

49. Title: A system for controlling the speed/torque of a switched reluctance motor

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Key Words: Switched reluctance motor, Control drive, Current sensor

Domain: Motors & Machines

Summary: A system is developed to control the speed/torque of a switched reluctance motor (SRM). The system is designed such that with only one current sensor the current information can be extracted for all four phases. This current information is fed to the control drive for controlling the speed/torque of the SRM.

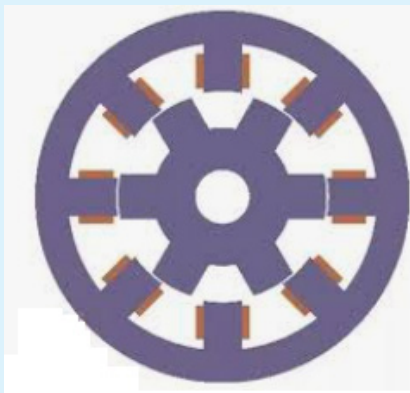


Diagram: Symbolic representation of Switched reluctance motor

Advantages:

- » Number of current sensors and corresponding circuitry is reduced
- » Cost of the drive is reduced without compromising the system performance

Applications: Energy management, switched reluctance motor

Scale of Development: A prototype is developed and tested in simulated environment up to the scale of 1 KW 4-Ph SRM for different values of parameters.

Technology Readiness Level: 4

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