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NOMENCLATURE

A_c	collector surface area, m^2
B	collector tilt angle, W/m^2
C	collector perimeter, m
c_p	specific heat of air, J/kgK
GT	solar radiation intensity, W/m^2
K	thermal conductivity of insulation material, W/mK
L	thickness of the insulation material, m
\dot{m}	mass flow rate, kg/s
N	number of glass cover
Q_c	reflectance rate of transparent cover, %
SAH	solar air heater
GI	galvanized iron
T	temperature, K
V	fluid velocity, m/s
η	Thermal efficiency
ρ	density of air, kg/m^3
U_c	overall convective heat transfer coefficient, W/m^2
T_{amb}	ambient temperature, K

Subscripts

amb	ambient
in	inlet
out	outlet
c	collector
ave	average
p	plate surface