

Annotation

In the research paper outlines the rationale of modernization of the freight elevator. An analysis and justification of choice of asynchronous motor with frequency control. Produced motor selection 4MTKF(H)200L6 and inverter ATV61HD22M3X. A system for control of electric freight elevator and conducted research in dynamic mode programming environment MATLAB.

Transition processes at various working hours of system are investigated and analysed.

In the section "Health and safety" calculation the noise level of the electric drive of the freight elevator is made.

In the section "Economic Part" all capital expenses at design of the freight elevator are calculated. Besides are calculated economic efficiency at introduction new technologies and a payback period.