Abstract

This paper represents a decoupled control strategy using sliding surface based on sliding mode controller for speed control of induction motor. The decoupled method provides a simple way to achieve asymptotic stability for induction motor. A strategy of sliding mode control is used, the decoupling method in this study uses two sliding mode controller for flux and speed. Then it compared by using PI controller which control flux and speed of the motor. Both controllers are simulated using SIMULINK. Simulation results are presented the effectiveness and good performance of the decoupling sliding mode control by considering the effects of the variations of the load torque.

References

Index Terms

Computer Science

Control Systems
Keywords

Sliding mode control  Decoupling control  field oriented control  Variable structure systems (VSS)