HA Type	Number of cylinders	Displacement 50 / 60 Hz (1450/1740 rpm)	Electrical data				Weight	Connections ⑥		Oil charge
			Voltage ①	Max. working current ②	Max. power consumption ②	Starting current (rotor locked) ②		Discharge line DV	Suction line SV	
		m³/h		A	kW	A	kg	mm I inch	mm I inch	Ltr.
				Δ / Y		Δ / Y				
HA12P/60-4	2	5,40 / 6,40	③	5,5 / 3,2	1,7	40 / 23	52,0	12 I 1/2	12 I 1/2	0,8
HA12P/75-4	2	6,70 / 8,10	③	5,9 / 3,4	1,8	40 / 23	53,0	12 I 1/2	12 I 1/2	0,8
HA12P/90-4	2	8,00 / 9,60	③	6,6 / 3,8	2,0	43 / 25	53,0	12 I 1/2	12 I 1/2	0,8
HA12P/110-4	2	9,40 / 11,30	③	6,9 / 4,0	2,2	43 / 25	53,0	12 I 1/2	12 I 1/2	0,8
HA22P/125-4	2	11,10 / 13,30	③	7,1 / 4,1	3,0	69 / 40	80,0	12 I 1/2	16 I 5/8	1,0
HA22P/160-4	2	13,70 / 16,40	③	8,2 / 4,8	4,0	87 / 50	82,0	12 I 1/2	16 I 5/8	1,0
HA22P/190-4	2	16,50 / 19,80	③	9,0 / 5,2	4,0	87 / 50	81,0	12 I 1/2	16 I 5/8	1,0
HA34P/215-4	4	18,80 / 22,60	③	10,9 / 6,3	3,7	87 / 50	98,0	16 I 5/8	22 I 7/8	1,3
HA34P/255-4	4	22,10 / 26,60	③	12,5 / 7,2	4,3	87 / 50	98,0	16 I 5/8	22 I 7/8	1,3
HA34P/315-4	4	27,30 / 32,80	③	16,2 / 9,4	5,3	132 / 76	100,0	16 I 5/8	22 I 7/8	1,3
HA34P/380-4	4	33,10 / 39,70	③	18,9 / 11,0	6,4	132 / 76	100,0	16 I 5/8	22 I 7/8	1,3
				*PW 1+2		*PW1 / PW 1+2				
HA4/465-4	4	40,50 / 48,60	④	21	11,2	82 / 107	155,0	28 / 1 1/8	35 / 1 3/8	2,7
HA4/555-4	4	48,20 / 57,80	④	26	13,3	107 / 140	157,0	28 / 1 1/8	35 / 1 3/8	2,7
HA4/650-4	4	56,60 / 67,90	④	26	15,6	107 / 140	156,0	28 / 1 1/8	35 / 1 3/8	2,7
HA5/725-4	4	62,90 / 75,50	④	26	12,5	107 / 140	204,0	28 / 1 1/8	42 / 1 5/8	3,6
HA5/830-4	4	72,20 / 86,70	④	26	12,8	126 / 160	207,0	28 / 1 1/8	42 / 1 5/8	3,6
HA5/945-4	4	82,20 / 98,60	④	26	12,9	126 / 160	205,0	28 / 1 1/8	42 / 1 5/8	3,6
HA6/1080-4	4	93,70 / 112,40	④	31	15,8	172 / 212	223,0	28 / 1 1/8	42 / 1 5/8	3,6
HA6/1240-4	4	107,60 / 129,10	④	31	15,9	172 / 212	221,0	28 / 1 1/8	42 / 1 5/8	3,6
HA6/1410-4	4	122,40 / 146,90	④	31	16,2	172 / 212	219,0	28 / 1 1/8	42 / 1 5/8	3,6

* PW = Part Winding, motors for part winding start 1 = 1. part winding 2 = 2. part winding

Oil sump heater 110-240 V - 1 - 50/60 Hz (option)
HG(HA)12, HG(HA)22, HG(HA)34: 50-120 W
PTC heater, self-regulating, installation in housing bore

Oil sump heater 230 V - 1 - 50/60 Hz (standard)
- HG(HA)4: 80 W
- HG(HA)5, HG(HA)6, HG7: 140 W
- HG8: 200 W

Permanently set version, installation in immersion sleeve

Fan motors for the HA version 230 V - 1 - 50/60 Hz
- HA12P: 40 W / 0,3 A
- HA22P, HA34P: 72 W / 0,53 A
- HA4, HA5, HA6: 140 W / 0,71 A

Explanations:

① Tolerance (± 10%) relates to the mean value of the voltage range. Other voltages and current types on request.

② - The specifications for max. power consumption apply for 50Hz operation. For 60Hz operation, the specifications have to be multiplied by the factor 1.2. The max. working current remains unchanged.
- Take account of the max. operating current / max. power consumption when designing contactors, leads and fuses. Switches: Service category AC3

③ 220-240 V Δ / 380-420 V Y - 3 - 50 Hz
265-290 V Δ / 440-480 V Y - 3 - 60 Hz

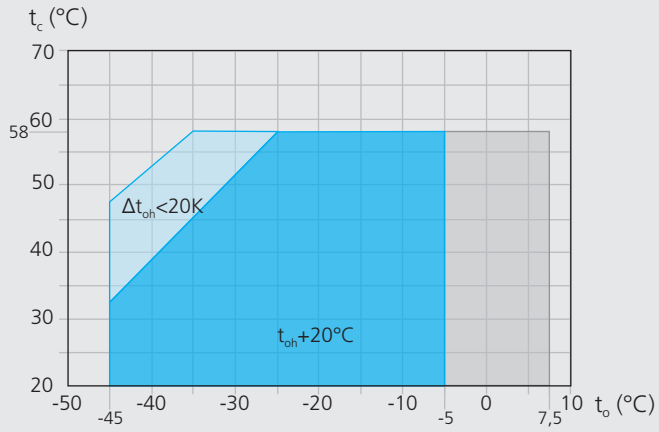
④ 380-420 V Y/YY - 3 - 50 Hz PW
440-480 V Y/YY - 3 - 60 Hz PW
PW = Part Winding, motors for part winding start
(no start unloaders required)
- Winding ratios: HG(HA)4, HG(HA)5, HG(HA)6 = 66% / 33%
- Designs for Y/Δ on request

⑤ 380-420 V Δ/ YYY - 3 - 50 Hz PW
440-480 V Δ/ YYY - 3 - 60 Hz PW
PW = Part Winding, motors for part winding start
(no start unloaders required)
- Winding ratios: HG7, HG8 = 60% / 40%
- Designs for Y/Δ on request

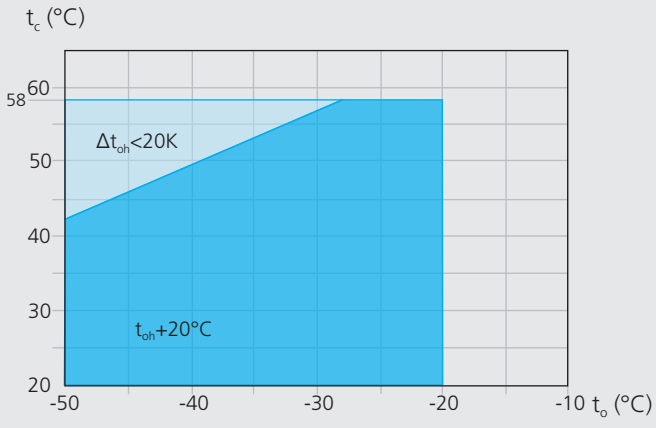
⑥ For soldering connections

R404A/R507 Operating limits

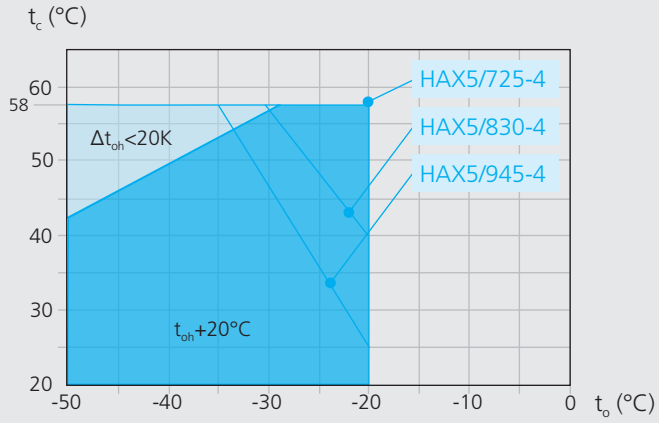
HGX12P / HGX22e / HGX34e /
HGX4 / HGX5 / HGX6① / HGX7 / HGX8②



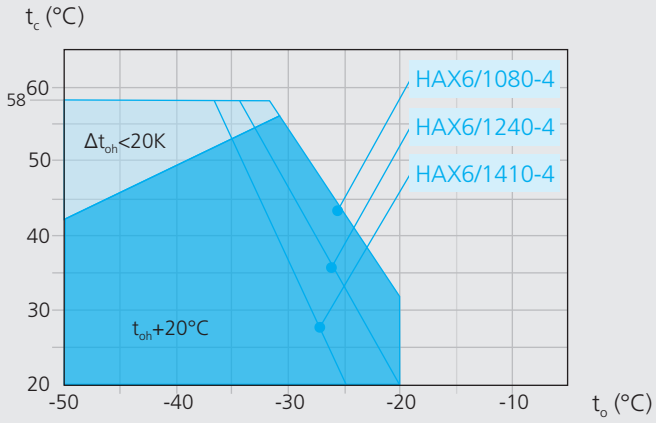
HAX12P / HAX22P / HAX34P / HAX4



HAX5



HAX6



Max. permissible operating pressure (LP/HP)[1]: 19/28 bar

[1] LP = low pressure HP = high pressure

① **HGX6/1410-4S**
Max. evaporating temperature
t_o = 2 °C

HGX6/1410-4
Max. evaporating temperature
t_o = -7 °C

② **HGX8/2830-4**
Max. evaporating temperature
t_o = 0 °C

Unlimited application range

-HG Supplementary cooling or reduced suction gas temperature
-HA reduced suction gas temperature

Motor version -S-
(more powerful motor)

t_o Evaporating temperature (°C)
t_c Condensing temperature (°C)
Δt_{Oh} Suction gas superheat (K)
t_{Oh} Suction gas temperature (°C)

R404A/R507 — Performance data — 50 Hz

Type	Cond. temp. °C		Cooling capacity $\dot{Q}_o$ [W] Evaporating temperature °C 7,5	5	0	-5	-10	-15	Power consumption P_e [kW] -20	-25	-30	-35	-40	-45
HGX12P/60-4 S [1]	30	Q	6535	5989	4990	4108	3336	2667	2094	1610	1207	878	616	414
		P	1,20	1,22	1,23	1,20	1,15	1,08	1,00	0,91	0,81	0,71	0,62	0,53
	40	Q	5537	5060	4191	3428	2764	2193	1706	1297	959	684	465	296
		P	1,49	1,48	1,43	1,37	1,28	1,18	1,06	0,95	0,83	0,71	0,61	0,52
	50	Q	4535	4128	3390	2748	2195	1723	1324	993	722	503	329	
		P	1,72	1,69	1,60	1,49	1,37	1,24	1,10	0,96	0,83	0,70	0,59	
HAX12P/60-4	30	Q							2327	1851	1442	1097	809	573
		P							1,04	0,95	0,86	0,75	0,66	0,56
	40	Q							1956	1538	1182	883	635	435
		P							1,12	1,00	0,88	0,76	0,65	0,54
	50	Q							1582	1223	921	670	465	301
		P							1,18	1,04	0,89	0,75	0,62	0,51
HGX12P/75-4 [1] HGX12P/75-4 S [1]	30	Q	8160	7498	6284	5227	4288	3469	2764	2164	1661	1246	911	648
		P	1,52	1,54	1,55	1,50	1,45	1,37	1,26	1,15	1,03	0,91	0,79	0,68
	40	Q	6934	6357	5304	4419	3606	2902	2299	1789	1364	1015	734	513
		P	1,91	1,89	1,83	1,73	1,63	1,50	1,37	1,23	1,08	0,94	0,81	0,69
	50	Q	5729	5238	4345	3632	2945	2355	1855	1435	1087	804	577	
		P	2,21	2,17	2,05	1,92	1,78	1,62	1,45	1,29	1,12	0,96	0,82	
HAX12P/75-4	30	Q							2888	2296	1789	1361	1004	711
		P							1,29	1,18	1,06	0,94	0,81	0,70
	40	Q							2427	1908	1466	1095	788	540
		P							1,39	1,25	1,10	0,95	0,80	0,67
	50	Q							1962	1517	1143	831	577	374
		P							1,46	1,29	1,11	0,93	0,77	0,63
HGX12P/90-4 [1] HGX12P/90-4 S [1]	30	Q	9738	8948	7500	6085	5000	4052	3231	2529	1937	1446	1047	730
		P	1,85	1,86	1,86	1,78	1,69	1,58	1,46	1,32	1,18	1,03	0,89	0,75
	40	Q	8288	7600	6344	5145	4202	3381	2676	2075	1571	1155	817	549
		P	2,27	2,25	2,17	2,02	1,88	1,72	1,56	1,39	1,21	1,04	0,88	0,72
	50	Q	6863	6276	5212	4219	3418	2727	2137	1640	1226	886	611	
		P	2,66	2,60	2,46	2,25	2,06	1,85	1,65	1,44	1,24	1,04	0,86	
HAX12P/90-4	30	Q							3407	2698	2089	1574	1146	796
		P							1,56	1,43	1,29	1,15	1,00	0,86
	40	Q							2853	2229	1699	1254	889	596
		P							1,67	1,50	1,33	1,15	0,98	0,82
	50	Q							2287	1752	1303	932	633	399
		P							1,75	1,54	1,33	1,13	0,93	0,76
HGX12P/110-4 [1] HGX12P/110-4 S [1]	30	Q	11247	10345	8691	7218	5966	4868	3914	3094	2397	1814	1334	946
		P	2,17	2,18	2,16	2,15	2,05	1,92	1,76	1,59	1,41	1,23	1,05	0,88
	40	Q	9581	8796	7361	6125	5039	4091	3270	2567	1972	1473	1062	728
		P	2,65	2,62	2,53	2,47	2,30	2,10	1,89	1,68	1,46	1,25	1,05	0,88
	50	Q	7877	7211	6000	5010	4095	3301	2619	2039	1549	1141	803	
		P	3,12	3,05	2,89	2,74	2,50	2,25	1,99	1,73	1,49	1,26	1,05	
HAX12P/110-4	30	Q							4092	3265	2558	1960	1461	1051
		P							1,78	1,63	1,46	1,28	1,11	0,94
	40	Q							3451	2726	2109	1590	1159	806
		P							1,94	1,74	1,52	1,30	1,10	0,92
	50	Q							2809	2189	1664	1227	866	572
		P							2,05	1,80	1,55	1,30	1,07	0,88
HGX22e/125-4 HGX22e/125-4 S	30	Q	13400	12400	10500	8790	7250	5870	4650	3590	2680	1920	1320	857
		P	2,19	2,23	2,26	2,24	2,16	2,03	1,88	1,69	1,49	1,28	1,07	0,878
	40	Q	11600	10700	8970	7460	6090	4880	3820	2900	2120	1490	992	640
		P	2,77	2,75	2,68	2,58	2,41	2,22	2,00	1,76	1,52	1,28	1,06	0,853
	50	Q	9650	8860	7390	6080	4910	3880	2990	2230	1610	1110	749	
		P	3,26	3,19	3,03	2,84	2,60	2,34	2,07	1,80	1,53	1,27	1,03	
HAX22P/125-4	30	Q							4728	3791	2981	2291	1715	1247
		P							1,92	1,71	1,51	1,32	1,13	0,94
	40	Q							3959	3158	2466	1876	1382	977
		P							2,09	1,84	1,60	1,37	1,14	0,92
	50	Q							3211	2538	1956	1458	1037	689
		P							2,22	1,92	1,64	1,37	1,10	0,83
HGX22e/160-4 HGX22e/160-4 S	30	Q	16900	15600	13200	10900	8980	7320	5850	4560	3450	2510	1750	1170
		P	2,71	2,75	2,78	2,73	2,62	2,47	2,29	2,07	1,84	1,59	1,34	1,08
	40	Q	14500	13400	11200	9170	7540	6090	4810	3700	2750	1960	1330	851
		P	3,42	3,40	3,30	3,17	2,96	2,72	2,47	2,19	1,91	1,62	1,34	1,07
	50	Q	12100	11100	9150	7480	6090	4860	3790	2860	2090	1460	971	
		P	4,02	3,94	3,73	3,51	3,22	2,90	2,58	2,25	1,92	1,60	1,30	
HAX22P/160-4	30	Q							5837	4680	3680	2828	2118	1540
		P							2,37	2,11	1,87	1,63	1,40	1,17
	40	Q							4888	3899	3044	2316	1706	1207
		P							2,58	2,27	1,98	1,69	1,41	1,14
	50	Q							3964	3134	2414	1799	1281	851
		P							2,74	2,38	2,03	1,69	1,36	1,03

Relating to 20 °C suction gas temp. without liquid subcooling

[1] Compressors (R404A) are ASERCOM certified

Motor version -S- (more powerful motor)

Supplementary cooling or reduced suction gas temp.

Performance data

R404A/R507 — Performance data — 50 Hz

Type	Cond. temp. °C		Cooling capacity $\dot{Q}_o$ [W] Evaporating temperature °C 7,5	5	0	-5	-10	-15	Power consumption P_e [kW] -20	-25	-30	-35	-40	-45
HGX22e/190-4 HGX22e/190-4 S	30	Q	20800	19200	16100	13300	11000	8920	7140	5620	4330	3240	2350	1620
		P	3,46	3,48	3,46	3,41	3,26	3,07	2,84	2,57	2,29	2,00	1,70	1,41
	40	Q	17800	16400	13700	11300	9200	7450	5940	4640	3540	2620	1860	1230
		P	4,28	4,23	4,09	3,93	3,68	3,39	3,08	2,74	2,39	2,03	1,68	1,35
	50	Q	14800	13600	11300	9150	7460	6000	4750	3680	2780	2020	1390	
		P	5,04	4,93	4,66	4,40	4,06	3,68	3,27	2,85	2,43	2,01	1,61	
HAX22P/190-4	30	Q							7063	5663	4453	3422	2562	1863
		P							2,87	2,55	2,26	1,97	1,69	1,41
	40	Q							5915	4718	3684	2802	2064	1460
		P							3,12	2,75	2,39	2,05	1,71	1,37
	50	Q							4797	3792	2922	2177	1550	1030
		P							3,31	2,88	2,45	2,04	1,64	1,25
HGX34e/215-4 [1] HGX34e/215-4 S [1]	30	Q	23900	21900	18200	14600	11900	9470	7390	5610	4120	2900	1940	1220
		P	3,83	3,85	3,84	3,70	3,52	3,26	2,94	2,58	2,21	1,84	1,49	1,18
	40	Q	20200	18500	15300	12200	9840	7770	5990	4480	3230	2220	1430	851
		P	4,72	4,65	4,48	4,26	3,94	3,56	3,14	2,70	2,27	1,85	1,47	1,15
	50	Q	16500	15000	12200	9770	7800	6090	4630	3420	2420	1630	1040	
		P	5,48	5,33	4,99	4,67	4,23	3,75	3,25	2,74	2,26	1,81	1,42	
HAX34P/215-4	30	Q							8042	6449	5071	3897	2918	2122
		P							3,26	2,91	2,57	2,24	1,92	1,61
	40	Q							6735	5372	4194	3190	2350	1662
		P							3,56	3,13	2,73	2,33	1,95	1,57
	50	Q							5462	4317	3327	2479	1765	1172
		P							3,77	3,27	2,79	2,33	1,87	1,42
HGX34e/255-4 [1] HGX34e/255-4 S [1]	30	Q	28000	25700	21500	17200	14200	11500	9120	7080	5350	3900	2730	1820
		P	4,57	4,61	4,59	4,44	4,23	3,95	3,61	3,22	2,81	2,39	1,97	1,58
	40	Q	23800	21800	18100	14500	11800	9460	7430	5680	4210	3010	2050	1320
		P	5,64	5,58	5,38	5,14	4,76	4,33	3,86	3,37	2,87	2,38	1,92	1,50
	50	Q	19500	17700	14600	11700	9410	7450	5760	4330	3150	2200	1480	
		P	6,55	6,40	6,02	5,68	5,15	4,58	4,00	3,41	2,84	2,30	1,80	
HAX34P/255-4	30	Q							9456	7582	5962	4582	3430	2495
		P							3,84	3,42	3,02	2,64	2,26	1,89
	40	Q							7919	6317	4932	3751	2763	1955
		P							4,18	3,68	3,20	2,74	2,29	1,84
	50	Q							6422	5076	3911	2915	2075	1379
		P							4,44	3,85	3,28	2,73	2,20	1,67
HGX34e/315-4 [1] HGX34e/315-4 S [1]	30	Q	33800	31000	26000	21300	17600	14300	11400	8840	6700	4930	3490	2370
		P	5,86	5,82	5,67	5,47	5,20	4,85	4,43	3,98	3,49	2,99	2,49	2,01
	40	Q	28700	26300	22000	17900	14700	11900	9350	7220	5400	3880	2650	1690
		P	7,05	6,92	6,59	6,29	5,83	5,32	4,76	4,18	3,58	2,98	2,40	1,86
	50	Q	23500	21500	17800	14500	11800	9430	7370	5600	4100	2840	1820	
		P	8,13	7,90	7,39	6,97	6,34	5,67	4,96	4,25	3,54	2,85	2,20	
HAX34P/315-4	30	Q							11674	9361	7360	5657	4235	3080
		P							4,74	4,22	3,73	3,26	2,79	2,33
	40	Q							9776	7798	6088	4631	3411	2413
		P							5,16	4,55	3,96	3,38	2,82	2,27
	50	Q							7929	6267	4829	3599	2562	1702
		P							5,48	4,75	4,05	3,38	2,71	2,06
HGX34e/380-4 [1] HGX34e/380-4 S [1]	30	Q	40900	37600	31700	25800	21200	17300	13800	10900	8300	6200	4490	3120
		P	7,20	7,15	6,98	6,84	6,45	5,98	5,46	4,88	4,28	3,67	3,05	2,45
	40	Q	34600	31800	26700	21600	17700	14300	11400	8850	6730	4960	3510	2340
		P	8,75	8,59	8,18	7,84	7,25	6,59	5,90	5,18	4,45	3,72	3,00	2,33
	50	Q	28400	26000	21800	17600	14300	11500	9030	6960	5210	3760	2550	
		P	10,10	9,86	9,23	8,73	7,92	7,08	6,22	5,34	4,47	3,62	2,81	
HAX34P/380-4	30	Q							14125	11327	8906	6845	5125	3726
		P							5,73	5,11	4,51	3,94	3,38	2,82
	40	Q							11829	9436	7367	5604	4128	2920
		P							6,25	5,50	4,79	4,09	3,42	2,75
	50	Q							9594	7583	5843	4355	3100	2059
		P							6,63	5,75	4,91	4,09	3,28	2,49
HGX4/465-4 [1] HGX4/465-4 S [1]	30	Q	49311	45325	38018	31142	25587	20747	16575	13020	10035	7569	5576	4005
		P	9,55	9,44	9,13	8,81	8,32	7,71	7,01	6,24	5,45	4,66	3,91	3,21
	40	Q	42248	38764	32400	26283	21490	17340	13783	10770	8253	6183	4511	3187
		P	11,33	11,08	10,52	10,08	9,31	8,45	7,53	6,58	5,64	4,73	3,88	3,13
	50	Q	34849	31886	26502	21559	17526	14061	11117	8643	6592	4913	3560	
		P	12,97	12,59	11,76	11,12	10,09	9,00	7,89	6,78	5,71	4,70	3,79	
HAX4/465-4	30	Q							18696	15000	11814	9094	6798	4884
		P							7,76	6,86	6,00	5,17	4,35	3,56
	40	Q							15696	12501	9756	7420	5449	3802
		P							8,32	7,27	6,26	5,29	4,36	3,46
	50	Q							12819	10124	7822	5870	4225	2845
		P							8,76	7,56	6,42	5,33	4,29	3,30

Relating to 20 °C suction gas temp. without liquid subcooling

[1] Compressors (R404A) are ASERCOM certified

Motor version -S- (more powerful motor)

Supplementary cooling or reduced suction gas temp.

R404A/R507 — Performance data — 50 Hz

Type	Cond. temp. °C		Cooling capacity $\dot{Q}_o$ [W] Evaporating temperature °C 7,5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
HGX4/555-4 [1] HGX4/555-4 S [1]	30	Q	59014	54222	45450	37853	31129	25259	20184	15848	12194	9164	6702	4751
		P	11,52	11,34	10,89	10,34	9,72	8,99	8,19	7,34	6,47	5,59	4,73	3,93
	40	Q	50452	46260	38616	32112	26279	21212	16857	13155	10050	7484	5401	3743
		P	13,64	13,29	12,51	11,84	10,88	9,86	8,81	7,74	6,69	5,67	4,72	3,85
	50	Q	41937	38348	31838	26484	21544	17286	13653	10589	8036	5938	4236	
		P	15,53	15,01	13,93	13,14	11,87	10,58	9,30	8,04	6,83	5,70	4,66	
HAX4/555-4	30	Q							21842	17569	13875	10713	8037	5799
		P							8,84	7,84	6,87	5,93	5,01	4,12
	40	Q							18374	14675	11488	8766	6461	4528
		P							9,46	8,27	7,14	6,04	4,99	3,98
	50	Q							15013	11894	9220	6944	5018	3396
		P							9,95	8,60	7,31	6,08	4,90	3,78
HGX4/650-4 [1] HGX4/650-4 S [1]	30	Q	70903	65224	54821	44444	36811	30119	24302	19297	15039	11465	8510	6110
		P	14,57	14,19	13,41	12,51	11,70	10,80	9,84	8,84	7,82	6,80	5,80	4,85
	40	Q	60855	55879	46795	37928	31232	25384	20322	15982	12298	9208	6647	4550
		P	16,80	16,29	15,22	14,30	13,15	11,94	10,70	9,45	8,21	7,01	5,86	4,79
	50	Q	50791	46523	38768	31303	25565	20586	16302	12650	9564	6980	4835	
		P	19,05	18,38	17,02	15,79	14,31	12,81	11,31	9,83	8,39	7,02	5,73	
HAX4/650-4	30	Q							24978	20136	15945	12352	9304	6747
		P							9,71	8,62	7,57	6,54	5,55	4,57
	40	Q							21012	16819	13202	10107	7480	5268
		P							10,39	9,10	7,86	6,67	5,53	4,42
	50	Q							17167	13632	10596	8006	5809	3951
		P							10,93	9,46	8,05	6,71	5,43	4,20
HGX5/725-4 [1] HGX5/725-4 S [1]	30	Q	76254	70105	58815	48024	39230	31558	24934	19288	14546	10636	7486	5024
		P	13,31	13,28	13,03	12,99	12,20	11,23	10,13	8,94	7,70	6,47	5,28	4,19
	40	Q	64689	59328	49517	40164	32541	25933	20266	15468	11467	8191	5568	3525
		P	16,28	16,01	15,29	14,87	13,61	12,22	10,76	9,25	7,76	6,32	4,98	3,78
	50	Q	53354	48782	40450	32498	26053	20515	15811	11869	8617	5982	3892	
		P	19,02	18,49	17,29	16,31	14,61	12,84	11,04	9,26	7,55	5,94	4,48	
HAX5/725-4	30	Q							26886	21437	16746	12756	9409	6644
		P							10,67	9,42	8,19	7,01	5,86	4,75
	40	Q							22619	17905	13864	10437	7565	5189
		P							11,41	9,93	8,51	7,15	5,84	4,60
	50	Q							18487	14513	11125	8265	5874	3892
		P							12,01	10,33	8,72	7,19	5,74	4,37
HGX5/830-4 [1] HGX5/830-4 S [1]	30	Q	86623	79925	67508	54430	44830	36400	29056	22717	17300	12722	8900	5752
		P	15,69	15,61	15,23	14,69	13,90	12,93	11,80	10,55	9,21	7,82	6,41	5,01
	40	Q	74069	68151	57216	45580	37311	30078	23798	18389	13769	9854	6561	3809
		P	19,30	18,89	17,91	16,93	15,69	14,28	12,75	11,13	9,45	7,74	6,04	4,38
	50	Q	61445	56332	46927	37034	30091	24051	18831	14348	10520	7263	4496	
		P	22,39	21,68	20,13	18,88	17,17	15,33	13,38	11,38	9,34	7,30	5,29	
HAX5/830-4	30	Q							30392	24266	19003	14530	10772	7655
		P							12,06	10,65	9,29	7,96	6,67	5,43
	40	Q							25602	20281	15733	11882	8654	5976
		P							12,90	11,24	9,65	8,12	6,65	5,25
	50	Q									12641	9414	6718	4480
		P									9,88	8,16	6,53	4,99
HGX5/945-4 [1] HGX5/945-4 S [1]	30	Q	99975	91955	77277	63293	52168	42473	34090	26900	20783	15620	11291	7678
		P	18,52	18,31	17,73	17,40	16,27	15,04	13,74	12,35	10,90	9,38	7,80	6,18
	40	Q	84751	77834	65213	52881	43552	35430	28395	22327	17107	12617	8737	5347
		P	22,17	21,71	20,66	19,84	18,30	16,69	14,99	13,23	11,40	9,52	7,59	5,61
	50	Q	69440	63623	53056	42757	35145	28515	22748	17723	13321	9424	5912	
		P	25,81	25,08	23,50	22,12	20,15	18,09	15,97	13,78	11,54	9,25	6,91	
HAX5/945-4	30	Q								27994	21989	16866	12548	8959
		P								12,27	10,72	9,21	7,74	6,32
	40	Q									18205	13799	10088	6997
		P									11,13	9,39	7,71	6,11
	50	Q										10929	7834	5248
		P										9,44	7,57	5,81
HGX5/1080-4 [1] HGX5/1080-4 S [1]	30	Q	113675	104548	87811	72501	59869	48801	39180	30889	23810	17826	12819	8672
		P	22,05	21,89	21,27	20,82	19,21	17,56	15,88	14,16	12,40	10,60	8,76	6,86
	40	Q	96893	88944	74420	61734	50695	41062	32716	25541	19419	14233	9866	6200
		P	26,74	26,17	24,80	23,74	21,61	19,46	17,30	15,13	12,94	10,72	8,49	6,22
	50	Q	80355	73583	61270	51086	41654	33468	26411	20366	15214	10840	7125	
		P	30,79	29,85	27,79	26,12	23,48	20,85	18,23	15,62	13,01	10,40	7,78	
HAX5/1080-4	30	Q							41973	33574	26360	20224	15061	10763
		P							16,66	14,73	12,86	11,05	9,29	7,58
	40	Q								28072	21828	16539	12098	8401
		P								15,55	13,36	11,27	9,26	7,33
	50	Q									17547	13107	9392	6297
		P									13,68	11,32	9,09	6,97

Relating to 20 °C suction gas temp. without liquid subcooling

[1] Compressors (R404A) are ASERCOM certified

Motor version -S- (more powerful motor)

Supplementary cooling or reduced suction gas temp.

Performance data

R404A/R507 — Performance data — 50 Hz

Type	Cond. temp. °C		Cooling capacity $\dot{Q}_o$ [W] Evaporating temperature °C 7,5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
HGX6/1240-4 [1]	30	Q	133368	122554	102765	83399	68935	56229	45169	35643	27538	20744	15146	10634
		P	27,78	27,28	26,04	23,70	22,26	20,54	18,62	16,56	14,43	12,29	10,21	8,25
HGX6/1240-4 S [1]	40	Q	113720	104299	87122	71042	58440	47422	37874	29684	22741	16931	12143	8265
		P	33,36	32,38	30,24	27,42	25,14	22,68	20,13	17,53	14,97	12,49	10,17	8,08
	50	Q	94323	86295	71734	58323	47668	38420	30468	23698	17998	13257	9362	
		P	38,27	36,83	33,86	30,45	27,41	24,30	21,19	18,14	15,22	12,49	10,02	
HAX6/1240-4	30	Q								38742	30407	23329	17378	12423
		P								17,00	14,83	12,74	10,72	8,75
	40	Q									25193	19081	13958	9695
		P									15,43	13,01	10,69	8,48
	50	Q										15126	10835	7265
		P										13,08	10,49	8,05
HGX6/1410-4 [1]	30	Q			112574	94071	76961	63138	51088	40671	31748	24176	17817	12528
		P			28,95	27,60	26,50	24,11	21,69	19,26	16,84	14,43	12,06	9,73
HGX6/1410-4 S [1]	40	Q			96228	80122	65316	53413	43056	34104	26417	19854	14276	9540
		P			33,76	31,54	30,24	26,98	23,78	20,67	17,65	14,74	11,96	9,32
	50	Q			79925	66235	53148	43254	34677	27278	20915	15450	10739	
		P			37,91	34,88	33,29	29,21	25,29	21,54	17,98	14,63	11,49	
HAX6/1410-4	30	Q									33768	25918	19311	13807
		P									16,48	14,13	11,86	9,68
	40	Q										21163	15482	10756
		P										14,43	11,83	9,36
	50	Q										16757	12003	8054
		P										14,53	11,62	8,90
HGX7/1620-4 [1]	30	Q	163130	150297	126636	106031	87518	71107	56728	44306	33770	25047	18065	12751
		P	32,39	32,05	30,98	30,00	28,31	26,22	23,83	21,24	18,56	15,88	13,30	10,93
HGX7/1620-4 S [1]	40	Q	139724	128531	107945	89756	73736	59585	47232	36603	27628	20232	14343	9890
		P	38,16	37,38	35,48	34,27	31,69	28,79	25,68	22,46	19,22	16,08	13,12	10,45
	50	Q	115792	106272	88826	73671	60144	48254	37928	29093	21678	15609	10816	
		P	43,47	42,23	39,46	37,57	34,13	30,47	26,68	22,85	19,10	15,52	12,22	
HGX7/1860-4 [1]	30	Q	184191	169853	143432	119116	98208	79858	63906	50195	38563	28854	20907	14563
		P	37,41	37,14	36,15	35,68	32,91	30,00	27,00	23,95	20,89	17,88	14,95	12,15
HGX7/1860-4 S [1]	40	Q	157436	144933	121960	100333	82508	66907	53368	41734	31846	23543	16668	11061
		P	45,37	44,40	42,11	39,79	36,14	32,43	28,71	25,02	21,40	17,91	14,59	11,48
	50	Q	130989	120333	100832	82100	67304	54394	43213	33601	25399	18448	12589	
		P	51,97	50,38	46,93	43,28	38,81	34,37	29,99	25,73	21,63	17,73	14,08	
HGX7/2110-4 [1]	30	Q	201969	186202	157288	130628	108549	89073	72027	57236	44527	33724	24655	17144
		P	46,49	45,47	43,22	40,64	37,84	34,82	31,63	28,33	24,95	21,53	18,14	14,81
HGX7/2110-4 S [1]	40	Q	173523	159904	134971	112651	93282	76227	61312	48362	37205	27665	19568	12741
		P	54,03	52,52	49,31	45,59	41,96	38,14	34,18	30,13	26,03	21,92	17,87	13,90
	50	Q	144329	132872	111953	93475	77007	62564	49972	39055	29641	21555	14623	
		P	60,77	58,78	54,63	49,93	45,43	40,76	35,99	31,14	26,28	21,44	16,68	
HGX7/2470-4 [1]	30	Q	254335	233623	195759	157695	130257	106132	85092	66910	51360	38215	27249	18235
		P	53,08	52,10	49,73	47,03	43,16	39,21	35,21	31,15	27,05	22,90	18,73	14,53
HGX7/2470-4 S [1]	40	Q	216832	198811	165981	135212	111218	90157	71803	55931	42312	30721	20931	12715
		P	62,30	60,54	56,70	52,81	47,88	42,92	37,94	32,95	27,94	22,94	17,95	12,98
	50	Q	179905	164564	136749	111576	91145	73270	57724	44281	32715	22799	14305	
		P	70,32	67,83	62,61	57,36	51,37	45,38	39,41	33,47	27,56	21,69	15,87	
HGX8/2830-4 [1]	30	Q	280334	258363	218657	182105	149962	121929	97702	76982	59466	44852	32841	23130
		P	58,49	57,89	57,29	54,05	50,41	46,43	42,19	37,75	33,17	28,54	23,91	19,37
HGX8/2830-4 S [1]	40	Q	240502	221237	187179	155251	127305	103039	82152	64342	49308	36749	26363	17849
		P	70,92	69,19	66,01	61,11	55,95	50,60	45,12	39,59	34,06	28,62	23,33	18,26
	50	Q	200747	184227	155772	128523	104826	84382	66888	52043	39545	29094	20387	
		P	81,06	78,33	73,50	67,07	60,51	53,90	47,31	40,80	34,45	28,32	22,48	
HGX8/3220-4 [1]	30	Q	299972	277577	236052	199764	165297	135207	109154	86797	67796	51812	38503	27530
		P	66,91	66,12	63,90	63,87	59,10	54,07	48,87	43,59	38,29	33,07	28,00	23,17
HGX8/3220-4 S [1]	40	Q	260037	240407	204062	170917	141015	114985	92486	73180	56724	42781	31008	21066
		P	81,79	79,73	75,15	71,84	65,49	59,02	52,53	46,09	39,78	33,68	27,88	22,45
	50	Q	217197	200466	169563	141839	116555	94639	75750	59548	45693	33845	23663	
		P	93,49	90,33	83,69	78,71	70,87	63,06	55,36	47,84	40,60	33,72	27,26	

Relating to 20 °C suction gas temp. without liquid subcooling

[1] Compressors (R404A) are ASERCOM certified

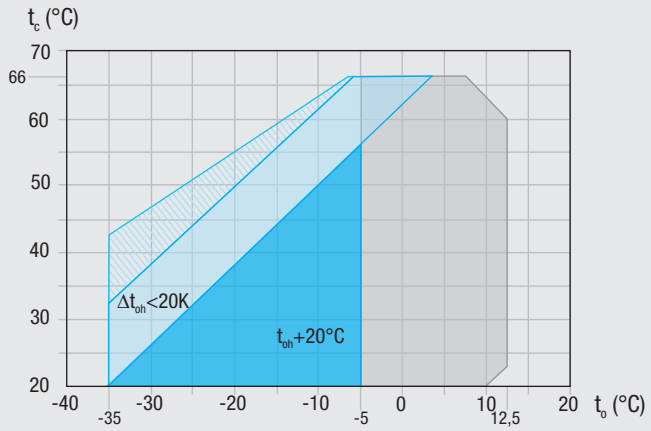
Motor version -S- (more powerful motor)

Supplementary cooling or reduced suction gas temp.

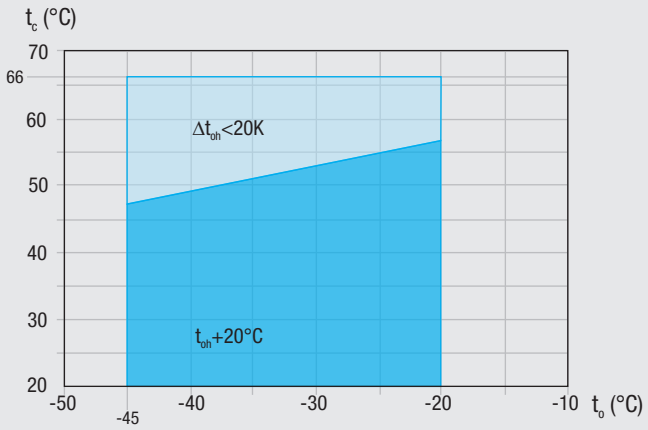
96215-02.2012-Gb ◦ Subject to change without notice

R22 Operating limits

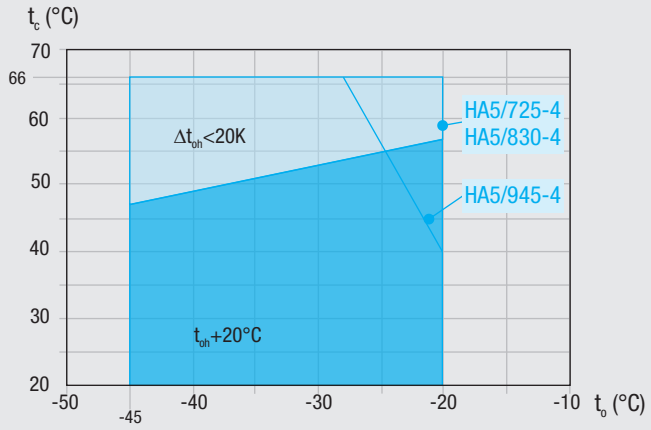
HG12P / HG22e / HG34e /
HG4 / HG5 / HG6① / HG7 / HG8②



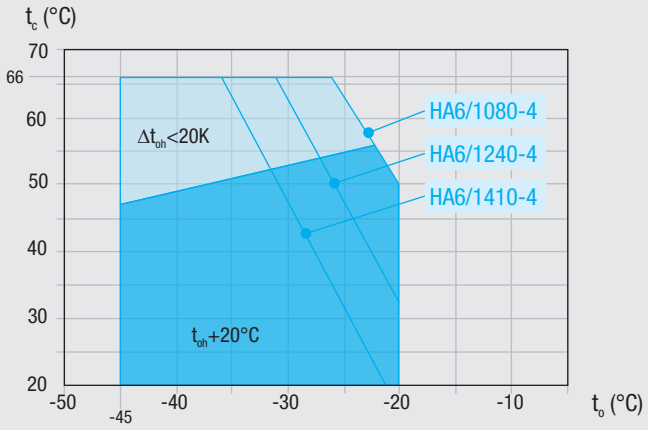
HA12P / HA22P / HA34P / HA4



HA5



HA6



Max. permissible operating pressure (LP/HP)[1]: 19/28 bar

[1] LP = low pressure HP = high pressure

① **HG7 „Motor version -S-“**
in the evaporation range of t_0 = 5 °C bis 12,5 °C
limited condensing temperature up to t_c = 50 °C

② **HG8/2830-4**
max. evaporating temperature t_0 = 0 °C

HG8/2470-4 S
in the evaporation range of t_0 = 7 °C bis 12,5 °C
limited condensing temperature up to t_c = 55 °C

HG8/3220-4 S
max. evaporating temperature t_0 = 5 °C

Unlimited application range

-HG Supplementary cooling or red. suction gas temp.
-HA reduced suction gas temperature

Supplementary cooling and
reduced suction gas temperature

Motor version -S-
(more powerful motor)

t_O Evaporating temperature (°C)
t_C Condensing temperature (°C)
Δt_{Oh} Suction gas superheat (K)
t_{Oh} Suction gas temperature (°C)

Performance data

R22 — Performance data — 50 Hz

Type	Cond. temp. °C		Cooling capacity $\dot{Q}_o$ [W] Evaporating temperature °C 12,5	10	7,5	5	0	-5	-10	-15	Power consumption P_e [kW] -20	-25	-30	-35	-45
HG12P/60-4 S	30	Q	7110	6523	5971	5454	4518	3703	2997	2390	1868	1422	1039	708	
		P	0,89	0,91	0,93	0,94	0,94	0,92	0,89	0,84	0,78	0,71	0,63	0,55	
	40	Q	6288	5759	5263	4799	3958	3227	2593	2044	1570	1158	798	477	
		P	1,20	1,19	1,19	1,18	1,14	1,08	1,01	0,94	0,85	0,76	0,66	0,57	
	50	Q	5494	5023	4581	4168	3422	2772	2207	1716	1287	909			
		P	1,47	1,44	1,42	1,38	1,31	1,22	1,12	1,02	0,91	0,80			
HA12P/60-4	30	Q									1824	1407	1054	758	512
		P									0,72	0,63	0,53	0,43	0,33
	40	Q									1599	1237	930	672	456
		P									0,79	0,68	0,57	0,46	0,35
	50	Q									1437	1127	865	643	455
		P									0,84	0,73	0,62	0,51	0,40
HG12P/75-4 HG12P/75-4 S	30	Q	8883	8149	7460	6814	5645	4626	3745	2985	2334	1776	1298	884	
		P	1,11	1,14	1,16	1,17	1,17	1,15	1,11	1,05	0,97	0,88	0,79	0,69	
	40	Q	7856	7195	6575	5995	4945	4031	3239	2554	1961	1447	997	596	
		P	1,49	1,49	1,48	1,47	1,42	1,35	1,27	1,17	1,06	0,95	0,83	0,71	
	50	Q	6864	6275	5723	5207	4275	3463	2758	2144	1608	1135			
		P	1,83	1,80	1,77	1,73	1,63	1,52	1,40	1,27	1,13	0,99			
HA12P/75-4	30	Q									2265	1748	1310	942	637
		P									0,90	0,78	0,66	0,53	0,41
	40	Q									1986	1536	1156	836	568
		P									0,99	0,85	0,72	0,58	0,44
	50	Q									1785	1400	1075	800	567
		P									1,05	0,91	0,78	0,64	0,51
HG12P/90-4 HG12P/90-4 S	30	Q	10595	9719	8897	8127	6732	5518	4466	3561	2784	2119	1548	1054	
		P	1,32	1,36	1,38	1,40	1,40	1,37	1,32	1,25	1,16	1,05	0,94	0,83	
	40	Q	9370	8582	7842	7150	5898	4808	3863	3046	2339	1726	1189	711	
		P	1,78	1,78	1,77	1,75	1,69	1,61	1,51	1,39	1,27	1,13	0,99	0,85	
	50	Q	8186	7484	6826	6211	5098	4130	3289	2557	1918	1354			
		P	2,19	2,15	2,11	2,06	1,95	1,82	1,67	1,51	1,35	1,19			
HA12P/90-4	30	Q									2702	2084	1562	1123	758
		P									1,06	0,92	0,77	0,62	0,47
	40	Q									2369	1832	1378	996	676
		P									1,16	1,00	0,84	0,67	0,51
	50	Q									2129	1669	1281	953	674
		P									1,22	1,06	0,90	0,74	0,58
HG12P/110-4 HG12P/110-4 S	30	Q	12456	11427	10460	9555	7915	6487	5251	4186	3273	2491	1820	1240	
		P	1,56	1,60	1,62	1,64	1,65	1,61	1,55	1,47	1,36	1,24	1,11	0,97	
	40	Q	11016	10089	9220	8406	6934	5653	4542	3581	2750	2029	1398	836	
		P	2,10	2,09	2,08	2,06	1,99	1,90	1,78	1,64	1,49	1,33	1,16	1,00	
	50	Q	9625	8799	8025	7302	5994	4856	3867	3007	2255	1592			
		P	2,57	2,53	2,48	2,42	2,29	2,14	1,96	1,78	1,59	1,39			
HA12P/110-4	30	Q									3175	2449	1835	1320	891
		P									1,25	1,09	0,92	0,74	0,57
	40	Q									2783	2153	1619	1170	794
		P									1,38	1,19	1,00	0,81	0,62
	50	Q									2501	1961	1505	1119	792
		P									1,46	1,27	1,08	0,89	0,70
HG22e/125-4 HG22e/125-4 S	30	Q	15700	14400	13200	12000	9930	8150	6630	5340	4250	3340	2580	1960	
		P	1,94	1,97	1,99	2,00	1,98	1,91	1,82	1,69	1,55	1,40	1,25	1,09	
	40	Q	13800	12700	11600	10600	8740	7170	5840	4700	3730	2900	2200	1600	
		P	2,54	2,53	2,50	2,47	2,37	2,24	2,08	1,90	1,72	1,52	1,33	1,15	
	50	Q	12000	11000	10000	9120	7540	6170	5010	4010	3150	2400			
		P	3,11	3,06	2,99	2,91	2,73	2,53	2,31	2,07	1,83	1,59			
HA22P/125-4	30	Q									3866	2983	2235	1607	1085
		P									1,53	1,33	1,12	0,91	0,69
	40	Q									3390	2621	1972	1425	967
		P									1,68	1,45	1,22	0,98	0,75
	50	Q									3046	2389	1833	1363	965
		P									1,78	1,55	1,32	1,09	0,86
HG22e/160-4 HG22e/160-4 S	30	Q	19400	17800	16300	14900	12300	10100	8190	6590	5240	4120	3190	2420	
		P	2,40	2,44	2,46	2,47	2,44	2,36	2,24	2,09	1,92	1,73	1,54	1,35	
	40	Q	17100	15600	14300	13100	10800	8860	7200	5790	4590	3580	2720	1980	
		P	3,13	3,12	3,09	3,05	2,93	2,77	2,57	2,35	2,11	1,88	1,64	1,42	
	50	Q	14800	13500	12400	11300	9300	7620	6180	4940	3880	2960			
		P	3,84	3,77	3,69	3,60	3,38	3,13	2,85	2,55	2,26	1,96			

HG Supplementary cooling or red. suction gas temp.
HA reduced suction gas temp.

Relating to 20 °C suction gas temperature, without liquid subcooling

Motor version -S- (more powerful motor)

Supplementary cooling and red. suction gas temp.

Performance data

R22 — Performance data — 50 Hz

Type	Cond. temp. °C		Cooling capacity $\dot{Q}_o$ [W] Evaporating temperature °C								Power consumption P_e [kW]				
			12,5	10	7,5	5	0	-5	-10	-15	-20	-25	-30	-35	-45
HA22P/160-4	30	Q									4773	3682	2759	1984	1340
		P									1,89	1,64	1,38	1,12	0,86
	40	Q									4185	3236	2434	1760	1194
		P									2,07	1,79	1,50	1,21	0,93
	50	Q									3761	2949	2262	1683	1191
		P									2,20	1,91	1,63	1,34	1,06
HG22e/190-4 HG22e/190-4 S	30	Q	23400	21400	19600	17900	14800	12200	9850	7920	6300	4950	3840	2910	
		P	2,90	2,94	2,97	2,98	2,94	2,84	2,70	2,52	2,31	2,09	1,86	1,63	
	40	Q	20600	18900	17200	15700	13000	10700	8680	6980	5540	4320	3280	2380	
		P	3,78	3,76	3,72	3,67	3,52	3,32	3,09	2,83	2,55	2,27	1,99	1,72	
	50	Q	17800	16300	14900	13600	11200	9200	7450	5960	4670	3560			
		P	4,63	4,54	4,44	4,33	4,06	3,76	3,43	3,08	2,72	2,37			
HA22P/190-4	30	Q									5775	4456	3338	2401	1621
		P									2,28	1,98	1,67	1,35	1,04
	40	Q									5064	3916	2945	2129	1445
		P									2,51	2,17	1,82	1,47	1,12
	50	Q									4550	3568	2738	2036	1441
		P									2,66	2,31	1,97	1,62	1,28
HG34e/215-4 HG34e/215-4 S	30	Q	26500	24300	22200	20300	16800	13900	11300	9010	7160	5620	4360	3310	
		P	3,30	3,35	3,38	3,39	3,35	3,25	3,08	2,88	2,64	2,38	2,12	1,86	
	40	Q	23300	21400	19600	17900	14800	12200	9870	7930	6290	4910	3730	2710	
		P	4,31	4,29	4,25	4,19	4,02	3,80	3,53	3,23	2,91	2,58	2,26	1,96	
	50	Q	20200	18500	17000	15500	12800	10500	8480	6780	5330	4060			
		P	5,29	5,19	5,07	4,94	4,64	4,29	3,91	3,51	3,11	2,71			
HA34P/215-4	30	Q									6576	5074	3801	2734	1846
		P									2,60	2,25	1,90	1,54	1,18
	40	Q									5766	4459	3354	2425	1646
		P									2,86	2,47	2,07	1,67	1,28
	50	Q									5181	4063	3117	2318	1641
		P									3,02	2,63	2,24	1,85	1,46
HG34e/255-4 HG34e/255-4 S	30	Q	31200	28600	26200	23900	19800	16300	13200	10600	8440	6630	5130	3890	
		P	3,87	3,94	3,98	3,99	3,94	3,82	3,62	3,37	3,10	2,80	2,49	2,19	
	40	Q	27400	25100	23000	21000	17400	14300	11600	9330	7410	5780	4390	3200	
		P	5,06	5,04	4,99	4,92	4,72	4,46	4,14	3,79	3,42	3,03	2,66	2,29	
	50	Q	23700	21800	19900	18200	15000	12300	9970	7970	6260	4770			
		P	6,21	6,09	5,96	5,80	5,45	5,04	4,59	4,12	3,64	3,17			
HA34P/255-4	30	Q									7732	5965	4469	3214	2170
		P									3,06	2,65	2,23	1,81	1,39
	40	Q									6779	5243	3943	2851	1935
		P									3,36	2,90	2,44	1,97	1,50
	50	Q									6092	4777	3665	2726	1930
		P									3,56	3,10	2,63	2,17	1,71
HG34e/315-4 HG34e/315-4 S	30	Q	38500	35300	32300	29500	24500	20100	16400	13200	10500	8200	6340	4800	
		P	4,79	4,87	4,92	4,93	4,87	4,71	4,49	4,19	3,83	3,45	3,07	2,70	
	40	Q	33900	31100	28500	26000	21600	17700	14400	11600	9160	7140	5420	3940	
		P	6,26	6,23	6,17	6,09	5,84	5,51	5,13	4,69	4,22	3,74	3,27	2,84	
	50	Q	29400	26900	24600	22500	18600	15200	12400	9850	7730	5890			
		P	7,67	7,53	7,37	7,18	6,74	6,23	5,69	5,10	4,50	3,91			
HA34P/315-4	30	Q									9546	7365	5518	3969	2679
		P									3,77	3,27	2,76	2,24	1,71
	40	Q									8369	6473	4868	3519	2389
		P									4,15	3,58	3,01	2,43	1,85
	50	Q									7521	5898	4525	3365	2382
		P									4,39	3,82	3,25	2,68	2,12
HG34e/380-4 HG34e/380-4 S	30	Q	46700	42800	39100	35700	29600	24300	19800	16000	12700	9950	7690	5830	
		P	5,82	5,92	5,97	5,99	5,91	5,72	5,43	5,06	4,64	4,19	3,73	3,29	
	40	Q	41000	37600	34400	31400	26100	21400	17400	14000	11200	8650	6560	4780	
		P	7,60	7,56	7,49	7,39	7,08	6,68	6,21	5,68	5,12	4,54	3,98	3,45	
	50	Q	35500	32500	29800	27200	22500	18500	15000	12000	9360	7120			
		P	9,31	9,14	8,93	8,70	8,16	7,56	6,89	6,18	5,46	4,75			
HA34P/380-4	30	Q									11550	8911	6677	4802	3242
		P									4,57	3,96	3,34	2,71	2,07
	40	Q									10127	7832	5891	4259	2890
		P									5,02	4,33	3,64	2,94	2,24
	50	Q									9101	7136	5475	4072	2882
		P									5,31	4,62	3,93	3,24	2,56

HG Supplementary cooling or red. suction gas temp.
HA reduced suction gas temp.

Relating to 20 °C suction gas temperature, without liquid subcooling

Motor version -S- (more powerful motor)

Supplementary cooling and red. suction gas temp.

96215-02.2012-Gb ◦ Subject to change without notice

R22	Performance data													50 Hz
Type	Cond. temp. °C		Cooling capacity $\dot{Q}_o$ [W] Evaporating temperature °C									Power consumption P_e [kW]		
			12,5	10	7,5	5	0	-5	-10	-15	-20	-25	-30	-35	-45
HG4/465-4 HG4/465-4 S	30	Q	56368	52042	47946	44073	36965	30657	25090	20203	15935	12226	9016	6244	
		P	6,99	6,93	6,86	6,80	6,64	6,46	6,24	5,98	5,66	5,28	4,83	4,29	
	40	Q	51425	47427	43647	40077	33537	27748	22649	18178	14277	10884	7939	5382	
		P	8,92	8,77	8,61	8,45	8,11	7,74	7,33	6,88	6,37	5,80	5,15	4,42	
	50	Q	45657	42026	38601	35374	29481	24288	19734	15759	12303	9304			
		P	10,92	10,66	10,39	10,11	9,55	8,96	8,33	7,66	6,92	6,13			
HG4/465-4 S	30	Q									16459	12893	9840	7251	5074
		P									5,74	5,32	4,83	4,26	3,58
	40	Q									14621	11365	8586	6234	4256
		P									6,58	5,98	5,29	4,51	3,61
	50	Q									12490	9599	7148	5086	3362
		P									7,24	6,42	5,50	4,48	3,32
HG4/555-4 HG4/555-4 S	30	Q	67083	61934	57059	52450	43991	36485	29859	24043	18964	14550	10730	7431	
		P	8,32	8,25	8,17	8,09	7,90	7,69	7,43	7,11	6,74	6,28	5,74	5,11	
	40	Q	61200	56442	51943	47695	39912	33023	26954	21634	16991	12953	9449	6405	
		P	10,62	10,43	10,25	10,05	9,65	9,21	8,72	8,18	7,58	6,90	6,13	5,27	
	50	Q	54335	50015	45939	42098	35085	28905	23485	18755	14641	11072			
		P	13,00	12,68	12,36	12,04	11,37	10,67	9,92	9,11	8,24	7,29			
HA4/555-4	30	Q									19587	15343	11711	8630	6039
		P									6,83	6,33	5,75	5,07	4,26
	40	Q									17400	13525	10218	7419	5065
		P									7,83	7,12	6,30	5,36	4,29
	50	Q									14864	11423	8507	6053	4001
		P									8,61	7,64	6,55	5,33	3,95
HG4/650-4 HG4/465-4 S	30	Q	78729	72686	66965	61556	51628	42819	35043	28217	22256	17076	12593	8721	
		P	9,77	9,68	9,59	9,49	9,28	9,02	8,72	8,35	7,90	7,37	6,74	6,00	
	40	Q	71825	66241	60961	55975	46842	38756	31633	25390	19941	15202	11089	7518	
		P	12,46	12,25	12,03	11,80	11,32	10,81	10,24	9,60	8,89	8,09	7,19	6,18	
	50	Q	63768	58698	53914	49406	41176	33923	27562	22011	17183	12995			
		P	15,25	14,88	14,51	14,13	13,34	12,52	11,64	10,69	9,67	8,56			
HA4/650-4	30	Q									22988	18007	13744	10128	7087
		P									8,01	7,43	6,75	5,95	5,00
	40	Q									20421	15873	11993	8707	5944
		P									9,19	8,35	7,39	6,30	5,04
	50	Q									17445	13407	9984	7104	4696
		P									10,11	8,97	7,69	6,25	4,63
HG5/725-4 HG5/725-4 S	30	Q	87633	80907	74539	68518	57467	47662	39007	31409	24774	19008	14017	9708	
		P	10,87	10,77	10,67	10,56	10,33	10,04	9,70	9,29	8,80	8,21	7,50	6,68	
	40	Q	79948	73733	67856	62306	52139	43139	35211	28261	22196	16921	12343	8368	
		P	13,87	13,63	13,39	13,13	12,60	12,03	11,39	10,69	9,90	9,01	8,01	6,88	
	50	Q	70981	65337	60012	54994	45833	37759	30680	24500	19126	14464			
		P	16,98	16,57	16,15	15,72	14,85	13,93	12,95	11,90	10,76	9,52			
HA5/725-4	30	Q									25631	20086	15342	11316	7926
		P									8,94	8,29	7,52	6,62	5,56
	40	Q									22752	17689	13371	9718	6646
		P									10,25	9,31	8,24	7,01	5,61
	50	Q									19423	14921	11112	7912	5239
		P									11,27	9,99	8,57	6,97	5,18
HG5/830-4 HG5/830-4 S	30	Q	100599	92878	85568	78656	65970	54713	44778	36056	28439	21820	16091	11144	
		P	12,48	12,37	12,25	12,13	11,85	11,53	11,14	10,67	10,10	9,42	8,61	7,66	
	40	Q	91777	84642	77896	71525	59854	49522	40421	32443	25480	19425	14169	9606	
		P	15,93	15,65	15,37	15,08	14,47	13,81	13,08	12,27	11,36	10,34	9,19	7,90	
	50	Q	81483	75004	68891	63131	52614	43346	35219	28125	21956	16605			
		P	19,49	19,02	18,54	18,05	17,05	15,99	14,87	13,66	12,36	10,93			
HA5/830-4	30	Q									29343	22994	17562	12953	9072
		P									10,24	9,49	8,61	7,58	6,37
	40	Q									26046	20248	15306	11124	7609
		P									11,73	10,66	9,43	8,03	6,42
	50	Q									22234	17080	12720	9059	6003
		P									12,90	11,44	9,81	7,98	5,92
HG5/945-4 HG5/945-4 S	30	Q	114460	105675	97357	89493	75059	62252	50947	41024	32358	24827	18308	12679	
		P	14,20	14,07	13,94	13,80	13,49	13,12	12,67	12,14	11,49	10,72	9,80	8,72	
	40	Q	104422	96304	88628	81379	68100	56345	45990	36912	28991	22101	16122	10929	
		P	18,12	17,80	17,48	17,15	16,46	15,71	14,88	13,96	12,93	11,77	10,46	8,98	
	50	Q	92709	85338	78383	71829	59863	49318	40072	32000	24981	18892			
		P	22,17	21,64	21,09	20,54	19,40	18,20	16,92	15,55	14,06	12,44			

HG Supplementary cooling or red. suction gas temp.
HA reduced suction gas temp.

Relating to 20 °C suction gas temperature, without liquid subcooling

Motor version -S- (more powerful motor)

Supplementary cooling and red. suction gas temp.

Performance data

R22 — Performance data — 50 Hz

Type	Cond. temp. °C		Cooling capacity $\dot{Q}_o$ [W] Evaporating temperature °C 12,5	10	7,5	5	0	-5	-10	-15	Power consumption P_e [kW] -20	-25	-30	-35	-45
HA5/945-4	30	Q									33374	26174	20007	14774	10374
		P									11,64	10,78	9,78	8,61	7,24
	40	Q									29594	22995	17376	12635	8674
		P									13,35	12,14	10,75	9,15	7,32
	50	Q										19387	14394	10227	6786
		P										13,04	11,20	9,12	6,77
HG6/1080-4 HG6/1080-4 S	30	Q	129363	119434	110034	101145	84833	70357	57581	46365	36571	28059	20692	14330	
		P	18,28	18,00	17,72	17,43	16,80	16,10	15,29	14,33	13,22	11,91	10,38	8,61	
	40	Q	118019	108844	100169	91976	76968	63681	51978	41719	32765	24979	18221	12352	
		P	22,56	22,15	21,72	21,28	20,33	19,27	18,07	16,71	15,16	13,38	11,36	9,06	
	50	Q	104781	96450	88589	81182	67658	55740	45289	36167	28234	21352			
		P	26,66	26,07	25,47	24,83	23,49	22,00	20,35	18,51	16,44	14,13			
HA6/1080-4	30	Q									37747	29595	22620	16702	11720
		P									12,65	11,26	9,89	8,49	7,05
	40	Q									33470	26012	19664	14306	9816
		P									14,58	12,95	11,30	9,62	7,86
	50	Q									28580	21920	16301	11605	7710
		P									16,24	14,31	12,36	10,34	8,23
HG6/1240-4 HG6/1240-4 S	30	Q	148504	137106	126315	116111	97384	80768	66101	53225	41982	32211	23754	16451	
		P	20,98	20,66	20,34	20,01	19,29	18,48	17,55	16,45	15,17	13,67	11,92	9,88	
	40	Q	135481	124948	114989	105584	88356	73103	59668	47891	37613	28675	20917	14180	
		P	25,90	25,43	24,94	24,43	23,34	22,12	20,75	19,18	17,40	15,36	13,04	10,40	
	50	Q	120284	110720	101696	93193	77669	63987	51990	41518	32411	24511			
		P	30,61	29,93	29,23	28,51	26,96	25,26	23,36	21,25	18,88	16,22			
HA6/1240-4	30	Q									43328	33978	25970	19174	13463
		P									14,52	12,92	11,35	9,75	8,10
	40	Q									38417	29848	22551	16399	11262
		P									16,74	14,87	12,98	11,05	9,03
	50	Q									32848	25165	18685	13281	8824
		P									18,64	16,44	14,20	11,89	9,46
HG6/1410-4 HG6/1410-4 S	30	Q	168964	155996	143718	132108	110802	91895	75208	60559	47766	36649	27026	18717	
		P	23,87	23,51	23,14	22,77	21,95	21,03	19,96	18,72	17,26	15,56	13,56	11,24	
	40	Q	154147	142163	130832	120131	100529	83176	67889	54490	42796	32626	23799	16134	
		P	29,47	28,93	28,37	27,80	26,55	25,17	23,61	21,83	19,80	17,48	14,84	11,83	
	50	Q	136857	125975	115708	106033	88370	72803	59153	47238	36877	27889			
		P	34,82	34,06	33,26	32,44	30,67	28,73	26,58	24,17	21,48	18,46			
HA6/1410-4	30	Q										38625	29529	21803	15324
		P										14,69	12,90	11,08	9,20
	40	Q											25605	18595	12767
		P											14,77	12,57	10,28
	50	Q												15015	9929
		P												13,54	10,78
HG7/1620-4 HG7/1620-4 S	30	Q	178802	164852	151711	139349	116850	97132	79968	65133	52401	41547	32345	24570	
		P	23,29	24,07	24,65	25,03	25,25	24,85	23,94	22,64	21,04	19,26	17,42	15,60	
	40	Q	163682	150728	138537	127084	106272	88068	72246	58580	46844	36813	28261	20963	
		P	31,23	31,46	31,51	31,39	30,68	29,46	27,83	25,89	23,77	21,56	19,38	17,34	
	50	Q	148020	136086	124873	114354	95282	78644	64215	51770	41082	31926			
		P	38,75	38,45	37,98	37,37	35,77	33,74	31,41	28,87	26,24	23,62			
HG7/1860-4 HG7/1860-4 S	30	Q	205257	189244	174158	159966	134139	111504	91800	74770	60154	47694	37131	28205	
		P	26,74	27,64	28,29	28,73	28,98	28,53	27,49	25,99	24,16	22,11	19,99	17,91	
	40	Q	187901	173029	159035	145887	121996	101099	82935	67247	53775	42259	32442	24065	
		P	35,85	36,12	36,17	36,03	35,22	33,82	31,94	29,72	27,28	24,75	22,25	19,90	
	50	Q	169921	156221	143350	131274	109380	90280	73717	59429	47160	36649			
		P	44,49	44,14	43,60	42,90	41,06	38,73	36,05	33,14	30,12	27,12			
HG7/2110-4 HG7/2110-4 S	30	Q	233537	215317	198153	182006	152621	126866	104448	85072	68442	54266	42247	32091	
		P	30,42	31,44	32,19	32,69	32,98	32,46	31,27	29,57	27,48	25,16	22,75	20,38	
	40	Q	213789	196869	180947	165987	138805	115028	94362	76512	61184	48082	36912	27380	
		P	40,79	41,09	41,16	41,00	40,08	38,48	36,35	33,82	31,04	28,16	25,31	22,64	
	50	Q	193332	177745	163100	149360	124450	102719	83873	67618	53658	41699			
		P	50,62	50,22	49,61	48,81	46,72	44,07	41,02	37,70	34,27	30,85			

HG Supplementary cooling or red. suction gas temp.
HA reduced suction gas temp.

Relating to 25 °C suction gas temperature, without liquid subcooling

Motor version -S- (more powerful motor)

Supplementary cooling and red. suction gas temp.

96215-02.2012-Gb ◦ Subject to change without notice

Performance data

R22			Performance data											50 Hz
Type	Cond. temp. °C		Cooling capacity $\dot{Q}_o$ [W]										Power consumption P_e [kW]	
			Evaporating temperature °C											
			12,5	10	7,5	5	0	-5	-10	-15	-20	-25	-30	-35	-45
HG8/2470-4 HG8/2470-4 S	30	Q	267888	247010	227287	208683	174692	149961	120514	95716	75087	58148	44418	33420	
		P	43,56	44,15	44,42	44,40	43,54	39,66	37,55	34,65	31,16	27,25	23,10	18,90	
	40	Q	243384	224002	205721	188504	157123	130966	105250	83688	65798	51101	39119	29370	
		P	58,85	58,09	57,09	55,85	52,76	45,79	42,21	38,05	33,48	28,69	23,85	19,15	
	50	Q	217933	200057	183226	167405	138654	113466	91260	72709	57336	44660			
		P	72,17	70,15	67,95	65,58	60,43	50,69	45,82	40,56	35,09	29,58			
HG8/2830-4 HG8/2830-4 S	30	Q	307524	283557	260916	239559	200540	166175	136141	110115	87775	68795	52854	39628	
		P	50,00	50,68	51,00	50,97	49,99	47,94	45,03	41,45	37,41	33,11	28,75	24,54	
	40	Q	279395	257146	236159	216394	180371	148752	121215	97435	77090	59855	45409	33426	
		P	67,55	66,69	65,53	64,11	60,56	56,25	51,37	46,13	40,73	35,37	30,24	25,55	
	50	Q	250178	229657	210336	192175	159170	130319	105299	83786	65458	49990			
		P	82,84	80,53	78,00	75,28	69,37	62,99	56,34	49,63	43,05	36,81			
HG8/3220-4 HG8/3220-4 S	30	Q				272565	228170	189070	154898	125287	99868	78274	60136	45087	
		P				57,99	56,87	54,54	51,23	47,16	42,57	37,68	32,72	27,92	
	40	Q				246209	205222	169247	137916	110859	87711	68102	51665	38032	
		P				72,94	68,91	64,00	58,45	52,49	46,34	40,24	34,41	29,07	
	50	Q				218652	181100	148274	119807	95330	74477	56878			
		P				85,66	78,92	71,66	64,10	56,46	48,98	41,89			

Relating to 25 °C suction gas temperature
(HGX8/2470-4 to 20 °C suction gas temperature)
without liquid subcooling

HG Supplementary cooling or red. suction gas temp.
HA reduced suction gas temp.

Motor version -S-
(more powerful motor)

Supplementary cooling and red. suction gas temp.