

Switching Losses in Power Electronic Converter of Switched Reluctance Motor

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Abstract : A cautious and astute selection of switching devices used in power electronic converters of a switched reluctance (SR) motor is required. It is a matter of choice of best switching devices with respect to their switching ability rather than fulfilling the number of switches. This paper highlights the computational determination of switching losses comprising of switch-on, switch-off and conduction losses respectively by using experimental data in simulation model of a SR machine. The finding of this research is helpful for proper selection of electronic switches and suitable converter topology for switched reluctance motor.

Keywords : converter, operating modes, switched reluctance motor, switching losses

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