

GLOSSARY

A

alternating current an electric current that changes direction at regular intervals (807)

B

back emf the emf induced in a motor's coil that tends to reduce the current powering the motor (812)

E

electromagnetic induction production of an emf in a conducting circuit by a change in the strength, position, or orientation of an external magnetic field (794)

G

generator a device that uses induction to convert mechanical energy to electrical energy (803)

M

mutual inductance a measure of the ability of one circuit carrying a changing current to induce an emf in a nearby circuit (814)

R

rms current the amount of direct current that dissipates as much energy in a resistor as an instantaneous alternating current does during a complete cycle (808)

S

self-induction the process by which a changing current in a circuit induces an emf in that circuit (819)

T

transformer a device that changes one ac potential difference to a different ac potential difference (815)