

DESIGN, SIMULATION AND ANALYSIS OF SENSORLESS VECTOR CONTROLLED INDUCTION MOTOR DRIVE

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ABSTRACT

The applications where vector control is required but retrofitting of shaft for speed encoder is not possible, sensorless vector control can be used. The paper presents a scheme for sensorless vector control of induction motor. The proposed scheme utilizes easy and simple approach for speed estimation. The scheme is very efficient and a wide range of speed control is available. Speed reversal can be achieved without any instability of system. The proposed scheme had been simulated using MATLAB software.

Index Terms-- Flux estimation, Induction Motor, SensorlessVector control, Speed estimation.