Abstract

Induction Motor is a most popular drive in Industrial application due to its various characteristic. Better performance of Induction Motor depends on the quality power in un-disturbances condition. But the performance of power system is dynamic and the continuous disturbances take place in power system as well as in the Induction Motor. In Induction Motor most of the faults takes place at stator side like open fault, short circuit, transient fault etc. In general the performance of Induction Motor changes due to various faults and transient and hence it is necessary to make the analysis of such fault and their stresses on the Induction Motor. This paper deals with analysis of stresses on Induction motor due to disturbances and faults at stator
side. The Propose analysis to do assessment under open-circuit and short-circuit conditions. A
generalized dynamic model of a three-phase squirrel cage induction motor will be developed by
following reference projects. The model will be developed using d and q variables in a
synchronously rotating reference frame. The model will predict performance of the motor during
open-circuit and short-circuit conditions. The simulation results will be obtained from squirrel
cage induction motor for low hp. The proposed system has been developed using
MATLAB/SIMULINK.

References

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Index Terms

Computer Science

Engineering and Technology
Keywords
Modeling  Induction motor (IM)  open-circuit (OC)  short-circuit (SC)