Abstract

Online monitoring of induction motors is becoming increasingly important. Knowledge based fuzzy logic approach helps in diagnosing the induction motor faults. The current work presents an effective method for diagnosing the stator side faults such as double line fault and an unbalance fault. Stator condition is diagnosed based on the stator RMS values of current amplitude in addition to the knowledge expressed in rules and membership function. The model is implemented in MATLAB/SIMULINK with the data obtained under both healthy and faulty condition and has ability to work with variable speed drives.

References

Unbalanced and Double Line to Ground Fault Detection of Three Phase VSI Fed Induction Motor Drive using Fuzzy Logic Approach


Timothy J. Ross. "Fuzzy logic with engineering applications" pages 101-103


Index Terms

Computer Science

Control Systems

Keywords

Diagnosis   Fuzzy Logic   Unbalance   Stator Current Amplitude   Knowledge Base