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OPTIMIZATION OF MAGNETIZATION AND DEMAGNETIZATION PROCESSES OF THE VECTOR CONTROLLED ASYNCHRONOUS MOTOR

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Abstract

It was found the optimal time constants of the exponential laws of magnetization and demagnetization for induction motor with vector-control. It allows minimizing heat losses from field components of the stator and rotor currents. In addition, formulas for calculating these losses are found. Comparison of processes with standard and optimal control laws according to exponential and linear laws by the method of mathematical modeling is performed. References 9, figures 2, table 1.

Key words: induction motor, demagnetization, magnetization, optimization.

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