Technical Data Sheet

10/29/2015

Model: AE2415Y-FZ1B

Product Description

Type: Reciprocating
Application: LBP - Low Back Pressure
Refrigerant: R-134a
Voltage/Frequency: 220-240V ~ 50Hz
Version: N/A

Product Specifications

Performance

		Refrigeration Capacity			Input Power	Efficiency			EVAP TEMP	COND	AMBIENT	RETURN	LIQUID
Condition	Test Voltage	Btu/h	kcal/h	W	W	Btu/Wh	kcal/Wh	W/W		TEMP	TEMP	GAS	TEMP
ASHRAE	220V ~ 50HZ	1230	310	361	268	4.59	1.16	1.35	-23°C (-10°F)	54°C (130°F)	32°C (90°F)	32°C (90°F)	32°C (90°F)

General

Evaporating Temp. Range: N/A
Motor Torque: High Start Torque (HST)
Compressor Cooling: Fan

Mechanical

Weight: 0
Weight Unit of Measure: N/A
Displacement (cc): 12.48
Oil Type: Polyolester
Viscosity (cSt): 32
Oil Charge (cc): 387

Electrical

Voltage Range (50 Hz): 198-253
Voltage Range (60 Hz): N/A
Locked Rotor Amps (LRA): 15
Rated Load Amps (RLA 50 Hz): 1.73
Rated Load Amps (RLA 60 Hz): 0
Max. Continuous Current (MCC in Amps): 0
Motor Resistance (Ohm) - Main: 5.56
Motor Resistance (Ohm) - Start: 17.79
Motor Type: CSIR
Overload Type: N/A
Relay Type: N/A

Agency Approval

CE Listed, IRAM Listed, VDE Listed

Performance Data Sheet

AE2415Y-FZ1B

General Information

Model	AE2415Y-FZ1B	**Refrigerant**	R-134a
Test Condition	EN12900	**Performance Test Voltage**	220V ~ 50HZ
Return Gas	20°C (68°F) RETURN GAS	**Motor Type**	CSIR

Performance Information

Evap Temp (°C)		Condensing Temperature (°C)			
		30	40	50	60
-40	Btu/h	524	441	304	149
	Watts (Power)	153	154	146	127
	Amps	1.37	1.37	1.35	1.31
	Lb/h	6.80	6.21	4.85	3.13
-35	Btu/h	724	638	503	355
	Watts (Power)	178	182	180	168
	Amps	1.44	1.45	1.44	1.41
	Lb/h	9.44	8.99	7.84	6.39
-30	Btu/h	963	860	712	557
	Watts (Power)	205	212	214	210
	Amps	1.52	1.54	1.54	1.53
	Lb/h	12.6	12.1	11.1	9.78
-25	Btu/h	1260	1120	949	774
	Watts (Power)	235	244	251	253
	Amps	1.62	1.64	1.66	1.67
	Lb/h	16.4	15.9	14.8	13.6
-23.3	Btu/h	1370	1220	1040	853
	Watts (Power)	245	255	264	268
	Amps	1.65	1.68	1.71	1.73
	Lb/h	17.9	17.4	16.3	15.0
-20	Btu/h	1620	1440	1230	1020
	Watts (Power)	267	278	290	298
	Amps	1.73	1.77	1.81	1.84
	Lb/h	21.2	20.5	19.3	18.0
-15	Btu/h	2070	1830	1570	1310
	Watts (Power)	305	317	333	347
	Amps	1.86	1.92	1.98	2.04
	Lb/h	27.2	26.2	24.8	23.3
-10	Btu/h	2620	2320	1990	1670
	Watts (Power)	347	361	380	400
	Amps	2.02	2.09	2.17	2.26
	Lb/h	34.7	33.3	31.5	29.7

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	5.112272E+03	4.907007E+02	2.211680E+00	5.659636E+01
C2	2.458204E+02	1.426997E+01	3.584309E-02	2.910539E+00
C3	-1.432754E+01	-4.096114E+00	1.600716E-03	1.742754E-01
C4	3.862569E+00	1.840309E-01	3.820374E-04	5.032712E-02
C5	-2.456374E+00	-1.423208E-01	6.285664E-05	-1.778186E-02
C6	-8.267445E-01	1.087841E-01	1.673975E-04	-9.731419E-03
C7	2.171639E-02	1.290186E-03	2.519242E-06	3.252161E-04
C8	-2.731449E-02	-6.647500E-04	4.923614E-06	-2.222627E-04
C9	4.920559E-03	2.188944E-03	5.744661E-06	5.748210E-05
C10	6.252639E-03	-5.241856E-04	-5.263722E-07	6.835536E-05

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

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General Information

Model	AE2415Y-FZ1B	**Refrigerant**	R-134a
Test Condition	EN12900	**Performance Test Voltage**	220V ~ 50HZ
Return Gas	20°C (68°F) RETURN GAS	**Motor Type**	CSIR

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	**90**	**100**	**110**	**120**	**130**	**140**
-40	Btu/h	533	512	466	400	320	235	149
	Watts	151	153	154	152	147	139	127
	Amps	1.36	1.37	1.37	1.37	1.36	1.34	1.31
	Lb/h	6.76	6.76	6.42	5.82	5.02	4.11	3.13
-35	Btu/h	641	620	573	508	430	347	264
	Watts	165	168	169	169	166	160	150
	Amps	1.40	1.41	1.41	1.41	1.40	1.39	1.36
	Lb/h	8.16	8.20	7.91	7.38	6.65	5.82	4.94
-30	Btu/h	760	736	686	620	541	458	377
	Watts	179	182	185	186	184	180	173
	Amps	1.44	1.45	1.45	1.46	1.45	1.44	1.42
	Lb/h	9.68	9.75	9.50	9.00	8.33	7.56	6.75
-25	Btu/h	893	863	809	738	657	572	489
	Watts	194	198	201	203	203	201	196
	Amps	1.48	1.49	1.50	1.51	1.51	1.50	1.49
	Lb/h	11.4	11.4	11.2	10.7	10.1	9.37	8.62
-20	Btu/h	1040	1000	943	867	780	690	604
	Watts	209	213	217	220	222	222	219
	Amps	1.53	1.54	1.56	1.56	1.57	1.57	1.56
	Lb/h	13.3	13.3	13.1	12.6	12.0	11.3	10.6
-15	Btu/h	1210	1160	1090	1010	913	816	724
	Watts	225	230	235	239	242	244	243
	Amps	1.58	1.60	1.61	1.62	1.63	1.64	1.64
	Lb/h	15.4	15.4	15.2	14.7	14.1	13.4	12.7
-10	Btu/h	1400	1340	1260	1160	1060	952	852
	Watts	242	247	253	258	263	266	268
	Amps	1.64	1.66	1.68	1.69	1.71	1.72	1.73
	Lb/h	17.9	17.8	17.5	17.0	16.4	15.7	14.9
-5	Btu/h	1620	1540	1450	1340	1220	1100	990
	Watts	261	266	272	278	284	289	293
	Amps	1.70	1.73	1.75	1.77	1.79	1.81	1.82
	Lb/h	20.6	20.5	20.2	19.6	18.9	18.2	17.4

0	Btu/h	1860	1770	1660	1530	1400	1270	1140
	Watts	280	286	292	300	307	314	320
	Amps	1.77	1.80	1.82	1.85	1.88	1.90	1.92
	Lb/h	23.8	23.6	23.1	22.5	21.8	21.0	20.2
5	Btu/h	2140	2020	1890	1750	1600	1450	1310
	Watts	301	307	314	322	331	339	347
	Amps	1.85	1.88	1.91	1.94	1.97	2.00	2.04
	Lb/h	27.4	27.1	26.5	25.8	24.9	24.1	23.3
10	Btu/h	2440	2310	2160	1990	1820	1660	1500
	Watts	324	330	337	346	356	366	376
	Amps	1.93	1.96	2.00	2.03	2.07	2.11	2.16
	Lb/h	31.4	30.9	30.3	29.4	28.5	27.6	26.7

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.148655E+03	3.445280E+02	1.668388E+00	7.680021E+00
C2	8.724083E+01	6.528728E+00	1.581028E-02	9.018225E-01
C3	3.285704E+01	-2.642954E+00	-4.335704E-04	4.818349E-01
C4	9.845531E-01	3.920948E-02	4.942806E-05	1.139926E-02
C5	-5.123906E-01	-6.065257E-02	-9.767277E-05	-3.679937E-03
C6	-3.850911E-01	3.019325E-02	2.880968E-05	-4.444118E-03
C7	3.723661E-03	2.212253E-04	4.319688E-07	5.576407E-05
C8	-4.683555E-03	-1.139832E-04	8.442410E-07	-3.811089E-05
C9	8.437172E-04	3.753333E-04	9.850241E-07	9.856327E-06
C10	1.072126E-03	-8.988094E-05	-9.025587E-08	1.172074E-05

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