

Keywords

- Auxiliary winding
- Magnetic induction
- Vibration
- Noise



Prototype of auxiliary winding with decoupling capacitors produced in the laboratory

BOBINOX



AIR-GAP

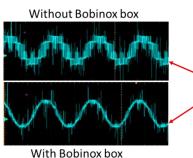
ROTOR

STATOR

Reduction of the magnetic induction harmonics, vibrations and noise of an electrical motor

Technology

- The auxiliary winding is placed in the slots
- The auxiliary winding is connected to capacitors with adequate values
- Induction air gap is more sinusoidal
- Reduction of induction harmonics
- Motor duration increased



Auxiliary coil Capacitors box

Asynchronous machine equipped with Bobinox device

Reducing of induction harmonics

Benefits

- The system is simple, passive, without electronics.
- No adjustment required and helps combat a wide range of frequencies.
- Self-adjustments in case of speed or load change.
- The capacitors box is compact and easy to integrate.
- The benefits are stable :
 - Noise reduction : up to -10dB
 - Vibration reduction : up to -70%

Partnership

Licensing and/or partnership

Applications

- Industrial motors
- Automotive
- Railway traction
- Aviation
- Household electrical devices (washing machine)
- Roller shutter

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