

ENGINEERING  
TOMORROW



Danfoss BOCK® compressors | Stationary compressors

# BOCK® LG compressors range

Designed for use with low-GWP HFO refrigerants.

**Longer  
lifetime**

thanks to robust  
design.



[bock.danfoss.com](http://bock.danfoss.com)

**BOCK®**

# LG compressors for low and medium temperature, air-conditioning, heat pumps

**Always one step ahead! With this claim BOCK® develops for almost 90 years innovative compressor solutions for refrigeration and air-conditioning technology that set standards. Current example: The new range of semi-hermetic LG compressors – specially designed for use with low-GWP HFO refrigerants.**

With the new LG range (LG = Low-GWP) BOCK® now offers a compressor portfolio with suitable compressor technology for all synthetic refrigerants. This includes the common HFC fluids as well as the new HFO low-GWP fluids with a GWP value <150, enabling planners and operators to create individually configurable, economical system solutions for sustainable refrigerants that meet the requirements for the global phase down of F-Gases in a safe and sustainable way (F-Gas Regulation, Kigali Amendment etc.).

## **Long-term tests show: HFO refrigerants need special compressor technology**

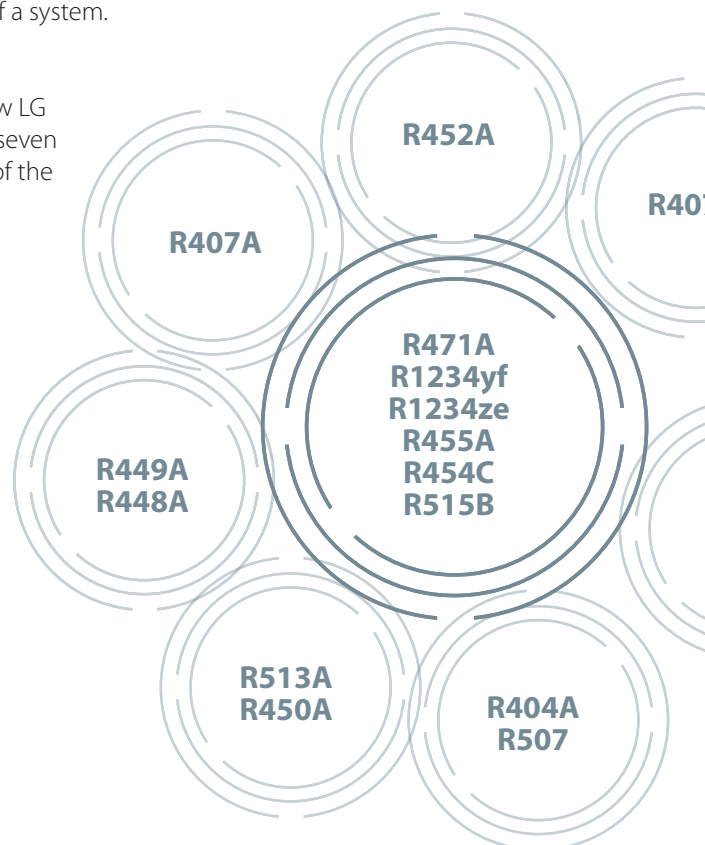
The development of pioneering BOCK® products such as the new LG compressor range is the result of continuous research including internal and external long-term tests in various applications. Here it became apparent that conventional compressors are not suitable for safe and reliable operation with HFO refrigerants. In particular, the driving gear and seals usually lost their functional reliability in the long run due to the higher requirements of these refrigerants.

Once again, the decades of experience of the BOCK® experts were confirmed: Different refrigerants require compressors with special technical design – for maximum robustness, reliability and durability over the entire life cycle of a system.

## **New series with complete product range**

Within the semi-hermetic BOCK® standard HG compressor range, the new LG compressors are an independent series with a complete product range: seven model sizes with 25 capacity stages exceed all features and advantages of the standard series, which BOCK® customers worldwide appreciate.

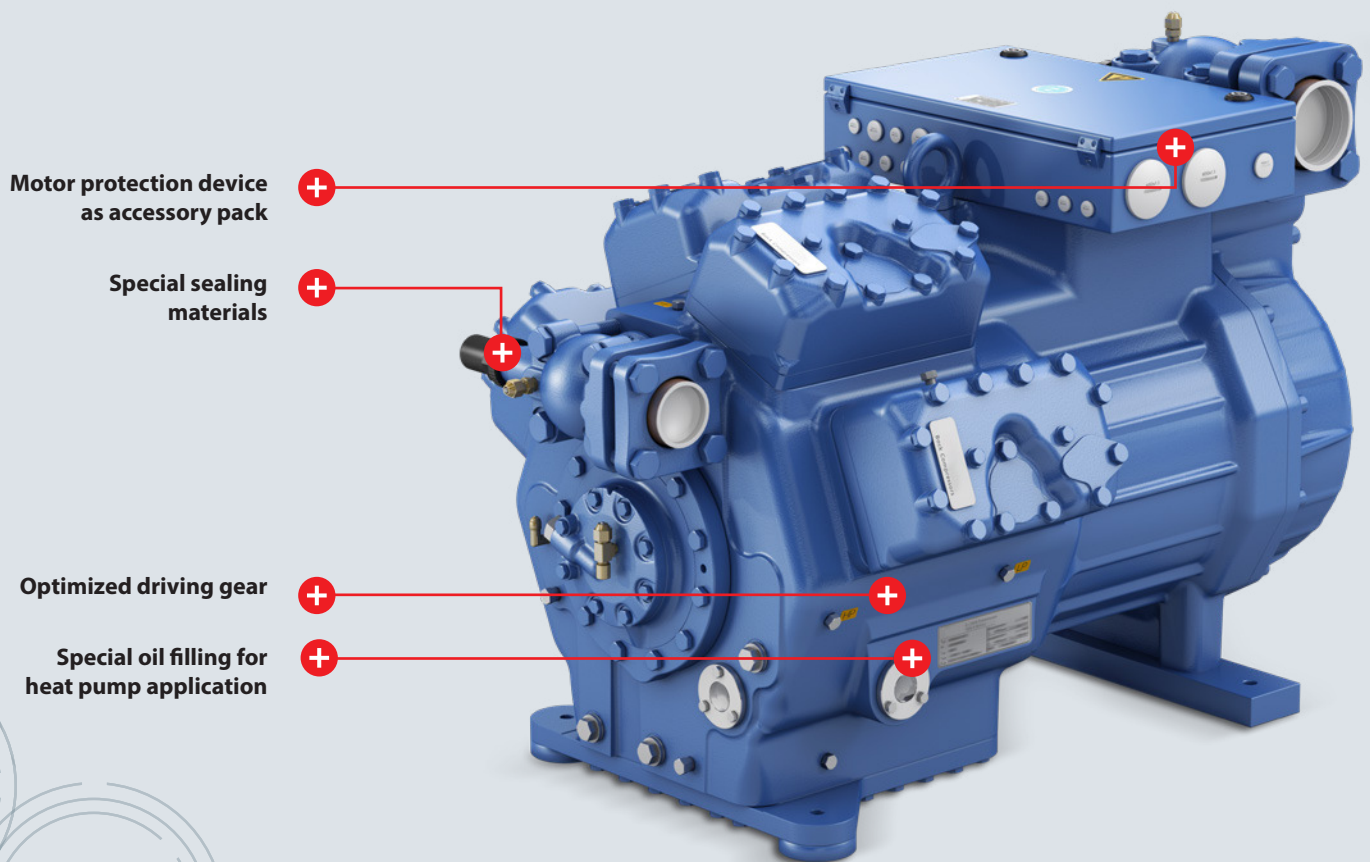
**One compressor version** for all common refrigerants



# HFO specialists thanks to **optimized BOCK® driving gear design**

HFO refrigerants such as R455A or R1234ze place significantly higher demands on the compressors than standard HFC refrigerants such as R404A and R134a – especially with regard to the driving gear, keyword emergency running properties. The reason: HFO refrigerants have a much higher solubility in oil, which leads to a sharp reduction in oil viscosity and thus increases the susceptibility to compressor damage.

For this reason, BOCK® engineers – based on their many years of experience in dealing with the technically demanding refrigerants CO<sub>2</sub> and hydrocarbons – have developed a special driving gear design for the new LG range that makes the compressors „less sensitive“ to falling oil viscosity.



**Motor protection device  
as accessory pack**

**Special sealing  
materials**

**Optimized driving gear**

**Special oil filling for  
heat pump application**

R7F

R407C

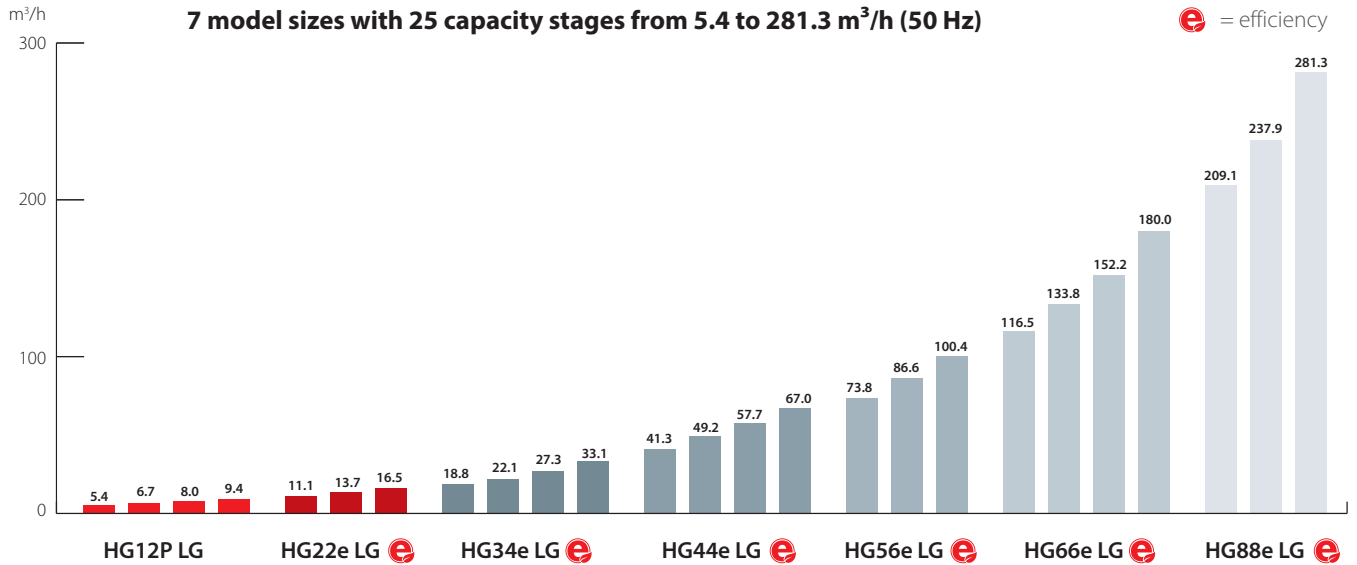
R134a



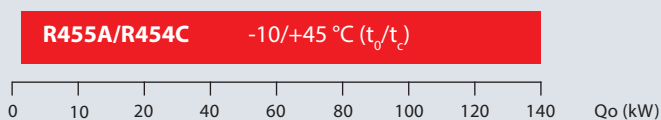
## **VAP tool**

Current information on technical data, performance data, operating limits and much more can be done online via the BOCK® compressor selection program (VAP): [vap.bock.de](http://vap.bock.de)

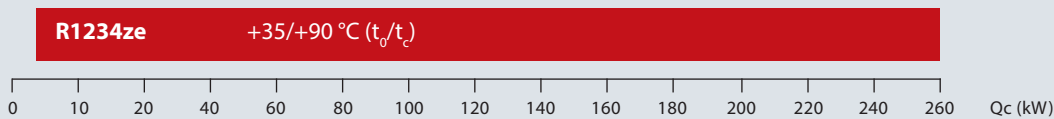
## Single-stage LG compressors



### Cooling capacity R455A/R454C



### Heating capacity R1234ze



### Type key – adapted to worldwide requirements

HGX88e/3235  
HGX88e/3235

S	95	LG
ML	80	LG

LG – Low-GWP  
 HP code for motor size  
 Motor application | S – strong motor e.g. AC | ML – motor for MT and LT

Any information, including, but not limited to information on selection of product, its application or use, product design, weight, dimensions, capacity or any other technical data in product manuals, catalogues, descriptions, advertisements, etc. and whether made available in writing, orally, electronically, online or via download, shall be considered informative, and is only binding if and to the extent, explicit reference is made in a quotation or order confirmation. Danfoss cannot accept any responsibility for possible errors in catalogues, brochures, videos and other material. Danfoss reserves the right to alter its products without notice. This also applies to products ordered but not delivered provided that such alterations can be made without changes to form, fit or function of the product. All trademarks in this material are property of Danfoss A/S or Danfoss group companies. Danfoss and the Danfoss logo are trademarks of Danfoss A/S. All rights reserved.