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LOSS ESTIMATION AND PARAMETERS CALCULATION OF A 7.5kW INDUCTION MACHINE

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ABSTRACT

This paper presents the Loss estimation and parameters calculation of 10hp three phase induction machine. The data obtained will enhance the activities of the motor and FEM designers in proposing the electromagnetic and thermodynamic model of AC induction machines. To achieve the purpose of this paper, we have assumed the efficiency of an induction machine to be 85.7 percent and a power factor of 0.87. The effect of various machine parameters such as the resistances of stator and rotor, rotor current, induction machine losses are also presented in this paper.

KEYWORDS: Loss Estimation, Losses, Power Factor, Parameters