

ENGINEERING
TOMORROW



Chillventa 2024 issue | Danfoss Climate Solutions for cooling

TECH INSIDER

SPECIAL EDITION
CHILLVENTA
2024

Introduction

Welcome to the Danfoss Tech Insider Chillventa special!
Discover our featured products from this year's Chillventa exhibition on 8-10 October 2024, including high-efficiency compressors, low-GWP refrigerant solutions, adaptive control systems, and smart sensors. Each innovation is designed to boost energy efficiency, streamline system management, and support sustainable cooling solutions for the future.
We hope you will enjoy reading the special issue of Danfoss Tech Insider!

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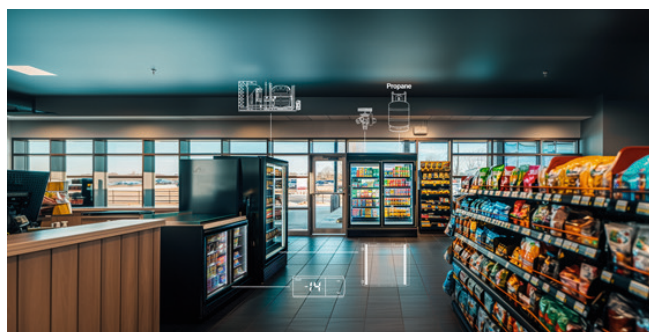
Solutions for HORECA Refrigeration



We have a full cooling solutions portfolio for HORECA with synthetic and hydrocarbon refrigerants. Check out some of our **food service** solutions and energy-efficient **walk-in cold room** solutions

Detailed info on products >> [HERE](#)

R290 Portfolio for Glass Door Merchandisers and Commercial Fridges and Freezers



Danfoss offers a full portfolio of lightweight, compact refrigeration solutions – compatible with R290 refrigerant – to meet your commercial refrigeration needs.

Detailed info on products >> [HERE](#)

Multi Refrigerant Portfolio for Cold Rooms: A2L, CO₂ and Propane



As we transition toward a more environmentally friendly future, your refrigerant choice becomes an important factor for your business and the planet. Because no two applications are alike, choose from a full portfolio of food service refrigeration solutions - tailored to your specific need.

Detailed info on products >> [HERE](#)

ADAP-KOOL[®] Pack Control Solutions



Danfoss offers a range of pack controllers for use in compact systems, as well as in large power packs. The ADAP-KOOL[®] pack controllers ensure efficient control and operational reliability for advanced solutions for controlling up to twelve compressors. The intelligent controllers optimize the suction and condensing pressure according to load and outdoor temperatures.

Detailed info on products >> [HERE](#)

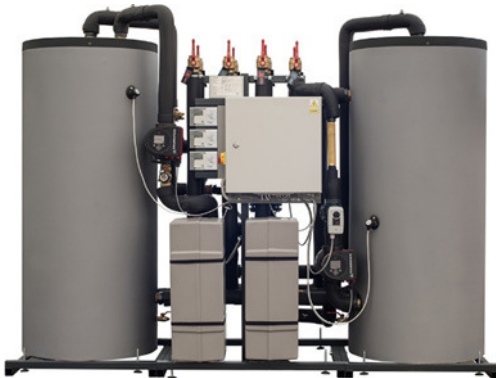
ADAP-KOOL® Case Controls Solutions for Food Retail Applications



Danfoss offers a solution that makes it easier than ever to save on adaptive and reliable food retail refrigeration: the new generation of the proven ADAP-KOOL® Case Controls Solution. It delivers energy savings of 6-10% compared to the next best alternative, and it includes features that improve the user experience for OEMs, installers, and end users by simplifying design, installation, and service.

Detailed info on products >> [HERE](#)

Heat Recovery Solutions



The Heat Recovery Unit (HRU) is environmentally friendly, and it reduces CO₂ emissions. Especially supermarkets can accumulate excess heat from cooling systems to heat up shop area. In some areas waste heat via heating networks can be transferred to household. System efficiency ensure short “return of investment” time and allows to save money for heating in longer term.

Detailed info on products >> [HERE](#)

Monitoring & Connectivity Solutions for Refrigeration



Connecting your refrigeration system to the cloud offers a world of possibilities to save money and improve food safety. Remote monitoring and management make it easy to check and triage system alarms, giving priority to those with an immediate impact on costs or potential food loss.

Detailed info on products >> [HERE](#)

Danfoss Smart Store – Application Development Center (ADC)



In the Danfoss Smart Store the cooling and heating technologies are in operation 24/7 and run exclusively on natural refrigerants (CO₂). It's not a laboratory simulating real-life operation. Customers open cabinet doors hundreds of times a day and every time it puts demand on the cooling and heating of the supermarket. The Danfoss Smart Store demonstrates our available solutions in action.

Detailed info on products >> [HERE](#)

CO₂ Solutions



Danfoss has pioneered CO₂ technologies for both transcritical and subcritical systems for more than ten years and has gained valuable experience from thousands of installations all over the world. The many installations have proved that CO₂ can be applied in supermarkets enabling both environmentally friendly and energy saving systems in all types of stores. Meanwhile, alongside the traditional large applications, CO₂ is increasingly being used in a broader range of settings than ever, including very small systems.

Detailed info on products >> [HERE](#)

Alsense Monitoring & Managing Solution



Our IoT cloud-based monitoring and management software Alsense brings you a new level of sense by offering scalable, digital, and expert-managed services through our secure, sustainable and future-proof portal for optimizing the performance of your food retail operations. Alsense IoT Cloud, a state-of-the-art solution based on the proven and secure Microsoft Azure platform.

Detailed info on the solution >> [HERE](#)

Universal Programmable Controller – Alsmart®



Alsmart® is the latest generation of programmable controller platform for the HVAC market. It is the smart, compact and powerful brain of the HVAC unit (chiller, rooftop, heat pump, dedicated outdoor air systems, and more) packed with the latest best-in-class technology, ready to fully make the most of your thermodynamic knowledge.

Detailed info on the controller >> [HERE](#)

Danfoss Components for Cold Storage and Food Processing



Comprehensive portfolio of refrigeration solutions can create a sustainable cold chain, improve efficiency and reduce carbon emissions from farm to table.

Detailed info on the products >> [HERE](#)

NeoCharge – Shortcut to Low-Charge



NeoCharge is a game changer in industrial refrigeration. This unique yet simple technology reduces the charge in both new and existing systems. The solution reduces energy costs by up to 20% and can increase the capacity by up to 40%. With easy installation in any type of system, NeoCharge gives you a shortcut to low-charge.

Detailed info on the solution >> [HERE](#)

CO₂ for Large-Scale Industrial Systems



Danfoss has a full line of large components for industrial CO₂ transcritical systems. As the food industry transitions to natural refrigerants, CO₂ can be a sustainable, energy-efficient option that offers strong benefits for industrial applications when used with the right solution. Danfoss has worked with CO₂ industrial refrigeration solutions for over 20 years and has an extensive product lineup that supports both subcritical and transcritical applications.

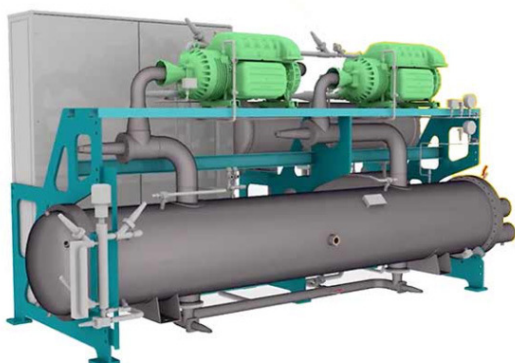
Read more >> [HERE](#)

Process Heating & Cooling Solutions



Industrial Heat Pumps (IHPs) play a critical role in decarbonizing industries such as Food & Beverage, Pulp & Paper, Chemicals, Textiles, etc. Danfoss is addressing the increasing demand for IHPs by offering compressors, heat exchangers, components, and controls capable of achieving elevated temperatures required for various processes.

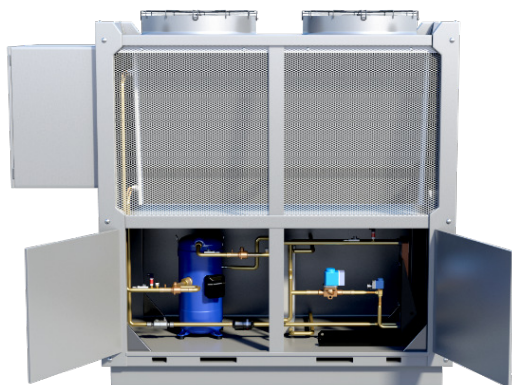
Detailed info on the solutions >> [HERE](#)



Cold storage in the food chain is a key driver of Scope 3 emissions, which account for 80% of a typical retailer's emissions. Danfoss provides efficient cooling technologies helping reduce carbon footprints and meet net zero targets.

Detailed info on the solutions >> [HERE](#)

Comfort Heating & Cooling Solutions



Heat pumps are essential to the modern heating and cooling of residential and commercial spaces. Using existing external energy sources like brine, water, and air for heating, cooling, and heat recovery makes heat pumps a highly efficient way to decarbonize the cooling and heating sector, including in renovation projects. Danfoss offers innovative solutions for many different types of heat pumps, with natural and low-GWP refrigerants.

Detailed info on the solutions >> [HERE](#)

We really hope you enjoyed reading this special edition of Tech Insider!
If you have any further questions or would like to find out more, please don't hesitate to contact your local Danfoss sales representative or use the contact details below.

Details for Additional Information

UK/IE

[Cooling United Support Hub](#)

[Support Made Easy](#)

customerservice.uk@danfoss.com

customerservice.ie@danfoss.com

Customer Service UK & IE tel: 0330 808 6888

Denmark

[Cooling United Support Hub](#)

[Support Made Easy](#)

kundeservice.dk@danfoss.com

Kundeservice tel: 69 91 80 80

Norway

[Cooling United Support Hub](#)

[Support Made Easy](#)

kundeservice.no@danfoss.com

Kundeservice tel: 23 96 71 00

Sweden

[Cooling United Support Hub](#)

[Support Made Easy](#)

kundeservice.se@danfoss.com

Finland

[Cooling United Support Hub](#)

[Support Made Easy](#)

asiakaspalvelu.fi@danfoss.com

Asiakaspalvelu puh: 0753 251 100

Estonia

klienditeenindus.ee@danfoss.com

Klienditeenindus tel: +372 6681 380

Latvia

klientuserviss.lv@danfoss.com

Klientu serviss tel: +371 6733 9166

Lithuania

klientucentras.lt@danfoss.com

Klientų centras tel: +370 5214 0043

Kundeservice tel: 010 888 7400