Coburn's College of HVAC Education

Total Heat Calculation

Volts x Amps x 3.413 = BTU Output

$$\frac{\text{Output BTU}}{\text{TD X 1.08}} = \text{CFM}$$

CFM x HD x 4.5 = Total Heat

Example:

3 ton Heat pump system in EM Heat mode

Blower on High speed

Volts *237*

Amps *67.5*

Volts____ x Amps____ x 3.413 = BTU Out_____

$$\frac{\text{Output BTU}}{\text{TD X 1.08}} = \text{CFM}$$

Temp Diff SA 113 – RA 70 = 43

CFM _____

RA WB *61* *Enthalpy*_____

SA WB *50* *Enthalpy*_____

*RA Enthalpy – SA Enthalpy = HD*_____

CFM _____x HD_____ x 4.5 = Total Heat

Total Heat Removed _____

Total Heat Chart

W.B.	Enthalpy	W.B.	Enthalpy
40	15.23	60	26.46
41	15.70	61	27.15
42	16.17	62	27.85
43	16.66	63	28.57
44	17.15	64	29.31
45	17.65	65	30.06
46	18.16	66	30.83
47	18.68	67	31.62
48	19.21	68	32.42
49	19.75	69	33.25
50	20.30	70	34.09
51	20.86	71	34.95
52	21.44	72	35.83
53	22.02	73	36.74
54	22.62	74	38.61
56	23.84	76	39.57
57	24.48	77	40.57
58	25.12	78	41.58
59	25.80	79	42.62