

Model: AVA5538EXN

Product Description

Type:	Reciprocating Compressors
Application:	HBP/AC - Air Conditioning
Refrigerant:	R-22
Voltage/Frequency:	208-230V ~ 60Hz 200-220V ~ 50Hz
Version:	N/A



Product Specifications

Performance

Condition	Test Voltage	Refrigeration Capacity			Input Power (I) W	(E) Efficiency			EVAP TEMP	Condition	AMBIENT TEMP	RETURN GAS	LIQUID TEMP
		(R) Btu/h	(R) kcal/h	(R) W		(E) Btu/Wh	(E) kcal/Wh	W/W					
ASHRAE (R-22)	230V ~ 60HZ	38400	9677	11251	3760	10.21	2.57	2.99	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:	-23.3°C to 12.8°C (-10°F to 55°F)
Motor Torque:	Low Start Torque (LST)
Compressor Cooling:	Fan

Mechanical

Weight:	83
Weight Unit of Measure:	LB
Displacement (cc):	67.011
Oil Type:	Polyolester
Viscosity (cSt):	32
Oil Charge (cc):	1624

Electrical

Voltage Range (50 Hz):	180-242
Voltage Range (60 Hz):	197-254
Locked Rotor Amps (LRA):	95
Rated Load Amps (RLA 50 Hz):	0
Rated Load Amps (RLA 60 Hz):	17.2
Max. Continuous Current (MCC in Amps):	30.8
Motor Resistance (Ohm) - Main:	.61

Motor Resistance (Ohm) - Start: 3.35
MotorType: PSC

Overload Type:

Relay Type:

Agency Approval

cURus Recognized

AVA5538EXN

General

Model	AVA5538EXN	Unit of Measure	Fahrenheit
Condition	ASHRAE	Voltage/Frequency	230V ~ 60HZ
RETURN GAS	-6.7°C (20°F) SUPERHEAT	Motor Type	PSC

Performance Information

EVAP TEMP (°F)	Condensing Temperature (°F)								
		80	90	100	110	120	130	140	150
-15	Btu/h	12300	11000						
	Watts	1430	1470						
	Amps	7.10	6.89						
	Lb/h	159	147						
-10	Btu/h	13500	12100	10600					
	Watts	1590	1660	1670					
	Amps	7.78	7.75	7.59					
	Lb/h	173	161	146					
-5	Btu/h	15100	13600	12100					
	Watts	1730	1820	1860					
	Amps	8.37	8.52	8.52					
	Lb/h	193	180	166					
0	Btu/h	17300	15700	14000	12200				
	Watts	1850	1970	2040	2060				
	Amps	8.86	9.19	9.36	9.38				
	Lb/h	218	206	191	174				
5	Btu/h	19900	18100	16300	14400	12400			
	Watts	1960	2100	2200	2250	2250			
	Amps	9.26	9.77	10.1	10.3	10.3			
	Lb/h	250	237	222	204	184			
10	Btu/h	23000	21100	19100	17000	14800	12600		
	Watts	2050	2220	2350	2430	2460	2450		
	Amps	9.57	10.3	10.8	11.1	11.3	11.3		
	Lb/h	287	273	258	240	219	195		
15	Btu/h	26600	24400	22200	20000	17700	15300	12800	
	Watts	2130	2330	2480	2590	2660	2680	2670	
	Amps	9.80	10.7	11.4	11.9	12.2	12.3	12.3	
	Lb/h	330	315	298	280	259	235	207	
20	Btu/h	30600	28200	25800	23400	20800	18300	15600	12900
	Watts	2190	2410	2590	2740	2840	2900	2920	2900
	Amps	9.95	11.0	11.9	12.5	13.0	13.3	13.4	13.3
	Lb/h	378	361	344	325	303	279	251	219
25	Btu/h	35200	32500	29800	27100	24400	21600	18800	15900
	Watts	2240	2480	2700	2870	3000	3100	3160	3180
	Amps	10.0	11.3	12.3	13.2	13.8	14.2	14.4	14.4

	Lb/h	431	413	394	374	352	327	298	266
30	Btu/h	40100	37100	34200	31200	28200	25200	22200	19100
	Watts	2260	2540	2780	2990	3150	3280	3380	3440
	Amps	10.0	11.5	12.7	13.7	14.5	15.0	15.4	15.5
	Lb/h	488	469	449	428	404	378	349	317
35	Btu/h	45500	42200	38900	35600	32400	29100	25800	22500
	Watts	2280	2580	2850	3090	3290	3460	3590	3690
	Amps	9.99	11.6	13.0	14.2	15.1	15.8	16.3	16.5
	Lb/h	551	530	508	485	461	434	404	371
40	Btu/h	51300	47700	44000	40400	36900	33300	29700	26100
	Watts	2280	2610	2910	3180	3410	3620	3790	3920
	Amps	9.87	11.7	13.3	14.6	15.7	16.5	17.1	17.5
	Lb/h	618	595	571	547	521	492	462	428
45	Btu/h	57600	53500	49500	45600	41600	37800	33900	30000
	Watts	2260	2620	2950	3250	3520	3760	3970	4150
	Amps	9.69	11.7	13.5	15.0	16.2	17.2	17.9	18.4
	Lb/h	690	664	639	612	584	555	523	488
50	Btu/h	64200	59700	55300	51000	46700	42500	38300	34100
	Watts	2230	2620	2980	3310	3620	3890	4140	4360
	Amps	9.46	11.7	13.6	15.3	16.7	17.8	18.7	19.3
	Lb/h	766	738	710	681	651	620	586	550
55	Btu/h	71300	66300	61500	56700	52100	47400	42900	38300
	Watts	2180	2600	2990	3360	3700	4010	4300	4550
	Amps	9.19	11.6	13.7	15.6	17.1	18.4	19.4	20.2
	Lb/h	846	815	784	753	721	688	653	615

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.818792E+04	-8.303972E+02	3.180243E-02	3.124246E+02
C2	8.289057E+02	-4.142778E+00	-2.877402E-01	8.041701E+00
C3	-1.310097E+02	5.320070E+01	1.844327E-01	-1.786539E+00
C4	1.453640E+01	-3.675603E-01	-2.032245E-03	1.517141E-01
C5	-5.774675E+00	1.853044E-01	5.662521E-03	-4.658204E-02
C6	9.585774E-02	-2.473989E-01	-9.866599E-04	1.529151E-02
C7	-1.229539E-02	1.420717E-04	5.546002E-06	-2.230888E-04
C8	-5.863620E-02	5.936698E-04	2.767467E-06	-4.534987E-04
C9	1.729432E-02	1.949642E-03	-1.194686E-05	2.227216E-04
C10	-2.083615E-03	2.281195E-05	7.537655E-07	-9.569456E-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