



Semi-hermetic Compressors for railway- and bus air-conditioning

At a glance	62
Operating limits and performance data	64
Technical data	71
Dimensions and connections	73
Scope of supply and accessories	78

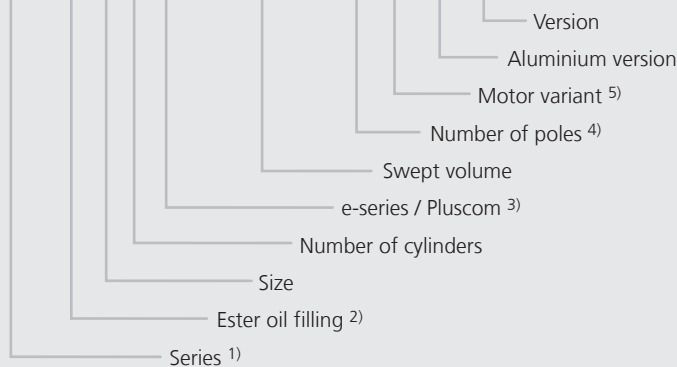
Semi-hermetic 2- and 4-cylinder compressors in cast iron and full-aluminium construction

The Bock semi-hermetic compressor programme for mobile applications provides a full performance range of innovative and modern compressor designs in 2- and 4-cylinder constructions.

The ideal solution for any kind of mobile application.

Type key

HGX34P / 215 - 2 S A K



¹⁾ HG = Hermetic Gas-cooled (suction gas-cooled)

²⁾ X = Ester oil filling (HFC refrigerant e.g. R134a, R407C)

³⁾ = Additional indication for e-series and Pluscom compressors

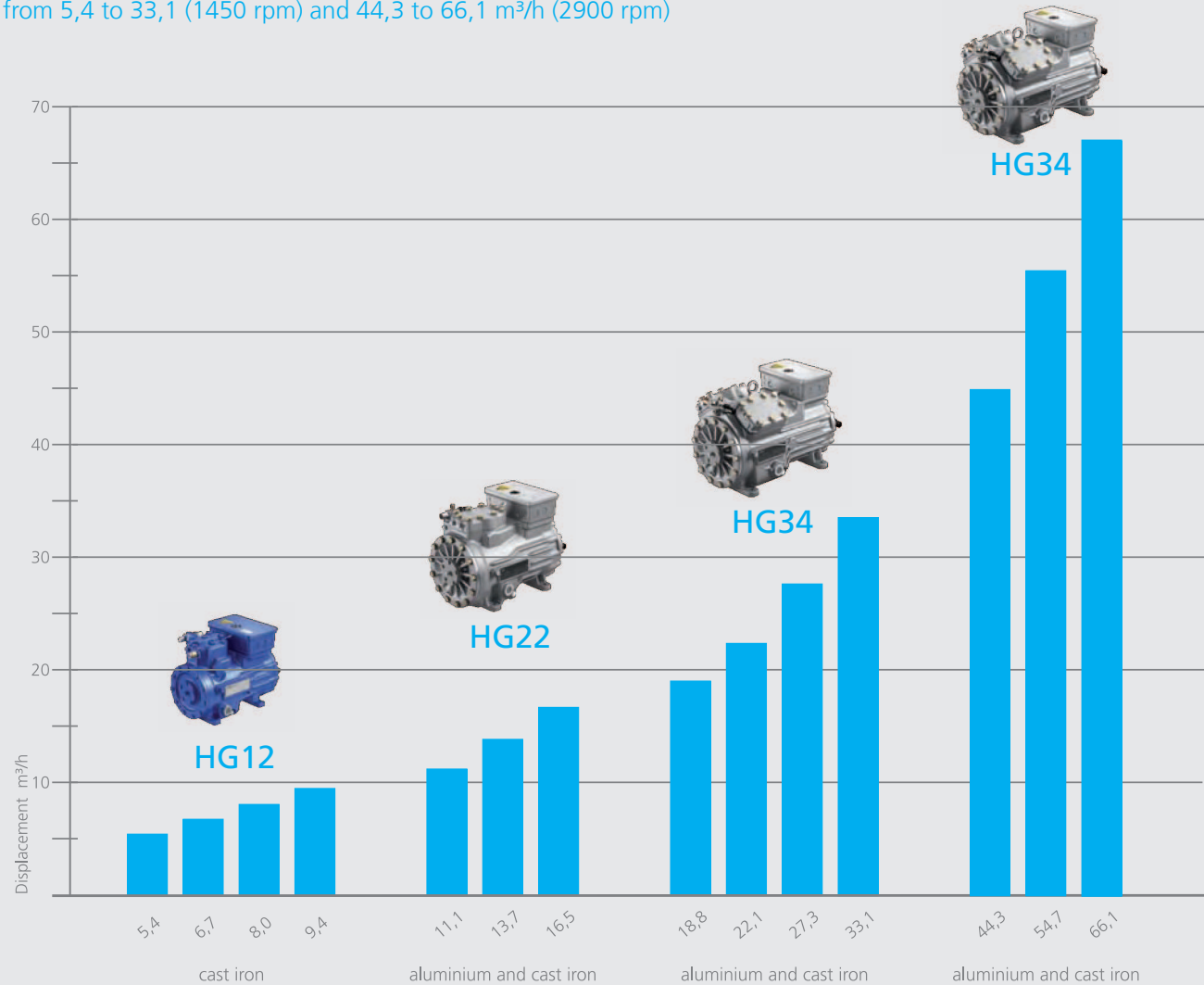
⁴⁾ 2 = 2-poles (2.900 rpm - 50 Hz)

4 = 4-poles (1.450 rpm - 50 Hz)

⁵⁾ S = More powerful motor e.g. air-conditioning systems

⁶⁾ K = K valve plate

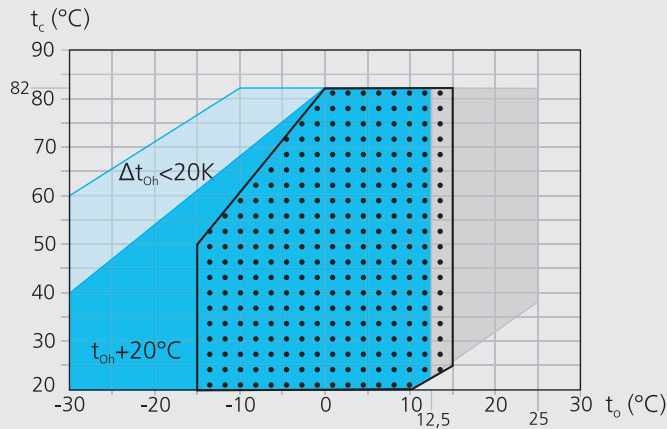
The current program
...3 model sizes with 14 capacity stages
from 5,4 to 33,1 (1450 rpm) and 44,3 to 66,1 m³/h (2900 rpm)



- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

R134a Operating limits

HGX12P / HGX22e / HGX34e / HGX34P 2-pole

Max. permissible operating pressure (LP/HP)¹⁾: 19/28 bar¹⁾ LP = low pressure HP = high pressure

- 4-pole
- Unlimited application range
 - Supplementary cooling or reduced suction gas temperature
 - Motor variant -S- (more powerful motor)
- 2-pole
- Unlimited application range

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

R134a Notes

Operating limits

Compressor operation is possible within the limits shown on the application diagrams. Please note the coloured 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. For further information see sample calculation page 52.

For operation with frequency converter:

HGX12P...-4 30-70 Hz

HGX22e...-4 30-70 Hz

HGX34e...-4 25-70 Hz

HGX34P...-2 15-50 Hz

HGX34P...-2 K 15-60 Hz

Performance data

The performance data for R134a are based on EN 12900 at 50 Hz 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.

4-pole compressor:

Conversion factor for 60 Hz = 1,2

Performance data for other operating points, see GEA Bock software.

R134a			Performance data										50 Hz 4-pole	
Type	Cond. temp. °C		Cooling capacity $\dot{Q}_0$ [W]								Power consumption P [kW]			
			Evaporation temperature °C											
			12,5	10	7,5	5	0	-5	-10	-15	-20	-25	-30	
HGX12P/60-4 S	30	Q P	4920 0,70	4490 0,71	4080 0,71	3700 0,71	3010 0,68	2420 0,65	1910 0,60	1480 0,54	1130 0,49	836 0,44	605 0,40	
	40	Q P	4260 0,85	3880 0,84	3520 0,83	3190 0,81	2590 0,77	2070 0,71	1630 0,65	1250 0,59	932 0,54	670 0,49	456 0,45	
	50	Q P	3630 0,99	3300 0,97	2990 0,94	2700 0,91	2190 0,85	1740 0,77	1350 0,70	1030 0,63	742 0,57	505 0,52	302 0,49	
	60	Q P	3020 1,11	2740 1,08	2480 1,04	2240 1,00	1800 0,91	1420 0,82	1100 0,74	806 0,66	558 0,59	341 0,55	146 0,52	
	70	Q P	2450 1,22	2220 1,17	2010 1,12	1810 1,06	1450 0,96	1130 0,85	847 0,75	602 0,66	381 0,60			
HGX12P/75-4 HGX12P/75-4 S	30	Q P	6150 0,88	5610 0,89	5100 0,89	4620 0,88	3760 0,85	3020 0,81	2390 0,75	1850 0,68	1410 0,61	1050 0,55	756 0,50	
	40	Q P	5320 1,06	4850 1,05	4400 1,03	3980 1,01	3230 0,96	2590 0,89	2030 0,82	1560 0,74	1170 0,67	837 0,61	569 0,57	
	50	Q P	4530 1,23	4120 1,21	3730 1,17	3380 1,14	2730 1,05	2170 0,97	1690 0,88	1280 0,79	927 0,71	630 0,65	377 0,62	
	60	Q P	3780 1,39	3430 1,35	3100 1,30	2800 1,24	2250 1,13	1780 1,02	1370 0,92	1010 0,82	697 0,74	425 0,68	182 0,65	
	70	Q P	3070 1,53	2780 1,46	2510 1,40	2260 1,33	1800 1,19	1410 1,06	1060 0,94	751 0,83	476 0,74			
HGX12P/90-4 HGX12P/90-4 S	30	Q P	7300 1,08	6670 1,10	6070 1,12	5520 1,12	4510 1,10	3630 1,06	2870 1,00	2230 0,92	1700 0,83	1260 0,74	912 0,65	
	40	Q P	6380 1,33	5820 1,33	5290 1,32	4790 1,30	3890 1,24	3110 1,16	2440 1,06	1880 0,96	1410 0,85	1020 0,74	708 0,65	
	50	Q P	5490 1,59	4990 1,56	4520 1,53	4080 1,48	3290 1,38	2610 1,26	2030 1,14	1540 1,01	1130 0,89	793 0,77	522 0,67	
	60	Q P	4620 1,82	4180 1,77	3780 1,71	3400 1,65	2720 1,51	2140 1,35	1640 1,20	1230 1,05	876 0,91	592 0,79	359 0,69	
	70	Q P	3780 2,00	3410 1,93	3060 1,84	2750 1,76	2180 1,58	1690 1,40	1280 1,22	937 1,05	653 0,90			
HGX12P/110-4 HGX12P/110-4 S	30	Q P	8619 1,23	7858 1,24	7145 1,25	6477 1,24	5272 1,20	4231 1,13	3342 1,05	2593 0,95	1971 0,86	1464 0,78	1060 0,71	
	40	Q P	7453 1,49	6787 1,48	6163 1,45	5580 1,42	4528 1,35	3619 1,25	2842 1,14	2183 1,04	1631 0,94	1173 0,85	797 0,79	
	50	Q P	6342 1,74	5767 1,70	5229 1,65	4726 1,60	3820 1,48	3037 1,36	2364 1,23	1789 1,11	1299 1,00	883 0,92	528 0,87	
	60	Q P	5287 1,96	4800 1,89	4344 1,82	3919 1,75	3152 1,60	2486 1,44	1910 1,29	1411 1,15	977 1,04	596 0,96	255 0,91	
	70	Q P	4291 2,15	3888 2,06	3511 1,96	3159 1,87	2524 1,68	1969 1,49	1483 1,31	1053 1,16	667 1,04			
HGX22e/125-4 HGX22e/125-4 S HGX22e/125-4 A HGX22e/125-4 S A	30	Q P	10200 1,30	9270 1,35	8440 1,38	7660 1,39	6220 1,39	4960 1,34	3860 1,25	2930 1,14	2160 1,02	1550 0,891	1090 0,765	
	40	Q P	8990 1,69	8200 1,70	7450 1,69	6740 1,67	5440 1,59	4300 1,48	3310 1,35	2480 1,20	1790 1,05	1260 0,903	860 0,769	
	50	Q P	7800 2,02	7090 1,98	6420 1,94	5780 1,88	4630 1,75	3620 1,59	2750 1,41	2020 1,24	1440 1,06	978 0,908	657 0,773	
	60	Q P	6570 2,27	5950 2,21	5360 2,13	4810 2,04	3810 1,86	2940 1,66	2200 1,45	1590 1,25	1110 1,07	744 0,909	504 0,783	
	70	Q P	5330 2,48	4800 2,38	4310 2,27	3840 2,16	3000 1,93	2280 1,70	1690 1,47	1200 1,25	829 1,06			
HGX22e/160-4 HGX22e/160-4 S HGX22e/160-4 A HGX22e/160-4 S A	30	Q P	12800 1,63	11600 1,65	10600 1,66	9560 1,65	7780 1,63	6240 1,59	4920 1,51	3810 1,41	2870 1,29	2110 1,15	1490 0,983	
	40	Q P	11200 2,07	10200 2,05	9200 2,03	8330 2,00	6750 1,92	5390 1,81	4230 1,68	3240 1,53	2410 1,36	1730 1,17	1160 0,962	
	50	Q P	9640 2,46	8760 2,41	7930 2,36	7170 2,29	5780 2,15	4580 1,99	3560 1,80	2680 1,60	1940 1,38	1310 1,14	783 0,884	
	60	Q P	8230 2,80	7460 2,72	6730 2,63	6060 2,54	4840 2,33	3790 2,11	2880 1,87	2100 1,61	1430 1,34	844 1,04	335 0,744	
	70	Q P	6880 3,09	6210 2,97	5580 2,85	4990 2,72	3930 2,45	3000 2,17	2190 1,87	1490 1,56	862 1,23			

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

 Supplementary cooling or
reduced suction gas temp.

R134a			Performance data								50 Hz 4-pole			
Type	Cond. temp. °C		Cooling capacity $\dot{Q}_o$ [W]								Power consumption P [kW]			
			Evaporation temperature °C											
			12,5	10	7,5	5	0	-5	-10	-15	-20	-25	-30	
HGX22e/190-4 HGX22e/190-4 S HGX22e/190-4 A HGX22e/190-4 S A	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	2,62	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	
HGX34e/215-4 HGX34e/215-4 S HGX34e/215-4 A HGX34e/215-4 S A	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					
HGX34e/255-4 HGX34e/255-4 S HGX34e/255-4 A HGX34e/255-4 S A	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/315-4 HGX34e/315-4 S HGX34e/315-4 A HGX34e/315-4 S A	60	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	
	70	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					
HGX34e/380-4 HGX34e/380-4 S HGX34e/380-4 A HGX34e/380-4 S A	30	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	
	40	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	
	50	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	
HGX34e/450-4 HGX34e/450-4 S HGX34e/450-4 A HGX34e/450-4 S A	60	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	
	70	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					
HGX34e/560-4 HGX34e/560-4 S HGX34e/560-4 A HGX34e/560-4 S A	30	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	
	40	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	
	50	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	
HGX34e/630-4 HGX34e/630-4 S HGX34e/630-4 A HGX34e/630-4 S A	60	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	
	70	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/710-4 HGX34e/710-4 S HGX34e/710-4 A HGX34e/710-4 S A	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	
HGX34e/800-4 HGX34e/800-4 S HGX34e/800-4 A HGX34e/800-4 S A	60	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	
	70	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					

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

 Supplementary cooling or
reduced suction gas temp.

R134a			Performance data							50 Hz 2-pole
Type	Cond. temp. °C		Cooling capacity $\dot{Q}_o$ [W]					Power consumption P [kW]		
			Evaporation temperature °C							
	15	10	7,5	5	0	-5	-10	-15		
HGX34P/255-2 HGX34P/255-2 A	30	Q P	39699 8,45	32887 7,93	29809 7,64	26941 7,35	21802 6,72	17406 6,06	13692 5,39	10598 4,73
	40	Q P	35067 9,53	28934 8,81	26166 8,43	23588 8,05	18969 7,25	15013 6,45	11659 5,65	8846 4,86
	50	Q P	30304 10,40	24875 9,49	22429 9,03	20153 8,56	16077 7,62	12585 6,68	9615 5,76	7106 4,87
	60	Q P	25473 11,05	20771 9,97	18659 9,42	16696 8,88	13188 7,80	10184 6,74	7622 5,72	
	70	Q P	20632 11,46	16682 10,22	14916 9,61	13279 9,00	10362 7,79	7869 6,63		
HGX34P/315-2 HGX34P/315-2 A HGX34P/315-2 A K	30	Q P	49386 8,65	40993 8,62	37189 8,51	33638 8,34	27263 7,86	21812 7,24	17227 6,52	13450 5,75
	40	Q P	43240 10,52	35838 10,14	32488 9,87	29362 9,55	23754 8,79	18957 7,92	14914 6,99	11567 6,04
	50	Q P	37096 12,03	30698 11,34	27807 10,92	25113 10,47	20284 9,47	16154 8,39	12665 7,28	9760 6,19
	60	Q P	30994 13,20	25612 12,23	23187 11,69	20930 11,12	16893 9,91	13441 8,66	10519 7,41	
	70	Q P	24974 14,04	20620 12,83	18667 12,18	16854 11,51	13620 10,14	10860 8,75		
HGX34P/380-2 HGX34P/380-2 A HGX34P/380-2 A K	30	Q P	54230 13,28	45243 12,00	41160 11,41	37338 10,86	30436 9,81	24457 8,83	19322 7,88	14952 6,92
	40	Q P	48142 14,18	40109 12,89	36453 12,28	33023 11,68	26803 10,54	21371 9,42	16647 8,28	12551 7,09
	50	Q P	41930 15,17	34842 13,79	31607 13,12	28565 12,46	23018 11,15	18124 9,81	13801 8,42	9971 6,93
	60	Q P	35602 16,15	29450 14,61	26632 13,85	23973 13,08	19091 11,53	14724 9,91	10794 8,19	
	70	Q P	29169 16,99	23944 15,23	21538 14,34	19257 13,44	15030 11,57	11182 9,60		

1

2

3

4

5

6

7

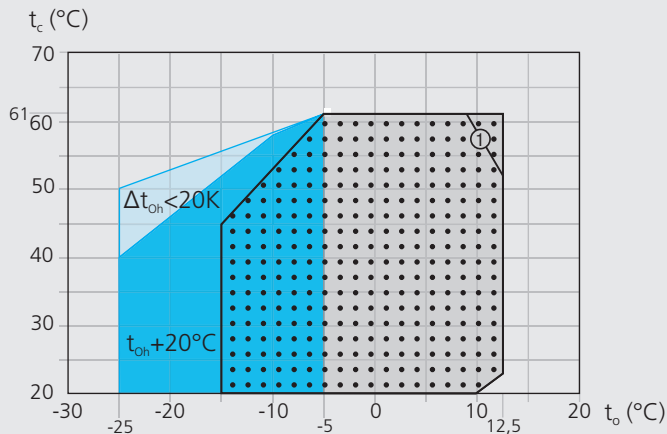
8

R134a			Performance data						60 Hz 2-pole	
Type	Cond. temp. °C		Cooling capacity $\dot{Q}_0$ [W]					Power consumption P [kW]		
			Evaporation temperature °C							
			15	10	7,5	5	0	-5	-10	-15
HGX34P/315-2 A K	30	Q P	55162 10,43	45788 10,39	41539 10,26	37572 10,06	30452 9,48	24363 8,73	19242 7,86	15024 6,93
	40	Q P	48298 12,69	40030 12,23	36288 11,90	32797 11,51	26533 10,60	21175 9,55	16659 8,43	12920 7,29
	50	Q P	41435 14,51	34289 13,67	31060 13,17 1	28050 2,62	22657 11,42	18043 10,12	14146 8,78	10902 7,47
	60	Q P	34619 15,91	28607 14,75	25899 14,09	23379 13,41	18869 11,95	15014 10,44	11750 8,94	
	70	Q P	27895 16,93	23031 15,47	20850 14,69	18825 13,89	15213 12,23	12130 10,55		
HGX34P/380-2 A K	30	Q P	60573 16,02	50535 14,47	45975 13,77	41705 13,09	33996 11,83	27318 10,65	21582 9,50	16701 8,34
	40	Q P	53773 17,10	44801 15,54	40717 14,81	36885 14,09	29938 12,71	23871 11,36	18594 9,98	14020 8,55
	50	Q P	46834 18,30	38917 16,63	35304 15,83	31906 15,03	25711 13,45	20243 11,83	15415 10,15	11137 8,36
	60	Q P	39766 19,47	32895 17,62	29748 16,70	26777 15,78	21324 13,90	16446 11,95	12056 9,88	
	70	Q P	32581 20,49	26745 18,37	24057 17,29	21510 16,20	16788 13,95	12490 11,57		

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

R407C Operating limits

HGX12P / HGX22e / HGX34e / HGX34P 2-pole



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

¹⁾ LP = low pressure HP = high pressure

- 4-pole
- Unlimited application range
 - Supplementary cooling or reduced suction gas temperature
 - Motor variant -S- (more powerful motor)
- 2-pole
- Unlimited application range

① HGX34P/380-2 HGX34P/380-2 A HGX34P/380-2 A K
Please note operating limits

t_o Evaporating temperature (°C)

t_c Condensing temperature (°C)

Δt_{oh} Suction gas superheat (K)

t_{oh} Suction gas temperature (°C)

R407C Notes

Operating limits

Compressor operation is possible within the limits shown on the application diagrams. Please note the coloured 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. For further information see sample calculation page 52.

For operation with frequency converter:

HGX12P...-4 30-70 Hz

HGX22e...-4 30-70 Hz

HGX34e...-4 25-70 Hz

HGX34P...-2 15-50 Hz

HGX34P...-2 K 15-60 Hz

Performance data

The performance data R407C are based on EN 12900 to 50 Hz supply frequency. This signifies 20 °C suction gas temperature without liquid subcooling.

The evaporating- and condensing temperatures are based on the dew point values (saturated vapour conditions).

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

4-pole compressor:

Conversion factor for 60 Hz = 1,2

Performance data for other operating points, see GEA Bock software.

R407C			Performance data									50 Hz 4-pole	
Type	Cond. temp. °C		Cooling capacity $\dot{Q}_o$ [W]						Power consumption P [kW]				
			Evaporation temperature °C										
			12,5	10	7,5	5	0	-5	-10	-15	-20	-25	
HGX12P/60-4 S	30	Q P	6780 0,88	6180 0,90	5610 0,92	5080 0,92	4140 0,91	3330 0,88	2650 0,82	2080 0,76	1610 0,69	1230 0,62	
	40	Q P	5870 1,16	5340 1,16	4840 1,15	4380 1,13	3560 1,08	2860 1,01	2270 0,92	1780 0,83	1360 0,74	1020 0,66	
	50	Q P	5010 1,41	4550 1,39	4120 1,35	3720 1,31	3020 1,22	2420 1,12	1920 1,00	1490 0,90	1130 0,79	827 0,69	
HGX12P/75-4 HGX12P/75-4 S	30	Q P	8740 1,12	7960 1,16	7230 1,18	6550 1,18	5340 1,17	4300 1,13	3420 1,06	2680 0,98	2080 0,89	1580 0,79	
	40	Q P	7560 1,50	6880 1,49	6240 1,48	5650 1,46	4590 1,39	3690 1,30	2920 1,19	2290 1,07	1760 0,96	1320 0,84	
	50	Q P	6450 1,82	5860 1,79	5310 1,74	4800 1,69	3890 1,58	3120 1,44	2470 1,29	1920 1,15	1460 1,01	1070 0,89	
HGX12P/90-4 HGX12P/90-4 S	30	Q P	10500 1,34	9490 1,38	8620 1,40	7810 1,41	6360 1,40	5120 1,34	4080 1,26	3200 1,16	2480 1,05	1890 0,95	
	40	Q P	9020 1,79	8200 1,78	7440 1,77	6730 1,74	5470 1,66	4400 1,55	3490 1,42	2730 1,28	2090 1,13	1570 1,00	
	50	Q P	7690 2,17	6990 2,13	6330 2,08	5720 2,02	4640 1,88	3720 1,72	2940 1,55	2290 1,37	1740 1,21	1280 1,06	
HGX12P/110-4 HGX12P/110-4 S	30	Q P	12300 1,58	11200 1,62	10200 1,65	9180 1,66	7480 1,64	6020 1,58	4790 1,48	3760 1,37	2910 1,24	2220 1,11	
	40	Q P	10600 2,10	9640 2,10	8750 2,08	7910 2,05	6430 1,95	5170 1,82	4100 1,67	3200 1,50	2460 1,33	1850 1,18	
	50	Q P	9040 2,56	8210 2,51	7440 2,45	6730 2,38	5460 2,21	4370 2,02	3460 1,82	2690 1,61	2040 1,42	1500 1,25	
HGX22e/125-4 HGX22e/125-4 S HGX22e/125-4 A HGX22e/125-4 S A	30	Q P	14400 1,78	13100 1,82	11900 1,85	10800 1,87	8790 1,85	7070 1,78	5630 1,67	4420 1,53	3420 1,39	2600 1,25	
	40	Q P	12500 2,36	11400 2,35	10300 2,33	9300 2,30	7560 2,19	6060 2,04	4800 1,87	3760 1,68	2890 1,5	2160 1,32	
	50	Q P	10700 2,87	9640 2,81	8740 2,75	7910 2,67	6410 2,48	5120 2,27	4050 2,04	3150 1,81	2400 1,59	1760 1,40	
HGX22e/160-4 HGX22e/160-4 S HGX22e/160-4 A HGX22e/160-4 S A	30	Q P	17600 2,18	16000 2,24	14500 2,28	13200 2,30	10700 2,27	8730 2,30	6950 2,16	5470 1,99	4240 1,79	3230 1,61	
	40	Q P	15200 2,90	13800 2,90	12500 2,87	11300 2,83	9180 2,69	7500 2,64	5950 2,42	4650 2,18	3580 1,94	2680 1,72	
	50	Q P	12900 3,53	11700 3,46	10700 3,38	9590 3,28	7780 3,05	6350 2,93	5020 2,64	3900 2,34	2970 2,06	2180 1,81	
HGX22e/190-4 HGX22e/190-4 S HGX22e/190-4 A HGX22e/190-4 S A	30	Q P	21800 2,67	19900 2,74	18100 2,79	16400 2,81	13300 2,78	10800 2,83	8550 2,65	6700 2,44	5180 2,20	3960 1,98	
	40	Q P	18900 3,54	17200 3,54	15600 3,51	14100 3,46	11500 3,29	9220 3,25	7310 2,97	5710 2,68	4390 2,38	3290 2,10	
	50	Q P	16100 4,31	14600 4,23	13300 4,13	12000 4,01	9700 3,73	7790 3,60	6170 3,24	4810 2,87	3650 2,53	2670 2,22	
HGX34e/215-4 HGX34e/215-4 S HGX34e/215-4 A HGX34e/215-4 S A	30	Q P	25600 3,45	23300 3,49	21100 3,50	19100 3,48	15600 3,39	12200 3,16	9720 2,94	7650 2,67	5910 2,38	4480 2,09	
	40	Q P	22400 4,38	20300 4,33	18400 4,26	16600 4,17	13400 3,94	10400 3,60	8190 3,25	6410 2,89	4920 2,52	3700 2,17	
	50	Q P	19100 5,19	17300 5,06	15600 4,91	14100 4,75	11300 4,39	8590 3,98	6820 3,54	5330 3,09	4100 2,66	3100 2,27	
HGX34e/255-4 HGX34e/255-4 S HGX34e/255-4 A HGX34e/255-4 S A	30	Q P	29600 4,30	27000 4,30	24600 4,28	22300 4,23	18300 4,08	14500 3,84	11500 3,54	9040 3,20	7030 2,85	5300 2,48	
	40	Q P	26000 5,33	23600 5,24	21500 5,13	19500 5,00	15800 4,71	12300 4,38	9730 3,94	7660 3,50	5940 3,06	4430 2,63	
	50	Q P	22200 6,25	20200 6,08	18300 5,89	16500 5,69	13400 5,25	10200 4,83	8080 4,29	6420 3,76	5050 3,26	3820 2,79	
HGX34e/315-4 HGX34e/315-4 S HGX34e/315-4 A HGX34e/315-4 S A	30	Q P	35900 4,95	32700 5,00	29800 5,01	27000 4,99	22100 4,86	17600 4,69	14100 4,34	11100 3,96	8590 3,55	6550 3,11	
	40	Q P	31300 6,32	28500 6,25	25900 6,16	23500 6,04	19200 5,72	15100 5,33	12000 4,85	9420 4,33	7260 3,80	5500 3,27	
	50	Q P	26800 7,63	24300 7,45	22100 7,24	20000 7,02	16200 6,50	12800 5,87	10200 5,25	7910 4,63	6060 3,99	4550 3,37	
HGX34e/380-4 HGX34e/380-4 S HGX34e/380-4 A HGX34e/380-4 S A	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	
	40	Q P	8000 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	
	50	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	

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

 Motor version -S-
(more powerful motor)

 Supplementary cooling or
reduced suction gas temp.

R407C			Performance data						50 Hz 2-pole	
Type	Cond. temp. °C		Cooling capacity $\dot{Q}_o$ [W]					Power consumption P [kW]		
			Evaporation temperature °C							
	12,5	10	7,5	5	0	-5	-10	-15		
HGX34P/255-2 HGX34P/255-2 A	30	Q P	52539 12,07	47952 11,48	43691 10,94	39736 10,44	32658 9,54	26551 8,71	21247 7,90	16579 7,05
	40	Q P	46183 13,17	42128 12,57	38356 12,01	34845 11,48	28523 10,46	22996 9,45	18095 8,39	13654 7,23
	50	Q P	39689 14,42	36164 13,77	32877 13,15	29807 12,53	24235 11,29	19281 10,01	14778 8,61	
	60	Q P	32997 15,72	29998 14,97	27193 14,23	24561 13,48	19733 11,93	15346 10,27		
HGX34P/315-2 S HGX34P/315-2 S A HGX34P/315-2 S A K	30	Q P	63241 13,80	57821 13,29	52726 12,79	47944 12,32	39278 11,40	31740 10,50	25246 9,59	19713 8,65
	40	Q P	55904 15,40	51037 14,85	46464 14,30	42175 13,76	34404 12,68	27642 11,57	21804 10,40	16806 9,14
	50	Q P	48302 17,11	44007 16,48	39976 15,83	36199 15,18	29362 13,84	23414 12,42	18271 10,89	
	60	Q P	40621 18,81	36918 18,04	33448 17,25	30202 16,44	24339 14,75	19243 12,92		
HGX34P/380-2 HGX34P/380-2 A HGX34P/380-2 A K	30	Q P	74227 19,29	68198 18,40	62453 17,54	56995 16,70	46946 15,07	38072 13,53	30389 12,08	23916 10,73
	40	Q P	65658 21,04	60233 20,07	55067 19,12	50164 18,19	41150 16,38	33212 14,65	26367 13,01	20634 11,45
	50	Q P	56631 22,97	51863 21,88	47330 20,81	43034 19,75	35163 17,68	28269 15,69	22369 13,77	
	60	Q P			39256 22,31	35622 21,08	29001 18,68	23257 16,34		

R407C			Performance data						60 Hz 2-pole	
Type	Cond. temp. °C		Cooling capacity $\dot{Q}_o$ [W]					Power consumption P [kW]		
			Evaporation temperature °C							
			12,5	10	7,5	5	0	-5	-10	-15
HGX34P/315-2 S A K	30	Q	70638	64585	58893	53551	43872	35452	28199	22018
		P	16,65	16,03	15,43	14,86	13,75	12,66	11,57	10,43
	40	Q	62443	57007	51899	47108	38429	30875	24354	18772
		P	18,58	17,91	17,25	16,60	15,30	13,96	12,55	11,03
	50	Q	53952	49155	44652	40433	32797	26153	20408	
		P	20,64	19,87	19,10	18,32	16,70	14,98	13,14	
	60	Q	45373	41236	37360	33735	27185	21494		
		P	22,68	21,76	20,81	19,83	17,79	15,59		
HGX34P/380-2 A K	30	Q	82909	76175	69758	63661	52438	42525	33943	26714
		P	23,26	22,20	21,16	20,14	18,18	16,32	14,57	12,94
	40	Q	73338	67278	61509	56031	45964	37097	29451	23048
		P	25,38	24,21	23,07	21,94	19,76	17,68	15,69	13,82
	50	Q	63255	57929	52866	48067	39276	31575	24986	
		P	27,71	26,40	25,10	23,82	21,33	18,92	16,61	
	60	Q			43848	39789	32393	25978		
		P			26,91	25,43	22,53	19,71		

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

HG HG Alu Type	Number of cylinders	Displacement 50 / 60 Hz (1450/1740 rpm) m³/h	Electrical data				Weight kg	Connections ④		Oil charge Ltr.
			Voltage ①	Max. working current ②	Max. power con- sumption ②	Starting current (rotor locked) A Δ / Y		Discharge line DV mm I inch	Suction line SV mm I inch	
				A	kW					
HG12P/60-4 S	2	5,40 / 6,40	③	6,8 / 3,9	2,2	40 / 23	48,0	12 I 1/2	16 I 5/8	0,8
HG12P/75-4	2	6,70 / 8,10	③	7,1 / 4,1	2,3	40 / 23	48,0	12 I 1/2	16 I 5/8	0,8
HG12P/75-4 S	2	6,70 / 8,10	③	8,0 / 4,6	2,6	43 / 25	49,0	12 I 1/2	16 I 5/8	0,8
HG12P/90-4	2	8,00 / 9,60	③	8,5 / 4,9	2,8	43 / 25	49,0	12 I 1/2	16 I 5/8	0,8
HG12P/90-4 S	2	8,00 / 9,60	③	8,8 / 5,1	2,9	45 / 26	49,0	12 I 1/2	16 I 5/8	0,8
HG12P/110-4	2	9,40 / 11,30	③	9,2 / 5,3	3,1	43 / 25	49,0	12 I 1/2	16 I 5/8	0,8
HG12P/110-4 S	2	9,40 / 11,30	③	10,6 / 6,1	3,6	45 / 26	49,0	12 I 1/2	16 I 5/8	0,8
HG22e/125-4	2	11,10 / 13,30	③	9,3 / 5,4	3,0	69 / 40	74,0	16 I 5/8	22 I 7/8	1,0
HG22e/125-4 A	2	11,10 / 13,30	③	9,3 / 5,4	3,0	69 / 40	44,0	16 I 5/8	22 I 7/8	1,0
HG22e/125-4 S	2	11,10 / 13,30	③	10,8 / 6,2	3,6	69 / 40	74,0	16 I 5/8	22 I 7/8	1,0
HG22e/125-4 S A	2	11,10 / 13,30	③	10,8 / 6,2	3,6	69 / 40	46,0	16 I 5/8	22 I 7/8	1,0
HG22e/160-4	2	13,70 / 16,40	③	11,1 / 6,4	3,7	69 / 40	74,0	16 I 5/8	22 I 7/8	1,0
HG22e/160-4 A	2	13,70 / 16,40	③	11,1 / 6,4	3,7	69 / 40	46,0	16 I 5/8	22 I 7/8	1,0
HG22e/160-4 S	2	13,70 / 16,40	③	13,1 / 7,6	4,4	87 / 50	76,0	16 I 5/8	22 I 7/8	1,0
HG22e/160-4 S A	2	13,70 / 16,40	③	13,1 / 7,6	4,4	87 / 50	47,0	16 I 5/8	22 I 7/8	1,0
HG22e/190-4	2	16,50 / 19,80	③	13,8 / 8,0	4,8	69 / 40	74,0	16 I 5/8	22 I 7/8	1,0
HG22e/190-4 A	2	16,50 / 19,80	③	13,8 / 8,0	4,8	69 / 40	45,0	16 I 5/8	22 I 7/8	1,0
HG22e/190-4 S	2	16,50 / 19,80	③	16,2 / 9,4	5,6	87 / 50	75,0	16 I 5/8	22 I 7/8	1,0
HG22e/190-4 S A	2	16,50 / 19,80	③	16,2 / 9,4	5,6	87 / 50	47,0	16 I 5/8	22 I 7/8	1,0
HG34e/215-4	4	18,80 / 22,60	③	14,0 / 8,1	4,8	87 / 50	92,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/215-4 A	4	18,80 / 22,60	③	14,0 / 8,1	4,8	87 / 50	55,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/215-4 S	4	18,80 / 22,60	③	18,3 / 10,5	6,0	132 / 76	97,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/215-4 S A	4	18,80 / 22,60	③	18,3 / 10,5	6,0	132 / 76	58,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/255-4	4	22,10 / 26,60	③	17,0 / 9,8	6,0	87 / 50	92,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/255-4 A	4	22,10 / 26,60	③	17,0 / 9,8	6,0	87 / 50	55,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/255-4 S	4	22,10 / 26,60	③	21,1 / 12,2	7,2	132 / 76	96,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/255-4 S A	4	22,10 / 26,60	③	21,1 / 12,2	7,2	132 / 76	58,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/315-4	4	27,30 / 32,80	③	21,1 / 12,2	7,4	111 / 64	94,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/315-4 A	4	27,30 / 32,80	③	21,1 / 12,2	7,4	111 / 64	57,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/315-4 S	4	27,30 / 32,80	③	25,5 / 14,7	8,9	132 / 76	97,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/315-4 S A	4	27,30 / 32,80	③	25,5 / 14,7	8,9	132 / 76	60,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/380-4	4	33,10 / 39,70	③	26,1 / 15,1	9,3	111 / 64	93,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/380-4 A	4	33,10 / 39,70	③	26,1 / 15,1	9,3	111 / 64	56,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/380-4 S	4	33,10 / 39,70	③	31,2 / 18,0	11,1	132 / 76	96,0	22 I 7/8	28 I 1 1/8	1,3
HG34e/380-4 S A	4	33,10 / 39,70	③	31,2 / 18,0	11,1	132 / 76	59,0	22 I 7/8	28 I 1 1/8	1,3

Explanations:

- ① Tolerance (± 10%) relates to the mean value of the voltage range.
Other voltages and current types on request.
- ② - The specifications for max. power consumption apply for 50Hz operation. For 60Hz operation, the specifications have to be multiplied by the factor 1.2. The max. working current remains unchanged.
- Take account of the max. operating current / max. power consumption when designing contactors, leads and fuses.
Switches: Service category AC3
- ③ 220-240 V Δ / 380-420 V Y - 3 - 50 Hz
265-290 V Δ / 440-480 V Y - 3 - 60 Hz
- ④ For soldering connections

HG 2-pole HG 2-pole Alu	Number of cylinders	Displacement 50 Hz (2900 rpm)	Electrical data				Weight	Connections ⑤		Oil charge
			Voltage	Max. working current	Max. power con- sumption	Starting current (rotor locked)		Discharge line DV	Suction line SV	
			①	②	②					
Type		m³/h		A	kW	A	kg	mm I inch	mm I inch	Ltr.
				Y		Y				
HGX34P/255-2	4	44,3	③	25,8	16,0	117	95,0	22 I 7/8	35 I 1 3/8	1,3
HGX34P/255-2 A	4	44,3	③	25,8	16,0	117	58,0	22 I 7/8	35 I 1 3/8	1,3
HGX34P/315-2	4	54,7	③	24,3	14,7	117	95,0	22 I 7/8	35 I 1 3/8	1,3
HGX34P/315-2 A	4	54,7	③	24,3	14,7	117	58,0	22 I 7/8	35 I 1 3/8	1,3
HGX34P/315-2 S	4	54,7	③	32,2	19,0	172	103,0	22 I 7/8	35 I 1 3/8	1,3
HGX34P/315-2 S A	4	54,7	③	32,2	19,0	172	68,0	22 I 7/8	35 I 1 3/8	1,3
HGX34P/380-2	4	66,1	③	38,0	23,5	172	102,0	22 I 7/8	35 I 1 3/8	1,3
HGX34P/380-2 A	4	66,1	③	38,0	23,5	172	67,0	22 I 7/8	35 I 1 3/8	1,3

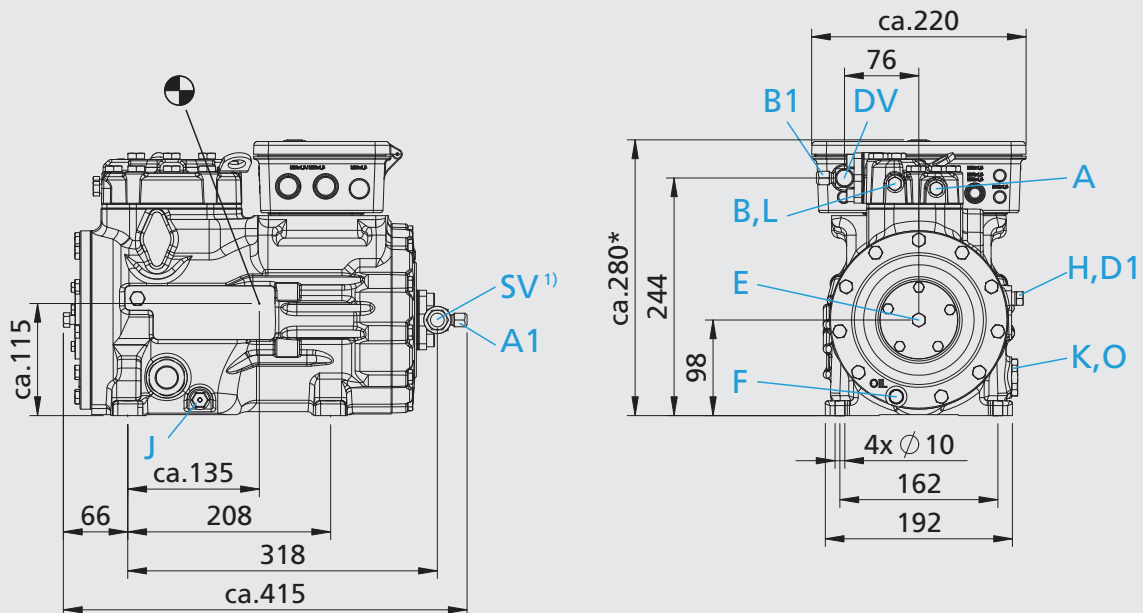
HG 2-pole Alu K	Number of cylinders	Displacement 50 / 60 Hz (2900/3480 rpm)	Electrical data				Weight	Connections ⑤		Oil charge
			Voltage	Max. working current	Max. power con- sumption	Starting current (rotor locked)		Discharge line DV	Suction line SV	
			①	②	②					
Type		m³/h		A	kW	A	kg	mm I inch	mm I inch	Ltr.
				Y		Y				
HGX34P/315-2 A K	4	54,7 / 65,6	④	24,3	14,7	117	58,0	22 I 7/8	35 I 1 3/8	1,3
HGX34P/315-2 S A K	4	54,7 / 65,6	④	32,2	19,0	172	68,0	22 I 7/8	35 I 1 3/8	1,3
HGX34P/380-2 A K	4	66,1 / 79,4	④	38,0	23,5	172	67,0	22 I 7/8	35 I 1 3/8	1,3

Explanations:

- ① Tolerance ($\pm 10\%$) relates to the mean value of the voltage range. Other voltages and current types on request.
- ② - The specifications for max. power consumption apply for 50Hz operation. For 60Hz operation, the specifications have to be multiplied by the factor 1.2. The max. working current remains unchanged.
- Take account of the max. operating current / max. power consumption when designing contactors, leads and fuses.
Switches: Service category AC3
- ③ 380-420 V Y - 3 - 50 Hz
- ④ 380-420 V Y - 3 - 50 Hz
440-480 V Y - 3 - 60 Hz
- ⑤ For soldering connections

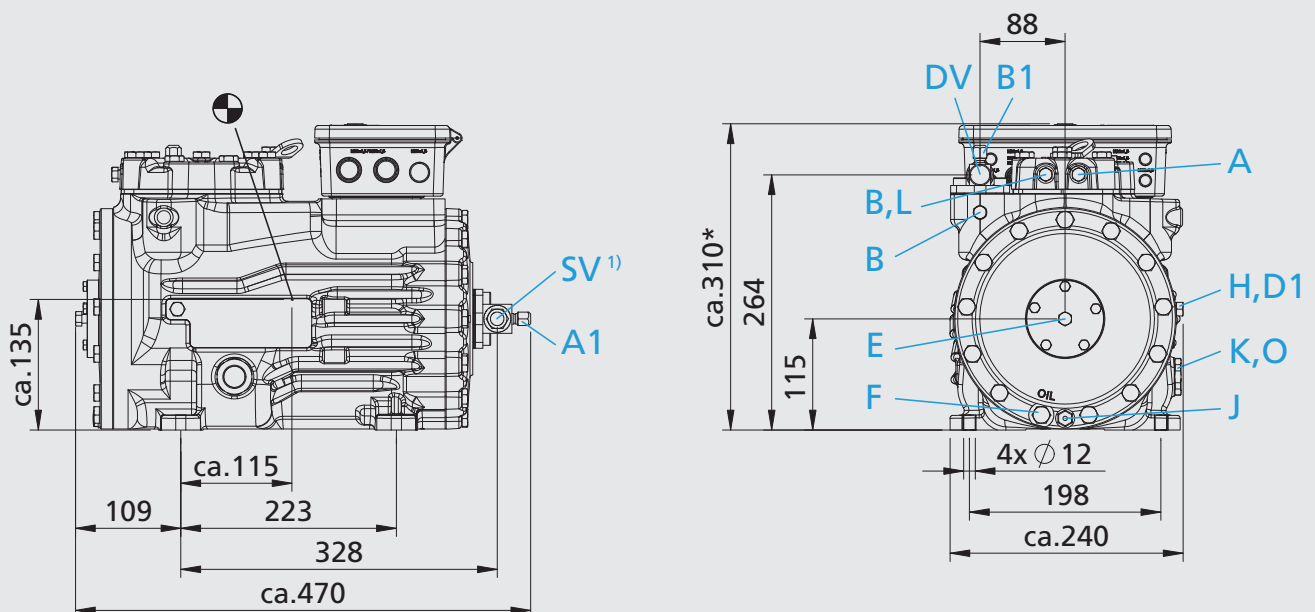
HG12P 4-pole

HG12P/60-4 S

HG12P/75-4
HG12P/75-4 SHG12P/90-4
HG12P/90-4 SHG12P/110-4
HG12P/110-4 S

*) With the accessory "Terminal box with reduced height" about 270 mm
(Motor protection MP10 as an extra for control cabinet installation)

HG22e 4-pole

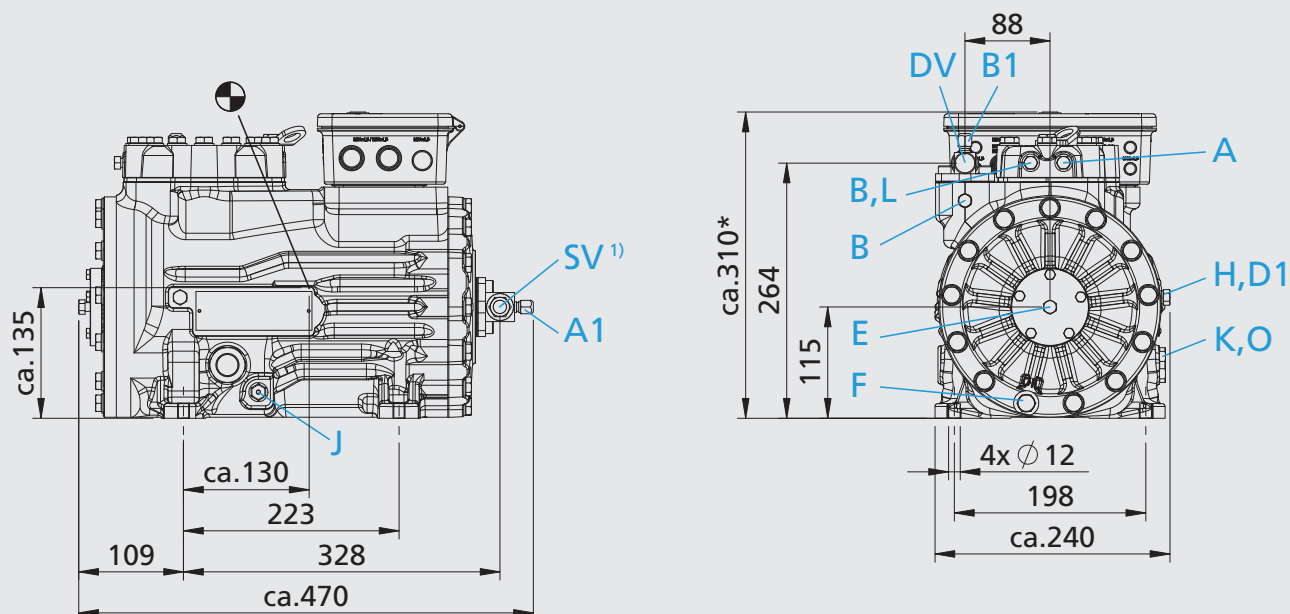
HG22e/125-4
HG22e/125-4 SHG22e/160-4
HG22e/160-4 SHG22e/190-4
HG22e/190-4 S

*) With the accessory "Terminal box with reduced height" about 300 mm
(Motor protection MP10 as an extra for control cabinet installation)

1) SV 90° rotatable
 Centre of gravity

HG22e Aluminium 4-pole

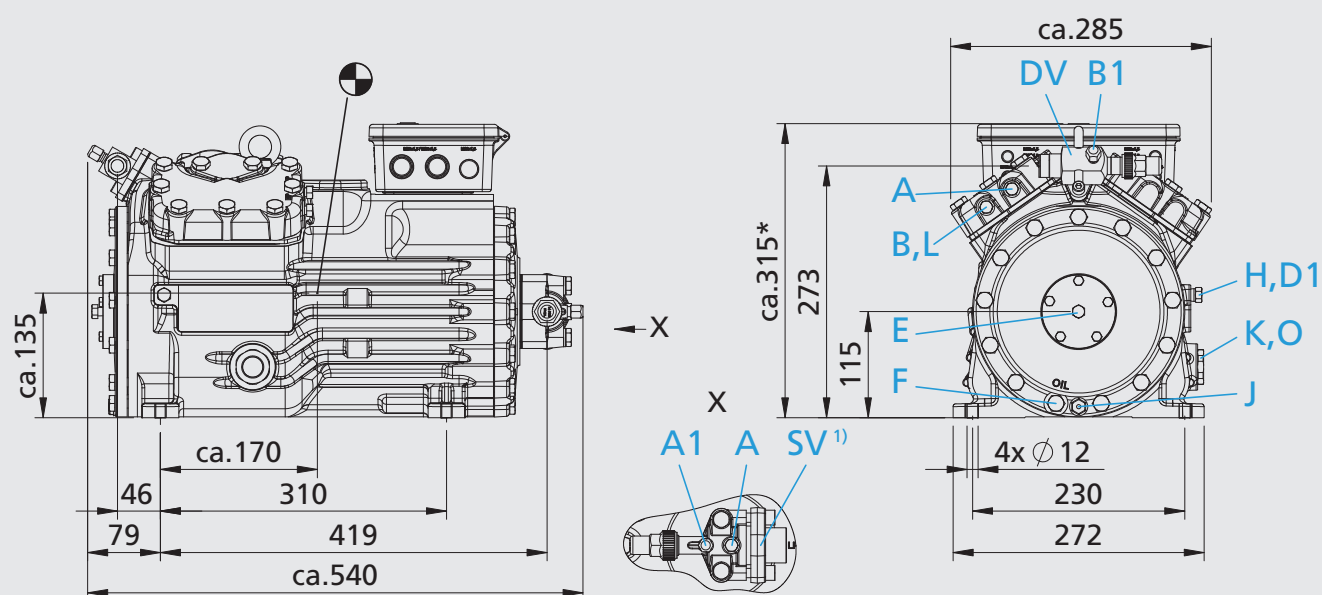
HG22e/125-4 A HG22e/160-4 A HG22e/190-4 A
 HG22e/125-4 S A HG22e/160-4 S A HG22e/190-4 S A



*) With the accessory "Terminal box with reduced height" about 300 mm
 (Motor protection MP10 as an extra for control cabinet installation)

HG34e 4-pole

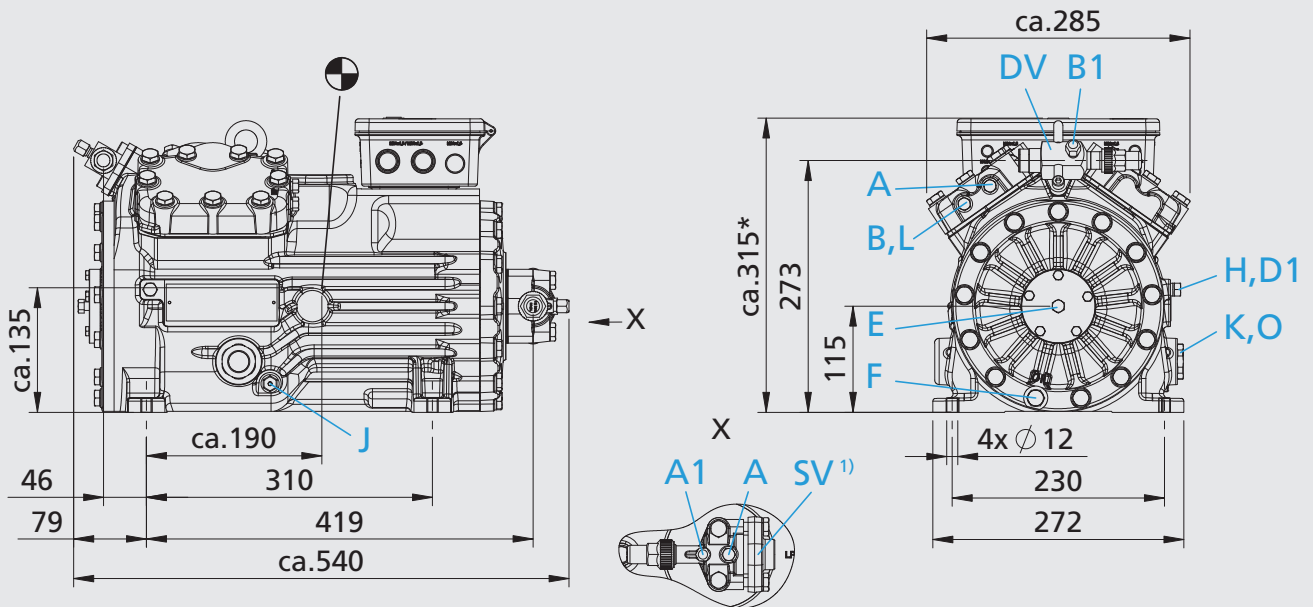
HG34e/215-4 HG34e/255-4 HG34e/315-4 HG34e/380-4
 HG34e/215-4 S HG34e/255-4 S HG34e/315-4 S HG34e/380-4 S



*) With the accessory "Terminal box with reduced height" about 300 mm
 (Motor protection MP10 as an extra for control cabinet installation)

HG34e Aluminium 4-pole

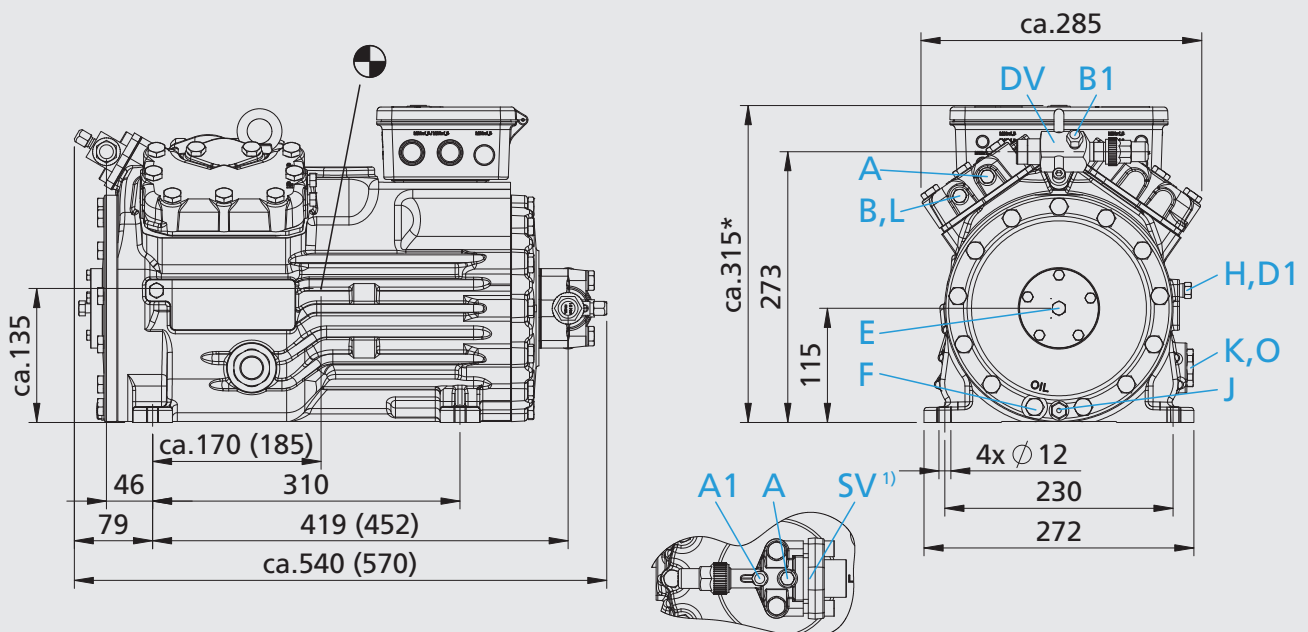
HG34e/215-4 A HG34e/255-4 A HG34e/315-4 A HG34e/380-4 A
 HG34e/215-4 S A HG34e/255-4 S A HG34e/315-4 S A HG34e/380-4 S A



*) With the accessory "Terminal box with reduced height" about 300 mm
 (Motor protection MP10 as an extra for control cabinet installation)

HGX34P 2-pole

HGX34P/255-2 HGX34P/315-2 HGX34P/380-2
 HGX34P/315-2 S



Dimensions in () = HGX34P/315-2 S
 HGX34P/380-2

*) With the accessory "Terminal box with reduced height" about 300 mm
 (Motor protection MP10 as an extra for control cabinet installation)

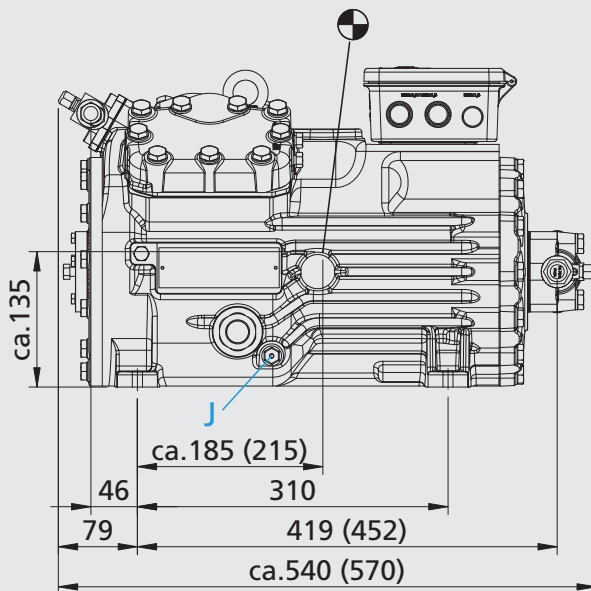
¹⁾ SV 90° rotatable
 ☉ Centre of gravity

HGX34P Aluminium 2-pole

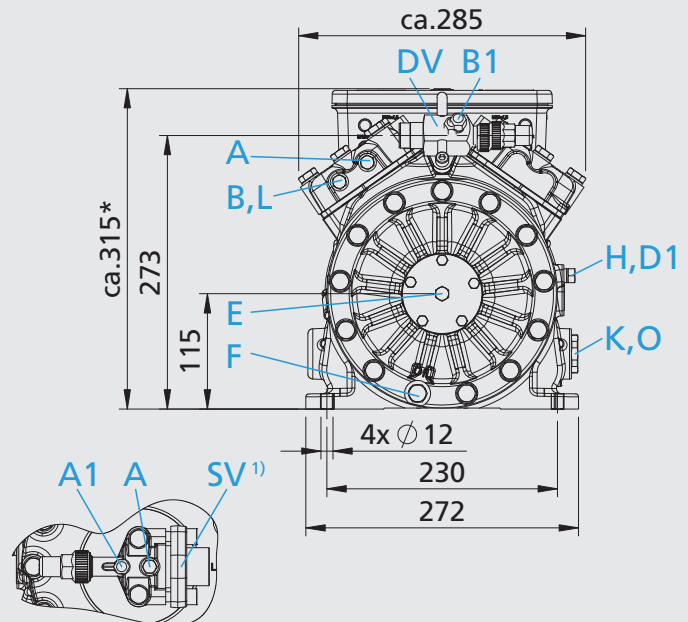
HGX34P/255-2 A

HGX34P/315-2 A
HGX34P/315-2 S A

HGX34P/380-2 A



Dimensions in () = HGX34P/315-2 S A
HGX34P/380-2 A

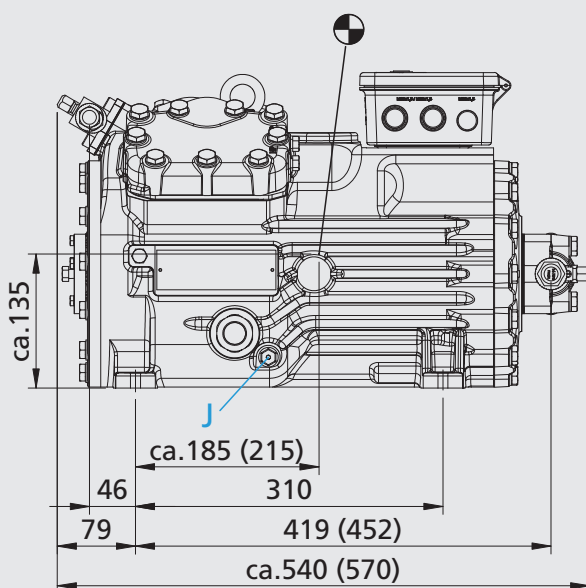


*) With the accessory "Terminal box with reduced height" about 300 mm
(Motor protection MP10 as an extra for control cabinet installation)

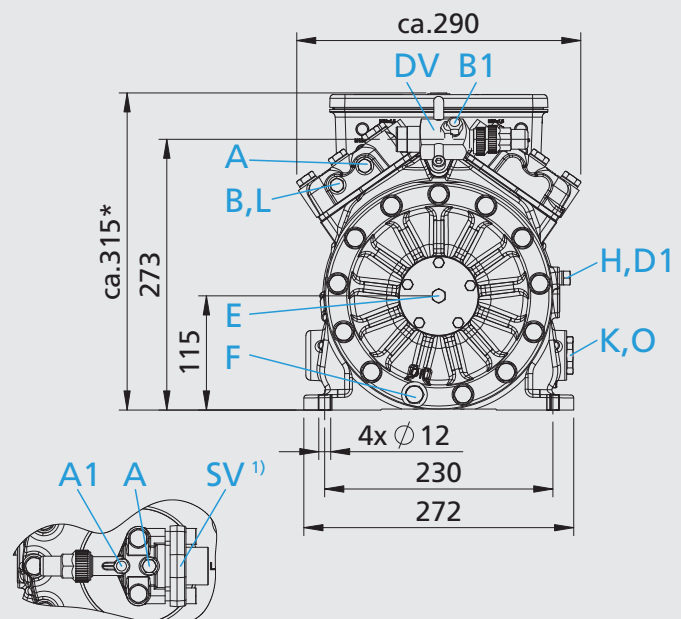
HGX34P Aluminium 2-pole K

HGX34P/315-2 A K
HGX34P/315-2 S A K

HGX34P/380-2 A K



Dimensions in () = HGX34P/315-2 S A K
HGX34P/380-2 A K



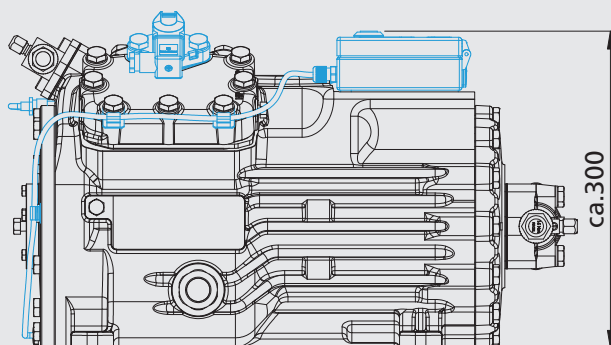
*) With the accessory "Terminal box with reduced height" about 300 mm
(Motor protection MP10 as an extra for control cabinet installation)

Connections		HG12P	HG22e ¹⁾	HG34e ¹⁾	HGX34P-2 ¹⁾
SV	Suction line	please refer to technical data page 71 & 72			
DV	Discharge line				
A	Connection suction side, not lockable	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF
A1	Connection suction side, lockable	7/16" UNF	7/16" UNF	7/16" UNF	7/16" UNF
B	Connection discharge side, not lockable	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF
B1	Connection discharge side, lockable	7/16" UNF	7/16" UNF	7/16" UNF	7/16" UNF
D1	Connection oil return from oil separator	1/4" NPTF	1/4" NPTF	1/4" NPTF	1/4" NPTF
E	Connection oil pressure gauge	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF
F	Oil drain	M 8	M 10	M 10	M 10
H	Oil charge plug	1/4" NPTF	1/4" NPTF	1/4" NPTF	1/4" NPTF
J	Connection oil sump heater	Ø 15 mm	Ø 15 mm	Ø 15 mm	Ø 15 mm
K	Sight glass	1 1/8" - 18 UNEF	1 1/8" - 18 UNEF	1 1/8" - 18 UNEF	1 1/8" - 18 UNEF
L	Connection thermal protection thermostat	1/8" NPTF	1/8" NPTF	1/8" NPTF	1/8" NPTF
O	Connection oil level regulator	1 1/8" - 18 UNEF	1 1/8" - 18 UNEF	1 1/8" - 18 UNEF	1 1/8" - 18 UNEF

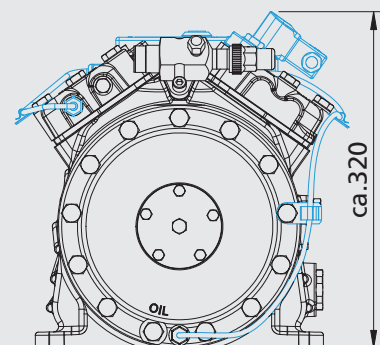
¹⁾ In cast iron and aluminium version

Dimensions with accessories

Terminal box with reduced height



Capacity regulator



Scope of supply cast iron compressor	HG12P	HG22e	HG34e	HGX34P-2
Semi-hermetic two cylinder reciprocating compressor with drive motor for direct start 220-240 V Δ / 380-420 V Y - 3 - 50 Hz 265-290 V Δ / 440-480 V Y - 3 - 60 Hz Single-section compressor housing with hermetically integrated electric motor	●	●		
Semi-hermetic four cylinder reciprocating compressor with drive motor for direct start 220-240 V Δ / 380-420 V Y - 3 - 50 Hz 265-290 V Δ / 440-480 V Y - 3 - 60 Hz Single-section compressor housing with hermetically integrated electric motor			●	
Semi-hermetic four cylinder reciprocating compressor with drive motor for direct start 380-420 V Y - 3 - 50 Hz Single-section compressor housing with hermetically integrated electric motor				●
Winding protection with PTC resistor sensors and electronic trigger unit Bock MP10 230 V - 1 - 50/60 Hz	●	●	●	●
Oil charge: HG: FUCHS Reniso SP 46 HGX: FUCHS Reniso Triton SE 55	●	●	●	●
Sight glass	●	●	●	●
Suction and discharge line valve	●	●	●	●
Inert gas charge	●	●	●	●

Scope of supply aluminium compressor	HG22e A	HG34e A	HGX34P-2 A	HGX34P-2 A K
Semi-hermetic two cylinder reciprocating compressor with drive motor for direct start 220-240 V Δ / 380-420 V Y - 3 - 50 Hz 265-290 V Δ / 440-480 V Y - 3 - 60 Hz Single-section compressor housing with hermetically integrated electric motor	•			
Semi-hermetic four cylinder reciprocating compressor with drive motor for direct start 220-240 V Δ / 380-420 V Y - 3 - 50 Hz 265-290 V Δ / 440-480 V Y - 3 - 60 Hz Single-section compressor housing with hermetically integrated electric motor		•		
Semi-hermetic four cylinder reciprocating compressor with drive motor for direct start 380-420 V Y - 3 - 50 Hz Single-section compressor housing with hermetically integrated electric motor			•	•
Winding protection with PTC resistor sensors and electronic trigger unit Bock MP10 230 V - 1 - 50/60 Hz	•	•	•	•
Oil charge: HG: FUCHS Reniso SP 46 HGX: FUCHS Reniso Triton SE 55	•	•	•	•
Sight glass	•	•	•	•
Suction and discharge line valve	•	•	•	•
Inert gas charge	•	•	•	•

1

2

3

4

5

6

7

8

Accessories cast iron compressors	HG12P	HG22e	HG34e	HGX34P-2
① Start unloader by means of a Bock ESS (Electronic Soft Start) IP20 (Connection clamps IP00) for installation in switch cabinet		●	●	●
② Capacity regulator 12 V DC, IP65 1 capacity regulator = 50% residual capacity			●	●
Capacity regulator 24 V DC, IP65 1 capacity regulator = 50% residual capacity			●	●
Capacity regulator 24 V - 1 - 50/60 Hz, IP65 1 capacity regulator = 50% residual capacity			●	●
Capacity regulator 110 V - 1 - 50/60 Hz, IP65 1 capacity regulator = 50% residual capacity			●	●
Capacity regulator 230 V - 1 - 50/60 Hz, IP65 1 capacity regulator = 50% residual capacity			●	●
③ Bock ESP (Electronic Single Phase) phase converter from single to three phase AC for installation in switch cabinet, IP20	●			
④ Oil sump heater 24 V DC, 80 W, IP66 permanently set version	●	●	●	●
Oil sump heater 110-240 V - 1 - 50/60 Hz, 50-120 W, IP66 PTC heater self-regulating	●	●	●	●
Oil sump heater 400 V - 1 - 50/60 Hz, 80 W, IP66 permanently set version	●	●	●	●
⑤ Thermal protection thermostat (PTC sensor) IP67	●	●	●	●
⑥ Terminal box with reduced height (-15 mm), IP88 (Motor protection MP10 as an extra item for installation in switch cabinet)		●	●	●
⑦ MP10 with 24 V DC control voltage	●	●	●	●
MP10 with 110 V - 1 - 50/60 Hz control voltage	●	●	●	●
Special voltage and/or frequency (on request)	●	●	●	●

Accessories aluminium compressors	HG22e A	HG34e A	HGX34P-2 A	HGX34P-2 A K
① Start unloader by means of a Bock ESS (Electronic Soft Start) IP20 (Connection clamps IP00) for installation in switch cabinet	•	•	•	•
② Capacity regulator 12 V DC, IP65 1 capacity regulator = 50% residual capacity		•	•	•
Capacity regulator 24 V DC, IP65 1 capacity regulator = 50% residual capacity		•	•	•
Capacity regulator 24 V - 1 - 50/60 Hz, IP65 1 capacity regulator = 50% residual capacity		•	•	•
Capacity regulator 110 V - 1 - 50/60 Hz, IP65 1 capacity regulator = 50% residual capacity		•	•	•
Capacity regulator 230 V - 1 - 50/60 Hz, IP65 1 capacity regulator = 50% residual capacity		•	•	•
④ Oil sump heater 24 V DC, 80 W, IP66 permanently set version	•	•	•	•
Oil sump heater 110-240 V - 1 - 50/60 Hz, 50-120 W, IP66 PTC heater self-regulating	•	•	•	•
Oil sump heater 400 V - 1 - 50/60 Hz, 80 W, IP66 permanently set version	•	•	•	•
⑤ Thermal protection thermostat (PTC sensor) IP67	•	•	•	•
⑥ Terminal box with reduced height (-15 mm), IP66 (Motor protection MP10 as an extra item for installation in switch cabinet)		•	•	•
⑦ MP10 with 24 V DC control voltage	•	•	•	•
MP10 with 110 V - 1 - 50/60 Hz control voltage	•	•	•	•
Special voltage and/or frequency (on request)	•	•	•	•
⑧ Kit for silent block		•	•	•

ESS Electronic Soft Start

①



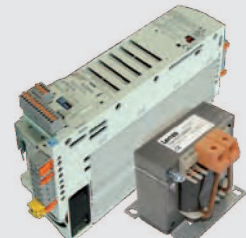
Capacity regulator

②



ESP Electronic Single Phase

③



Oil sump heater

④



Thermal protection thermostat

⑤



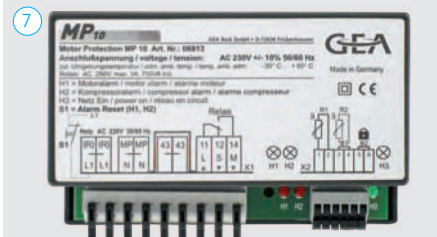
Terminal box with reduced height

⑥



MP10 Motor Protection

⑦



Silent block for aluminium version

⑧

