

Refrigeration system report

Refrigerant R - 22

Evaporator	suction line temperature =	42.1 F (5.6 C)		
	suction line pressure =	60 PSI-G (413.7 KPA-G / 4.14 Bar-G)		
	suction line saturation temp =	33.9 F (1.0 C)		
	suction line superheat =	8.2 F (4.6 C)		
Condensor	suction line temperature =	47.6 F (8.7 C)		
	suction line pressure =	58 PSI-G (399.9 KPA-G / 4.00 Bar-G)		
	suction line saturation temp =	32.4 F (0.2 C)		
	suction line superheat =	15.2 F (8.5 C)		
Piping	suction line superheat gain =	7.0 F (3.9 C)		
	suction line pressure drop =	2 PSI (0.14 KPA)		
Evaporator	liquid line temperature =	80 F (26.7 C)		
	liquid line pressure =	185 PSI-G (1275.5 KPA-G / 12.76 Bar-G)		
	liquid line saturation temp =	96.1 F (35.6 C)		
	liquid line subcooling =	16.1 F (9.0 C)		
Condensor	liquid line temperature =	82 F (27.8 C)		
	liquid line pressure =	189 PSI-G (1303.1 KPA-G / 13.03 Bar-G)		
	liquid line saturation temp =	97.6 F (36.4 C)		
	liquid line subcooling =	15.6 F (8.6 C)		
Piping	liquid line subcooling gain =	0.5 F (0.4 C)		
	liquid line pressure drop =	4 PSI (0.27 KPA)		
Condensor	discharge temperature =	120 F (48.9 C)		
	discharge line pressure =	191 PSI-G (1316.9 KPA-G / 13.17 Bar-G)		
	discharge saturation temp =	98.3 F (36.8 C)		
	discharge superheat =	21.7 F (12.1 C)		
AHU Air	R/A = 74 F (23.3 C) RH = 50	S/A = 52 F (11.1 C) RH = 95	Delta = -22 F (-12.2 C)	
	CFM = 1200			
Condensor Air	Ambient air = 92 F (33.3 C)	Discharge air = 130 F (54.4 C)	Delta = 38 F (21.1 C)	
AHU KWH	0.5 (0.72 HP)	Condensor KWH = 2.2 (2.98 HP)		
Total KWH	2.8 (3.71 HP)	Compressor KWH = 1.8 KWH (2.47 HP)		
Actual BTUH Capacity RA -> SA	35,619 Total (2.97 Tons)	EER BTU/W = 12.9	KWH / Ton = .9	

Program comment : **Condensor** air Delta is >30 F . May indicate a dirty coil, bad fan, or recirculating condensor air.

Program comment : **Evaporator** LL Sub-cooling is >15. May indicate restriction, overcharge, bad/wrong metering device, or non-condensibles.

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