AN APPROACH TO THE MODELLING OF THE SQUIRREL-CAGE THREE-PHASE INDUCTION MOTOR

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Abstract: *A model of a squirrel-cage induction motor is presented in this paper. In this model the rotor cage has a number of circuits equal to the number of bars, each circuit being formed of two neighbouring bars and the ring segments between them. A system of equations, which allows for the description of the working of the induction machine in a dynamic state, and the determination of an expression of the electromagnetic torque, is also being presented. The model can be applied for an odd as well as for an even number of rotor bars.*

Key words: *Induction motor, model, dynamic state, currents in the ring segments.*