



Think **green**, choose **blue**.

GEA Compressors for natural refrigerants



GEA Bock HG Compressors

Suitable compressors for
the use in supermarkets

GEA compressors – the best choice for supermarket applications

In supermarkets nothing must be left to chance. Customers always want to fill their carts with fresh products and optimally cooled food. For this purpose, a best possible food cooling in supermarkets is essential.

A compressor design for all common refrigerants

In this brochure we want to present our GEA semi-hermetic compressor programme for solutions in the area of supermarket cooling.

Natural refrigerants are gaining ground

The focus here is mainly on our compressors that are suitable for the use of natural refrigerants. For the use with the refrigerant CO₂ GEA offers compressors that are not only optimized with regard to pressures, but also for the use with CO₂, in many other respects. This includes a robust design for the partially demanding operating conditions with CO₂, a very smooth and quiet operation due to low vibration and pulsation and a very low oil carry over.

In the last years hydrocarbons have established themselves as another natural alternative. The GEA compressors of the

hydrocarbon series meet all requirements of the F-gas regulation. Thus, they can be used for the long-term and increase the planning dependability for system manufacturers, users and investors.

Proven quality combined with high efficiency

The new compressor series GEA Bock HG22e to HG44e were optimized: Compared with their predecessors these compressors offer a better efficiency, larger displacement stages and a more compact engineering design.

The GEA Bock HG56e series are entirely new compressors: They combine state-of-the-art technology with the GEA design features that have been proven for decades. The new 6-cylinder compressors replace the previous 4-cylinder series HG5 and partially HG6. Three sizes cover the range from 73.8 m³/h to 100.4 m³/h displacement (at 50 Hz).

R744

**R449A
R448A**

R134a

**R450A
R513A**

R717




**R407F
R407A**

**R404A
R507**

**R290
R1270**

Product overview

GEA compressors are used in various fields of the cool chain and always provide the right temperature for food.

Semi-hermetic compressors		
Compressors for natural refrigerants	Compressors for synthetic refrigerants (suction gas-cooled)	Compressors for synthetic refrigerants (air-cooled) for low temperature applications
		
HG CO ₂ T compressors transcritical	HG compressors	HA compressors
HG CO ₂ compressors subcritical	SHG condensing units	SHA condensing units
HG HC compressors for hydrocarbons	SHG Plusbox	



Origin



Transport



Processing



Cold Storage



Distribution



Retail and Wholesale



F-gas Regulation – HFC on the way out

Since 2006 the F-gas Regulation (EC) No 842/2006 has been governing the use of fluorinated hydrocarbons (HFC) in technical refrigeration systems. The reason why emissions into the atmosphere must be kept within limits is that the heat-absorbing properties of HFC represent a cause of the greenhouse effect and global climate warming.

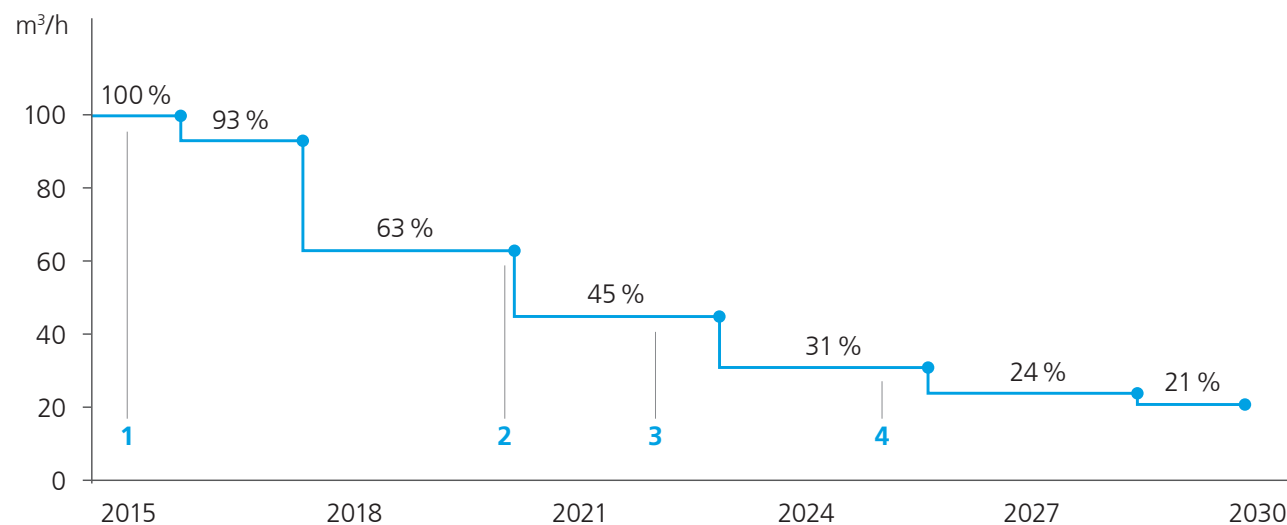
Since the beginning of 2015, the new F-gas Regulation EU 517/2014 is effective. Planners, manufacturers, implementers and operators of refrigeration systems must undergo considerable reorientation. The new directive narrows their choice of applicable refrigerants more than ever, marking a fundamental turn away from refrigerants with a high greenhouse effect.

The goal set for the year 2030 is to reduce emissions of partly fluorinated hydrocarbons (HFC) to a fifth of the average output 2009–2012. Already in the near future, equipment for refrigerants with high greenhouse potential will be banned from the market, and refilling of existing systems will be subjected to restrictions.

As a technology partner for refrigeration, air-conditioning and heating applications GEA offers comprehensive advice and support for your switch to the natural refrigerants ammonia (NH₃), carbon dioxide (CO₂), and hydrocarbons (HC/R290). An extensive portfolio of compressors is available for any task.



PLACING ON THE MARKET PROHIBITIONS

**1 2015:**

Household refrigeration appliances
(GWP ≥ 150)

2 2020:

Movable room AC systems (hermetically sealed systems)
(GWP ≥ 150);
Stationary refrigeration systems (GWP ≥ 2500),
Prohibited: e.g. R404A, R507
Refrigerators and freezers for commercial use
(hermetically sealed systems) (GWP ≥ 2500)

3 2022:

Multipack centralised commercial refrigeration systems
> 40 kW (GWP ≥ 150) – except primary circuit of
cascaded systems (GWP ≥ 1500)
Refrigerators and freezers for commercial use
(hermetically sealed systems) (GWP ≥ 150)

4 2025:

Single-Split AC systems < 3 kg charge
(GWP ≥ 750)

GEA compressor solutions ...

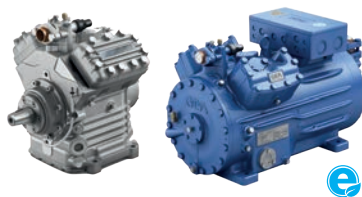
Heating / Air-Conditioning

Heat pumps / Chiller with semi-hermetic
HG compressors.



Transport cooling

Transport cooling with open-type FK
and semi-hermetic HG compressors.



... for the whole supermarket

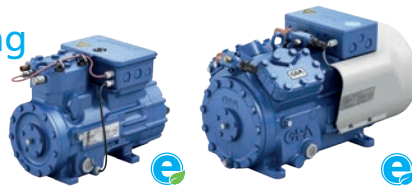
Medium temperature cooling

Rack with semi-hermetic HG compressors.



Low temperature cooling

Rack with semi-hermetic HG and HA compressors.



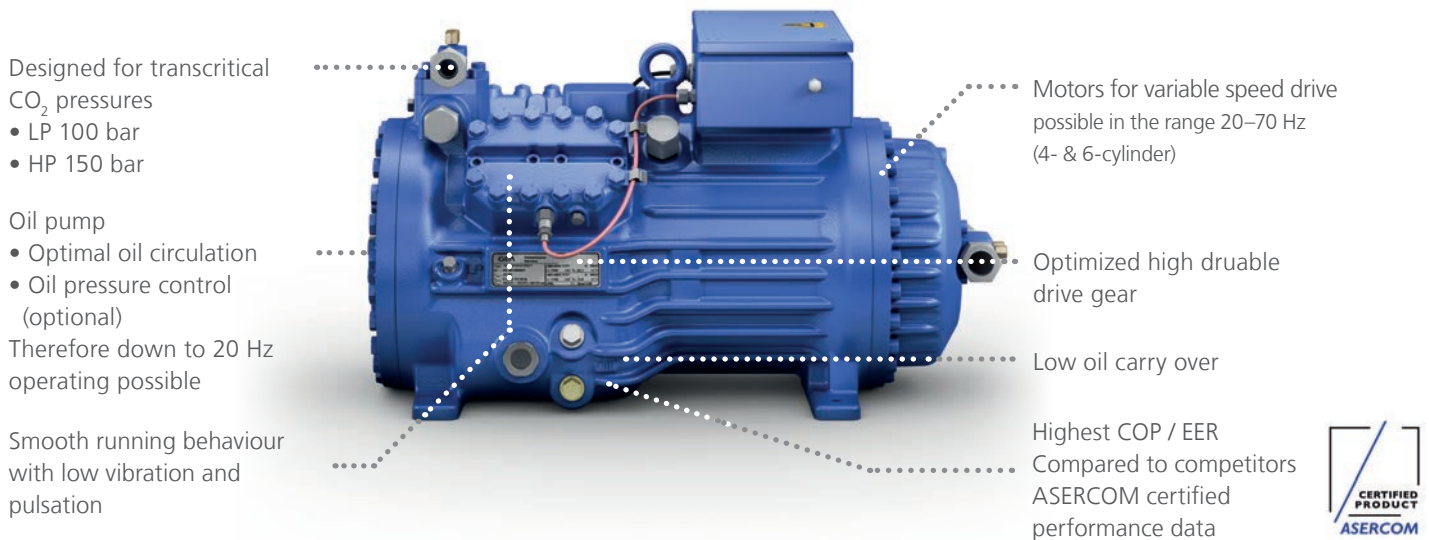
CO₂ compressors for the refrigerant R744

CO₂ compressors transcritical

Since the beginning of the 90's, GEA has been engaged in the development of compressors for transcritical CO₂ systems. The series now covers displacement from 6.2 to 38.2 m³/h (50 Hz) with 2, 4- and 6-cylinder reciprocating compressors. The compressors are distinguished by high reliability, excellent operating performance, wide frequency band for minimum part-load needs and previously unachievable efficiency standards in the market. The collected outstanding

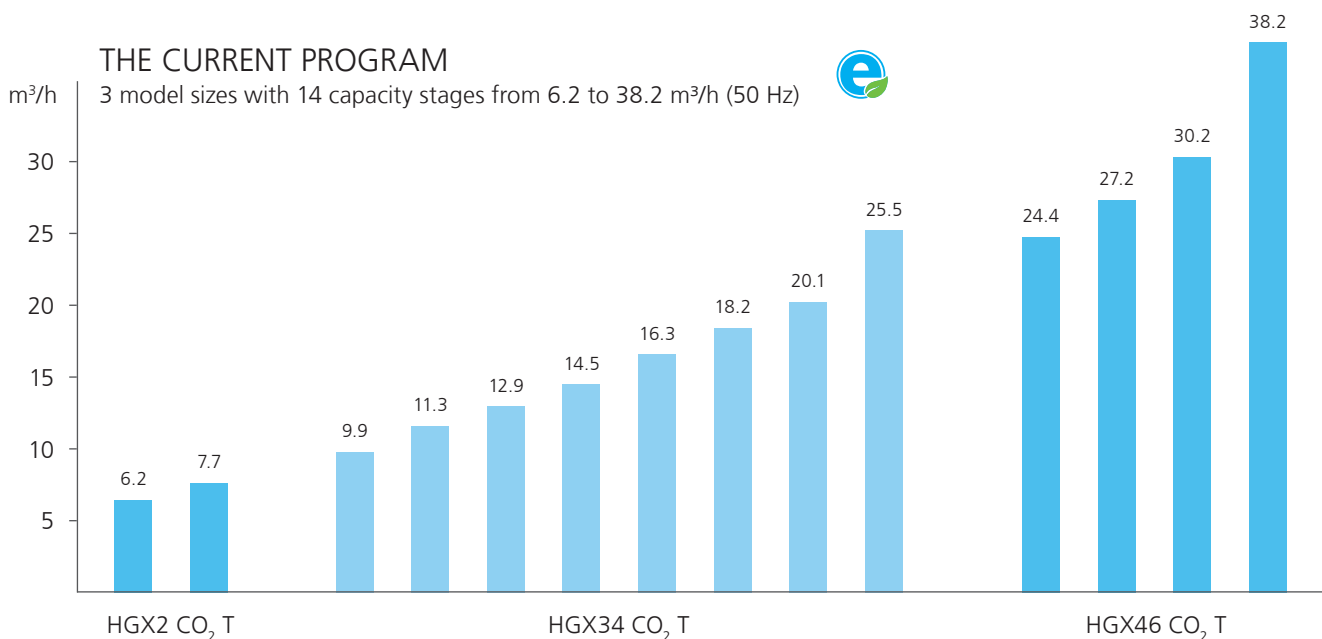
performance data has also been confirmed officially through ASERCOM (Association of European Refrigeration Component Manufacturers). Therefore the compressors contribute to lowest life-cycle costs and comply with long-term legal requirements such as the F-gas regulation in Europe.

The compressors are used in transcritical and subcritical applications for supermarkets, industrial refrigeration and heat pumps.



THE CURRENT PROGRAM

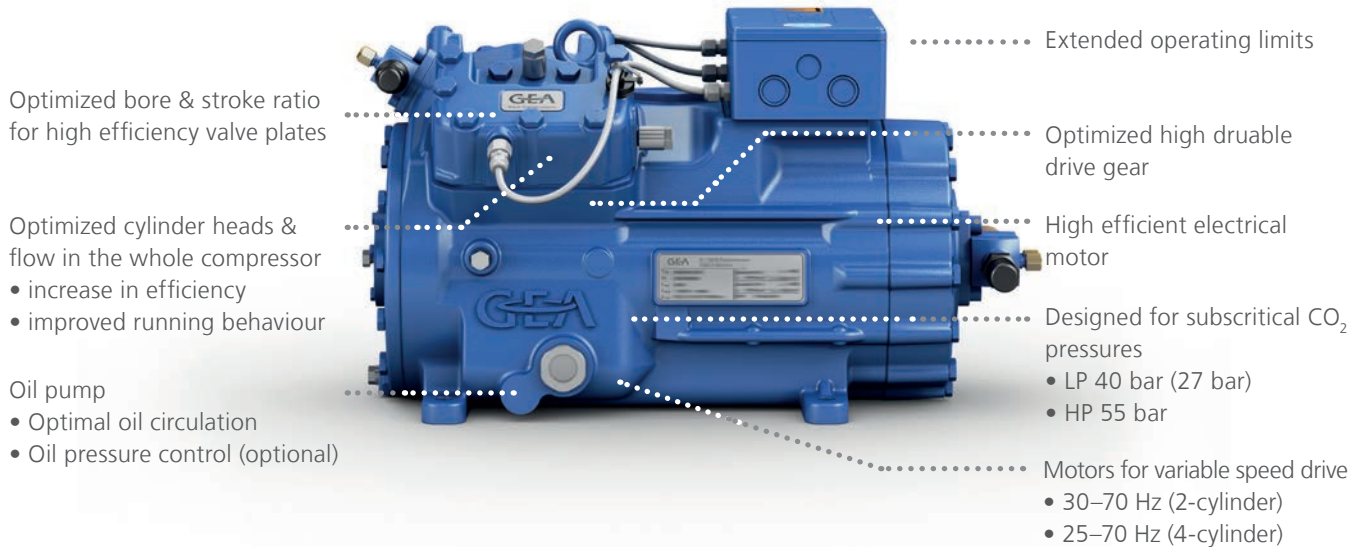
3 model sizes with 14 capacity stages from 6.2 to 38.2 m³/h (50 Hz)



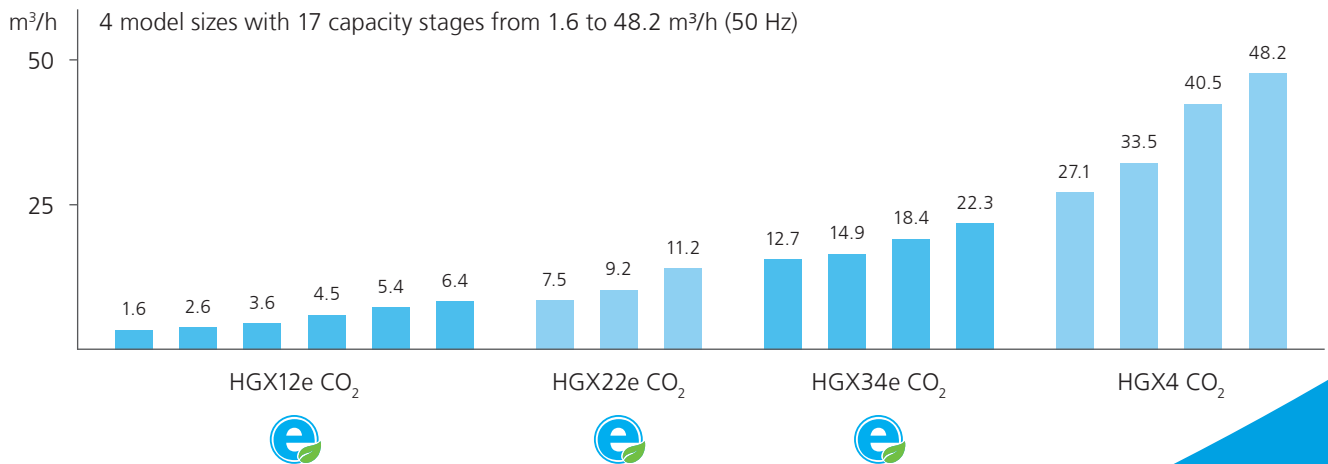
CO₂ compressors subcritical

For low temperature applications a series with displacements from 1.6 to 48.2 m³/h (50 Hz) is available. This series combines the advantages of a time-tested compressor series, which

have been optimally adapted to the demands of CO₂. The compressors are used in cascade- and booster-systems in supermarket and industrial cooling applications.



THE CURRENT PROGRAM

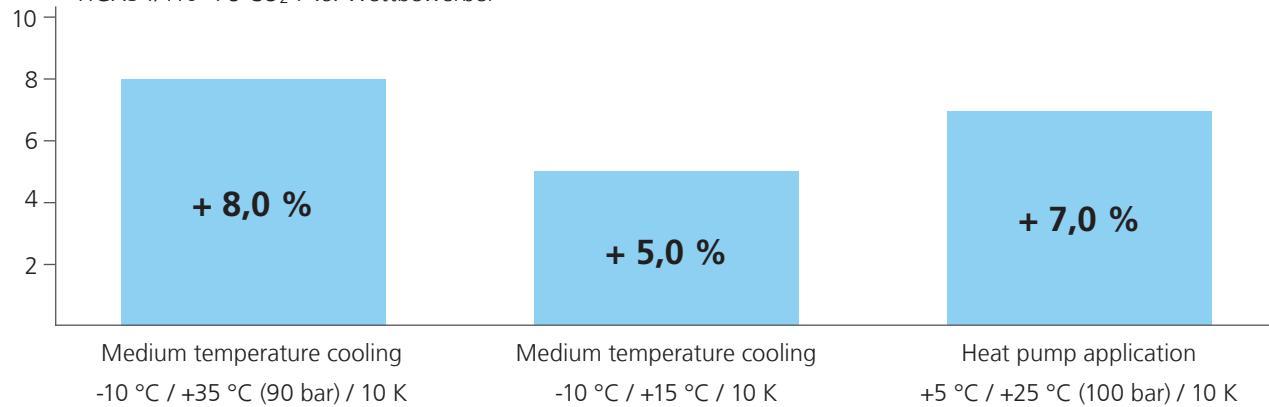


With technical optimizations we continuously improve the energy consumption of our compressors. The compressors of the e-series set a new standard when it comes to motor-efficiency, gas flow and efficiency of the valve system. All this results in a higher refrigerating capacity of the compressor at a lower drive power.

Best COP for GEA compressors

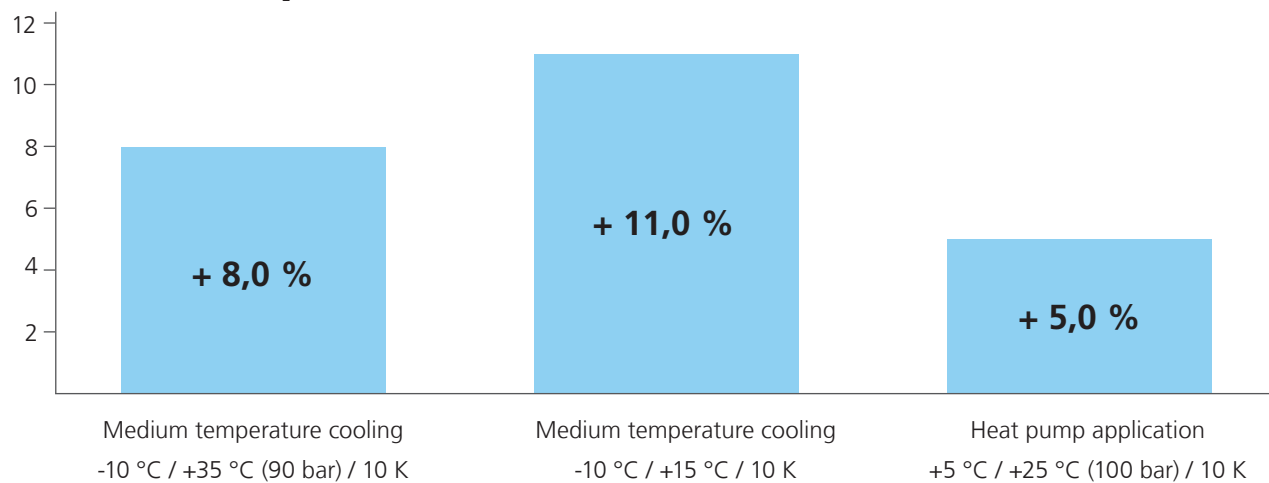
COP COMPETITIVE COMPARISON

HGX34/110-4 S CO₂ T vs. Wettbewerber



COP COMPETITIVE COMPARISON

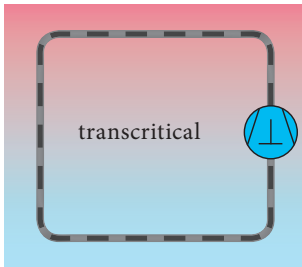
HGX34/210-4 S CO₂ T vs. Wettbewerber



ASERCOM CERTIFIED PERFORMANCE DATA

The performance data of compressors bearing this label has been certified to the strict requirements of ASERCOM. ASERCOM is the Association of European Refrigeration Compressors and Controls Manufacturers. Information about the Association and the constantly updated overview of certified GEA compressors can be found at www.asercom.org.

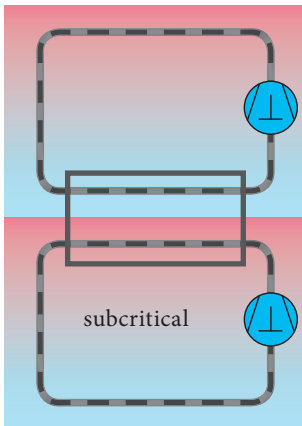
CO₂ system examples



Single-stage applications

Single-stage transcritical CO₂ applications are used in the field of medium temperature refrigeration. They can be operated very efficiently, if the high pressure is operated in the subcritical range over a long period. Using the high-pressure side, it is appropriate to use the application in the transcritical range also in combination with refrigeration, due to a big temperature glide and a relatively high discharge end temperature for specific heat pumps and the heat recovery.

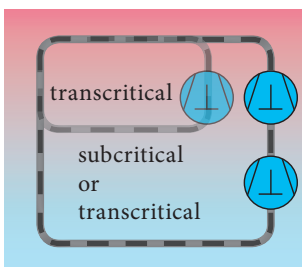
Transcritical GEA CO₂ compressors are used.



Cascade application

In a cascade system, different refrigerants are used in an application. They are combined in two refrigerating circuits that are separated from each other. A solution with CO₂ in low temperature refrigeration is very interesting due to economic reasons and the perspective of efficiency. The high temperature stage is used as a condenser in the CO₂ application. Here it is possible to use different refrigerants like hydrocarbons, ammonia and also HFCs like R134a. Subcritical GEA CO₂ compressors are used in the low temperature stage.

In the high temperature range there is a wide product portfolio of GEA compressors available for the use of different refrigerants.



Booster applications

Regarding applications with CO₂ in low and medium temperature refrigeration, so-called Booster systems are used. High pressure of low temperature compressor is discharged directly to the suction side of the second compressor stage. Different plant constructions of these Booster applications are used for example in supermarket applications.

Transcritical and subcritical GEA CO₂ compressors are used.

The best arguments for semi-hermetic GEA compressors

HG compressors

The GEA 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 new compressor series GEA Bock HG22e to HG44e were optimized: Compared with their predecessors these compressors offer a better efficiency, larger displacement stages and a more compact engineering design.

The GEA Bock HG56e series are entirely new compressors: They combine state-of-the-art technology with the GEA design features that have been proven for decades. The new 6-cylinder compressors replace the previous 4-cylinder series HG5 and partially

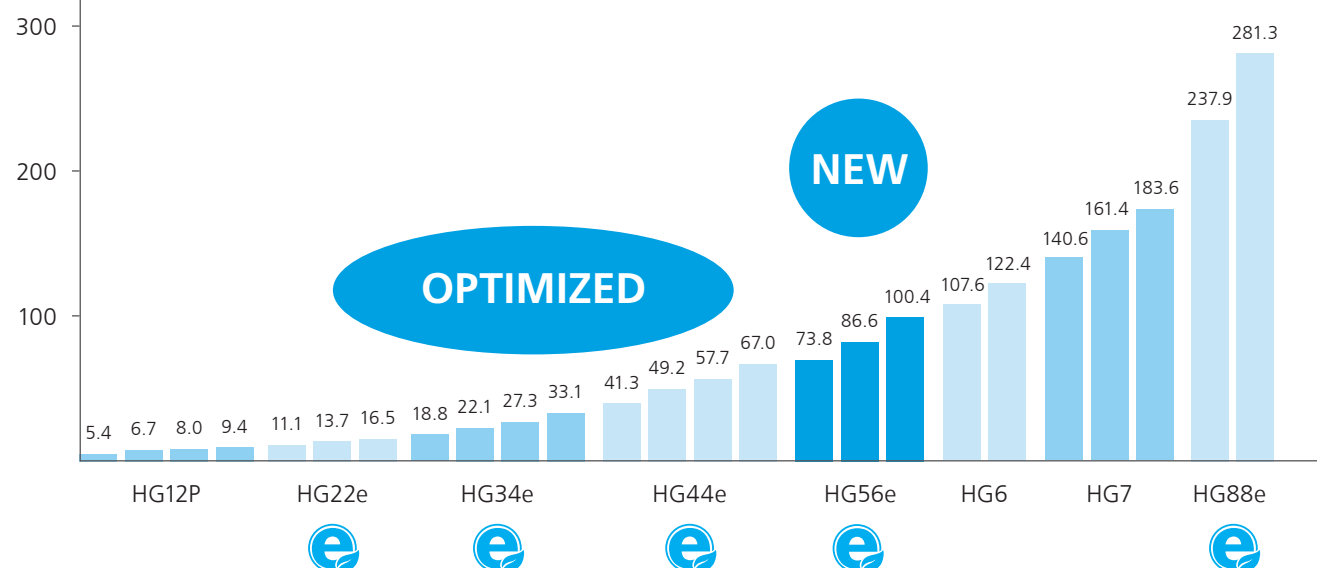
HG6. Three sizes cover the range from 73.8 m³/h to 100.4 m³/h displacement (at 50 Hz).

All HG and HA compressors are characterised by the following features:

- High refrigeration capacity combined with minimum power requirement
- Outstanding running comfort
- Wide range of applications without additional cooling
- Stable valve plate design
- Replaceable motors
- Economic capacity control
- Minimum space requirement
- Quiet and low vibration
- Oil pump lubrication independent of direction of rotation

THE CURRENT PROGRAM

8 model sizes with 25 capacity stages from 5.4 to 281.3 m³/h (50 Hz)



HA compressors

Low temperature applications place greater demands on compressors. This applies particularly to suction gas cooled semi-hermetic compressors. Within low temperature applications the refrigerant mass flow is smaller and is heated up disproportionately by the drive motor. This has the following effects on the operation of the compressor:

- The volumetric efficiency is reduced due to the decreasing specific density
- The discharge temperature and oil temperature are higher. This means that the oil ages more quickly and the lubrication properties deteriorate.

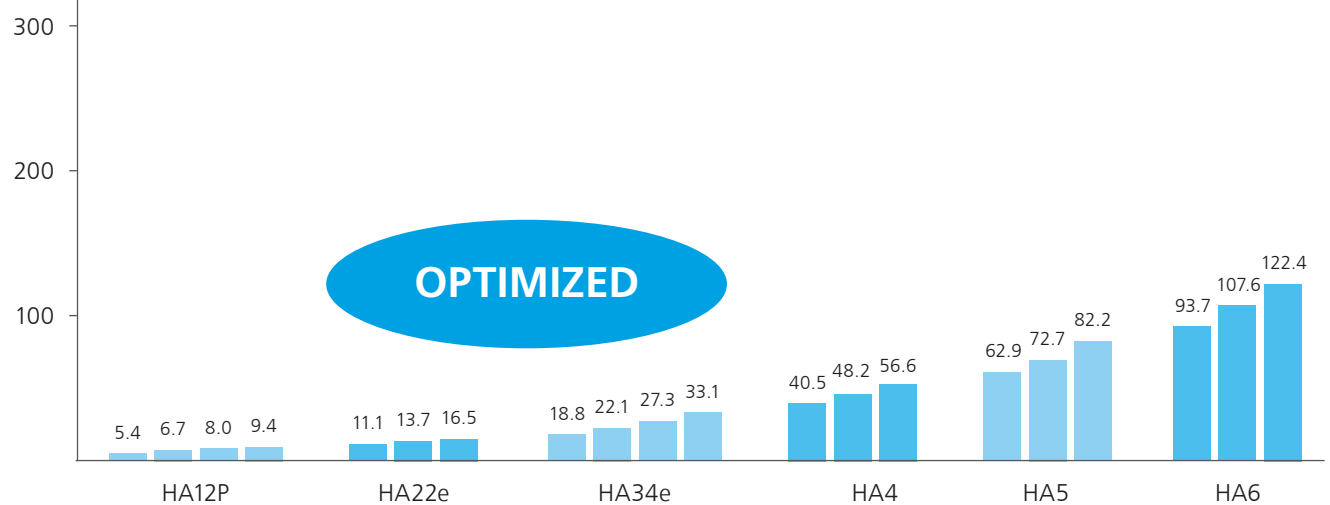
This particularly affects refrigerants with a high isentropic exponent, such as for example the new HFO/HFC blends with lower GWP, which are envisaged as transitional R404A replacement refrigerants.

For these refrigerants in low temperature applications with suction gas cooled semi-hermetic compressors is valid: special technical measures are envisaged for reduction of discharge temperature!

The “HA principle”, which is a specially developed design by GEA Bock, is the most efficient semi-hermetic solution for low temperature applications. Here the compressor is direct-suctioned and the drive motor air-cooled. The suction gas is not heated additionally, but rather fed directly into the cylinders without diversions via the motor. The motor is cooled by means of a compact, integrated ventilation unit, which also supplies a air flow to the cylinder heads, so that these are as well partially cooled. Due to this principle, the discharge temperature is reduced, the application range is extended and an increase in capacity is achieved.

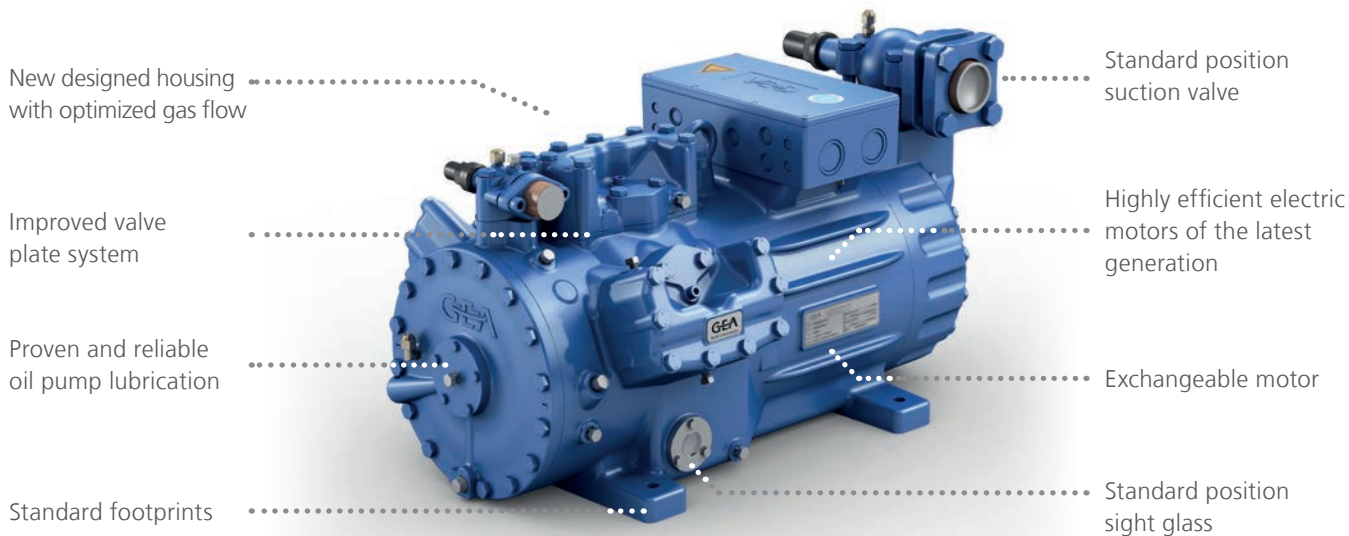
THE CURRENT PROGRAM

m³/h 6 model sizes with 20 capacity stages from 5.4 bis 122.4 m³/h (50 Hz)



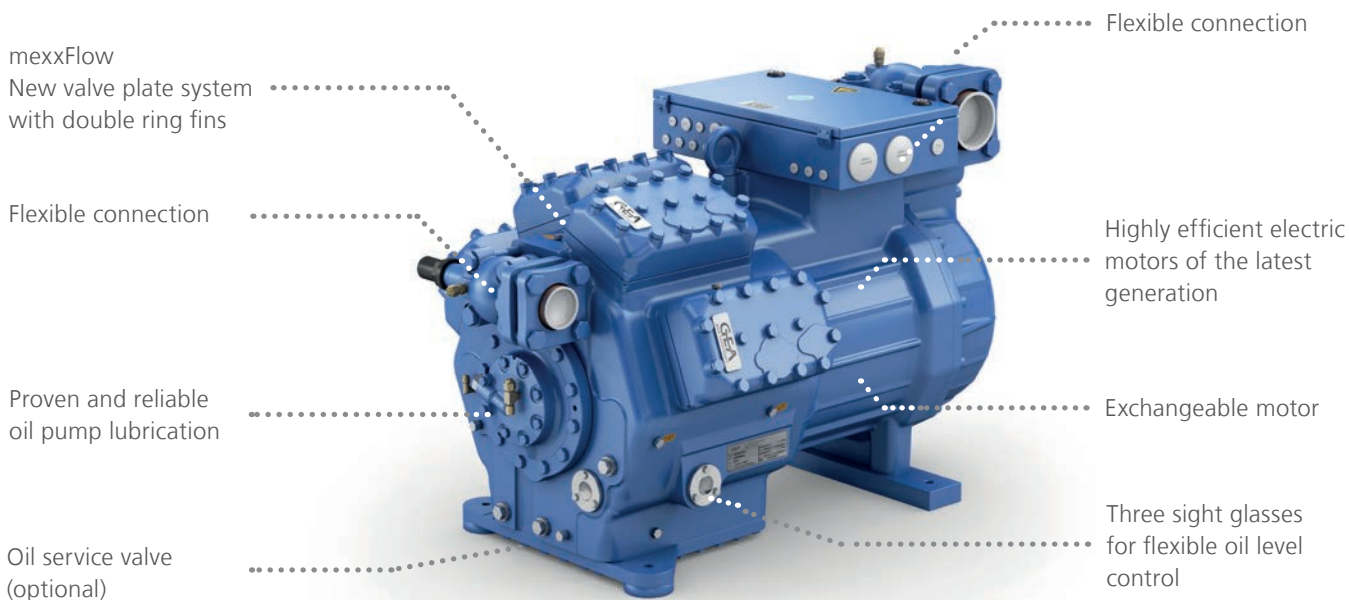
HG56e

The new 6-cylinder compressor with a high level of efficiency and quiet operation



HG88e

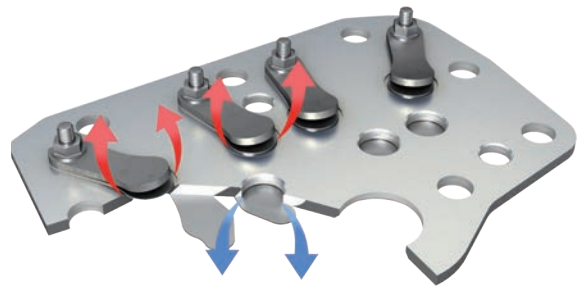
The biggest reciprocating compressor for commercial refrigeration



GEA Valve plate systems

Standard valve plate construction

GEA compressors, for smaller and medium-sized capacities, are equipped with a standard valve plate design. This world-wide proven valve design is equipped with finger reed valves on suction and discharge side. The fins are made of high-quality, impact-resistant spring steel. The valve in- and outlets are flow-optimized for smaller and medium-sized capacities in order to reach an efficient compression.



HG12P-HG56e

mexxFlow valve plate innovation

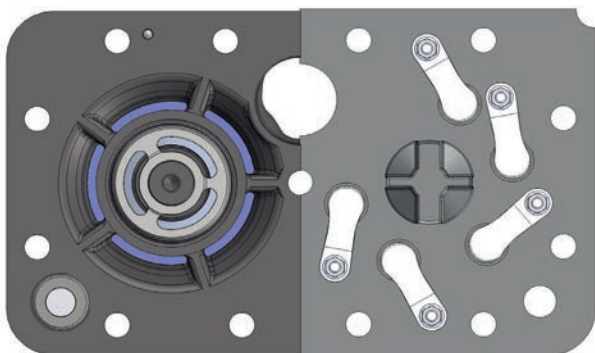
More refrigerating capacity and lower power consumption – this is the motto of the mexxFlow valve plate, which forms the heart of the new GEA compressor generations for higher capacities.

In order to increase the energy efficiency of reciprocating compressors, manufacturers has always been focused on the valve plate system. At higher capacities the standard valve plates reach their limits in terms of efficiency. With the mexxFlow, GEA was successful in increasing the efficiency of its

compressors by up to 20 %. This success was achieved through a flow-optimized double ring fin construction of the valve plate in combination with a specially adapted cylinder head. Thus, GEA compressors achieve records in terms of efficiency.

Special features of the mexxFlow valve plate:

- Valve plate with highly efficient double ring fins
- Flow optimized system of valve plate and cylinder head



mexxFlow (left side) vs. previous design (right side)

mexxFlow



HG88e

HC compressors for hydrocarbons

For various applications, such as the field of supermarket refrigeration, hydrocarbons have established themselves as another natural alternative besides CO₂. The GEA compressors of the hydrocarbon range meet the requirements of the F-gas regulation. They can be used for the long-term and therefore increase the planning dependability for system manufacturers,

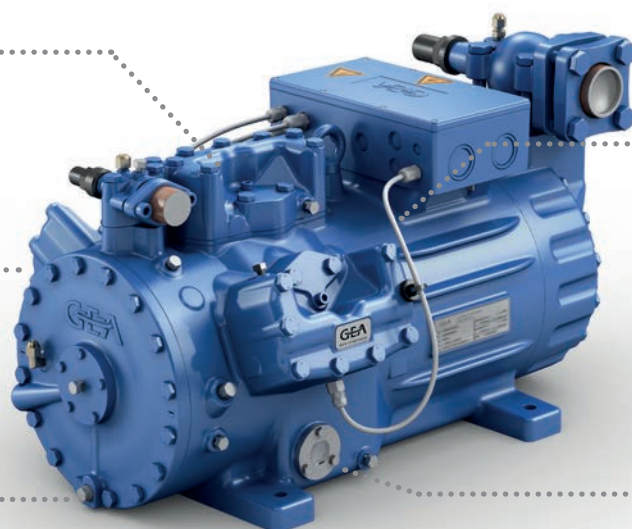
users and investors. Due to the flammability of hydrocarbons the compressor has some safety related modifications and corresponding adjustments in the system design.

The compressor series HC with displacement from 5.4 to 279.8 m³/h is available for the use with hydrocarbons.

Optimized valve plate system
for maximum efficiency

Durable engine
for demanding applications
with hydrocarbons

Oil sump heater (required)
due to high solubility
of refrigerant in oil



Thermal protection thermostat
Recommended for operating
conditions with high hot gas
temperatures

Specific oil filling
High wear protection even
for extreme requirements



Electronic motor protection INT69 G
enclosed for installation in the switchboard

The new HG44e HC and HG56e HC

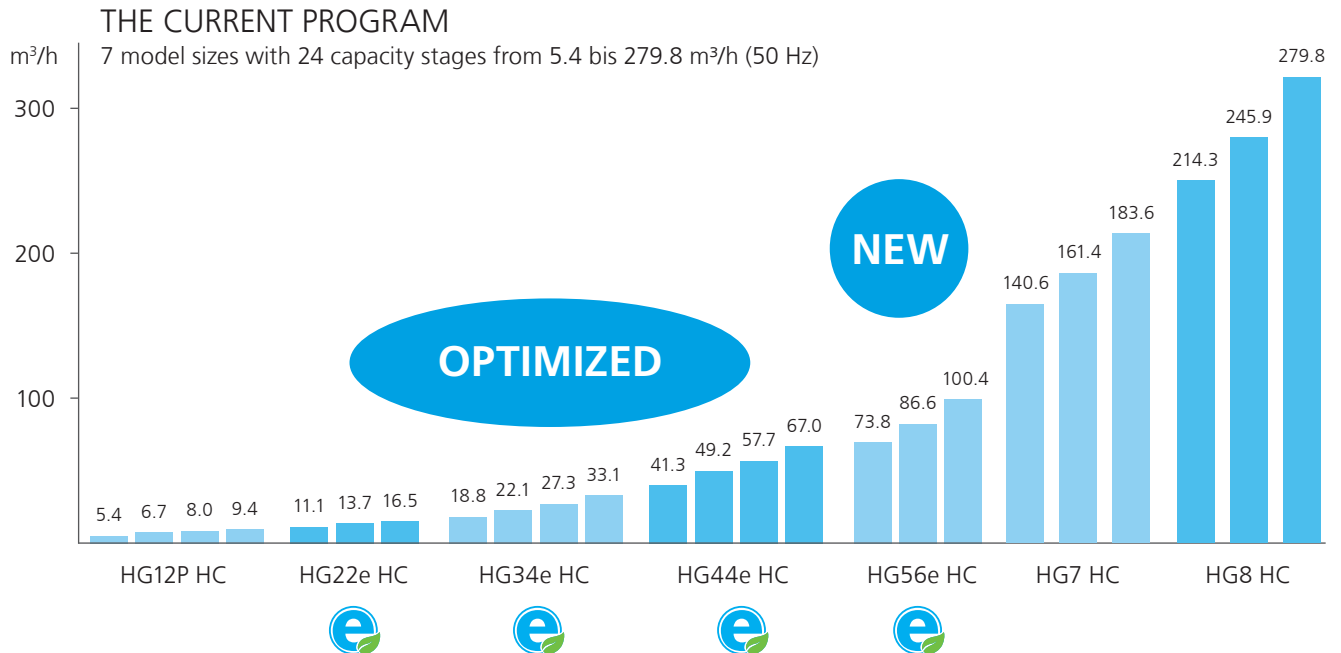
The advantages of the proven HG44e range have now been transferred to the compressors for hydrocarbons. The new, more efficient HG44e HC compressors was launched in February 2016 and will replace the HG4 HC range.

Since April 2014 the HG44e is successfully on the market and offers key advantages over the previous series. It combines the time-tested reliability and running smoothness of the preceding model HG4 with new and enhanced efficiency.

The HG44e HC series, in comparison to its predecessors, now offers four instead of three model sizes and covers the range of maximum displacements from 41.3 to 67.0 m³/h. In addition, the largest version, the HG44e/770-4 HC compressor, offers almost 20% more displacement with its 67 m³/h than the largest HG4 HC model and replaces the smallest model size of the former HG5 HC range with 62.9 m³/h.

In addition to the already optimized and well-established model HG44e HC, GEA presents now the new 6-cylinder compressors for hydrocarbons: the GEA Bock HG56e HC series, with three models, covers the range with displacements from 73.8 to 100.4 m³/h.

As a result, the GEA Bock HC series guarantee the most extensive performance coverage of any brand in the industry. The new compressor versions for hydrocarbons combine high efficiency, running smoothness, compactness and a long life cycle. Due to optimized drive gear components and an adjusted specific oil filling, both models offer highest performance, even under very demanding conditions of hydrocarbons. The GEA compressors of the hydrocarbon range meet the requirements of the F-gas regulation. This provides planning assurance to system manufacturers, users and investors.



Additionally, ATEX compressors are available that can be operated with hydrocarbons as well. You can find more information about these compressors in our ATEX brochure.

GEA compressors in use

Many customers rely on GEA compressors for cooling and air-conditioning – our references speak for themselves!

Cooling quality is the key to economic success

Whether the premium supermarket or the discounter, the city branch or the hypermarket on the greenfield: Increasingly better planned markets offer food in growing variety and top quality. Deep freezing, cooling and air-conditioning systems keep delicate food and ready-to-eat products constantly available – independent of the season and the origin.

The cool chain principle that must not be interrupted from production through to consumption guarantees the safety and quality of all cooled food. Suitable cooling processes developed for each phase of pro-

cessing, transport and storage have long become an integral part of state-of-the-art supermarket logistics. Also the heat generated thereby is increasingly being used in particular for room heating and hot water generation.

For decades, GEA compressors have been a key component in supermarkets. Today the continuously improved GEA compressor technology enables to further reduce space, energy and maintenance requirements of cooling systems and to implement the upcoming transformation to natural refrigerants. The GEA expertise continuously achieves new offer and service benefits.



METRO relies on natural refrigerants

METRO Cash & Carry is an international leader in the self-service wholesale sector. Fresh products and optimally cooled food are a matter of course for METRO customers. METRO AG is focusing on environmental friendliness and has set itself the goal to reduce emissions: Until 2030 all F-gases should be replaced by natural refrigerants. The METRO market in Leverkusen is one of the pioneers in this field: Here, transcritical CO₂ compressors from GEA provide optimal cooling. Constructor is kke GmbH in Kesselsdorf (close to Dresden), Germany.



Technical information

CO₂ compressors (transcritical range):

2x HGX₃₄ CO₂ T

(Parallel-Compressors (+ AC, + Flash Gas +2 °C))

4x HGX₄₆ CO₂ T

CO₂ compressors (subcritical range):

3x HGX_{34e} CO₂

Capacity: 245 kW Medium temperature cooling

128 kW Low temperature cooling

85 kW Air-conditioning



Retail logistics centre from Kesko

Kesko is a Finnish listed trading sector company. Kesko operates in the grocery trade, the building and technical trade and the car trade. Our partner Huurre delivers with their refrigeration



system, equipped with GEA compressors, world-class energy efficiency to Kesko's logistics centre. The logistics centre in Hakkila was revamped and the refrigeration system is a uniquely powerful, energy-efficient and eco-friendly solution.

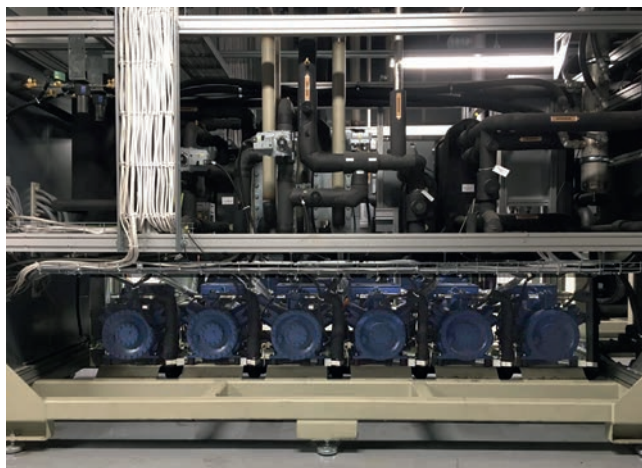
The Huurre ECO system installed in the Hakkila premises is one of the most powerful transcritical CO₂ refrigeration system in the Nordic countries. The combined power of the two Huurre refrigeration units is 1,500 kW. The units use carbon dioxide as a refrigerant, as it is the only non-toxic and non-flammable natural refrigerant that complies with the new legislation restricting greenhouse gases. By using this refrigeration solution, Kesko can ensure that its refrigeration plant operates in the most energy-efficient manner possible and minimises the lifecycle costs.

Technical information

CO₂ compressors (transcritical range):

12x HGX46/440-4 CO₂ T

Capacity: 1,5 MW Normal cooling (chiller)



Selgros Cash & Carry in Wiefelstede-Oldenburg

On more than 11,000 square metres Selgros Cash & Carry offers a tailored product range for customers from gastronomy, hotel business and trade like kiosks, bakeries and butchers to meet their needs. The product range covers more than 50,000 products from the food and non-food segments. All other traders, freelancers and self-employed persons can also enjoy the benefit. In the Wiefelstede-Oldenburg branch a total of seven GEA compressors provide optimal cooling for food.



Technical information

CO₂ compressors (transcritical range):

6x HGX46 CO₂ T

CO₂ compressors (subcritical range):

4x HGX22e/110-4 CO₂

Capacity: 600 kW Medium temperature cooling
140 kW Low temperature cooling

GEA CO₂ compressors ensure sustainability in supermarkets

The largest supermarket network in the German retail sector trusts in the quality of GEA compressors. In Germany the retail chain meets the daily customer demands with a wide and high-quality range of food. In the branches of the supermarket chain the customers enjoy the benefits of optimally cooled food thanks to a CO₂ booster system. The CO₂ plant manufacturers Christof Fischer GmbH, Kehrein & Kubanek GmbH and KKE-SYSTEM GmbH use GEA compressors, which ensure that the right temperature will be maintained in cold storage rooms, cooling cabinets, freezer cabinets and freezer rooms.

Technical information

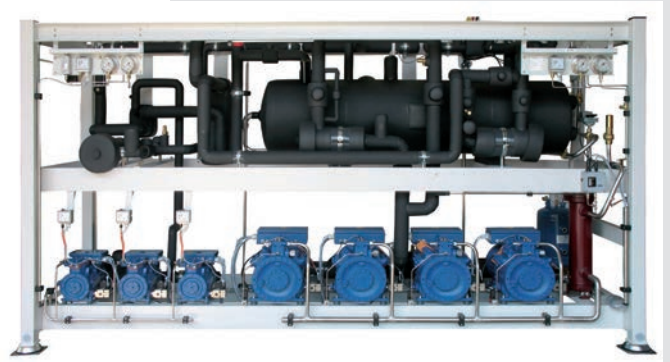
CO₂ Compressors (transcritical range):

3x HG34e/150-4 CO₂ T

CO₂ Compressors (subcritical range):

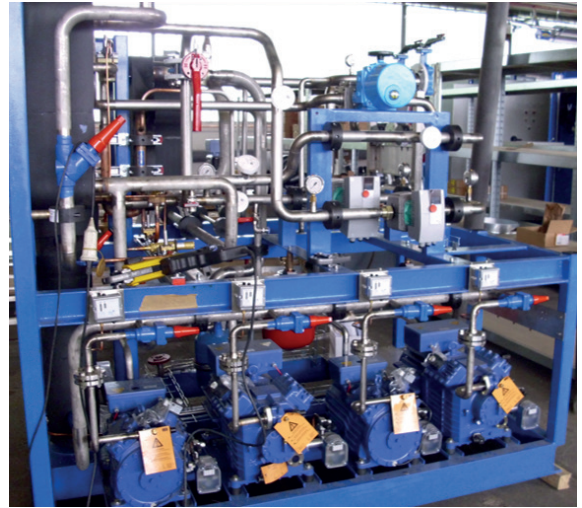
2x HG12e/60-4 CO₂

Capacity: 90 kW Medium temperature cooling
20 kW Low temperature cooling



Supermarket application with HC and CO₂ at discounters in Germany

With regard to cooling one of the largest German food retailers attaches the greatest value to the use of natural refrigerants. Over 135 systems in Germany have meanwhile been equipped with our compressors for propane R290 (HC). With these systems the retailer completely relies on the GEA Bock HC compressor series. These are indirectly cooled systems. A water-glycol brine serves as the medium.



Technical information

Compressors for hydrocarbons:

2x HG34P/380-4 HC

1x HG4/555-4 HC

1x HG4/650-4HC

CO₂ Compressors (subcritical range):

1x HGX12P/40-4 CO₂

Capacity: 60 kW Medium temperature cooling

6 kW Low temperature cooling

40 kW Air-conditioning



Optimal cooling for the producing of convenience food in Belgium

A food producer in Belgium produces ready made meals with fresh ingredients, sold via the large retailers in Belgium, the Netherlands, France & Germany. In order to meet the highest quality standards, the cooling during food processing is of elemental importance – for this purpose compressors of the GEA Bock HG CO₂ (T) series are used.

Technical information

CO₂ compressors (transcritical range):

1x HG46/310-4 S CO₂ T

5x HG46/440-4 ML CO₂ T

CO₂ compressors (subcritical range):

2x HG12e/30-4 S CO₂

Capacity: 550 kW Medium temperature cooling
12 kW Low temperature cooling



Belgian Retailer charts course for 100 % hydrocarbons in stores

Natural refrigerants are helping to save money and deliver environmental targets. The ultimate goal of the leading Belgian retailer is to become HFC-free. This led to the adoption in December 2014 of the official target of using 100% natural refrigerants for all its cooling needs. After considering which natural refrigerant would best match their needs, his team opted for propane (R290) for in-store cooling.

The concept of the German company Futron GmbH meet the requirements to reduce CO₂ emissions and the goal to become HCF-free. After the tender 2015, Futron was the only manufacturer, which responded with a fitting proposal for a bespoke propane system. The current blueprint is based on two or three small refrigerant circuits each with a maximum propane charge of 2.5 kg, and a secondary system that uses propylene glycol to bring the cold to where it is needed.

Compressors from the GEA Bock HC series are used in this propane system. They ensure an optimal temperature of the special cold rooms in the supermarkets in which customers choose fruit, vegetables and other products from shelves.

Technical information

Compressors for hydrocarbons:

2x HG56e/1155-4 S HC

Capacity: 45 kW Medium temperature cooling





GEA Compressors on the high sea

GEA compressors are not only used on land, but also on the water. For example, CO₂ compressors provide the right temperature for fishing boats for one of the largest fishing companies in Norway. Sustainable harvesting and an environmentally friendly production is very important for the food manufacturer. 36 tons of fish are caught and processed on fishing boats every day. The GEA Bock HG CO₂ T compressors in combination with plate freezers enable a higher freezer capacity and approximately 25% faster freezing compared to older systems that are operated with the R22 refrigerant.

Technical information

CO₂ compressors:

11x HG46 CO₂ T

Capacity: 240 kW Low temperature cooling

Learn more about GEA Compressors

CO₂ Training: all about the natural refrigerant R744

In many fields of the refrigeration, special heat pumps and air-conditioning industry, CO₂ as a natural refrigerant has considerably won recognition and can be seen as the refrigerant of the future. Crucial for CO₂ (R744) in comparison to other natural refrigerants is the fact that CO₂ is not only an environmentally-friendly refrigerant for supermarkets. Also in security matters, it is superior to other solutions.

In cooperation with the company Danfoss, GEA Bock offers a special application training for the use of CO₂ as natural refrigerant. To make the workshops a „hands-on“ experience, GEA put a fully functional-transcritical CO₂ supermarket booster system into operation in its training centre in Frickenhausen.

First Training Dates for 2017:

- CO₂ Training (English): 10. – 11.04.2017
- CO₂ Training (German): 18. – 19.05.2017

You can find further information about our trainings as well as current dates on our website www.gea.com:



For additional questions or advice, please contact our training director Peter Spies:

Phone +49 7022 945 4-157, Fax +49 7022 945 4-137

Email: Peter.Spies@gea.com



GEA Bock HG, F and FK Compressors Online

VAP Compressor selection program

The GEA Bock compressor selection software supports you in searching the suitable compressor or rather condensing unit for your application. On the basis of the searched refrigerating capacity and operating condition (refrigerant, evaporation and condensing temperature) suitable compressors will be found. Furthermore the software provides additional information on the chosen compressor:

- Operating limits
- Technical data
- Performance data
- Scope of supply and accessories
- Dimensions and connections
- Product image
- Spare part list, drawings, 3D model etc.

The compressor selection program is available as webbased online-version as well as offline-version for installation on the computer.

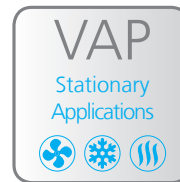
- Find suitable compressors quickly
- Software-date on a daily basis
- For stationary and mobile applications
- All compressors in one version

Here's the direct way to the online-version:

- GEA Bock HG compressors

- GEA Bock F compressors

- GEA Bock FK compressors



SOCIAL MEDIA

GEA is represented in the following social media networks:

LinkedIn

International exchange and land get connected on LinkedIn.

www.linkedin.com/groups/GEA-Food-4225307



Facebook

Please contact us and stay updated with all the latest news in the transportation industry.

www.facebook.com/GEAttransportation



YouTube

You can find product videos and animations of GEA on YouTube.

www.youtube.com/user/theGEAGroup



Twitter

Follow us on Twitter and be always up-to-date.

www.twitter.com/GEA_Events



We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA Group is a global engineering company with multi-billion euro sales and operations in more than 50 countries. Founded in 1881, the company is one of the largest providers of innovative equipment and process technology. GEA Group is listed in the STOXX® Europe 600 index.

GEA Germany

GEA Bock GmbH

Benzstraße 7
72636 Frickenhausen, Germany

Tel +49 (0)7022 9454-0
Fax +49 (0)7022 9454-137

info@gea.com
gea.com