

Model: AGB4553TZ
Product Description

Type:	Reciprocating Compressors
Application:	HBP - High Back Pressure
ProductDescription:	R-404A
Voltage/Frequency:	440V 3~ 60Hz 400V 3~ 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					
EN12900	440V 3~ 60HZ	50195	12649	14707	5865	8.56	2.16	2.51	5°C (41°F)	45°C (113°F)	32°C (90°F)	15°C (59°F)	45°C (113°F)
EN12900	400V 3~ 50HZ	41761	10524	12236	4576	9.13	2.3	2.67	5°C (41°F)	45°C (113°F)	32°C (90°F)	15°C (59°F)	45°C (113°F)

General

Evaporating Temp. Range:	-6.7°C to 12.8°C (20°F to 55°F)
Motor Torque:	High Start Torque (HST)
Compressor Cooling:	Fan

Mechanical

Weight:	46
Weight Unit of Measure:	KG
Displacement (cc):	100.7
Oil Type:	Polyolester
Viscosity (cSt):	32
Oil Charge (cc):	1960

Electrical

Voltage Range (50 Hz):	340-440
Voltage Range (60 Hz):	396-499
Locked Rotor Amps (LRA):	45
Rated Load Amps (RLA 50 Hz):	7.9
Rated Load Amps (RLA 60 Hz):	8.4
Max. Continuous Current (MCC in Amps):	0

Motor Resistance (Ohm) - Main:

Motor Resistance (Ohm) - Start:

Motor Type: 3PH

Overload Type:

Relay Type:

Agency Approval

CE Listed, GOST RUSSIA Listed, GOST UKRAINE Listed, IRAM Listed, SASO Listed, UL Recognized, VDE Listed, cURus Recognized

Performance Data Sheet

AGB4553ZTZ

General

Model	AGB4553ZTZ	Unit of Measure	Celsius
Condition	EN12900(R-404A)	Voltage/Frequency	400V 3~ 50HZ
RETURN GAS		Motor Type	3PH

Performance Information

EVAP TEMP (°C)	Condensing Temperature (°C)								
		30	35	40	45	50	55	60	65
-6.7	Watts (Capacity)	10600	9550	8500	7450	6410	5390	4390	3410
	Watts (Power)	3350	3470	3570	3640	3680	3680	3640	3560
	Amps	5.91	6.08	6.20	6.29	6.35	6.37	6.36	6.31
-5	Watts (Capacity)	11500	10400	9230	8110	7010	5920	4850	3800
	Watts (Power)	3450	3590	3700	3790	3850	3870	3850	3790
	Amps	6.05	6.24	6.39	6.50	6.58	6.62	6.63	6.61
0	Watts (Capacity)	14400	13000	11600	10300	8930	7610	6320	5050
	Watts (Power)	3730	3900	4060	4190	4310	4390	4430	4440
	Amps	6.45	6.70	6.91	7.09	7.24	7.35	7.42	7.46
5	Watts (Capacity)	17700	16000	14400	12800	11100	9560	8000	6480
	Watts (Power)	3990	4200	4390	4580	4740	4870	4980	5050
	Amps	6.82	7.14	7.42	7.67	7.88	8.06	8.20	8.30
7.2	Watts (Capacity)	19300	17500	15700	14000	12200	10500	8830	7170
	Watts (Power)	4100	4320	4540	4740	4920	5080	5210	5310
	Amps	6.98	7.33	7.64	7.91	8.15	8.36	8.53	8.67
10	Watts (Capacity)	21500	19500	17600	15600	13700	11800	9950	8120
	Watts (Power)	4240	4480	4710	4940	5150	5330	5500	5630
	Amps	7.18	7.56	7.91	8.22	8.50	8.74	8.95	9.13
15	Watts (Capacity)	25900	23600	21200	18900	16700	14400	12200	10000
	Watts (Power)	4490	4750	5020	5280	5530	5770	5990	6180
	Amps	7.51	7.96	8.38	8.76	9.10	9.41	9.69	9.93

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.270000E+04	2.590000E+03	4.210000E+00	
C2	9.520000E+02	3.110000E+01	-3.000000E-03	
C3	-2.760000E+02	3.390000E+01	9.550000E-02	
C4	1.430000E+01	1.290000E-01	-3.790000E-04	
C5	-1.160000E+01	1.430000E-01	2.660000E-03	
C6	-1.860000E-01	3.160000E-01	-6.990000E-04	
C7	5.800000E-02	6.100000E-03	0.000000E+00	
C8	-1.660000E-01	-1.390000E-02	0.000000E+00	
C9	1.620000E-02	2.030000E-02	0.000000E+00	
C10	3.920000E-03	-6.150000E-03	0.000000E+00	

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

Te = Evaporator Temperature

T_c = Condensing Temperature

Performance Data Sheet

AGB4553ZTZ

General

Model	AGB4553ZTZ	Unit of Measure	Celsius
Condition	EN12900(R-404A)	Voltage/Frequency	440V 3~ 60HZ
RETURN GAS		MotorType	3PH

Performance Information

EVAP TEMP (°C)	Condensing Temperature (°C)								
		30	35	40	45	50	55	60	65
-6.7	Watts (Capacity)	12900	11700	10500	9220	7960	6680	5410	4150
	Watts (Power)	4360	4480	4580	4650	4670	4630	4500	4280
	Amps	6.50	6.68	6.82	6.92	6.98	7.01	6.99	6.94
-5	Watts (Capacity)	13800	12600	11300	9990	8660	7320	5980	4640
	Watts (Power)	4500	4630	4750	4840	4880	4870	4770	4590
	Amps	6.66	6.86	7.02	7.15	7.23	7.28	7.29	7.26
0	Watts (Capacity)	17000	15500	14000	12500	10900	9320	7750	6170
	Watts (Power)	4910	5070	5220	5370	5480	5530	5530	5440
	Amps	7.09	7.36	7.60	7.80	7.96	8.08	8.16	8.21
5	Watts (Capacity)	20600	18800	17100	15200	13400	11600	9710	7850
	Watts (Power)	5320	5500	5680	5870	6030	6150	6230	6230
	Amps	7.50	7.85	8.16	8.43	8.66	8.85	9.01	9.13
7.2	Watts (Capacity)	22300	20400	18500	16600	14600	12600	10600	8650
	Watts (Power)	5510	5690	5880	6080	6260	6420	6520	6560
	Amps	7.67	8.05	8.40	8.70	8.96	9.19	9.38	9.53
10	Watts (Capacity)	24600	22600	20500	18400	16200	14100	11900	9730
	Watts (Power)	5750	5930	6140	6350	6560	6740	6880	6960
	Amps	7.89	8.31	8.69	9.04	9.34	9.61	9.84	10.0
15	Watts (Capacity)	29200	26800	24400	21900	19400	16900	14400	11800
	Watts (Power)	6220	6400	6610	6840	7080	7300	7500	7650
	Amps	8.26	8.75	9.21	9.63	10.0	10.3	10.6	10.9

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.450000E+04	4.830000E+03	4.630000E+00	
C2	9.580000E+02	1.050000E+02	-3.300000E-03	
C3	-2.010000E+02	-4.510000E+01	1.050000E-01	
C4	1.370000E+01	1.490000E+00	-4.170000E-04	
C5	-9.240000E+00	-2.250000E+00	2.920000E-03	
C6	-2.000000E+00	2.230000E+00	-7.690000E-04	
C7	5.310000E-02	1.780000E-02	0.000000E+00	
C8	-1.640000E-01	-4.460000E-02	0.000000E+00	
C9	-8.810000E-03	4.860000E-02	0.000000E+00	
C10	1.160000E-02	-2.140000E-02	0.000000E+00	

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

Te = Evaporator Temperature

T_c = Condensing Temperature