

*induction motor, rotor cage asymmetry,
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INFLUENCE OF DESIGN DATA OF INDUCTION MOTOR ON EFFECTS OF CAGE ASYMMETRY

The paper presents results of analysis of influence of chosen parameters of induction cage motor on the component $(1 - 2s)f_0$ in stator currents, which is commonly used for diagnosis of cage condition. The investigation concentrates on the influence of commonly available motor data such as pole-pair and rotor slot numbers, respectively, but also on relationships between resistances of cage bars and end rings. A reduced model of motor with a faulty cage is used, in which cage faults are represented by asymmetry coefficients of a cage. The main intention of the paper is to provide engineers with simple estimates of effects due to cage faults for various motors given limited information.

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