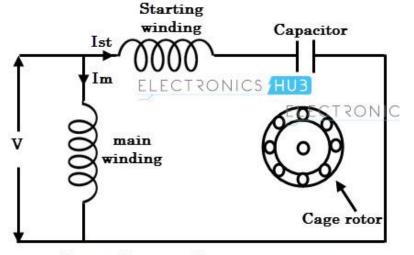




TYPES OF SINGLE PHASE INDUCTION MOTOR

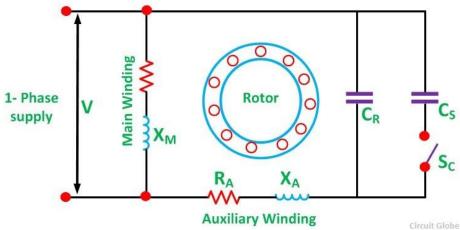




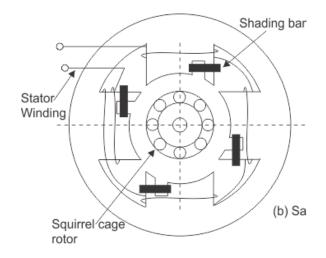


Capacitor Run

Circuit diagram of capacitor run motor



Capacitor Start and Capacitor Run IM

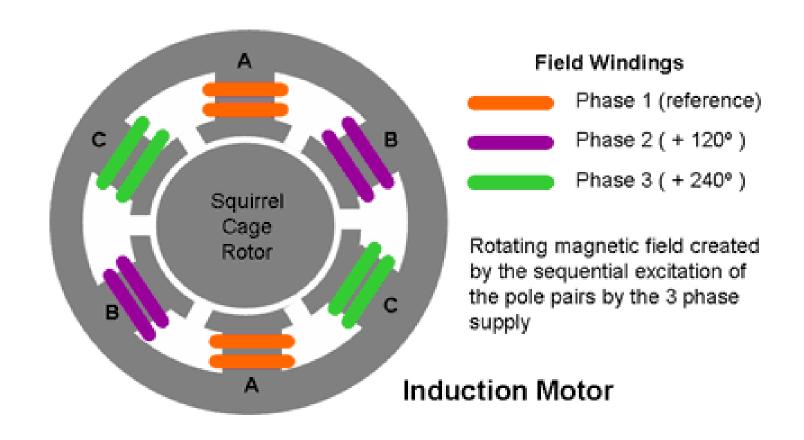


(a) 4-pole shaded pole construction



THREE PHASE INDUCTION MOTOR



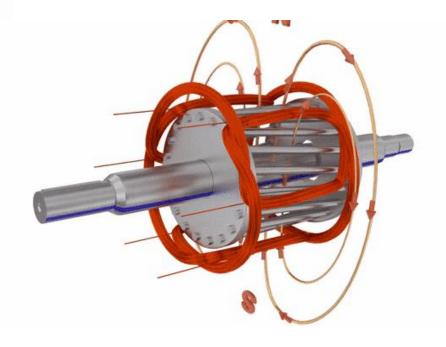




THREE PHASE INDUCTION MOTOR WORKING PRINCIPLE



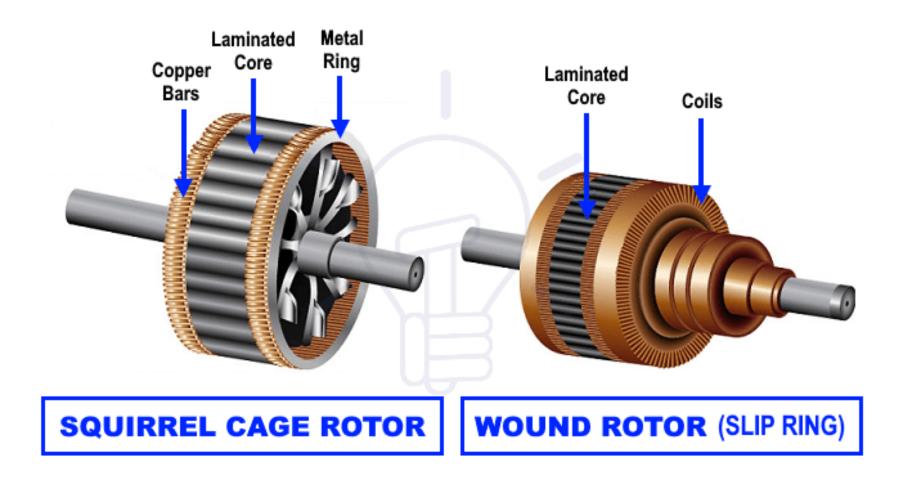






TYPES OF 3 PHASE INDUCTION MOTOR





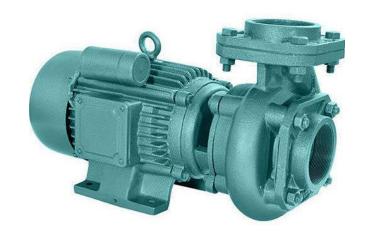


KIRCHHOFF'S LAW













REFERENCES



- 1. Bhattacharya. S.K, "Basic Electrical and Electronics Engineering", Pearson Education, (2017)
- 2. Muthu Subramanian R, Salivahanan S," Basic Electrical and Electronics Engineering", Tata McGraw Hill Publishers, (2009)
- 3. V.Mittle" Basic Electrical Engineering", Tata McGraw Hill Publishers, (2017)
- 4. Nagrath. I.J, "Electronics: Analog and Digital", Prentice Hall India Pvt. Ltd., (2013)

THANK YOU