















## NOMENCLATURE

$C_p$	Specific heat at constant pressure
$C_v$	Specific heat at constant volume
$k$	Specific heat ratio
$R$	Ideal gas constant
$C_{pc}$	Specific heat at constant pressure for cold air
$C_{ph}$	Specific heat at constant pressure for burned gas
$t$	Temperature ratio
$r$	Compression pressure ratio
$\eta_c$	Compression isentropic efficiency
$\eta_t$	Expansion isentropic efficiency
$(r_{opt})_w$	Pressure ratio corresponding to the maximum net work output
$(r_{max})_w$	Largest pressure ratio corresponding to where net work output becomes zero
$(r_{opt})_\eta$	Pressure ratio corresponding to the maximum efficiency
$(r_{max})_\eta$	Largest pressure ratio corresponding to where efficiency becomes zero

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