

Annotation

Diplom a work is devoted to the development of automated electric pump unit oil pumping station for pumping oil. The project provides information about types, structures, operating conditions of the pumping unit. Considered problems of selecting the type of pump unit and the motor. As an electric drive system, selected system "IF-AD." Considered parameters of calculating the electric motor, given a calculation scheme converter of frequency, also structural schemes. Shows the mechanical and electromechanical characteristics of the electric motor. Used mathematical packages such as Matlab Simulink, Excel.

In the section labor protection lighting and electrical safety oil pumping stations are considered.

In the economic part made an analysis on the effectiveness of the selected electric motor and converter of frequency.