Technical Data Sheet

2/16/2012

Model:AHC4524ZHZ (FH4524Z)

Product Description

Type: Reciprocating
Application: HBP - High Back Pressure
Refrigerant: R404A
Voltage/Frequency: 208-220V ~ 60Hz

Product Specifications

Performance

		Refrigeration Capacity			Input Power	Efficiency			EVAP TEMP	COND TEMP	AMBIENT TEMP	RETURN GAS	LIQUID TEMP
Condition	Test Voltage	Btu/h	kcal/h	W	W	Btu/Wh	kcal/Wh	W/W					
EN12900 ASERCOM	220V ~ 60HZ	23242	5857	6810	2721	8.54	2.15	2.5	5°C (41°F)	45°C (113°F)	32°C (90°F)	15°C (59°F)	45°C (113°F)

General

Evaporating Temp. Range: -6.7°C to 12.8°C (20°F to 55°F)
Motor Torque: High Start Torque (HST)
Compressor Cooling: Fan

Mechanical

Weight: 34.729
Weight Unit of Measure: N/A
Displacement (cc): 43.5
Oil Type: Polyolester
Viscosity (cSt): 32
Oil Charge (cc): 1480
Sound Power dB(A): N/A

Electrical

Voltage Range (50 Hz): N/A
Voltage Range (60 Hz): 187-242
Locked Rotor Amps (LRA): 71
Rated Load Amps (RLA 50 Hz): 14.5
Rated Load Amps (RLA 60 Hz): 14.6
Max. Continuous Current (MCC in Amps): 23
Motor Resitance (Ohm) - Main: 0.8
Motor Resitance (Ohm) - Start: 3.5
Motor Type: CSR
Overload Type: INTERNAL
Relay Type: N/A

Agency Approval

CE Listed, CSA Listed, GOST RUSSIA Listed, UL Recognized

Performance Data Sheet

AHC4524ZHZ

General Information

Model	AHC4524ZHZ	**Refrigerant**	R404A
Test Condition	EN12900 ASERCOM	**Performance Test Voltage**	220V ~ 60HZ
Return Gas	20°C (68°F) RETURN GAS	**Motor Type**	CSR

Performance Information

Evap Temp (°C)		Condensing Temperature (°C)				
		30	40	50	60	70
-6.7	Watts (Capacity)	5820	4820	3750	2660	1600
	Watts (Power)	1950	2090	2230	2360	2500
	Amps	9.55	10.2	10.8	11.4	12.0
-5	Watts (Capacity)	6260	5210	4070	2920	1780
	Watts (Power)	2000	2160	2320	2480	2630
	Amps	9.84	10.5	11.2	11.9	12.6
0	Watts (Capacity)	7680	6440	5100	3720	2340
	Watts (Power)	2150	2370	2590	2800	3020
	Amps	10.7	11.7	12.6	13.5	14.4
5	Watts (Capacity)	9310	7840	6260	4620	2970
	Watts (Power)	2310	2580	2860	3130	3400
	Amps	11.7	12.8	14.0	15.1	16.2
7.2	Watts (Capacity)	10100	8510	6820	5050	3270
	Watts (Power)	2390	2680	2980	3280	3570
	Amps	12.1	13.4	14.6	15.8	17.0
10	Watts (Capacity)	11200	9430	7580	5650	3690
	Watts (Power)	2480	2810	3130	3460	3780
	Amps	12.7	14.0	15.4	16.7	18.1
15	Watts (Capacity)	13200	11200	9070	6810	4510
	Watts (Power)	2660	3030	3410	3790	4160
	Amps	13.8	15.3	16.8	18.3	19.9

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.038067E+04	1.568500E+03	8.057803E+00	
C2	4.084044E+02	-3.283067E+00	5.175144E-02	
C3	-5.432148E+01	1.754668E+01	8.676884E-02	

C4	6.072768E+00	3.325630E-01	2.012747E-03	
C5	-2.976408E+00	1.152269E+00	4.470236E-03	
C6	-1.428864E+00	8.167566E-02	1.130080E-04	
C7	2.630388E-02	1.000000E-16	0.000000E+00	
C8	-6.685068E-02	-5.669044E-03	-2.860070E-05	
C9	-1.670328E-02	-6.880000E-05	-4.830000E-07	
C10	8.048545E-03	-5.130000E-04	-7.510000E-07	

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

Te = Evaporator Temperature

Tc = Condensing Temperature