

## Abstract

The topic of the switched reluctance motor is receiving increased attention in the last few years. The induction motor has been the preferred electrical motor for over a century, and this period has undergone considerable improvement in both performance and cost. Its major limitation arises out of its nearly constant speed performance when operated from mains. Because of this, the search is still on for a motor which is capable of cost-effective variable speed operation.

The switched reluctance motor promises some of these requirements, and hence attracted considerable attention in the recent past. Although the basic performance and design of the machine is established, and commercial production has started, it has still not found the widespread application achieved by the induction motor and the associated inverter drives. It is expected that the next few years will witness further penetration by the switched reluctance motor drives, at least in certain application where its special features are an advantage.

This report briefly describes the operating principle and performance of the switched reluctance motor, design procedure for Switched Reluctance Motor, MATLAB M-file programming for design of Switched Reluctance Motor, Finite Element Analysis of the Switched Reluctance Motor.