LAWS OF THERMODYNAMCIS

SECOND LAW OF THERMODYNAMCIS

FIRST LAW OF THERMODYNAMICS

When a system undergoes a thermodynamic cycle then the net heat supplied to the system from the surroundings is equal to net work done by the system on its surroundings.

LIMITATION OF FIRST LAW

No limit on the amount of energy that can be converted to work

No information on direction of heat transfer

STATEMENTS OF SECOND LAW

CLAUSIUS STATEMENT

It is impossible for a self acting machine working in a cyclic process unaided by any external agency, to convey heat from a body at a lower temperature to a body at a higher temperature

KELVIN PLANCK STATEMENT

It is impossible to construct an engine, which while operating in a cycle produces no other effect except to extract heat from a single reservoir and do equivalent amount of work