ABSTRACT

The master dissertation contains: 140 pages; 39 figures; 27 tables; 6 sheets of the graphical part; 51 sources in the reference list.

In this master dissertation the selection and calculation of the induction motor and vector control research point for the track module of electric transport were done. Calculation of AD includes: calculation of nominal load and maximum load, the choice of power parts.

By the method of mathematical modeling graphics engine transients when developing the trajectory point corresponding to the typical cycle of the vehicle were built.

Two strategies of realization of the system control and two types of directly controlling were investigated.

On the basis of these researches was created a start-up project.

ASYNCHRONUS TRACK MOTOR, RAIL ELECTRIC TRANSPORT, STATEGY OF CONTROL, INDIRECT FIELD ORIENTED CONTROL, TRACK MODULE OF TRAM, ASYNCHRONUS ELECTRIC DRIVE