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NOMENCLATURE

A_b	area of basin, (m ²)
A_g	area of glass cover, (m ²)
C_p	specific heat capacity (kJ .kg ⁻¹ .K ⁻¹)
$h_{e.w-g}$	evaporative heat transfer coefficient from water to inner surface of glass (W.m ⁻² K ⁻¹)
$h_{r,w-g}$	radiation heat transfer coefficient from water to inner surface of glass (W.m ⁻² K ⁻¹)
$h_{t.g-a}$	total loss heat transfer coefficient from glass to air (W.m ⁻² K ⁻¹)
k	thermal conductivity, W.m ⁻¹ . K ⁻¹
Nu	local Nusselt number along the heat source
T_s	temperature of the sun (K)

Subscripts

a	ambient
b	basin
g	glass
p	absorber plate
i	inlet
r	receiver
w	water