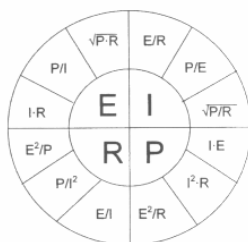


Refrigeration and Air Conditioning Mechanic Level 2

Formulas

1. $COP = \frac{Cap.W}{P_w} = \frac{Cap.Btuh}{P_{Btuh}}$
2. $Q_S = 1.08 \times cfm \times \Delta^\circ F$
3. $Q_T = 4.5 \times cfm \times \Delta H$
4. $Q_L = 0.68 \times cfm \times \Delta h$
5. $Btu's = WT \times SH \times TD$
6. $3 - phase V_{Im} = \frac{Max.Dev.}{E_{ave}} \times 100\%$
7. $V = \pi r^2 \times h$
8. $P_1 \times RPM_1 = P_2 \times RPM_2$
9. $CFM_N = (RPM_N / RPM_O) \times CFM_O$
10. $SP_N = (RPM_N / RPM_O)^2 \times SP_O$ or $(CFM_N / CFM_O)^2 \times SP_O$
11. $BHP_N = (RPM_N / RPM_O)^3 \times BHP_O$ or $(CFM_N / CFM_O)^3 \times BHP_O$
12. $CR = \frac{Absolute Discharge Pressure}{Absolute Suction Pressure}$

13.



14. $psi/ft = \frac{Density}{144 in^2/ft^2}$