

Model: AE4450Z-FZ1A (AE4450Z-FZ)

Product Description

Type: Reciprocating
Application: HBP/CBP - High/Commercial
Back Pressure
Refrigerant: R-404A
Voltage/Frequency: 220-240V ~ 50Hz
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		Btu/Wh	kcal/Wh	W/W					
ASHRAE	220V ~ 50HZ	4800	1210	1407	634	7.57	1.91	2.22	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: N/A
Motor Torque: High Start Torque (HST)
Compressor Cooling: Fan

Mechanical

Weight: 0
Weight Unit of Measure: N/A
Displacement (cc): 8.85
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): 17.5
Rated Load Amps (RLA 50 Hz): 3.52
Rated Load Amps (RLA 60 Hz): 0
Max. Continuous Current (MCC in Amps): 0
Motor Resistance (Ohm) - Main: 5.74
Motor Resistance (Ohm) - Start: 25.41
Motor Type: CSIR
Overload Type: N/A
Relay Type: N/A

Agency Approval

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



Performance Data Sheet

AE4450Z-FZ1A

General Information

Model	AE4450Z-FZ1A	Refrigerant	R-404A
Test Condition	EN12900	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
-15	Watts (Capacity)	760	633	500	360
	Watts (Power)	392	422	448	462
	Amps	2.79	2.85	2.97	2.92
	Lb/h	18.8	17.6	16.1	14.2
-10	Watts (Capacity)	944	795	640	478
	Watts (Power)	415	454	491	517
	Amps	2.83	2.98	3.16	3.16
	Lb/h	23.5	22.2	20.7	18.8
-6.7	Watts (Capacity)	1080	914	741	559
	Watts (Power)	428	472	517	551
	Amps	2.86	3.05	3.26	3.27
	Lb/h	27.1	25.7	24.1	22.2
-5	Watts (Capacity)	1160	980	795	602
	Watts (Power)	433	481	530	568
	Amps	2.87	3.09	3.31	3.32
	Lb/h	29.1	27.7	26.0	24.0
0	Watts (Capacity)	1410	1190	970	738
	Watts (Power)	446	504	564	616
	Amps	2.93	3.17	3.40	3.40
	Lb/h	35.8	34.2	32.3	30.1
5	Watts (Capacity)	1700	1440	1170	891
	Watts (Power)	452	520	592	659
	Amps	2.98	3.23	3.44	3.40
	Lb/h	44.0	42.0	39.8	37.4
7.2	Watts (Capacity)	1850	1560	1270	965
	Watts (Power)	452	525	603	676

	Amps	3.01	3.24	3.44	3.37
	Lb/h	48.1	46.0	43.6	41.0
10	Watts (Capacity)	2050	1730	1400	1070
	Watts (Power)	449	529	614	695
	Amps	3.04	3.26	3.42	3.30
	Lb/h	53.8	51.4	48.9	46.0
15	Watts (Capacity)	2440	2060	1670	1270
	Watts (Power)	437	528	627	723
	Amps	3.09	3.25	3.33	3.12
	Lb/h	65.6	62.7	59.6	56.3

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.049236E+03	3.781449E+02	4.221760E+00	4.017358E+01
C2	7.937308E+01	-2.108496E+00	-2.590220E-02	1.653668E+00
C3	-2.136882E+01	-2.252749E+00	-1.362349E-01	-1.463146E-01
C4	1.338835E+00	-1.745012E-01	1.813435E-03	3.421232E-02
C5	-8.242239E-01	7.943510E-02	1.892551E-03	-5.99080E-03
C6	1.396688E-02	1.975576E-01	4.162206E-03	4.240324E-04
C7	7.239216E-03	-1.737537E-03	-4.488221E-06	3.418538E-04
C8	-1.661213E-02	1.151674E-03	-5.844405E-05	-1.911046E-04
C9	-3.399324E-04	1.786919E-03	-2.217921E-05	8.415433E-06
C10	-3.663878E-04	-1.564293E-03	-3.533547E-05	-1.293507E-05

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

Te = Evaporator Temperature

Tc = Condensing Temperature