

CO₂ in RETAIL APPLICATIONS

Today, Carbon Dioxide is considered a standard solution when a supermarket chain is developing new projects. Political (see Kyoto Protocol and new legislation restrictions), economic, environmental, and thermodynamic advantages have made this refrigerant, in most cases, superior by comparison to others. Because of advancements made in recent years, Carbon Dioxide is one of the most suitable and available GREEN solutions present in the market today.

Dixell has always given special attention to Environmental and Energy Saving Solutions and has developed systems with CO₂ refrigerant management, which suits the needs of Contractors and OEMs in the Commercial Refrigeration field. Currently we can offer a complete controller range for CO₂ applications in subcritical and transcritical plants both for LT and MT sections.



THE INTEREST IN CO₂ BEGAN WITH THE KYOTO PROTOCOL (1997) THAT ASKS THE 160 NATIONS THAT SIGNED THIS AGREEMENT TO REDUCE THE POLLUTANT EMISSIONS PRODUCED BY GREENHOUSE GASES. TODAY THE INTEREST IS MUCH GREATER BECAUSE OF NEW LEGISLATION THAT IMPOSES NEW RESTRICTIONS ON HFC USE IN 2018.

CO₂ ADVANTAGES

- Natural gas (OPD=0 – GWP=1)
- Nonflammable
- Non-toxic
- Compatible with most common materials
- Cost effective
- High energy efficiency

DIXELL SOLUTION ADVANTAGES

- Easy to install
- Easy to adjust
- Cost effective
- High efficiency
- Complete for LT and MT

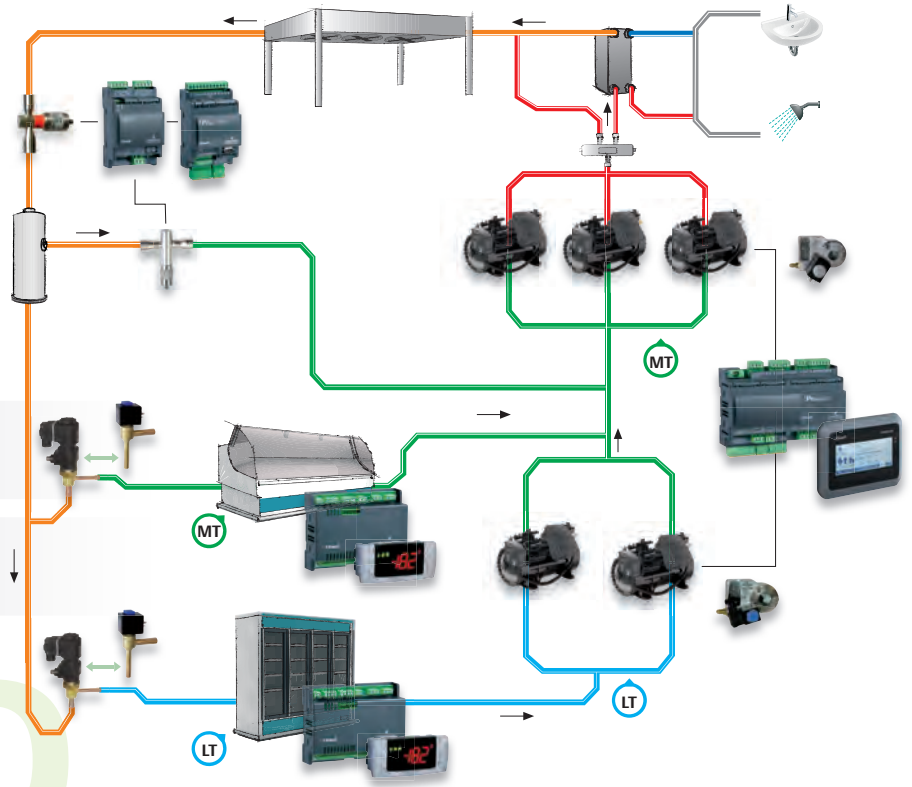
TRANSCRITICAL SYSTEM

(Booster Solution)

This advanced solution allows you to have a complete GREEN application with the use of CO₂ as unique refrigerant fluid. With Dixell's industry expertise and experience, we provide a complete solution that allows you to optimally manage advanced and innovative plants.

iProRACK: compressor rack controller
IPRC02D: gas cooler pressure regulator
XEV20D: electronic expansion valve driver

XM600: cabinet controller
EX3: electronic expansion valve



CO₂

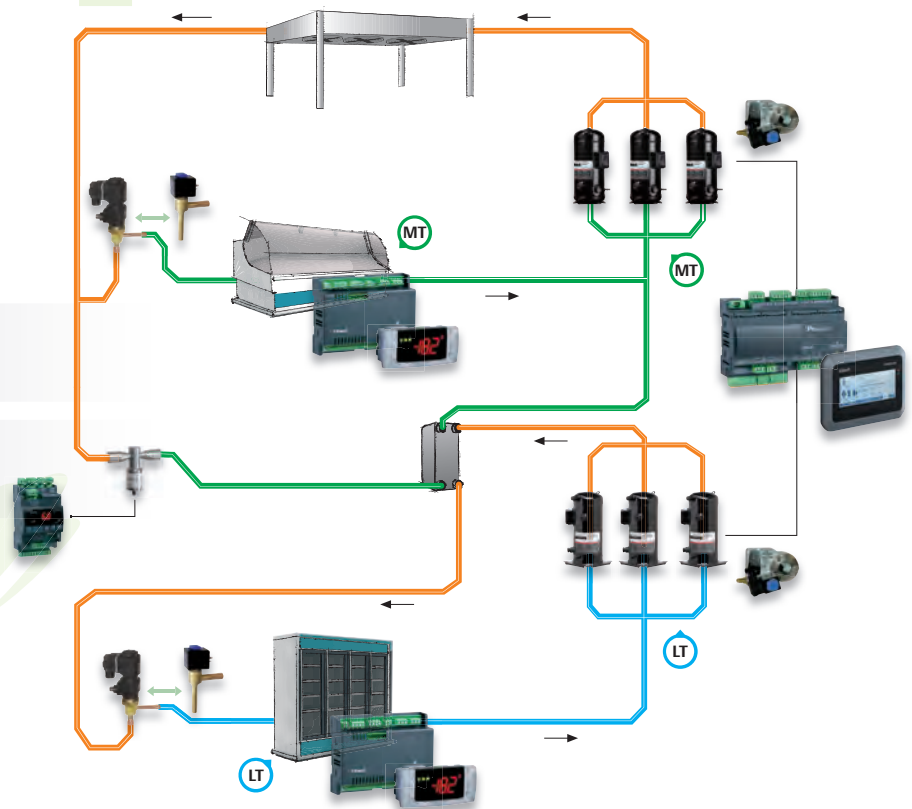
SUBCRITICAL SYSTEM

(Cascade Solution)

A partial GREEN solution that uses natural fluid, R744 is used only in an LT application while an HFC refrigerant is used in the MT plant.

iProRACK: compressor rack controller
XEV32D: electronic expansion valve driver

XM600: cabinet controller
EX3: electronic expansion valve



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