

HG

Type	Number of cylinders	Displacement		Electrical data						Weight	Connections ⁵⁾				Oil charge	Fre- quency range
				Voltage ¹⁾	Max. Working current ²⁾		Max. Power consump- tion ²⁾	Starting current (rotor locked)	Discharge line DV		Suction line SV					
					A	kW			A		kg	mm	inch	mm		
		50 Hz 1450 rpm	60 Hz 1740 rpm		Δ	Y		Δ	Y		mm	inch	mm	inch	Ltr.	Hz
HG12P/60-4 S	2	5.40	6.40	³⁾	6.8	3.9	2.2	40	23	48.0	12	1½	16	5⁄8	0.8	30–70
HG12P/75-4	2	6.70	8.10	³⁾	7.1	4.1	2.3	40	23	48.0	12	1½	16	5⁄8	0.8	30–70
HG12P/75-4 S	2	6.70	8.10	³⁾	8.0	4.6	2.6	43	25	49.0	12	1½	16	5⁄8	0.8	30–70
HG12P/90-4	2	8.00	9.60	³⁾	8.5	4.9	2.8	43	25	49.0	12	1½	16	5⁄8	0.8	30–70
HG12P/90-4 S	2	8.00	9.60	³⁾	9.1	5.3	3.0	45	26	49.0	12	1½	16	5⁄8	0.8	30–70
HG12P/110-4	2	9.40	11.30	³⁾	9.2	5.3	3.1	43	25	49.0	12	1½	16	5⁄8	0.8	30–70
HG12P/110-4 S	2	9.40	11.30	³⁾	10.6	6.1	3.6	45	26	49.0	12	1½	16	5⁄8	0.8	30–70
HG22e/125-4	2	11.10	13.30	³⁾	9.3	5.4	3.0	69	40	74.0	16	5⁄8	22	7⁄8	1.0	30–70
HG22e/125-4 S	2	11.10	13.30	³⁾	10.8	6.2	3.6	69	40	74.0	16	5⁄8	22	7⁄8	1.0	30–70
HG22e/160-4	2	13.70	16.40	³⁾	11.1	6.4	3.7	69	40	74.0	16	5⁄8	22	7⁄8	1.0	30–70
HG22e/160-4 S	2	13.70	16.40	³⁾	13.1	7.6	4.4	87	50	76.0	16	5⁄8	22	7⁄8	1.0	30–70
HG22e/190-4	2	16.50	19.80	³⁾	13.8	8.0	4.8	69	40	74.0	16	5⁄8	22	7⁄8	1.0	30–70
HG22e/190-4 S	2	16.50	19.80	³⁾	16.2	9.4	5.6	87	50	75.0	16	5⁄8	22	7⁄8	1.0	30–70
HG34e/215-4	4	18.80	22.60	³⁾	14.0	8.1	4.8	87	50	92.0	22	7⁄8	28	1½	1.2	25–70
HG34e/215-4 S	4	18.80	22.60	³⁾	18.3	10.5	6.0	132	76	97.0	22	7⁄8	28	1½	1.2	25–70
HG34e/255-4	4	22.10	26.60	³⁾	17.0	9.8	6.0	87	50	92.0	22	7⁄8	28	1½	1.2	25–70
HG34e/255-4 S	4	22.10	26.60	³⁾	21.1	12.2	7.2	132	76	96.0	22	7⁄8	28	1½	1.2	25–70
HG34e/315-4	4	27.30	32.80	³⁾	21.1	12.2	7.4	111	64	94.0	22	7⁄8	28	1½	1.2	25–70
HG34e/315-4 S	4	27.30	32.80	³⁾	25.5	14.7	8.9	132	76	97.0	22	7⁄8	28	1½	1.2	25–70
HG34e/380-4	4	33.10	39.70	³⁾	26.1	15.1	9.3	111	64	93.0	22	7⁄8	28	1½	1.2	25–70
HG34e/380-4 S	4	33.10	39.70	³⁾	31.2	18.0	11.1	132	76	96.0	22	7⁄8	28	1½	1.2	25–70
		PW 1+2* PW1/PW1+2*														
HG44e/475-4	4	41.30	49.60	⁴⁾	19.0		11.0	83	109	164.0	28	1½	35	1¾	2.3	25–70
HG44e/475-4 S	4	41.30	49.60	⁴⁾	23.0		13.1	115	150	168.0	28	1½	35	1¾	2.3	25–70
HG44e/565-4	4	49.20	59.00	⁴⁾	22.0		13.2	83	109	164.0	28	1½	35	1¾	2.3	25–70
HG44e/565-4 S	4	49.20	59.00	⁴⁾	26.0		15.6	133	171	170.0	28	1½	42	1⅝	2.3	25–70
HG44e/665-4	4	57.70	69.20	⁴⁾	26.0		15.4	115	150	171.0	28	1½	42	1⅝	2.3	25–70
HG44e/665-4 S	4	57.70	69.20	⁴⁾	30.0		18.3	133	171	168.0	28	1½	42	1⅝	2.3	25–70
HG44e/770-4	4	67.00	80.40	⁴⁾	30.0		17.8	133	171	168.0	28	1½	42	1⅝	2.3	25–70
HG44e/770-4 S	4	67.00	80.40	⁴⁾	35.0		21.4	133	171	168.0	28	1½	42	1⅝	2.3	25–70
HG56e/850-4	6	73.80	88.60	⁴⁾	32.6		19.7	133	171	194.3	35	1¾	54	2½	2.7	25–70
HG56e/850-4 S	6	73.80	88.60	⁴⁾	39.4		23.5	162	210	211.1	35	1¾	54	2½	2.7	25–70
HG56e/995-4	6	86.60	103.90	⁴⁾	38.9		23.2	162	210	194.3	35	1¾	54	2½	2.7	25–70
HG56e/995-4 S	6	86.60	103.90	⁴⁾	46.4		27.7	189	246	211.3	35	1¾	54	2½	2.7	25–70
HG56e/1155-4	6	100.40	120.50	⁴⁾	46.9		28.0	189	246	211.8	35	1¾	54	2½	2.7	25–70
HG56e/1155-4 S	6	100.40	120.50	⁴⁾	58.3		33.3	253	330	220.6	35	1¾	54	2½	2.7	25–70

*PW = Part Winding, motors for part winding start

1 - first part winding

2 - second part winding

HG

Type	Number of cylinders	Displacement 50 Hz/60Hz (1450/1.740 rpm)		Electrical data						Weight	Connections ⁵⁾				Oil charge	Fre- quency range
				Voltage ¹⁾	Max. Working current ²⁾		Max. Power consump- tion ²⁾	Starting current (rotor locked)			Discharge line DV		Suction line SV			
					A	kW		A	kg							
		50 Hz 1450 rpm	60 Hz 1.740 rpm		Δ	Y		Δ	Y		mm	inch	mm	inch	Ltr.	Hz
HG66e/1340-4	6	116.50	139.80	4)	53.7		31.9	170	275	282.0	42	1 5⁄8	54	2 1⁄8	4.4	25-60
HG66e/1340-4 S	6	116.50	139.80	4)	65.3		38.1	196	335	287.0	42	1 5⁄8	54	2 1⁄8	4.4	25-60
HG66e/1540-4	6	133.80	160.50	4)	62.1		37.2	170	275	280.0	42	1 5⁄8	54	2 1⁄8	4.4	25-60
HG66e/1540-4 S	6	133.80	160.50	4)	75.0		44.4	196	335	285.0	42	1 5⁄8	54	2 1⁄8	4.4	25-60
HG66e/1750-4	6	152.20	182.60	4)	71.9		42.4	196	335	280.0	42	1 5⁄8	54	2 1⁄8	4.4	25-60
HG66e/1750-4 S	6	152.20	182.60	4)	86.8		50.7	222	361	282.0	42	1 5⁄8	54	2 1⁄8	4.4	25-60
HG66e/2070-4	6	180.00	216.00	4)	85.1		50.7	196	335	276.0	42	1 5⁄8	64	2 1⁄8	4.4	25-60
HG66e/2070-4 S	6	180.00	216.00	4)	103.0		60.7	222	361	278.0	42	1 5⁄8	64	2 1⁄8	4.4	25-60
HG88e/2400-4	8	209.10	250.90	4)	101.0		59.5	298	438	452.0	54	2 1⁄8	76	3 1⁄8	9.6	25-60
HG88e/2400-4 S	8	209.10	250.90	4)	120.0		69.8	447	657	452.0	54	2 1⁄8	76	3 1⁄8	9.6	25-60
HG88e/2735-4	8	237.90	285.50	4)	116.0		67.1	386	567	455.0	54	2 1⁄8	76	3 1⁄8	9.6	25-60
HG88e/2735-4 S	8	237.90	285.50	4)	136.0		80.0	447	657	464.0	54	2 1⁄8	76	3 1⁄8	9.6	25-60
HG88e/3235-4	8	281.30	337.60	4)	135.0		79.2	447	657	459.0	54	2 1⁄8	76	3 1⁄8	9.6	25-60
HG88e/3235-4 S	8	281.30	337.60	4)	162.0		93.9	538	791	467.0	54	2 1⁄8	76	3 1⁄8	9.6	25-60

*PW = Part Winding, motors for part winding start

1 - first part winding

2 - second part winding

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 50 Hz operation. For 60 Hz 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) PW = Part Winding, motors for part winding start (no start unloaders required)
- Winding ratios:
HG44e, HG56e, HG66e, HG88e = 50 % / 50 %
- Designs for Y/Δ on request
- 5) For soldering connections

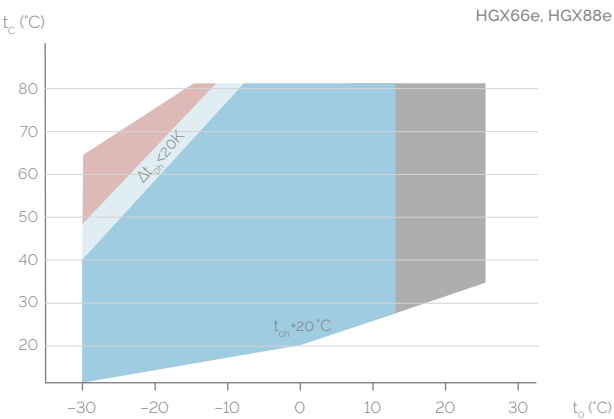
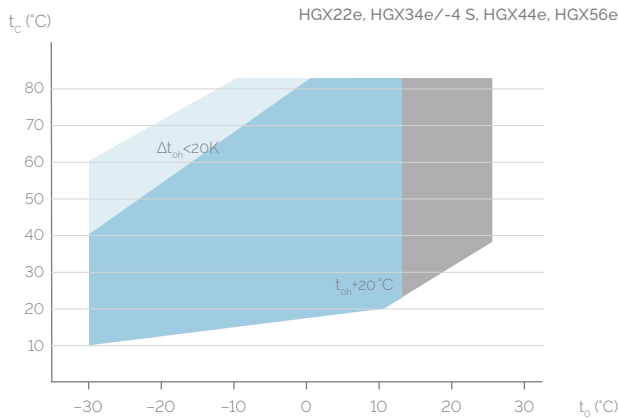
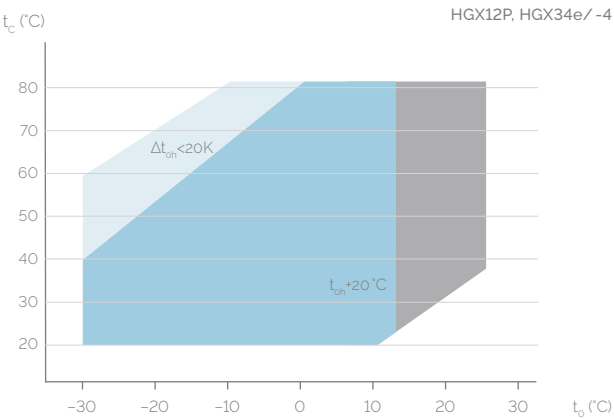
Oil sump heater 110-240 V - 1 - 50 / 60 Hz (option)

- HG12P, HG22e, HG34e: 50–120 W
- PTC heater, self-regulating, installation in housing bore

Oil sump heater 230 V - 1 - 50 / 60 Hz (option)

- HG44e, HG56e, HG66e: 160 W, installation in housing bore
- HG88e: 200 W, installation in immersion sleeve
- Permanently set version

R134a



- t_o Evaporating temperature (°C)
t_c Condensing temperature (°C)
Δt_{sh} Suction gas superheat (K)
t_{sh} Suction gas temperature (°C)
- Unlimited application range
 - Supplementary cooling or reduced suction gas temperature (Δt_{sh} < 20K)
 - Supplementary cooling and reduced suction gas temperature (Δt_{sh} < 20K)
 - Motor version -S- (more powerful motor)

Max. permissible operating pressure (LP/HP) ¹⁾: 19/28 bar
¹⁾ LP = low pressure, HP = high pressure

Notes

Operating limits

Compressor operation is possible within the limits shown on the application diagrams. Please note the colored areas. Compressor application limits should not be chosen for design purposes or continuous operation.

Performance data

The performance data for R134a are based on European Standard EN 12900 50 Hz power supply frequency.
This signifies: 20 °C suction gas temperature without liquid subcooling.
This results in significant differences compared to specifications with liquid undercooling and/or suction-gas temperatures.

A comprehensive modification to 20 °C suction gas temperature will follow at a later date.

R134a | 50 Hz

Type		Cooling capacity Q _o [kW]								Power consumption P _e [kW]			
		Evaporating temperature °C											
		Cond. temp. °C											
		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	
HGX12P/60-4S	30	Q	4920	4490	4080	3700	3010	2420	1910	1480	1130	836	605
		P	0.703	0.710	0.711	0.706	0.682	0.645	0.597	0.544	0.491	0.443	0.403
	40	Q	4260	3880	3520	3190	2590	2070	1630	1250	932	670	456
		P	0.851	0.843	0.830	0.813	0.768	0.713	0.653	0.592	0.535	0.487	0.453
	50	Q	3630	3300	2990	2700	2190	1740	1350	1030	742	505	302
		P	0.991	0.968	0.942	0.912	0.846	0.774	0.701	0.631	0.571	0.523	0.494
	60	Q	3020	2740	2480	2240	1800	1420	1100	806	558	341	146
		P	1.11	1.08	1.04	0.999	0.910	0.821	0.735	0.657	0.593	0.546	0.521
	70	Q	2450	2220	2010	1810	1450	1130	847	602	381	-	-
		P	1.22	1.17	1.12	1.06	0.956	0.849	0.750	0.664	0.595	-	-
HGX12P/75-4	30	Q	6150	5610	5100	4620	3760	3020	2390	1850	1410	1050	756
		P	0.879	0.887	0.888	0.882	0.853	0.805	0.746	0.680	0.614	0.553	0.503
	40	Q	5320	4850	4400	3980	3230	2590	2030	1560	1170	837	569
		P	1.06	1.05	1.03	1.01	0.959	0.891	0.815	0.739	0.668	0.609	0.565
	50	Q	4530	4120	3730	3380	2730	2170	1690	1280	927	630	377
		P	1.23	1.21	1.17	1.14	1.05	0.967	0.875	0.789	0.713	0.654	0.617
	60	Q	3780	3430	3100	2800	2250	1780	1370	1010	697	425	182
		P	1.39	1.35	1.30	1.24	1.13	1.02	0.918	0.821	0.741	0.682	0.651
	70	Q	3070	2780	2510	2260	1800	1410	1060	751	476	-	-
		P	1.53	1.46	1.40	1.33	1.19	1.06	0.937	0.829	0.743	-	-
HGX12P/90-4	30	Q	7300	6670	6070	5520	4510	3630	2870	2230	1700	1260	912
		P	1.08	1.10	1.12	1.12	1.10	1.06	0.997	0.915	0.826	0.735	0.649
	40	Q	6380	5820	5290	4790	3890	3110	2440	1880	1410	1020	708
		P	1.33	1.33	1.32	1.30	1.24	1.16	1.06	0.955	0.846	0.742	0.649
	50	Q	5490	4990	4520	4080	3290	2610	2030	1540	1130	793	522
		P	1.59	1.56	1.53	1.48	1.38	1.26	1.14	1.01	0.885	0.770	0.672
	60	Q	4620	4180	3780	3400	2720	2140	1640	1230	876	592	359
		P	1.82	1.77	1.71	1.65	1.51	1.35	1.20	1.05	0.914	0.790	0.690
	70	Q	3780	3410	3060	2750	2180	1690	1280	937	653	-	-
		P	2.00	1.93	1.84	1.76	1.58	1.40	1.22	1.05	0.903	-	-
HGX12P/110-4	30	Q	8620	7860	7150	6480	5280	4240	3350	2600	1980	1470	1060
		P	1.23	1.24	1.24	1.23	1.19	1.13	1.04	0.954	0.861	0.776	0.706
	40	Q	7460	6790	6170	5580	4530	3620	2850	2190	1640	1180	798
		P	1.49	1.47	1.45	1.42	1.34	1.24	1.14	1.03	0.938	0.854	0.793
	50	Q	6350	5770	5230	4730	3830	3040	2370	1790	1300	884	529
		P	1.73	1.69	1.65	1.59	1.48	1.35	1.22	1.10	1.00	0.917	0.866
	60	Q	5290	4800	4350	3920	3160	2490	1920	1420	978	596	255
		P	1.96	1.89	1.82	1.75	1.59	1.43	1.28	1.15	1.03	0.957	0.914
	70	Q	4300	3890	3520	3160	2530	1970	1490	1060	668	-	-
		P	2.15	2.05	1.96	1.86	1.67	1.48	1.31	1.16	1.04	-	-
HGX22e/125-4	30	Q	10200	9270	8440	7660	6220	4960	3860	2930	2160	1550	1090
		P	1.30	1.35	1.38	1.39	1.39	1.34	1.25	1.14	1.02	0.891	0.765
	40	Q	8990	8200	7450	6740	5440	4300	3310	2480	1790	1260	860
		P	1.69	1.70	1.69	1.67	1.59	1.48	1.35	1.20	1.05	0.903	0.769
	50	Q	7800	7090	6420	5780	4630	3620	2750	2020	1440	978	657
		P	2.02	1.98	1.94	1.88	1.75	1.59	1.41	1.24	1.06	0.908	0.773
	60	Q	6570	5950	5360	4810	3810	2940	2200	1590	1110	744	504
		P	2.27	2.21	2.13	2.04	1.86	1.66	1.45	1.25	1.07	0.909	0.783
	70	Q	5330	4800	4310	3840	3000	2280	1690	1200	829	-	-
		P	2.48	2.38	2.27	2.16	1.93	1.70	1.47	1.25	1.06	-	-
HGX22e/160-4	30	Q	12800	11600	10600	9560	7780	6240	4920	3810	2870	2110	1490
		P	1.63	1.65	1.66	1.65	1.63	1.59	1.51	1.41	1.29	1.15	0.983
	40	Q	11200	10200	9200	8330	6750	5390	4230	3240	2410	1730	1160
		P	2.07	2.05	2.03	2.00	1.92	1.81	1.68	1.53	1.36	1.17	0.962
	50	Q	9640	8760	7930	7170	5780	4580	3560	2680	1940	1310	783
		P	2.46	2.41	2.36	2.29	2.15	1.99	1.80	1.60	1.38	1.14	0.884
	60	Q	8230	7460	6730	6060	4840	3790	2880	2100	1430	844	335
		P	2.80	2.72	2.63	2.54	2.33	2.11	1.87	1.61	1.34	1.04	0.744
	70	Q	6880	6210	5580	4990	3930	3000	2190	1490	862	-	-
		P	3.09	2.97	2.85	2.72	2.45	2.17	1.87	1.56	1.23	-	-
HGX22e/190-4	30	Q	15300	14000	12900	11700	9630	7800	6180	4790	3610	2640	1870
		P	2.04	2.06	2.06	2.05	2.00	1.92	1.80	1.65	1.48	1.29	1.09
	40	Q	13600	12500	11400	10400	8460	6810	5360	4110	3060	2200	1530
		P	2.59	2.55	2.51	2.46	2.33	2.17	1.98	1.78	1.57	1.34	1.11
	50	Q	11900	10800	9840	8940	7270	5800	4520	3430	2520	1790	1220
		P	3.09	3.01	2.92	2.83	2.62	2.39	2.14	1.89	1.63	1.37	1.12
	60	Q	10100	9160	8320	7520	6070	4800	3700	2770	2010	1410	959
		P	3.54	3.41	3.28	3.14	2.86	2.56	2.26	1.96	1.66	1.37	1.10
	70	Q	8280	7510	6790	6110	4880	3810	2900	2150	1540	-	-
		P	3.91	3.74	3.57	3.39	3.03	2.68	2.32	1.97	1.64	-	-

Relating to 20 °C suction gas temperature without liquid subcooling

Supplementary cooling or reduced suction gas temperature

R134a | 50 Hz

Type		Cooling capacity Q _o [kW]										Power consumption P _e [kW]	
		Evaporating temperature °C											
		Cond. temp. °C		12.5	10	7.5	5	0	-5	-10	-15	-20	-25
HGX34e/215-4	30	Q	17200	15700	14400	13000	10600	8450	6590	5000	3670	2610	1800
		P	2.27	2.30	2.32	2.31	2.25	2.14	1.98	1.80	1.59	1.38	1.18
	40	Q	15200	13800	12600	11400	9120	7190	5530	4120	2970	2060	1400
		P	2.87	2.84	2.78	2.72	2.55	2.34	2.11	1.87	1.64	1.42	1.22
	50	Q	13000	11800	10700	9540	7590	5890	4440	3240	2270	1540	1040
		P	3.38	3.27	3.16	3.03	2.76	2.47	2.18	1.90	1.64	1.42	1.24
HGX34e/255-4 ¹⁾	30	Q	10800	9690	8690	7750	6070	4620	3400	2420	1660	1120	784
		P	3.79	3.62	3.45	3.27	2.90	2.54	2.20	1.89	1.61	1.39	1.24
	40	Q	8590	7680	6830	6040	4630	3440	2480	1730	1190	-	-
		P	4.12	3.89	3.66	3.43	2.99	2.56	2.17	1.84	1.56	-	-
	50	Q	20600	18800	17200	15600	12700	10100	7800	5890	4320	3080	2190
		P	2.61	2.67	2.71	2.71	2.66	2.53	2.34	2.12	1.88	1.63	1.41
HGX34e/315-4 ¹⁾	30	Q	18100	16500	15000	13600	11000	8660	6660	4960	3570	2490	1710
		P	3.36	3.35	3.31	3.25	3.08	2.84	2.57	2.27	1.97	1.68	1.43
	40	Q	15600	14200	12900	11600	9310	7280	5540	4070	2880	1960	1330
		P	4.02	3.93	3.83	3.71	3.42	3.08	2.73	2.36	2.01	1.68	1.41
	50	Q	13100	11900	10700	9610	7640	5920	4450	3220	2240	1510	1030
		P	4.56	4.41	4.24	4.06	3.66	3.23	2.80	2.37	1.96	1.61	1.32
HGX34e/380-4 ¹⁾	30	Q	10500	9430	8480	7590	5970	4570	3380	2410	1660	-	-
		P	4.98	4.77	4.54	4.30	3.79	3.28	2.76	2.28	1.83	-	-
	40	Q	25500	23300	21100	19200	15500	12400	9660	7390	5520	4040	2920
		P	3.40	3.43	3.43	3.40	3.29	3.11	2.88	2.61	2.32	2.02	1.72
	50	Q	22300	20300	18500	16700	13500	10700	8260	6260	4620	3320	2330
		P	4.22	4.17	4.10	4.01	3.78	3.49	3.16	2.80	2.43	2.07	1.73
HGX34e/475-4	30	Q	19200	17400	15800	14200	11400	8950	6880	5140	3720	2600	1740
		P	4.97	4.85	4.71	4.55	4.19	3.79	3.36	2.91	2.47	2.04	1.65
	40	Q	16100	14600	13100	11800	9350	7280	5520	4050	2850	1900	1170
		P	5.63	5.44	5.22	5.00	4.51	4.00	3.46	2.93	2.41	1.92	1.47
	50	Q	13100	11800	10600	9390	7380	5660	4200	3000	2010	-	-
		P	6.18	5.91	5.62	5.33	4.71	4.08	3.44	2.82	2.22	-	-
HGX34e/565-4	30	Q	30700	28100	25600	23200	19000	15300	12100	9310	7060	5250	3860
		P	4.27	4.28	4.26	4.22	4.06	3.83	3.53	3.20	2.83	2.46	2.09
	40	Q	27000	24600	22400	20300	16600	13300	10400	8000	6020	4420	3180
		P	5.26	5.19	5.09	4.97	4.67	4.30	3.89	3.46	3.00	2.56	2.13
	50	Q	23200	21200	19300	17400	14100	11300	8760	6670	4940	3540	2450
		P	6.17	6.01	5.83	5.63	5.18	4.69	4.16	3.62	3.07	2.55	2.06
HGX44e/475-4	30	Q	19600	17800	16100	14600	11700	9240	7130	5350	3860	2650	1690
		P	6.97	6.73	6.46	6.18	5.59	4.96	4.31	3.66	3.02	2.42	1.86
	40	Q	16000	14500	13100	11800	9340	7290	5530	4040	2800	-	-
		P	7.65	7.31	6.97	6.60	5.86	5.09	4.32	3.56	2.83	-	-
	50	Q	39200	35700	32500	29500	24100	19400	15400	12100	9190	6850	4920
		P	4.71	4.75	4.76	4.74	4.62	4.41	4.13	3.79	3.42	3.03	2.63
HGX44e/565-4	30	Q	34500	31400	28600	25900	21100	16900	13400	10400	7790	5670	3890
		P	5.95	5.90	5.82	5.71	5.43	5.07	4.65	4.19	3.70	3.20	2.72
	40	Q	29900	27200	24700	22300	18100	14400	11300	8660	6430	4520	2880
		P	7.12	6.97	6.80	6.61	6.16	5.64	5.08	4.49	3.88	3.27	2.69
	50	Q	25400	23000	20800	18800	15100	12000	9280	7000	5040	3340	1840
		P	8.16	7.91	7.65	7.36	6.74	6.06	5.35	4.62	3.89	3.17	2.49
HGX44e/665-4 ¹⁾	30	Q	20800	18800	16900	15200	12100	9450	7210	5280	3600	-	-
		P	8.99	8.65	8.28	7.90	7.10	6.26	5.40	4.52	3.66	-	-
	40	Q	46600	42600	38700	35200	28800	23200	18500	14500	11100	8310	6010
		P	5.58	5.62	5.64	5.61	5.47	5.22	4.88	4.48	4.03	3.56	3.09
	50	Q	41100	37500	34100	30900	25200	20300	16100	12500	9480	6950	4820
		P	7.07	7.01	6.91	6.79	6.45	6.01	5.51	4.95	4.37	3.78	3.19
HGX44e/665-4 ¹⁾	30	Q	35700	32500	29500	26700	21700	17400	13700	10600	7890	5610	3640
		P	8.49	8.31	8.10	7.87	7.33	6.71	6.03	5.31	4.58	3.86	3.17
	40	Q	30400	27600	25000	22600	18200	14500	11400	8620	6280	4240	2410
		P	9.75	9.45	9.13	8.78	8.03	7.21	6.35	5.47	4.59	3.74	2.92
	50	Q	25000	22600	20400	18400	14700	11600	8910	6610	4590	-	-
		P	10.7	10.3	9.90	9.44	8.47	7.45	6.41	5.36	4.32	-	-
HGX44e/665-4 ¹⁾	30	Q	55700	50900	46400	42100	34400	27700	21900	17000	12900	9520	6880
		P	6.61	6.71	6.76	6.76	6.62	6.33	5.92	5.40	4.82	4.20	3.57
	40	Q	49200	44900	40800	37000	30100	24100	18900	14600	10900	7930	5580
		P	8.52	8.45	8.34	8.18	7.76	7.21	6.57	5.86	5.11	4.35	3.61
	50	Q	42600	38800	35200	31800	25700	20400	15900	12100	8940	6360	4310
		P	10.2	10.0	9.73	9.42	8.72	7.92	7.06	6.16	5.26	4.37	3.54
HGX44e/665-4 ¹⁾	30	Q	36000	32700	29500	26600	21300	16800	13000	9700	7030	4850	3110
		P	11.6	11.3	10.8	10.4	9.45	8.42	7.35	6.27	5.22	4.22	3.30
	40	Q	29400	26500	23900	21400	17000	13200	10100	7380	5200	-	-
		P	12.8	12.3	11.7	11.1	9.90	8.64	7.38	6.14	4.95	-	-

Relating to 20 °C suction gas temperature without liquid subcooling

Supplementary cooling or reduced suction gas temperature

¹⁾ ASERCOM certified

R134a | 50 Hz

Type		Cooling capacity Q _o [kW]										Power consumption P _e [kW]	
		Evaporating temperature °C											
		Cond. temp. °C	12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30
HGX44e/770-4	30	Q	63600	58000	52800	47900	39100	31600	25100	19700	15100	11300	8100
		P	7.62	7.68	7.70	7.67	7.48	7.14	6.69	6.14	5.54	4.90	4.25
	40	Q	56000	51100	46400	42100	34200	27500	21800	16900	12800	9360	6460
		P	9.63	9.54	9.42	9.24	8.79	8.21	7.53	6.78	5.99	5.19	4.40
	50	Q	48700	44200	40100	36300	29500	23600	18600	14300	10700	7510	4830
		P	11.5	11.2	11.0	10.7	9.97	9.14	8.23	7.26	6.28	5.30	4.35
HHGX56e/850-4	30	Q	41300	37500	33900	30600	24700	19600	15300	11600	8390	5630	3160
		P	13.2	12.8	12.3	11.9	10.9	9.82	8.66	7.48	6.29	5.13	4.02
	40	Q	34000	30700	27700	24900	19900	15600	12000	8810	6070	-	-
		P	14.5	13.9	13.4	12.7	11.5	10.1	8.74	7.32	5.93	-	-
	50	Q	71500	65200	59400	53900	43900	35300	28000	21700	16500	12300	8870
		P	8.74	8.80	8.79	8.74	8.49	8.08	7.52	6.86	6.11	5.30	4.45
HGX56e/995-4	30	Q	62900	57400	52200	47300	38500	30900	24300	18800	14200	10400	7330
		P	11.1	10.9	10.8	10.5	9.99	9.27	8.43	7.50	6.51	5.48	4.45
	40	Q	54500	49600	45000	40700	33000	26400	20700	15900	11900	8470	5720
		P	13.2	12.9	12.5	12.1	11.2	10.2	9.11	7.93	6.71	5.47	4.26
	50	Q	46000	41800	37900	34200	27600	21900	17100	13000	9440	6520	4060
		P	15.1	14.6	14.1	13.5	12.3	10.9	9.57	8.13	6.68	5.24	3.85
HGX56e/1155-4	30	Q	37600	34100	30800	27700	22200	17500	13400	9960	7050	-	-
		P	16.7	16.0	15.3	14.6	13.0	11.4	9.77	8.09	6.41	-	-
	40	Q	82900	75700	68900	62500	51000	41000	32400	25100	19000	14000	10100
		P	10.1	10.1	10.1	10.1	9.81	9.29	8.62	7.81	6.92	5.98	5.03
	50	Q	73100	66600	60600	54900	44700	35800	28100	21600	16200	11700	8050
		P	12.7	12.6	12.4	12.1	11.4	10.6	9.60	8.51	7.36	6.20	5.05
HGX66e/1340-4	30	Q	63200	57600	52300	47300	38300	30500	23900	18100	13300	9260	5930
		P	15.2	14.8	14.4	13.9	12.9	11.6	10.3	8.98	7.58	6.19	4.85
	40	Q	53300	48500	43900	39700	32000	25300	19500	14600	10400	6770	3720
		P	17.4	16.8	16.1	15.5	14.0	12.4	10.8	9.16	7.49	5.88	4.35
	50	Q	43500	39400	35600	32000	25600	20000	15200	11000	7380	-	-
		P	19.1	18.3	17.5	16.6	14.7	12.8	10.9	8.94	7.02	-	-
HGX66e/1540-4	30	Q	94600	86200	78400	71100	57800	46400	36600	28400	21600	16000	11700
		P	13.0	12.9	12.8	12.6	12.0	11.2	10.3	9.31	8.24	7.16	6.12
	40	Q	83600	76200	69200	62600	50800	40700	32000	24700	18600	13600	9550
		P	15.9	15.6	15.3	14.9	13.9	12.8	11.5	10.2	8.85	7.51	6.24
	50	Q	72600	66000	59900	54100	43800	34900	27300	20800	15500	11000	7340
		P	18.7	18.2	17.6	17.0	15.6	14.1	12.5	10.8	9.21	7.60	6.08
HGX66e/1750-4	30	Q	61500	55800	50500	45500	36700	29000	22500	17000	12300	8370	5090
		P	21.3	20.5	19.7	18.9	17.1	15.1	13.2	11.1	9.20	7.29	5.50
	40	Q	50400	45600	41100	37000	29500	23200	17700	13100	9130	-	-
		P	23.5	22.5	21.4	20.3	18.1	15.7	13.3	11.0	8.69	-	-
	50	Q	109000	99700	91100	82900	68000	54900	43600	33900	25800	19100	13800
		P	14.0	14.2	14.2	14.1	13.6	12.9	12.0	10.8	9.66	8.40	7.16
HGX66e/1750-4	30	Q	97000	88700	80800	73400	59900	48000	37800	29100	21800	15800	11100
		P	17.7	17.5	17.2	16.8	15.8	14.5	13.1	11.6	10.1	8.65	7.22
	40	Q	84400	76900	69900	63300	51300	40800	31800	24200	17900	12700	-
		P	20.9	20.4	19.7	19.0	17.5	15.8	14.0	12.1	10.3	8.62	-
	50	Q	71300	64800	58600	52900	42500	33500	25900	19500	14200	-	-
		P	23.6	22.8	21.8	20.8	18.8	16.6	14.4	12.3	10.2	-	-
HGX66e/1750-4	30	Q	57900	52400	47200	42400	33800	26400	20200	15100	-	-	-
		P	25.8	24.6	23.4	22.1	19.6	17.0	14.4	12.0	-	-	-
	40	Q	125000	115000	105000	95200	78200	63300	50400	39300	30000	22300	16200
		P	16.1	16.2	16.3	16.2	15.7	14.9	13.8	12.5	11.1	9.74	8.33
	50	Q	112000	102000	92900	84400	69000	55500	43900	33900	25500	18700	13200
		P	20.4	20.2	19.8	19.4	18.2	16.8	15.2	13.5	11.8	10.1	8.50
HGX66e/1750-4	30	Q	97000	88500	80500	73000	59300	47400	37100	28400	21100	15200	-
		P	24.2	23.6	22.9	22.1	20.3	18.3	16.3	14.2	12.1	10.2	-
	40	Q	82100	74700	67700	61200	49300	39100	30400	23000	16900	-	-
		P	27.5	26.4	25.4	24.3	21.9	19.4	16.9	14.5	12.1	-	-
	50	Q	66900	60600	54700	49200	39400	31000	23900	18100	-	-	-
		P	30.1	28.7	27.3	25.9	23.0	20.0	17.1	14.3	-	-	-
HGX66e/1750-4	30	Q	143000	131000	120000	109000	89400	72400	57600	44900	34300	25600	18600
		P	18.4	18.6	18.6	18.5	17.9	17.0	15.8	14.4	12.8	11.2	9.67
	40	Q	128000	117000	107000	96600	79000	63600	50200	38800	29300	21400	15200
		P	23.3	23.0	22.6	22.1	20.8	19.2	17.5	15.5	13.6	11.7	9.89
	50	Q	111000	102000	92200	83600	67900	54300	42500	32600	24200	17400	-
		P	27.6	26.9	26.1	25.2	23.2	21.0	18.7	16.3	14.0	11.8	-
HGX66e/1750-4	30	Q	94100	85600	77600	70100	56600	44900	34900	26500	19500	-	-
		P	31.3	30.2	29.0	27.7	25.1	22.3	19.4	16.7	14.0	-	-
	40	Q	76700	69500	62800	56500	45200	35600	27500	20800	-	-	-
		P	34.3	32.8	31.2	29.6	26.3	23.0	19.7	16.5	-	-	-

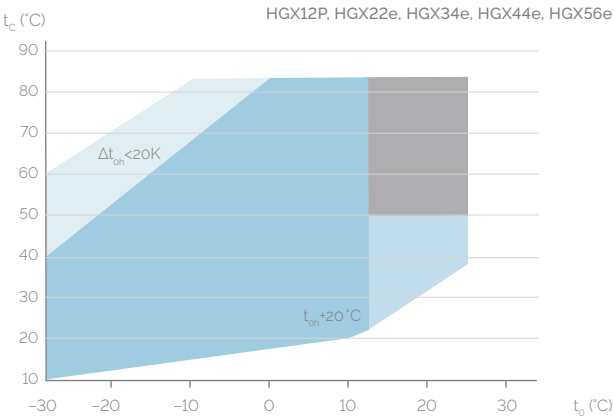
R134a | 50 Hz

Type		Cooling capacity Q _o [kW]										Power consumption P _e [kW]	
		Evaporating temperature °C											
Cond. temp. °C		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	
HGX66e/2070-4	30	Q	168000	154000	141000	129000	106000	85300	67900	53000	40500	30200	22000
		P	21.7	21.9	21.9	21.8	21.1	20.0	18.6	16.9	15.0	13.1	11.2
	40	Q	150000	137000	125000	114000	93000	74900	59200	45800	34500	25300	17900
		P	27.6	27.2	26.7	26.1	24.6	22.7	20.6	18.3	15.9	13.7	11.5
	50	Q	131000	120000	109000	98300	79900	63900	50100	38400	28600	20600	-
		P	32.8	31.9	30.9	29.9	27.5	24.8	22.0	19.2	16.4	13.8	-
HGX88e/2400-4	30	Q	111000	101000	91100	82400	66500	52800	41100	31200	23000	-	-
		P	37.3	35.9	34.4	32.9	29.7	26.3	22.9	19.6	16.5	-	-
	40	Q	89900	81500	73700	66300	53200	41900	32400	24600	-	-	-
		P	40.9	39.0	37.1	35.2	31.2	27.2	23.2	19.4	-	-	-
	50	Q	197000	181000	165000	151000	124000	99900	79500	62000	47400	35300	25700
		P	26.1	26.3	26.3	26.1	25.4	24.2	22.5	20.6	18.4	16.1	13.8
HGX88e/2735-4	30	Q	176000	161000	147000	134000	110000	87800	69400	53700	40500	29600	21000
		P	32.8	32.4	31.8	31.1	29.4	27.2	24.8	22.2	19.5	16.8	14.2
	40	Q	154000	141000	128000	116000	94000	75100	58900	45100	33600	24200	-
		P	38.8	37.8	36.7	35.4	32.7	29.7	26.5	23.3	20.1	17.0	-
	50	Q	131000	119000	108000	97100	78400	62200	48300	36700	27100	-	-
		P	44.0	42.4	40.7	38.9	35.3	31.5	27.6	23.8	20.2	-	-
HGX88e/3235-4	30	Q	107000	96400	87100	78400	62800	49400	38200	29000	-	-	-
		P	48.2	46.1	43.9	41.6	37.1	32.5	28.0	23.7	-	-	-
	40	Q	225000	206000	188000	171000	141000	114000	90500	70600	53900	40200	29300
		P	29.9	30.1	30.1	29.9	29.0	27.6	25.8	23.5	21.1	18.5	15.8
	50	Q	201000	184000	168000	152000	125000	100000	79000	61100	46100	33700	23900
		P	37.4	36.9	36.3	35.5	33.5	31.1	28.4	25.4	22.3	19.2	16.3
HGX88e/3235-4	30	Q	176000	160000	146000	132000	108000	85600	67100	51400	38200	27500	-
		P	44.1	43.0	41.7	40.3	37.3	33.9	30.3	26.7	23.0	19.5	-
	40	Q	149000	136000	123000	111000	89400	70900	55100	41800	30900	-	-
		P	49.8	48.1	46.2	44.3	40.2	35.9	31.5	27.2	23.1	-	-
	50	Q	122000	111000	99400	89400	71600	56300	43500	33000	-	-	-
		P	54.5	52.2	49.7	47.2	42.2	37.0	32.0	27.1	-	-	-
HGX88e/3235-4	30	Q	265000	243000	222000	202000	166000	135000	107000	83300	63500	47300	34400
		P	35.2	35.4	35.4	35.2	34.2	32.5	30.3	27.6	24.7	21.6	18.5
	40	Q	237000	217000	198000	180000	147000	118000	93200	72000	54200	39600	28000
		P	44.1	43.5	42.7	41.8	39.4	36.6	33.3	29.8	26.1	22.5	18.9
	50	Q	207000	189000	172000	156000	127000	101000	78900	60400	44900	32300	-
		P	52.0	50.6	49.1	47.5	43.8	39.8	35.6	31.2	26.9	22.7	-
HGX88e/3235-4	30	Q	176000	160000	145000	131000	106000	83400	64700	49100	36100	-	-
		P	58.7	56.6	54.4	52.1	47.2	42.1	37.0	31.8	26.9	-	-
	40	Q	144000	130000	117000	106000	84200	66200	51100	38600	-	-	-
		P	64.3	61.4	58.5	55.6	49.5	43.4	37.4	31.5	-	-	-
	50	Q	144000	130000	117000	106000	84200	66200	51100	38600	-	-	-
		P	64.3	61.4	58.5	55.6	49.5	43.4	37.4	31.5	-	-	-

Relating to 20 °C suction gas temperature without liquid subcooling

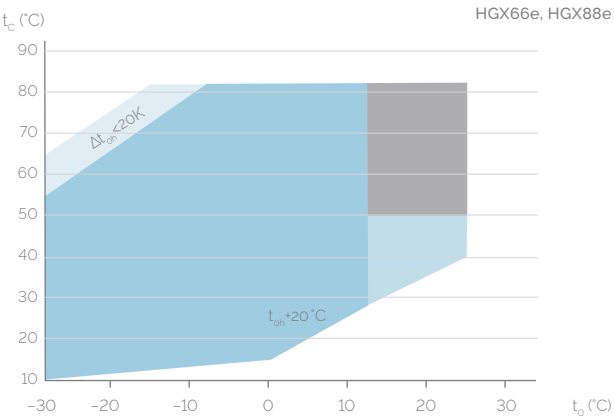
Supplementary cooling or reduced suction gas temperature

R513A



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

Max. permissible operating pressure (LP/HP) ¹⁾: 19/28 bar
¹⁾ LP = low pressure, HP = high pressure



● Unlimited application range
● Supplementary cooling or reduced suction gas temperature (Δt_{oh} < 20K)
● Motor version -S- (more powerful motor)
● Required minimum superheating Δt_{oh} = 20K

Notes

Operating limits
Compressor operation is possible within the limits shown on the application diagrams. Please note the colored areas. Compressor application limits should not be chosen for design purposes or continuous operation.

Performance data
The performance data for R513A are based on European Standard EN 12900 with a 50 Hz power supply frequency. This signifies: 20 °C suction gas temperature without liquid subcooling.

This results in significant differences compared to specifications with liquid undercooling and/or suction-gas temperatures. A comprehensive modification to 20 °C suction gas temperature will follow at a later date.

Conversion factor for 60 Hz = 1.2

R513A | 50 Hz

Type		Cooling capacity Q _o [kW]											Power consumption P _e [kW]	
		Evaporating temperature °C												
Cond. temp. °C		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30		
HGX12P/60-4 S	30	Q	5040	4610	4210	3830	3150	2550	2040	1600	1230	925	677	
		P	0.722	0.732	0.735	0.732	0.713	0.679	0.633	0.581	0.527	0.475	0.431	
	40	Q	4320	3950	3600	3270	2680	2170	1720	1340	1020	745	520	
		P	0.879	0.873	0.862	0.847	0.805	0.751	0.691	0.629	0.569	0.516	0.474	
	50	Q	3620	3310	3010	2730	2230	1800	1420	1090	809	570	365	
		P	1.02	1.00	0.981	0.953	0.888	0.816	0.741	0.668	0.603	0.548	0.508	
	60	Q	2950	2690	2450	2220	1800	1440	1130	850	611	401	213	
HGX12P/75-4 HGX12P/75-4 S)	30	Q	6280	5750	5260	4790	3930	3190	2550	2000	1540	1160	846	
		P	0.970	0.987	0.998	1.00	0.891	0.848	0.791	0.726	0.658	0.594	0.538	
	40	Q	5500	5030	4590	4180	3350	2700	2150	1680	1270	931	650	
		P	1.19	1.18	1.18	1.16	1.00	0.939	0.864	0.786	0.711	0.645	0.592	
	50	Q	4690	4280	3890	3530	2790	2240	1770	1360	1010	712	456	
		P	1.39	1.37	1.34	1.31	1.10	1.01	0.926	0.835	0.753	0.684	0.635	
	60	Q	3840	3500	3170	2870	2250	1800	1410	1070	763	501	266	
HGX12P/90-4 HGX12P/90-4 S	30	Q	7550	6890	6270	5690	4710	3830	3060	2410	1860	1400	1030	
		P	1.15	1.17	1.19	1.19	1.14	1.10	1.04	0.963	0.874	0.780	0.689	
	40	Q	6570	5990	5440	4940	4030	3250	2580	2010	1530	1130	800	
		P	1.42	1.42	1.41	1.39	1.30	1.22	1.12	1.01	0.908	0.799	0.698	
	50	Q	5590	5090	4620	4180	3370	2700	2130	1640	1230	880	600	
		P	1.67	1.65	1.62	1.58	1.45	1.34	1.21	1.08	0.953	0.831	0.723	
	60	Q	4600	4180	3790	3420	2730	2170	1690	1280	940	658	426	
HGX12P/110-4 HGX12P/110-4 S	30	Q	8820	8070	7370	6710	5510	4470	3570	2800	2160	1620	1190	
		P	1.26	1.28	1.28	1.28	1.25	1.18	1.10	1.01	0.923	0.833	0.755	
	40	Q	7560	6910	6300	5730	4690	3790	3010	2350	1780	1310	911	
		P	1.54	1.53	1.51	1.48	1.41	1.31	1.21	1.10	0.997	0.904	0.831	
	50	Q	6340	5790	5270	4780	3900	3140	2480	1910	1420	998	640	
		P	1.80	1.76	1.71	1.66	1.55	1.42	1.29	1.17	1.05	0.960	0.891	
	60	Q	5170	4710	4280	3880	3150	2520	1970	1490	1070	702	373	
HGX22e/125-4 HGX22e/125-4 S	30	Q	10400	9540	8730	7970	6540	5280	4170	3210	2410	1750	1240	
		P	1.31	1.37	1.41	1.43	1.44	1.40	1.32	1.22	1.09	0.964	0.832	
	40	Q	9130	8370	7640	6950	5670	4540	3550	2700	1990	1420	975	
		P	1.73	1.74	1.74	1.73	1.66	1.56	1.43	1.28	1.13	0.980	0.837	
	50	Q	7810	7130	6490	5880	4760	3770	2920	2190	1580	1100	741	
		P	2.08	2.05	2.01	1.97	1.83	1.68	1.51	1.33	1.15	0.986	0.839	
	60	Q	6440	5860	5310	4790	3840	3010	2290	1690	1210	825	558	
HGX22e/160-4 HGX22e/160-4 S	30	Q	13100	12000	11000	10100	8150	6600	5270	4130	3160	2360	1700	
		P	1.71	1.75	1.77	1.79	1.71	1.66	1.59	1.50	1.38	1.24	1.07	
	40	Q	11500	10600	9600	8740	7010	5660	4490	3490	2640	1930	1340	
		P	2.17	2.16	2.15	2.12	2.00	1.90	1.78	1.63	1.46	1.27	1.07	
	50	Q	9850	8990	8170	7400	5930	4750	3740	2870	2120	1490	944	
		P	2.56	2.51	2.46	2.40	2.25	2.09	1.91	1.71	1.49	1.26	1.00	
	60	Q	8170	7420	6720	6050	4870	3860	2990	2230	1580	1010	505	
HGX22e/190-4 HGX22e/190-4 S	30	Q	15700	14500	13300	12200	10100	8230	6620	5200	3990	2970	2140	
		P	2.11	2.13	2.14	2.14	2.10	2.02	1.90	1.76	1.59	1.41	1.21	
	40	Q	13700	12600	11600	10600	8760	7130	5690	4430	3360	2460	1740	
		P	2.64	2.62	2.59	2.55	2.45	2.29	2.11	1.91	1.69	1.47	1.24	
	50	Q	11800	10800	9840	8980	7420	5990	4740	3660	2740	1980	1380	
		P	3.15	3.08	3.01	2.93	2.76	2.53	2.28	2.03	1.77	1.51	1.25	
	60	Q	9740	8920	8150	7410	6070	4850	3800	2900	2140	1540	1070	

R513A | 50 Hz

Type		Cooling capacity Q _o [kW]											Power consumption P _e [kW]	
		Evaporating temperature °C												
Cond. temp. °C		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30		
HGX44e/770-4 HGX44e/770-4 S	30	Q	65200	59700	54600	49700	41000	33400	26800	21200	16500	12500	9160	
		P	7.93	8.01	8.04	8.03	7.86	7.55	7.11	6.57	5.96	5.31	4.64	
	40	Q	57000	52100	47500	43300	35500	28800	23100	18200	14000	10400	7400	
		P	10.0	9.95	9.83	9.68	9.24	8.68	8.02	7.27	6.47	5.65	4.83	
	50	Q	48800	44500	40500	36800	30100	24300	19400	15100	11500	8350	5680	
		P	11.9	11.7	11.4	11.1	10.4	9.66	8.76	7.80	6.81	5.81	4.82	
HGX56e/850-4 HGX56e/850-4 S	60	Q	40500	36900	33500	30300	24700	19800	15700	12100	8970	6300	3940	
		P	13.6	13.2	12.8	12.4	11.4	10.3	9.24	8.06	6.87	5.68	4.53	
	70	Q	32200	29200	26400	23800	19200	15300	11900	8940	6420	-	-	
		P	15.0	14.4	13.9	13.3	12.0	10.7	9.36	7.95	6.55	-	-	
	30	Q	73600	67400	61600	56200	46100	37400	30000	23600	18200	13700	10100	
		P	9.23	9.29	9.30	9.26	8.96	8.57	8.03	7.37	6.62	5.80	4.94	
HGX56e/995-4 HGX56e/995-4 S	40	Q	64200	58800	53600	48800	39900	32400	25800	20200	15500	11600	8310	
		P	11.6	11.5	11.3	11.1	10.5	9.83	9.00	8.08	7.09	6.05	5.00	
	50	Q	54800	50000	45600	41400	33700	27200	21600	16900	12800	9360	6530	
		P	13.7	13.4	13.1	12.7	11.8	10.8	9.76	8.58	7.35	6.11	4.87	
	60	Q	45300	41300	37500	34000	27600	22100	17500	13500	10100	7170	4750	
		P	15.6	15.2	14.7	14.1	12.9	11.6	10.2	8.85	7.40	5.95	4.53	
HGX56e/1155-4 HGX56e/1155-4 S	70	Q	35800	32500	29500	26600	21400	17000	13300	10100	7350	-	-	
		P	17.3	16.6	15.9	15.2	13.8	12.2	10.5	8.89	7.21	-	-	
	30	Q	85100	78000	71300	65000	53500	43400	34700	27200	20900	15700	11500	
		P	10.5	10.6	10.6	10.6	10.3	9.86	9.20	8.40	7.51	6.56	5.57	
	40	Q	74300	68100	62200	56600	46400	37500	29900	23300	17700	13100	9200	
		P	13.3	13.2	13.0	12.7	12.0	11.2	10.2	9.18	8.03	6.84	5.66	
HGX66e/1340-4 HGX66e/1340-4 S	50	Q	63400	58000	52800	48000	39200	31600	25000	19300	14500	10400	6940	
		P	15.8	15.5	15.1	14.6	13.6	12.4	11.1	9.73	8.32	6.90	5.51	
	60	Q	52400	47800	43500	39400	31900	25600	20000	15300	11200	7660	4660	
		P	18.0	17.5	16.9	16.2	14.8	13.2	11.6	9.98	8.30	6.65	5.07	
	70	Q	41300	37600	34000	30700	24700	19600	15100	11300	7910	-	-	
		P	19.8	19.1	18.2	17.4	15.6	13.7	11.8	9.84	7.91	-	-	
HGX66e/1540-4 HGX66e/1540-4 S	30	Q	98000	89700	81900	74500	60700	49200	39300	30800	23700	17900	13200	
		P	13.8	13.8	13.7	13.5	12.7	11.9	11.0	10.0	8.95	7.83	6.72	
	40	Q	85900	78500	71600	65100	52800	42700	34000	26500	20300	15100	10800	
		P	16.8	16.5	16.2	15.8	14.7	13.6	12.3	11.0	9.65	8.26	6.91	
	50	Q	73500	67100	61100	55500	44800	36100	28600	22200	16700	12200	8410	
		P	19.5	19.1	18.5	18.0	16.5	15.0	13.4	11.7	10.1	8.43	6.83	
HGX66e/1750-4 HGX66e/1750-4 S	60	Q	61000	55500	50400	45700	36700	29400	23100	17700	13200	9280	6030	
		P	22.1	21.4	20.6	19.8	18.0	16.1	14.2	12.1	10.1	8.21	6.34	
	70	Q	48300	43900	39700	35800	28500	22600	17600	13300	9600	-	-	
		P	24.2	23.3	22.3	21.3	19.1	16.8	14.5	12.1	9.76	-	-	
	HGX66e/1340-4 HGX66e/1340-4 S	30	Q	116000	106000	96700	88100	72200	58700	47000	36900	28500	21500	15800
			P	15.4	15.5	15.4	15.3	14.6	13.7	12.7	11.5	10.3	9.06	7.85
40		Q	102000	93100	84900	77200	62900	50800	40300	31400	23800	17600	12500	
		P	18.9	18.6	18.3	17.8	16.7	15.4	13.9	12.4	10.8	9.33	7.90	
50		Q	87200	79600	72400	65600	53000	42500	33400	25700	19300	14000	9660	
		P	21.9	21.4	20.8	20.1	18.4	16.7	14.9	13.0	11.1	9.36	7.74	
HGX66e/1540-4 HGX66e/1540-4 S	60	Q	72100	65500	59300	53600	42900	34100	26600	20400	15200	11000	7580	
		P	24.5	23.7	22.8	21.9	19.8	17.6	15.4	13.2	11.0	9.09	7.29	
	70	Q	56500	51100	46100	41500	32900	26000	20300	15600	11800	8800	-	
		P	26.6	25.5	24.4	23.2	20.7	18.1	15.5	13.0	10.6	8.45	-	
	HGX66e/1540-4 HGX66e/1540-4 S	30	Q	133000	122000	111000	102000	83100	67600	54300	42800	33100	25100	18600
			P	17.6	17.7	17.6	17.5	16.8	15.8	14.7	13.3	11.9	10.5	9.13
40		Q	117000	107000	97700	88900	72500	58700	46700	36500	27800	20700	14900	
		P	21.7	21.4	21.0	20.5	19.3	17.8	16.1	14.4	12.6	10.9	9.29	
50		Q	101000	91600	83400	75700	61300	49200	38900	30100	22700	16600	11700	
		P	25.3	24.7	24.0	23.2	21.4	19.4	17.3	15.2	13.0	11.0	9.22	
HGX66e/1750-4 HGX66e/1750-4 S	60	Q	83100	75600	68500	62000	49800	39700	31200	24000	18000	13200	9310	
		P	28.4	27.5	26.5	25.4	23.1	20.6	18.1	15.5	13.1	10.8	8.85	
	70	Q	65300	59200	53400	48100	38400	30500	23900	18500	14200	10800	-	
		P	30.9	29.7	28.4	27.1	24.2	21.3	18.3	15.5	12.8	10.3	-	
	HGX66e/1750-4 HGX66e/1750-4 S	30	Q	151000	138000	126000	115000	95000	77300	62000	48900	37900	28700	21300
			P	20.2	20.3	20.2	20.0	19.2	18.1	16.8	15.3	13.7	12.1	10.5
40		Q	133000	122000	111000	101000	82900	67100	53500	41800	31900	23700	17100	
		P	24.8	24.5	24.1	23.5	22.0	20.4	18.5	16.5	14.5	12.6	10.7	
50		Q	114000	104000	94700	86000	70200	56400	44600	34500	26100	19100	13500	
		P	29.0	28.3	27.5	26.6	24.5	22.2	19.8	17.4	15.0	12.8	10.7	
60	Q	94300	85800	77900	70500	57100	45600	35800	27600	20800	15200	10800		
	P	32.6	31.5	30.4	29.1	26.4	23.6	20.7	17.9	15.2	12.6	10.3		
70	Q	74200	67200	60800	54800	44000	35000	27500	21300	16400	12500	-		
	P	35.5	34.0	32.6	31.0	27.7	24.4	21.1	17.9	14.8	12.0	-		

Relating to 20 °C suction gas temperature without liquid subcooling



Motor version -S- (more powerful motor)

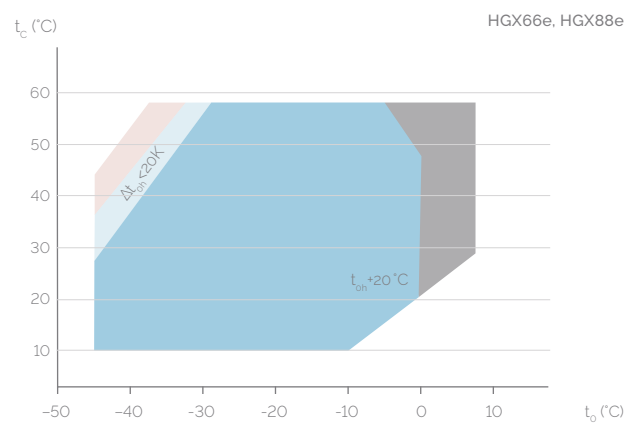
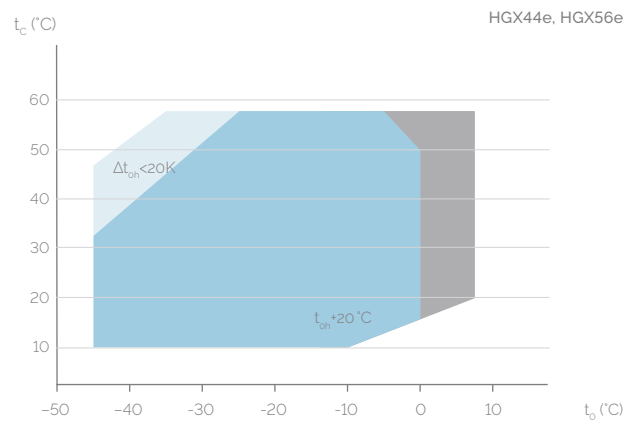
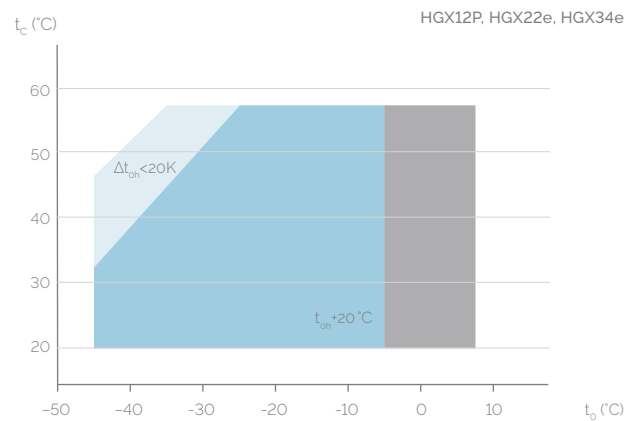


Supplementary cooling or reduced suction gas temperature

R513A | 50 Hz

Type		Cooling capacity Q _o [kW]											Power consumption P _e [kW]	
		Evaporating temperature °C												
Cond. temp. °C		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30		
HGX66e/2070-4 HGX66e/2070-4 S	30	Q	177000	163000	149000	136000	112000	91100	73100	57700	44700	33900	25100	
		P	23.8	23.9	23.8	23.6	22.6	21.3	19.8	18.0	16.1	14.1	12.3	
	40	Q	157000	143000	131000	119000	97600	79100	63000	49200	37600	28000	20200	
		P	29.3	29.0	28.4	27.8	26.0	24.0	21.8	19.4	17.0	14.7	12.6	
	50	Q	134000	123000	112000	102000	82500	66400	52500	40700	30800	22600	15900	
		P	34.3	33.5	32.5	31.5	29.0	26.3	23.4	20.5	17.7	15.0	12.5	
HGX88e/2400-4 HGX88e/2400-4 S	30	Q	111000	101000	91500	82800	67100	53600	42200	32500	24500	18000	12800	
		P	38.6	37.3	36.0	34.5	31.3	27.9	24.5	21.1	17.8	14.8	12.1	
	40	Q	87100	78900	71400	64300	51700	41200	32400	25100	19300	14700	-	
		P	42.1	40.4	38.6	36.8	32.9	28.9	24.9	21.0	17.4	14.0	-	
	50	Q	209000	192000	175000	160000	131000	107000	85600	67500	52300	39600	29400	
		P	28.9	28.9	28.8	28.6	27.1	25.7	23.9	21.8	19.6	17.3	15.1	
HGX88e/2735-4 HGX88e/2735-4 S	30	Q	185000	169000	155000	141000	115000	92800	73900	57700	44100	32900	23700	
		P	35.1	34.7	34.1	33.4	31.0	28.8	26.2	23.5	20.8	18.1	15.5	
	40	Q	159000	145000	132000	120000	97100	78100	61700	47800	36100	26500	18800	
		P	40.7	39.8	38.7	37.5	34.4	31.4	28.1	24.8	21.5	18.4	15.5	
	50	Q	132000	120000	109000	98400	79100	63200	49600	38300	28900	21200	15200	
		P	45.5	44.1	42.6	41.0	37.1	33.3	29.4	25.5	21.8	18.2	15.0	
HGX88e/3235-4 HGX88e/3235-4 S	30	Q	104000	94100	85000	76600	61100	48600	38200	29700	22800	17500	-	
		P	49.4	47.5	45.6	43.6	39.1	34.5	29.9	25.5	21.3	17.4	-	
	40	Q	237000	218000	199000	182000	150000	122000	97500	76900	59500	45100	33500	
		P	32.6	32.6	32.5	32.2	30.9	29.3	27.3	25.0	22.5	19.9	17.3	
	50	Q	210000	192000	176000	160000	131000	106000	84200	65800	50300	37400	27000	
		P	39.7	39.2	38.5	37.7	35.4	32.8	30.0	26.9	23.8	20.7	17.7	
HGX88e/3235-4 HGX88e/3235-4 S	30	Q	181000	165000	150000	137000	111000	89000	70300	54500	41200	30200	21400	
		P	46.1	45.0	43.8	42.4	39.2	35.8	32.1	28.4	24.7	21.1	17.7	
	40	Q	150000	137000	124000	112000	90200	72000	56600	43600	32900	24200	17300	
		P	51.6	50.0	48.2	46.4	42.2	38.0	33.6	29.2	24.9	20.9	17.2	
	50	Q	118000	107000	96500	86900	69700	55400	43500	33800	26000	19900	-	
		P	56.1	53.9	51.7	49.4	44.4	39.3	34.2	29.2	24.4	19.9	-	
HGX88e/3235-4 HGX88e/3235-4 S	30	Q	280000	257000	235000	215000	177000	144000	116000	90700	70100	53100	39300	
		P	38.4	38.5	38.4	38.0	36.4	34.5	32.1	29.3	26.3	23.3	20.2	
	40	Q	248000	227000	207000	189000	155000	125000	99200	77500	59100	43900	31600	
		P	46.8	46.2	45.4	44.4	41.6	38.6	35.2	31.6	27.9	24.2	20.7	
	50	Q	213000	195000	177000	161000	131000	105000	82800	64000	48300	35400	25000	
		P	54.3	53.0	51.5	49.9	46.1	42.0	37.7	33.3	28.8	24.6	20.6	
	60	Q	177000	161000	146000	132000	107000	84700	66500	51100	38500	28200	20100	
		P	60.7	58.8	56.7	54.5	49.7	44.6	39.3	34.1	29.0	24.2	19.9	
	70	Q	139000	126000	114000	103000	82000	65100	51000	39600	30400	23200	-	
	P	65.9	63.4	60.7	57.9	52.1	46.1	40.0	34.0	28.3	23.0	-		

R404A/R507



- t_o Evaporating temperature (°C)
t_c Condensing temperature (°C)
Δt_{oh} Suction gas superheat (K)
t_{oh} Suction gas temperature (°C)
- Unlimited application range
 - Supplementary cooling or reduced suction gas temperature (Δt_{oh} < 20K)
 - Supplementary cooling and reduced suction gas temperature (Δt_{oh} < 20K)
 - Motor version -S- (more powerful motor)
- Max. permissible operating pressure (LP/HP)¹⁾: 19/28 bar
¹⁾ LP = low pressure, HP = high pressure

Notes

Operating limits
Compressor operation is possible within the limits shown on the application diagrams. Please note the colored areas. Compressor application limits should not be chosen for design purposes or continuous operation.

Performance data
The performance data for R404A/R507 are based on European Standard EN 12900 with a 50 Hz power supply frequency. This signifies: 20 °C suction gas temperature without liquid subcooling. This leads to significant differences compared to systems with liquid subcooling and/or other suction gas temperatures.

Performance data were compiled for R404A and R507.
The base values are the data for R404A.

R404A/R507 | 50 Hz

Type		Cooling capacity Q _o [kW]												Power consumption P _e [kW]	
		Evaporating temperature °C													
		7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45		
HGX12P/60-4 S ¹⁾	30 Q	6540	5990	5000	4110	3340	2670	2100	1610	1210	879	617	415		
	P	120	121	122	120	115	108	100	0.908	0.810	0.712	0.618	0.533		
	40 Q	5540	5070	4200	3430	2770	2200	1710	1300	959	685	466	296		
HGX12P/75-4 S ¹⁾	P	148	147	143	136	127	117	106	0.945	0.827	0.713	0.609	0.519		
	50 Q	4540	4130	3400	2750	2200	1730	1330	994	722	503	330	-		
	P	172	168	159	149	136	123	109	0.959	0.825	0.700	0.589	-		
HGX12P/90-4 S ¹⁾	30 Q	8160	7500	6290	5230	4290	3470	2770	2170	1670	1250	911	648		
	P	152	154	155	150	144	136	126	115	103	0.908	0.789	0.680		
	40 Q	6940	6360	5310	4420	3610	2910	2300	1790	1370	1020	734	513		
HGX12P/110-4 S ¹⁾	P	190	189	183	172	162	150	136	122	108	0.939	0.807	0.689		
	50 Q	5730	5240	4350	3640	2950	2360	1860	1440	1090	805	577	-		
	P	221	216	205	192	177	162	145	128	112	0.963	0.821	-		
HGX12P/125-4 S ¹⁾	30 Q	9740	8950	7510	6090	5000	4060	3240	2530	1940	1450	1050	731		
	P	185	186	185	177	168	157	145	132	117	103	0.888	0.745		
	40 Q	8290	7600	6350	5150	4210	3390	2680	2080	1580	1160	818	550		
HGX12P/160-4 S ¹⁾	P	227	224	217	202	187	172	155	138	121	104	0.876	0.719		
	50 Q	6870	6280	5220	4220	3420	2730	2140	1640	1230	886	611	-		
	P	266	260	246	225	205	185	164	144	123	104	0.857	-		
HGX12P/190-4 S ¹⁾	30 Q	11300	10400	8700	7220	5970	4870	3920	3100	2400	1820	1340	947		
	P	216	217	215	215	204	191	176	159	141	122	105	0.883		
	40 Q	9590	8800	7370	6130	5040	4100	3280	2570	1980	1480	1070	728		
HGX12P/215-4 S ¹⁾	P	264	261	252	247	229	210	189	167	145	124	105	0.877		
	50 Q	7880	7220	6010	5020	4100	3310	2620	2040	1550	1150	804	-		
	P	312	305	288	273	249	224	198	173	148	125	105	-		
HGX22e/125-4 S ¹⁾	30 Q	13400	12400	10500	8790	7250	5870	4650	3590	2680	1920	1320	857		
	P	218	222	226	224	216	203	188	169	149	128	107	0.878		
	40 Q	11600	10700	8970	7460	6090	4880	3820	2900	2120	1490	992	640		
HGX22e/160-4 S ¹⁾	P	277	275	268	258	241	222	200	176	152	128	106	0.853		
	50 Q	9650	8860	7390	6080	4910	3880	2990	2230	1610	1110	749	-		
	P	326	320	303	284	260	234	207	180	153	127	103	-		
HGX22e/190-4 S ¹⁾	30 Q	17000	15700	13200	10900	8980	7320	5850	4560	3450	2510	1750	1170		
	P	270	275	278	273	262	247	229	207	184	159	134	108		
	40 Q	14600	13400	11200	9170	7540	6090	4810	3700	2750	1960	1330	851		
HGX22e/215-4 S ¹⁾	P	342	340	331	317	296	272	247	219	191	162	134	107		
	50 Q	12100	11100	9150	7480	6090	4860	3790	2860	2090	1460	972	-		
	P	401	393	373	351	322	290	258	225	192	160	130	-		
HGX22e/255-4 S ¹⁾	30 Q	20800	19200	16100	13300	11000	8920	7140	5620	4330	3240	2350	1620		
	P	347	349	347	341	326	307	284	257	229	200	170	141		
	40 Q	17800	16300	13700	11300	9200	7450	5940	4640	3540	2620	1860	1230		
HGX22e/315-4 S ¹⁾	P	429	424	409	393	368	339	308	274	239	203	168	135		
	50 Q	14800	13500	11300	9150	7460	6000	4750	3680	2780	2020	1390	-		
	P	504	492	465	440	406	368	327	285	243	201	161	-		
HGX34e/215-4 S ¹⁾	30 Q	23900	21900	18200	14600	11900	9470	7390	5610	4120	2900	1940	1220		
	P	383	385	384	370	352	326	294	258	221	184	149	118		
	40 Q	20200	18500	15300	12200	9840	7770	5990	4480	3230	2220	1430	851		
HGX34e/255-4 S ¹⁾	P	472	465	448	426	394	356	314	270	227	185	147	115		
	50 Q	16500	15000	12200	9770	7800	6090	4630	3420	2420	1630	1040	-		
	P	548	533	499	467	423	375	325	274	226	181	142	-		
HGX34e/315-4 S ¹⁾	30 Q	28000	25700	21500	17200	14200	11500	9120	7080	5350	3900	2730	1820		
	P	457	461	459	444	423	395	361	322	281	239	197	158		
	40 Q	23800	21800	18100	14500	11800	9460	7430	5680	4210	3010	2050	1320		
HGX34e/355-4 S ¹⁾	P	564	558	538	514	476	433	386	337	287	238	192	150		
	50 Q	19500	17700	14600	11700	9410	7450	5760	4330	3150	2200	1480	-		
	P	655	640	602	568	515	458	400	341	284	230	180	-		
HGX34e/415-4 S ¹⁾	30 Q	33800	31000	26000	21300	17600	14300	11400	8840	6700	4930	3490	2370		
	P	586	582	567	547	520	485	443	398	349	299	249	201		
	40 Q	28700	26300	22000	17900	14700	11900	9350	7220	5400	3880	2650	1690		
HGX34e/455-4 S ¹⁾	P	705	692	659	629	583	532	476	418	358	298	240	186		
	50 Q	23500	21500	17800	14500	11800	9430	7370	5600	4100	2840	1820	-		
	P	813	790	739	697	634	567	496	425	354	285	220	-		

¹⁾ ASERCOM certified

Relating to 20 °C suction gas temperature without liquid subcooling

Motor version -S- (more powerful motor)

Supplementary cooling or reduced suction gas temperature

R404A/R507 | 50 Hz

Type		Cooling capacity Q _o [kW]											Power consumption P _e [kW]			
		Evaporating temperature °C														
Cond. temp. °C		7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45			
HGX34e/380-4 HGX34e/380-4 S	30	Q P	40900 720	37600 715	31700 6.98	25800 6.84	21200 6.45	17300 5.98	13800 5.46	10900 4.88	8300 4.28	6200 3.67	4490 3.05	3120 2.45		
		Q P	34600 8.75	31800 8.59	26700 8.18	21600 7.84	17700 7.25	14300 6.59	11400 5.90	8850 5.18	6730 4.45	4960 3.72	3510 3.00	2340 2.33		
	40	Q P	28400 10.1	26000 9.86	21800 9.23	17600 8.73	14300 7.92	11500 7.08	9030 6.22	6960 5.34	5210 4.47	3760 3.62	2550 2.81	- 2.81		
		50	Q P	52500 7.73	48300 7.85	40200 7.91	33500 7.80	27500 7.52	22400 7.10	18000 6.57	14300 5.94	11100 5.26	8340 4.54	6060 3.81	4110 3.11	
HGX44e/475-4 HGX44e/475-4 S	30	Q P	45200 9.97	41400 9.90	34200 9.62	28300 9.16	23200 8.57	18800 7.88	15000 7.12	11800 6.31	9010 5.47	6670 4.64	4650 3.84	2870 3.11		
		Q P	37600 11.8	34300 11.5	28100 11.0	23100 10.2	18800 9.41	15100 8.49	12000 7.55	9260 6.59	6970 5.65	5000 4.76	3270 3.94	- 3.94		
	40	Q P	62700 9.18	57700 9.32	47800 9.45	39800 9.31	32800 8.97	26800 8.47	21600 7.82	17200 7.07	13400 6.24	10200 5.38	7470 4.51	5140 3.66		
		50	Q P	54000 11.8	49600 11.7	40700 11.5	33700 10.9	27700 10.2	22500 9.42	18100 8.49	14300 7.51	11100 6.50	8230 5.50	5820 4.55	3680 3.67	
HGX44e/565-4 HGX44e/565-4 S	30	Q P	45100 14.0	41200 13.7	33400 13.2	27500 12.3	22500 11.2	18200 10.1	14500 9.01	11400 7.85	8620 6.72	6270 5.64	4180 4.66	- 4.66		
		50	Q P	73100 10.7	67100 10.9	56000 11.0	46500 10.9	38300 10.5	31100 9.94	25000 9.19	19800 8.32	15300 7.36	11600 6.35	8340 5.33	5630 4.34	
	40	Q P	62700 13.9	57400 13.8	47500 13.4	39300 12.8	32200 12.0	26000 11.0	20800 9.97	16300 8.83	12500 7.66	9160 6.49	6360 5.37	3910 4.34		
		50	Q P	52000 16.5	47500 16.1	38900 15.4	32000 14.3	26000 13.1	20900 11.8	16500 10.5	12800 9.22	9570 7.91	6840 6.66	4440 5.51	- 5.51	
HGX44e/770-4 HGX44e/770-4 S	30	Q P	84600 12.4	77800 12.6	65300 12.8	54300 12.6	44700 12.1	36500 11.5	29400 10.6	23300 9.62	18100 8.51	13800 7.34	10100 6.16	6840 5.02		
		40	Q P	72600 16.1	66500 16.0	55600 15.5	46100 14.8	37800 13.8	30700 12.7	24500 11.5	19300 10.2	14900 8.86	11100 7.51	7750 6.22	4860 5.02	
	50	Q P	60300 19.2	55100 18.8	45700 17.8	37600 16.5	30700 15.2	24700 13.7	19600 12.2	15300 10.6	11600 9.15	8360 7.70	5530 6.37	- 6.37		
		50	Q P	93700 13.7	86100 13.9	71800 14.1	59800 13.9	49300 13.4	40200 12.6	32400 11.7	25800 10.6	20100 9.38	15300 8.08	11200 6.77	7710 5.49	
HGX56e/850-4 HGX56e/850-4 S	30	Q P	80500 17.7	73800 17.6	61100 17.1	50600 16.3	41600 15.3	33800 14.0	27200 12.7	21400 11.2	16600 9.76	12400 8.27	8720 6.83	5520 5.50		
		40	Q P	67000 21.1	61200 20.6	50100 19.6	41300 18.3	33800 16.8	27300 15.1	21800 13.4	17000 11.7	13000 10.0	9410 8.48	6280 7.00	- 7.00	
	50	Q P	111000 18.6	102000 18.3	85000 17.6	70800 16.7	58300 15.8	47400 14.6	38000 13.4	29800 12.1	22900 10.7	17100 9.21	12200 7.61	8120 5.94		
		50	Q P	94300 22.0	86600 21.5	72100 20.4	59800 19.2	49000 17.8	39600 16.3	31500 14.7	24500 12.9	18500 11.1	13400 9.23	9110 7.23	5480 5.15	
HGX56e/995-4 HGX56e/995-4 S	30	Q P	78000 25.3	71400 24.6	59000 23.1	48600 21.4	39500 19.6	31700 17.6	24900 15.5	19100 13.4	14100 11.1	9800 8.75	6130 6.30	- 6.30		
		40	Q P	127000 19.4	117000 19.7	97500 20.0	81100 19.7	66800 19.0	54500 17.9	43900 16.6	34800 15.0	27100 13.2	20600 11.4	15000 9.59	10300 7.80	
	50	Q P	109000 25.1	99900 24.9	83000 24.4	68800 23.2	56400 21.7	45800 19.9	36700 18.0	28900 15.9	22200 13.8	16600 11.7	11700 9.68	7280 7.80		
		50	Q P	90600 29.9	82800 29.2	68200 27.9	56200 26.0	45800 23.8	36900 21.5	29300 19.1	22900 16.6	17300 14.2	12500 12.0	8270 9.91	- 9.91	
HGX66e/1340-4 HGX66e/1340-4 S	30	Q P	150000 25.0	138000 24.9	115000 24.2	95700 23.2	78800 21.9	64100 20.3	51300 18.5	40400 16.5	31000 14.4	23100 12.3	16500 10.3	11000 8.30		
		40	Q P	129000 30.3	118000 29.7	97900 28.4	81200 26.6	66600 24.5	53800 22.3	42800 19.9	33400 17.4	25400 14.9	18500 12.5	12700 10.1	- 10.1	
	50	Q P	106000 34.9	97000 33.9	79900 31.8	65900 29.3	53700 26.6	43100 23.8	34100 20.9	26400 17.9	19800 15.0	14200 12.2	- 12.2	- 12.2		
		50	Q P	172000 28.8	158000 28.6	132000 28.0	110000 26.9	90700 25.4	73900 23.5	59400 21.5	46900 19.2	36200 16.9	27100 14.5	19500 12.1	13200 9.87	
HGX66e/1540-4 HGX66e/1540-4 S	30	Q P	148000 35.1	136000 34.4	113000 32.9	93400 30.9	76800 28.6	62300 26.0	49700 23.3	39000 20.4	29800 17.6	21900 14.7	15300 12.0	- 12.0		
		40	Q P	122000 40.5	112000 39.4	91900 37.1	75900 34.2	62100 31.1	50100 27.9	39800 24.5	31000 21.1	23400 17.8	17000 14.6	- 14.6	- 14.6	

Relating to 20 °C suction gas temperature without liquid subcooling



Motor version -S- (more powerful motor)

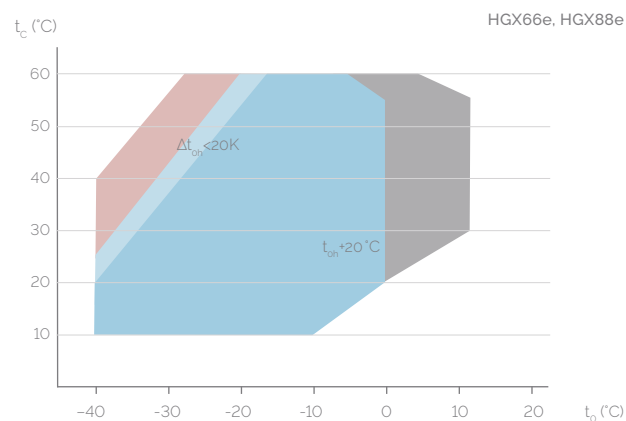
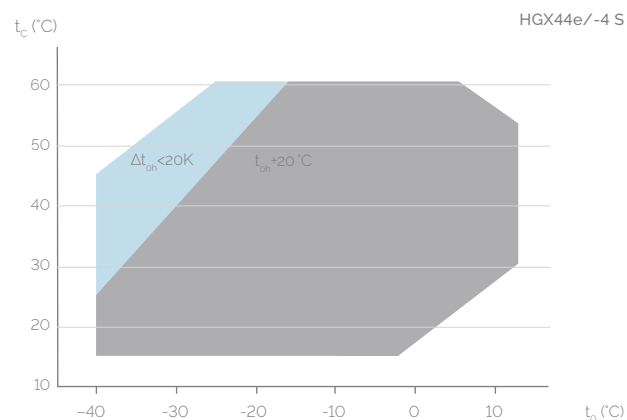
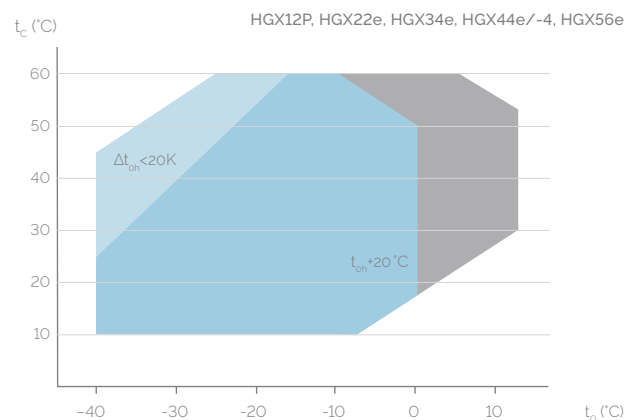


Supplementary cooling or reduced suction gas temperature

R404A/R507 | 50 Hz

Type		Cooling capacity Q _o [kW]										Power consumption P _e [kW]		
		Evaporating temperature °C												
		7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	
HGX66e/1750-4 HGX66e/1750-4 S	30	Q P	195000 32.9	180000 32.8	151000 31.9	126000 30.7	104000 28.9	84700 26.9	68000 24.5	53700 22.0	41500 19.3	31100 16.6	22400 14.0	15200 11.4
		Q P	167000 40.1	154000 39.4	129000 37.6	107000 35.3	88000 32.6	71400 29.7	57100 26.6	44800 23.4	34200 20.2	25200 17.0	17600 13.9	- -
		Q P	138000 46.3	127000 45.1	106000 42.3	87000 39.1	71200 35.6	57500 31.9	45700 28.1	35600 24.3	27000 20.5	19600 16.9	- -	- -
	40	Q P	229000 39.1	211000 38.9	177000 38.0	148000 36.4	122000 34.4	99600 31.9	80000 29.1	63200 26.0	48900 22.8	36700 19.6	26500 16.4	17900 13.4
		Q P	196000 47.8	180000 46.9	151000 44.8	126000 42.0	104000 38.8	83800 35.3	67100 31.6	52700 27.7	40300 23.8	29800 20.0	20800 16.4	- -
		Q P	162000 55.4	148000 53.8	123000 50.6	102000 46.7	83400 42.4	67400 37.9	53700 33.3	41900 28.7	31800 24.2	23100 19.9	- -	- -
HGX88e/2400-4 HGX88e/2400-4 S	30	Q P	272000 46.0	251000 45.8	209000 44.8	175000 43.0	144000 40.6	118000 37.8	94200 34.6	74300 31.1	57400 27.4	43100 23.7	31100 20.1	21100 16.6
		Q P	235000 55.6	216000 54.6	179000 52.7	149000 49.5	122000 45.8	99000 41.8	79100 37.5	62000 33.1	47400 28.6	35100 24.3	24500 20.1	- -
		Q P	194000 63.9	178000 62.2	147000 59.4	121000 54.9	98900 50.0	79800 44.8	63400 39.6	49400 34.3	37500 29.2	27300 24.2	- -	- -
	40	Q P	309000 52.2	284000 51.9	239000 50.7	199000 48.7	164000 46.1	134000 42.9	108000 39.3	84700 35.5	65400 31.4	49100 27.2	35400 23.0	24000 19.0
		Q P	266000 63.3	244000 62.1	204000 59.5	170000 55.9	140000 51.8	113000 47.4	90200 42.6	70700 37.7	54100 32.7	39900 27.8	27900 23.0	- -
		Q P	220000 73.1	202000 71.0	168000 67.0	139000 61.9	113000 56.5	91100 50.8	72400 44.9	56400 39.1	42700 33.3	31100 27.7	- -	- -
HGX88e/3235-4 HGX88e/3235-4 S	30	Q P	365000 61.5	336000 61.1	282000 59.8	235000 57.5	194000 54.3	158000 50.6	127000 46.3	99800 41.6	77000 36.8	57700 31.8	41500 26.9	28100 22.1
		Q P	314000 74.5	288000 73.1	241000 70.2	200000 66.0	165000 61.1	133000 55.7	107000 50.1	83200 44.2	63500 38.3	46800 32.4	32600 26.8	- -
		Q P	260000 85.9	238000 83.5	198000 79.1	163000 73.0	133000 66.5	108000 59.7	85100 52.7	66200 45.8	50100 38.9	36400 32.2	- -	- -

R448A/R449A



- t_o Evaporating temperature (°C)
t_c Condensing temperature (°C)
Δt_{oh} Suction gas superheat (K)
t_{oh} Suction gas temperature (°C)
- Unlimited application range
 - Supplementary cooling or reduced suction gas temperature (Δt_{oh} < 20K)
 - Supplementary cooling and reduced suction gas temperature (Δt_{oh} < 20K)
 - Motor version -S- (more powerful motor)

Max. permissible operating pressure (LP/HP)¹⁾: 19/28 bar
¹⁾ LP = low pressure, HP = high pressure

Notes

Operating limits

Compressor operation is possible within the limits shown on the application diagrams. Please note the colored areas. Compressor application limits should not be chosen for design purposes or continuous operation.

Restrictions to the operating limits may occur when using a frequency converter.

Performance data

The performance data for R448A and R449A are based on European Standard EN 12900 50 Hz power supply frequency. This signifies: 20 °C suction gas temperature without liquid subcooling. Evaporation and condensing temperatures are based on the dew point values (saturated vapour conditions).

R448A | 50 Hz

Type		Cooling capacity Q _o [kW]										Power consumption P _e [kW]				
		Evaporating temperature °C														
Cond. temp. °C		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40		
HGX12P/60-4 S	30	Q P	7620 112	6970 114	6360 115	5790 115	4760 113	3870 109	3110 103	2460 0.957	1920 0.871	1470 0.780	1100 0.687	790 0.597	543 0.515	
		Q P	6730 142	6140 141	5590 140	5070 137	4140 132	3350 124	2670 114	2100 104	1630 0.931	1230 0.817	907 0.705	644 0.600	428 0.507	
	40	Q P	5850 174	5320 171	4820 167	4360 162	3540 152	2830 140	2240 127	1740 113	1330 0.988	988 0.847	712 0.712	487 0.588	-	
		Q P	9480 138	8680 140	7920 141	7220 142	5940 140	4840 135	3900 128	3090 118	2420 107	1860 0.962	1400 0.845	1020 0.732	703 0.629	
	HGX12P/75-4 S	30	Q P	8380 176	7640 175	6960 174	6320 171	5180 165	4190 155	3350 143	2650 130	2060 116	1570 101	1170 0.875	835 0.743	563 0.626
			Q P	7290 218	6630 214	6020 209	5450 203	4420 192	3550 176	2820 160	2200 142	1690 124	1270 106	924 0.893	641 0.737	-
HGX12P/90-4 S	30	Q P	11300 167	10400 170	9430 171	8590 172	7070 167	5760 160	4650 151	3700 140	2900 127	2230 113	1680 0.997	1230 0.861	857 0.736	
		Q P	9960 213	9090 213	8280 211	7530 208	6160 196	5000 185	4010 170	3170 155	2470 138	1890 120	1410 103	1020 0.881	694 0.739	
	40	Q P	8670 264	7890 260	7160 254	6490 247	5270 229	4240 211	3370 191	2640 170	2040 148	1540 127	1130 106	789 0.880	-	
		Q P	13200 196	12100 199	11100 201	10100 202	8280 196	6750 189	5450 178	4340 165	3410 149	2630 133	1990 116	1460 100	1020 0.857	
	HGX12P/110-4 S	30	Q P	11700 252	10700 251	9680 248	8800 245	7210 232	5850 218	4700 201	3720 182	2910 162	2230 142	1670 122	1210 103	828 0.865
			Q P	10200 314	9200 308	8360 301	7570 293	6150 271	4960 250	3950 226	3100 201	2400 175	1820 150	1340 126	942 103	-
HGX22e/125-4 S	30	Q P	16600 200	15200 206	13800 210	12600 212	10300 212	8330 206	6680 196	5290 182	4130 166	3160 148	2370 130	1710 112	1170 0.958	
		Q P	14500 264	13200 265	12000 263	10900 260	8870 251	7170 237	5730 219	4510 199	3500 178	2660 156	1950 135	1370 115	853 0.987	
	40	Q P	12400 322	11200 316	10200 310	9180 302	7470 283	6010 261	4770 237	3730 211	2870 185	2150 160	1540 137	1010 116	-	
		Q P	20300 294	18600 290	17000 285	15400 279	12600 262	10200 254	8180 241	6480 223	5060 203	3880 180	2900 157	2100 135	1440 115	
	HHGX22e/160-4 S	30	Q P	17700 365	16100 355	14700 345	13400 335	10900 311	8760 292	7000 270	5520 245	4290 218	3260 190	2400 164	1670 139	1050 118
			Q P	15200 434	13800 419	12600 404	11400 388	9110 352	7330 324	5820 293	4560 260	3510 227	2630 196	1880 166	1230 140	-
HGX22e/190-4 S	30	Q P	24500 357	22400 351	20500 345	18700 339	15400 335	12700 314	10300 293	8260 270	6570 247	5170 223	3980 198	2980 172	2110 144	
		Q P	21300 445	19500 433	17800 422	16200 409	13400 395	11000 364	8890 333	7140 303	5670 272	4430 241	3380 210	2460 179	1630 147	
	40	Q P	18300 533	16700 514	15200 496	13900 477	11500 451	9300 409	7510 368	6010 329	4740 290	3660 252	2730 214	1880 178	-	
		Q P	27600 348	25200 349	23000 348	20900 345	16800 336	13700 319	10900 296	8490 270	6500 242	4830 213	3470 184	2370 157	1500 134	
	HGX34e/215-4 S	30	Q P	24200 458	22000 448	20000 437	18100 424	14400 401	11600 367	9060 330	6980 293	5240 255	3810 219	2650 186	1740 157	1030 133
			Q P	20600 559	18600 538	16800 517	15100 495	11900 457	9380 408	7280 358	5520 310	4080 264	2920 221	2010 185	1320 154	-
HGX34e/255-4 S	30	Q P	32200 359	29600 372	27100 380	24700 386	20000 392	16400 382	13200 363	10400 336	7970 303	5960 267	4300 229	2950 192	1880 158	
		Q P	27900 483	25600 485	23400 484	21300 480	17200 473	14000 446	11200 411	8720 370	6660 326	4930 279	3490 233	2310 189	1370 150	
	40	Q P	23300 595	21300 587	19400 576	17600 563	14100 543	11400 499	9040 449	7040 394	5350 338	3930 281	2750 227	1790 177	-	
		Q P	41100 484	37500 490	34100 492	30900 492	25000 475	20200 458	16200 433	12800 400	9840 362	7440 320	5470 276	3850 231	2510 187	
	HGX34e/315-4 S	30	Q P	35700 623	32500 618	29500 611	26700 601	21500 567	17300 533	13800 491	10800 443	8230 391	6140 337	4410 282	2960 227	1720 174
			Q P	30300 755	27400 740	24800 722	22400 703	17900 650	14300 598	11300 539	8770 476	6660 409	4910 342	3430 274	2170 209	-

Relating to 20 °C suction gas temperature without liquid subcooling

Motor version -S- (more powerful motor)

Supplementary cooling or reduced suction gas temperature

R448A | 50 Hz

Type		Cooling capacity Q _o [kW]										Power consumption P _e [kW]			
		Evaporating temperature °C													
Cond. temp. °C		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
HGX34e/380-4 HGX34e/380-4 S	30	Q P	48800 6.17	44600 6.20	40600 6.20	37000 6.17	30000 5.95	24500 5.71	19800 5.38	15700 4.97	12300 4.50	9440 3.98	7070 3.44	5090 2.88	3430 2.33
		Q P	42400 7.82	38700 7.74	35200 7.62	32000 7.48	25800 7.06	21000 6.62	16900 6.09	13400 5.50	10400 4.87	7890 4.20	5790 3.52	3990 2.85	2420 2.19
	50	Q P	35900 9.40	32600 9.19	29600 8.96	26900 8.70	21600 8.08	17500 7.42	14000 6.69	11100 5.92	8530 5.11	6410 4.28	4590 3.46	2990 2.65	-
		Q P	61800 7.17	56500 7.30	51700 7.37	47100 7.39	38600 7.26	31500 7.00	25400 6.62	20200 6.12	15800 5.54	12200 4.89	9150 4.21	6660 3.53	4620 2.85
HGX44e/475-4 HGX44e/475-4 S	30	Q P	54300 9.44	49600 9.40	45200 9.30	41100 9.17	33500 8.77	27300 8.23	21900 7.58	17300 6.84	13500 6.05	10300 5.21	7590 4.37	5340 3.55	3430 2.76
		Q P	46700 11.5	42500 11.3	38700 11.0	35100 10.7	28400 10.0	22900 9.25	18200 8.33	14300 7.34	11000 6.32	8150 5.28	5790 4.26	3760 3.28	-
	50	Q P	61800 7.17	56500 7.30	51700 7.37	47100 7.39	38600 7.26	31500 7.00	25400 6.62	20200 6.12	15800 5.54	12200 4.89	9150 4.21	6660 3.53	4620 2.85
		Q P	54300 9.44	49600 9.40	45200 9.30	41100 9.17	33500 8.77	27300 8.23	21900 7.58	17300 6.84	13500 6.05	10300 5.21	7590 4.37	5340 3.55	3430 2.76
HGX44e/565-4 HGX44e/565-4 S	30	Q P	73700 8.52	67500 8.66	61700 8.75	56200 8.77	45900 8.65	37500 8.35	30300 7.88	24200 7.28	19000 6.58	14700 5.80	11200 4.99	8160 4.16	5710 3.36
		Q P	64900 11.2	59300 11.1	54100 11.0	49200 10.8	40000 10.4	32600 9.83	26200 9.04	20900 8.15	16300 7.19	12500 6.19	9300 5.18	6620 4.19	4320 3.25
	50	Q P	55900 13.7	51000 13.4	46400 13.1	42100 12.7	33800 12.1	27400 11.0	21900 9.95	17300 8.75	13400 7.52	10100 6.27	7190 5.04	4750 3.87	-
		Q P	87000 9.92	79500 10.1	72600 10.2	66000 10.2	53700 10.1	43800 9.81	35300 9.26	28100 8.57	22000 7.75	16900 6.85	12700 5.90	9210 4.93	6350 3.99
HGX44e/665-4 HGX44e/665-4 S ¹⁾	30	Q P	76200 13.0	69500 13.0	63300 12.9	57500 12.7	46600 12.2	37900 11.5	30400 10.6	24000 9.58	18700 8.47	14200 7.30	10500 6.12	7330 4.96	4670 3.86
		Q P	65400 16.0	59500 15.7	54000 15.3	48800 14.9	39300 14.1	31700 12.9	25200 11.6	19800 10.2	15100 8.84	11300 7.39	7930 5.97	5120 4.59	-
	50	Q P	99500 11.5	91100 11.7	83200 11.8	75900 11.8	62600 11.7	51100 11.3	41300 10.7	32900 9.91	25800 8.96	19900 7.92	15100 6.82	11000 5.71	7650 4.61
		Q P	87300 15.3	79800 15.2	72800 15.0	66300 14.8	54500 14.1	44300 13.3	35600 12.2	28300 11.0	22100 9.79	16900 8.44	12600 7.08	8860 5.74	5760 4.46
HGX44e/770-4 HGX44e/770-4 S	30	Q P	75100 18.8	68400 18.4	62200 18.0	56500 17.4	46200 16.3	37300 14.9	29800 13.4	23400 11.8	18000 10.2	13500 8.55	9620 6.90	6320 5.31	-
		Q P	110000 12.7	101000 12.9	92100 13.0	83900 13.1	69000 12.9	56300 12.5	45500 11.8	36300 10.9	28600 9.87	22100 8.72	16700 7.49	12300 6.25	8560 5.04
	50	Q P	96600 16.8	88400 16.7	80600 16.5	73400 16.3	60000 15.6	48900 14.7	39400 13.5	31300 12.2	24500 10.7	18800 9.29	14000 7.78	9920 6.29	6480 4.87
		Q P	83100 20.6	75800 20.2	69000 19.7	62600 19.1	50800 18.0	41200 16.5	32900 14.8	25900 13.1	20000 11.2	15100 9.41	10800 7.58	7130 5.82	-
HGX56e/850-4 HGX56e/850-4 S	30	Q P	129000 15.6	119000 15.8	108000 15.9	98500 15.9	81100 15.6	66400 15.0	53800 14.1	43000 13.1	33900 11.8	26200 10.5	19800 9.08	14400 7.60	9760 6.11
		Q P	113000 20.3	104000 20.1	94300 19.9	86000 19.5	70500 18.7	57600 17.5	46600 16.1	37100 14.6	29100 12.9	22300 11.1	16500 9.34	11400 7.50	6880 5.70
	50	Q P	96900 24.6	88500 24.2	80700 23.6	73300 22.9	59800 21.5	48700 19.8	39200 17.8	31000 15.8	24000 13.6	18000 11.4	12700 9.22	7940 7.01	-
		Q P	150000 18.0	137000 18.3	125000 18.5	114000 18.5	93500 18.3	76400 17.7	61600 16.7	49100 15.4	38600 13.9	29800 12.3	22500 10.6	16500 8.88	11500 7.17
HGX56e/1155-4 HGX56e/1155-4 S	30	Q P	132000 23.8	120000 23.7	110000 23.4	99500 23.1	81300 22.2	66200 20.8	53200 19.2	42300 17.3	33000 15.3	25200 13.1	18800 11.0	13300 8.93	8620 6.93
		Q P	113000 29.2	103000 28.6	93500 27.9	84800 27.2	68900 25.6	55700 23.4	44400 21.1	34900 18.5	26900 15.9	20200 13.3	14400 10.7	9460 8.26	-
	50	Q P	160000 22.8	146000 22.6	133000 22.4	123000 22.4	109000 21.6	88300 20.5	71200 19.2	56700 17.6	44500 15.8	34200 14.0	25600 12.1	18400 10.1	-
		Q P	140000 27.9	128000 27.4	116000 26.8	116000 26.8	94100 25.3	76500 23.6	61400 21.6	48700 19.4	37900 17.1	28800 14.8	21100 12.4	-	-
HGX66e/1340-4 HGX66e/1340-4 S	30	Q P	120000 32.6	109000 31.7	98600 30.8	98600 30.8	79700 28.7	64400 26.2	51400 23.6	40400 20.8	31000 17.9	23100 14.9	-	-	-
		Q P	183000 26.2	167000 26.1	152000 25.8	138000 25.8	125000 25.0	102000 23.7	82100 22.2	65500 20.4	51600 18.4	39800 16.3	30000 14.1	21700 11.9	-
	50	Q P	161000 32.2	146000 31.6	133000 31.0	123000 30.8	109000 29.4	88100 27.4	71000 25.1	56400 22.6	44100 20.0	33700 17.3	24900 14.6	-	-
		Q P	138000 37.9	125000 36.9	114000 35.8	103000 35.8	91800 33.4	74400 30.6	59600 27.5	47000 24.3	36400 21.0	27300 17.7	-	-	-

¹⁾ ASERCOM certified

Relating to 20 °C suction gas temperature
without liquid subcooling

Motor version -S-
(more powerful motor)

Supplementary cooling or
reduced suction gas temperature

R448A | 50 Hz

Type		Cooling capacity Q _o [kW]									Power consumption P _e [kW]				
		Evaporating temperature °C													
		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
HGX66e/1750-4 HGX66e/1750-4 S	30	Q P	207000 30.0	189000 29.8	173000 29.5	158000 15.9	143000 28.5	117000 27.1	94000 25.3	75100 23.3	59100 21.1	45700 18.7	34400 16.2	24900 13.7	-
		Q P	182000 36.8	166000 36.2	151000 35.4	86000 19.5	124000 33.5	101000 31.3	81300 28.7	64700 25.9	50600 22.9	38700 19.9	28600 16.8	-	-
		Q P	156000 43.3	142000 42.2	129000 40.9	73300 22.9	106000 38.1	85200 34.9	68300 31.5	54000 27.9	41800 24.1	31400 20.3	-	-	-
HGX66e/2070-4 HGX66e/2070-4 S	30	Q P	244000 35.5	223000 35.3	203000 35.0	198500 15.9	167000 33.8	137000 32.1	111000 30.0	88300 27.6	69600 24.9	53800 22.0	40600 19.1	29400 16.1	-
		Q P	213000 43.8	195000 43.0	177000 42.1	86000 19.5	146000 39.9	119000 37.2	95500 34.1	76100 30.7	59600 27.1	45600 23.4	33700 19.8	-	-
		Q P	183000 51.7	166000 50.3	151000 48.7	73300 22.9	123000 45.5	99900 41.6	80200 37.5	63400 33.1	49200 28.5	37000 24.0	-	-	-
HGX88e/2400-4 HGX88e/2400-4 S	30	Q P	289000 42.0	264000 41.8	241000 41.4	198500 15.9	197000 39.9	161000 38.0	130000 35.6	104000 32.9	81700 29.8	63200 26.5	47600 23.1	34500 19.7	-
		Q P	255000 51.1	232000 50.3	211000 49.3	86000 19.5	172000 47.0	140000 43.9	113000 40.3	89600 36.5	70100 32.4	53600 28.2	39600 24.0	-	-
		Q P	219000 59.8	199000 58.3	181000 56.7	73300 22.9	146000 53.6	119000 49.1	94800 44.3	74900 39.2	58000 34.1	43600 28.9	-	-	-
HGX88e/2735-4 HGX88e/2735-4 S	30	Q P	328000 47.5	300000 47.2	273000 46.8	198500 15.9	225000 45.3	184000 43.2	149000 40.5	119000 37.4	93100 34.0	72000 30.3	54200 26.5	39300 22.6	-
		Q P	289000 58.1	263000 57.1	240000 55.9	86000 19.5	196000 53.2	160000 49.7	129000 45.7	103000 41.4	79900 36.9	61100 32.2	45100 27.4	-	-
		Q P	248000 68.3	226000 66.5	205000 64.6	73300 22.9	167000 60.5	136000 55.5	109000 50.2	85400 44.6	66100 38.8	49700 33.0	-	-	-
HGX88e/3235-4 HGX88e/3235-4 S	30	Q P	387000 55.9	354000 55.6	323000 55.1	198500 15.9	265000 53.4	217000 50.9	175000 47.7	140000 44.0	110000 39.9	84700 35.5	63800 31.0	46100 26.4	-
		Q P	341000 68.4	311000 67.2	283000 65.8	86000 19.5	232000 62.7	189000 58.6	152000 53.9	121000 48.7	94000 43.3	71800 37.7	53000 32.1	-	-
		Q P	293000 80.3	267000 78.2	242000 75.9	73300 22.9	197000 71.3	160000 65.4	128000 59.0	101000 52.4	77700 45.5	58300 38.6	-	-	-

R449A | 50 Hz

HGX12P/60-4 S	30	Q P	
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R449A | 50 Hz

Type		Cooling capacity Q _o [kW]										Power consumption P _e [kW]			
		Evaporating temperature °C													
		Cond. temp. °C													
		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
HGX22e/160-4 HGX22e/160-4 S	30	Q P	20200 2.92	18500 2.88	16900 2.83	15400 2.78	12600 2.61	10200 2.53	8150 2.40	6450 2.23	5040 2.02	3860 1.80	2900 1.57	2100 1.35	1440 1.14
		Q P	17600 3.63	16000 3.53	14600 3.44	13300 3.34	10800 3.09	8710 2.91	6960 2.69	5490 2.44	4260 2.17	3240 1.90	2390 1.63	1670 1.39	1040 1.18
	40	Q P	15000 4.31	13700 4.16	12500 4.01	11400 3.86	9040 3.50	7270 3.22	5780 2.91	4530 2.59	3490 2.26	2610 1.95	1870 1.66	1230 1.40	
		Q P	24400 3.55	22300 3.50	20400 3.44	18600 3.37	15400 3.33	12600 3.13	10300 2.91	8220 2.69	6550 2.46	5150 2.22	3970 1.97	2970 1.71	2110 1.44
HGX22e/190-4 HGX22e/190-4 S	30	Q P	21200 4.43	19400 4.31	17700 4.19	16100 4.07	13400 3.93	10900 3.63	8840 3.32	7110 3.01	5650 2.71	4410 2.40	3360 2.09	2450 1.78	1630 1.47
		Q P	18200 5.29	16600 5.11	15100 4.93	13800 4.74	11400 4.49	9230 4.07	7460 3.67	5970 3.27	4710 2.88	3640 2.51	2710 2.13	1870 1.77	
	40	Q P	27400 3.46	25100 3.47	22800 3.46	20800 3.44	16800 3.35	13600 3.18	10800 2.95	8460 2.69	6470 2.41	4820 2.12	3460 1.84	2360 1.57	1500 1.34
		Q P	24000 4.56	21800 4.46	19800 4.35	17900 4.22	14300 3.99	11500 3.65	9010 3.29	6940 2.91	5210 2.54	3790 2.18	2640 1.85	1730 1.56	1030 1.33
HGX34e/215-4 HGX34e/215-4 S	30	Q P	20400 5.55	18500 5.35	16700 5.14	15000 4.92	11800 4.55	9320 4.06	7230 3.56	5480 3.08	4050 2.62	2900 2.21	2000 1.84	1310 1.54	
		Q P	32100 3.57	29400 3.70	26900 3.79	24600 3.84	19900 3.90	16300 3.81	13100 3.61	10300 3.35	7940 3.02	5940 2.66	4280 2.28	2940 1.91	1870 1.57
	40	Q P	27800 4.81	25400 4.83	23200 4.82	21100 4.78	17100 4.71	13900 4.44	11100 4.09	8670 3.69	6630 3.24	4900 2.78	3470 2.32	2300 1.89	1360 1.50
		Q P	23100 5.92	21100 5.84	19200 5.73	17500 5.60	14000 5.40	11300 4.96	8980 4.46	7000 3.92	5310 3.36	3900 2.80	2740 2.26	1790 1.76	
HGX34e/315-4 HGX34e/315-4 S	30	Q P	40900 4.81	37300 4.87	33900 4.90	30800 4.90	24900 4.73	20100 4.56	16100 4.31	12700 3.99	9800 3.61	7420 3.19	5460 2.75	3840 2.31	2510 1.87
		Q P	35500 6.19	32300 6.15	29300 6.08	26500 5.98	21300 5.64	17200 5.30	13700 4.89	10700 4.41	8190 3.90	6120 3.36	4390 2.81	2940 2.26	1710 1.73
	40	Q P	30000 7.50	27200 7.35	24600 7.18	22200 6.99	17800 6.47	14200 5.95	11300 5.36	8710 4.74	6620 4.08	4880 3.40	3410 2.73	2160 2.08	
		Q P	48500 6.14	44300 6.17	40400 6.17	36800 6.14	29900 5.92	24400 5.69	19700 5.36	15700 4.95	12300 4.48	9410 3.97	7050 3.43	5080 2.88	3420 2.33
HGX34e/380-4 HGX34e/380-4 S	30	Q P	42100 7.78	38400 7.70	35000 7.58	31800 7.44	25700 7.03	20900 6.59	16800 6.06	13300 5.48	10400 4.85	7860 4.19	5760 3.51	3970 2.84	2410 2.18
		Q P	35600 9.35	32400 9.14	29400 8.91	26600 8.65	21400 8.04	17400 7.38	13900 6.66	11000 5.89	8480 5.09	6370 4.27	4560 3.45	2980 2.64	
	40	Q P	61400 7.14	56200 7.26	51400 7.33	46800 7.36	38400 7.22	31300 6.98	25300 6.59	20100 6.10	15800 5.52	12200 4.88	9120 4.20	6650 3.52	4610 2.85
		Q P	53900 9.39	49300 9.35	44900 9.26	40900 9.12	33300 8.73	27100 8.19	21800 7.55	17300 6.81	13400 6.02	10300 5.20	7550 4.36	5320 3.54	3420 2.75
HGX44e/475-4 HGX44e/475-4 S	30	Q P	46300 11.4	42200 11.2	38400 11.0	34800 10.7	28100 10.0	22700 9.21	18100 8.29	14200 7.31	10900 6.29	8100 5.26	5760 4.25	3750 3.27	
		Q P	73300 8.47	67100 8.62	61300 8.71	55900 8.73	45700 8.61	37400 8.31	30200 7.85	24100 7.25	19000 6.55	14700 5.78	11100 4.97	8140 4.15	5700 3.35
	40	Q P	64400 11.1	58900 11.1	53700 10.9	48900 10.8	39700 10.4	32400 9.79	26100 9.01	20700 8.12	16200 7.16	12500 6.17	9260 5.16	6590 4.17	4300 3.24
		Q P	55500 13.6	50600 13.3	46000 13.0	41800 12.7	33600 12.0	27200 11.0	21800 9.91	17200 8.72	13300 7.48	9950 6.24	7150 5.02	4730 3.86	
HGX44e/665-4 HGX44e/665-4 S ¹⁾	30	Q P	85400 9.91	78200 10.0	71400 10.1	65100 10.2	53500 10.1	43600 9.77	35200 9.23	28000 8.54	21900 7.72	16900 6.83	12700 5.88	9180 4.92	6340 3.98
		Q P	74900 13.0	68400 13.0	62400 12.8	56700 12.7	46300 12.2	37600 11.4	30200 10.5	23900 9.54	18600 8.43	14200 7.28	10500 6.10	7310 4.95	4660 3.85
	40	Q P	64200 16.0	58500 15.7	53200 15.3	48200 14.9	39000 14.0	31500 12.8	25100 11.6	19600 10.2	15100 8.81	11200 7.37	7890 5.95	5090 4.58	
		Q P	98900 11.4	90600 11.6	82800 11.8	75500 11.8	62300 11.6	50900 11.2	41100 10.6	32700 9.87	25700 8.93	19900 7.90	15000 6.80	11000 5.69	7640 4.60
HGX44e/770-4 HGX44e/770-4 S	30	Q P	86800 15.2	79300 15.1	72300 14.9	65800 14.7	54100 14.1	44100 13.2	35400 12.2	28100 11.0	22000 9.75	16800 8.41	12500 7.06	8830 5.72	5740 4.45
		Q P	74500 18.7	67900 18.3	61800 17.9	56000 17.4	45800 16.2	37000 14.8	29600 13.4	23200 11.8	17900 10.1	13400 8.52	9570 6.88	6290 5.30	

¹⁾ ASERCOM certified

Relating to 20 °C suction gas temperature without liquid subcooling

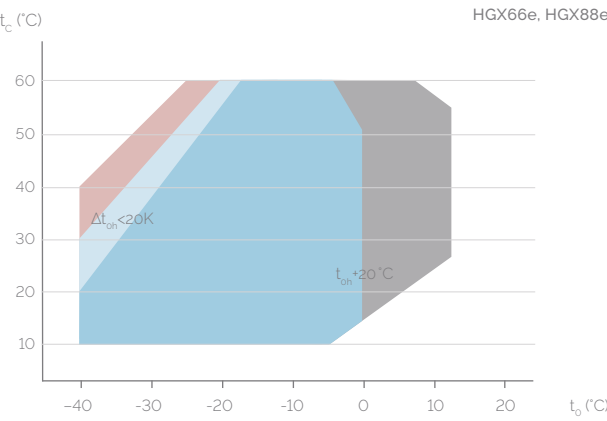
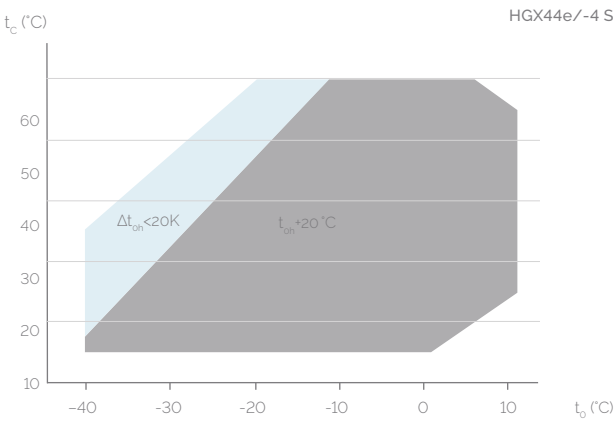
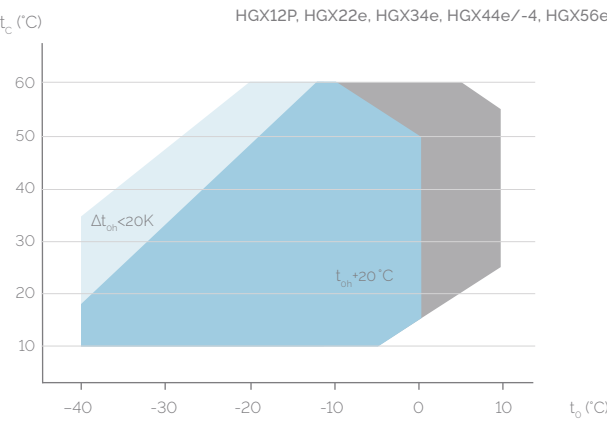
Motor version -S- (more powerful motor)

Supplementary cooling or reduced suction gas temperature

R449A | 50 Hz

Type		Cooling capacity Q _o [kW]										Power consumption P _e [kW]				
		Evaporating temperature °C														
		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40		
Cond.	temp. °C															
HGX56e/850-4	HGX56e/850-4 S	30	Q P	110000	101000	91600	83500	68600	56100	45300	36200	28500	22000	16700	12300	8550
			12.6	12.8	13.0	13.0	12.8	12.4	11.7	10.8	9.84	8.69	7.47	6.23	5.03	
		40	Q P	96000	87800	80100	72900	59600	48600	39200	31100	24400	18700	13900	9880	6450
			16.7	16.6	16.4	16.2	15.5	14.6	13.4	12.1	10.7	9.26	7.75	6.27	4.86	
HGX56e/995-4	HGX56e/995-4 S	50	Q P	82500	75200	68400	62100	50400	40900	32700	25800	19900	15000	10800	7100	
			20.5	20.1	19.6	19.0	17.9	16.4	14.8	13.0	11.2	9.38	7.56	5.80		
		30	Q P	129000	118000	108000	98000	80700	66100	53500	42800	33800	26200	19800	14400	9740
			15.6	15.7	15.8	15.8	15.5	14.9	14.1	13.0	11.8	10.4	9.06	7.58	6.10	
HGX56e/1155-4	HGX56e/1155-4 S	40	Q P	113000	103000	93700	85400	70100	57300	46300	36900	29000	22200	16400	11400	6860
			20.2	20.0	19.8	19.4	18.6	17.4	16.1	14.5	12.9	11.1	9.31	7.48	5.68	
		50	Q P	96100	87800	80000	72800	59400	48400	38900	30800	23900	17900	12600	7900	
			24.5	24.0	23.5	22.8	21.4	19.7	17.8	15.7	13.6	11.4	9.19	6.99		
HGX56e/1340-4	HGX56e/1340-4 S	30	Q P	149000	136000	125000	114000	93100	76000	61400	48900	38500	29700	22400	16400	11500
			17.9	18.2	18.4	18.5	18.3	17.6	16.6	15.4	13.9	12.3	10.5	8.85	7.15	
		40	Q P	131000	120000	109000	98800	80900	65800	52900	42000	32800	25100	18700	13300	8590
			23.7	23.5	23.3	23.0	22.1	20.7	19.1	17.2	15.2	13.1	11.0	8.90	6.91	
HGX66e/1340-4	HGX66e/1340-4 S	50	Q P	112000	102000	92800	84200	68400	55300	44100	34700	26700	20000	14400	9420	
			29.0	28.5	27.8	27.0	25.4	23.3	21.0	18.5	15.9	13.2	10.7	8.23		
		30	Q P	159000	145000	132000	114000	108000	87900	71000	56500	44400	34200	25600	18400	
			22.7	22.6	22.3	18.5	21.5	20.5	19.1	17.5	15.8	14.0	12.0	10.1		
HGX66e/1540-4	HGX66e/1540-4 S	40	Q P	139000	127000	115000	98800	93600	76100	61100	48500	37700	28700	21000		
			27.7	27.2	26.7	23.0	25.2	23.5	21.5	19.4	17.1	14.7	12.3			
		50	Q P	119000	108000	97900	84200	79200	64000	51100	40200	30900	23000			
			32.5	31.6	30.6	27.0	28.5	26.1	23.5	20.7	17.8	14.9				
HGX66e/1750-4	HGX66e/1750-4 S	30	Q P	182000	166000	152000	114000	124000	102000	81800	65300	51400	39700	30000	21700	
			26.1	26.0	25.7	18.5	24.9	23.7	22.1	20.3	18.4	16.2	14.1	11.9		
		40	Q P	160000	146000	133000	98800	108000	87700	70600	56200	43900	33600	24800		
			32.1	31.5	30.8	23.0	29.3	27.3	25.0	22.6	20.0	17.3	14.5			
HGX66e/2070-4	HGX66e/2070-4 S	50	Q P	137000	124000	113000	84200	91200	73900	59200	46800	36200	27200			
			37.7	36.7	35.6	27.0	33.3	30.5	27.4	24.3	21.0	17.6				
		30	Q P	206000	189000	172000	114000	142000	116000	93600	74800	58900	45600	34400	24900	
			29.9	29.7	29.4	18.5	28.4	27.0	25.3	23.3	21.0	18.6	16.2	13.7		
HGX66e/2400-4	HGX66e/2400-4 S	40	Q P	181000	165000	150000	98800	124000	101000	81000	64400	50400	38600	28500		
			36.7	36.0	35.3	23.0	33.4	31.1	28.6	25.8	22.9	19.8	16.8			
		50	Q P	155000	141000	128000	84200	105000	84700	68000	53700	41600	31300			
			43.1	42.0	40.7	27.0	38.0	34.8	31.4	27.8	24.1	20.3				
HGX88e/2400-4	HGX88e/2400-4 S	30	Q P	242000	222000	202000	114000	167000	136000	111000	88000	69400	53700	40500	29400	
			35.3	35.2	34.8	18.5	33.7	32.0	29.9	27.5	24.8	22.0	19.0	16.1		
		40	Q P	212000	194000	176000	98800	145000	118000	95100	75800	59400	45500	33600		
			43.6	42.8	41.9	23.0	39.7	37.0	33.9	30.6	27.0	23.4	19.7			
HGX88e/2735-4	HGX88e/2735-4 S	50	Q P	181000	165000	150000	84200	123000	99300	79700	63100	49000	36900			
			51.4	50.0	48.5	27.0	45.3	41.5	37.3	33.0	28.5	24.0				
		30	Q P	287000	263000	239000	114000	196000	160000	130000	104000	81500	63000	47500	34500	
			41.8	41.6	41.2	18.5	39.7	37.9	35.5	32.8	29.7	26.5	23.1	19.7		
HGX88e/3235-4	HGX88e/3235-4 S	40	Q P	253000	231000	210000	98800	171000	140000	113000	89200	69800	53500	39600		
			50.9	50.1	49.1	23.0	46.8	43.7	40.2	36.3	32.3	28.1	23.9			
		50	Q P	218000	198000	180000	84200	146000	118000	94300	74500	57800	43500			
			59.6	58.0	56.4	27.0	53.3	48.9	44.1	39.1	34.0	28.8				
HGX88e/3235-4	HGX88e/3235-4 S	30	Q P	326000	298000	272000	114000	224000	183000	148000	118000	92900	71800	54100	39300	
			47.3	47.1	46.6	18.5	45.1	43.0	40.4	37.3	33.9	30.2	26.4	22.6		
		40	Q P	287000	262000	238000	98800	195000	159000	128000	102000	79600	60900	45100		
			57.9	56.9	55.7	23.0	53.0	49.5	45.6	41.3	36.8	32.1	27.4			
HGX88e/3235-4	HGX88e/3235-4 S	50	Q P	247000	224000	204000	84200	166000	135000	108000	85000	65800	49600			
			68.0	66.2	64.3	27.0	60.2	55.3	50.0	44.4	38.7	32.9				
		30	Q P	385000	352000	321000	114000	264000	216000	175000	139000	110000	84500	63700	46100	
			55.7	55.4	54.9	18.5	53.2	50.7	47.6	43.9	39.8	35.5	30.9	26.4		
HGX88e/3235-4	HGX88e/3235-4 S	40	Q P	339000	309000	281000	98800	230000	188000	151000	120000	93700	71600	52900		
			68.1	66.9	65.6	23.0	62.5	58.4	53.7	48.6	43.2	37.6	32.0			
		50	Q P	291000	265000	240000	84200	196000	159000	127000	100000	77400	58100			
			79.9	77.8	75.5	27.0	71.0	65.1	58.8	52.2	45.4	38.5				

R407A



- to Evaporating temperature (°C)
- tc Condensing temperature (°C)
- Δtoh Suction gas superheat (K)
- toh Suction gas temperature (°C)
- Unlimited application range
- Supplementary cooling or reduced suction gas temperature (Δtoh<20K)
- Supplementary cooling and reduced suction gas temperature (Δtoh<20K)
- Motor version -S- (more powerful motor)

Max. permissible operating pressure (LP/HP) ¹⁾: 19/28 bar
¹⁾ LP = low pressure, HP = high pressure

Notes

Operating limits
Compressor operation is possible within the limits shown on the application diagrams. Please note the colored areas. Compressor application limits should not be chosen for design purposes or continuous operation.

Restrictions to the operating limits may occur when using a frequency converter.

Performance data
The performance data for R407A are based on European Standard EN 12900 50 Hz power supply frequency. This signifies: 20 °C suction gas temperature without liquid subcooling. Evaporation and condensing temperatures are based on the dew point values (saturated vapour conditions).

R407A | 50 Hz

Type	Cond. temp. °C	Cooling capacity Q _o [kW]												Power consumption P _e [kW]	
		Evaporating temperature °C													
		10	7,5	5	0	-5	-10	-15	-20	-25	-30	-35	-40		
HGX12P/60-4 S	30	Q 6820	6230	5680	4690	3810	3060	2420	1870	1430	1060	770	553		
		P 105	107	108	108	104	0.993	0.921	0.839	0.753	0.669	0.593	0.532		
	40	Q 5900	5390	4900	4030	3260	2610	2050	1580	1200	884	639	-		
HGX12P/75-4	30	Q 5030	4570	4150	3390	2730	2170	1690	1300	968	-	-	-		
		P 132	132	130	125	118	109	0.996	0.892	0.791	0.697	0.618	-		
	50	Q 157	154	150	140	129	117	105	0.927	0.811	-	-	-		
HGX12P/75-4 S	30	Q 8490	7760	7080	5850	4770	3830	3040	2360	1800	1350	989	715		
		P 130	133	134	134	130	123	114	103	0.928	0.823	0.728	0.653		
	40	Q 7350	6710	6120	5030	4090	3270	2580	2010	1530	1140	828	-		
HGX12P/90-4	30	Q 164	164	162	157	147	136	124	111	0.983	0.866	0.768	-		
		P 6260	5710	5180	4240	3430	2730	2140	1650	1250	-	-	-		
	50	Q 196	192	187	177	163	148	132	116	101	-	-	-		
HGX12P/90-4 S	30	Q 10100	9240	8430	6960	5680	4570	3630	2830	2170	1630	1200	872		
		P 157	160	162	159	154	146	135	122	109	0.970	0.856	0.764		
	40	Q 8740	7990	7280	5990	4870	3910	3100	2410	1840	1380	1010	-		
HGX12P/110-4	30	Q 199	198	196	186	176	162	147	132	117	102	0.909	-		
		P 7450	6790	6170	5050	4090	3270	2580	1990	1510	-	-	-		
	50	Q 238	234	228	211	195	177	158	139	121	-	-	-		
HGX12P/110-4 S	30	Q 11900	10900	9870	8150	6660	5360	4260	3330	2550	1920	1420	1040		
		P 184	188	190	187	181	171	158	144	128	113	100	0.893		
	40	Q 10300	9340	8510	7000	5710	4590	3640	2840	2170	1630	1200	-		
HGX22e/125-4	30	Q 235	234	231	220	207	192	174	155	137	121	107	-		
		P 8690	7930	7210	5910	4790	3840	3030	2350	1790	-	-	-		
	50	Q 283	277	270	250	231	209	186	164	143	-	-	-		
HGX22e/125-4 S	30	Q 15200	13800	12600	10200	8240	6580	5180	4000	3030	2220	1570	1030		
		P 206	208	209	208	201	190	177	162	146	129	113	0.992		
	40	Q 13300	12000	10900	8810	7090	5630	4400	3370	2520	1830	1250	-		
HHGX22e/160-4	30	Q 260	257	253	243	229	212	193	174	155	137	120	-		
		P 11300	10200	9170	7410	5920	4660	3620	2750	2040	-	-	-		
	50	Q 308	301	293	274	253	230	207	184	163	-	-	-		
HGX22e/160-4 S	30	Q 19300	17500	15900	12600	10200	8120	6450	5060	3920	2960	2130	1360		
		P 272	269	266	258	243	230	216	202	187	169	148	122		
	40	Q 17000	15400	13900	11100	8860	7060	5580	4350	3310	2400	1580	-		
HGX22e/190-4	30	Q 330	323	315	300	279	260	241	221	199	175	148	-		
		P 14700	13200	11900	9540	7630	6050	4720	3600	2630	-	-	-		
	50	Q 386	374	361	340	313	288	262	235	206	-	-	-		
HGX22e/190-4 S	30	Q 22500	20500	18600	15300	12600	10200	8100	6400	4970	3760	2750	1870		
		P 348	340	332	326	304	282	262	241	220	198	175	149		
	40	Q 19600	17800	16200	13400	10900	8760	6980	5490	4240	3180	2270	-		
HGX34e/215-4	30	Q 423	410	396	381	350	321	294	267	240	213	186	-		
		P 16800	15300	13900	11400	9190	7370	5850	4570	3510	-	-	-		
	50	Q 500	480	461	435	395	357	322	289	256	-	-	-		
HGX34e/215-4 S	30	Q 24600	22400	20400	16500	13300	10600	8200	6230	4590	3270	2220	1430		
		P 347	347	344	334	317	294	267	238	208	179	153	131		
	40	Q 21500	19500	17600	14100	11300	8800	6740	5020	3620	2500	1640	-		
HGX34e/255-4	30	Q 447	436	423	399	364	327	288	250	213	180	152	-		
		P 18200	16400	14800	11700	9170	7070	5310	3880	2730	-	-	-		
	50	Q 537	515	493	455	404	353	303	256	214	-	-	-		
HGX34e/315-4	30	Q 28900	26500	24100	19600	16000	12800	9990	7640	5670	4050	2760	1790		
		P 372	381	386	391	381	360	332	297	260	222	185	153		
	40	Q 25000	22800	20800	16800	13600	10900	8440	6400	4690	3290	2180	-		
HGX34e/315-4 S	30	Q 486	485	481	473	444	408	365	319	271	225	182	-		
		P 20900	19000	17300	13900	11200	8820	6810	5110	3700	-	-	-		
	50	Q 589	578	564	542	496	443	387	328	271	-	-	-		
HGX34e/315-4 S	30	Q 36600	33300	30200	24400	19700	15700	12300	9450	7100	5180	3630	2400		
		P 489	492	492	474	456	429	395	356	313	268	223	180		
	40	Q 31700	28800	26100	21000	16900	13400	10400	7920	5870	4180	2790	-		
	30	Q 619	612	602	567	530	487	437	384	328	272	217	-		
		P 26800	24300	21900	17600	14000	11000	8480	6370	4620	-	-	-		
	50	Q 741	723	703	650	594	533	467	398	329	-	-	-		

Relating to 20 °C suction gas temperature without liquid subcooling

Motor version -S- (more powerful motor)

Supplementary cooling or reduced suction gas temperature

R407A | 50 Hz

Type		Cooling capacity Q _o [kW]										Power consumption P _e [kW]			
		Evaporating temperature °C													
Cond. temp. °C		10	7,5	5	0	-5	-10	-15	-20	-25	-30	-35	-40		
HGX34e/380-4 HGX34e/380-4 S	30	Q P	43800 6.24	39900 6.23	36200 6.19	29300 5.93	23900 5.68	19200 5.33	15200 4.91	11900 4.42	9030 3.89	6720 3.34	4830 2.79	3290 2.25	
		Q P	37900 7.77	34500 7.64	31300 7.49	25300 7.05	20500 6.59	16500 6.04	13000 5.43	10100 4.77	7560 4.09	5510 3.40	3790 2.72	-	
	40	Q P	32000 9.22	29100 8.97	26300 8.70	21200 8.08	17200 7.38	13700 6.62	10700 5.81	8180 4.97	6060 4.12	-	-	-	
		Q P	56800 7.37	51900 7.47	47300 7.51	38700 7.40	31500 7.15	25300 6.75	20000 6.22	15600 5.61	11900 4.95	8840 4.26	6390 3.57	4420 2.92	
	HGX44e/475-4 HGX44e/475-4 S	30	Q P	49700 9.41	45300 9.35	41200 9.23	33500 8.86	27100 8.33	21700 7.67	17100 6.91	13200 6.09	9960 5.24	7310 4.39	5130 3.57	-
			Q P	42500 11.2	38600 11.0	35000 10.7	28300 10.1	22800 9.34	18100 8.41	14100 7.42	10800 6.39	8040 5.35	-	-	-
HGX44e/565-4 HGX44e/565-4 S	30	Q P	67800 8.75	61900 8.87	56400 8.92	46000 8.84	37500 8.53	30200 8.04	24000 7.41	18800 6.67	14400 5.87	10800 5.04	7830 4.22	5480 3.44	
		Q P	59400 11.1	54200 11.1	49300 10.9	39900 10.6	32400 9.95	26000 9.15	20600 8.24	16000 7.25	12200 6.22	8970 5.20	6380 4.22	-	
	40	Q P	51000 13.4	46300 13.1	42000 12.8	33700 12.1	27300 11.1	21800 10.0	17100 8.85	13200 7.60	9890 6.35	-	-	-	
		Q P	79000 10.2	72100 10.3	65700 10.4	53800 10.3	43800 10.0	35200 9.45	27800 8.71	21600 7.86	16500 6.93	12300 5.96	8820 5.00	6070 4.09	
	HGX44e/665-4 HGX44e/665-4 S ¹⁾	30	Q P	69000 13.1	62900 13.0	57100 12.8	46500 12.4	37700 11.6	30100 10.7	23700 9.68	18300 8.53	13800 7.34	10100 6.15	7030 5.00	-
			Q P	58900 15.7	53500 15.4	48500 15.0	39200 14.2	31500 13.0	25000 11.7	19500 10.3	14900 8.94	11100 7.49	-	-	-
HGX44e/770-4 HGX44e/770-4 S	30	Q P	91500 11.8	83600 12.0	76200 12.0	62700 11.9	51100 11.5	41100 10.9	32600 10.0	25400 9.09	19500 8.01	14600 6.89	10600 5.78	7340 4.73	
		Q P	80000 15.2	72900 15.1	66300 14.9	54400 14.3	44100 13.4	35300 12.4	27900 11.1	21600 9.86	16400 8.49	12100 7.11	8530 5.78	-	
	40	Q P	68400 18.3	62200 18.0	56400 17.5	46000 16.4	37100 15.1	29500 13.6	23100 12.0	17800 10.3	13300 8.66	-	-	-	
		Q P	99300 13.0	90700 13.2	82500 13.2	69100 13.2	56300 12.7	45400 12.0	36000 11.1	28100 10.0	21600 8.82	16200 7.57	11800 6.33	8220 5.16	
	HGX56e/850-4 HGX56e/850-4 S	30	Q P	86800 16.7	79000 16.6	71800 16.4	59900 15.8	48700 14.8	39000 13.7	30900 12.3	24000 10.8	18200 9.35	13500 7.82	9570 6.34	-
			Q P	74300 20.1	67500 19.7	61100 19.2	50700 18.1	40900 16.6	32700 15.0	25700 13.2	19800 11.4	14900 9.54	-	-	-
HGX56e/995-4 HGX56e/995-4 S	30	Q P	116000 15.6	106000 15.6	96400 15.6	79600 15.2	65300 14.6	52900 13.8	42200 12.7	33100 11.5	25500 10.2	19000 8.81	13600 7.32	9140 5.81	
		Q P	103000 19.9	93500 19.6	85300 19.2	70000 18.3	57100 17.1	45900 15.7	36400 14.2	28300 12.5	21400 10.7	15600 8.90	10700 7.02	-	
	40	Q P	88600 23.8	80700 23.2	73300 22.5	59700 21.0	48300 19.2	38500 17.3	30100 15.2	23100 13.0	17100 10.8	-	-	-	
		Q P	138000 18.6	126000 18.9	115000 19.0	93400 18.8	75800 18.2	60800 17.2	48000 15.9	37300 14.4	28400 12.7	21100 11.1	15200 9.43	10500 7.86	
	HGX56e/1155-4 HGX56e/1155-4 S	30	Q P	121000 23.9	110000 23.7	99300 23.4	80800 22.6	65400 21.2	52200 19.6	41000 17.7	31600 15.7	23900 13.6	17500 11.5	12200 9.61	-
			Q P	103000 28.7	93400 28.1	84500 27.4	68300 25.9	54900 23.9	43500 21.6	33900 19.1	25900 16.6	19200 14.1	-	-	-
HGX66e/1340-4 HGX66e/1340-4 S	30	Q P	156000 22.3	142000 22.2	129000 22.0	105000 21.2	85200 20.1	68400 18.8	54200 17.3	42300 15.5	32400 13.6	24100 11.7	17200 9.77	11200 7.81	
		Q P	136000 27.6	124000 27.0	113000 26.4	90900 25.0	73600 23.2	58900 21.2	46500 19.0	36000 16.7	27200 14.3	19700 11.9	-	-	
	40	Q P	117000 32.4	106000 31.5	95500 30.5	76900 28.3	61900 25.8	49300 23.1	38600 20.3	29500 17.3	21700 14.4	-	-	-	
		Q P	179000 25.7	163000 25.5	148000 25.3	121000 24.5	97900 23.3	78800 21.8	62600 20.0	49100 18.0	37700 15.9	28300 13.7	20300 11.4	13400 9.24	
	HGX66e/1540-4 HGX66e/1540-4 S	30	Q P	156000 31.9	142000 31.3	129000 30.6	105000 29.0	84800 27.0	68000 24.7	53900 22.2	42000 19.5	31900 16.8	23300 14.0	-	-
			Q P	134000 37.7	122000 36.6	110000 35.4	88600 33.0	71600 30.2	57200 27.1	44900 23.8	34600 20.4	25700 17.0	-	-	-

¹⁾ ASERCOM certified

Relating to 20 °C suction gas temperature without liquid subcooling



Motor version -S- (more powerful motor)



Supplementary cooling or reduced suction gas temperature

R407A | 50 Hz

Type		Cooling capacity Q _o [kW]									Power consumption P _e [kW]			
		Evaporating temperature °C												
		10	7,5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
HGX66e/1750-4 HGX66e/1750-4 S	30	Q P	203000 29.4	185000 29.2	168000 28.9	138000 27.9	113000 26.6	90200 24.9	71700 22.9	56200 20.6	43300 18.2	32400 15.7	23300 13.2	15400 10.7
		Q P	177000 36.4	161000 35.8	147000 35.0	120000 33.1	97100 30.8	78000 28.2	61800 25.4	48200 22.4	36700 19.3	26800 16.1	- -	- -
	40	Q P	152000 43.0	138000 41.8	125000 40.5	102000 37.7	82000 34.4	65600 30.9	51600 27.3	39800 23.4	29600 19.6	- -	- -	- -
		50	Q P	123000 43.0	110000 41.8	99000 40.5	80000 37.7	64000 34.4	51000 30.9	40000 27.3	31000 23.4	23000 19.6	- -	- -
HGX66e/2070-4 HGX66e/2070-4 S	30	Q P	239000 34.8	218000 34.6	198000 34.3	162000 33.1	132000 31.5	107000 29.5	84400 27.0	66200 24.4	51000 21.5	38200 18.5	27500 15.5	18200 12.5
		Q P	208000 43.3	189000 42.5	172000 41.5	141000 39.4	114000 36.6	91600 33.5	72700 30.1	56700 26.5	43200 22.8	31600 19.0	- -	- -
	40	Q P	178000 51.3	161000 49.9	146000 48.3	119000 45.0	96100 41.0	77000 36.8	60700 32.3	46800 27.7	34800 23.1	- -	- -	- -
		50	Q P	146000 51.3	131000 49.9	117000 48.3	95000 45.0	76000 41.0	60000 36.8	47000 32.3	36000 27.7	27000 23.1	- -	- -
HGX88e/2400-4 HGX88e/2400-4 S	30	Q P	283000 41.2	258000 41.0	234000 40.6	191000 39.1	155000 37.3	125000 35.0	99200 32.2	77800 29.2	59900 25.9	44900 22.5	32300 19.0	21400 15.5
		Q P	248000 50.6	226000 49.7	205000 48.7	166000 46.4	135000 43.2	108000 39.6	85600 35.8	66700 31.7	50800 27.4	37200 23.1	- -	- -
	40	Q P	213000 59.5	194000 57.9	175000 56.2	141000 52.9	114000 48.4	91000 43.5	71600 38.4	55200 33.2	41100 27.9	- -	- -	- -
		50	Q P	175000 59.5	158000 57.9	141000 56.2	111000 52.9	89000 48.4	70000 43.5	54000 38.4	41000 33.2	30000 27.9	- -	- -
HGX88e/2735-4 HGX88e/2735-4 S	30	Q P	321000 46.6	293000 46.4	266000 45.9	218000 44.4	177000 42.4	143000 39.8	114000 36.7	88600 33.3	68200 29.6	51100 25.7	36700 21.7	24300 17.7
		Q P	281000 57.5	256000 56.5	232000 55.3	190000 52.5	154000 49.0	124000 45.0	97600 40.7	76100 36.1	57900 31.3	42400 26.4	- -	- -
	40	Q P	242000 67.9	219000 66.0	199000 64.0	161000 59.8	131000 54.7	104000 49.3	81700 43.6	62900 37.8	46800 31.8	- -	- -	- -
		50	Q P	199000 67.9	179000 66.0	160000 64.0	125000 59.8	100000 54.7	79000 49.3	62000 43.6	47000 37.8	35000 31.8	- -	- -
HGX88e/3235-4 HGX88e/3235-4 S	30	Q P	379000 54.9	346000 54.6	314000 54.1	257000 52.4	209000 49.9	168000 46.9	134000 43.2	105000 39.1	80300 34.7	60100 30.1	43100 25.4	28500 20.7
		Q P	332000 67.7	302000 66.5	274000 65.1	224000 61.9	181000 57.7	146000 53.0	115000 47.8	89500 42.3	68000 36.7	49700 30.9	- -	- -
	40	Q P	285000 79.8	259000 77.6	234000 75.2	190000 70.5	154000 64.5	123000 58.0	96100 51.2	73900 44.3	54900 37.2	- -	- -	- -
		50	Q P	234000 79.8	211000 77.6	189000 75.2	150000 70.5	120000 64.5	95000 58.0	74000 51.2	57000 44.3	43000 37.2	- -	- -

Relating to 20 °C suction gas temperature without liquid subcooling

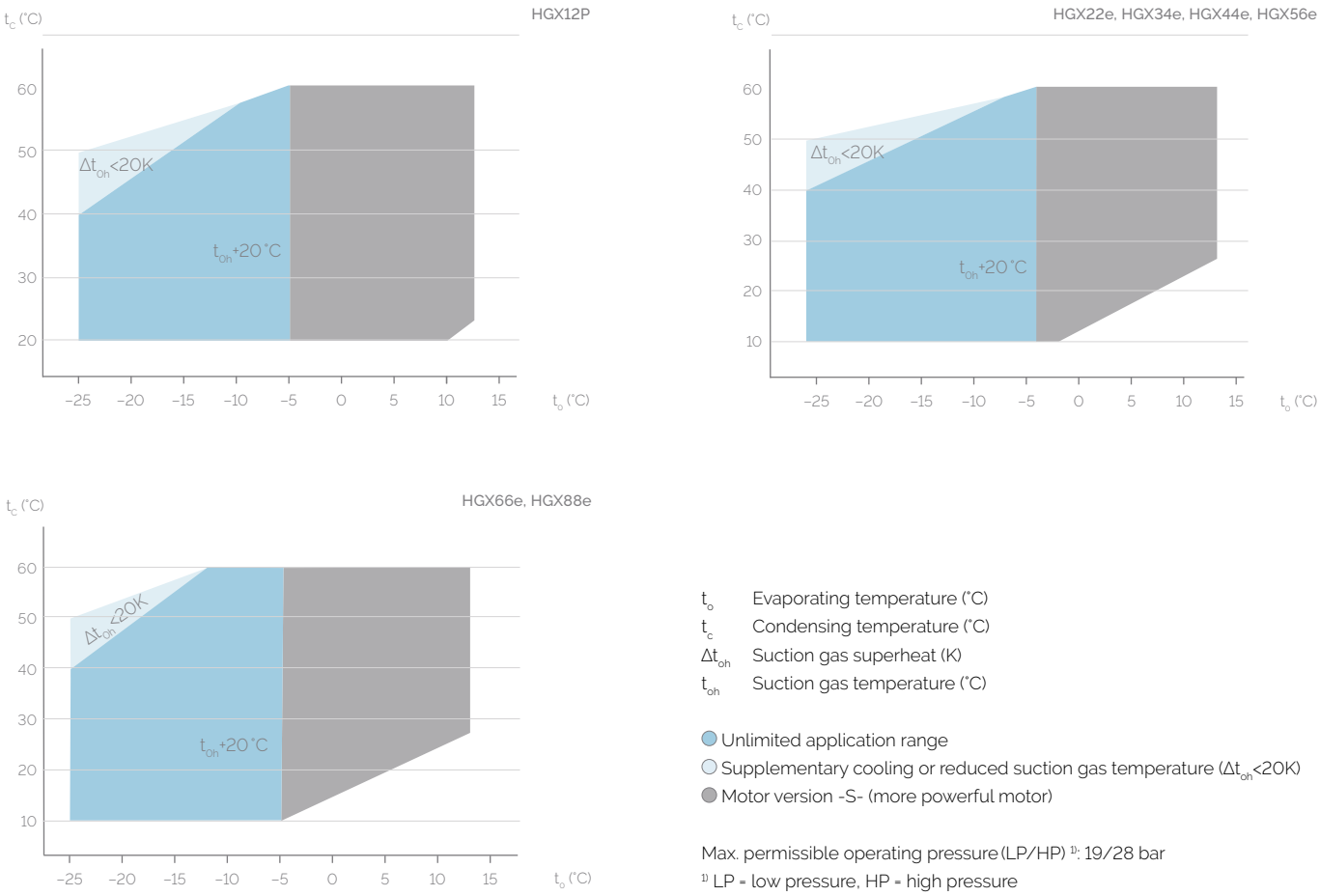


Motor version -S- (more powerful motor)



Supplementary cooling or reduced suction gas temperature

R407C



Notes

Operating limits

Compressor operation is possible within the limits shown on the application diagrams. Please note the colored areas. Compressor application limits should not be chosen for design purposes or continuous operation.

Performance data

The performance data for R407C are based on European Standard EN 12900 50 Hz power supply frequency. This signifies: 20 °C suction gas temperature without liquid subcooling. Evaporation and condensing temperatures are based on the dew point values (saturated vapour conditions). A comprehensive modification to 20 °C suction gas temperature will follow at a later date.

This results in significant differences compared to specifications with liquid undercooling and/or suction-gas temperatures.

Conversion factor for 60 Hz = 1.2

R407C | 50 Hz

Type	Cond. temp. °C	Cooling capacity Q _o [kW]										Power consumption P _e [kW]	
		Evaporating temperature °C											
		12.5	10	7.5	5	0	-5	-10	-15	-20	-25		
HGX12P/60-4 S	30	Q P 6780 0.88	Q P 6180 0.90	Q P 5610 0.92	Q P 5080 0.92	Q P 4140 0.91	Q P 3330 0.88	Q P 2650 0.82	Q P 2080 0.76	Q P 1610 0.69	Q P 1230 0.62		
	40	Q P 5870 1.16	Q P 5340 1.16	Q P 4840 1.15	Q P 4380 1.13	Q P 3560 1.08	Q P 2860 1.01	Q P 2270 0.92	Q P 1780 0.83	Q P 1360 0.74	Q P 1020 0.66		
	50	Q P 5010 1.41	Q P 4550 1.39	Q P 4120 1.35	Q P 3720 1.31	Q P 3020 1.22	Q P 2420 1.12	Q P 1920 1.00	Q P 1490 0.90	Q P 1130 0.79	Q P 827 0.69		
HGX12P/75-4 HGX12P/75-4 S	30	Q P 8740 1.12	Q P 7960 1.16	Q P 7230 1.18	Q P 6550 1.18	Q P 5340 1.17	Q P 4300 1.13	Q P 3420 1.06	Q P 2680 0.98	Q P 2080 0.89	Q P 1580 0.79		
	40	Q P 7560 1.50	Q P 6880 1.49	Q P 6240 1.48	Q P 5650 1.46	Q P 4590 1.39	Q P 3690 1.30	Q P 2920 1.19	Q P 2290 1.07	Q P 1760 0.96	Q P 1320 0.84		
	50	Q P 6450 1.82	Q P 5860 1.79	Q P 5310 1.74	Q P 4800 1.69	Q P 3890 1.58	Q P 3120 1.44	Q P 2470 1.29	Q P 1920 1.15	Q P 1460 1.01	Q P 1070 0.89		
HGX12P/90-4 HGX12P/90-4 S	30	Q P 10500 1.34	Q P 9490 1.38	Q P 8620 1.40	Q P 7810 1.41	Q P 6360 1.40	Q P 5120 1.34	Q P 4080 1.26	Q P 3200 1.16	Q P 2480 1.05	Q P 1890 0.95		
	40	Q P 9020 1.79	Q P 8200 1.78	Q P 7440 1.77	Q P 6730 1.74	Q P 5470 1.66	Q P 4400 1.55	Q P 3490 1.42	Q P 2730 1.28	Q P 2090 1.13	Q P 1570 1.00		
	50	Q P 7690 2.17	Q P 6990 2.13	Q P 6330 2.08	Q P 5720 2.02	Q P 4640 1.88	Q P 3720 1.72	Q P 2940 1.55	Q P 2290 1.37	Q P 1740 1.21	Q P 1280 1.06		
HGX12P/110-4 HGX12P/110-4 S	30	Q P 12300 1.58	Q P 11200 1.62	Q P 10200 1.65	Q P 9180 1.66	Q P 7480 1.64	Q P 6020 1.58	Q P 4790 1.48	Q P 3760 1.37	Q P 2910 1.24	Q P 2220 1.11		
	40	Q P 10600 2.10	Q P 9640 2.10	Q P 8750 2.08	Q P 7910 2.05	Q P 6430 1.95	Q P 5170 1.82	Q P 4100 1.67	Q P 3200 1.50	Q P 2460 1.33	Q P 1850 1.18		
	50	Q P 9040 2.56	Q P 8210 2.51	Q P 7440 2.45	Q P 6730 2.38	Q P 5460 2.21	Q P 4370 2.02	Q P 3460 1.82	Q P 2690 1.61	Q P 2040 1.42	Q P 1500 1.25		
HGX22e/125-4 HGX22e/125-4 S	30	Q P 14400 1.78	Q P 13100 1.82	Q P 11900 1.85	Q P 10800 1.87	Q P 8790 1.85	Q P 7070 1.78	Q P 5630 1.67	Q P 4420 1.53	Q P 3420 1.39	Q P 2600 1.25		
	40	Q P 12500 2.36	Q P 11400 2.35	Q P 10300 2.33	Q P 9300 2.30	Q P 7560 2.19	Q P 6060 2.04	Q P 4800 1.87	Q P 3760 1.68	Q P 2890 1.5	Q P 2160 1.32		
	50	Q P 10700 2.87	Q P 9640 2.81	Q P 8740 2.75	Q P 7910 2.67	Q P 6410 2.48	Q P 5120 2.27	Q P 4050 2.04	Q P 3150 1.81	Q P 2400 1.59	Q P 1760 1.40		
HHGX22e/160-4 HGX22e/160-4 S	30	Q P 17600 2.18	Q P 16000 2.24	Q P 14500 2.28	Q P 13200 2.30	Q P 10700 2.27	Q P 8730 2.30	Q P 6950 2.16	Q P 5470 1.99	Q P 4240 1.79	Q P 3230 1.61		
	40	Q P 15200 2.90	Q P 13800 2.90	Q P 12500 2.87	Q P 11300 2.83	Q P 9180 2.69	Q P 7500 2.64	Q P 5950 2.42	Q P 4650 2.18	Q P 3580 1.94	Q P 2680 1.72		
	50	Q P 12900 3.53	Q P 11700 3.46	Q P 10700 3.38	Q P 9590 3.28	Q P 7780 3.05	Q P 6350 2.93	Q P 5020 2.64	Q P 3900 2.34	Q P 2970 2.06	Q P 2180 1.81		
HGX22e/190-4 HGX22e/190-4 S	30	Q P 21800 2.67	Q P 19900 2.74	Q P 18100 2.79	Q P 16400 2.81	Q P 13300 2.78	Q P 10800 2.83	Q P 8550 2.65	Q P 6700 2.44	Q P 5180 2.20	Q P 3960 1.98		
	40	Q P 18900 3.54	Q P 17200 3.54	Q P 15600 3.51	Q P 14100 3.46	Q P 11500 3.29	Q P 9220 3.25	Q P 7310 2.97	Q P 5710 2.68	Q P 4390 2.38	Q P 3290 2.10		
	50	Q P 16100 4.31	Q P 14600 4.23	Q P 13300 4.13	Q P 12000 4.01	Q P 9700 3.73	Q P 7790 3.60	Q P 6170 3.24	Q P 4810 2.87	Q P 3650 2.53	Q P 2670 2.22		
HGX34e/215-4 HGX34e/215-4 S	30	Q P 25600 3.45	Q P 23300 3.49	Q P 21100 3.50	Q P 19100 3.48	Q P 15600 3.39	Q P 12200 3.16	Q P 9720 2.94	Q P 7650 2.67	Q P 5910 2.38	Q P 4480 2.09		
	40	Q P 22400 4.38	Q P 20300 4.33	Q P 18400 4.26	Q P 16600 4.17	Q P 13400 3.94	Q P 10400 3.60	Q P 8190 3.25	Q P 6410 2.89	Q P 4920 2.52	Q P 3700 2.17		
	50	Q P 19100 5.19	Q P 17300 5.06	Q P 15600 4.91	Q P 14100 4.75	Q P 11300 4.39	Q P 8590 3.98	Q P 6820 3.54	Q P 5330 3.09	Q P 4100 2.66	Q P 3100 2.27		
HGX34e/255-4 HGX34e/255-4 S	30	Q P 29600 4.30	Q P 27000 4.30	Q P 24600 4.28	Q P 22300 4.23	Q P 18300 4.08	Q P 14500 3.84	Q P 11500 3.54	Q P 9040 3.20	Q P 7030 2.85	Q P 5300 2.48		
	40	Q P 26000 5.33	Q P 23600 5.24	Q P 21500 5.13	Q P 19500 5.00	Q P 15800 4.71	Q P 12300 4.38	Q P 9730 3.94	Q P 7660 3.50	Q P 5940 3.06	Q P 4430 2.63		
	50	Q P 22200 6.25	Q P 20200 6.08	Q P 18300 5.89	Q P 16500 5.69	Q P 13400 5.25	Q P 10200 4.83	Q P 8080 4.29	Q P 6420 3.76	Q P 5050 3.26	Q P 3820 2.79		
HGX34e/315-4 HGX34e/315-4 S	30	Q P 35900 4.95	Q P 32700 5.00	Q P 29800 5.01	Q P 27000 4.99	Q P 22100 4.86	Q P 17600 4.69	Q P 14100 4.34	Q P 11100 3.96	Q P 8590 3.55	Q P 6550 3.11		
	40	Q P 31300 6.32	Q P 28500 6.25	Q P 25900 6.16	Q P 23500 6.04	Q P 19200 5.72	Q P 15100 5.33	Q P 12000 4.85	Q P 9420 4.33	Q P 7260 3.80	Q P 5500 3.27		
	50	Q P 26800 7.63	Q P 24300 7.45	Q P 22100 7.24	Q P 20000 7.02	Q P 16200 6.50	Q P 12800 5.87	Q P 10200 5.25	Q P 7910 4.63	Q P 6060 3.99	Q P 4550 3.37		

Relating to 20 °C suction gas temperature without liquid subcooling

Motor version -S- (more powerful motor)

Supplementary cooling or reduced suction gas temperature

R407C | 50 Hz

Type		Cooling capacity Q _o [kW]							Power consumption P _e [kW]			
		Evaporating temperature °C										
Cond. temp. °C		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	
HGX34e/380-4 HGX34e/380-4 S	30	Q P	43500 6.40	39600 6.35	36000 6.27	32700 6.17	26700 5.93	21600 5.84	17500 5.38	13900 4.91	10900 4.42	8310 3.90
		Q P	38000 7.95	34600 7.78	31400 7.59	28400 7.39	23200 6.94	18700 6.71	15100 6.08	12000 5.45	9320 4.82	7140 4.18
	40	Q P	32200 9.52	29300 9.23	26500 8.92	24000 8.60	19600 7.93	15800 7.49	12800 6.69	10100 5.91	7900 5.13	6070 4.36
		Q P	56600 7.20	51700 7.25	47100 7.25	42800 7.21	35200 7.03	28500 6.66	22900 6.24	18100 5.73	14100 5.18	10700 4.59
HGX44e/475-4 HGX44e/475-4 S	30	Q P	50200 9.13	45800 9.03	41700 8.89	37800 8.72	30900 8.28	24900 7.69	19900 7.05	15600 6.35	12000 5.61	8850 4.87
		Q P	43600 10.80	39700 10.50	36000 10.30	32600 10.00	26500 9.33	21200 8.54	16800 7.69	13100 6.80	9850 5.90	7100 5.02
	40	Q P	67400 8.54	61600 8.60	56200 8.61	51100 8.56	42000 8.34	33900 7.93	27300 7.42	21700 6.81	17000 6.14	12900 5.44
		Q P	60000 10.80	54700 10.70	49800 10.50	45200 10.30	37000 9.83	29700 9.18	23800 8.40	18700 7.55	14500 6.67	10800 5.78
HGX44e/565-4 HGX44e/565-4 S	30	Q P	52200 12.80	47500 12.50	43100 12.20	39000 11.80	31800 11.00	25300 10.20	20100 9.18	15700 8.10	12000 7.01	8650 5.95
		Q P	78700 10.00	71900 10.00	65500 10.00	59600 10.00	48900 9.76	40000 9.23	32200 8.65	25500 7.95	19800 7.17	15000 6.36
	40	Q P	69800 12.70	63600 12.50	57900 12.30	52500 12.10	42900 11.50	34900 10.60	27900 9.77	21900 8.80	16800 7.78	12400 6.75
		Q P	60600 15.10	55100 14.70	49900 14.40	45200 13.90	36700 13.00	29700 11.80	23500 10.60	18300 9.43	13800 8.18	9890 6.96
HGX44e/770-4 HGX44e/770-4 S	30	Q P	92000 11.60	84000 11.70	76600 11.70	69600 11.60	57100 11.30	46300 10.80	37100 10.00	29300 9.22	22700 8.26	17000 7.23
		Q P	81400 14.80	74200 14.70	67400 14.40	61200 14.10	49900 13.30	40300 12.40	32000 11.30	25000 10.00	19000 8.82	13900 7.51
	40	Q P	70400 17.60	64000 17.20	58000 16.70	52400 16.20	42500 15.00	34000 13.60	26800 12.10	20600 10.60	15400 9.06	10800 7.49
		Q P	101000 12.7	92000 12.8	83900 12.8	76300 12.7	62800 12.4	50900 11.8	41000 11.1	32600 10.2	25400 9.23	19300 8.17
HGX56e/850-4 HGX56e/850-4 S	30	Q P	89400 16.2	81500 16.0	74200 15.8	67400 15.4	55200 14.7	44500 13.7	35700 12.5	28100 11.3	21700 10.0	16100 8.68
		Q P	77600 19.3	70600 18.8	64100 18.3	58100 17.8	47300 16.5	38000 15.2	30200 13.7	23600 12.1	18000 10.5	13000 8.93
	40	Q P	121000 14.3	111000 14.5	101000 14.6	91500 14.6	75400 14.4	61200 13.8	49300 13.0	39100 11.9	30500 10.7	23200 9.45
		Q P	107000 18.8	96900 18.7	88300 18.5	80300 18.2	65900 17.3	53300 16.2	42700 14.8	33600 13.3	25900 11.6	19400 10.0
HGX56e/995-4 HGX56e/995-4 S	30	Q P	92100 23.1	83900 22.6	76400 22.0	69300 21.4	56700 19.9	45600 18.2	36300 16.3	28400 14.3	21600 12.2	15800 10.2
		Q P	139000 18.2	127000 18.3	115000 18.3	105000 18.2	85600 17.7	69200 16.9	55500 15.7	43800 14.4	33900 12.8	25400 11.2
	40	Q P	123000 23.1	112000 22.9	102000 22.5	91800 22.0	74900 20.8	60100 19.4	47800 17.6	37300 15.7	28400 13.7	20700 11.7
		Q P	106000 27.4	96100 26.8	87100 26.0	78700 25.2	63800 23.4	50800 21.3	40000 19.0	30800 16.6	23000 14.1	16100 11.6
HGX66e/1340-4 HGX66e/1340-4 S	30	Q P	164000 21.3	149000 21.1	136000 20.9	123000 20.6	101000 19.8	80800 18.8	64600 17.6	51000 16.1	39500 14.5	29900 12.6
		Q P	144000 26.4	131000 25.9	119000 25.4	108000 24.8	87800 23.4	70300 21.7	56000 19.9	43900 17.9	33700 15.6	25100 13.2
	40	Q P	124000 31.3	113000 30.5	102000 29.6	92200 28.6	74900 26.5	59600 24.2	47300 21.7	36800 19.0	27900 16.1	20300 13.1
		Q P	187000 24.4	171000 24.3	156000 24.0	141000 23.7	116000 22.8	92900 21.7	74500 20.3	59000 18.7	45900 16.8	34800 14.7
HGX66e/1540-4 HGX66e/1540-4 S	30	Q P	165000 30.5	150000 29.9	137000 29.3	124000 28.6	102000 27.0	81000 25.2	64800 23.1	51000 20.8	39300 18.3	29400 15.5
		Q P	142000 36.3	129000 35.3	118000 34.3	107000 33.2	86400 30.8	69000 28.2	54900 25.4	43000 22.3	32800 19.0	24000 15.5

¹⁾ ASERCOM certified

Relating to 20 °C suction gas temperature without liquid subcooling



Motor version -S- (more powerful motor)

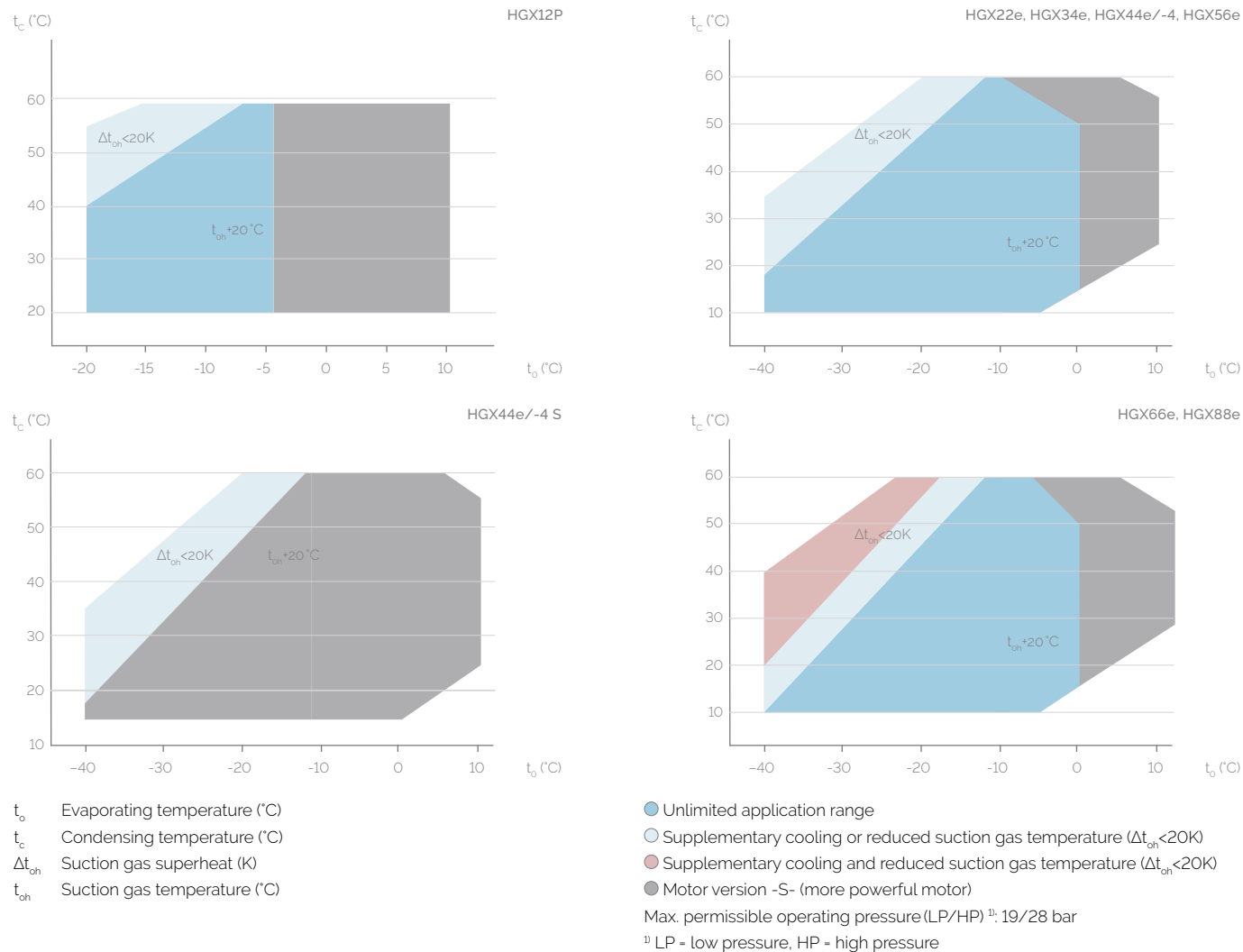


Supplementary cooling or reduced suction gas temperature

R407C | 50 Hz

Type		Cooling capacity Q _o [kW]							Power consumption P _e [kW]			
		Evaporating temperature °C										
Cond. temp. °C		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	
HGX66e/1750-4 HGX66e/1750-4 S	30	Q P	212000 28.0	194000 27.8	177000 27.5	160000 27.1	132000 26.2	107000 24.8	85300 23.2	67500 21.4	52500 19.3	39900 16.9
	40	Q P	187000 34.9	171000 34.2	155000 33.5	141000 32.7	115000 31.0	92800 28.8	74200 26.4	58500 23.8	45100 21.0	33800 17.8
	50	Q P	161000 41.5	147000 40.4	133000 39.2	121000 38.0	98100 35.3	79100 32.3	63000 29.0	49400 25.5	37700 21.8	27600 17.8
HGX66e/2070-4 HGX66e/2070-4 S	30	Q P	250000 33.1	228000 32.8	208000 32.5	189000 32.0	155000 30.9	126000 29.3	101000 27.5	79500 25.3	61900 22.8	47100 19.9
	40	Q P	220000 41.4	200000 40.6	182000 39.8	165000 38.8	135000 36.7	109000 34.2	87300 31.3	68800 28.2	53200 24.8	39800 21.0
	50	Q P	189000 49.5	172000 48.1	156000 46.7	142000 45.2	116000 41.9	92800 38.4	74000 34.4	58100 30.2	44400 25.7	32500 21.0
HGX88e/2400-4 HGX88e/2400-4 S	30	Q P	296000 39.3	270000 39.0	246000 38.6	223000 38.1	183000 36.9	147000 34.8	118000 32.7	93300 30.2	72600 27.3	55200 24.1
	40	Q P	261000 48.5	238000 47.7	217000 46.7	196000 45.7	161000 43.3	129000 40.4	103000 37.2	81000 33.6	62500 29.6	46800 25.4
	50	Q P	226000 57.5	206000 56.0	187000 54.4	169000 52.7	138000 49.1	110000 45.3	87400 40.8	68500 36.0	52300 30.9	38400 25.5
HGX88e/2735-4 HGX88e/2735-4 S	30	Q P	336000 44.4	306000 44.1	279000 43.6	253000 43.1	208000 41.7	168000 39.6	135000 37.3	107000 34.5	82700 31.2	62900 27.5
	40	Q P	296000 55.1	270000 54.1	246000 53.0	223000 51.8	182000 49.1	147000 45.9	118000 42.3	92300 38.2	71200 33.8	53300 29.1
	50	Q P	257000 65.5	233000 63.8	212000 61.9	192000 60.0	156000 55.8	126000 51.3	99700 46.3	78100 40.9	59600 35.2	43700 29.2
HGX88e/3235-4 HGX88e/3235-4 S	30	Q P	396000 52.3	362000 51.9	329000 51.4	299000 50.8	245000 49.1	198000 46.7	159000 43.9	126000 40.5	97500 36.7	74000 32.3
	40	Q P	350000 64.9	319000 63.7	290000 62.4	263000 61.0	215000 57.8	173000 54.0	139000 49.7	109000 44.9	83800 39.7	62700 34.0
	50	Q P	303000 77.1	275000 75.0	250000 72.8	226000 70.5	184000 65.6	148000 60.4	118000 54.4	91800 48.0	70000 41.2	51300 34.1

R407F



Notes

Operating limits

Compressor operation is possible within the limits shown on the application diagrams. Please note the colored areas. Compressor application limits should not be chosen for design purposes or continuous operation.

Performance data

The performance data for R407F are based on European Standard EN 12900 with a 50 Hz power supply frequency. This signifies: 20 °C suction gas temperature without liquid subcooling. Evaporation and condensing temperatures are based on the dew point values (saturated vapour conditions).

R407F | 50 Hz

Type	Cond. temp. °C	Cooling capacity Q _o [kW]												Power consumption P _e [kW]	
		Evaporating temperature °C													
		10	7,5	5	0	-5	-10	-15	-20	-25	-30	-35	-40		
HGX12P/60-4 S	30	Q	7240	6570	5950	4840	3890	3080	2410	1850	-	-	-	-	-
		P	110	113	115	115	112	106	0.982	0.894	-	-	-	-	-
	40	Q	6290	5700	5150	4180	3340	2640	2040	1540	-	-	-	-	-
HGX12P/75-4	30	Q	141	142	140	136	127	117	106	0.948	-	-	-	-	-
		P	167	164	160	151	138	124	110	0.963	-	-	-	-	-
	40	Q	5300	4800	4330	3490	2780	2170	1660	1220	-	-	-	-	-
HGX12P/90-4	30	Q	9010	8200	7440	6090	4950	3960	3130	2430	-	-	-	-	-
		P	139	143	146	146	140	133	123	112	-	-	-	-	-
	40	Q	7850	7140	6470	5290	4310	3440	2690	2070	-	-	-	-	-
HGX12P/110-4	30	Q	182	182	180	174	162	149	136	121	-	-	-	-	-
		P	215	211	206	194	178	161	144	127	-	-	-	-	-
	40	Q	6670	6060	5490	4480	3670	2910	2260	1720	-	-	-	-	-
HGX12P/130-4	30	Q	9160	8330	7560	6180	5070	4040	3170	2430	-	-	-	-	-
		P	304	298	291	272	254	227	200	174	-	-	-	-	-
	40	Q	12500	11300	10300	8420	6830	5510	4390	3440	-	-	-	-	-
HGX22e/125-4	30	Q	201	204	206	203	201	188	173	157	-	-	-	-	-
		P	254	252	250	240	231	211	189	168	-	-	-	-	-
	40	Q	9160	8330	7560	6180	5070	4040	3170	2430	-	-	-	-	-
HGX22e/160-4	30	Q	304	298	291	272	254	227	200	174	-	-	-	-	-
		P	335	325	316	294	271	247	222	197	-	-	-	-	-
	40	Q	15400	14100	12800	10600	8560	6860	5410	4190	3180	2350	1690	1160	-
HGX22e/190-4	30	Q	225	226	226	222	214	203	189	174	157	139	122	105	-
		P	281	277	272	260	244	226	207	187	166	146	127	-	-
	40	Q	11700	10600	9580	7800	6260	4950	3840	2920	2160	-	-	-	-
HGX34e/215-4	30	Q	335	325	316	294	271	247	222	197	173	-	-	-	-
		P	335	325	316	294	271	247	222	197	173	-	-	-	-
	40	Q	19600	17900	16300	13100	10600	8470	6740	5300	4110	3120	2280	1520	-
HGX34e/255-4	30	Q	298	293	288	277	261	246	232	217	201	181	158	130	-
		P	359	349	339	322	299	279	258	237	214	187	157	-	-
	40	Q	17500	15900	14400	11600	9300	7440	5890	4580	3490	2540	1690	-	-
HGX34e/315-4	30	Q	420	405	390	367	337	309	280	251	219	-	-	-	-
		P	420	405	390	367	337	309	280	251	219	-	-	-	-
	40	Q	15300	13800	12500	10200	8140	6460	5040	3820	2770	-	-	-	-
HGX44e/445-4	30	Q	420	405	390	367	337	309	280	251	219	-	-	-	-
		P	420	405	390	367	337	309	280	251	219	-	-	-	-
	40	Q	22700	20800	19000	15800	13000	10600	8450	6680	5200	3960	2940	2100	-
HGX44e/565-4	30	Q	385	373	362	352	327	304	282	260	238	214	188	159	-
		P	464	446	430	412	377	346	316	287	258	229	198	-	-
	40	Q	20000	18300	16700	13900	11400	9180	7330	5770	4460	3370	2450	-	-
HGX56e/665-4	30	Q	464	446	430	412	377	346	316	287	258	229	198	-	-
		P	547	524	502	472	427	385	346	309	272	-	-	-	-
	40	Q	17400	15900	14500	11900	9680	7790	6180	4830	3700	-	-	-	-
HGX66e/885-4	30	Q	547	524	502	472	427	385	346	309	272	-	-	-	-
		P	547	524	502	472	427	385	346	309	272	-	-	-	-
	40	Q	25900	23600	21400	17200	13900	11100	8570	6520	4820	3430	2320	1450	-
HGX88e/1105-4	30	Q	362	361	357	348	329	305	277	247	217	188	161	138	-
		P	470	457	443	418	381	341	301	262	224	191	163	-	-
	40	Q	22700	20600	18600	14800	11800	9230	7080	5290	3840	2680	1770	-	-
HGX110e/1405-4	30	Q	568	545	520	480	426	372	320	272	229	-	-	-	-
		P	568	545	520	480	426	372	320	272	229	-	-	-	-
	40	Q	19400	17500	15700	12300	9650	7460	5650	4180	3020	-	-	-	-
HGX130e/1705-4	30	Q	568	545	520	480	426	372	320	272	229	-	-	-	-
		P	568	545	520	480	426	372	320	272	229	-	-	-	-
	40	Q	30300	27700	25200	20500	16700	13400	10500	8020	5970	4280	2910	1820	-
HGX160e/2205-4	30	Q	383	392	398	405	394	373	344	310	272	233	196	161	-
		P	505	504	499	492	462	425	381	334	286	239	194	-	-
	40	Q	26300	24000	21800	17600	14300	11400	8860	6760	5000	3540	2360	-	-
HGX220e/2905-4	30	Q	505	504	499	492	462	425	381	334	286	239	194	-	-
		P	615	603	588	567	519	465	407	347	289	-	-	-	-
	40	Q	22000	20000	18100	14500	11700	9230	7190	5470	4050	-	-	-	-
HGX280e/3705-4	30	Q	615	603	588	567	519	465	407	347	289	-	-	-	-
		P	615	603	588	567	519	465	407	347	289	-	-	-	-
	40	Q	38500	34900	31700	25600	20600	16400	12900	9900	7460	5450	3800	2430	-
HGX315e/4405-4	30	Q	504	507	507	491	472	445	411	371	327	282	236	191	-
		P	644	636	625	590	552	507	457	402	346	289	232	-	-
	40	Q	33500	30400	27500	22100	17700	14000	11000	8350	6230	4470	3000	-	-
HGX355e/5005-4	30	Q	644	636	625	590	552	507	457	402	346	289	232	-	-
		P	644	636	625	590	552	507	457	402	346	289	232	-	-
	40	Q	28500	25700	23200	18500	14800	11600	8990	6840	5070	-	-	-	-
HGX400e/5605-4	30	Q	776	757	735	680	623	559	492	422	351	-	-	-	-
		P	776	757	735	680	623	559	492	422	351	-	-	-	-
	40	Q	776	757	735	680	623	559	492	422	351	-	-	-	-

Relating to 20 °C suction gas temperature without liquid subcooling

Motor version -S- (more powerful motor)

Supplementary cooling or reduced suction gas temperature

R407F | 50 Hz

Type		Cooling capacity Q _o [kW]										Power consumption P _e [kW]		
		Evaporating temperature °C												
Cond. temp. °C		10	7,5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
HGX34e/380-4 HGX34e/380-4 S	30	Q P	45700 6.39	41600 6.39	37800 6.36	30700 6.15	25000 5.88	20100 5.53	15900 5.09	12400 4.60	9460 4.07	7040 3.51	5030 2.94	3320 2.38
		Q P	39900 8.05	36200 7.93	32900 7.77	26500 7.34	21500 6.85	17200 6.29	13600 5.67	10600 5.00	8000 4.31	5870 3.61	4050 2.92	
	40	Q P	33800 9.65	30700 9.39	27800 9.10	22300 8.45	18000 7.73	14400 6.94	11300 6.11	8760 5.26	6630 4.40			
		Q P	58200 7.56	53100 7.67	48400 7.73	39600 7.62	32300 7.37	26000 6.98	20600 6.45	16100 5.84	12400 5.15	9210 4.43	6640 3.71	4520 3.00
HGX44e/475-4 HGX44e/475-4 S	30	Q P	51000 9.81	46500 9.74	42400 9.63	34500 9.22	28100 8.67	22600 7.99	17900 7.21	13900 6.36	10500 5.46	7620 4.55	5210 3.65	
		Q P	43900 11.8	40000 11.6	36300 11.3	29400 10.6	23900 9.78	19100 8.81	15000 7.76	11500 6.67	8460 5.55			
	40	Q P	69400 9.05	63400 9.18	57800 9.24	47100 9.13	38500 8.84	31000 8.36	24700 7.73	19400 6.99	14900 6.16	11200 5.30	8120 4.42	5600 3.57
		Q P	61000 11.7	55700 11.6	50700 11.5	41100 11.1	33500 10.4	27000 9.61	21500 8.66	16700 7.63	12800 6.54	9330 5.44	6460 4.36	
HGX44e/565-4 HGX44e/565-4 S	30	Q P	52600 14.1	47900 13.8	43600 13.5	35100 12.8	28600 11.8	22900 10.6	18100 9.35	14000 8.02	10400 6.66			
		Q P	81800 10.5	74700 10.6	68000 10.7	55700 10.6	45400 10.2	36500 9.72	29000 9.00	22600 8.15	17300 7.20	12900 6.20	9260 5.18	6270 4.19
	40	Q P	71600 13.6	65300 13.5	59400 13.4	48500 12.8	39400 12.0	31600 11.1	25000 10.0	19400 8.88	14700 7.63	10700 6.36	7220 5.11	
		Q P	61600 16.5	56000 16.2	50900 15.8	41300 14.8	33400 13.6	26700 12.3	20900 10.8	16000 9.33	11800 7.78			
HGX44e/770-4 HGX44e/770-4 S	30	Q P	93600 12.1	85500 12.3	77900 12.4	64300 12.3	52400 11.9	42200 11.3	33600 10.4	26300 9.50	20200 8.42	15100 7.29	10900 6.16	7350 5.08
		Q P	82000 15.8	74900 15.7	68200 15.5	56100 15.1	45700 14.0	36700 12.9	29100 11.7	22600 10.3	17100 8.99	12500 7.58	8480 6.20	
	40	Q P	70500 19.2	64300 18.8	58400 18.3	47900 17.2	38900 15.8	31100 14.3	24400 12.7	18700 11.0	13900 9.27			
		Q P	104000 13.5	94600 13.7	86300 13.8	70700 13.6	57800 13.2	46600 12.5	37100 11.6	29100 10.4	22400 9.26	16800 7.96	12200 6.64	8390 5.36
HGX56e/850-4 HGX56e/850-4 S	30	Q P	90800 17.5	82900 17.4	75500 17.2	61800 16.5	50400 15.5	40600 14.3	32200 12.9	25100 11.4	19100 9.82	14100 8.18	9680 6.55	
		Q P	78100 21.3	71200 20.8	64700 20.3	52700 19.1	42900 17.5	34400 15.8	27200 13.9	21000 12.0	15600 10.0			
	40	Q P	122000 16.5	112000 16.5	102000 16.4	83700 16.0	68600 15.4	55500 14.5	44200 13.4	34600 12.1	26600 10.7	19800 9.23	14100 7.65	9420 6.04
		Q P	108000 20.9	98400 20.6	89700 20.2	73600 19.3	60000 18.0	48200 16.6	38100 15.0	29600 13.2	22300 11.3	16200 9.38	11000 7.36	
HGX56e/995-4 HGX56e/995-4 S	30	Q P	93700 25.1	85400 24.4	77600 23.8	63100 22.2	51100 20.4	40700 18.4	31900 16.2	24300 13.9	17900 11.4			
		Q P	141000 18.9	129000 19.2	117000 19.3	96000 19.2	78300 18.6	63100 17.6	50200 16.3	39300 14.8	30100 13.1	22500 11.3	16300 9.59	11100 7.89
	40	Q P	124000 24.6	113000 24.4	103000 24.1	83800 23.4	68200 22.0	54900 20.3	43500 18.3	33800 16.2	25600 14.0	18700 11.8	12700 9.65	
		Q P	106000 29.8	96600 29.2	87800 28.5	71500 27.0	58000 24.9	46400 22.5	36500 19.9	28000 17.2	20700 14.4			
HGX66e/1340-4 HGX66e/1340-4 S	30	Q P	164000 23.1	149000 23.0	136000 22.8	111000 22.1	89600 21.0	71900 19.6	56900 17.9	44300 16.1	33800 14.2	25000 12.2		
		Q P	144000 29.0	131000 28.5	119000 27.8	96300 26.3	78000 24.4	62400 22.3	49100 19.9	38000 17.5	28700 15.0			
	40	Q P	124000 34.5	113000 33.4	102000 32.3	82200 30.0	66200 27.3	52600 24.4	41100 21.4	31500 18.3				
		Q P	187000 26.6	171000 26.5	156000 26.3	127000 25.5	103000 24.3	82900 22.7	65800 20.8	51400 18.7	39300 16.5	29300 14.2		
HGX66e/1540-4 HGX66e/1540-4 S	30	Q P	165000 33.6	150000 32.9	137000 32.2	111000 30.5	89800 28.3	72000 25.9	57000 23.3	44300 20.5	33600 17.6			
		Q P	143000 40.1	130000 38.9	118000 37.6	94600 35.0	76400 31.9	61000 28.6	47900 25.1	36900 21.6				

¹⁾ ASERCOM certified

Relating to 20 °C suction gas temperature without liquid subcooling



Motor version -S- (more powerful motor)

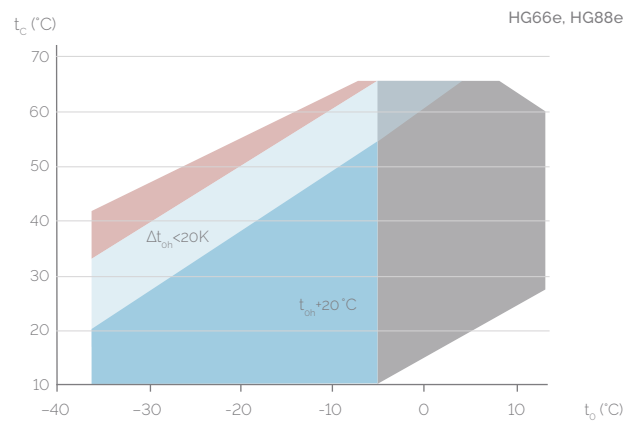
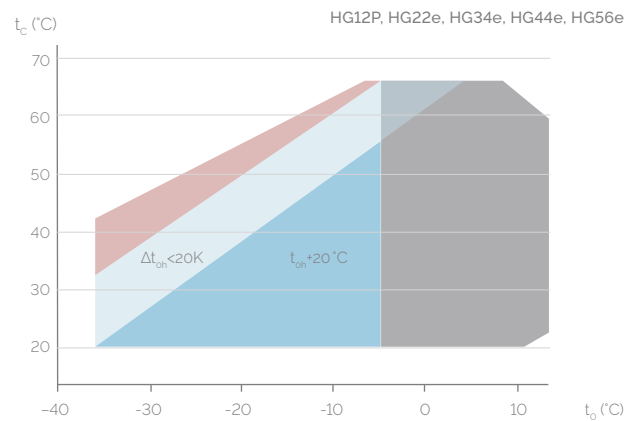


Supplementary cooling or reduced suction gas temperature

R407F | 50 Hz

Type		Cooling capacity Q _o [kW]										Power consumption P _e [kW]		
		Evaporating temperature °C												
		10	7,5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	
HGX66e/1750-4 HGX66e/1750-4 S	30	Q P	212000	194000	177000	145000	118000	94900	75300	58900	45100	33600		
			30.5	30.4	30.1	29.1	27.7	25.9	23.8	21.4	18.9	16.4		
	40	Q P	187000	171000	155000	127000	103000	82600	65300	50800	38600			
			38.3	37.6	36.8	34.8	32.3	29.6	26.6	23.5	20.2			
HGX66e/2070-4 HGX66e/2070-4 S	30	Q P	162000	147000	133000	109000	87600	69900	55000	42400				
			45.8	44.4	43.0	40.0	36.4	32.7	28.8	24.8				
	40	Q P	250000	228000	207000	171000	139000	112000	88700	69300	53100	39700		
			36.1	36.0	35.7	34.5	32.8	30.7	28.1	25.3	22.3	19.3		
HGX88e/2400-4 HGX88e/2400-4 S	30	Q P	219000	200000	182000	149000	121000	97000	76800	59800	45400			
			45.6	44.8	43.8	41.4	38.5	35.1	31.5	27.7	23.9			
	40	Q P	189000	172000	156000	127000	103000	82000	64600	49900				
			54.7	53.1	51.3	47.8	43.5	38.9	34.2	29.3				
HGX88e/2735-4 HGX88e/2735-4 S	30	Q P	296000	270000	246000	201000	163000	132000	105000	81400	62400	46500		
			42.7	42.5	42.2	40.8	38.9	36.4	33.5	30.3	26.9	23.3		
	40	Q P	262000	239000	217000	176000	143000	115000	90500	70400	53400			
			53.2	52.3	51.1	48.8	45.4	41.6	37.4	33.1	28.7			
HGX88e/3235-4 HGX88e/3235-4 S	30	Q P	227000	207000	187000	151000	122000	97100	76300	58800				
			63.2	61.4	59.5	56.1	51.2	45.9	40.5	35.0				
	40	Q P	336000	307000	279000	230000	187000	150000	119000	93000	71200	53100		
			48.3	48.1	47.7	46.3	44.2	41.5	38.3	34.7	30.9	26.9		
HGX88e/3235-4 HGX88e/3235-4 S	30	Q P	297000	271000	246000	202000	164000	131000	104000	80400	61000			
			60.5	59.4	58.1	55.0	51.4	47.2	42.7	37.9	33.0			
	40	Q P	258000	234000	212000	173000	140000	112000	87300	67200				
			72.2	70.1	67.9	63.0	57.7	52.0	46.1	40.0				
HGX88e/3235-4 HGX88e/3235-4 S	30	Q P	397000	362000	330000	270000	220000	177000	140000	110000	83700	62300		
			56.9	56.7	56.2	54.5	52.0	48.7	44.9	40.6	36.0	31.3		
	40	Q P	351000	320000	290000	237000	192000	154000	122000	94400	71600			
			71.3	69.9	68.4	65.1	60.6	55.5	50.0	44.3	38.4			
HGX88e/3235-4 HGX88e/3235-4 S	30	Q P	304000	276000	250000	203000	164000	131000	103000	78800				
			84.9	82.4	79.8	74.7	68.2	61.2	54.0	46.7				

R22



- t_o Evaporating temperature (°C)
t_c Condensing temperature (°C)
Δt_{oh} Suction gas superheat (K)
t_{oh} Suction gas temperature (°C)
- Unlimited application range
 - Supplementary cooling or reduced suction gas temperature (Δt_{oh} < 20K)
 - Supplementary cooling and reduced suction gas temperature (Δt_{oh} < 20K)
 - Motor version -S- (more powerful motor)

Max. permissible operating pressure (LP/HP)¹⁾: 19/28 bar
¹⁾ LP = low pressure, HP = high pressure

Notes

Operating limits
Compressor operation is possible within the limits shown on the application diagrams. Please note the colored areas. Compressor application limits should not be chosen for design purposes or continuous operation.

Performance data
The performance data for R22 are based on European Standard EN 12900 with a 50 Hz power supply frequency. This signifies: 20 °C suction gas temperature without liquid subcooling.

This results in significant differences compared to specifications with liquid undercooling and/or suction-gas temperatures. A comprehensive modification to 20 °C suction gas temperature will follow at a later date.

Conversion factor for 60 Hz = 1.2

R22 | 50 Hz

Type		Cooling capacity Q _o [W]								Power consumption P _e [kW]				
		Evaporating temperature °C												
Cond. temp. °C		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	
HGX12P/60-4 S ¹⁾	30	Q P	7120 0.889	6530 0.911	5980 0.927	5460 0.936	4520 0.939	3710 0.921	3000 0.886	2390 0.837	1870 0.776	1430 0.707	1040 0.632	708 0.553
	40	Q P	6290 1.19	5760 1.19	5270 1.18	4800 1.17	3960 1.13	3230 1.08	2600 1.01	2050 0.936	1570 0.849	1160 0.758		
	50	Q P	5500 1.46	5030 1.44	4590 1.41	4170 1.38	3430 1.30	2780 1.21	2210 1.12	1720 1.01	1290 0.906			
HGX12P/75-4 ¹⁾ HGX12P/75-4 S ¹⁾	30	Q P	8890 1.11	8150 1.13	7460 1.15	6820 1.17	5650 1.17	4630 1.15	3750 1.10	2990 1.04	2340 0.970	1780 0.883	1300 0.789	885 0.691
	40	Q P	7860 1.49	7200 1.49	6580 1.48	6000 1.46	4950 1.42	4040 1.35	3240 1.26	2560 1.16	1970 1.06	1450 0.947		
	50	Q P	6870 1.83	6280 1.80	5730 1.76	5210 1.72	4280 1.63	3470 1.52	2760 1.40	2150 1.26				
HGX12P/90-4 ¹⁾ HGX12P/90-4 S ¹⁾	30	Q P	10600 1.32	9720 1.35	8900 1.38	8130 1.39	6740 1.39	5520 1.37	4470 1.32	3570 1.24	2790 1.15	2120 1.05	1550 0.941	1060 0.825
	40	Q P	9380 1.78	8590 1.77	7850 1.76	7160 1.75	5900 1.69	4810 1.61	3870 1.51	3050 1.39	2340 1.26	1730 1.12		
	50	Q P	8190 2.18	7490 2.15	6830 2.10	6220 2.06	5100 1.94	4140 1.81	3290 1.66	2560 1.51				
HGX12P/110-4 ¹⁾ HGX12P/110-4 S ¹⁾	30	Q P	12500 1.55	11500 1.59	10500 1.62	9560 1.64	7920 1.64	6490 1.61	5260 1.55	4190 1.46	3280 1.36	2500 1.23	1820 1.10	1240 0.970
	40	Q P	11100 2.09	10100 2.09	9230 2.08	8410 2.05	6940 1.99	5660 1.89	4550 1.77	3590 1.63	2750 1.48	2030 1.32		
	50	Q P	9630 2.57	8800 2.52	8030 2.48	7310 2.42	6000 2.29	4860 2.13	3870 1.96	3010 1.77				
HGX22e/125-4 HGX22e/125-4 S ¹⁾	30	Q P	15700 1.94	14400 1.97	13200 1.99	12000 2.00	9930 1.98	8150 1.91	6630 1.82	5340 1.69	4250 1.55	3340 1.40	2580 1.25	1960 1.09
	40	Q P	13800 2.54	12700 2.53	11600 2.50	10600 2.47	8740 2.37	7170 2.24	5840 2.08	4700 1.90	3730 1.72	2900 1.52		
	50	Q P	12000 3.11	11000 3.06	10000 2.99	9120 2.91	7540 2.73	6170 2.53	5010 2.31	4010 2.07				
HHGX22e/160-4 HGX22e/160-4 S ¹⁾	30	Q P	19400 2.40	17800 2.44	16300 2.46	14900 2.47	12300 2.44	10100 2.36	8190 2.24	6590 2.09	5240 1.92	4120 1.73	3190 1.54	2420 1.35
	40	Q P	17100 3.13	15600 3.12	14300 3.09	13100 3.05	10800 2.93	8860 2.77	7200 2.57	5790 2.35	4590 2.11	3580 1.88		
	50	Q P	14800 3.84	13500 3.77	12400 3.69	11300 3.60	9300 3.38	7620 3.13	6180 2.85	4940 2.55				
HGX22e/190-4 HGX22e/190-4 S ¹⁾	30	Q P	23400 2.90	21400 2.94	19600 2.97	17900 2.98	14800 2.94	12200 2.84	9850 2.70	7920 2.52	6300 2.31	4950 2.09	3840 1.86	2910 1.63
	40	Q P	20600 3.78	18900 3.76	17200 3.72	15700 3.67	13000 3.52	10700 3.32	8680 3.09	6980 2.83	5540 2.55	4320 2.27		
	50	Q P	17800 4.63	16300 4.54	14900 4.44	13600 4.33	11200 4.06	9200 3.76	7450 3.43	5960 3.08				
HGX34e/215-4 ¹⁾ HGX34e/215-4 S ¹⁾	30	Q P	26500 3.30	24300 3.35	22200 3.38	20300 3.39	16800 3.35	13900 3.25	11300 3.08	9010 2.88	7160 2.64	5620 2.38	4360 2.12	3310 1.86
	40	Q P	23300 4.31	21400 4.29	19600 4.25	17900 4.19	14800 4.02	12200 3.80	9870 3.53	7930 3.23	6290 2.91	4910 2.58		
	50	Q P	20200 5.29	18500 5.19	17000 5.07	15500 4.94	12800 4.64	10500 4.29	8480 3.91	6780 3.51				
HGX34e/255-4 ¹⁾ HGX34e/255-4 S ¹⁾	30	Q P	31200 3.87	28600 3.94	26200 3.98	23900 3.99	19800 3.94	16300 3.82	13200 3.62	10600 3.37	8440 3.10	6630 2.80	5130 2.49	3890 2.19
	40	Q P	27400 5.06	25100 5.04	23000 4.99	21000 4.92	17400 4.72	14300 4.46	11600 4.14	9330 3.79	7410 3.42	5780 3.03		
	50	Q P	23700 6.21	21800 6.09	19900 5.96	18200 5.80	15000 5.45	12300 5.04	9970 4.59	7970 4.12				
HGX34e/315-4 ¹⁾ HGX34e/315-4 S ¹⁾	30	Q P	38500 4.79	35300 4.87	32300 4.92	29500 4.93	24500 4.87	20100 4.71	16400 4.49	13200 4.19	10500 3.83	8200 3.45	6340 3.07	4800 2.70
	40	Q P	33900 6.26	31100 6.23	28500 6.17	26000 6.09	21600 5.84	17700 5.51	14400 5.13	11600 4.69	9160 4.22	7140 3.74		
	50	Q P	29400 7.67	26900 7.53	24600 7.37	22500 7.18	18600 6.74	15200 6.23	12400 5.69	9850 5.10				

¹⁾ ASERCOM certified

Relating to 20 °C suction gas temperature without liquid subcooling

Motor version -S- (more powerful motor)

Supplementary cooling or reduced suction gas temperature

R22 | 50 Hz

Type		Cooling capacity Q _o [kW]								Power consumption P _e [kW]				
		Evaporating temperature °C												
Cond. temp. °C		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	
HGX34e/380-4 HGX34e/380-4 S	30	Q P	46700 5.82	42800 5.92	39100 5.97	35700 5.99	29600 5.91	24300 5.72	19800 5.43	16000 5.06	12700 4.64	9950 4.19	7690 3.73	5830 3.29
		Q P	41000 7.60	37600 7.56	34400 7.49	31400 7.39	26100 7.08	21400 6.68	17400 6.21	14000 5.68	11200 5.12	8650 4.54		
	40	Q P	35500 9.31	32500 9.14	29800 8.93	27200 8.70	22500 8.16	18500 7.56	15000 6.89	12000 6.18				
		50	Q P	58200 7.16	53600 7.27	49100 7.34	45000 7.36	37500 7.29	30800 7.02	25100 6.68	20300 6.25	16100 5.73	12500 5.16	9390 4.55
HGX44e/475-4 HGX44e/475-4 S	30	Q P	52700 9.17	48300 9.15	44300 9.08	40500 8.97	33600 8.66	27400 8.19	22200 7.63	17800 6.99	14000 6.29	10700 5.54		
		Q P	47000 11.0	43100 10.8	39300 10.6	35900 10.4	29600 9.90	24000 9.24	19300 8.46	15300 7.62				
	40	Q P	69400 8.50	63900 8.64	58600 8.71	53700 8.74	44800 8.65	36700 8.37	30000 7.96	24300 7.43	19300 6.81	15100 6.12	11400 5.39	8180 4.64
		50	Q P	62900 10.8	57700 10.8	52900 10.7	48400 10.6	40200 10.2	32600 9.79	26600 9.11	21300 8.33	16800 7.48	12900 6.58	
HGX44e/565-4 HGX44e/565-4 S	30	Q P	56300 13.1	51500 12.9	47100 12.6	43000 12.4	35500 11.7	28600 11.0	23200 10.1	18400 9.10				
		Q P	81000 9.95	74500 10.1	68300 10.1	62600 10.2	52100 10.1	43300 9.73	35300 9.26	28500 8.66	22600 7.94	17500 7.15	13200 6.30	9410 5.44
	40	Q P	73100 12.7	67100 12.7	61500 12.6	56200 12.5	46600 12.0	38400 11.3	31200 10.5	24900 9.69	19600 8.71	14900 7.68		
		50	Q P	65200 15.4	59700 15.2	54600 14.9	49700 14.5	41000 13.8	33600 12.8	27000 11.7	21400 10.5			
HGX44e/770-4 HGX44e/770-4 S	30	Q P	93900 11.5	86300 11.7	79200 11.8	72600 11.8	60500 11.7	50000 11.3	40900 10.8	33000 10.1	26200 9.28	20400 8.35	15400 7.36	11100 6.36
		Q P	84700 14.8	77800 14.8	71300 14.6	65200 14.5	54100 13.9	44500 13.2	36200 12.3	29000 11.3	22800 10.1	17500 8.97		
	40	Q P	75600 17.9	69300 17.7	63300 17.3	57800 16.9	47700 16.0	39000 14.9	31500 13.6	25000 12.3				
		50	Q P	104000 12.7	95400 12.9	87600 13.0	80200 13.0	66900 12.9	55000 12.5	45000 11.9	36400 11.1	29000 10.2	22600 9.19	17100 8.10
HGX56e/850-4 HGX56e/850-4 S	30	Q P	93700 16.3	86000 16.2	78800 16.1	72100 15.9	59900 15.3	49000 14.6	39900 13.6	32000 12.4	25200 11.2	19400 9.88		
		Q P	83700 19.6	76600 19.4	70100 19.0	64000 18.6	52900 17.6	43000 16.5	34800 15.1	27600 13.6				
	40	Q P	122000 14.9	112000 15.1	103000 15.2	93700 15.3	78000 15.1	64700 14.5	52800 13.8	42600 12.9	33800 11.8	26200 10.6	19700 9.42	14100 8.14
		50	Q P	110000 19.1	101000 19.1	91900 18.9	84000 18.7	69700 18.0	57400 16.9	46600 15.7	37300 14.4	29200 13.0	22300 11.4	
HGX56e/995-4 HGX56e/995-4 S	30	Q P	97500 23.1	89300 22.8	81600 22.4	74400 21.9	61300 20.7	50200 19.0	40400 17.4	32000 15.7				
		Q P	141000 18.0	130000 18.2	119000 18.4	109000 18.5	90700 18.3	74700 17.7	61000 16.9	49300 15.8	39200 14.4	30500 13.0	23100 11.4	16600 9.89
	40	Q P	128000 23.1	117000 23.0	107000 22.9	97800 22.6	81200 21.8	66500 20.7	54000 19.3	43300 17.7	34100 15.9	26100 14.0		
		50	Q P	114000 27.9	105000 27.5	95100 27.0	86800 26.4	71700 24.9	58300 23.4	47000 21.4	37300 19.3			
HGX56e/1155-4 HGX56e/1155-4 S	30	Q P	168000 21.4	155000 21.6	142000 21.7	131000 21.6	109000 21.2	89400 20.3	73100 19.2	59000 17.8	46800 16.2	36400 14.4	27700 12.6	20400 10.8
		Q P	152000 27.4	140000 27.1	128000 26.8	118000 26.3	97600 25.1	79700 23.5	64800 21.7	51900 19.7	40900 17.5	31400 15.3		
	40	Q P	135000 32.8	124000 32.1	114000 31.3	104000 30.4	85600 28.4	69500 26.2	56100 23.8	44600 21.2				
		50	Q P	192000 24.6	177000 24.8	163000 24.9	150000 24.9	126000 24.4	103000 23.5	84200 22.2	68100 20.6	54200 18.8	42300 16.8	32300 14.7
HGX66e/1340-4 HGX66e/1340-4 S	30	Q P	174000 31.7	160000 31.4	147000 30.9	135000 30.4	113000 29.0	91800 27.3	74800 25.2	60200 22.9	47500 20.5	36700 17.9		
		Q P	155000 38.1	142000 37.3	130000 36.3	119000 35.3	98600 33.1	80200 30.6	65000 27.8	51900 24.8				
	40	Q P	192000 24.6	177000 24.8	163000 24.9	150000 24.9	126000 24.4	103000 23.5	84200 22.2	68100 20.6	54200 18.8	42300 16.8	32300 14.7	24000 12.6
		50	Q P	174000 31.7	160000 31.4	147000 30.9	135000 30.4	113000 29.0	91800 27.3	74800 25.2	60200 22.9	47500 20.5	36700 17.9	

Relating to 20 °C suction gas temperature without liquid subcooling



Motor version -S- (more powerful motor)



Supplementary cooling or reduced suction gas temperature

R22 | 50 Hz

Type		Cooling capacity Q _o [kW]								Power consumption P _e [kW]				
		Evaporating temperature °C												
Cond. temp. °C		12.5	10	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	
HGX66e/1750-4 HGX66e/1750-4 S	30	Q P	218000 28.2	201000 28.4	185000 28.5	170000 28.5	142000 27.9	118000 26.8	96400 25.4	78000 23.6	62100 21.5	48500 19.3	37100 16.9	27500 14.5
		Q P	197000 36.2	182000 35.8	167000 35.4	153000 34.8	128000 33.2	106000 31.2	85800 28.8	69000 26.2	54500 23.5	42200 20.6		
	40	Q P	175000 43.5	161000 42.6	148000 41.6	135000 40.4	112000 37.8	91900 34.9	74600 31.7	59600 28.4				
		Q P	256000 33.3	236000 33.6	217000 33.7	200000 33.7	167000 33.0	139000 31.8	114000 30.0	91700 27.9	73100 25.4	57100 22.7	43700 19.9	32400 17.1
HGX66e/2070-4 HGX66e/2070-4 S	30	Q P	231000 43.0	213000 42.6	196000 42.0	180000 41.3	150000 39.4	124000 37.1	101000 34.2	81100 31.1	64200 27.8	49700 24.3		
		Q P	205000 51.9	189000 50.8	173000 49.5	158000 48.1	132000 45.0	108000 41.6	87500 37.8	70000 33.7				
	40	Q P	304000 39.6	280000 39.9	258000 40.0	237000 40.0	198000 39.3	163000 37.6	134000 35.7	108000 33.2	85900 30.4	67200 27.3	51400 24.1	38100 20.8
		Q P	276000 50.3	254000 49.9	233000 49.2	214000 48.4	179000 46.3	146000 43.8	119000 40.6	95500 37.0	75500 33.1	58500 29.2		
HGX88e/2400-4 HGX88e/2400-4 S	30	Q P	246000 60.1	226000 58.9	207000 57.5	190000 56.0	157000 52.6	128000 49.1	104000 44.7	82700 40.0				
		Q P	345000 44.7	318000 45.1	292000 45.3	269000 45.2	225000 44.4	186000 42.8	152000 40.6	123000 37.8	97900 34.7	76500 31.2	58500 27.5	43400 23.8
	40	Q P	313000 57.2	288000 56.6	265000 55.9	243000 55.0	202000 52.6	167000 49.6	136000 46.0	109000 42.0	86100 37.7	66600 33.3		
		Q P	279000 68.6	256000 67.2	235000 65.5	215000 63.8	179000 59.8	146000 55.5	119000 50.6	94300 45.4				
HGX88e/2735-4 HGX88e/2735-4 S	30	Q P	407000 52.7	376000 53.1	346000 53.3	317000 53.2	266000 52.3	219000 50.4	180000 47.8	145000 44.5	116000 40.7	90100 36.6	68800 32.3	51000 27.9
		Q P	370000 67.3	340000 66.7	313000 65.8	286000 64.7	239000 61.8	196000 58.4	160000 54.1	129000 49.4	102000 44.3	78300 39.0		
	40	Q P	329000 80.7	303000 79.0	277000 77.1	254000 75.0	210000 70.3	172000 65.4	140000 59.5	111000 53.3				

Relating to 20 °C suction gas temperature without liquid subcooling

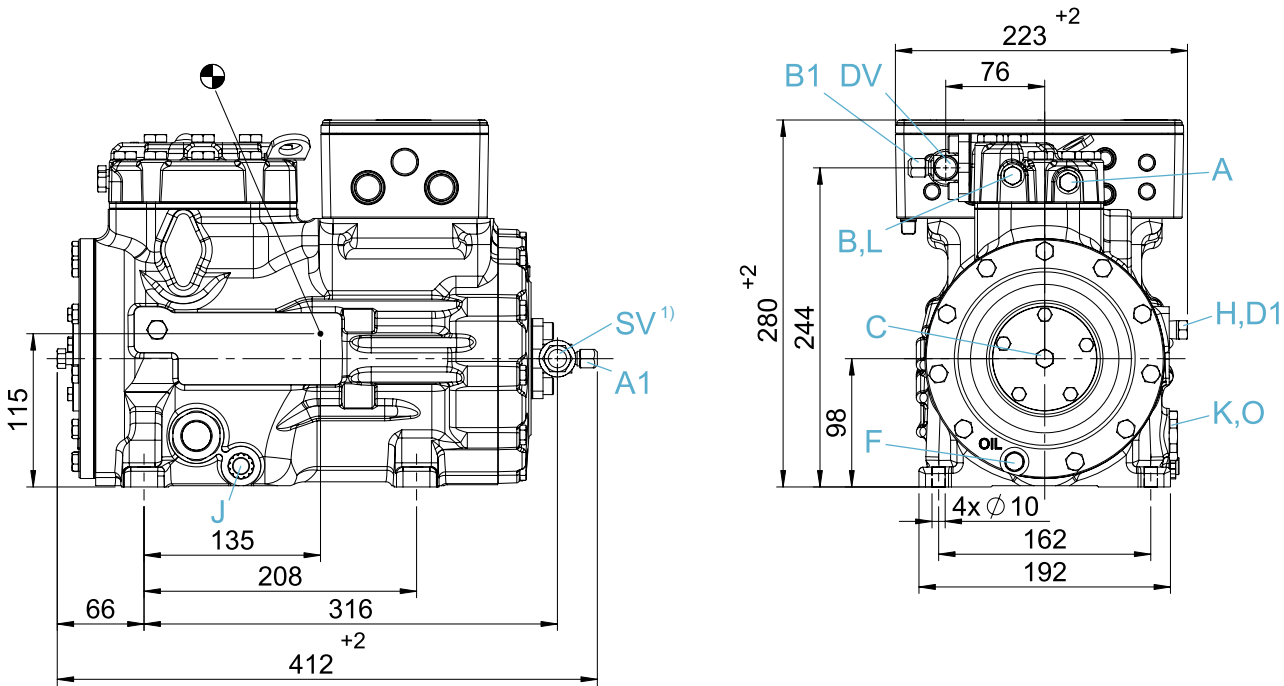


Motor version -S- (more powerful motor)

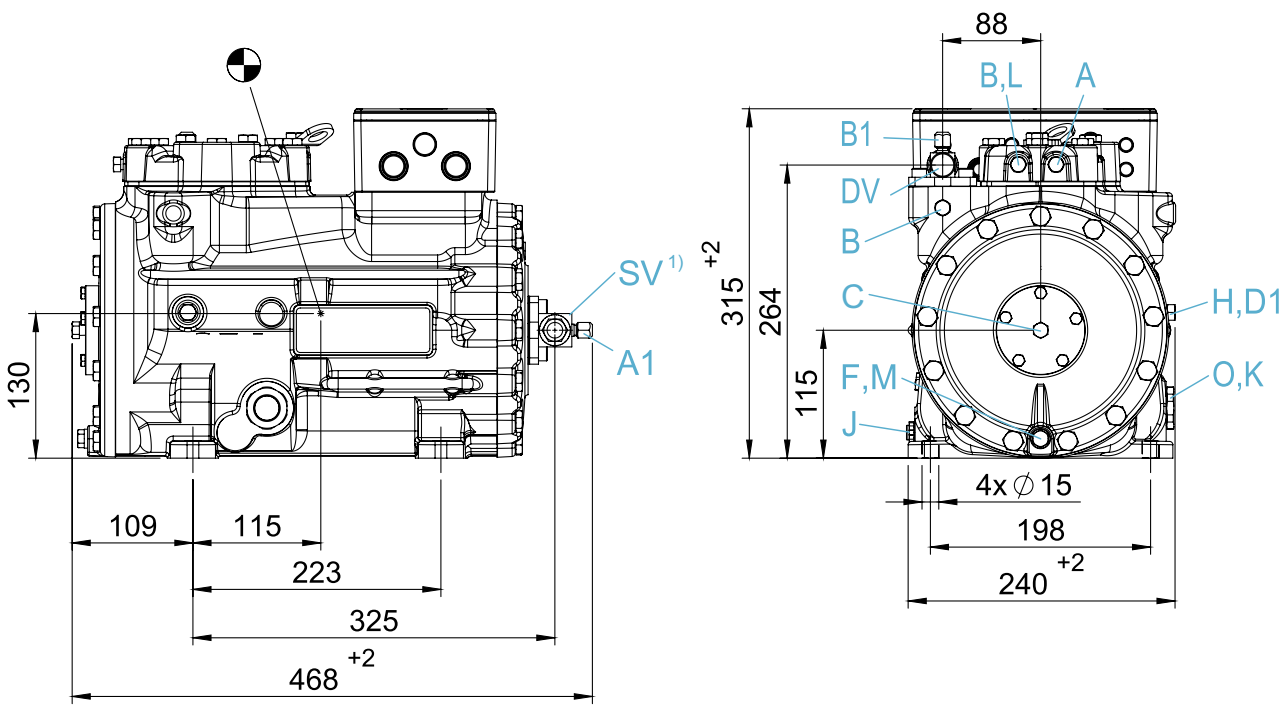


Supplementary cooling or reduced suction gas temperature

HG12P » HG12P/60-4 S » HG12P/75-4 » HG12P/75-4 S
HG12P/90-4 » HG12P/90-4 S » HG12P/110-4 » HG12P/110-4 S



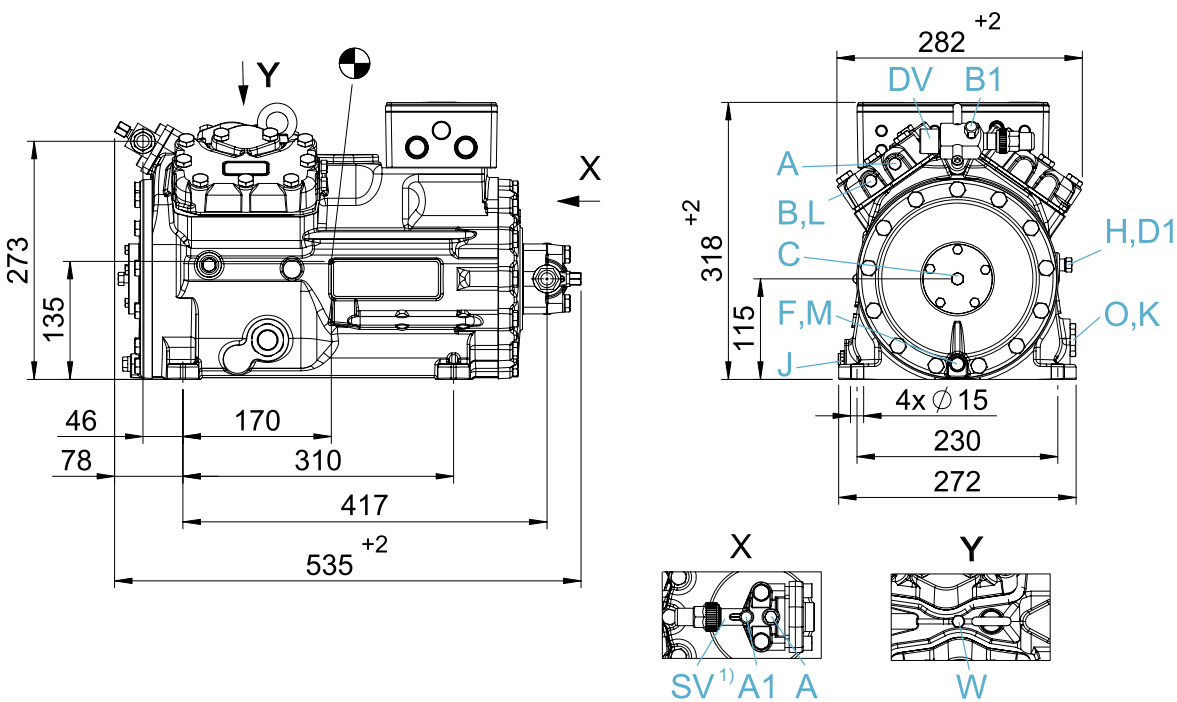
HG22e » HG22e/125-4 » HG22e/125-4 S » HG22e/160-4 » HG22e/160-4 S
HG22e/190-4 » HG22e/190-4 S



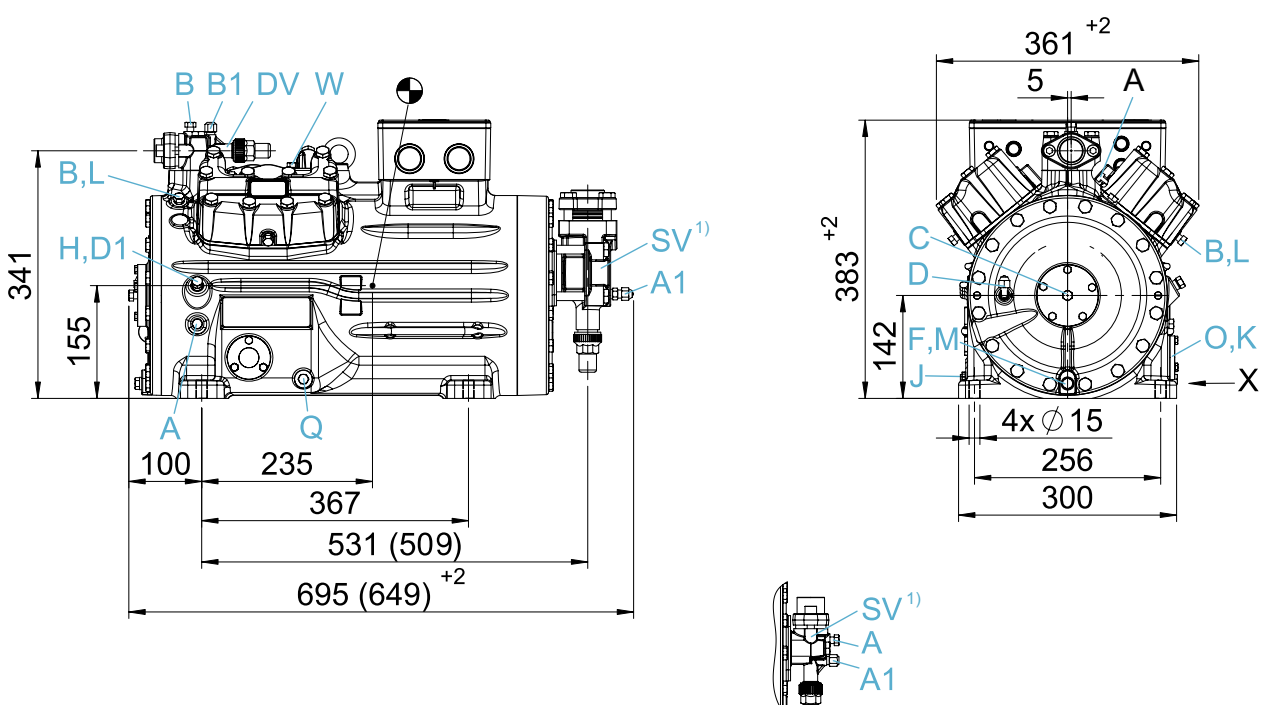
Dimensions in mm
● Center of gravity
¹⁾ SV 90° rotatable

Connections see page 64
Dimensions for anti-vibration pad see page 61

HG34e » HG34e/215-4 » HG34e/215-4 S » HG34e/255-4 » HG34e/255-4 S
HG34e/315-4 » HG34e/315-4 S » HG34e/380-4 » HG34e/380-4 S



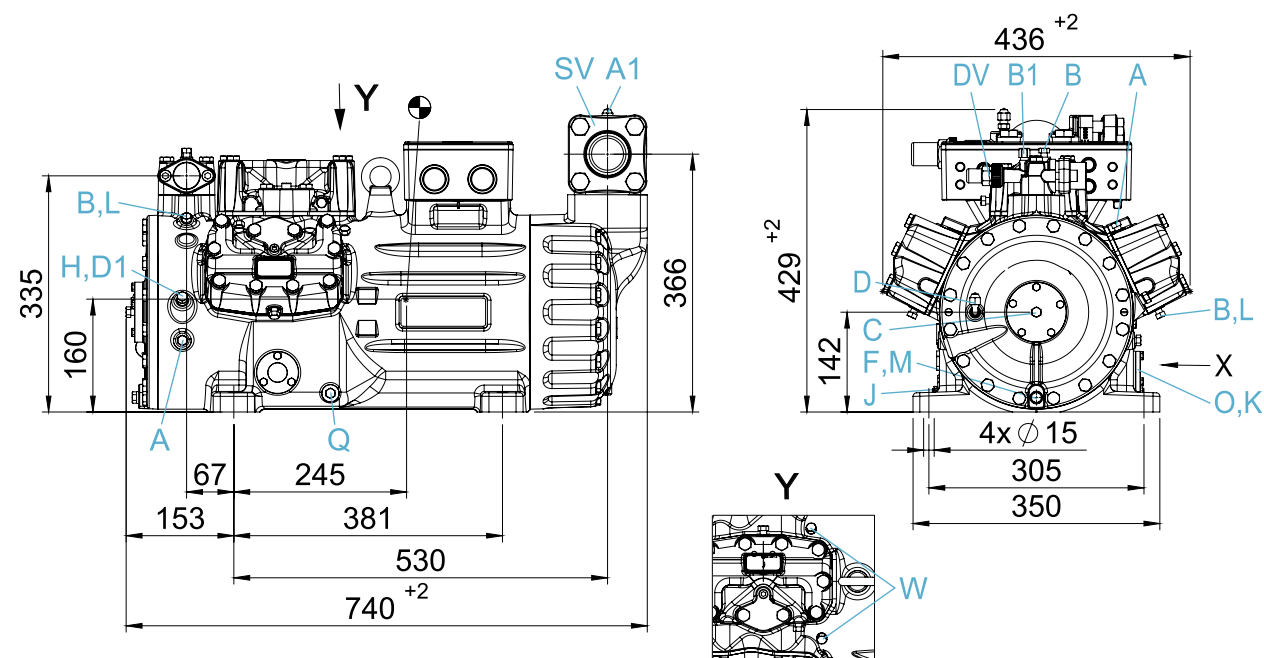
HG44e » HG44e/475-4 » HG44e/475-4 S » HG44e/565-4 » HG44e/565-4 S
HG44e/665-4 » HG44e/665-4 S



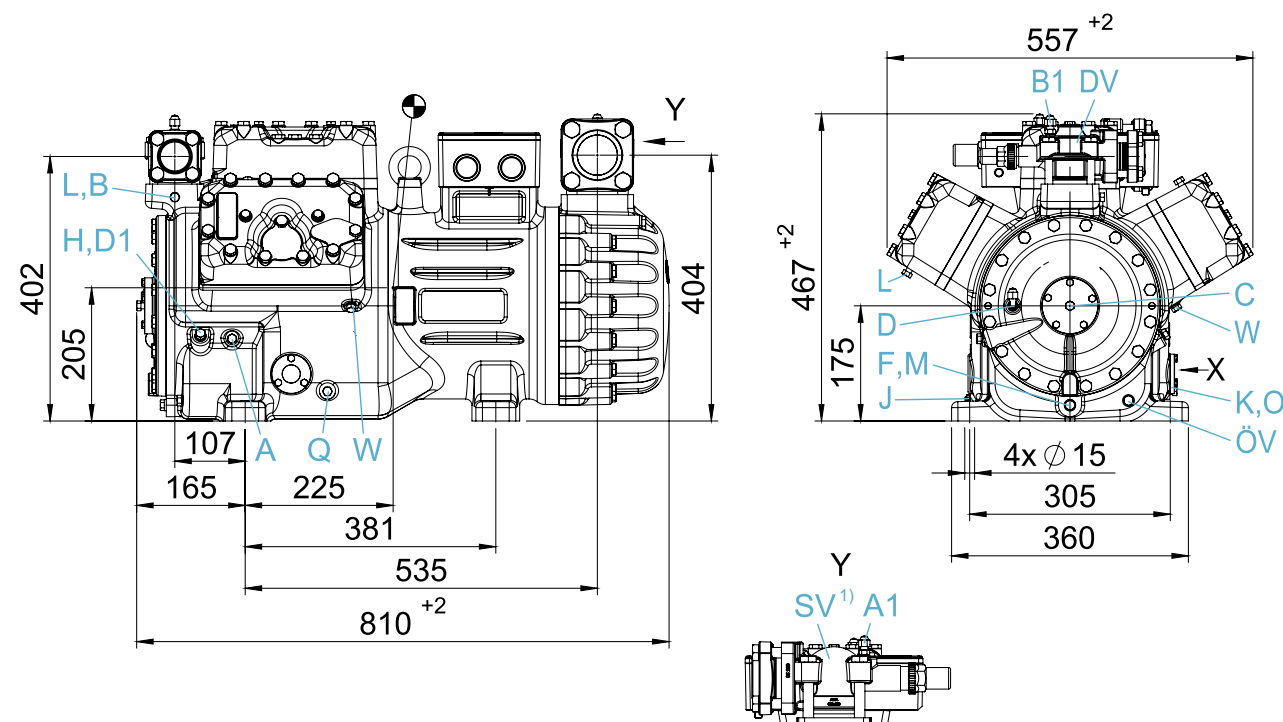
Dimensions in mm
● Center of gravity
¹⁾ SV 90° rotatable

Connections see page 64
Dimensions for anti-vibration pad see page 61

HG56e » HG56e/850-4 » HG56e/850-4 S » HG56e/995-4
HG56e/995-4 S » HG56e/1155-4 » HG56e/1155-4 S



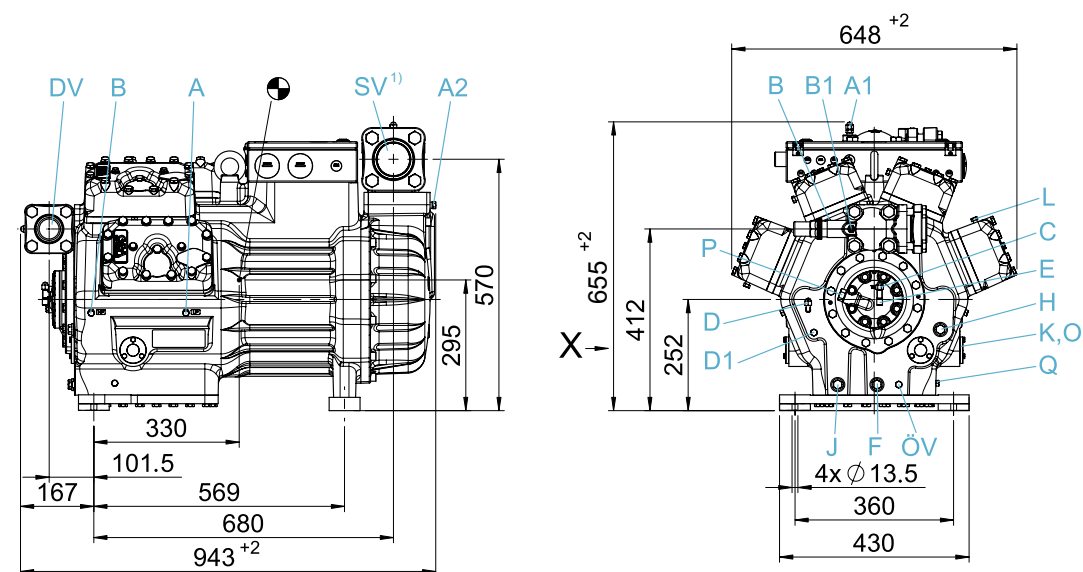
HG66e » HG66e/1340-4 » HG66e/1340-4 S » HG66e/1540-4 » HG66e/1540-4 S
HG66e/1750-4 » HG66e/1750-4 S » HG66e/2070-4 » HG66e/2070-4 S



Dimensions in mm
● Center of gravity
¹⁾ SV 180° rotatable

Connections see page 64
Dimensions for anti-vibration pad see page 61

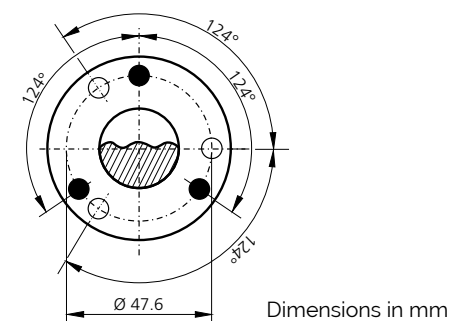
HG88e » HG88e/2400-4 » HG88e/2400-4 S » HG88e/2735-4
HG88e/2735-4 S » HG88e/3235-4 » HG88e/3235-4 S



Dimensions in mm
● Center of gravity
¹⁾ SV 180° rotatable

Connections see page 64
Dimensions for anti-vibration pad see below

View X



Dimensions for anti-vibration pad

Type	Ø a	b	c	d
HG12P	30	30	M8	20
HG22e	40	30	M10	20
HG34e	40	30	M10	20
HG44e	50	30	M12	25
HG56e	50	30	M12	25
HG66e	50	30	M12	25
HG88e	70	45	M12	37

Dimensions in mm

Possibility to connect to oil level regulator

HG44e, HG56e, HG66e, HG88e

- Three-hole connection for oil level regulator of brands ESK, AC+R, CARLY (3 x M6 x 10 deep)
- Three-hole connection for oil level regulator of brand TRAXOIL (3 x M6 x 10 deep)

