



# Purity

## THE NATURAL ALTERNATIVE

Hussmann is proud to offer a leading transcritical CO<sub>2</sub> system to the North American market.

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**HIGH EFFICIENCY, MULTIPLE COMPRESSOR  
CO<sub>2</sub> REFRIGERATION SYSTEM**

For commercial applications using natural refrigerant

**HUSSMANN®**

Enabling excellence in food retailing.

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# Purity

## TRANSCRITICAL CO<sub>2</sub> REFRIGERATION

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### Industry Leading CO<sub>2</sub> Refrigeration Technology for Food Store Applications

The Purity offering is a multiple compressor system that uses R744 (CO<sub>2</sub>) exclusively. This natural refrigerant is relatively inexpensive, readily available, and has virtually no direct environmental impact in the amounts used for refrigeration.

Purity operates efficiently in low, medium, and high temperature applications. The Purity system is optimized for an operating range of 15 to 225 tons, and it is highly adaptable for use in most climatic conditions.

### Purity: the Energy Efficient, Natural Alternative

The Purity system provides superior energy efficiency when compared to many other CO<sub>2</sub> options and to many other traditional refrigeration alternatives. The unique technology behind Purity allows it to be installed in southern climates and still operate at favorable energy efficiency levels.

Each Purity system is designed with precise line sizing to limit pressure losses, increase efficiency and enhance performance.



*GreenChill is an EPA partnership with food retailers to reduce refrigerant emissions and decrease their impact on the ozone layer and climate change by helping them adopt sustainable refrigeration technologies and best environmental practices. Many stores using the Purity system have been awarded GreenChill Platinum Certification.*

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## Superior Reliability

The Purity system includes many design features to help ensure reliable performance.

- 30-min battery back-up and soft start
- Low pressure oiling system
- Suction line heat exchangers

## Custom Purity Systems Include These Options:

- Moderated gas defrost system – reduces thermal shock, helps improve reliability
  - Various heat recovery options
  - Mechanical sub-cooling and adiabatic gas coolers for Southern Climates
  - Power failure protection optionally available
  - Various controller options include Danfoss, CPC, MT, and others
  - Store Connect predictive diagnostics
  - Purity Plus for dehumidification
  - Loop or branch circuiting
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## Summary of Benefits for Food Retailers

- A completely natural refrigerant solution
- Minimal green house gas emissions
- Superior energy efficiency
- Precise compressor suction superheat control for long term reliability
- Minimal operating costs
- Innovative compressor lubrication management system for reliability and performance
- Remote management of system parameters
- Adaptable for efficient operation in southern climates
- Customized, plus variety of options to meet the needs of each customer



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