

## NOMENCLATURE

aux	auxiliary gas
c	ammonia concentration ( $\text{kmol m}^{-3}$ )
$c_p$	specific heat capacity ( $\text{kJ kg}^{-1}\text{K}^{-1}$ )
COP	coefficient of performance
D	molecular diffusivity ( $\text{m}^2 \text{s}^{-1}$ )
DAR	diffusion absorption refrigeration or diffusion absorption refrigerator
g	acceleration due to gravity ( $\text{m s}^{-2}$ )
h	specific enthalpy ( $\text{kJ kg}^{-1}$ )
$\text{H}_2$	hydrogen
$\text{H}_2\text{O}$	water
He	helium
HR	head ratio
ID	inside diameter (in., mm.)
$\dot{m}$	mass flow rate ( $\text{kg s}^{-1}$ )
$\text{NH}_3$	ammonia
OD	outside diameter (in., mm.)
P	pressure (bar, MPa)
$Q_H$	high temperature heat (kJ)
$Q_L$	low temperature heat (kJ)
$Q_s$	surrounding temperature heat (kJ)
$\dot{Q}_{in}$	input power (kW)
Re	Reynolds number
T	temperature ( $^{\circ}\text{C}$ )
x,X	concentration
Z	elevation (m)

## GREEK LETTERS

$\delta$	film thickness (m)
$\rho$	density ( $\text{kg m}^{-3}$ )
$\Delta$	difference
$\Gamma$	mass flow rate per unit width ( $\text{kg m}^{-1}\text{s}^{-1}$ )
$\mu$	viscosity ( $\text{kg m}^{-1}\text{s}^{-1}$ )
$\varepsilon$	combined evaporator absorber effectiveness

## SUBSCRIPTS

amm	ammonia
con	condenser
evap	evaporator
liq	liquid phase
rec	rectifier
vap	vapor phase