

DOUBLE EFFECT SELECTION SARI PUYA MODELS

DESIGN CONDITIONS:

- 1) DESIGN LOAD..... TON
- 2) CHILLED WATER GPM
- 3) LEAVING & ENTERING CHILLED WATER TEMP(..... /..... °F)
- 4) MAX EVA PD.....FT-WATER
- 5) COOLING WATERGPM
- 6) ENTERING /LEAVING COOLING WATER TEMP (...../.....°F)
- 7) MAX ABSORBER & CONDENSOR PD.....FT-WATER
- 8) STEAM SUPPLY PRESSURE..... PSI

◆ STEP1) MACHINE SIZE SELECTION:
SDE.....

◆ STEP2) SELECT CHILLED & COOLING PASSES ARRANGMENT:
.....PASS EVAFEET PD
.....PASS ABS & COND.....FEET PD

◆ STEP3) CHECK DESIGN LOAD:
AT THE LCWT..... °F & ECWT °F, THE AVAILABLE LOAD AT THE 120 PSIG^{*}
STEAM PRESSURE WILL BE TON THEN:
.....TONTON . THEN:

◆ STEP4) DETERMINE FULL LOAD STEAM CONSUMPTION:
.....TON×10.5 LB / HR / TON=.....LB / HR

◆ STEP5) DETERMINE COOLING WATER RANGE:

HEAT INPUT TO GEN = LB/HR×A^{**} =BTU/HR

HEAT INPUT TO EVA =TON×12000 =BTU/HR

HEAT INPUT TO DRAIN HEX = STEAM CONSUMPTIONLB/HR×126 BTU/LB= BTU/HR

TOTAL HEAT REJ = EVA HEAT + GEN HEAT+DRAIN HEX HEAT.....=..... BTU/HR

COOLING WATER RANGE = $\frac{\text{THRJ}.....}{500 \times \text{COOLING GPM}}$

CWR= °F

LEAVING COOLING WATER TEMP= ECWT °F+CWR.....°F=.....°F THEN

* In case the pressure is less than 120 PSIG , refer to page No.19 , diagram No.3

** For value of A , refer to Page No.19 , Diagram No.4