compressor technical data

identification

model

TAG4568Z



*Non-contractual picture

summary

application
HBP

power supply
400V 3~ 50 Hz
440V 3~ 60 Hz

refrigerant
R-452A / R-404A / R-448A / R-449A / R-407C / R-22

horse-power
5,5 hp

motor type
3PH

test condition
EN12900

cooling capacity
14444 Watt (R-404A)

efficiency
2.44 Watt/W (R-404A)

technology
Reciprocating

sound power
78 dBA

certificates

nominal cooling capacity (*)

refrigerant	Frequency	power input (W)	refrig. capacity (Watt)	efficiency (Watt/W)
R-452A	50HZ	5712	14480	2.54
R-404A	50HZ	5916	14444	2.44
R-448A	50HZ	5440	14496	2.66
R-449A	50HZ	5440	14496	2.66
R-407C	50HZ	5121	13877	2.71
R-22	50HZ	5526	14989	2.71

(*) Operating conditions EN12900 : Dew / T°Cond. 50°C / T°Evap 5°C / T°Return gas temp. 20°C / T°Subcooling 0K

general data

model	AGB4568ZTZ
technology	reciprocating
compressor type	fix-speed
application	HBP
evaporating temp. range	-15°C to 15°C (5°F to 59°F)
horse power	5.5 hp
expansion device	capil. tube/expans. valve

mechanical data

displacement	124.4 cm³
motor torque	high (HST)
compressor cooling	fan
oil type / viscosity	P.O.E. / 32 cSt@40°C
oil charge	1760 ml
weight	47 kg (104 lb)

compressor technical data

electrical data

motor type	3PH
current LRA	58 A
current RLA 50 Hz	10.5 A
current RLA 60 Hz	11.5 A
main winding at 25 °C	2.93 ohms

electrical components

overload	Internal
• time check	2s - 5s / 48 A
• open temp / close temp	120 °C / 61 °C

pressure equipment directive

max. ambient temp.	+46 °C
max. allowable press.	21 bar
shell temperature range	-35/+150 °C
leak test pressure	23.1 bar
free volume	11.6 l

dimensions

length	361 mm (14.2 in)
width	238 mm (9.4 in)
height	423 mm (16.7 in)
ø external diameter : suction tube	1-1/8 in (28.6mm)
ø external diameter : discharge tube	5/8 in (15.9mm)

compressor technical data

performance

operating conditions EN12900
conditions DEW

Return gas temp. : 20 °C
Subcooling : 0 K

50HZ R-452A

Condensing	Evaporating	(°C)	-25	-20	-15	-10	-5	0	5	10	15
30	Refrig. Capacity	(Watt)	5091	6791	8801	11169	13941	17166	20890	25160	30025
	Power Input	(W)	2594	2983	3351	3717	4101	4523	5002	5557	6209
	efficiency	(Watt/W)	1.96	2.28	2.63	3	3.4	3.8	4.18	4.53	4.84
	Amps	(A)	4.75	5.28	5.79	6.31	6.82	7.32	7.83	8.33	8.83
40	Refrig. Capacity	(Watt)		5322	7131	9229	11664	14483	17734	21463	25718
	Power Input	(W)		3024	3496	3940	4376	4822	5299	5827	6425
	efficiency	(Watt/W)		1.76	2.04	2.34	2.67	3	3.35	3.68	4
	Amps	(A)		5.28	5.93	6.58	7.23	7.87	8.51	9.15	9.78
50	Refrig. Capacity	(Watt)			5431	7243	9324	11720	14480	17651	21279
	Power Input	(W)			3531	4109	4652	5179	5712	6268	6868
	efficiency	(Watt/W)			1.54	1.76	2	2.26	2.54	2.82	3.1
	Amps	(A)			5.97	6.75	7.53	8.31	9.09	9.87	10.6
60	Refrig. Capacity	(Watt)				5225	6934	8891	11144	13739	16724
	Power Input	(W)				4156	4863	5529	6172	6813	7472
	efficiency	(Watt/W)				1.26	1.43	1.61	1.81	2.02	2.24
	Amps	(A)				6.8	7.73	8.65	9.57	10.5	11.4

50HZ R-404A

Condensing	Evaporating	(°C)	-25	-20	-15	-10	-5	0	5	10	15
30	Refrig. Capacity	(Watt)	5428	7159	9193	11574	14348	17558	21248	25463	30248
	Power Input	(W)	2748	3147	3523	3895	4284	4707	5186	5739	6385
	efficiency	(Watt/W)	1.98	2.27	2.61	2.97	3.35	3.73	4.1	4.44	4.74
	Amps	(A)	5.04	5.57	6.09	6.61	7.12	7.62	8.12	8.6	9.08
40	Refrig. Capacity	(Watt)	4015	5606	7425	9519	11931	14705	17887	21520	25649
	Power Input	(W)	2674	3205	3686	4135	4573	5018	5491	6011	6597
	efficiency	(Watt/W)	1.5	1.75	2.01	2.3	2.61	2.93	3.26	3.58	3.89
	Amps	(A)	4.93	5.6	6.26	6.91	7.55	8.19	8.82	9.44	10
50	Refrig. Capacity	(Watt)		4049	5639	7429	9463	11787	14444	17478	20935
	Power Input	(W)		3101	3742	4325	4868	5392	5916	6459	7041
	efficiency	(Watt/W)		1.31	1.51	1.72	1.94	2.19	2.44	2.71	2.97
	Amps	(A)		5.53	6.32	7.11	7.88	8.65	9.41	10.2	10.9
60	Refrig. Capacity	(Watt)			3857	5327	6969	8825	10941	13362	16131
	Power Input	(W)			3627	4399	5105	5764	6395	7018	7653
	efficiency	(Watt/W)			1.06	1.21	1.37	1.53	1.71	1.9	2.11
	Amps	(A)			6.28	7.2	8.11	9.02	9.91	10.8	11.7

compressor technical data

performance

operating conditions EN12900
conditions DEW

Return gas temp. : 20 °C
Subcooling : 0 K

50HZ R-448A*

Condensing	Evaporating	(°C)	-25	-20	-15	-10	-5	0	5	10	15
30	Refrig. Capacity	(Watt)	4486	6135	8097	10423	13166	16380	20116	24428	29368
	Power Input	(W)	2419	2776	3122	3471	3841	4247	4706	5233	5846
	efficiency	(Watt/W)	1.85	2.21	2.59	3	3.43	3.86	4.27	4.67	5.02
	Amps	(A)	4.43	4.91	5.4	5.89	6.39	6.88	7.37	7.84	8.31
40	Refrig. Capacity	(Watt)		4832	6609	8694	11139	13996	17319	21159	25570
	Power Input	(W)		2840	3280	3700	4115	4542	4997	5495	6054
	efficiency	(Watt/W)		1.7	2.01	2.35	2.71	3.08	3.47	3.85	4.22
	Amps	(A)		4.96	5.57	6.18	6.8	7.41	8.03	8.63	9.22
50	Refrig. Capacity	(Watt)			5110	6950	9093	11590	14496	17861	21739
	Power Input	(W)			3335	3889	4414	4925	5440	5973	6542
	efficiency	(Watt/W)			1.53	1.79	2.06	2.35	2.66	2.99	3.32
	Amps	(A)			5.64	6.39	7.15	7.9	8.66	9.4	10.1
60	Refrig. Capacity	(Watt)				5235	7072	9207	11691	14578	17920
	Power Input	(W)				3947	4646	5306	5945	6577	7220
	efficiency	(Watt/W)				1.33	1.52	1.74	1.97	2.22	2.48
	Amps	(A)				6.47	7.38	8.3	9.21	10.1	11

50HZ R-449A*

Condensing	Evaporating	(°C)	-25	-20	-15	-10	-5	0	5	10	15
30	Refrig. Capacity	(Watt)	4486	6135	8097	10423	13166	16380	20116	24428	29368
	Power Input	(W)	2419	2776	3122	3471	3841	4247	4706	5233	5846
	efficiency	(Watt/W)	1.85	2.21	2.59	3	3.43	3.86	4.27	4.67	5.02
	Amps	(A)	4.43	4.91	5.4	5.89	6.39	6.88	7.37	7.84	8.31
40	Refrig. Capacity	(Watt)		4832	6609	8694	11139	13996	17319	21159	25570
	Power Input	(W)		2840	3280	3700	4115	4542	4997	5495	6054
	efficiency	(Watt/W)		1.7	2.01	2.35	2.71	3.08	3.47	3.85	4.22
	Amps	(A)		4.96	5.57	6.18	6.8	7.41	8.03	8.63	9.22
50	Refrig. Capacity	(Watt)			5110	6950	9093	11590	14496	17861	21739
	Power Input	(W)			3335	3889	4414	4925	5440	5973	6542
	efficiency	(Watt/W)			1.53	1.79	2.06	2.35	2.66	2.99	3.32
	Amps	(A)			5.64	6.39	7.15	7.9	8.66	9.4	10.1
60	Refrig. Capacity	(Watt)				5235	7072	9207	11691	14578	17920
	Power Input	(W)				3947	4646	5306	5945	6577	7220
	efficiency	(Watt/W)				1.33	1.52	1.74	1.97	2.22	2.48
	Amps	(A)				6.47	7.38	8.3	9.21	10.1	11

* Due to very high discharge temperature especially on LBP conditions, please strictly refer to Tecumseh Guidelines & Marketing Bulletin when using this refrigerant.

compressor technical data

performance

operating conditions EN12900
conditions DEW

Return gas temp. : 20 °C
Subcooling : 0 K

50HZ R-407C

Condensing	Evaporating	(°C)	-25	-20	-15	-10	-5	0	5	10	15
30	Refrig. Capacity	(Watt)	3954	5532	7413	9653	12305	15423	19061	23273	28113
	Power Input	(W)	2159	2535	2885	3227	3577	3953	4372	4852	5410
	efficiency	(Watt/W)	1.83	2.18	2.57	2.99	3.44	3.9	4.36	4.8	5.2
	Amps	(A)	3.96	4.48	4.99	5.48	5.95	6.4	6.84	7.27	7.69
40	Refrig. Capacity	(Watt)		4311	6029	8052	10435	13230	16493	20277	24636
	Power Input	(W)		2533	2994	3425	3842	4263	4706	5187	5723
	efficiency	(Watt/W)		1.7	2.01	2.35	2.72	3.1	3.5	3.91	4.3
	Amps	(A)		4.42	5.08	5.72	6.35	6.96	7.55	8.14	8.72
50	Refrig. Capacity	(Watt)		3039	4594	6401	8514	10988	13877	17233	21112
	Power Input	(W)		2344	2971	3544	4082	4602	5121	5656	6226
	efficiency	(Watt/W)		1.3	1.55	1.81	2.09	2.39	2.71	3.05	3.39
	Amps	(A)		4.2	5.02	5.82	6.61	7.39	8.15	8.9	9.65
60	Refrig. Capacity	(Watt)			3179	4771	6616	8768	11282	14212	17610
	Power Input	(W)			2755	3525	4238	4910	5559	6203	6859
	efficiency	(Watt/W)			1.15	1.35	1.56	1.79	2.03	2.29	2.57
	Amps	(A)			4.79	5.77	6.73	7.68	8.62	9.55	10.5

50HZ R-22

Condensing	Evaporating	(°C)	-20	-15	-10	-5	0	5	10	15
40	Refrig. Capacity	(Watt)	5341	7045	9044	11382	14102	17247	20861	24987
	Power Input	(W)	3005	3425	3820	4208	4607	5036	5513	6057
	efficiency	(Watt/W)	1.78	2.06	2.37	2.7	3.06	3.42	3.78	4.12
	Amps	(A)	5.25	5.82	6.38	6.95	7.52	8.08	8.65	9.23
50	Refrig. Capacity	(Watt)	4242	5789	7593	9699	12150	14989	18259	22005
	Power Input	(W)	3004	3566	4082	4567	5043	5526	6036	6591
	efficiency	(Watt/W)	1.41	1.62	1.86	2.12	2.41	2.71	3.03	3.34
	Amps	(A)	5.34	6.02	6.71	7.4	8.09	8.79	9.5	10.2
60	Refrig. Capacity	(Watt)		4565	6180	8059	10246	12785	15717	19088
	Power Input	(W)		3604	4287	4920	5520	6106	6696	7310
	efficiency	(Watt/W)		1.27	1.44	1.64	1.86	2.09	2.35	2.61
	Amps	(A)		6.22	7.01	7.82	8.64	9.46	10.3	11.2

compressor technical data

performance

operating conditions EN12900
conditions DEW

Return gas temp. : 20 °C
Subcooling : 0 K

60HZ R-452A

Condensing	Evaporating	(°C)	-25	-20	-15	-10	-5	0	5	10	15
30	Refrig. Capacity	(Watt)	6239	8331	10887	13834	17102	20618	24310	28105	31933
	Power Input	(W)	3221	3795	4341	4874	5407	5954	6530	7147	7819
	efficiency	(Watt/W)	1.94	2.2	2.51	2.84	3.16	3.46	3.72	3.93	4.08
	Amps	(A)	5.4	6.13	6.88	7.63	8.39	9.16	9.94	10.7	11.5
40	Refrig. Capacity	(Watt)		6653	8842	11448	14401	17627	21056	24614	28230
	Power Input	(W)		3820	4494	5131	5745	6351	6960	7589	8250
	efficiency	(Watt/W)		1.74	1.97	2.23	2.51	2.78	3.03	3.24	3.42
	Amps	(A)		6.13	7.01	7.89	8.78	9.68	10.6	11.5	12.5
50	Refrig. Capacity	(Watt)			6839	9013	11560	14406	17479	20709	24022
	Power Input	(W)			4470	5265	6014	6731	7429	8122	8825
	efficiency	(Watt/W)			1.53	1.71	1.92	2.14	2.35	2.55	2.72
	Amps	(A)			7.01	8.03	9.06	10.1	11.1	12.2	13.3
60	Refrig. Capacity	(Watt)				6411	8460	10834	13462	16272	19191
	Power Input	(W)				5155	6092	6974	7813	8625	9423
	efficiency	(Watt/W)				1.24	1.39	1.55	1.72	1.89	2.04
	Amps	(A)				8.05	9.22	10.4	11.6	12.8	14

60HZ R-404A

Condensing	Evaporating	(°C)	-25	-20	-15	-10	-5	0	5	10	15
30	Refrig. Capacity	(Watt)	6649	8787	11375	14337	17599	21088	24729	28446	32167
	Power Input	(W)	3412	4004	4564	5107	5647	6197	6770	7380	8040
	efficiency	(Watt/W)	1.95	2.19	2.49	2.81	3.12	3.4	3.65	3.85	4
	Amps	(A)	5.72	6.47	7.23	7.99	8.76	9.53	10.3	11.1	11.9
40	Refrig. Capacity	(Watt)	5277	7007	9208	11807	14728	17897	21239	24682	28149
	Power Input	(W)	3304	4048	4737	5385	6004	6609	7213	7829	8472
	efficiency	(Watt/W)	1.6	1.73	1.94	2.19	2.45	2.71	2.94	3.15	3.32
	Amps	(A)	5.61	6.5	7.39	8.28	9.18	10.1	11	11.9	12.8
50	Refrig. Capacity	(Watt)		5381	7103	9244	11730	14486	17438	20511	23632
	Power Input	(W)		3866	4737	5541	6294	7007	7694	8370	9048
	efficiency	(Watt/W)		1.39	1.5	1.67	1.86	2.07	2.27	2.45	2.61
	Amps	(A)		6.41	7.43	8.45	9.48	10.5	11.5	12.6	13.6
60	Refrig. Capacity	(Watt)			4951	6542	8499	10749	13216	15828	18508
	Power Input	(W)			4443	5458	6396	7271	8096	8884	9650
	efficiency	(Watt/W)			1.11	1.2	1.33	1.48	1.63	1.78	1.92
	Amps	(A)			7.36	8.52	9.68	10.8	12	13.2	14.3

compressor technical data

performance

operating conditions EN12900
conditions DEW

Return gas temp. : 20 °C
Subcooling : 0 K

60HZ R-448A*

Condensing	Evaporating	(°C)	-25	-20	-15	-10	-5	0	5	10	15
30	Refrig. Capacity	(Watt)	5503	7517	10009	12910	16154	19676	23408	27284	31237
	Power Input	(W)	3004	3531	4043	4551	5064	5592	6144	6730	7361
	efficiency	(Watt/W)	1.83	2.13	2.48	2.84	3.19	3.52	3.81	4.05	4.24
	Amps	(A)	5.03	5.71	6.41	7.12	7.86	8.6	9.35	10.1	10.8
40	Refrig. Capacity	(Watt)		6038	8191	10787	13758	17039	20562	24262	28071
	Power Input	(W)		3587	4216	4818	5404	5983	6564	7158	7774
	efficiency	(Watt/W)		1.68	1.94	2.24	2.55	2.85	3.13	3.39	3.61
	Amps	(A)		5.76	6.57	7.41	8.26	9.12	9.99	10.9	11.7
50	Refrig. Capacity	(Watt)			6429	8650	11279	14249	17494	20948	24543
	Power Input	(W)			4222	4983	5706	6400	7075	7740	8406
	efficiency	(Watt/W)			1.52	1.74	1.98	2.23	2.47	2.71	2.92
	Amps	(A)			6.63	7.6	8.6	9.6	10.6	11.6	12.7
60	Refrig. Capacity	(Watt)				6418	8634	11224	14122	17260	20572
	Power Input	(W)				4896	5820	6693	7526	8327	9106
	efficiency	(Watt/W)				1.31	1.48	1.68	1.88	2.07	2.26
	Amps	(A)				7.65	8.8	9.98	11.2	12.3	13.5

60HZ R-449A*

Condensing	Evaporating	(°C)	-25	-20	-15	-10	-5	0	5	10	15
30	Refrig. Capacity	(Watt)	5503	7517	10009	12910	16154	19676	23408	27284	31237
	Power Input	(W)	3004	3531	4043	4551	5064	5592	6144	6730	7361
	efficiency	(Watt/W)	1.83	2.13	2.48	2.84	3.19	3.52	3.81	4.05	4.24
	Amps	(A)	5.03	5.71	6.41	7.12	7.86	8.6	9.35	10.1	10.8
40	Refrig. Capacity	(Watt)		6038	8191	10787	13758	17039	20562	24262	28071
	Power Input	(W)		3587	4216	4818	5404	5983	6564	7158	7774
	efficiency	(Watt/W)		1.68	1.94	2.24	2.55	2.85	3.13	3.39	3.61
	Amps	(A)		5.76	6.57	7.41	8.26	9.12	9.99	10.9	11.7
50	Refrig. Capacity	(Watt)			6429	8650	11279	14249	17494	20948	24543
	Power Input	(W)			4222	4983	5706	6400	7075	7740	8406
	efficiency	(Watt/W)			1.52	1.74	1.98	2.23	2.47	2.71	2.92
	Amps	(A)			6.63	7.6	8.6	9.6	10.6	11.6	12.7
60	Refrig. Capacity	(Watt)				6418	8634	11224	14122	17260	20572
	Power Input	(W)				4896	5820	6693	7526	8327	9106
	efficiency	(Watt/W)				1.31	1.48	1.68	1.88	2.07	2.26
	Amps	(A)				7.65	8.8	9.98	11.2	12.3	13.5

* Due to very high discharge temperature especially on LBP conditions, please strictly refer to Tecumseh Guidelines & Marketing Bulletin when using this refrigerant.

compressor technical data

performance

operating conditions EN12900
conditions DEW

Return gas temp. : 20 °C
Subcooling : 0 K

60HZ R-407C

Condensing	Evaporating	(°C)	-25	-20	-15	-10	-5	0	5	10	15
30	Refrig. Capacity	(Watt)	4851	6774	9165	11963	15106	18533	22182	25990	29897
	Power Input	(W)	2683	3226	3738	4230	4715	5204	5708	6240	6810
	efficiency	(Watt/W)	1.81	2.1	2.45	2.83	3.2	3.56	3.89	4.17	4.39
	Amps	(A)	4.49	5.21	5.92	6.62	7.32	8	8.68	9.36	10
40	Refrig. Capacity	(Watt)		5383	7465	9987	12888	16107	19580	23247	27047
	Power Input	(W)		3199	3849	4460	5045	5614	6181	6755	7350
	efficiency	(Watt/W)		1.68	1.94	2.24	2.55	2.87	3.17	3.44	3.68
	Amps	(A)		5.13	6	6.86	7.71	8.56	9.41	10.3	11.1
50	Refrig. Capacity	(Watt)		4073	5784	7968	10564	13511	16747	20210	23839
	Power Input	(W)		2923	3761	4543	5278	5980	6660	7329	7999
	efficiency	(Watt/W)		1.39	1.54	1.75	2	2.26	2.51	2.76	2.98
	Amps	(A)		4.87	5.9	6.93	7.95	8.97	9.99	11	12
60	Refrig. Capacity	(Watt)			4064	5847	8076	10689	13625	16822	20218
	Power Input	(W)			3369	4371	5309	6194	7038	7853	8650
	efficiency	(Watt/W)			1.21	1.34	1.52	1.73	1.94	2.14	2.34
	Amps	(A)			5.62	6.83	8.03	9.23	10.4	11.6	12.9

60HZ R-22

Condensing	Evaporating	(°C)	-20	-15	-10	-5	0	5	10	15
40	Refrig. Capacity	(Watt)	6668	8735	11222	14055	17164	20477	23921	27425
	Power Input	(W)	3795	4403	4975	5525	6067	6614	7180	7778
	efficiency	(Watt/W)	1.76	1.98	2.26	2.54	2.83	3.1	3.33	3.53
	Amps	(A)	6.09	6.87	7.65	8.44	9.25	10.1	10.9	11.7
50	Refrig. Capacity	(Watt)	5556	7274	9457	12035	14935	18086	21415	24851
	Power Input	(W)	3744	4514	5230	5905	6553	7187	7821	8469
	efficiency	(Watt/W)	1.48	1.61	1.81	2.04	2.28	2.52	2.74	2.93
	Amps	(A)	6.2	7.08	7.98	8.9	9.83	10.8	11.8	12.8
60	Refrig. Capacity	(Watt)		5742	7575	9848	12491	15432	18599	21919
	Power Input	(W)		4414	5319	6164	6963	7729	8476	9219
	efficiency	(Watt/W)		1.3	1.42	1.6	1.79	2	2.19	2.38
	Amps	(A)		7.29	8.3	9.33	10.4	11.5	12.6	13.7

Note : Tecumseh reserves the right to change information contained in this document without notification.