SUMMARY

The diploma project comprises: 64 pages, 18 figures, 1 table and graphical part on 3 pages A1.

The purpose of the bachelor's thesis is to develop and research the traction asynchronous electric drive of a tram car.

An analytical review of existing types of electric drives, the study of static and dynamic modes of the tram electromechanical system is carried out. The algorithm of operation of the microprocessor control system of the electric drive has been developed. The selection of the electric motor and power electrical equipment has been completed, the parameters of the electromechanical system are calculated. The obtained results of calculation, simulation and conclusions are analyzed.

TRAM, INDUCTION MOTOR, TRACTION ELECTRIC DRIVE, CONTROL SYSTEM, DIRECT TORQUE CONTROL, PULSE-WIDTH CONVERTER.