SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107

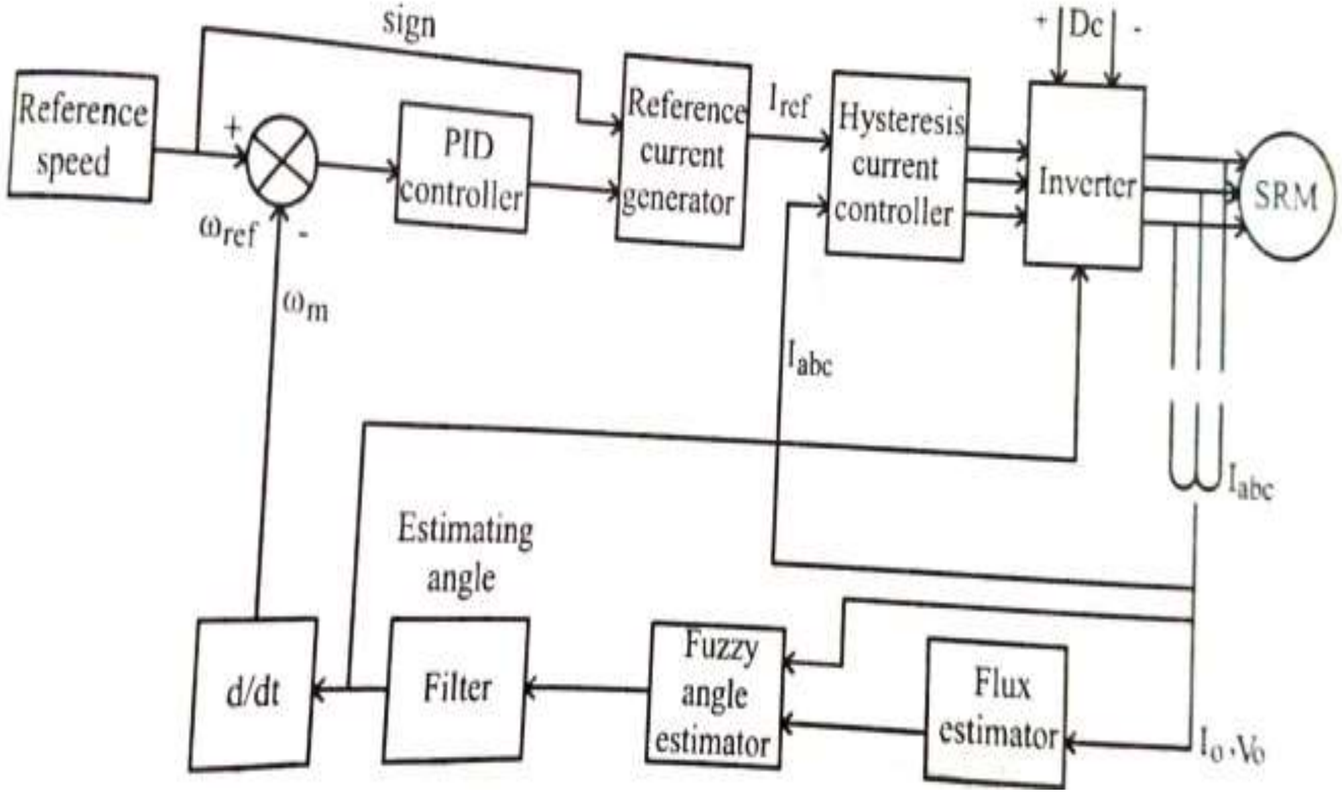
An Autonomous Institution

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

19EE504 - SPECIAL ELECTRICAL MACHINES
UNIT – 4
SWITCHED RELUCTANCE MOTOR
SENSORLESS CONTROL OF SRM DRIVE

Sensorless control of SRM drive



Sensorless control of SRM drive

- SRM drive has made successful into various sectors of industry such as aerospace and home appliances.
- The accurate knowledge of rotor position is required for good performance of SRM drive.
- Rotor position is an integral part of SRM control because of the nature of the relucatance torque production.
- Synchronized with the rotor position for effective control of speed, torque and torque pulsations.

Sensorless control of SRM drive

- An encoder or hall position sensors are usually employed to determine the rotor position .
- These sensors not only add complexity and cost of the system but also trends to reduce the reliability of the drive system.
- To avoid additional cost, size and unreliability associated with external position sensors, developing a reliable , precise and low cost position sensor less control scheme is necessary.


Thank you