

## Annotations

On the graduate work of a mine hoist machine type NKMZ 2C-5 \* 2.3 investigated motor drive system and considered the problem of energy saving: calculated energy savings when replacing the rotor with slip-ring station for regulated electric drive. Shows the economic impact of application of frequency converters: reducing breakdowns and accidents to the equipment , more accurate control of acceleration and deceleration to the skip , energy savings of 4%, as well as all the power slip of rotors to the motors returns in the supply network 6kV 50Hz and not spent to rotary resistance heating and motor heating .

Proposed applications of actuators:

- a) with induction motor with phase rotor and transistor voltage inverter;
- b) connecting the stator IM PR network 6kV 50 Hz via contactor reverser and regenerative inverter in the rotor;
- c) squirrel stator IM PR and regenerative inverter in the rotor;
- d) low-voltage inverter with regenerative IM PR in the stator and regenerative low-voltage inverter in the rotor;
- d) dual power supply machine (MDP) in the drive shaft hoisting machine.