

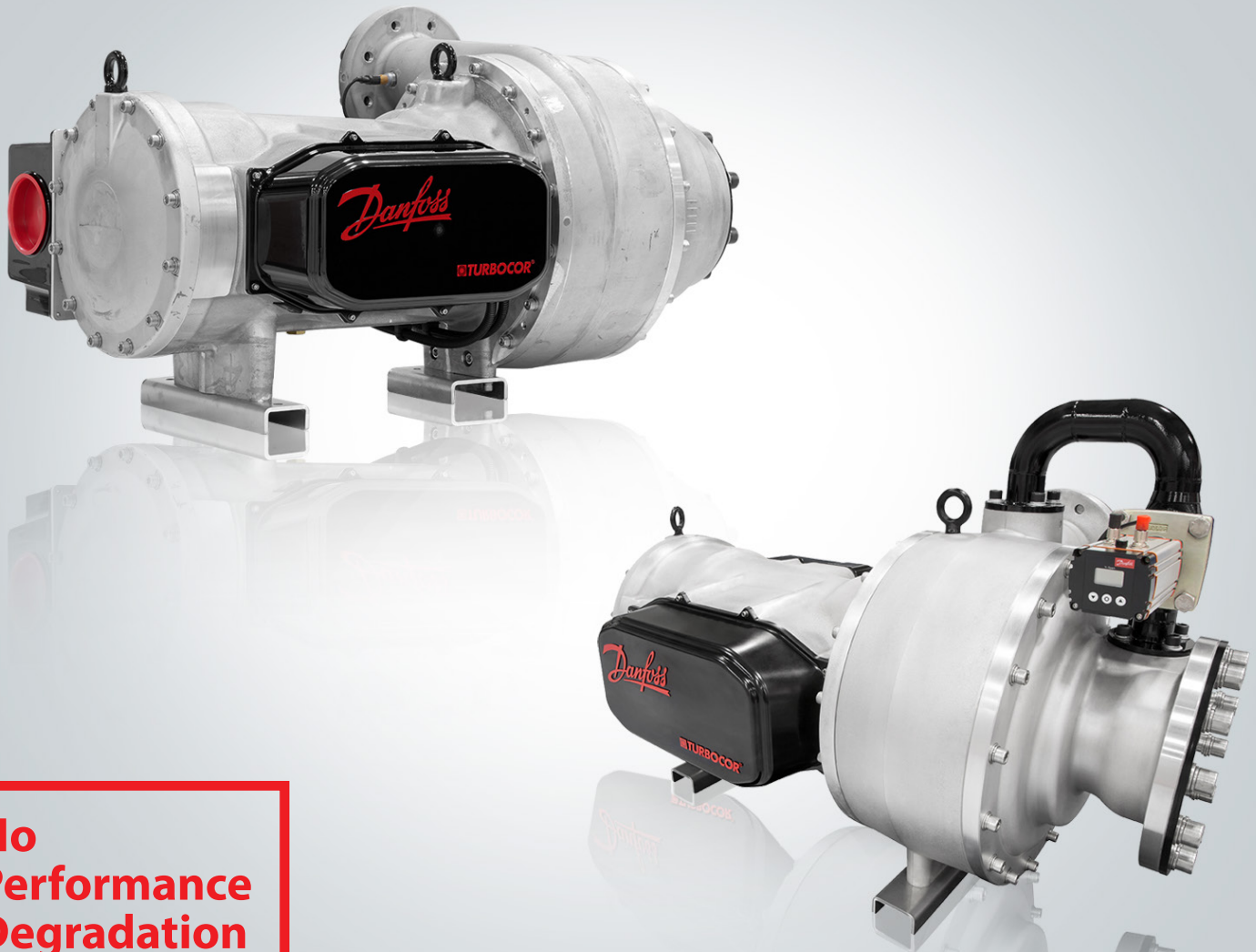
ENGINEERING  
TOMORROW



Danfoss Turbocor® VTT and VTX Compressor

**Delivering** industry leading efficiency  
using **oil free technology** for **water-**  
**cooled** applications

The Danfoss Turbocor® VTT and VTX oil-free, magnetic bearing compressor, optimized for water-cooled applications



**No  
Performance  
Degradation**

for the life of the  
compressor

[www.turbocor.danfoss.com](http://www.turbocor.danfoss.com) |  **TURBOCOR®**

The Danfoss Turbocor® Portfolio of Oil-Free Compressors

## Model VTT1200



2015 AHR Expo  
Product of the Year



The Danfoss Turbocor® **VTT1200** (Variable Twin Turbo) compressor brings the benefits of oil-free, magnetic bearing technology up to 400 tons / 1430 kW. The large capacity design results in an oil-free chiller system up to 3200 tons / 11,250 kW or larger in a multiple compressor configuration.

The VTT1200 compressor, optimized for water-cooled chiller applications, uses the patented IntraFlow™ technology which extends the stable operating range and increases the turn down capability of the chiller.

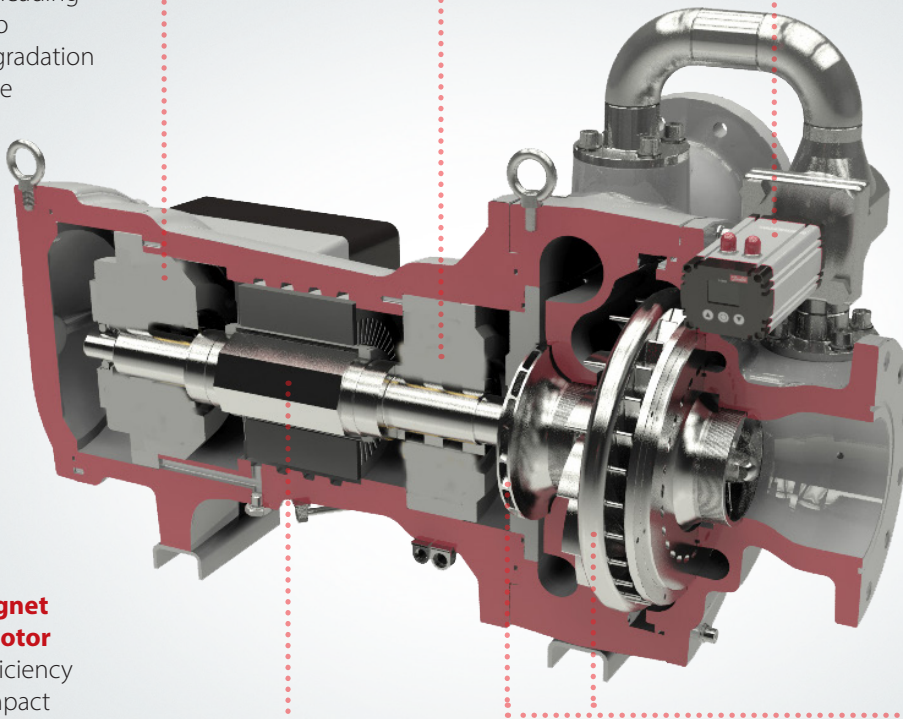
The result is a compressor that minimizes the risk of surge while maintaining peak full- and part-load efficiency.

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

**Patented IntraFlow™ technology** provides stable operation at a wide range of water-cooled operating conditions.

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

**Two stage** compression allows for stable operation over a wide range of operating conditions.





The Danfoss Turbocor® Portfolio of Oil-Free Compressors

## Model VTX1600

Design flexibility is standard on the **VTX1600** with 3 discharge connection options available.



Horizontal Discharge  
Rotated 0° (Standard)



Angled Discharge  
Rotated 45°



Downward Discharge  
Rotated 90°

The Danfoss Turbocor® **VTX1600** compressor brings the benefits of oil-free, magnetic bearing technology to larger capacity chillers. The 450 ton / 1600 kW nominal capacity rating allows for a multiple compressor configuration up to 3600 tons / 12,660 kW or larger.

The VTX1600 compressor, optimized for water-cooled chiller applications, uses an advanced aero design that gives industry leading full-load efficiency with no performance degradation over the life of the compressor. Combined with the **advanced** IGV design, the VTX1600 provides outstanding unloading capability even at constant entering condenser operating conditions.

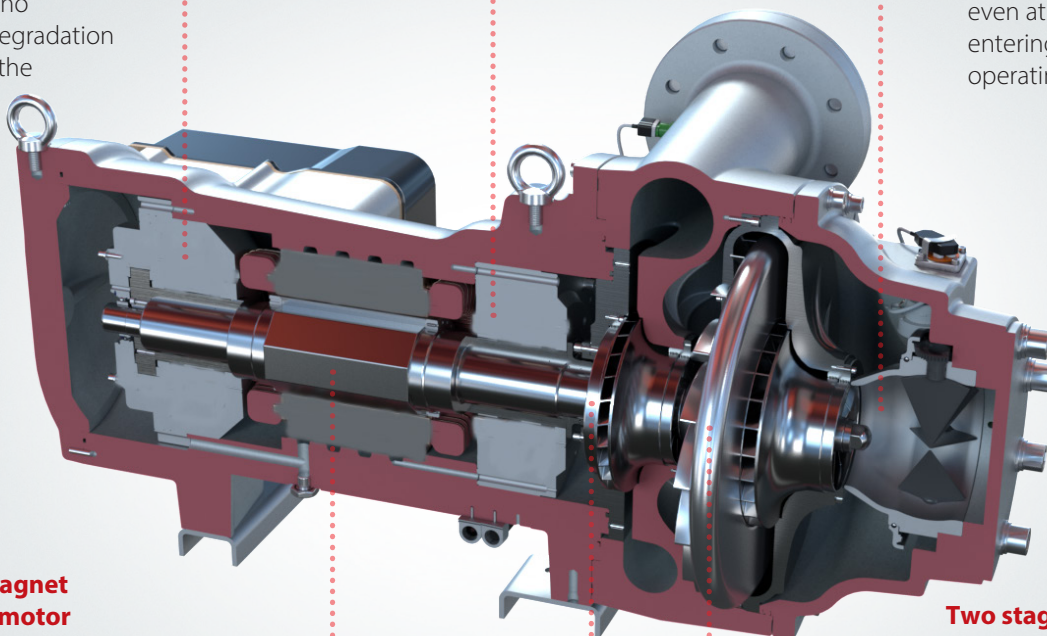
**Oil-free, magnetic bearings** and integrated variable speed drive delivers industry leading efficiency with no performance degradation over the life of the compressor.

### Advanced aero design

provides extended unloading capability even at constant entering condenser operating conditions.

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

**Two stage** compression allows for stable operation over a wide range of application conditions.



# High Performance Alternative to Screw Compressors

The VTT / VTX compressor is more efficient, quieter and requires less maintenance than screw compressors. The VTT / VTX compressor is more efficient, quieter and requires less maintenance 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

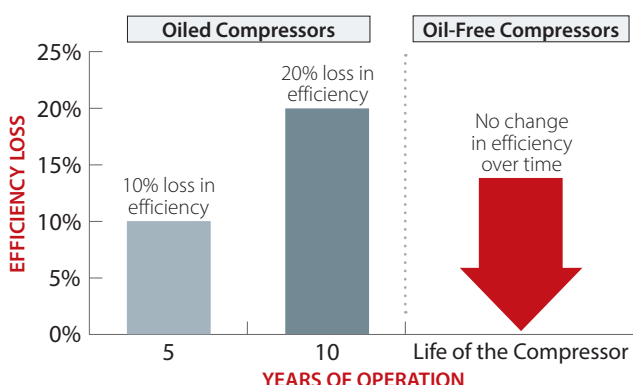
Fewer maintenance tasks as a result of elimination of the oil management system

Zero Performance degradation over the life of the compressor

## Zero Performance Degradation

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.

Performance Degradation Over Time\*



\*Source: Tsinghua University Study 2014

## 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](http://turbocor.danfoss.com) to download the ChillerROI app from Google Play and iTunes Stores.

