


# Commutator

â, noun: switch for reversing the direction of an electric current

A **commutator** is a rotary electrical switch in certain types of electric motors or electrical generators that periodically reverses the current direction between the [rotor](#) and the external circuit. In a [motor](#), it applies power to the best location on the [rotor](#), and in a [generator](#), picks off power similarly. As a switch, it has exceptionally long life, considering the number of circuit makes and breaks that occur in normal operation.

A **commutator** is a common feature of *direct current rotating machines*. By reversing the [current](#) direction in the moving [coil](#) of a motor's [armature](#), a steady rotating force (torque) is produced. Similarly, in a [generator](#), reversing of the [coil](#)'s connection to the external circuit provides unidirectional (i.e. direct) current to the external circuit. The first **commutator**-type [direct current](#) machine was built by Hippolyte Pixii in 1832, based on a suggestion by [Andr  -Marie Amp  re](#). [Wikipedia, Commutator](#) 

See Also

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