Abstract

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Fuzzy Logic and Conventional Direct Torque Control of An Induction motor A Comparative Study

Abstract: The aim of this paper is based on implementing direct torque (DTC) of an induction motor (I.M.) using both of the conventional DTC and a new proposed technique for DTC based on fuzzy logic concept (F.DTC) where fast torque response with low ripple in the stator flux and torque of induction motor can be achieved. Both of the two techniques were designed and simulated using MATLAB/SIMULINK version(6) software package. Also, MATLAB/FUZZY INFERENCE SYSTEM (FIS) software was used to implement the fuzzy logic controller. Both were simulated under the same conditions. The differences between them have been investigated through a computer simulator.