

Squirrel-cage rotor - rugged and low-loss

In the basic design, the deep-bar squirrel-cage winding consists of copper bars brazed to the short-circuiting rings. Depending on expected rotor stresses, either butt or grooved bar-to-ring joints are used.

The comparatively low resistance of the copper winding leads to low current/heat losses and, consequently, to high efficiencies.

The copper bars are driven into the rotor slots and peened to ensure absolutely positive seating. This prevents any movement of the cage winding relative to the rotor core, and makes for optimum heat transfer, essential for long acceleration or locked-rotor times.

For higher starting torques, or to meet the requirements of particular torque characteristics, special slot designs are used.



Rotor with copper cage winding

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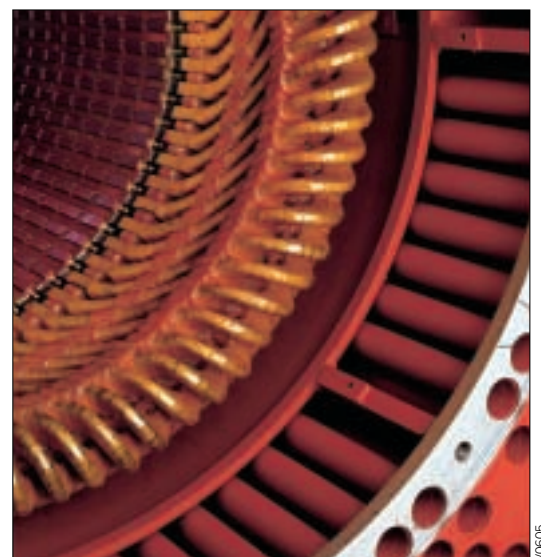


Connecting side of endwinding

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Stator winding

The stator winding is a corded two-layer winding. It is connected in star, with the neutral being connected at the winding overhang. The three winding outlets are brought out to the terminal box via flameproof cable glands. On request, all winding ends can be brought out. In that case, the neutral is formed in a separate terminal box.



Endwinding

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