Technical Datasheet

8/25/2021

Model: AJ5510C-FZ3C

Product Description

Type:	Reciprocating Compressors
Application:	HBP/AC - Air Conditioning
ProductDescription:	R-407C
Voltage/Frequency:	220-240V ~ 50Hz
Version:	N/A

Product Specifications

Performance

		Refrigeration Capacity			Input Power	(E) Efficiency							
Condition	Test Voltage	(R) Btu/h	(R) kcal/h	(R) W	(I) W	(E) Btu/Wh	(E) kcal/Wh	W/W	EVAP TEMP	Condition	AMBIENT TEMP	RETURN GAS	LIQUID TEMP
EN12900	220V ~ 50HZ	6247	1574	1830	799	7.81	1.97	2.29	5°C (41°F)	50°C (122°F)	32°C (90°F)	15°C (59°F)	50°C (122°F)

General

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

Mechanical

Weight:	17
Weight Unit of Measure:	KG
Displacement (cc):	18.6
Oil Type:	Polyolester
Viscosity (cSt):	32
Oil Charge (cc):	475

Electrical

Voltage Range (50 Hz):	198-253
Voltage Range (60 Hz):	
Locked Rotor Amps (LRA):	24
Rated Load Amps (RLA 50 Hz):	4.6
Rated Load Amps (RLA 60 Hz):	0
Max. Continuous Current (MCC in Amps):	7.3
Motor Resistance (Ohm) - Main:	2.95

Motor Resistance (Ohm) - Start:	11
MotorType:	PSC
Overload Type:	
Relay Type:	

Agency Approval

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

Tecumseh

Performance Data Sheet

AJ5510C-FZ3C

General

Model	AJ5510C-FZ3C	**Unit of Measure**	Celsius
Condition	Tecumseh Europe(R-407C)	**Voltage/Frequency**	220V~50HZ
RETURN GAS		**MotorType**	PSC

Performance Information

EVAP TEMP (°C)		Condensing Temperature (°C)							
		30	35	40	45	50	55	60	65
-25	Watts (Capacity)								
	Watts (Power)	114	118						
	Amps	3.29	3.12						
-23.3	Watts (Capacity)								
	Watts (Power)	170	172	176					
	Amps	3.32	3.16	3.01					
-20	Watts (Capacity)					6.85			
	Watts (Power)	271	271	271	273	275			
	Amps	3.36	3.25	3.14	3.03	2.92			
-15	Watts (Capacity)	347	315	283	251	219	187		
	Watts (Power)	404	402	401	401	401	402		
	Amps	3.44	3.39	3.34	3.29	3.24	3.19		
-10	Watts (Capacity)	803	729	656	582	509	435	362	
	Watts (Power)	512	513	514	515	516	518	520	
	Amps	3.52	3.53	3.54	3.54	3.55	3.56	3.57	
-6.7	Watts (Capacity)	1150	1050	945	843	742	640	539	437
	Watts (Power)	569	574	578	583	587	591	595	599
	Amps	3.58	3.62	3.67	3.71	3.76	3.80	3.85	3.90
-5	Watts (Capacity)	1340	1220	1110	991	875	759	643	527
	Watts (Power)	595	602	608	615	621	627	633	639
	Amps	3.61	3.67	3.73	3.80	3.86	3.92	3.99	4.05
0	Watts (Capacity)	1950	1790	1640	1480	1320	1160	1000	841
	Watts (Power)	653	669	685	701	715	730	743	757
	Amps	3.70	3.81	3.93	4.04	4.16	4.27	4.39	4.51
5	Watts (Capacity)	2650	2450	2240	2040	1840	1640	1430	1230
	Watts (Power)	687	716	744	772	799	825	850	874
	Amps	3.80	3.96	4.13	4.29	4.45	4.62	4.78	4.94
7.2	Watts (Capacity)	2980	2760	2540	2310	2090	1870	1650	1420
	Watts (Power)	694	730	765	799	832	864	895	925
	Amps	3.84	4.03	4.21	4.40	4.58	4.76	4.95	5.13
10	Watts (Capacity)	3420	3180	2930	2680	2440	2190	1940	1690
	Watts (Power)	695	741	786	829	871	912	952	991
	Amps	3.90	4.11	4.32	4.53	4.74	4.95	5.16	5.37
15	Watts (Capacity)	4280	3990	3690	3400	3110	2820	2520	2230
	Watts (Power)	679	745	810	872	934	993	1050	1110

	Amps	4.01	4.26	4.52	4.77	5.02	5.27	5.52	5.78

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.902360E+03	5.443833E+02	3.029740E+00	
C2	1.828306E+02	-5.819557E+00	-4.308439E-02	
C3	-3.158279E+01	3.934291E+00	2.210703E-02	
C4	1.687662E+00	-9.187938E-01	4.526230E-04	
C5	-1.723179E+00	5.424478E-01	2.099673E-03	
C6	-1.940000E-03	-1.030000E-02	9.390000E-06	
C7	-2.260000E-16	-3.440000E-17	-9.860000E-20	
C8	-2.980000E-03	1.410000E-02	-1.150000E-05	
C9	-1.290000E-04	-1.420000E-03	-1.020000E-06	
C10	-6.770000E-19	-1.630000E-16	-1.370000E-19	

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