SUMMARY

Diploma project contains pages - 125, drawings - 56, tables - 35 and graphic part on 6 sheets A1.

The work presents mathematical models of the components of the generation system based on a permanent magnet synchronous generator. Has been developed and tested a vector control system for a permanent magnet synchronous generator in a coordinate system oriented along the rotor flux linkage vector. Has been developed a wind turbine speed control system, which ensures the maximum efficiency of the wind turbine at a speed below the rated speed and limiting the power at a speed above the rated speed.

SYNCHRONOUS GENERATOR WITH PERMANENT MAGNETS, VECTOR CONTROL, SPEED CONTROL MODE TO ACHIEVE THE MAXIMUM WIND TURBINE EFFICIENCY, POWER LIMIT MODE, MATHEMATICAL MODELS, THREE-PHASE INVERTER, FREQUENCY CONVERTER

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	Lit.	Page	Pages
Vector control of an autonomous generation system based on a synchronous machine with permanent magnets. Summary		6	125
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