

**LOSS MINIMIZATION IN AN INDUCTION MOTOR  
BASED ON TRUE PARAMETRIC MODEL**

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**ABSTRACT** This paper describes a new approach to power loss minimization in a three-phase induction motor. The method employs the motor's parametric model of which parameters resulted from identification. In this work, genetic algorithm is employed to identify the motor's model. The approach of loss minimization is suitable for use with variable load situation. Its usefulness and limitation are illustrated via simulation results.