Glossary

ABC **Air Bottoming Cycle** Compressor inlet temperature in the topping cycle. t1t Compressor exit temperature in the topping cycle. t2t Turbine inlet temperature of topping cycle. t3t Turbine exit temperature of topping cycle. t4t t1b Compressor inlet temperature of bottoming cycle. Compressor exit temperature of bottoming cycle. t2b t3b Turbine inlet temperature of bottoming cycle. Exhaust temperature from the air turbine. t4t Effectiveness of heat exchanger e Number of inter cooling stages n Wnett Net work of topping cycle. Thermal efficiency of topping cycle. neta t Wnetb Net work of bottoming cycle Net work of combined cycle. Wnet Thermal efficiency of combined cycle. neta net Sfecific fuel consumption of fuel of combined cycle. Sfc Mass flow rate in bottoming cycle. mab Pressure ratio of topping cycle. rp1 Pressure ratio of bottoming cycle. rp2 Compressor work in topping cycle. Wct Turbine work in topping cycle. Wtt Mass flow rate of air in topping cycle. ma Mass flow rate of gas (air+fuel) in topping cycle. mg Heat supplied in combustion chamber. q Efficiency of combustion chamber. ncomb. Efficiency of compressor. η_c Efficiency of turbine. ηt Specific heat of gas. Cpg

Specific heat of air.

Cpa