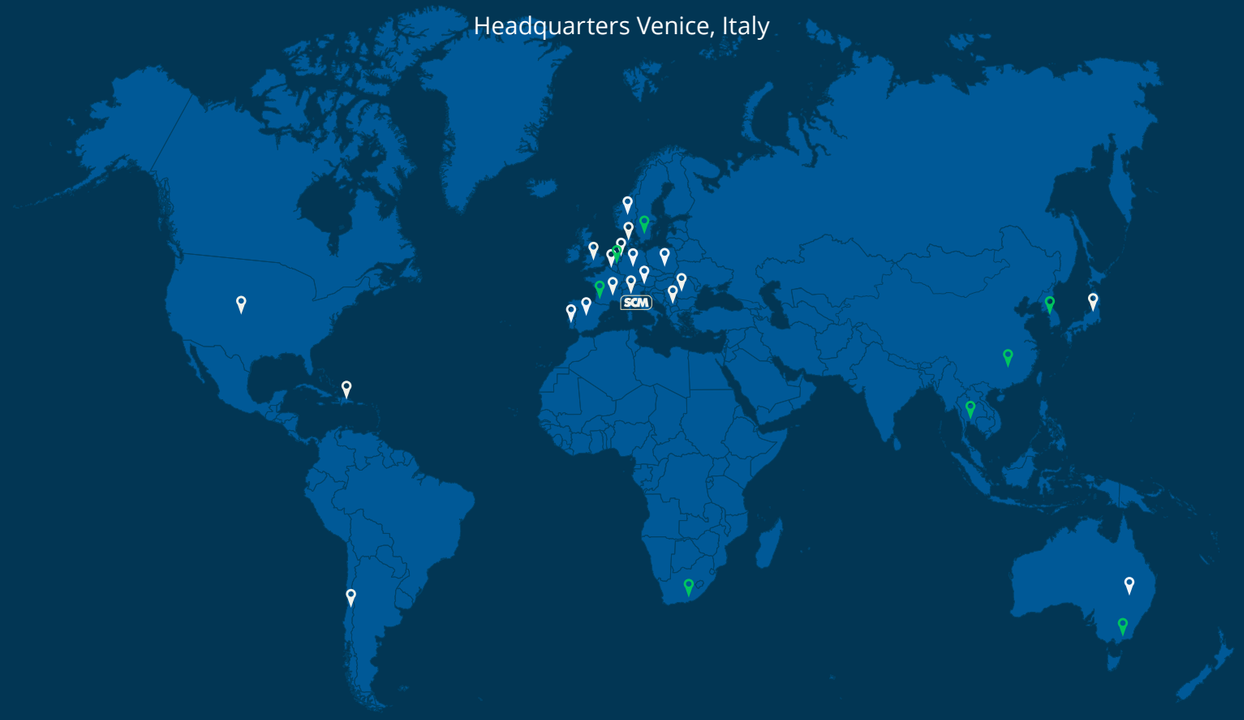
# SCM Frigo Around the World

## A Global $CO_2$ Leader

Headquarters Venice, Italy



SUSTAINABLE COLD SOLUTIONS

BOOSTER MWV

# Transcritical $CO_2$ Booster Rack



## Why $CO_2$?

Natural Refrigerant
R744 ($CO_2$)

- Zero ODP (Ozone Depletion Potential)
- Ultra-low GWP (Global Warming Potential = 1)
- Energy-efficient in most climates
- Non-toxic, non-flammable
- Compliant with F-Gas regulations
- Ideal for commercial & industrial applications

## Main Advantages

- READY-TO-INSTALL ENCLOSURE
- MINIMAL MAINTENANCE
- SCALABLE AND VERSATILE
- ECO-FRIENDLY SOLUTION
- COMPACT VERTICAL DESIGN
- ENERGY EFFICIENCY
- LOW NOISE

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Member of CISQ Federation
RINA CERTIFIED MANAGEMENT SYSTEM
ISO 9001 - ISO 14001

A BEIJER REF Company

We know the art of achieving
*a perfect temperature*

BEIJER REF

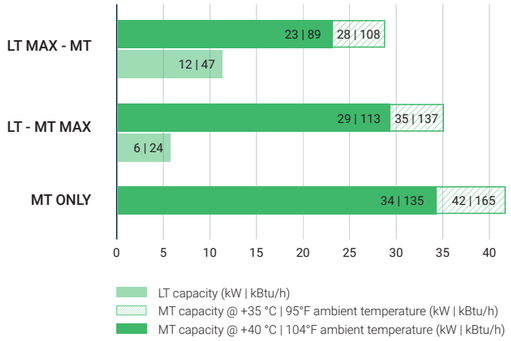
BOOSTER MWV

# TRANSCRITICAL CO2 BOOSTER RACK

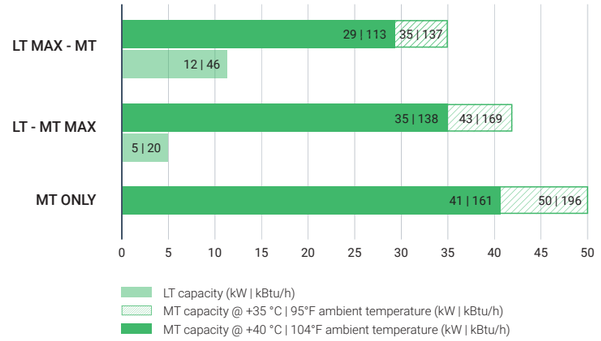
MWV range is a new addition to the CO2 transcritical booster range, designed in a vertical configuration to fit within a europallet footprint and delivered inside an enclosure. Available with Bitzer reciprocating or Copeland scroll compressors, it offers flexible MT and LT configurations for installations where floor space is limited. A CAREL low pressure (LP) modulating ejector is available as an option for models with piston compressors, while the scroll version features vapour injection technology to boost efficiency in warm climates.

## Cooling Capacity

### PISTON VERSION




### SCOLL VERSION




## Standard Accessories

PISTON VERSION

- MT compressor with stepless capacity modulation 10-100% (Varistep)
- Electronic oil level regulator on each compressor

SCROLL VERSION

- Leading MT compressor with BPM motor and frequency inverter capacity modulation 25-100%
- DVI (Dynamic Vapor Injection) system

- Replaceable oil filter dryer
- Maintenance free oil separator with integrated oil reservoir
- 64 dm³ liquid receiver with minimum liquid level switch
- PS 120/80/52/30 Bar | 1740/1160/754/435 PSI
- Suction filter strainer MT / LT
- Liquid filter drier with replaceable core
- Suction superheater PHE with modulating bypass valve
- HP / MP stepper motor valves
- Carel pack controller
- Standard enclosure 35 dB(A) @ 10 m (~33 ft)
- Pressure relief valve cabinet installed outside the enclosure
- Full factory testing and parameters setting

## Accessories on Request

PISTON VERSION

- Frequency inverter on leading MT compressor
- Frequency inverter on LT compressor
- LP modulating Ejector (Carel)
- Pack controller Danfoss, Copeland (Dixell), Wurm
- PS 130/80/80/80 Bar | 1885/1160/1160/1160 PSI

SCROLL VERSION

- PS 130/80/80/80 Bar | 1885/1160/1160/1160 PSI
- Frequency inverter on LT compressor

## Spare accessories

- Energy meter
- V3V bypass gas cooler
- Heat Recovery module with 3-way bypass valve
- Pressure relief valve cabinet

**TWO TECHNOLOGIES,** OPTIMISED PERFORMANCE

**PISTON VERSION**

**CRII CAPACITY CONTROL**
Stepless capacity modulation for maximum adaptability at partial loads.

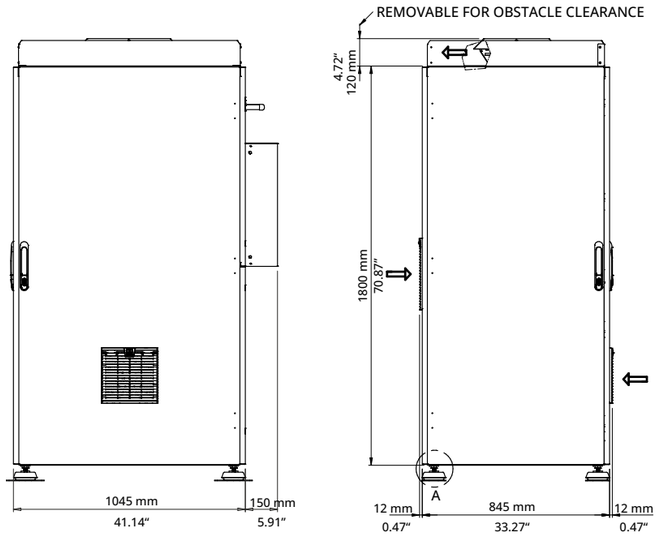
**LP EJECTOR OPTION**
Enhances system efficiency by recovering expansion energy and increasing cooling capacity.

**SCROLL VERSION**

**DVI TECHNOLOGY INCLUDED**
Dynamic Vapour Injection for higher efficiency and capacity, especially in warm climates.

SAME FOOTPRINT.
DIFFERENT NEEDS.
**THE RIGHT TECHNOLOGY.**

## Dimensional Data




## Additional Features & Benefits

### LP Ejector



**CAREL EmJ ELECTRONIC MODULATING EJECTOR**

Recovers CO2 expansion energy to reduce compressor work and increase system efficiency. **Continuous electronic modulation** automatically adapts capacity to load and operating conditions, delivering efficient performance across different climates and especially under warm and part-load condition.

### ME COMPRESSOR



**BITZER ECOLINE ME SERIES FOR SUBCRITICAL CO2**

Designed for subcritical CO2 applications, the ECOLINE ME series combines high standstill pressures, high efficiency, smooth running and high reliability with the natural refrigerant CO2. Available for both medium- and low-temperature applications, the range offers broad capacity coverage for commercial and industrial refrigeration.