Technical Data Sheet

6/12/2013

Model:AE4430Y-FZ1A (AE4430Y)

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
EN12900 ASERCOM	220V ~ 50HZ	2800	706	821	337	8.31	2.09	2.44	5°C (41°F)	54°C (130°F)	32°C (90°F)	20°C (68°F)	50°C (122°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: 9.788
Weight Unit of Measure: KG
Displacement (cc): 8.02
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): 11.5
Rated Load Amps (RLA 50 Hz): 2.13
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

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

Performance Data Sheet

AE4430Y-FZ1A

General Information

Model	AE4430Y-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)	365	318	270	223	181
	Watts (Power)	199	211	222	231	242
	Amps	1.76	1.79	1.80	1.81	1.81
-10	Watts (Capacity)	472	412	352	292	235
	Watts (Power)	212	230	244	257	272
	Amps	1.79	1.83	1.86	1.89	1.91
-6.7	Watts (Capacity)	553	485	414	344	277
	Watts (Power)	220	242	260	276	292
	Amps	1.80	1.86	1.91	1.95	1.98
-5	Watts (Capacity)	599	526	450	374	300
	Watts (Power)	224	248	267	285	303
	Amps	1.81	1.87	1.93	1.97	2.02
0	Watts (Capacity)	750	659	566	471	378
	Watts (Power)	233	264	290	313	336
	Amps	1.83	1.91	1.99	2.06	2.12
5	Watts (Capacity)	925	816	702	586	471
	Watts (Power)	240	278	312	342	371
	Amps	1.86	1.96	2.05	2.14	2.22
7.2	Watts (Capacity)	1010	893	769	643	518
	Watts (Power)	241	284	321	354	386
	Amps	1.87	1.98	2.08	2.18	2.27
10	Watts (Capacity)	1130	998	861	722	582
	Watts (Power)	243	290	332	369	405
	Amps	1.88	2.00	2.12	2.23	2.33

15	Watts (Capacity)	1360	1210	1050	879	712
	Watts (Power)	242	299	350	396	439
	Amps	1.90	2.05	2.18	2.31	2.43

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	972.6062	88.34062	1.54287	
C2	42.26463	-3.663419	-0.007611	
C3	-5.739992	6.573863	0.0106985	
C4	0.6589996	-0.1152817	0.00000704518	
C5	-0.2947726	0.1956949	0.000406933	
C6	-0.06943348	-0.06967202	-0.0000349979	
C7	0.002951841	-0.0007717834	0	
C8	-0.005039077	0.001916606	0	
C9	-0.0009376387	-0.0006693567	0	
C10	0.0004299661	0.0003771039	0	

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