ENGINEERING TOMORROW

Danfoss solutions to **maximize the performance** of your Glass Door Merchandiser

4

simple steps
to get the best
out of your GDM

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4 SIMPLE STEPS to reduce energy bill and environmental footprint

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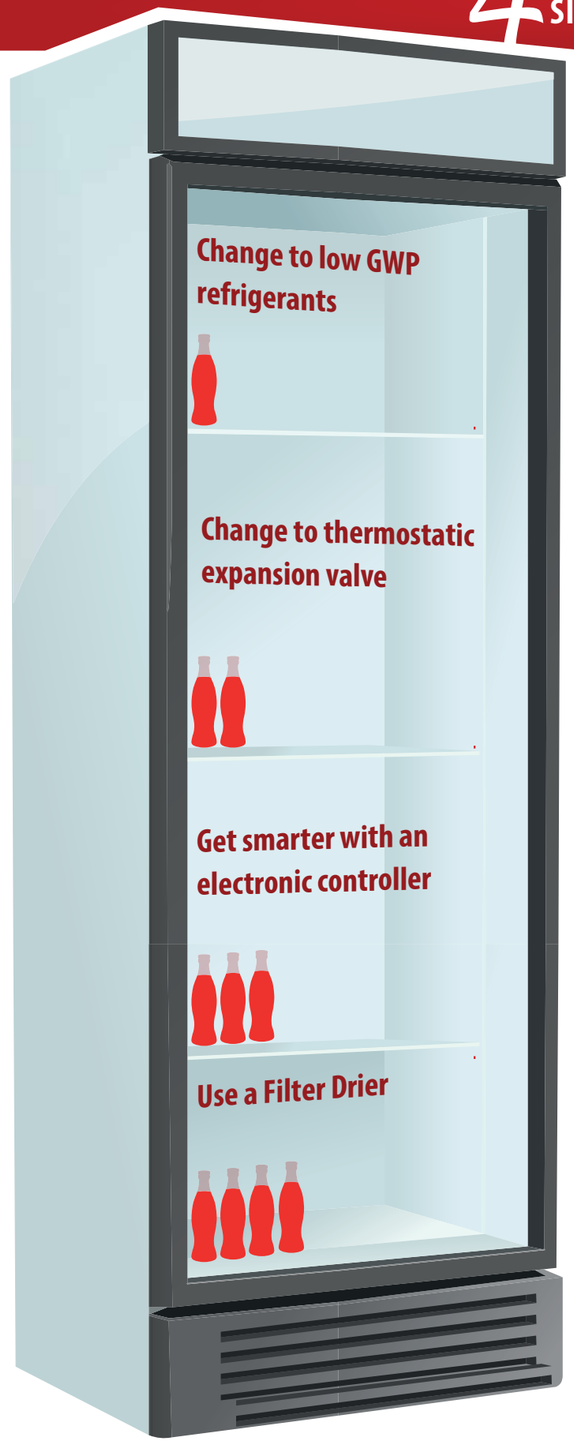

Low GWP

Low GWP refrigerants enable improved energy efficiency. It is the parameter that provides the largest positive impact on the carbon footprint.

Propane

- Safety standards and building codes are being addressed to ensure safe implementation
- Good thermodynamic efficiency
- The relative refrigerant cost is similar to HFC systems
- Special competencies are required during service

GWP 3

CO_2

GWP 1 $

- Requires high operating pressures for efficient operation, up to 90 bar (1,323 psi)
- High performance in many applications
- Widely available
- Low price
- Special competencies are required during service

Expansion devices keep the evaporator as full as possible. They ensure that all refrigerant evaporates preventing compressor damage.

Capillary Tube

$

- Low initial cost
- Needs stable ambient environment and static operating conditions

Thermostatic Expansion Valve (TXV)

- Maintains constant superheat across varying loads

Using a TXV instead of a capillary tube

Energy consumption	10% reduction
Pull down time	20% decrease

Energy Management Devices efficiently control the compressor, evaporator fan, cabinet light and defrost heater.

Mechanical Thermostat

- Maintains the desired temperature by switching heating or cooling devices on or off
- Options for automatic and semi-automatic defrost

Electronic Thermostat

- Optimizes fan, defrost heater and light
- Higher accuracy of temperature control
- Voltage protection and condenser protection
- Built-in defrost timer

Electronic Controller

0010 1100

- Advanced energy management software
- Adaptive Defrost
- Easy to program
- Large, easy to read display

Up to 46% energy savings compared to a conventional thermostat

Filter driers ensure a high-performing refrigeration system by eliminating moisture, acids, and solid particles. With these contaminates eliminated, systems are protected against freeze-ups, harmful chemical reactions, and abrasive impurities.

Loose Desiccant with Spun Copper Tube

- Loose beads enclosed in a thin copper casing tube with a built-in wire mesh
- Wide price and quality range
- Less expensive than solid core
- MWP limit is normally around 24 bar (348 psig)

Solid Core with Steel Housing

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- Solid core enclosed in a steel housing with polyester felt mat
- 1.5 in^3 filter drier optimized for hydrocarbon refrigerant use
- MWP up to 46 bar (667 psig)
- High durability and long service life
- Higher moisture adsorption capacity

$

Natural Refrigerants

Thermostatic Expansion Valve

Electronic Controller

Filter Drier

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80 years

The industry's widest expertise at your disposal. We've been looking ahead since 1933.

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