Abstract

This paper presents an analysis of effects of dynamic air-gap eccentricity on the performances of a 6/4 Switched Reluctance Machine (SRM) through finite element analysis (FEA) based on a FEMM package associated to MATLAB/SIMULINK package software. Among the various Time-Frequency methods used for detection of defects, the Time-Frequency Representation (TFR) is an appropriate tool to detect the mechanical failures through the torque analysis by allowing a better representation independent from the type of fault. Simulation results of healthy and faulty cases are discussed and illustrate the effectiveness of the proposed approach.
and Other Eccentricity Related Harmonics in a Three Phase Induction Motor with Different Rotor Cages&quo;,
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Index Terms

Computer Science

Signal Processing

Keywords
Eccentricity  FEA  SRM  Time-Frequency Representation  Wigner-Ville Distribution