

MODELS OF A SQUIRREL-CAGE INDUCTION MACHINE

Maria ANTONOAI¹

Abstract: *Aiming a higher precision, especially for transient phenomena, in the present paper, a model that considers the circuits formed with all elements of the squirrel-cage is presented. The double reaction system of equation has been chosen, for it leads to the convenient treatment of the study of transient phenomena. The model, built in SIMULINK environment, is based on the voltage equations according to two axes d and q . For the rotor, all circuits formed by bars and ring segments are separately considered.*

Key words: *Induction machine, model, dynamic status, simulation, currents of rotor bars.*

¹ Dept. of Electrical Engineering, Transilvania University of Braşov.