

AIR COOLED SCREW AND RECIP CHILLER DIAGNOSTIC LOG SHEET

COMPONENT	DESIGN	DESIGN	ACTUAL
<u>EVAPORATOR</u>			
1. WATER PRESSURE DROP ACROSS CHILLER			
2. ENTERING CHILLED WATER TEMPERATURE			
3. LEAVING CHILLED WATER TEMPERATURE			
4. DELTA T (LINE 3 TEMP MINUS LINE 2 TEMP)			
5. SUCTION PRESSURE			
6. EVAP. SATURATION TEMPERATURE (LINE 5, SAT. TEMP.)			
7. SUCTION TEMPERATURE			
8. SUPERHEAT (LINE 7 MINUS LINE 6)			
9. APPROACH TEMPERATURE (LINE 3 MINUS LINE 6)			
10. EVAPORATOR G.P.M.			
<u>CONDENSER</u>			
11. ENTERING CONDENSER AIR TEMPERATURE			
12. LEAVING CONDENSER AIR TEMPERATURE			
13. DELTA T (LINE 12 TEMP MUNIS LINE 11 TEMP)			
14. COMPRESSOR DISCHARGE PRESSURE			
15. COMPRESSOR DISCHARGE TEMPERATURE			
16. COND. SATURATION TEMPERATURE (LINE 14, SAT, TEMP.)			
17. APPROACH TEMPERATURE (LINE 16 MINUS LINE 11)			
18. DISCHARGE SUPERHEAT (LINE 15 TEMP MINUS LINE 16 TEMP)			
19. LIQUID LINE TEMP (BEFORE SUBCOOLER IF EQUIPPED)			
20. SUBCOOLING (LINE 16 TEMP MINUS LINE 19 TEMP)			
21. TEMPERATURE DROP ACROSS LIQUID LINE FILTER DRIER (< 3)			
22. EXPANSION VALVE POSITION IF EEV			
23. RECEIVER / FLASH TANK LEVEL IF EQUIPPED			
<u>COMPRESSOR</u>			
24. NET OIL PRESSURE (CC PRESS - OIL DISCH PRESS)			
25. OIL TEMPERATURE ENTERING OIL COOLER (IF EQUIPPED)			
26. OIL TEMPERATURE LEAVING COOLER (IF EQUIPPED)			
27. OUTDOOR DRY BULB AIR TEMPERATURE			
29. OIL LEVEL IN SG			
29. COMPRESSOR MOTOR CURRENT			
30. SLIDE VALVE POSITION (IF EQUIPPED)			
31. COMPRESSOR SPEED (IF VFD EQUIPPED)			
<u>NOTES:</u>			

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- TO CONVERT FT H₂O TO PSIG, MULTIPLY FT. X .434 OR ÷ BY 2.31
- TO CONVERT PSIG TO FT H₂O, MULTIPLY PSIG. X 2.31 OR ÷ .434
- NEED TO ADD A NOTE FOR CALCULATING EVAP AND COND GPM USING THE DELTA T EQUATION
- ALSO NEED TO MAKE A NOTE FOR TEACHING HOW TO USE THE PRESSURE DROP AND A FLOW
- CURVE TO CHECK THE GPM. NEED TO COMPARE EVERYTHING TO THE SUBMITTAL.
- NEED TO SHOW SOME DESIGN INFO ON THE SECOND PAGE TO HELP THEM GO THROUGH IT.
- APPROACH VALUES HELP YOU DETERMINE IF GOOD HEAT TRANSFER IS TAKING PLACE