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عنوان مقاله:

Application of Ant Colony Optimization Algorithm for Optimal Design of Squirrel Cage Induction Motor

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خلاصه مقاله:

Low efficiency and high volume are one of the major disadvantages of induction motors. In recent decades, for determined motor power output, the motor dimension is reduced, and so efficiency is the upside. The main purpose of design of an induction motor is obtaining the physical dimensions of all parts of the motor to satisfy the customer. This paper proposes the optimal design of a three-phase induction motor for increased efficiency and reduces the volume. In this paper, the motor has been optimized by ant colony optimization algorithm because it offer maximum efficiency and minimum size. A multi-objective optimization is performed in this paper for optimum dimensions of the motor using ant colony optimization algorithm

کلمات کلیدی:

Ant colony algorithm, Optimization, Induction motor, Squirrel cage

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