



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 ELECTRICAL AND ELECTRONICS ENGINEERING

COURSE NAME : 19EE101-BASIC ELECTRICAL & ELECTRONICS ENGINEERING

III YEAR /I SEMESTER MECHATRONICS

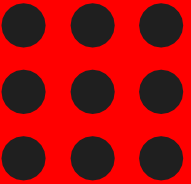


Unit 2: Electrical Machines

Topic 3: Induction Motor

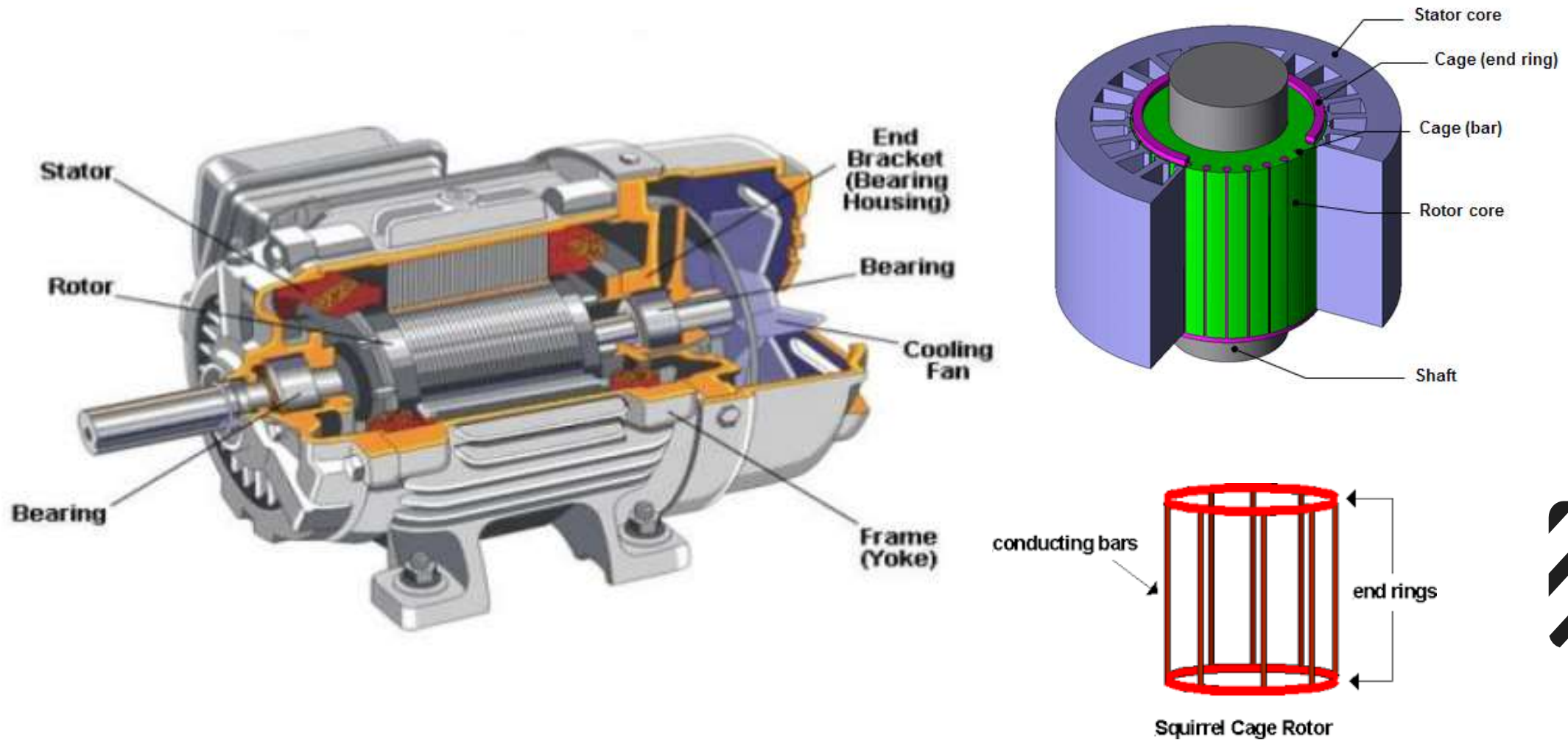
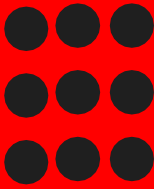
INDUCTION MOTOR /BEEE/SARANYA/EEE/SNSCE

12/5/2022





CONSTRUCTION OF INDUCTION MOTOR





SINGLE PHASE IM WORKING PRINCIPLE

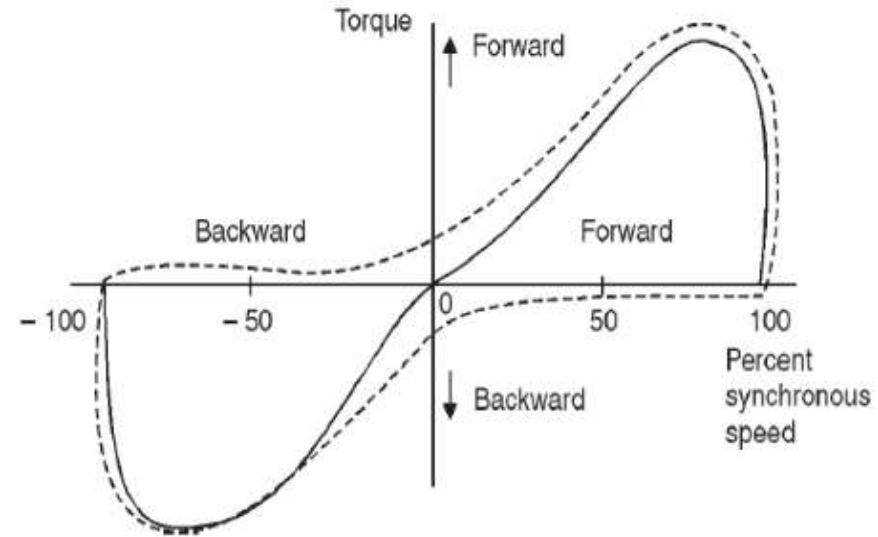
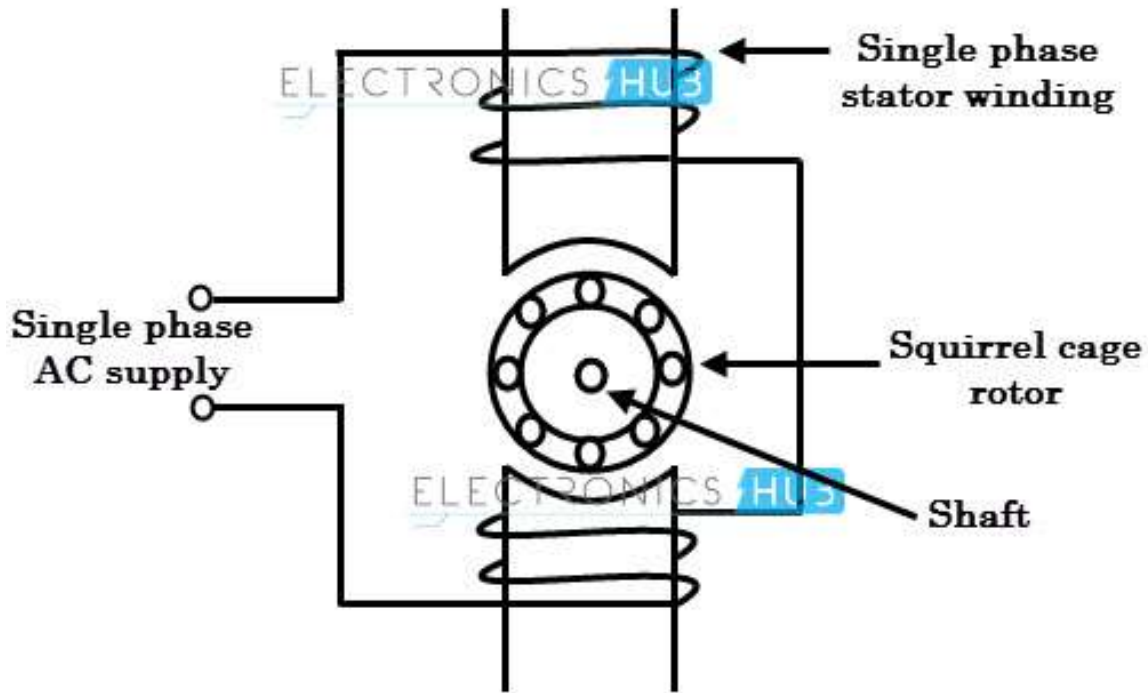
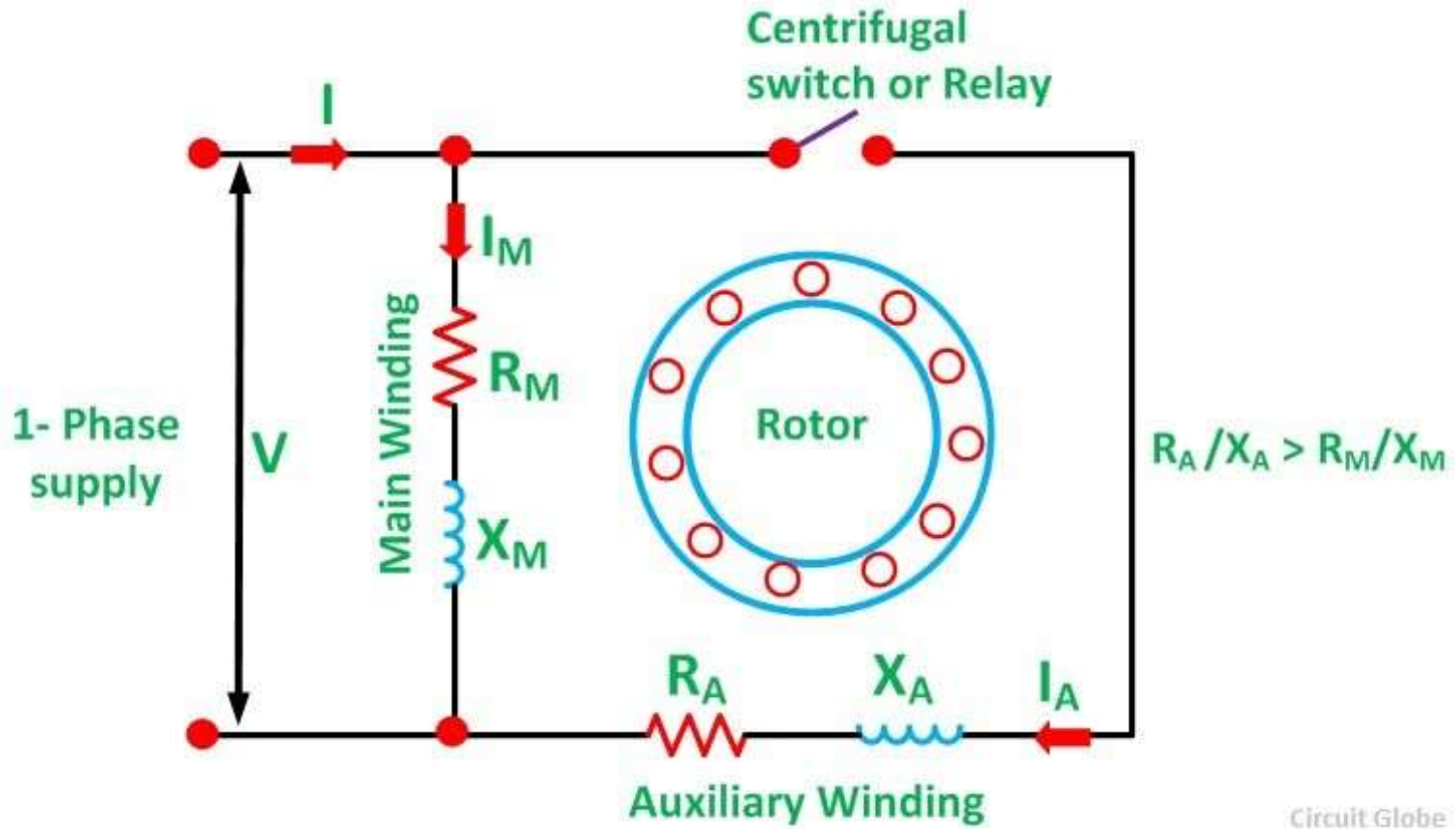


Fig. 9.4. Torque-speed characteristic of a 1-phase induction motor taking into account changes in the flux waves.



SPLIT PHASE 1PH INDUCTION MOTOR

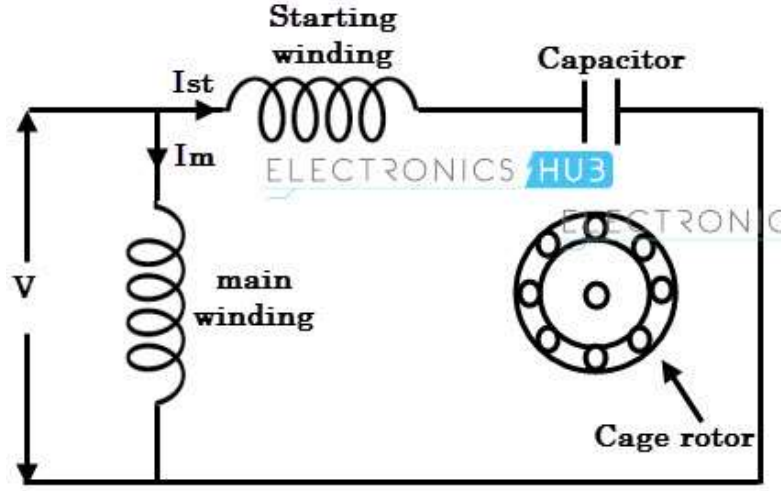
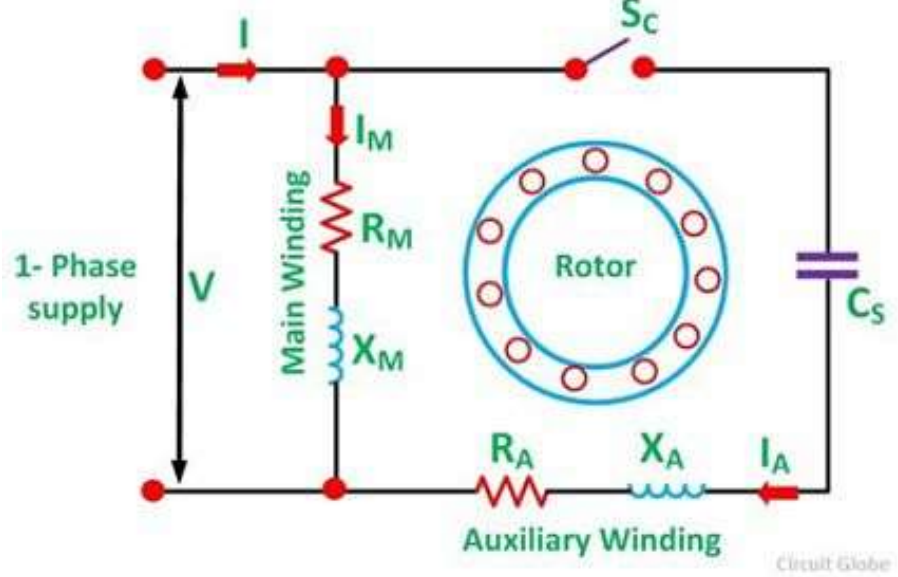


Circuit Globe

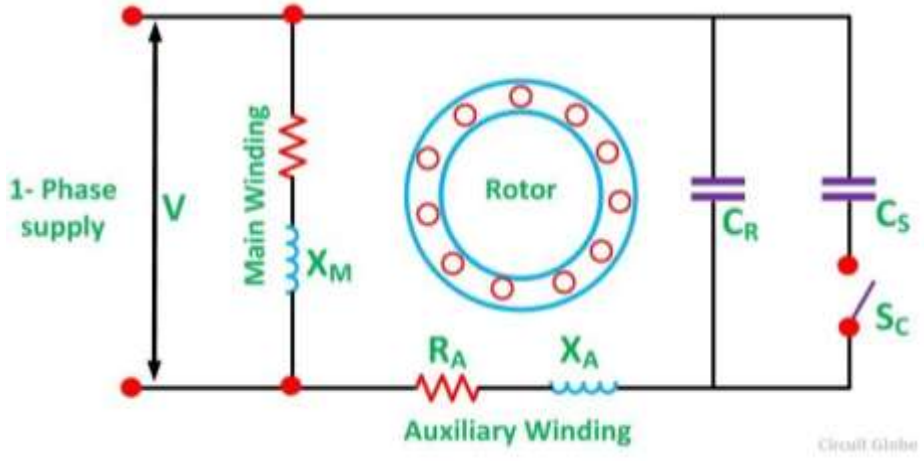


TYPES OF SINGLE PHASE INDUCTION MOTOR

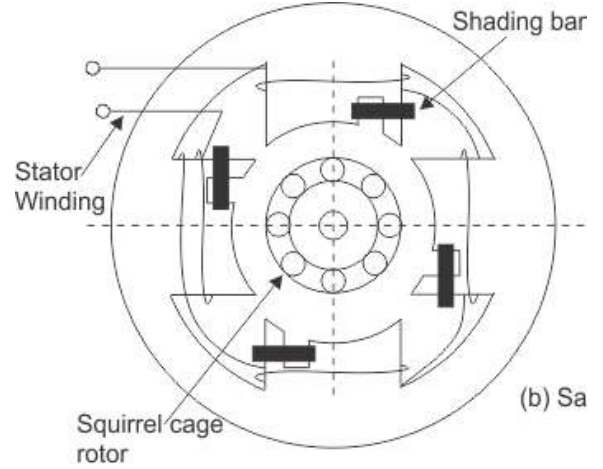
Capacitor start Induction motor



Capacitor Run IM



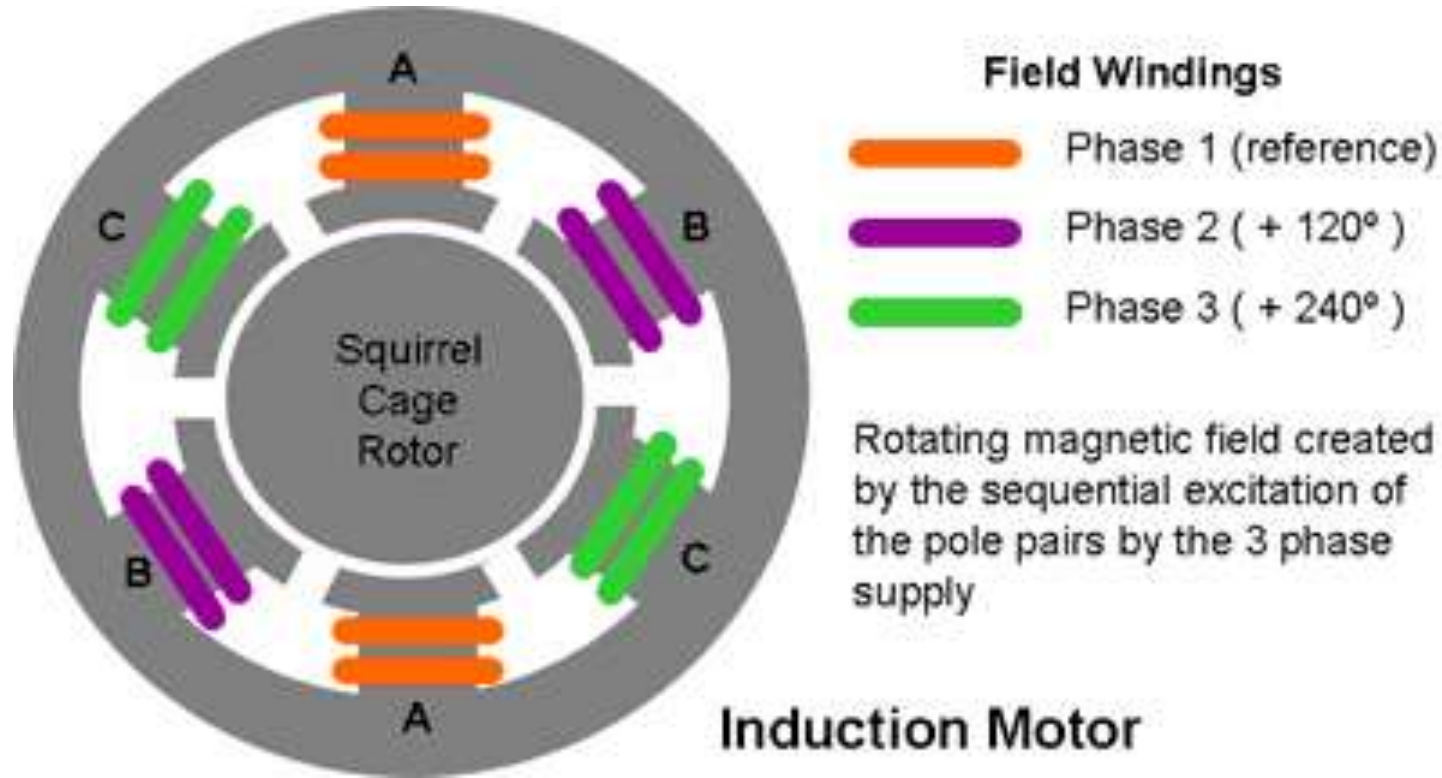
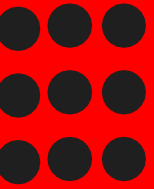
Capacitor Start and Capacitor Run IM



(a) 4-pole shaded pole construction

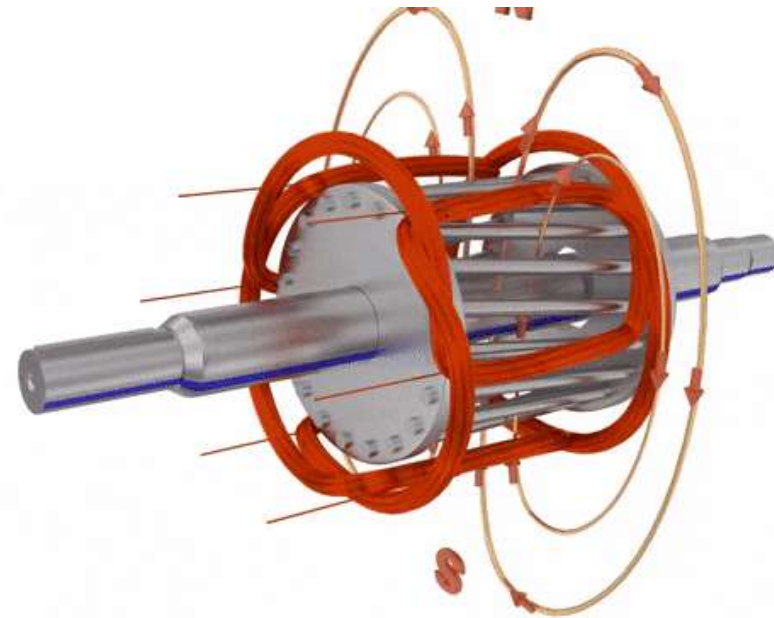


THREE PHASE INDUCTION MOTOR



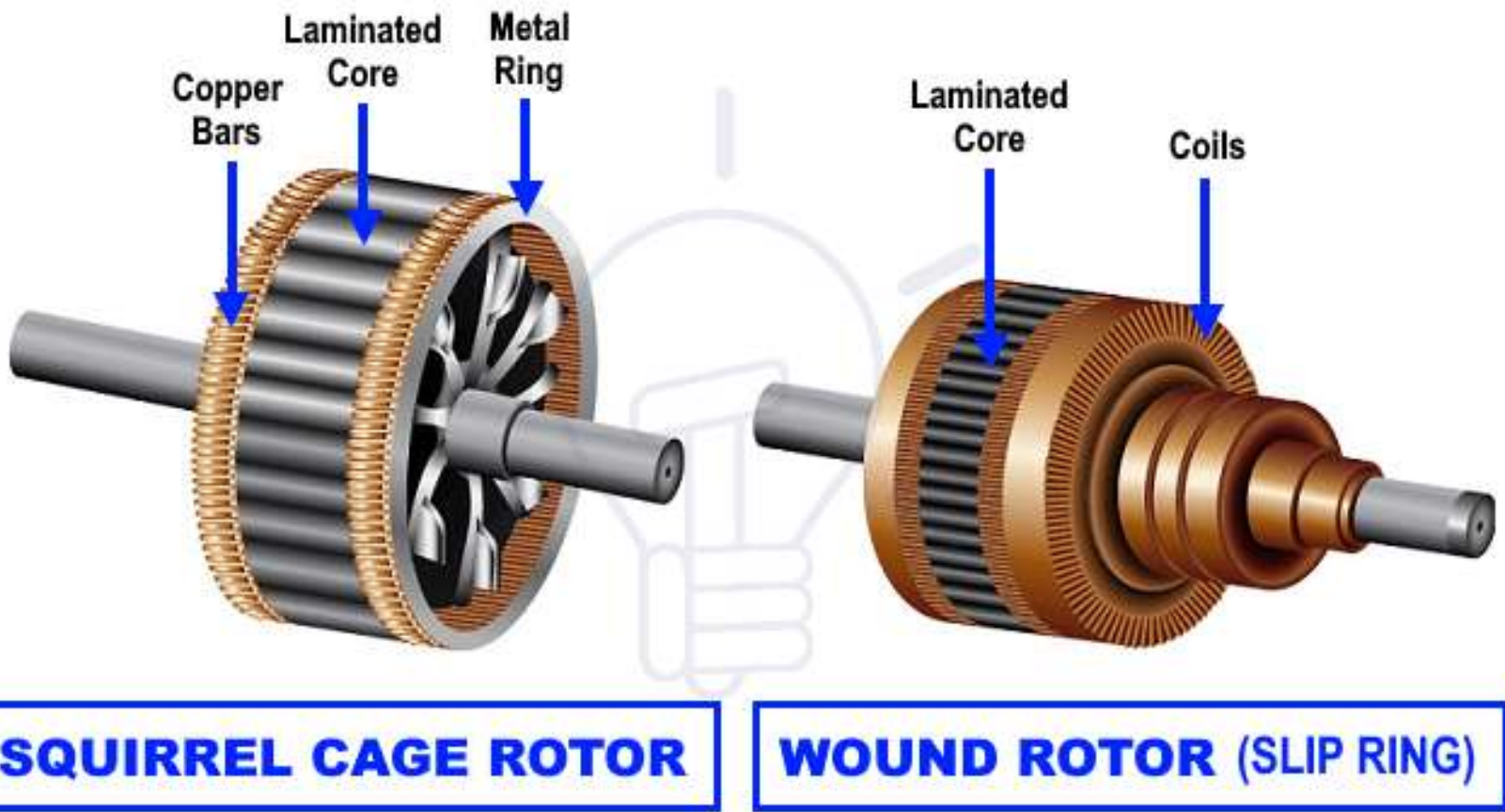
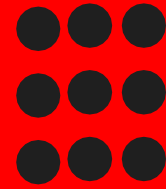


THREE PHASE INDUCTION MOTOR WORKING PRINCIPLE



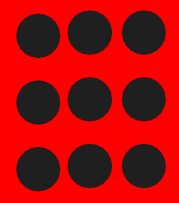


TYPES OF 3 PHASE INDUCTION MOTOR



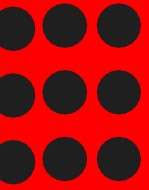


KIRCHHOFF'S LAW





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REFERENCES

1. Muthusubramanian R, Salivahanan S, “Basic Electrical and Electronics Engineering”, Tata McGraw Hill Publishers, (2009) - UNIT I – V
2. Bhattacharya. S.K, “Basic Electrical and Electronics Engineering”, Pearson Education , (2017) – UNIT I – IV
3. Mehta V K, Mehta Rohit, “Principles of Electrical Engineering and Electronics”, S.Chand & Company Ltd, (2010)- UNIT I and II
4. Mehta V K, Mehta Rohit, “Principles of Electronics”, S.Chand & Company Ltd, (2005)- UNIT IV and V

THANK YOU