



## Widest low-GWP portfolio

of cold room and  
refrigerated locker  
solutions

ENGINEERING  
TOMORROW



eBrochure | Online Grocery Solutions

# Online Grocery Solutions

Online grocery is booming. Pick-up points and refrigerated lockers make shopping easy for busy, on-the-go consumers—and are a profitable new business model for grocers. And while many grocers are well on their way with click-and-collect locations, the need for reliable, energy-efficient, and intelligent remote cold storage is only increasing.

**Discover how we can help refrigerated locker and cold room manufacturers build safer, smarter, and greener systems with our leading portfolio of energy-efficient, sustainable solutions.**

**> START HERE**

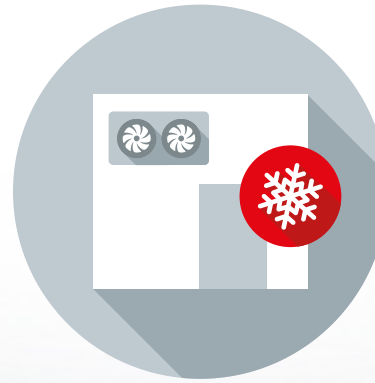
# Your one-stop-shop

## for click-and-collect cooling systems

Navigate through this e-brochure by  
clicking on the different tabs and menu icons.



New opportunities  
for **click-and-  
collect cooling**



Solutions for  
**drive-up  
cold rooms**



Solutions for  
**refrigerated  
lockers**



New opportunities  
for click-and-  
collect cooling



Solutions for  
pick-up point  
cold rooms



Solutions for  
refrigerated  
lockers

# New opportunities for **click-and-collect** **cooling systems**

Grocery store owners are actively expanding their businesses with click-and-collect cooling systems—creating exciting new opportunities for refrigerated locker and cold room manufacturers.

## Discover the widest portfolio of click-and-collect cooling solutions

We can help you build durable, A2L- and A3-ready click-and-collect cooling systems with a leading portfolio of products and solutions, application expertise, and the facilities to develop and test designs.

## Our portfolio meets grocers and retailers' key requirements, such as:

- Boosted energy efficiency
- Reduced CO<sub>2</sub> footprint
- Precise temperature control
- Remote temperature monitoring
- Alarms activating immediate response to irregularities
- Automatic HACCP records
- Reduced food loss and increased cost savings

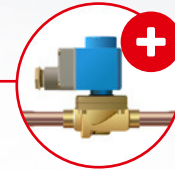




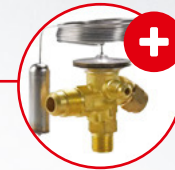
# Complete

- Precise room temperature control
- Switches off/on flow via a solenoid valve
- Several sensor inputs

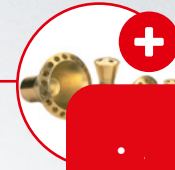
- Simple wiring and programming
- Defrost management functions
- High safety with differential magnetothermal circuit breaker and alarms signaling
- Easy Modbus connection



Solenoid valve



Thermostatic expansion valve



Differential pressure sensor

- Indicates moisture in the refrigerant
- Shows if flashing occurs before the expansion valve
- Used for monitoring the liquid refrigerant condition



- Improves system reliability enabling lower maintenance
- Used for hot gas defrost, pump-down and other applications
- Dual voltage coil provides options



Thermostat



Electron controller

## TEMPERATURE CONTROL

- Protects product
- Reduces food waste
- Saves time

- 24/7 real-time monitoring
- Alarms by phone
- Automatic HMI
- Remote temperature control

- Ultimate value for your retailer customers bringing asset performance, operational efficiency and energy efficiency
- Scalable services from standalone equipment to full store management
- Actionable insights to reduce downtime, and food waste



## SOLUTIONS FOR CONDENSING UNITS OR PACKAGED SYSTEMS



Connectivity device



App-based solution



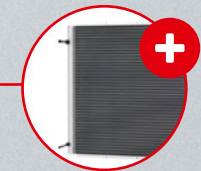
Cloud services



Refrigeration drive



Fan-speed controller



Heat exchanger

- Dedicated for variable speed compressors
- Oil return management options



reduces the risk of failure



corrosion resistant compared with other condensers

opportunities and controlling



Solutions for point of sale systems



Solutions for integrated systems

- From 0.2 to 26 kW for positive and negative temperature applications
- Fixed speed and variable speed technology for greater efficiency and precision cooling
- Compatible with A2L refrigerants (R1234yf, R454C, R455A) and R290 for smaller sizes

0.2 to 26 kW  
 1/2 ton or bare units to  
 10 ton  
 Low GWP  
 R1234yf, R454C, R455A,  
 R290  
 Efficient, reliable, low

#### REDUCE REFRIGERANT CHARGE

Heat exchanger

- High reliability pressure safety switches
- Available as single- or dual-pressure switches
- Wide range of types and pressure ranges

- Controls the refrigerant flow to the evaporator
- Accurate superheat control improving energy efficiency of the system & ensuring compressor reliability
- Stainless steel hermetic valve

- Indicates moisture in the refrigerant
- Shows if flashing occurs before the expansion valve
- Used for monitoring the liquid refrigerant condition

- Filters and retains moisture, debris and small foreign particles
- DML type ensures high and fast moisture retention

(operation)

- Ultimate value for your retailer customers bringing asset operational energy efficiency
- Protects perishable stock
- Reduces food loss costs
- Saves time and money

- 24/7 real-time temperature monitoring

- Helps maintain temperature
- Extended product life
- Modular design to more compact
- Built-in CANbus and various protocols
- For temperature control
- Temperature range -50°C to +50°C
- Complete installation



REDUCE CO2 EMISSIONS



Connectivity device



App-based solution



Cloud services



Electronic controller



Temperature sensor

PRECISION



New opportunities for click-and-collect cooling



Solutions for pick-up point cold rooms



Solutions for refrigerated lockers



Speed roller

# Ready to **learn more?**



**Explore our complete portfolio in our Low-GWP eBook**

> **Learn more**



**Accelerate the refrigerant transition and turn down climate impact**

> **Learn more**



**Talk to our experts in the Danfoss Application Development centers**

> **Learn more**



**Visit our websites**

> **Cold rooms**

> **Lockers**



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