

ENGINEERING
TOMORROW

Danfoss

Danfoss BOCK® Compressors | Transcritical CO₂ compressor

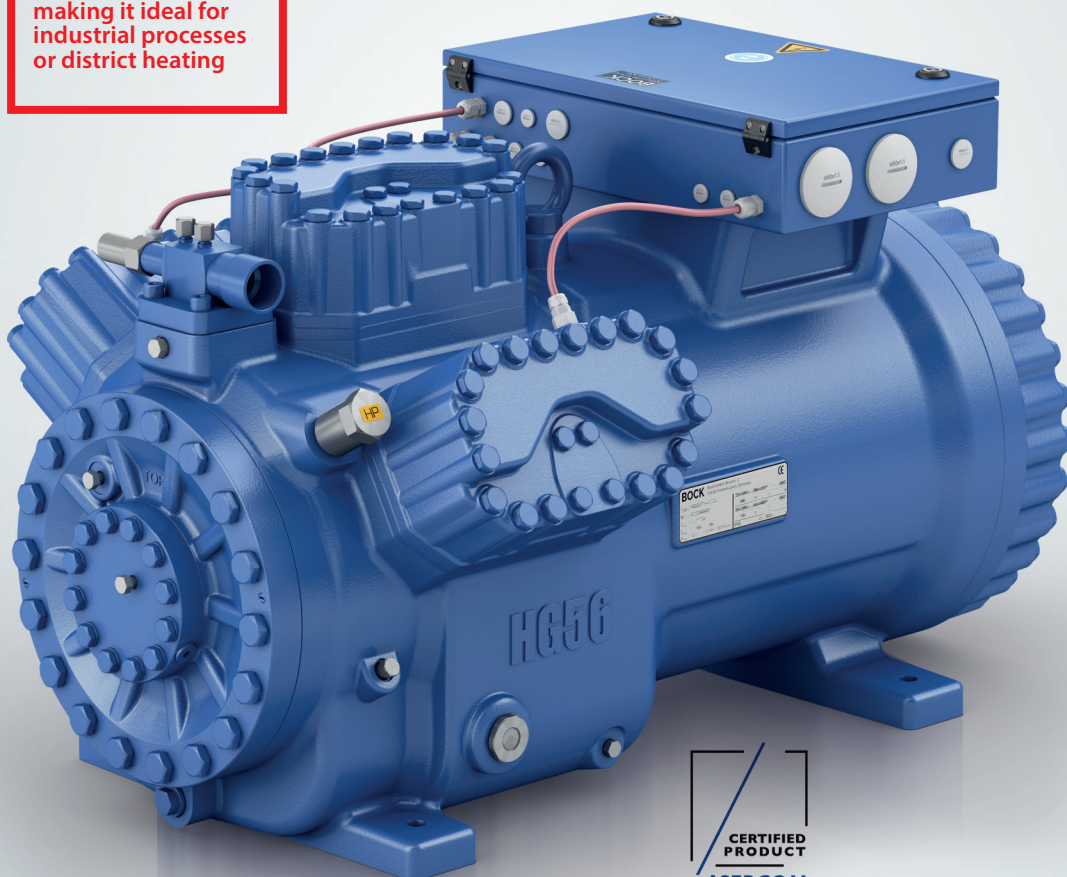
Simplicity for large-capacity industrial systems

The HGX56 CO₂ T 6 cylinder compressor reduces cost, system complexity, and the number of compressors required for large industrial heat pumps, refrigeration, and district heating systems. ASERCOM certified.

Supply water up to

90°C

making it ideal for industrial processes or district heating



bock.danfoss.com

BOCK®



Danfoss BOCK® goes big – with **CO₂ compressors**

Transcritical 6-cylinder compressor for large capacities in industrial, commercial and sports facilities

The new Danfoss BOCK® HGX56 CO₂ T transcritical CO₂ compressor is specially designed for performance increases with the natural refrigerant R744. The new 6-cylinder design ensures greater capacities while reducing the number of compressors. Different design variants offer optimized solutions especially for industrial refrigeration, cold storage, ice sports facilities and heat pumps – an attractive and sustainable alternative to synthetic refrigerants and NH₃ applications.

Danfoss BOCK® HGX56 CO₂ T – Advantages and benefits

- Designed for demanding conditions with the natural refrigerant R744 in commercial and industrial applications
- Higher capacities with reduced number of compressors: reduced system complexity and investment costs
- Specialized also for the requirements of heat pumps with extended operating conditions
- High efficiency and highest reliability due to holistic Danfoss BOCK® CO₂ compressor design.



Lowest energy and operating costs

Highest efficiency and reliability thanks to more than 30 years of Danfoss BOCK® expertise in CO₂ compressor technology



Wide range of applications

From low temperature to high-temperature heat pumps – with reliable and flexible partial and full load



Outstanding running comfort

Low noise and vibration, compact and lightweight design and minimal oil carry over rate



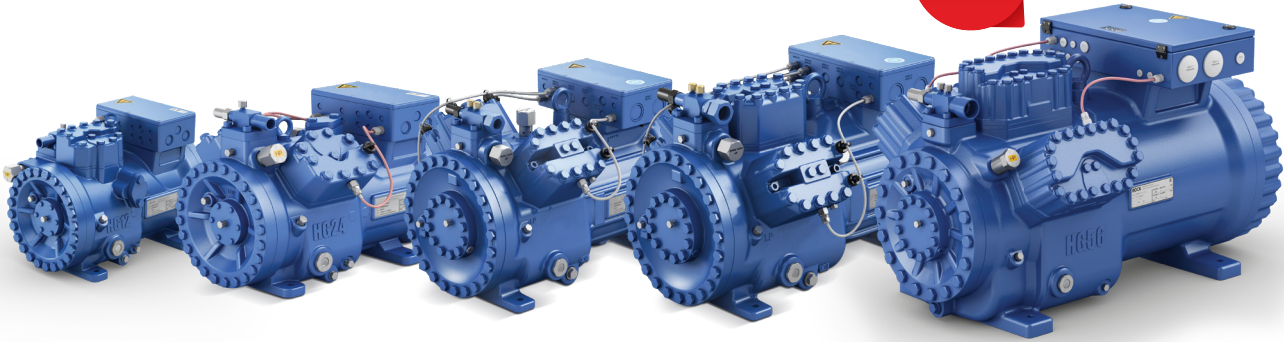
Certified compressors:

HGX56/480-4 S CO₂T
HGX56/680-4 ML CO₂T
HGX56/680-4 S CO₂T
HGX56/680-4 SH CO₂T

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.

NEW



Transcritical Danfoss BOCK® CO₂ compressor range – from small to large capacity for all applications



NATURAL REFRIGERANT



CO₂



EFFICIENCY



RELIABILITY

Medium Temperature Application

Cooling capacity. HGX CO₂ T range with HGX56 CO₂ T

HGX CO₂ T range
3 – 85 kW¹

HGX56 CO₂ T
90 – 135 kW¹



¹ -10°C / +35°C / 90 bar / 10 K / 50 Hz EER (Energy Efficiency Ratio) Cooling

Efficiency

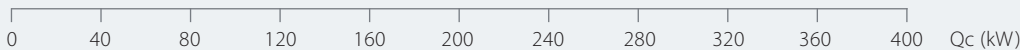
1.95

Heat Pump Application

Heating capacity. HGX CO₂ T range with HGX56 CO₂ T

HGX CO₂ T range
9 – 180 kW²

HGX56 CO₂ T
250 – 350 kW²



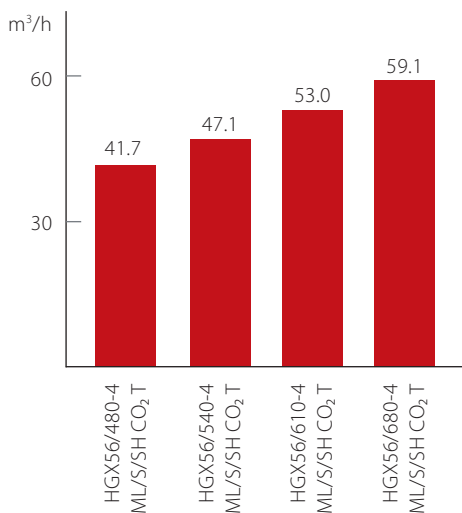
² +5°C / +25°C / 100 bar / 10 K / 50 Hz COP (Coefficient of Performance) Heating

4.49

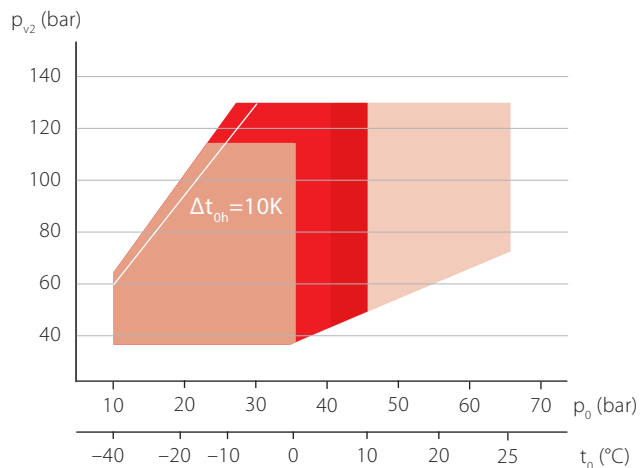
HGX56/680-4S CO₂T

HGX56 CO₂ T (transcritical)

One model size with four capacity stages from 41.7 to 59.1 m³/h (50 Hz)



Operating limits



Max. permissible operating pressure (LP/HP) 100/150 bar

● compressor version ML ● compressor version S ● compressor version SH

– compressor ranges HGX12 CO₂T and HGX24 CO₂T



An entire CO₂ portfolio

COM	ICMTS	CCMT	CTR
DMT	SVA	FIA	SNV
AK-PC 7xx	Ejectors	AKS4100 AKS2050	Scan to download or go to vap.bock.de

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