



Model: AHC4531EHZ (FHP4531F)

Product Description

Type: Reciprocating
Application: HBP - High Back Pressure
Refrigerant: R-22
Voltage/Frequency: 208-220V ~ 60Hz
Version: N/A

Product Specifications

Performance

Condition	Test Voltage	Refrigeration Capacity			Input Power	Efficiency			EVAP TEMP	COND TEMP	AMBIENT TEMP	RETURN GAS	LIQUID TEMP
		Btu/h	kcal/h	W	W	Btu/Wh	kcal/Wh	W/W					
EN12900	220V ~ 60HZ	30587	7708	8962	3267	9.36	2.36	2.74	5°C (41°F)	45°C (113°F)	32°C (90°F)	15°C (59°F)	45°C (113°F)

General

Evaporating Temp. Range: -15°C to 15°C (5°F to 59°F)
Motor Torque: N/A
Compressor Cooling: N/A

Mechanical

Weight: 37
Weight Unit of Measure: KG
Displacement (cc): 56.65
Oil Type: N/A
Viscosity (cSt): N/A
Oil Charge (cc): 0

Electrical

Voltage Range (50 Hz): N/A
Voltage Range (60 Hz): N/A
Locked Rotor Amps (LRA): 0
Rated Load Amps (RLA 50 Hz): 0
Rated Load Amps (RLA 60 Hz): 16.4
Max. Continuous Current (MCC in Amps): 0
Motor Resistance (Ohm) - Main: .58
Motor Resistance (Ohm) - Start: 3.01
Motor Type: N/A
Overload Type: N/A
Relay Type: N/A

Agency Approval

CE Listed



Tecumseh

Performance Data Sheet

AHC4531EHZ

General Information

Model	AHC4531EHZ	Refrigerant	R-22
Test Condition	Tecumseh Europe	Performance Test Voltage	220V ~ 60HZ
Return Gas	-6.7°C (20°F) SUPERHEAT	Motor Type	N/A

Performance Information

Evap Temp (°C)		Condensing Temperature (°C)							
		30	35	40	45	50	55	60	65
-6.7	Watts (Capacity)	7700	7180	6640	6080	5520	4950	4380	3810
	Watts (Power)	2530	2570	2620	2680	2750	2810	2870	2930
	Amps	12.6	12.7	12.9	13.0	13.2	13.4	13.5	13.7
-5	Watts (Capacity)	8250	7700	7130	6550	5960	5360	4770	4180
	Watts (Power)	2570	2630	2690	2770	2850	2920	3000	3070
	Amps	12.9	13.0	13.2	13.4	13.7	13.9	14.1	14.4
0	Watts (Capacity)	10000	9360	8700	8020	7350	6670	6000	5340
	Watts (Power)	2700	2790	2900	3020	3130	3250	3370	3480
	Amps	13.5	13.9	14.3	14.7	15.1	15.5	15.9	16.3
5	Watts (Capacity)	11900	11200	10400	9640	8880	8110	7360	6620
	Watts (Power)	2840	2970	3110	3270	3420	3580	3730	3880
	Amps	14.1	14.7	15.3	15.9	16.5	17.1	17.7	18.3
7.2	Watts (Capacity)	12800	12000	11200	10400	9590	8790	8000	7220
	Watts (Power)	2900	3050	3210	3380	3550	3720	3890	4050
	Amps	14.4	15.1	15.7	16.4	17.1	17.8	18.5	19.1
10	Watts (Capacity)	14000	13100	12300	11400	10500	9680	8840	8020
	Watts (Power)	2990	3150	3330	3520	3710	3900	4090	4270
	Amps	14.8	15.5	16.3	17.1	17.9	18.7	19.5	20.3
15	Watts (Capacity)	16200	15300	14300	13300	12300	11400	10400	9530
	Watts (Power)	3150	3350	3550	3770	3990	4210	4430	4650
	Amps	15.4	16.3	17.3	18.3	19.3	20.3	21.3	22.3

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.320000E+04	2.550000E+03	1.200000E+01	
C2	5.000000E+02	-1.690000E+01	-1.060000E-01	
C3	-8.010000E+01	-1.220000E+01	2.370000E-02	

C4	4.120000E+00	5.460000E-01	-1.200000E-03	
C5	-4.940000E+00	1.430000E+00	8.050000E-03	
C6	-1.110000E+00	7.120000E-01	1.090000E-03	
C7	0.000000E+00	1.000000E-16	0.000000E+00	
C8	-2.760000E-02	-1.120000E-02	2.480000E-05	
C9	1.550000E-02	1.130000E-03	-6.460000E-06	
C10	7.430000E-03	-4.690000E-03	-6.670000E-06	

$$\text{Value} = C1 + C2 * \text{Te} + C4 * \text{Te}^2 + C7 * \text{Te}^3 + (C3 + C5 * \text{Te} + C8 * \text{Te}^2) * \text{Tc} + (C6 + C9 * \text{Te}) * \text{Tc}^2 + C10 * \text{Tc}^3$$

Te = Evaporator Temperature

Tc = Condensing Temperature