Technical Data Sheet

6/12/2013

Model:AE4425Y-FZ1A (AE4425Y)

Product Description

Type: Reciprocating
Application: HBP/CBP - High/Commercial
Back Pressure
Refrigerant: R134a
Voltage/Frequency: 220-240V ~ 50Hz

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	2300	580	674	279	8.24	2.08	2.42	7.2°C (45°F)	54°C (130°F)	35°C (95°F)	35°C (95°F)	46°C (115°F)

General

Evaporating Temp. Range: -15°C to 15°C (5°F to 59°F)
Motor Torque: High Start Torque (HST)
Compressor Cooling: Fan

Mechanical

Weight: 9.1
Weight Unit of Measure: KG
Displacement (cc): 6.69
Oil Type: Polyolester
Viscosity (cSt): 32
Oil Charge (cc): 285

Electrical

Voltage Range (50 Hz): 198-253
Voltage Range (60 Hz): N/A
Locked Rotor Amps (LRA): 10.5
Rated Load Amps (RLA 50 Hz): 1.65
Rated Load Amps (RLA 60 Hz): N/A
Max. Continuous Current (MCC in Amps): N/A
Motor Resistance (Ohm) - Main: N/A
Motor Resistance (Ohm) - Start: N/A
Motor Type: CSIR
Overload Type: EXTERNAL
Relay Type: Current Relay

Agency Approval

CE Listed, GOST RUSSIA Listed, GOST UKRAINE Listed, VDE Listed

Performance Data Sheet

AE4425Y-FZ1A

General Information

Model	AE4425Y-FZ1A	**Refrigerant**	R134a
Test Condition	EN12900 ASERCOM	**Performance Test Voltage**	240V ~ 50HZ
Return Gas	20°C (68°F) RETURN GAS	**Motor Type**	CSIR

Performance Information

Evap Temp (°C)		Condensing Temperature (°C)				
		30	40	50	60	70
-15	Watts (Capacity)	324	295	237	164	91.2
	Watts (Power)	164	179	182	177	165
	Amps	1.30	1.34	1.34	1.33	1.28
	Lb/h	7.90	7.98	7.16	5.86	4.47
-10	Watts (Capacity)	407	372	312	239	169
	Watts (Power)	175	194	204	206	202
	Amps	1.33	1.38	1.40	1.41	1.40
	Lb/h	9.69	9.87	9.22	8.15	7.07
-6.7	Watts (Capacity)	469	428	363	288	217
	Watts (Power)	181	203	217	223	226
	Amps	1.35	1.41	1.44	1.47	1.48
	Lb/h	11.0	11.2	10.6	9.62	8.68
-5	Watts (Capacity)	505	459	390	313	241
	Watts (Power)	184	208	223	232	238
	Amps	1.36	1.42	1.47	1.50	1.52
	Lb/h	11.7	11.9	11.3	10.4	9.50
0	Watts (Capacity)	622	560	479	392	313
	Watts (Power)	190	219	241	257	272
	Amps	1.38	1.46	1.52	1.58	1.64
	Lb/h	14.1	14.2	13.6	12.7	11.9
5	Watts (Capacity)	765	683	583	481	390
	Watts (Power)	193	228	256	281	305
	Amps	1.40	1.49	1.58	1.67	1.76
	Lb/h	17.1	16.9	16.2	15.2	14.5
7.2	Watts (Capacity)	838	745	636	525	428
	Watts (Power)	194	231	262	290	318

	Amps	1.40	1.50	1.60	1.70	1.81
	Lb/h	18.6	18.3	17.5	16.4	15.6
10	Watts (Capacity)	940	832	709	587	479
	Watts (Power)	194	234	269	302	335
	Amps	1.40	1.51	1.63	1.75	1.87
	Lb/h	20.7	20.2	19.3	18.1	17.3
15	Watts (Capacity)	1150	1010	863	716	586
	Watts (Power)	192	238	280	321	364
	Amps	1.40	1.53	1.67	1.82	1.99
	Lb/h	25.1	24.2	22.9	21.5	20.5

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	5.44633E+02	3.35213E+01	1.11084E+00	5.67227E+00
C2	4.04177E+01	-5.67288E-01	1.69483E-03	7.03183E-01
C3	1.19475E+01	7.42265E+00	1.02363E-02	5.69088E-01
C4	8.19850E-01	-6.53801E-02	-2.40257E-04	1.65648E-02
C5	-5.74194E-01	1.13918E-02	-1.10490E-04	-7.84262E-03
C6	-3.83340E-01	-8.63445E-02	-4.04226E-05	-1.16183E-02
C7	7.86127E-03	-1.01714E-04	-2.68991E-06	1.90140E-04
C8	-1.00750E-02	4.69049E-04	3.28004E-06	-2.01662E-04
C9	2.95774E-03	1.31104E-03	6.13312E-06	6.86393E-05
C10	2.36185E-03	4.14148E-04	2.25868E-08	6.80460E-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