

## **Annotation**

This thesis is done on the topic "Diagnostics of malfunctions of the traction engine of electric vehicles." The main part describes: design, operating conditions of traction electric motors, provides the main causes of malfunctions, describes means for control checks, various schemes and methods for diagnosing malfunctions before and after major repairs.

Technical data and design of traction motors are described.

An electromagnetic calculation of the DK-261A engine was carried out in order to determine the switching class for the nominal mode, as well as the calculation of the mechanical characteristics for the TL2K1 engine.

Diagnostic methods for traction electric motors were examined, as well as methods for their elimination. An algorithm for repairing a traction motor is considered.

The section on life safety provides calculation of artificial and natural lighting of a power plant.

In the economic part, the cost-effectiveness of the introduction of the diagnostic line was calculated, as well as the calculation of the costs of diagnostics of traction motors.