

Annotation

This dissertation provides for the improvement of the electric drive of the pumping unit of the cold water supply system of the building.

It is necessary to select the type of pumping unit and the type of electric motor. Instead of an electric drive system, a frequency converter - asynchronous motor system was chosen. It is required to calculate the required parameter, calculate the required parameter of electric motors and give a schematic diagram of the frequency converter. Mechanical and electromechanical characteristics of the electric motor. Excel and Simulink Matlab programs were used.

In the life support section, the connection of the pumping station to the power grid, the technical calculation of the grounding device, and air cooling means are considered.

The economic section analyzes the efficiency of the selected electric motors and frequency converters.