

REDUCTION OF ENERGY CONSUMPTION DUE TO MODERNIZATION OF ASYNCHRONOUS MOTORS.REPAIR AND UPGRADE IN ONE PROCESS

Innovative product description

Patented technology of joint windings of electrical machines are two sets of windings. One set is connected in star circuit, the other one in delta circuit. The sets are parallel connected with each other. Due to optimization of magnetic field the common energy consumption decreases by 10-15%. Economic effect is achieved due to combining motor rewinding with its repair.



Competitive advantages

- Increase of starting torque by 15 %.
- ♦ Increase of peak torque by 20 %.
- Decrease of in-rush starting current by 15 %.
- Change of sliding.
- Direct start due to decrease of in-rush starting currents and increase of starting torque is available.
- Operation with efficiency factor close to nominal in extended load range (from 25% to 150%).
- Decrease of heat release (down to 30 %).
- ♦ Decrease of noise level by 5 dB in average.
- Decrease of vibration.

Applications

Asynchronous motors for drives of various pumps, industrial fans, conveyors, classifiers, in electric drives of different machines (metalworking, weaving, lifting, woodworking), earth-moving machines, elevators, pumps, household appliances, etc.



Current status and application examples

At the moment the technology is successfully applied for motor rewinding at such enterprises like ILIM Group, ZAO Philip Morris Izhora, OAO KMAruda, Acron Group, OOO Fazer, AO Knauf Petroboard.