

SUMMARY

The master's dissertation contains pages - 130, drawings - 58, tables - 14, and graphic part on 6 A1 sheets.

In the master's dissertation, the choice of the equipment for the laboratory installation for the research of the permanent magnet synchronous motor (PMSM) control systems was made. Electric circuits are developed for signal processing of the rotor position sensor.

The mathematical models for research of synchronous motors in immobile and rotating coordinate systems are developed. The design of sensor- and sensorless- vector control systems of PMSM is performed. The optimal control strategies for PMSM are proposed.

The concept of carrying out of experimental researches of control systems with permanent magnets synchronous motor on the laboratory stand of NORD is developed.

SYNCHRONOUS MOTOR WITH PERMANENT MAGNETS, FREQUENCY TRANSMITTER, ROTOR POSITION SENSOR, VECTOR CONTROL, OPTIMAL CONTROL, LABORATORY STAND

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Devel.	O. Burmelov				<i>The concept of conducting laboratory research of synchronous motor with permanent magnets Summary</i>												
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Approved.	S. Peresada																
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