



## BOCK HA-LG compressor range for low temp applications



Low GWP

The °Clever Art of Cooling:  
The solution for low-GWP HFO refrigerants

colour the world  
of tomorrow

# Low-GWP specialists for low temperature applications

The new range of semi-hermetic LG compressors - now also available in our air-cooled HA version

## The „HA principle“ specially developed by BOCK - now also for low-GWP applications

Applications in low temperature generally place higher demands on any compressor. In the low-temperature range, the refrigerant mass flow is lower and is disproportionately heated by the drive motor. In addition, the HFO refrigerants such as 455A or R454C require significantly more know-how and engineering skills compared to the standard refrigerants - especially in terms of the driving gear. The reason: HFO refrigerants have a significantly higher solubility in the oil, which leads to a strong reduction of the oil viscosity and thus increases the susceptibility to compressor damage. For this reason, the 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 for the new LG range, which makes the compressors „less sensitive“ to decreasing viscosity of the oil.

## BOCK HA-LG compressors: the most efficient and the most reliable solution for low temp applications

The BOCK HA-LG compressors are the most efficient alternative for low temperature applications. The compressors operate with direct suction and the motor is air-cooled. The suction gas is not additionally heated by the motor, but is sucked in directly by the compressor without a diversion via the motor. The engine is cooled by a compact ventilation unit, which cools not only the engine itself but also the cylinder heads through targeted air cooling. This allows the discharge gas temperature to be reduced. The result: a significant increase in performance and an extension of the range of applications. And this in combination with our well thought-out LG principle.

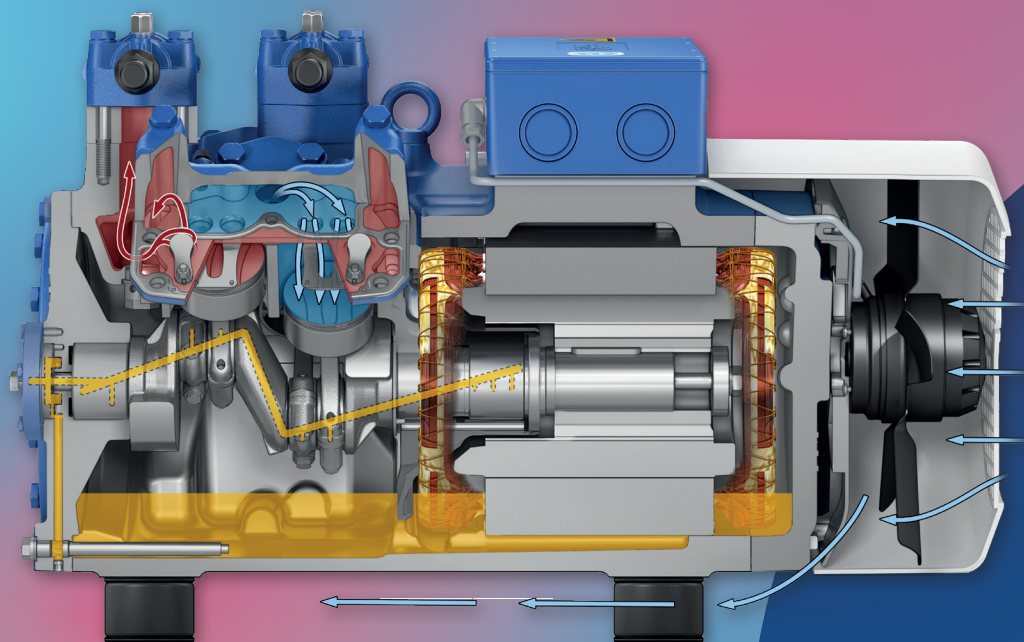
**We call this: The 'Clever Art of Cooling'**



## COMPRESSOR SELECTION PROGRAM

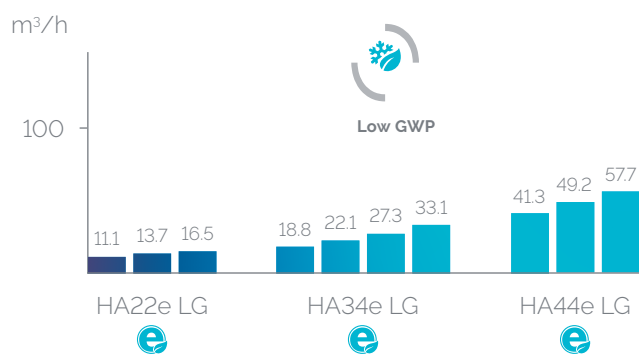
Current information on technical data, performance data, operating limits and much more can be done online via the BOCK compressor selection program (VAP): **vap.bock.de**



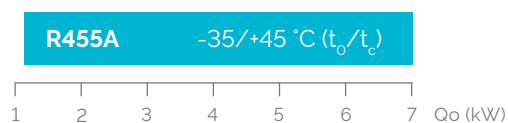


### The current program

3 model sizes with 10 capacity stages  
from 11.1 to 57.7 m<sup>3</sup>/h (50 Hz)



### Cooling capacity R455A



### Type key – adapted to worldwide requirements

HAX44e/665 **LT** **14** **LG**

- LG – Low-GWP
- HP – Code for motor size
- Motor application
- LT – motor for low temperature



**BOCK is one of the world's technology and innovation leaders in the development of environmentally friendly, economical solutions in the field of refrigeration and air-conditioning technology, including heat pumps and heat recovery – with one of the world's largest portfolios of compressors for natural refrigerants such as CO<sub>2</sub> (R744), hydrocarbons and other low-GWP refrigerants.**

# **BOCK**

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