

ENGINEERING
TOMORROW

Danfoss

Danfoss Turbocor® TTH/TGH Compressor

Experience the benefits of **oil-free technology** in **high lift** applications

The Danfoss Turbocor® TTH/TGH oil-free, magnetic bearing compressor, optimized for high lift applications.



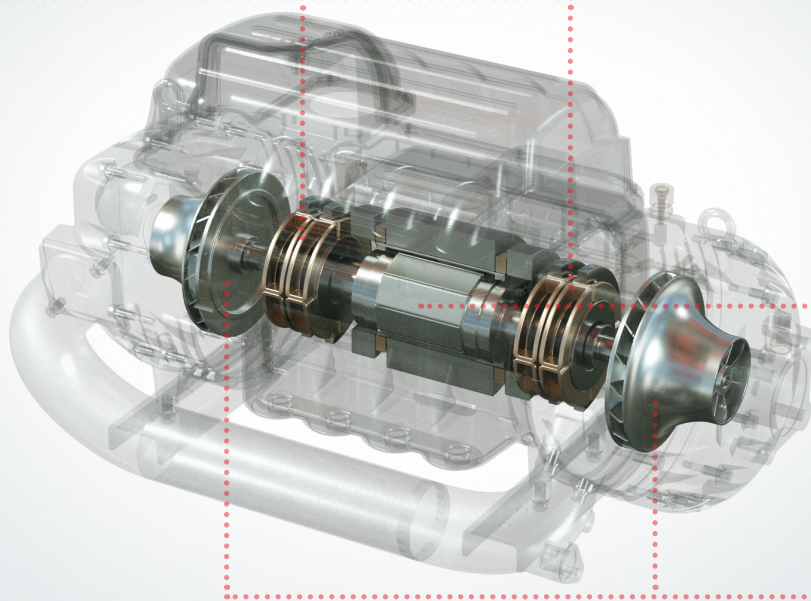
**First
oil-free**

compressors
optimized for higher
lift applications

Oil-Free Performance Advantage

Oil-Free, magnetic bearing compressor technology eliminates complex oil and refrigerant lubrication management systems resulting in a simplified chiller design, increased reliability and reduced maintenance.

Oil-free, magnetic bearings and integrated variable speed drive delivers industry leading efficiency with no performance degradation over the life of the compressor.



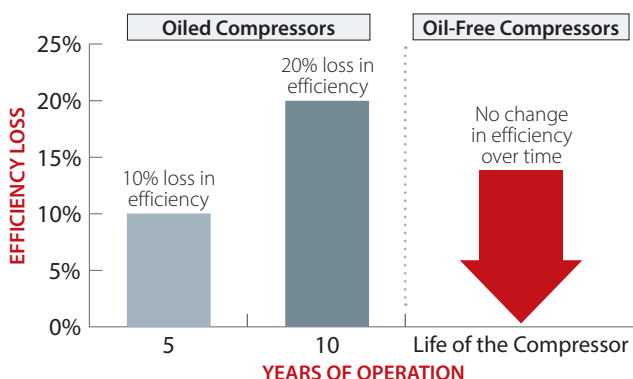
Permanent magnet synchronous motor provides high efficiency and enables compact design.

Two stage back-to-back impeller design expands the operating map to support demanding high lift applications with pressure ratios up to 6.2.

Zero Performance Degradation

Danfoss Turbocor® compressors have no oil in the system which means there is no performance degradation due to oil contamination. This, along with the contact-free operation enabled by magnetic bearings means the performance remains consistent over the life of the compressor.

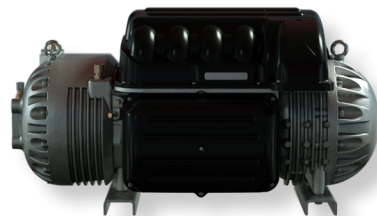
Performance Degradation Over Time*



*Source: Tsinghua University Study 2014

Environmentally Friendly

Danfoss Turbocor® compressors are available with R134a and low-GWP refrigerant R513A and ultra-low GWP R1234ze.



➤ **TTH375** with a nominal capacity of 376 kW / 107 tons using R134a or R513A.



➤ **TGH285** with a nominal capacity of 288 kW / 82 tons using R1234ze.

High Lift Applications

Danfoss Turbocor® TTH / TGH compressors with expanded operating map can operate under demanding high lift conditions.

Air Cooled Chiller

Ability to operate up to **52°C / 126°F** ambient temp.



Air-Water Heat Pump

Generate up to **50°C / 122°F** hot water at **0°C / 32°F** ambient.



Water-Water Heat Pump / Heat Recovery

Generate up to **68°C / 155°F** condenser LWT with Evap LWT = **6.7°C / 44°F**.



Thermal Storage / Low Temp Process

Ability to operate in low temp applications with minimum saturation temp of **-18°C / -0.4°F**.



High Performance Alternative to Screw Compressors

The new Danfoss Turbocor® TTH / TGH compressor delivers a high performance alternative to the traditional oiled screw compressor. The TTH / TGH compressor is more efficient, quieter and has a lighter weight / smaller physical footprint than screw compressors. All these features translate to a lower total cost of ownership and less customer complaints.

More Efficient

Low Noise

Less Maintenance

Oil-Free



Up to 40% better Part Load Efficiency versus Fixed speed screw compressors

~8 dBA quieter

Fewer maintenance tasks as a result of elimination of the oil management system

Zero Performance degradation over the life of the compressor

Worldwide Industry Recognition

The Danfoss Turbocor® TTH / TGH compressor was the recipient of numerous awards including the product of the year at the 2018 AHR Expo, 2018 China Ref and 2018 Mostra Convegno.



Simplify the chiller decision making process with the **Danfoss ChillerROI** app.

The Danfoss ChillerROI app simplifies the decision-making process by allowing you to estimate the return on investment (ROI) using a few pieces of basic information. Simply enter the parameters into the app, and you'll get a side-by-side comparison that displays the expected long- and short-term costs. Then, you can choose the best chiller for the situation. Visit turbocor.danfoss.com to download the ChillerROI app from Google Play and iTunes Stores.

