

AIR COOLED A/C AND REFRIGERATION DIAGNOSTIC LOG SHEET

COMPONENT	DESIGN	DESIGN	ACTUAL
EVAPORATOR			
1. ENTERING AIR TEMPERATURE			
2. LEAVING AIR TEMPERATURE			
3. DELTA T (LINE 1 TEMP MINUS LINE 2 TEMP)			
4. SUCTION PRESSURE			
5. EVAP. SATURATION TEMPERATURE (LINE 4, SAT. TEMP.)			
6. SUCTION TEMPERATURE			
7. SUPERHEAT (LINE 6 MINUS LINE 5)			
8. ENTERING AIR APPROACH TEMPERATURE (LINE 3 MINUS LINE 6)			
CONDENSER			
9. ENTERING CONDENSER AIR TEMPERATURE			
10. LEAVING CONDENSER AIR TEMPERATURE			
11. DELTA T (LINE 10 TEMP MUNIS LINE 9 TEMP)			
12. COMPRESSOR DISCHARGE PRESSURE			
13. COMPRESSOR DISCHARGE TEMPERATURE			
14. COND. SATURATION TEMPERATURE (LINE 15, SAT, TEMP.)			
15. APPROACH TEMPERATURE (LINE 17 MINUS LINE 13)			
16. DISCHARGE SUPERHEAT (LINE 16 TEMP MINUS LINE 17 TEMP)			
27. LIQUID LINE TEMPERATURE			
18. SUBCOOLING (LINE 17 TEMP MINUS LINE 20 TEMP)			
19. TEMPERATURE DROP ACROSS LIQUID LINE FILTER DRIER (< 3)	0		
COMPRESSOR			
20. COMPRESSOR MOTOR CURRENT			
21. OIL PRESSURE (IF EQUIPPED)			
22. OIL TEMPERATURE ENTERING OIL COOLER			
23. OIL TEMPERATURE LEAVING COOLER			
24. OUTDOOR DRY BULB AIR TEMPERATURE			
25. OUTDOOR WET BULB AIR TEMPERATURE			

NOTES:

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TERMS:

• DELTA T (TEMP DIFFERENTIAL)

NOTES:

- 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 THOW SOME DESIGN INFO ON THE SECOND PAGE TO HELP THEMGO THROUGH IT.
- APPROACH VALUES HELP YOU DETERMINE IF GOOD HEAT TRANSFER IS TAKING PLACE
- TO CALCULATE OIL PRESSURE, TAKE OIL PUMP DISCHARGE PRESSURE MINUS COMPRESSOR CRANCKASE PRESSURE