THE SUMMARY

The graduation work contains 69 pages; 14 drawings; 10 tables; 3 pages of charts.

In the thesis project developed the programmed control system of movement of passenger elevator of the administrative building. Application of electric gearless elevator based on vector-controlled synchronous motor with permanent magnet, which implements the programmed control system with predetermined trajectories of movement with limited speed, acceleration and jerk.

According to initial data made the choice of motor and frequency converter designed, compiled block diagram of the automatic control system. Investigated the dynamic modes of the system through simulation in the software package MATLAB.

Calculation and realization of this diploma project was provided through the use of the following programs: MATLAB R2009b, Microsoft Office Word 2010, Microsoft Office Visio 2010, Math Type 6.9.

ELECTRIC DRIVES, ELEVATOR, SYNCHRONOUS MOTORS, VECTOR CONTROL, SYNTHESIS, SIMULATION, TRANSIENTS, MATLAB.