

Model: AHA2435AXD
Product Description

Type: Reciprocating Compressors
Application: LBP - Low Back Pressure
ProductDescription: R-12
Voltage/Frequency: 208-230V ~ 60Hz 200V ~ 50Hz
Version: N/A


Product Specifications
Performance

Condition	Test Voltage	Refrigeration Capacity			Input Power (I) W	(E) Efficiency			EVAP TEMP	Condition	AMBIENT TEMP	RETURN GAS	LIQUID TEMP
		(R) Btu/h	(R) kcal/h	(R) W		(E) Btu/Wh	(E) kcal/Wh	W/W					
ASHRAE (R-12)	230V ~ 60HZ	3400	857	996	960	3.54	.89	1.04	-23°C (-10°F)	54°C (130°F)	32°C (90°F)	32°C (90°F)	32°C (90°F)

General

Evaporating Temp. Range: -40°C to -12.2°C (-40°F to 10°F)
Motor Torque: High Start Torque (HST)
Compressor Cooling: Fan

Mechanical

Weight: 70
Weight Unit of Measure: LB
Displacement (cc): 43.449
Oil Type:
Viscosity (cSt):
Oil Charge (cc): 1124

Electrical

Voltage Range (50 Hz): 180-220
Voltage Range (60 Hz): 187-254
Locked Rotor Amps (LRA): 45
Rated Load Amps (RLA 50 Hz): 0
Rated Load Amps (RLA 60 Hz): 6.4
Max. Continuous Current (MCC in Amps): 10.3
Motor Resistance (Ohm) - Main: 1.69

Motor Resistance (Ohm) - Start: 2.51
Motor Type: CSIR
Overload Type:
Relay Type:

[Agency Approval](#)

CE Listed, UL Recognized, cURus Recognized



Performance Data Sheet

AHA2435AXD

General

Model	AHA2435AXD	Unit of Measure	Fahrenheit
Condition	ASHRAE	Voltage/Frequency	230V ~ 60HZ
RETURN GAS	32.2°C (90°F) RETURN GAS	MotorType	CSIR

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)								
		80	90	100	110	120	130	140	150
-40	Btu/h	2640	1640	1040	686	457	217		
	Watts	949	654	504	444	422	383	273	40.6
	Amps	5.90	5.27	4.93	4.77	4.69	4.58	4.33	3.85
	Lb/h	42.4	26.4	16.6	11.0	7.33	3.48		
-35	Btu/h	3190	2150	1500	1110	846	571	154	
	Watts	1070	761	598	530	502	462	355	129
	Amps	6.02	5.37	5.02	4.86	4.78	4.68	4.45	4.00
	Lb/h	51.3	34.6	24.1	17.9	13.6	9.17	2.47	
-30	Btu/h	3780	2710	2030	1610	1310	1010	564	
	Watts	1200	875	700	623	591	551	447	228
	Amps	6.21	5.55	5.20	5.03	4.96	4.86	4.65	4.22
	Lb/h	60.9	43.6	32.6	25.8	21.0	16.2	9.07	
-25	Btu/h	4420	3320	2610	2160	1840	1520	1060	327
	Watts	1340	994	809	725	689	649	550	338
	Amps	6.48	5.81	5.44	5.27	5.20	5.11	4.92	4.50
	Lb/h	71.2	53.4	42.0	34.8	29.6	24.4	17.0	5.24
-20	Btu/h	5100	3970	3240	2780	2440	2100	1630	888
	Watts	1470	1120	923	833	795	755	661	458
	Amps	6.80	6.12	5.74	5.57	5.50	5.42	5.24	4.85
	Lb/h	82.1	64.0	52.2	44.7	39.3	33.8	26.2	14.3
-15	Btu/h	5800	4660	3920	3440	3090	2750	2270	1530
	Watts	1620	1250	1040	947	907	869	781	588
	Amps	7.18	6.47	6.09	5.91	5.85	5.78	5.61	5.24
	Lb/h	93.5	75.1	63.1	55.4	49.9	44.3	36.6	24.6
-10	Btu/h	6530	5380	4630	4150	3800	3450	2980	2240
	Watts	1760	1380	1170	1070	1020	990	908	725
	Amps	7.59	6.87	6.48	6.30	6.23	6.17	6.02	5.67
	Lb/h	105	86.8	74.7	66.9	61.3	55.7	48.1	36.1
-5	Btu/h	7280	6120	5370	4890	4550	4210	3740	3010
	Watts	1910	1520	1290	1190	1150	1120	1040	870
	Amps	8.03	7.30	6.89	6.71	6.65	6.60	6.46	6.12
	Lb/h	117	98.9	86.8	79.0	73.5	68.0	60.5	48.7
0	Btu/h	8030	6880	6140	5670	5340	5010	4560	3850
	Watts	2060	1650	1420	1320	1270	1250	1180	1020
	Amps	8.50	7.75	7.33	7.14	7.08	7.04	6.91	6.59

	Lb/h	130	111	99.3	91.7	86.3	81.1	73.8	62.3
5	Btu/h	8790	7650	6930	6470	6160	5850	5420	4740
	Watts	2210	1790	1560	1450	1410	1380	1330	1180
	Amps	8.97	8.20	7.77	7.58	7.52	7.48	7.37	7.07
	Lb/h	142	124	112	105	99.8	94.8	87.9	76.8
10	Btu/h	9550	8430	7720	7290	7000	6730	6330	5680
	Watts	2350	1930	1690	1580	1540	1520	1470	1340
	Amps	9.44	8.65	8.21	8.01	7.95	7.92	7.82	7.55
	Lb/h	155	137	125	118	114	109	103	92.2

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	4.777262E+04	1.798487E+04	3.909469E+01	7.706356E+02
C2	1.544920E+02	7.402260E+01	1.642212E-01	2.532437E+00
C3	-9.957165E+02	-4.043540E+02	-7.810941E-01	-1.605526E+01
C4	-1.013517E+00	-1.191861E-01	2.349571E-04	-1.517446E-02
C5	-2.101372E-01	-8.578025E-01	-1.362875E-03	-3.382194E-03
C6	8.009467E+00	3.279055E+00	6.377111E-03	1.291454E-01
C7	-8.205557E-03	-1.104377E-03	-1.356405E-05	-1.231548E-04
C8	1.385562E-02	1.559899E-03	-7.100532E-07	2.221527E-04
C9	2.209284E-03	3.800838E-03	6.024711E-06	3.506664E-05
C10	-2.215646E-02	-8.915388E-03	-1.742843E-05	-3.572708E-04

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

Te = Evaporator Temperature

Tc = Condensing Temperature