

AC motors are generally divided into two categories, induction and synchronous motors. The most common AC motor is the "Squirrel cage motor", a type of induction motor. Most AC motors require a starter, or method of limiting the inrush current to a reasonable level.

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AC Generator

The turning of a coil in a magnetic field produces motional emfs in both sides of the coil which add. Since the component of the velocity perpendicular to the magnetic field changes sinusoidally with the rotation, the generated voltage is sinusoidal or AC. This process can be described in terms of Faraday's law when you see that the rotation of the coil continually changes the magnetic flux through the coil and therefore generates a voltage.

AC generators are generally called an alternators.

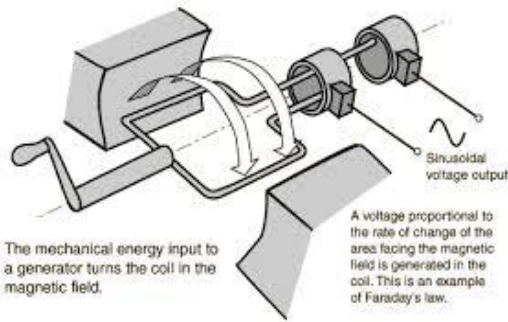


Fig 4: AC Generator

AC GENERATOR AND MOTOR

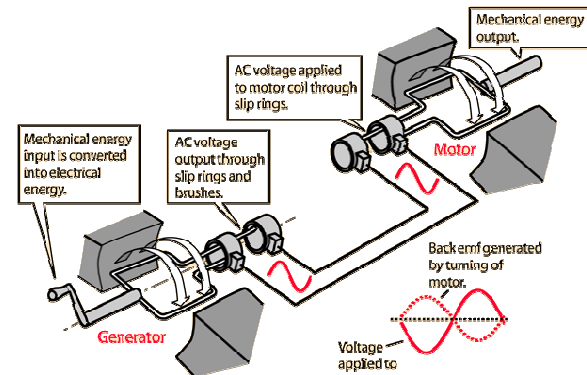


Fig 5: AC motor and generator