

Semi-hermetic Bock Compressors

Single-stage and Two-stage Reciprocating Compressors HG (HA)

° In touch with our customers

GEA Refrigeration Technologies: Your partner for low temperatures

GEA Refrigeration Technologies, part of the internationally active GEA Group, is a synonym for industrial refrigeration technology. Since the end of the 19th century, it has been our business to cool processes and products, and to control the temperature of goods in transport. You will find our solutions in the food and beverage sector; in the petrochemical, chemical, and pharmaceutical industries; on fishing ships; in natural gas liquefaction; in infrastructure facilities; and in ice factories. We are also at the top with know-how when it comes to refrigeration at leisure facilities. After all, we have been excited about refrigeration for decades now. As a result, our staff enthusiastically goes about its development and production projects – to include preventive and remedial maintenance of your refrigeration systems.

This enthusiasm is highly apparent in the daily work of all companies in our Segment. Whether it's complete systems or individual valves: we have the experience in every section of our company to optimally design, manufacture, and install refrigeration systems. And to take full advantage of this experience, we not only carry out development in our own company: we also manufacture, assemble, and test the core components. A chain is, after all, only as strong as its weakest link: and this also applies equally well to refrigeration technology, cooling processes, and cooling chains.

This makes it all the more important that you have a partner – in GEA Refrigeration Technologies – that has learned to master refrigeration from A to Z. And all of this since 1896, when Willem Grasso founded his refrigeration division. From this history of GEA Refrigeration Technologies, you will profit in the form of technical expertise and top sector know-how.

But we all live in the present and think about the future. We ponder a future in which more and more processes need energy around the world, and fewer natural resources are available. As a result, we have taken it as our goal to create solutions that are not only long-life and cost-effective, but also energy-saving and environment-protecting. We feel obligated to sustainability in many respects. Our objective is to produce longlife and material-saving products over the long run – as well as products that use environmentally benign refrigerants. And we aim to produce efficiently. But our responsibility does not end at the factory gate. As a result, we take great pains to ensure that our systems are energy-efficient and that they protect the climate. With GEA Refrigeration Technologies, you can also count on optimal economy: saving energy indeed means reducing money spent for energy. At the same time, you protect the environment. Thanks to our refrigeration technology, your processes will run more economically and more ecologically. To maintain our standard of living and to assure quality of life for future generations as well.

Our claim of combining economy with saving natural resources is reflected in all components of our company, such as the following: compressors, chillers, heat pumps, ice machines, fittings and valves, control systems, and many, many more. You can find proof of the above throughout the world. Our international corporate network – and above all our reference projects – are spread all over the globe.





GEA Bock - More than a compressor

Over 75 years ago, when the refrigeration and air-conditioning industry was still in its infancy, our company's founder, Wilhelm Bock, had a vision: he wanted to build first-class and reliable refrigeration machines. In the following decades Bock developed into one of the world's leading manufacturers of refrigeration and air-conditioning compressors.

Today, GEA Bock offers as part of GEA Refrigeration Technologies the right compressor for all fields of commercial-, industrial-, rail-, bus- and transport refrigeration.

That GEA Bock places the highest demands on compressors for energy efficiency shows our EFC system. For many years we offer with the EFC system a solution to reduce the energy consumption by 25 %.

In this brochure we present you our current program of single-stage and two-stage semi-hermetic Bock compressors.

Be inspired. By our new products, our established product series and the entire passion that goes into each of our products.



Semi-hermetic compressors HG (HA)

The Bock HG (Hermetic Gas-cooled) range of semi-hermetic compressors offers traditional suction gas-cooled compressor state of the art technology. These compressors of the highest quality standard excel in their running comfort, easy maintenance, efficiency and reliability. Suitable as standard for conventional or chlorine-free HFC refrigerants.

The HA (Hermetic Air-cooled) range, specially engineered by GEA Bock, is available for deep-freezing applications, in particular for use with the refrigerants R22 and R404A.

- ° Single-stage
- ° CO₂ compressors subcritical
- ° CO₂ compressors transcritical
- ° R134a compressors
- ° R407C compressors
- ° R410A compressors
- ° ATEX compressors
- ° HC compressors
- ° Aluminium compressors
- ° 2-pole compressors
- ° Two-stage compressors
- ° Duplex compressors
- ° Compressor units with receiver
- ° Condenser units air-cooled



Vehicle compressors FK

Bock vehicle compressors of the FK range are the result of many years of experience in the domain of mobile cooling systems.

The unsurpassed light, compact, robust design and wide r.p.m. range are only some of the outstanding features of this unique product range of two, four and six cylinder compressors.

A wide variety of designs can be tailored to suit individual requirements.

The so-called K version is a special innovation with a unique valve plate system for maximum requirements in bus and coach air-conditioning systems.

- ° Compressors for bus and train air-conditioning
- ° Compressors for transport refrigeration and other applications



Open type compressors F

The F model series provides modern open type compressors for separate drive systems (using V belts or direct couplings). Load transfer through a V pair.

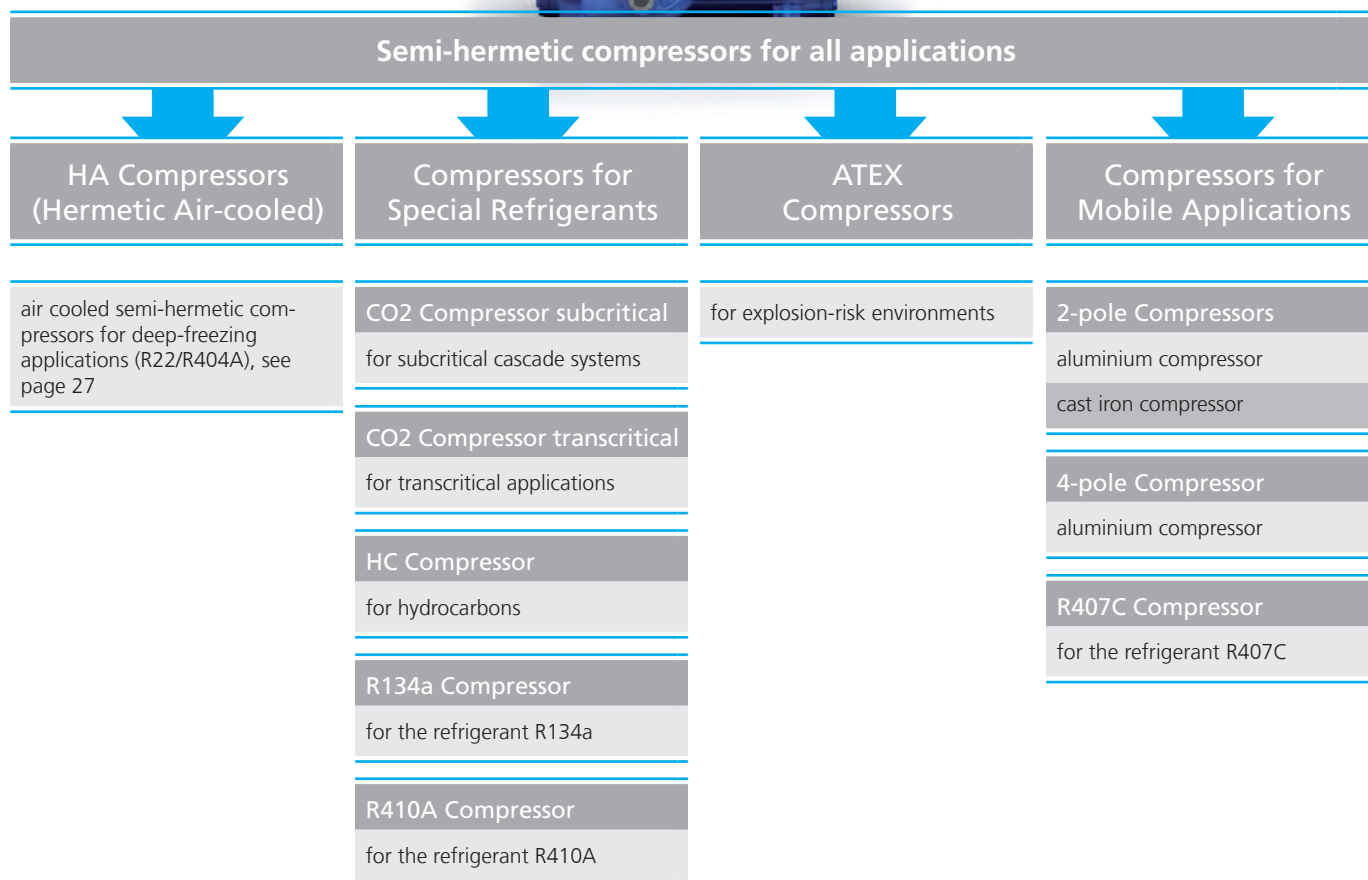
Virtually all drive capacity requirements can be met.

Very compact compressor design, robust and easy to handle. Oil pump lubrication as standard.

- ° Single-stage compressors
- ° NH₃ compressors
- ° Compressor units for direct drive
- ° NH₃ Compressor units for direct drive



Bock offers a choice of interesting compressor versions in the established semi-hermetic range for current market trends such as alternative refrigerants, deep-freezing or EX protection.



Available versions	HG12	HG22	HG34	HG4	HG5	HG6	HG7	HG8
HA compressors	●	●	●	●	●	●		
CO ₂ compressors subcritical	●	●	●	●				
CO ₂ compressors transcritical			●					
HC compressors	●	●	●	●	●	●	●	●
R134a compressors				●	●	●	●	
R410A compressors	●	●	●	●				
ATEX compressors	●	●	●	●	●	●		
2-pole compressors aluminium			●					
2-pole compressors cast iron			●					
4-pole compressors aluminium		●	●					
R407C compressors			●					

HA System Hermetic Air-cooled

Semi-hermetic air-cooled compressors for deep-freezing (R22/R404A)

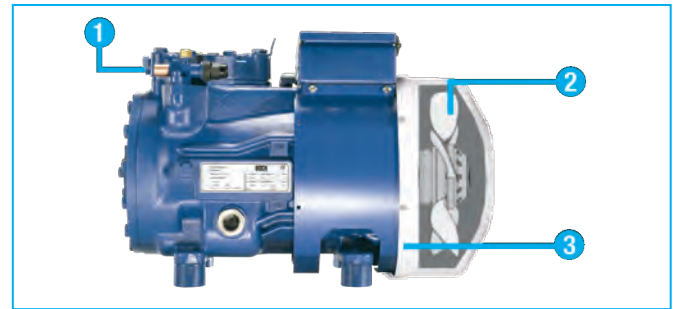
Available for all 2 and 4 cylinder versions.

Increasingly high specifications are being set for all suction gascooled semi-hermetic compressors for deep-freezing applications.

Compressors rapidly reach their temperature limits due to the rise in temperature of the suction gas caused by the drive motor. The refrigeration capacity also diminishes. But not in Bock HA compressors.

The unique "Bock HA principle" prevents this. The drive motor is air-cooled and compressor suction is direct. The suction gas is not heated by the motor, but is fed directly to the compressor without being diverted through the motor. The motor is cooled by a compact integrated ventilation unit. Its precise airflow cools not only the motor but also the compressor and especially the cylinder heads.

A semi-hermetic compressor with the advantages of an open type.



- ① Suction gas is fed directly into the compressor
- ② The motor is cooled by an integrated ventilation unit
- ③ Cool air is directed over the motor through an air duct hood

This results in a reduced discharge gas temperature and therefore an extended range of applications combined with improved capacity (deep-freezing - e.g. R22, R404A). In addition, the compressor is separate from the motor, which is a particular advantage in the event of a motor burn-out.

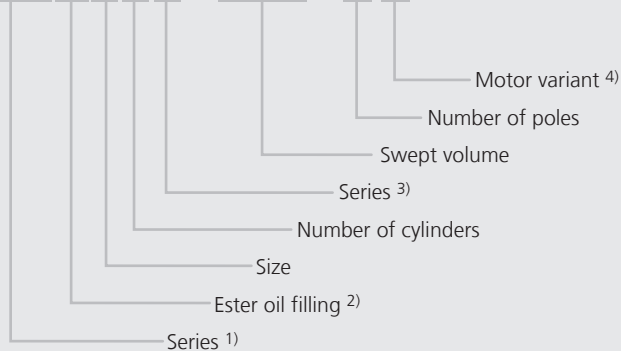




1
2
3
4

Type key

HGX34e / 215 - 4S



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

HA = Hermetic Air-Cooled (for deep-freezing)

2) X = Ester oil filling

(HFC refrigerants e.g. R134a, R404A, R507, R407C)

3) e = Additional declaration for e-series compressors

P = Additional declaration for Pluscom compressors

4) S = More powerful motor e.g. air-conditioning applications

R134a			Performance data											50 Hz	
Type		Cond. temp. °C	Cooling capacity \dot{Q}_o [W]								Power consumption P_e [kW]				
			Evaporating temperature °C												
			12,5	10	7,5	5	0	-5	-10	-15	-20	-25	-30		
HGX5/725-4	30	Q P	57279 10,01	52351 9,65	47725 9,30	43390 8,97	35549 8,34	28736 7,75	22862 7,18	17835 6,62	13564 6,04	9960 5,45	6930 4,81		
	40	Q P	51552 11,27	47064 10,84	42859 10,42	38926 10,01	31832 9,23	25690 8,48	20410 7,75	15901 7,02	12072 6,28	8834 5,51	6094 4,69		
	50	Q P	44810 12,58	40821 12,05	37097 11,54	33626 11,04	27398 10,07	22047 9,13	17481 8,20	13610 7,27	10343 6,32	7589 5,34	5259 4,31		
	60	Q P	36939 13,92	33511 13,29	30327 12,67	27378 12,06	22136 10,87	17695 9,71	13963 8,55	10849 7,38	8264 6,19	6116 4,97	4314 3,69		
	70	Q P	27829 15,32	25020 14,56	22438 13,82	20070 13,08	15934 11,64	12523 10,21	9744 8,78	7508 7,35	5724 5,89				
HGX5/830-4	30	Q P	65754 11,49	60097 11,08	54786 10,68	49810 10,30	40808 9,58	32988 8,90	26244 8,24	20474 7,59	15571 6,94	11433 6,25	7956 5,53		
	40	Q P	59180 12,94	54028 12,44	49200 11,96	44686 11,49	36541 10,60	29491 9,74	23430 8,90	18254 8,06	13859 7,21	10141 6,32	6995 5,39		
	50	Q P	51440 14,44	46861 13,83	42586 13,25	38601 12,67	31452 11,56	25309 10,48	20067 9,42	15623 8,35	11873 7,26	8712 6,13	6037 4,95		
	60	Q P	42405 15,98	38469 15,26	34814 14,55	31429 13,85	25412 12,48	20313 11,14	16029 9,81	12455 8,47	9487 7,11	7021 5,70	4952 4,24		
	70	Q P	31947 17,59	28722 16,72	25758 15,86	23040 15,02	18292 13,36	14376 11,72	11186 10,08	8619 8,44	6571 6,76				
HGX5/945-4	30	Q P	74814 13,08	68376 12,60	62334 12,15	56673 11,71	46431 10,89	37533 10,12	29860 9,38	23294 8,64	17717 7,89	13009 7,12	9052 6,29		
	40	Q P	67334 14,73	61471 14,16	55979 13,61	50842 13,08	41576 12,06	33554 11,08	26658 10,12	20768 9,17	15768 8,20	11538 7,19	7959 6,13		
	50	Q P	58527 16,43	53317 15,74	48453 15,07	43920 14,42	35785 13,16	28796 11,93	22832 10,71	17776 9,50	13509 8,26	9913 6,98	6869 5,64		
	60	Q P	48247 18,19	43769 17,36	39611 16,55	35759 15,76	28913 14,20	23112 12,68	18237 11,16	14171 9,64	10794 8,09	7988 6,49	5635 4,82		
	70	Q P	36349 20,01	32680 19,02	29306 18,05	26214 17,09	20812 15,20	16356 13,33	12727 11,47	9807 9,60	7476 7,69				
HGX6/1080-4	30	Q P	85736 14,90	78334 14,37	71386 13,87	64875 13,39	53098 12,46	42867 11,59	34049 10,74	26509 9,90	20114 9,04	14729 8,14	10219 7,19		
	40	Q P	77231 16,80	70507 16,16	64206 15,53	58310 14,93	47666 13,77	38441 12,65	30501 11,56	23712 10,47	17939 9,36	13049 8,22	8906 7,01		
	50	Q P	67028 18,77	61090 17,98	55541 17,21	50366 16,46	41068 15,01	33062 13,59	26213 12,20	20387 10,82	15449 9,41	11267 7,96	7704 6,46		
	60	Q P	54908 20,84	49861 19,87	45172 18,93	40824 18,01	33086 16,20	26510 14,44	20965 12,70	16315 10,96	12425 9,20	9163 7,40	6393 5,54		
	70	Q P	40651 23,02	36602 21,85	32879 20,71	29464 19,59	23497 17,38	18566 15,22	14537 13,08	11275 10,93	8647 8,77				
HGX6/1240-4	30	Q P	98422 17,10	89924 16,50	81948 15,92	74474 15,37	60954 14,31	49209 13,31	39087 12,33	30432 11,36	23090 10,38	16908 9,35	11731 8,25		
	40	Q P	88658 19,29	80940 18,55	73706 17,83	66937 17,14	54718 15,81	44128 14,52	35014 13,27	27220 12,02	20593 10,75	14979 9,43	10224 8,05		
	50	Q P	76946 21,55	70129 20,64	63759 19,76	57818 18,90	47145 17,23	37954 15,61	30091 14,01	23403 12,42	17735 10,80	12934 9,14	8844 7,41		
	60	Q P	63033 23,92	57239 22,81	51856 21,73	46865 20,67	37981 18,60	30433 16,58	24067 14,58	18729 12,58	14264 10,56	10519 8,50	7339 6,36		
	70	Q P	46666 26,42	42017 25,09	37743 23,77	33824 22,48	26974 19,95	21313 17,47	16688 15,01	12944 12,55	9926 10,06				
HGX6/1410-4	30	Q P	111982 19,46	102314 18,77	93239 18,11	84735 17,48	69352 16,28	55989 15,14	44472 14,03	34624 12,93	26271 11,81	19237 10,63	13347 9,39		
	40	Q P	100873 21,95	92091 21,10	83861 20,29	76160 19,50	62257 17,98	50208 16,53	39838 15,10	30970 13,68	23431 12,23	17043 10,73	11632 9,16		
	50	Q P	87547 24,52	79791 23,49	72544 22,48	65784 21,50	53640 19,60	43183 17,76	34237 15,94	26628 14,13	20179 12,29	14716 10,40	10062 8,43		
	60	Q P	71717 27,22	65125 25,96	59000 24,73	53322 23,52	43214 21,16	34626 18,86	27383 16,59	21309 14,32	16229 12,02	11968 9,67	8350 7,23		
	70	Q P	53096 30,06	47807 28,54	42943 27,05	38484 25,58	30690 22,70	24250 19,88	18987 17,08	14727 14,28	11294 11,45				
HGX7/1620-4	30	Q P	121493 16,46	110976 16,72	101143 16,84	91966 16,83	75469 16,46	61262 15,69	49126 14,61	38837 13,32	30174 11,90	22916 10,44	16842 9,03		
	40	Q P	108919 21,03	99297 20,91	90317 20,66	81950 20,30	66947 19,29	54067 17,97	43088 16,41	33788 14,72	25945 12,99	19339 11,29	13748 9,73		
	50	Q P	95988 25,19	87281 24,70	79173 24,11	71637 23,42	58168 21,82	46654 19,98	36872 17,99	28600 15,95	21618 13,94	15703 12,05	10634 10,37		
	60	Q P	82743 28,86	74970 28,03	67755 27,11	61069 26,12	49175 23,97	39066 21,65	30521 19,28	23318 16,92	17235 14,68	12052 12,64	7545 10,89		
	70	Q P	69228 31,98	62411 30,82	56108 29,60	50292 28,32	40012 25,66	31348 22,92	24080 20,19	17985 17,56	12842 15,13				

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

Supplementary cooling or
reduced suction gas temp.

R404A/R507			Performance data											50 Hz		
Type	Cond. temp. °C		Cooling capacity \dot{Q}_o [W]								Power consumption P_e [kW]					
			Evaporating temperature °C													
			7,5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45		
HGX4/555-4 ¹⁾ HGX4/555-4 S ¹⁾	30	Q P	59014 11,52	54222 11,34	45450 10,89	37853 10,34	31129 9,72	25259 8,99	20184 8,19	15848 7,34	12194 6,47	9164 5,59	6702 4,73	4751 3,93		
	40	Q P	50452 13,64	46260 13,29	38616 12,51	32112 11,84	26279 10,88	21212 9,86	16857 8,81	13155 7,74	10050 6,69	7484 5,67	5401 4,72	3743 3,85		
	50	Q P	41937 15,53	38348 15,01	31838 13,93	26484 13,14	21544 11,87	17286 10,58	13653 9,30	10589 8,04	8036 6,83	5938 5,70	4236 4,66			
HAX4/555-4	30	Q P							21842 8,84	17569 7,84	13875 6,87	10713 5,93	8037 5,01	5799 4,12		
	40	Q P							18374 9,46	14675 8,27	11488 7,14	8766 6,04	6461 4,99	4528 3,98		
	50	Q P							15013 9,95	11894 8,60	9220 7,31	6944 6,08	5018 4,90	3396 3,78		
HGX4/650-4 ¹⁾ HGX4/650-4 S ¹⁾	30	Q P	70903 14,57	65224 14,19	54821 13,41	44444 12,51	36811 11,70	30119 10,80	24302 9,84	19297 8,84	15039 7,82	11465 6,80	8510 5,80	6110 4,85		
	40	Q P	60855 16,80	55879 16,29	46795 15,22	37928 14,30	31232 13,15	25384 11,94	20322 10,70	15982 9,45	12298 8,21	9208 7,01	6647 5,86	4550 4,79		
	50	Q P	50791 19,05	46523 18,38	38768 17,02	31303 15,79	25565 14,31	20586 12,81	16302 11,31	12650 9,83	9564 8,39	6980 7,02	4835 5,73			
HAX4/650-4	30	Q P							24978 9,71	20136 8,62	15945 7,57	12352 6,54	9304 5,55	6747 4,57		
	40	Q P							21012 10,39	16819 9,10	13202 7,86	10107 6,67	7480 5,53	5268 4,42		
	50	Q P							17167 10,93	13632 9,46	10596 8,05	8006 6,71	5809 5,43	3951 4,20		
HGX5/725-4 ¹⁾ HGX5/725-4 S ¹⁾	30	Q P	76254 13,31	70105 13,28	58815 13,03	48024 12,99	39230 12,20	31558 11,23	24934 10,13	19288 8,94	14546 7,70	10636 6,47	7486 5,28	5024 4,19		
	40	Q P	64689 16,28	59328 16,01	49517 15,29	40164 14,87	32541 13,61	25933 12,22	20266 10,76	15468 9,25	11467 7,76	8191 6,32	5568 4,98	3525 3,78		
	50	Q P	53354 19,02	48782 18,49	40450 17,29	32498 16,31	26053 14,61	20515 12,84	15811 11,04	11869 9,26	8617 7,55	5982 5,94	3892 4,48			
HAX5/725-4	30	Q P							26886 10,67	21437 9,42	16746 8,19	12756 7,01	9409 5,86	6644 4,75		
	40	Q P							22619 11,41	17905 9,93	13864 8,51	10437 7,15	7565 5,84	5189 4,60		
	50	Q P							18487 12,01	14513 10,33	11125 8,72	8265 7,19	5874 5,74	3892 4,37		
HGX5/830-4 ¹⁾ HGX5/830-4 S ¹⁾	30	Q P	86623 15,69	79925 15,61	67508 15,23	54430 14,69	44830 13,90	36400 12,93	29056 11,80	22717 10,55	17300 9,21	12722 7,82	8900 6,41	5752 5,01		
	40	Q P	74069 19,30	68151 18,89	57216 17,91	45580 16,93	37311 15,69	30078 14,28	23798 12,75	18389 11,13	13769 9,45	9854 7,74	6561 6,04	3809 4,38		
	50	Q P	61445 22,39	56332 21,68	46927 20,13	37034 18,88	30091 17,17	24051 15,33	18831 13,38	14348 11,38	10520 9,34	7263 7,30	4496 5,29			
HAX5/830-4	30	Q P							30392 12,06	24266 10,65	19003 9,29	14530 7,96	10772 6,67	7655 5,43		
	40	Q P							25602 12,90	20281 11,24	15733 9,65	11882 8,12	8654 6,65	5976 5,25		
	50	Q P									12641 9,88	9414 8,16	6718 6,53	4480 4,99		
HGX5/945-4 ¹⁾ HGX5/945-4 S ¹⁾	30	Q P	99975 18,52	91955 18,31	77277 17,73	63293 17,40	52168 16,27	42473 15,04	34090 13,74	26900 12,35	20783 10,90	15620 9,38	11291 7,80	7678 6,18		
	40	Q P	84751 22,17	77834 21,71	65213 20,66	52881 19,84	43552 18,30	35430 16,69	28395 14,99	22327 13,23	17107 11,40	12617 9,52	8737 7,59	5347 5,61		
	50	Q P	69440 25,81	63623 25,08	53056 23,50	42757 22,12	35145 20,15	28515 18,09	22748 15,97	17723 13,78	13321 11,54	9424 9,25	5912 6,91			
HAX5/945-4	30	Q P									27994 12,27	21989 10,72	16866 9,21	12548 7,74	8959 6,32	
	40	Q P										18205 11,13	13799 9,39	10088 7,71	6997 6,11	
	50	Q P											10929 9,44	7834 7,57	5248 5,81	
HGX5/1080-4 ¹⁾ HGX5/1080-4 S ¹⁾	30	Q P	113675 22,05	104548 21,89	87811 21,27	72501 20,82	59869 19,21	48801 17,56	39180 15,88	30889 14,16	23810 12,40	17826 10,60	12819 8,76	8672 6,86		
	40	Q P	96893 26,74	88944 26,17	74420 24,80	61734 23,74	50695 21,61	41062 19,46	32716 17,30	25541 15,13	19419 12,94	14233 10,72	9866 8,49	6200 6,22		
	50	Q P	80355 30,79	73583 29,85	61270 27,79	51086 26,12	41654 23,48	33468 20,85	26411 18,23	20366 15,62	15214 13,01	10840 10,40	7125 7,78			
HAX5/1080-4	30	Q P									41973 16,66	33574 14,73	26360 12,86	20224 11,05	15061 9,29	10763 7,58
	40	Q P										28072 15,55	21828 13,36	16539 11,27	12098 9,26	8401 7,33
	50	Q P											17547 13,68	13107 11,32	9392 9,09	6297 6,97

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

¹⁾ Compressors (R404A)
are ASERCOM certified



Motor version -S-
(more powerful motor)

Supplementary cooling or
reduced suction gas temp.

R404A/R507			Performance data											50 Hz	
Type	Cond. temp. °C		Cooling capacity \dot{Q}_0 [W]								Power consumption P_e [kW]				
			Evaporating temperature °C												
			7,5	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	
HGX6/1240-4 ¹⁾ HGX6/1240-4 S ¹⁾	30	Q P	133368 27,78	122554 27,28	102765 26,04	83399 23,70	68935 22,26	56229 20,54	45169 18,62	35643 16,56	27538 14,43	20744 12,29	15146 10,21	10634 8,25	
	40	Q P	113720 33,36	104299 32,38	87122 30,24	71042 27,42	58440 25,14	47422 22,68	37874 20,13	29684 17,53	22741 14,97	16931 12,49	12143 10,17	8265 8,08	
	50	Q P	94323 38,27	86295 36,83	71734 33,86	58323 30,45	47668 27,41	38420 24,30	30468 21,19	23698 18,14	17998 15,22	13257 12,49	9362 10,02		
HAX6/1240-4	30	Q P									38742 17,00	30407 14,83	23329 12,74	17378 10,72	12423 8,75
	40	Q P										25193 15,43	19081 13,01	13958 10,69	9695 8,48
	50	Q P											15126 13,08	10835 10,49	7265 8,05
HGX6/1410-4 ¹⁾ HGX6/1410-4 S ¹⁾	30	Q P			112574 28,95	94071 27,60	76961 26,50	63138 24,11	51088 21,69	40671 19,26	31748 16,84	24176 14,43	17817 12,06	12528 9,73	
	40	Q P			96228 33,76	80122 31,54	65316 30,24	53413 26,98	43056 23,78	34104 20,67	26417 17,65	19854 14,74	14276 11,96	9540 9,32	
	50	Q P			79925 37,91	66235 34,88	53148 33,29	43254 29,21	34677 25,29	27278 21,54	20915 17,98	15450 14,63	10739 11,49		
HAX6/1410-4	30	Q P										33768 16,48	25918 14,13	19311 11,86	13807 9,68
	40	Q P											21163 14,43	15482 11,83	10756 9,36
	50	Q P											16757 14,53	12003 11,62	8054 8,90
HGX7/1620-4 ¹⁾ HGX7/1620-4 S ¹⁾	30	Q P	163130 32,39	150297 32,05	126636 30,98	106031 30,00	87518 28,31	71107 26,22	56728 23,83	44306 21,24	33770 18,56	25047 15,88	18065 13,30	12751 10,93	
	40	Q P	139724 38,16	128531 37,38	107945 35,48	89756 34,27	73736 31,69	59585 28,79	47232 25,68	36603 22,46	27628 19,22	20232 16,08	14343 13,12	9890 10,45	
	50	Q P	115792 43,47	106272 42,23	88826 39,46	73671 37,57	60144 34,13	48254 30,47	37928 26,68	29093 22,85	21678 19,10	15609 15,52	10816 12,22		
HGX7/1860-4 ¹⁾ HGX7/1860-4 S ¹⁾	30	Q P	184191 37,41	169853 37,14	143432 36,15	119116 35,68	98208 32,91	79858 30,00	63906 27,00	50195 23,95	38563 20,89	28854 17,88	20907 14,95	14563 12,15	
	40	Q P	157436 45,37	144933 44,40	121960 42,11	100333 39,79	82508 36,14	66907 32,43	53368 28,71	41734 25,02	31846 21,40	23543 17,91	16668 14,59	11061 11,48	
	50	Q P	130989 51,97	120333 50,38	100832 46,93	82100 43,28	67304 38,81	54394 34,37	43213 29,99	33601 25,73	25399 21,63	18448 17,73	12589 14,08		
HGX7/2110-4 ¹⁾ HGX7/2110-4 S ¹⁾	30	Q P	201969 46,49	186202 45,47	157288 43,22	130628 40,64	108549 37,84	89073 34,82	72027 31,63	57236 28,33	44527 24,95	33724 21,53	24655 18,14	17144 14,81	
	40	Q P	173523 54,03	159904 52,52	134971 49,31	112651 45,59	93282 41,96	76227 38,14	61312 34,18	48362 30,13	37205 26,03	27665 21,92	19568 17,87	12741 13,90	
	50	Q P	144329 60,77	132872 58,78	111953 54,63	93475 49,93	77007 45,43	62564 40,76	49972 35,99	39055 31,14	29641 26,28	21555 21,44	14623 16,68		
HGX7/2470-4 ¹⁾ HGX7/2470-4 S ¹⁾	30	Q P	254335 53,08	233623 52,10	195759 49,73	157695 47,03	130257 43,16	106132 39,21	85092 35,21	66910 31,15	51360 27,05	38215 22,90	27249 18,73	18235 14,53	
	40	Q P	216832 62,30	198811 60,54	165981 56,70	135212 52,81	111218 47,88	90157 42,92	71803 37,94	55931 32,95	42312 27,94	30721 22,94	20931 17,95	12715 12,98	
	50	Q P	179905 70,32	164564 67,83	136749 62,61	111576 57,36	91145 51,37	73270 45,38	57724 39,41	44281 33,47	32715 27,56	22799 21,69	14305 15,87		
HGX8/2830-4 ¹⁾ HGX8/2830-4 S ¹⁾	30	Q P	280334 58,49	258363 57,89	218657 57,29	182105 54,05	149962 50,41	121929 46,43	97702 42,19	76982 37,75	59466 33,17	44852 28,54	32841 23,91	23130 19,37	
	40	Q P	240502 70,92	221237 69,19	187179 66,01	155251 61,11	127305 55,95	103039 50,60	82152 45,12	64342 39,59	49308 34,06	36749 28,62	26363 23,33	17849 18,26	
	50	Q P	200747 81,06	184227 78,33	155772 73,50	128523 67,07	104826 60,51	84382 53,90	66888 47,31	52043 40,80	39545 34,45	29094 28,32	20387 22,48		
HGX8/3220-4 ¹⁾ HGX8/3220-4 S ¹⁾	30	Q P	299972 66,91	277577 66,12	236052 63,90	199764 63,87	165297 59,10	135207 54,07	109154 48,87	86797 43,59	67796 38,29	51812 33,07	38503 28,00	27530 23,17	
	40	Q P	260037 81,79	240407 79,73	204062 75,15	170917 71,84	141015 65,49	114985 59,02	92486 52,53	73180 46,09	56724 39,78	42781 33,68	31008 27,88	21066 22,45	
	50	Q P	217197 93,49	200466 90,33	169563 83,69	141839 78,71	116555 70,87	94639 63,06	75750 55,36	59548 47,84	45693 40,60	33845 33,72	23663 27,26		

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

¹⁾ Compressors (R404A)
are ASERCOM certified



Motor version -S-
(more powerful motor)

Supplementary cooling or
reduced suction gas temp.

R407C			Performance data									50 Hz	
Type	Cond. temp. °C		Cooling capacity \dot{Q}_o [W]						Power consumption P_e [kW]				
			Evaporating temperature °C										
			12,5	10	7,5	5	0	-5	-10	-15	-20	-25	
HGX4/465-4 HGX4/465-4 S	30	Q P	52241 7,84	47689 7,76	43438 7,67	39475 7,56	32358 7,31	27293 7,08	21900 6,58	17313 6,02	13459 5,42	10267 4,78	
	40	Q P	45881 9,73	41827 9,55	38049 9,36	34532 9,16	28226 8,69	23704 8,14	18952 7,40	14925 6,63	11550 5,84	8752 5,03	
	50	Q P	39635 11,44	36073 11,16	32759 10,86	29681 10,55	24173 9,85	20139 9,12	16049 8,14	12600 7,16	9721 6,17	7338 5,19	
HGX4/555-4 HGX4/555-4 S	30	Q P	62010 9,36	56703 9,30	51739 9,22	47101 9,12	38751 8,84	31207 8,53	25091 7,92	19907 7,29	15531 6,62	11833 5,87	
	40	Q P	54852 11,45	50089 11,27	45636 11,07	41481 10,84	34003 10,31	27316 9,88	21859 9,02	17204 8,13	13225 7,19	9795 6,18	
	50	Q P	47717 13,51	43491 13,20	39547 12,86	35869 12,49	29256 11,67	23377 11,13	18539 9,97	14373 8,78	10752 7,52	7550 6,17	
HGX4/650-4 HGX4/650-4 S	30	Q P	73505 11,85	67118 11,66	61158 11,45	55607 11,22	45658 10,68	36887 10,03	29718 9,28	23650 8,56	18538 7,80	14235 6,95	
	40	Q P	64535 14,25	58930 13,95	53705 13,62	48840 13,26	40118 12,48	32465 11,59	26041 10,60	20581 9,60	15939 8,54	11970 7,35	
	50	Q P	55792 16,75	50933 16,31	46405 15,84	42188 15,34	34616 14,26	27833 13,13	22140 11,79	17274 10,42	13090 8,96	9442 7,34	
HGX5/725-4 HGX5/725-4 S	30	Q P	82066 12,72	75111 12,43	68581 12,13	62458 11,81	51370 11,13	41718 10,38	33371 9,57	26199 8,68	20072 7,72	14859 6,69	
	40	Q P	73653 15,09	67297 14,67	61341 14,23	55769 13,79	45715 12,86	37005 11,88	29506 10,85	23091 9,75	17627 8,60	12986 7,39	
	50	Q P	64721 17,35	58974 16,80	53605 16,24	48597 15,67	39600 14,50	31854 13,30	25228 12,06	19592 10,77	14817 9,44	10770 8,06	
HGX5/830-4 HGX5/830-4 S	30	Q P	94208 14,60	86225 14,27	78728 13,92	71699 13,56	58971 12,78	47891 11,92	38309 10,99	30076 9,97	23042 8,87	17057 7,68	
	40	Q P	84551 17,32	77254 16,84	70417 16,34	64021 15,83	52480 14,76	42480 13,64	33872 12,45	26507 11,20	20235 9,88	14907 8,48	
	50	Q P	74298 19,92	67700 19,28	61536 18,64	55787 17,99	45459 16,65	36567 15,27	28961 13,84	22491 12,37	17009 10,84	12364 9,25	
HGX5/945-4 HGX5/945-4 S	30	Q P	107188 16,61	98104 16,23	89575 15,84	81578 15,43	67096 14,54	54489 13,56	43587 12,50	34219 11,34	26216 10,09	19407 8,74	
	40	Q P	96200 19,71	87898 19,16	80118 18,59	72842 18,01	59710 16,80	48332 15,52	38539 14,17	30159 12,74	23023 11,24	16961 9,65	
	50	Q P	84534 22,66	77027 21,94	70014 21,21	63473 20,46	51722 18,94	41605 17,37	32951 15,75	25590 14,07	19352 12,33	14068 10,53	
HGX6/1080-4 HGX6/1080-4 S	30	Q P	122447 18,97	112071 18,55	102327 18,10	93191 17,62	76648 16,61	62246 15,49	49792 14,28	39091 12,96	29948 11,53	22170 9,98	
	40	Q P	109895 22,51	100411 21,88	91524 21,24	83211 20,57	68210 19,19	55213 17,72	44025 16,18	34453 14,55	26301 12,84	19376 11,02	
	50	Q P	96568 25,89	87993 25,06	79981 24,23	72509 23,38	59085 21,64	47528 19,85	37642 17,99	29233 16,08	22107 14,09	16070 12,03	
HGX6/1240-4 HGX6/1240-4 S	30	Q P	140564 21,78	128652 21,29	117467 20,77	106980 20,23	87989 19,06	71456 17,79	57159 16,39	44875 14,88	34379 13,23	25450 11,46	
	40	Q P	25450 11,46	115267 25,12	105066 24,38	95523 23,61	78303 22,02	63382 20,35	50539 18,58	39550 16,71	30193 14,74	22243 12,65	
	50	Q P	110857 29,72	101013 28,77	91815 27,81	83238 26,84	67828 24,84	54560 22,78	43211 20,66	33558 18,45	2538 16,17	18448 13,81	
HGX6/1410-4 HGX6/1410-4 S	30	Q P	159931 24,78	146378 24,22	133651 23,64	121719 23,02	100112 21,69	81301 20,24	65035 18,65	51058 16,92	39116 15,05	28957 13,03	
	40	Q P	143537 29,40	131149 28,58	119452 27,74	108684 26,87	89091 25,06	72115 23,15	57503 21,14	45000 19,01	34352 16,77	25307 14,4	
	50	Q P	126130 33,81	114930 32,73	104466 31,64	94706 30,53	77173 28,26	62077 25,92	49165 23,50	38182 21,00	28875 18,40	20990 15,71	
HGX7/1620-4 HGX7/1620-4 S	30	Q P	176654 28,74	161203 28,45	146809 28,06	133424 27,56	109484 26,30	88991 24,73	71553 22,92	56778 20,92	44276 18,79	33654 16,61	
	40	Q P	156630 35,77	142783 34,91	129901 33,96	117934 32,93	96552 30,69	78246 28,23	62623 25,62	49292 22,93	37862 20,21	27940 17,53	
	50	Q P	136448 42,12	124231 40,70	112886 39,22	102364 37,69	83592 34,51	67524 31,21	53768 27,86	41933 24,53	31626 21,26	22457 18,13	
HGX7/1860-4 HGX7/1860-4 S	30	Q P	202792 32,99	185054 32,66	168531 32,21	153166 31,64	125683 30,19	102158 28,39	82139 26,31	65179 24,01	50827 21,57	38633 19,07	
	40	Q P	179805 41,07	163909 40,07	149121 38,98	135384 37,81	110838 35,23	89823 32,40	71888 29,41	56585 26,32	43464 23,20	32074 20,13	
	50	Q P	156636 48,35	142612 46,72	129589 45,03	117510 43,27	95960 39,61	77515 35,83	61724 31,99	48137 28,15	36305 24,41	25779 20,82	

Relating to 25 °C suction gas temperature
(HGX4 to 20 °C suction gas temperature)
without liquid subcooling

Motor version -S-
(more powerful motor)

Supplementary cooling or
reduced suction gas temp.

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

HG Supplementary cooling or red. suction gas temp.

HA reduced suction gas temp.

Relating to 20 °C suction gas temperature,
without liquid subcoolingMotor version -S-
(more powerful motor)Supplementary cooling and
red. suction gas temp.