Train Power System work and components

Components:

Rectifier

A rectifier converts AC to DC

Inverter

an electrical device that provides AC from DC

Transformer

A set of windings with a magnetic core used to step up or down a voltage from one level to another

Grid / Braking Resistor

A train or locomotive mounted steel resistor used absorb excess electric energy during motor or braking power control

Relay

A relay is remotely controlled device that opens and closes a switch in a local circuit, usually of higher power

Contactor

A contactor is remotely operated switch which is used to control a high power circuit

Master Controller

A driver's power control device located in the driver's cab and mounted on the left side of the driver's desk. Modern systems often have controllers that incorporate

braking (Direct Brake) as well.

Indirect Brake Controller

An auxiliary brake control device that is used to apply Indirect Brake (Pneumatic Brake) when necessary . An indirect brake controller is normally found on the right side of the driver's desk .