



New Website Coming Soon

Coefficients for Compressor Model H2BG104DBE

Measurement System: Metric	Revision: 1
Refrigerant: R22	Series Family: G

Coefficient	Capacity	Power	Current	Mass Flow	Efficiency
C1	86 308.630000000	2 131.496000000	4.755719000	1 288.055000000	0.0
C2	2 507.442000000	13.994370000	- 0.015764100	29.972710000	0.0
C3	- 893.806500000	10.652700000	0.116253200	- 19.825440000	0.0
C4	34.136280000	0.406728500	- 0.000749920	0.382119500	0.0
C5	- 22.704280000	- 0.292405400	0.000412305	- 0.303741500	0.0
C6	5.119181000	0.388011600	- 0.000650280	0.172803700	0.0
C7	0.132246500	0.002047007	- 0.000002317	0.001975188	0.0
C8	- 0.243788800	- 0.008360277	0.000007351	- 0.002950282	0.0
C9	0.092765290	0.008077258	0.000001767	0.001608722	0.0
C10	- 0.018108080	- 0.002635468	0.000000804	- 0.000621122	0.0

Use these equations:

$$\begin{aligned} \text{CAPACITY (Watts)} &= 0.29283333 * (C1 + C2 * (TE * 1.8 + 32) + C3 * (TC * 1.8 + 32) + C4 * (TE * 1.8 + 32)^2 + C5 * \\ &(TE * 1.8 + 32) * (TC * 1.8 + 32) \\ &+ C6 * (TC * 1.8 + 32)^2 + C7 * (TE * 1.8 + 32)^3 + C8 * (TE * 1.8 + 32)^2 * (TC * 1.8 + 32) + C9 * (TE * 1.8 + 32) * \\ &(TC * 1.8 + 32)^2 + C10 * (TC * 1.8 + 32)^3 \end{aligned}$$

$$\begin{aligned} \text{POWER (Watts)} &= C1 + C2 * (TE * 1.8 + 32) + C3 * (TC * 1.8 + 32) + C4 * (TE * 1.8 + 32)^2 + C5 * (TE * 1.8 + 32) * \\ &(TC * 1.8 + 32) \\ &+ C6 * (TC * 1.8 + 32)^2 + C7 * (TE * 1.8 + 32)^3 + C8 * (TE * 1.8 + 32)^2 * (TC * 1.8 + 32) + C9 * (TE * 1.8 + 32) * \\ &(TC * 1.8 + 32)^2 + C10 * (TC * 1.8 + 32)^3 \end{aligned}$$

$$\begin{aligned} \text{CURRENT (Amperes)} &= C1 + C2 * (TE * 1.8 + 32) + C3 * (TC * 1.8 + 32) + C4 * (TE * 1.8 + 32)^2 + C5 * (TE * 1.8 + 32) * \\ &(TC * 1.8 + 32) \\ &+ C6 * (TC * 1.8 + 32)^2 + C7 * (TE * 1.8 + 32)^3 + C8 * (TE * 1.8 + 32)^2 * (TC * 1.8 + 32) + C9 * (TE * 1.8 + 32) * \\ &(TC * 1.8 + 32)^2 + C10 * (TC * 1.8 + 32)^3 \end{aligned}$$

$$\begin{aligned} \text{MASS FLOW (kg/hr)} &= 0.4536 * (C1 + C2 * (TE * 1.8 + 32) + C3 * (TC * 1.8 + 32) + C4 * (TE * 1.8 + 32)^2 + \\ &C5 * (TE * 1.8 + 32) * (TC * 1.8 + 32) \\ &+ C6 * (TC * 1.8 + 32)^2 + C7 * (TE * 1.8 + 32)^3 + C8 * (TE * 1.8 + 32)^2 * (TC * 1.8 + 32) + C9 * (TE * 1.8 + 32) * \\ &(TC * 1.8 + 32)^2 + C10 * (TC * 1.8 + 32)^3 \end{aligned}$$

where TE (evaporating temperature) and TC (condensing temperature) are in units of °C.