SUMMARY

The Master's dissertation comprises: 126 pages, 37 figures, 32 tables, 1 addition and the graphical part on 6 pages A1.

There are the calculation and selection of an asynchronous motor, also the investigation of vector control of the speed of the AM for an electric vehicle, also in this diploma project were synthesised the current regulators, flow regulators and speed regulators. The calculation of the AD includes: calculation of the nominal and maximum load moments, calculation and selection of the battery. The chosen algorithm provides an asymptotic elaboration of given trajectories of velocity and flux coupling.

The mathematical modeling method used to construct graphs of transient engine processes when working out a given velocity trajectory, which corresponds to the urban traffic cycle of the vehicle and its movement to the mountain. Also, graphs were constructed to compare the elaboration of a given trajectory of motion between the modified system and the standard algorithm for forming the flow-coupling curve.

ASYNCHRONAL MOTOR, ELECTRICITY, BATTERY, VECTOR CONTROL, SYNTHESIS, CHARACTERISTICS, RESEARCH.