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Variable Frequency Converter Fed Induction Motors

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Abstract : A.C motors, in general, have superior performance characteristics to their d.c. counterparts. However, despite these advantage a.c. motors lack the controllability and simplicity and so d.c. motors retain a competitive edge where precise control is required. As part of an overall project to develop an improved cycloconverter control strategy for induction motors. Simulation and modelling techniques have been developed. This contribution describes a method used to simulate an induction motor drive using the SIMULINK toolbox within MATLAB software. The cycloconverter fed induction motor is principally modelled using the d-q axis equations. Results of the simulation for a given set of induction motor parameters are also presented.

Keywords : simulation, converter, motor, cycloconverter
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