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Experimental Study of the Fan Electric Drive Based on a Two-Speed Motor in Dynamic Modes

Authors: Makhsud Bobojanov, Dauletbek Rismukhamedov, Furkat Tuychiev, Khusniddin Shamsutdionov

Abstract : The article presents the results of experimental study of a two-speed asynchronous motor 4A80B6/4U3 with pole-changing winding on a fan drive VSUN 160x74-0.55-4 in static and dynamic modes. A prototype of a pole-changing Motor was made based on the results of the calculation and the performance and mechanical characteristics of the Motor were removed at the experimental stand, as well as useful capacities and other parameters from both poles were determined. In dynamic mode, the curves of changes of torque and current of the stator were removed by direct start, constant speed operation, by switching of speeds and stopping.

Keywords: two speed motor, pole-changing motor, electric drive of fan, dynamic modes

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