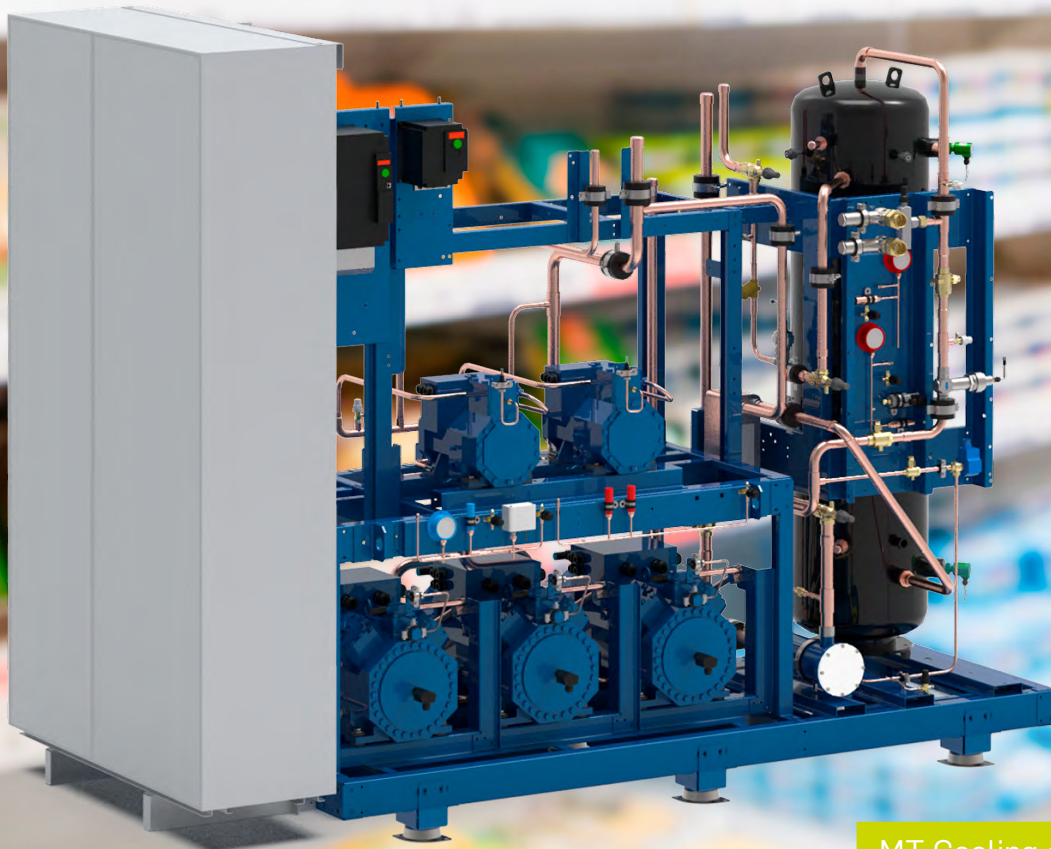


**PROFROID**

# Minicoool<sub>2</sub> compact

CO<sub>2</sub> transcritical refrigeration systems for convenience stores and supermarkets



MT Cooling capacity: **45-190 kW**

LT Cooling capacity: **0-57 kW**

[www.profroid.com](http://www.profroid.com)





# MiniCO<sub>2</sub>OL<sup>®</sup> Compact Standard

Our new range of MiniCO<sub>2</sub>OL<sup>®</sup> Compact S has been designed for small to medium supermarkets as well as for small industrial applications such as cold rooms and bakeries going up to 190kW MT and 56kW LT cooling capacity.

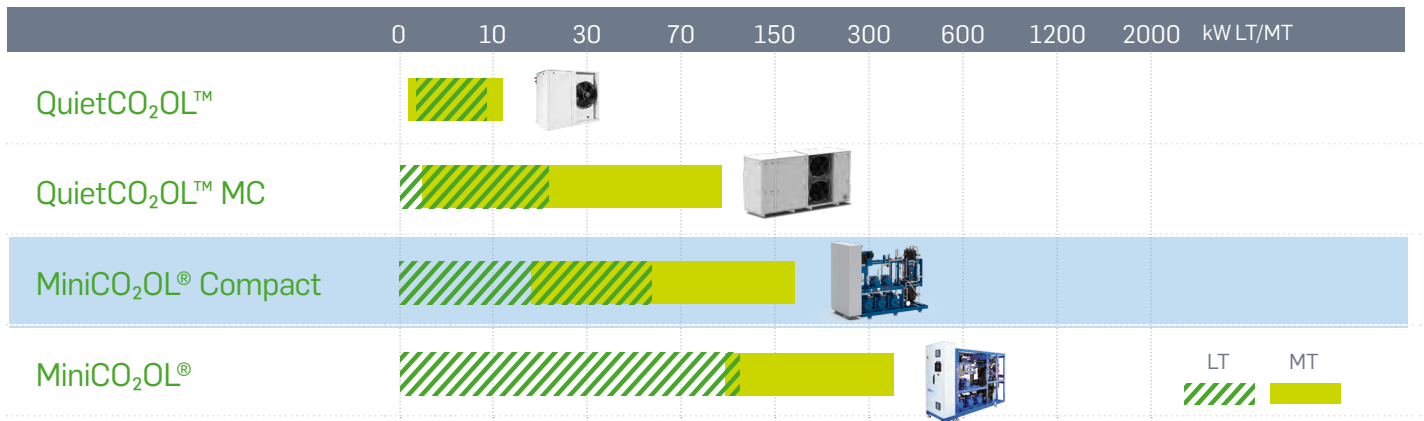
This refrigeration system has been designed and improved based on the track record of the 20.000 CO<sub>2</sub> units installed in Europe and Asia since the beginning of CO<sub>2</sub> refrigeration.

The product range is offering simplicity, easy handling, increased robustness and faster delivery time. It is well adapted for quick installation projects.

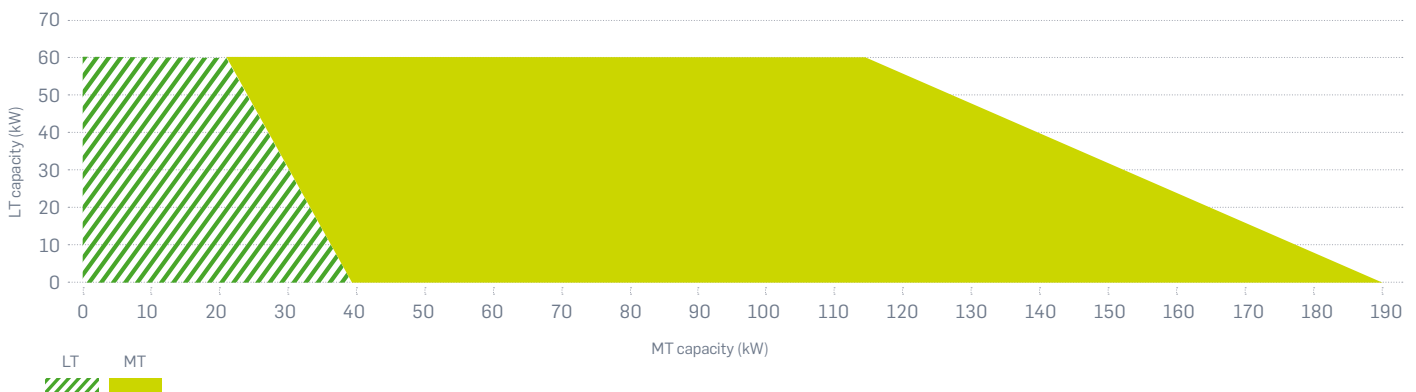
## Summary

|  |   |  |    |
|--|---|--|----|
| ▪ Highlights – efficiency, design and functions  | 4 | ▪ Available options and functions                | 14 |
| ▪ Highlights – selection, delivery & maintenance | 5 | ▪ Heat reclaim function – the easier, the better | 15 |
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| ▪ Compressor configurations                      | 8 |  |    |

## Cooling capacity and applications



## Cooling capacity (kW)



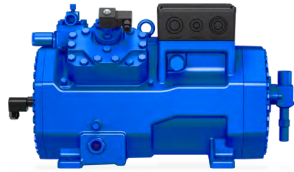
# Highlights – efficiency, design and functions

This CO<sub>2</sub> rack for food retail applications has been designed and manufactured in our center of excellence and manufacturing plant located in Aubagne, France. The working conditions and vibration resistance have been tested in our German laboratory located in Mainz. The 60 bar design pressure and increased volume 188L receiver are perfectly adapted to the current and future usages in stores. The simplicity of the standard mini pack controller requires little CO<sub>2</sub> know-how to be run.

## Optimized energy efficiency



Heat reclaim for heating and/or tap water available in order to re-use dissipated energy and increase COP



Advanced capacity control CR11 for capacity modulation from 10% to 100% on the first MT compressor (option)



Advanced controller available in option with extensive energy management functions: flexible I/O modules add-ons, COP calculation, advanced gas cooler control and pressure optimization

## Robust design and increased quality



Standard 60 bar design pressure



Vibration & robustness test performed in our German laboratory



Stable frame convenient to lift, with removable attachment points

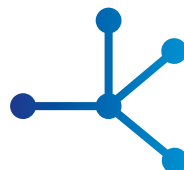


Fully standardized production according to Carrier Excellence™ quality process

## Simplified control panel and connectivity functions



Little CO<sub>2</sub> know-how required thanks to the simple and intuitive mini pack controller



Get access to the pack data and adjust the parameters in real time through a supervision or a gateway, by using the well known Modbus protocol



Less complexity in the electrical panel for the same protection level



# Highlights – selection, delivery & maintenance

The system and the options are fully standardized, which ensures a high quality level, optimized order management and optimized delivery time. A particular attention has been paid to the accessibility and practicality with: an open top frame, the main components labeled (option) and a big size receiver of 300L (option) for more flexibility and safety.

## Easier to configure

### **Cool Systems Select**



Find the right configuration thanks to Cool System Select online configurator (release in progress)

Clear list of standard options with their benefits (safety, energy efficiency, modularity, customer support)

Easy selection table for heat reclaim modules

## Improved delivery time



Fully standardized and industrialized pack design ensuring reduced manufacturing time



Automated technical configuration and order processing workflow

## Better accessibility and maintenance



Open frame for better access to components, improved compressor replacement with extra space and clearly identified cable trays



Labeling of all critical component in option

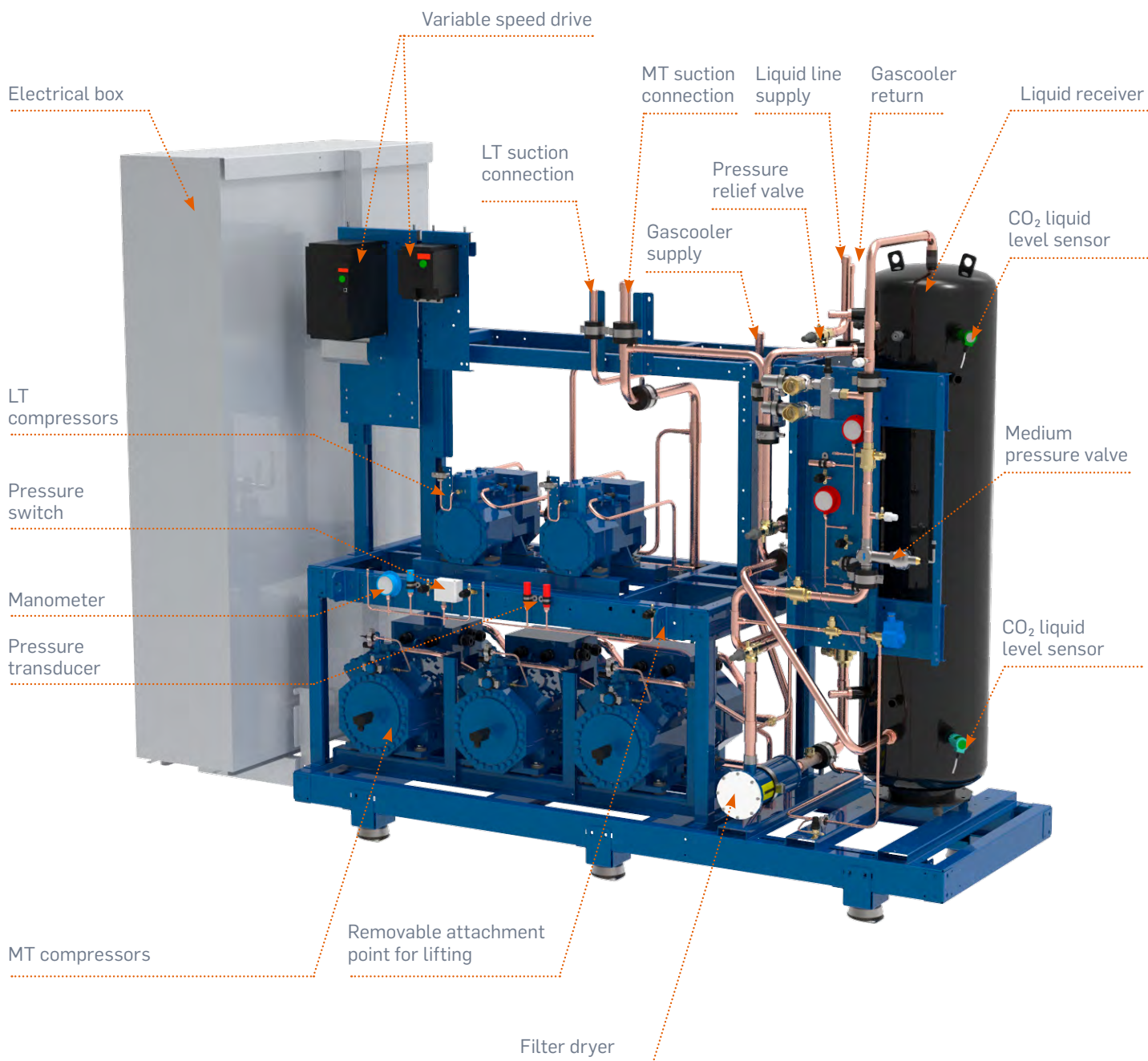


One big size 300L receiver available instead of two receivers for more simplicity



Support for the first commissioning by our own experts in option, and spare parts available across all European countries

# Components and connection points



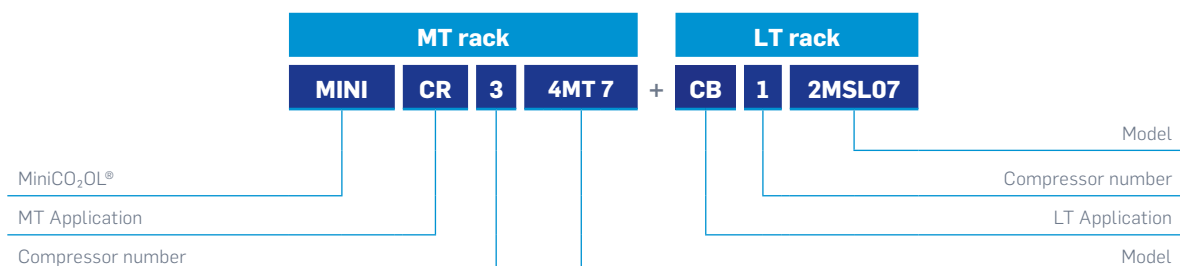
# Standard technical features

| General information                                |   |
|--|---|
| Compressor configurations (MTxLT)                  | 3x2 / 3x1 / 3x0   |
| Number of MT compressors                           | 3   |
| Number of LT compressors                           | 0 to 2  |
| Max cooling capacity MT*                           | 190 kW  |
| Max cooling capacity LT*                           | 56 kW   |
| Evaporating range (MT/LT)                          | -12°C to -5°C / -40°C to -30°C                                |
| Power supply voltage (V)                           | 400V / 3 Phases / 50Hz  |
| Weight (kg) (without electrical enclosure)         | From 825 kg to 1250 kg  |
| Liquid receiver volume                             | 188L as standard<br>300L in option                            |
| Frame  |   |
| Frame  | Steel profiles frame<br>RAL5010<br>Antivibration pads mounted |
| Height   | 1995 mm   |
| Length   | 2344 mm   |
| Length + e-cabinet                                 | 2842 mm   |
| Length + e-cabinet + heat reclaim                  | 3355 mm   |
| Width  | 850 mm  |
| Design pressure                                    |   |
| High pressure                                      | 120 bar   |
| Receiver pressure                                  | 60 bar  |
| MT suction pressure                                | 52 bar  |
| LT suction pressure                                | 30 bar  |
| Controller   |   |
| Controller brands                                  | Danfoss as standard<br>Carel and Eckelmann in option          |
| Heat reclaim (heating + tap water can be combined) |   |
| Heat reclaim range - heating (kW)                  | Up to 204 kW  |
| Heat reclaim range - tap water (kW)                | Up to 50 kW   |
| Electrical cabinet                                 |   |
| Neutral system                                     | TN as standard  |
| Short-circuit current (kA)                         | 10 kA   |
| Other components                                   |   |
| HP & MP valves type                                | CCMT (HP) / CCM (MP)  |
| Compressors  | Semi-hermetic   |
| Frequency inverter                                 | 400V, 30Hz to 55Hz (MT compressor)                            |
| PED technical documentation                        | Included  |

\* Conditions: -30°C evap./-5°C 0K subcooling 20K superheating

\* Conditions: -5°C evap./38°C gascooler outlet - 94bar / 0K subcooling 15K superheating

## Model designation



# Compressor configurations

| LT/MT cooling capacity |                  |                                | Compressor types               |          |           |           |           |           |
|------------------------|------------------|--------------------------------|--------------------------------|----------|-----------|-----------|-----------|-----------|
| LT capacity (kW)       | MT capacity (kW) | Designation                    | CP LT1                         | CP LT2   | CP MT1    | CP MT2    | CP MT3    |           |
| 0                      | 44,5             | MINI CR3-4MT 7                 | -                              | -        | 4MTE- 7KC | 4MTE- 7KC | 4MTE- 7KC |           |
|                        | 51,4             | MINI CR3-4M-4M-4K S            | -                              | -        | 4MTE- 7KC | 4MTE- 7KC | 4KTE-10KC |           |
|                        | 52,1             | MINI CR3-4K-4M-4M S            | -                              | -        | 4KTE-10KC | 4MTE- 7KC | 4MTE- 7KC |           |
|                        | 58,4             | MINI CR3-4M-4K-4K S            | -                              | -        | 4MTE- 7KC | 4KTE-10KC | 4KTE-10KC |           |
|                        | 66               | MINI CR3-4KT10 S               | -                              | -        | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |           |
|                        | 85,7             | MINI CR3-4HT15 S               | -                              | -        | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |           |
|                        | 98,3             | MINI CR3-4H-4H-4F S            | -                              | -        | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |           |
|                        | 111              | MINI CR3-4H-4F-4F S            | -                              | -        | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |           |
|                        | 124,9            | MINI CR3-4FT20 S               | -                              | -        | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |           |
|                        | 146,5            | MINI CR3-4F-4D-4D S            | -                              | -        | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |           |
|                        | 158,4            | MINI CR3-4DT25 S               | -                              | -        | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |           |
|                        | 165,5            | MINI CR3-4F-4C-4C S            | -                              | -        | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |           |
|                        | 187,9            | MINI CR3-4CT30 S               | -                              | -        | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |           |
|                        | 3,8              | 39,8                           | MINI CR3-4MT 7+CB1-2MSL07 S    | 2MSL-7KB | 0         | 4MTE- 7KC | 4MTE- 7KC | 4MTE- 7KC |
|                        |                  | 46,7                           | MINI CR3-4M-4M-4K+CB1-2MSL07 S | 2MSL-7KB | 0         | 4MTE- 7KC | 4MTE- 7KC | 4KTE-10KC |
|                        |                  | 47,4                           | MINI CR3-4K-4M-4M+CB1-2MSL07 S | 2MSL-7KB | 0         | 4KTE-10KC | 4MTE- 7KC | 4MTE- 7KC |
|                        |                  | 53,7                           | MINI CR3-4M-4K-4K+CB1-2MSL07 S | 2MSL-7KB | 0         | 4MTE- 7KC | 4KTE-10KC | 4KTE-10KC |
|                        |                  | 61,3                           | MINI CR3-4KT10+CB1-2MSL07 S    | 2MSL-7KB | 0         | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |
| 81                     |                  | MINI CR3-4HT15+CB1-2MSL07 S    | 2MSL-7KB                       | 0        | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |           |
| 93,6                   |                  | MINI CR3-4H-4H-4F+CB1-2MSL07 S | 2MSL-7KB                       | 0        | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |           |
| 106,3                  |                  | MINI CR3-4H-4F-4F+CB1-2MSL07 S | 2MSL-7KB                       | 0        | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |           |
| 120,2                  |                  | MINI CR3-4FT20+CB1-2MSL07 S    | 2MSL-7KB                       | 0        | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |           |
| 141,8                  |                  | MINI CR3-4F-4D-4D+CB1-2MSL07 S | 2MSL-7KB                       | 0        | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |           |
| 153,7                  |                  | MINI CR3-4DT25+CB1-2MS071 S    | 2MSL-7KB                       | 0        | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |           |
| 160,8                  |                  | MINI CR3-4F-4C-4C+CB1-2MSL07 S | 2MSL-7KB                       | 0        | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |           |
| 183,2                  |                  | MINI CR3-4CT30+CB1-2MSL07 S    | 2MSL-7KB                       | 0        | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |           |
| 6,3                    |                  | 36,8                           | MINI CR3-4MT 7+CB1-2KSL 1 S    | 2KSL-1KB | 0         | 4MTE- 7KC | 4MTE- 7KC | 4MTE- 7KC |
|                        |                  | 43,7                           | MINI CR3-4M-4M-4K+CB1-2KSL 1 S | 2KSL-1KB | 0         | 4MTE- 7KC | 4MTE- 7KC | 4KTE-10KC |
|                        |                  | 44,4                           | MINI CR3-4K-4M-4M+CB1-2KSL 1 S | 2KSL-1KB | 0         | 4KTE-10KC | 4MTE- 7KC | 4MTE- 7KC |
|                        |                  | 50,7                           | MINI CR3-4M-4K-4K+CB1-2KSL 1 S | 2KSL-1KB | 0         | 4MTE- 7KC | 4KTE-10KC | 4KTE-10KC |
|                        |                  | 58,3                           | MINI CR3-4KT10+CB1-2KSL 1 S    | 2KSL-1KB | 0         | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |
|                        | 78               | MINI CR3-4HT15+CB1-2KSL 1 S    | 2KSL-1KB                       | 0        | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |           |
|                        | 90,6             | MINI CR3-4H-4H-4F+CB1-2KSL 1 S | 2KSL-1KB                       | 0        | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |           |
|                        | 103,3            | MINI CR3-4H-4F-4F+CB1-2KSL 1 S | 2KSL-1KB                       | 0        | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |           |
|                        | 117,2            | MINI CR3-4FT20+CB1-2KSL 1 S    | 2KSL-1KB                       | 0        | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |           |
|                        | 138,8            | MINI CR3-4F-4D-4D+CB1-2KSL 1 S | 2KSL-1KB                       | 0        | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |           |
|                        | 150,7            | MINI CR3-4DT25+CB1-2KSL 1 S    | 2KSL-1KB                       | 0        | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |           |
|                        | 157,8            | MINI CR3-4F-4C-4C+CB1-2KSL 1 S | 2KSL-1KB                       | 0        | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |           |
|                        | 180,2            | MINI CR3-4CT30+CB1-2KSL 1 S    | 2KSL-1KB                       | 0        | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |           |
|                        | 7                | 35,9                           | MINI CR3-4MT 7+CB2-2MSL07 S    | 2MSL-7KB | 2MSL-7KB  | 4MTE- 7KC | 4MTE- 7KC | 4MTE- 7KC |
|                        |                  | 42,8                           | MINI CR3-4M-4M-4K+CB2-2MSL07 S | 2MSL-7KB | 2MSL-7KB  | 4MTE- 7KC | 4MTE- 7KC | 4KTE-10KC |
|                        |                  | 43,5                           | MINI CR3-4K-4M-4M+CB2-2MSL07 S | 2MSL-7KB | 2MSL-7KB  | 4KTE-10KC | 4MTE- 7KC | 4MTE- 7KC |
|                        |                  | 49,8                           | MINI CR3-4M-4K-4K+CB2-2MSL07 S | 2MSL-7KB | 2MSL-7KB  | 4MTE- 7KC | 4KTE-10KC | 4KTE-10KC |
|                        |                  | 57,4                           | MINI CR3-4KT10+CB2-2MSL07 S    | 2MSL-7KB | 2MSL-7KB  | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |
| 77,1                   |                  | MINI CR3-4HT15+CB2-2MSL07 S    | 2MSL-7KB                       | 2MSL-7KB | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |           |
| 89,7                   |                  | MINI CR3-4H-4H-4F+CB2-2MSL07 S | 2MSL-7KB                       | 2MSL-7KB | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |           |
| 102,4                  |                  | MINI CR3-4H-4F-4F+CB2-2MSL07 S | 2MSL-7KB                       | 2MSL-7KB | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |           |
| 116,3                  |                  | MINI CR3-4FT20+CB2-2MSL07 S    | 2MSL-7KB                       | 2MSL-7KB | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |           |
| 137,9                  |                  | MINI CR3-4F-4D-4D+CB2-2MSL07 S | 2MSL-7KB                       | 2MSL-7KB | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |           |
| 149,8                  |                  | MINI CR3-4DT25+CB2-2MS071 S    | 2MSL-7KB                       | 2MSL-7KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |           |
| 156,9                  |                  | MINI CR3-4F-4C-4C+CB2-2MSL07 S | 2MSL-7KB                       | 2MSL-7KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |           |
| 179,3                  |                  | MINI CR3-4CT30+CB2-2MSL07 S    | 2MSL-7KB                       | 2MSL-7KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |           |
| 9,1                    |                  | 33,4                           | MINI CR3-4MT 7+CB2-2M/2K S     | 2MSL-7KB | 2KSL-1KB  | 4MTE- 7KC | 4MTE- 7KC | 4MTE- 7KC |
|                        |                  | 40,3                           | MINI CR3-4M-4M-4K+CB2-2M/2K S  | 2MSL-7KB | 2KSL-1KB  | 4MTE- 7KC | 4MTE- 7KC | 4KTE-10KC |
|                        |                  | 41                             | MINI CR3-4K-4M-4M+CB2-2M/2K S  | 2MSL-7KB | 2KSL-1KB  | 4KTE-10KC | 4MTE- 7KC | 4MTE- 7KC |
|                        |                  | 47,3                           | MINI CR3-4M-4K-4K+CB2-2M/2K S  | 2MSL-7KB | 2KSL-1KB  | 4MTE- 7KC | 4KTE-10KC | 4KTE-10KC |
|                        |                  | 54,9                           | MINI CR3-4KT10+CB2-2M/2K S     | 2MSL-7KB | 2KSL-1KB  | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |
|                        | 74,6             | MINI CR3-4HT15+CB2-2M/2K S     | 2MSL-7KB                       | 2KSL-1KB | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |           |
|                        | 87,2             | MINI CR3-4H-4H-4F+CB2-2M/2K S  | 2MSL-7KB                       | 2KSL-1KB | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |           |
|                        | 99,9             | MINI CR3-4H-4F-4F+CB2-2M/2K S  | 2MSL-7KB                       | 2KSL-1KB | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |           |
|                        | 113,8            | MINI CR3-4FT20+CB2-2M/2K S     | 2MSL-7KB                       | 2KSL-1KB | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |           |
|                        | 135,4            | MINI CR3-4F-4D-4D+CB2-2M/2K S  | 2MSL-7KB                       | 2KSL-1KB | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |           |
|                        | 147,3            | MINI CR3-4DT25+CB2-2M/2K S     | 2MSL-7KB                       | 2KSL-1KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |           |
|                        | 154,4            | MINI CR3-4F-4C-4C+CB2-2M/2K S  | 2MSL-7KB                       | 2KSL-1KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |           |
|                        | 176,8            | MINI CR3-4CT30+CB2-2M/2K S     | 2MSL-7KB                       | 2KSL-1KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |           |
|                        | 10,5             | 31,5                           | MINI CR3-4MT 7+CB2-2M/2J S     | 2MSL-7KB | 2JSL-2KB  | 4MTE- 7KC | 4MTE- 7KC | 4MTE- 7KC |
|                        |                  | 38,4                           | MINI CR3-4M-4M-4K+CB2-2M/2J S  | 2MSL-7KB | 2JSL-2KB  | 4MTE- 7KC | 4MTE- 7KC | 4KTE-10KC |
|                        |                  | 39,1                           | MINI CR3-4K-4M-4M+CB2-2M/2J S  | 2MSL-7KB | 2JSL-2KB  | 4KTE-10KC | 4MTE- 7KC | 4MTE- 7KC |
|                        |                  | 45,4                           | MINI CR3-4M-4K-4K+CB2-2M/2J S  | 2MSL-7KB | 2JSL-2KB  | 4MTE- 7KC | 4KTE-10KC | 4KTE-10KC |
|                        |                  | 53                             | MINI CR3-4KT10+CB2-2M/2J S     | 2MSL-7KB | 2JSL-2KB  | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |
| 72,7                   |                  | MINI CR3-4HT15+CB2-2M/2J S     | 2MSL-7KB                       | 2JSL-2KB | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |           |
| 85,3                   |                  | MINI CR3-4H-4H-4F+CB2-2M/2J S  | 2MSL-7KB                       | 2JSL-2KB | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |           |
| 98                     |                  | MINI CR3-4H-4F-4F+CB2-2M/2J S  | 2MSL-7KB                       | 2JSL-2KB | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |           |
| 111,9                  |                  | MINI CR3-4FT20+CB2-2M/2J S     | 2MSL-7KB                       | 2JSL-2KB | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |           |
| 133,5                  |                  | MINI CR3-4F-4D-4D+CB2-2M/2J S  | 2MSL-7KB                       | 2JSL-2KB | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |           |
| 145,4                  |                  | MINI CR3-4DT25+CB2-2M/2J S     | 2MSL-7KB                       | 2JSL-2KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |           |
| 152,5                  |                  | MINI CR3-4F-4C-4C+CB2-2M/2J S  | 2MSL-7KB                       | 2JSL-2KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |           |
| 174,9                  |                  | MINI CR3-4CT30+CB2-2M/2J S     | 2MSL-7KB                       | 2JSL-2KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |           |

\* Conditions: -30°C evap./-5°C OK subcooling 20K superheating



| Absorbed / rejected power at 55 Hz |                               |                       | Piping diameter  |                       |               |              |              |
|------------------------------------|-------------------------------|-----------------------|------------------|-----------------------|---------------|--------------|--------------|
| Pabs MT<br>- 55 Hz (kW)            | Q gas cooler<br>- 55 Hz (kW)* | Pabs LT rack<br>(kW)* | Discharge pipe ø | Gascooler<br>return ø | Liquid line ø | MT suction ø | LT suction ø |
| 24,9                               | 69,4                          | 0                     | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | -            |
| 28,6                               | 80                            | 0                     | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | -            |
| 29                                 | 81,1                          | 0                     | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | -            |
| 32,3                               | 90,7                          | 0                     | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | -            |
| 36,4                               | 102,4                         | 0                     | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | -            |
| 45,4                               | 131,1                         | 0                     | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | -            |
| 52,7                               | 151                           | 0                     | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | -            |
| 60                                 | 171                           | 0                     | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | -            |
| 68                                 | 192,9                         | 0                     | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | -            |
| 81,3                               | 227,8                         | 0                     | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | -            |
| 88,7                               | 247,1                         | 0                     | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | -            |
| 91                                 | 256,5                         | 0                     | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | -            |
| 103,7                              | 291,6                         | 0                     | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | -            |
| 24,9                               | 69,4                          | 0,9                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "5/8         |
| 28,6                               | 80                            | 0,9                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "5/8         |
| 29                                 | 81,1                          | 0,9                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "5/8         |
| 32,3                               | 90,7                          | 0,9                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "5/8         |
| 36,4                               | 102,4                         | 0,9                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | "5/8         |
| 45,4                               | 131,1                         | 0,9                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "5/8         |
| 52,7                               | 151                           | 0,9                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "5/8         |
| 60                                 | 171                           | 0,9                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "5/8         |
| 68                                 | 192,9                         | 0,9                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "5/8         |
| 81,3                               | 227,8                         | 0,9                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "5/8         |
| 88,7                               | 247,1                         | 0,9                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "5/8         |
| 91                                 | 256,5                         | 0,9                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "5/8         |
| 103,7                              | 291,6                         | 0,9                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "5/8         |
| 24,9                               | 69,4                          | 1,4                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "5/8         |
| 28,6                               | 80                            | 1,4                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "5/8         |
| 29                                 | 81,1                          | 1,4                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "5/8         |
| 32,3                               | 90,7                          | 1,4                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "5/8         |
| 36,4                               | 102,4                         | 1,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | "5/8         |
| 45,4                               | 131,1                         | 1,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "5/8         |
| 52,7                               | 151                           | 1,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "5/8         |
| 60                                 | 171                           | 1,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "5/8         |
| 68                                 | 192,9                         | 1,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "5/8         |
| 81,3                               | 227,8                         | 1,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "5/8         |
| 88,7                               | 247,1                         | 1,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "5/8         |
| 91                                 | 256,5                         | 1,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "5/8         |
| 103,7                              | 291,6                         | 1,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "5/8         |
| 24,9                               | 69,4                          | 1,6                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 28,6                               | 80                            | 1,6                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 29                                 | 81,1                          | 1,6                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 32,3                               | 90,7                          | 1,6                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 36,4                               | 102,4                         | 1,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | "7/8         |
| 45,4                               | 131,1                         | 1,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 52,7                               | 151                           | 1,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 60                                 | 171                           | 1,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 68                                 | 192,9                         | 1,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 81,3                               | 227,8                         | 1,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 88,7                               | 247,1                         | 1,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 91                                 | 256,5                         | 1,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 103,7                              | 291,6                         | 1,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 24,9                               | 69,4                          | 2,0                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 28,6                               | 80                            | 2,0                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 29                                 | 81,1                          | 2,0                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 32,3                               | 90,7                          | 2,0                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 36,4                               | 102,4                         | 2,0                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | "7/8         |
| 45,4                               | 131,1                         | 2,0                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 52,7                               | 151                           | 2,0                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 60                                 | 171                           | 2,0                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 68                                 | 192,9                         | 2,0                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 81,3                               | 227,8                         | 2,0                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 88,7                               | 247,1                         | 2,0                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 91                                 | 256,5                         | 2,0                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 103,7                              | 291,6                         | 2,0                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 24,9                               | 69,4                          | 2,4                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 28,6                               | 80                            | 2,4                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 29                                 | 81,1                          | 2,4                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 32,3                               | 90,7                          | 2,4                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 36,4                               | 102,4                         | 2,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | "7/8         |
| 45,4                               | 131,1                         | 2,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 52,7                               | 151                           | 2,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 60                                 | 171                           | 2,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 68                                 | 192,9                         | 2,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 81,3                               | 227,8                         | 2,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 88,7                               | 247,1                         | 2,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 91                                 | 256,5                         | 2,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 103,7                              | 291,6                         | 2,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |

\* Conditions: -5°C evap./38°C gascooler outlet – 94bar / 0K subcooling 15K superheating

# Compressor configurations

| LT/MT cooling capacity |                  | Compressor types               |                             |          |           |           |           |
|------------------------|------------------|--------------------------------|-----------------------------|----------|-----------|-----------|-----------|
| LT capacity (kW)       | MT capacity (kW) | Designation                    | CP LT1                      | CP LT2   | CP MT1    | CP MT2    | CP MT3    |
| 11.6                   | 30,3             | MINI CR3-4MT 7+CB2-2KSL 1 S    | 2KSL-1KB                    | 2KSL-1KB | 4MTE- 7KC | 4MTE- 7KC | 4MTE- 7KC |
|                        | 37,2             | MINI CR3-4M-4M-4K+CB2-2KSL 1 S | 2KSL-1KB                    | 2KSL-1KB | 4MTE- 7KC | 4MTE- 7KC | 4KTE-10KC |
|                        | 37,9             | MINI CR3-4K-4M-4M+CB2-2KSL 1 S | 2KSL-1KB                    | 2KSL-1KB | 4KTE-10KC | 4MTE- 7KC | 4MTE- 7KC |
|                        | 44,2             | MINI CR3-4M-4K-4K+CB2-2KSL 1 S | 2KSL-1KB                    | 2KSL-1KB | 4MTE- 7KC | 4KTE-10KC | 4KTE-10KC |
|                        | 51,8             | MINI CR3-4KT10+CB2-2KSL 1 S    | 2KSL-1KB                    | 2KSL-1KB | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |
|                        | 71,5             | MINI CR3-4HT15+CB2-2KSL 1 S    | 2KSL-1KB                    | 2KSL-1KB | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |
|                        | 84,1             | MINI CR3-4H-4H-4F+CB2-2KSL 1 S | 2KSL-1KB                    | 2KSL-1KB | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |
|                        | 96,8             | MINI CR3-4H-4F-4F+CB2-2KSL 1 S | 2KSL-1KB                    | 2KSL-1KB | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |
|                        | 110,7            | MINI CR3-4FT20+CB2-2KSL 1 S    | 2KSL-1KB                    | 2KSL-1KB | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |
|                        | 132,3            | MINI CR3-4F-4D-4D+CB2-2KSL 1 S | 2KSL-1KB                    | 2KSL-1KB | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |
|                        | 144,2            | MINI CR3-4DT25+CB2-2KSL 1 S    | 2KSL-1KB                    | 2KSL-1KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |
|                        | 151,3            | MINI CR3-4F-4C-4C+CB2-2KSL 1 S | 2KSL-1KB                    | 2KSL-1KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |
|                        | 173,7            | MINI CR3-4CT30+CB2-2KSL 1 S    | 2KSL-1KB                    | 2KSL-1KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |
|                        | 13.1             | 28,4                           | MINI CR3-4MT 7+CB2-2K/2J S  | 2KSL-1KB | 2JSL-2KB  | 4MTE- 7KC | 4MTE- 7KC |
| 35,3                   |                  | MINI CR3-4M-4M-4K+CB2-2K/2J S  | 2KSL-1KB                    | 2JSL-2KB | 4MTE- 7KC | 4MTE- 7KC | 4KTE-10KC |
| 36                     |                  | MINI CR3-4K-4M-4M+CB2-2K/2J S  | 2KSL-1KB                    | 2JSL-2KB | 4KTE-10KC | 4MTE- 7KC | 4MTE- 7KC |
| 42,3                   |                  | MINI CR3-4M-4K-4K+CB2-2K/2J S  | 2KSL-1KB                    | 2JSL-2KB | 4MTE- 7KC | 4KTE-10KC | 4KTE-10KC |
| 49,9                   |                  | MINI CR3-4KT10+CB2-2K/2J S     | 2KSL-1KB                    | 2JSL-2KB | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |
| 69,6                   |                  | MINI CR3-4HT15+CB2-2K/2J S     | 2KSL-1KB                    | 2JSL-2KB | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |
| 82,2                   |                  | MINI CR3-4H-4H-4F+CB2-2K/2J S  | 2KSL-1KB                    | 2JSL-2KB | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |
| 94,9                   |                  | MINI CR3-4H-4F-4F+CB2-2K/2J S  | 2KSL-1KB                    | 2JSL-2KB | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |
| 108,8                  |                  | MINI CR3-4FT20+CB2-2K/2J S     | 2KSL-1KB                    | 2JSL-2KB | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |
| 130,4                  |                  | MINI CR3-4F-4D-4D+CB2-2K/2J S  | 2KSL-1KB                    | 2JSL-2KB | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |
| 142,3                  |                  | MINI CR3-4DT25+CB2-2K/2J S     | 2KSL-1KB                    | 2JSL-2KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |
| 149,4                  |                  | MINI CR3-4F-4C-4C+CB2-2K/2J S  | 2KSL-1KB                    | 2JSL-2KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |
| 171,8                  |                  | MINI CR3-4CT30+CB2-2K/2H S     | 2KSL-1KB                    | 2JSL-2KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |
| 15.6                   |                  | 25,3                           | MINI CR3-4MT 7+CB2-2JSL 2 S | 2JSL-2KB | 2JSL-2KB  | 4MTE- 7KC | 4MTE- 7KC |
|                        | 32,2             | MINI CR3-4M-4M-4K+CB2-2JSL 2 S | 2JSL-2KB                    | 2JSL-2KB | 4MTE- 7KC | 4MTE- 7KC | 4KTE-10KC |
|                        | 32,9             | MINI CR3-4K-4M-4M+CB2-2JSL 2 S | 2JSL-2KB                    | 2JSL-2KB | 4KTE-10KC | 4MTE- 7KC | 4MTE- 7KC |
|                        | 39,2             | MINI CR3-4M-4K-4K+CB2-2JSL 2 S | 2JSL-2KB                    | 2JSL-2KB | 4MTE- 7KC | 4KTE-10KC | 4KTE-10KC |
|                        | 46,8             | MINI CR3-4KT10+CB2-2JSL 2 S    | 2JSL-2KB                    | 2JSL-2KB | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |
|                        | 66,5             | MINI CR3-4HT15+CB2-2JSL 2 S    | 2JSL-2KB                    | 2JSL-2KB | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |
|                        | 79,1             | MINI CR3-4H-4H-4F+CB2-2JSL 2 S | 2JSL-2KB                    | 2JSL-2KB | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |
|                        | 91,8             | MINI CR3-4H-4F-4F+CB2-2JSL 2 S | 2JSL-2KB                    | 2JSL-2KB | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |
|                        | 105,7            | MINI CR3-4FT20+CB2-2JSL 2 S    | 2JSL-2KB                    | 2JSL-2KB | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |
|                        | 127,3            | MINI CR3-4F-4D-4D+CB2-2JSL 2 S | 2JSL-2KB                    | 2JSL-2KB | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |
|                        | 139,2            | MINI CR3-4DT25+CB2-2JSL 2 S    | 2JSL-2KB                    | 2JSL-2KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |
|                        | 146,3            | MINI CR3-4F-4C-4C+CB2-2JSL 2 S | 2JSL-2KB                    | 2JSL-2KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |
|                        | 168,7            | MINI CR3-4CT30+CB2-2JSL 2 S    | 2JSL-2KB                    | 2JSL-2KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |
|                        | 17.5             | 23,1                           | MINI CR3-4MT 7+CB2-2J/2H S  | 2JSL-2KB | 2HSL-3KB  | 4MTE- 7KC | 4MTE- 7KC |
| 30                     |                  | MINI CR3-4M-4M-4K+CB2-2J/2H S  | 2JSL-2KB                    | 2HSL-3KB | 4MTE- 7KC | 4MTE- 7KC | 4KTE-10KC |
| 30,7                   |                  | MINI CR3-4M-4K-4K+CB2-2MSL07 S | 2JSL-2KB                    | 2HSL-3KB | 4KTE-10KC | 4MTE- 7KC | 4MTE- 7KC |
| 37                     |                  | MINI CR3-4M-4K-4K+CB2-2J/2H S  | 2JSL-2KB                    | 2HSL-3KB | 4MTE- 7KC | 4KTE-10KC | 4KTE-10KC |
| 44,6                   |                  | MINI CR3-4KT10+CB2-2J/2H S     | 2JSL-2KB                    | 2HSL-3KB | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |
| 64,3                   |                  | MINI CR3-4HT15+CB2-2J/2H S     | 2JSL-2KB                    | 2HSL-3KB | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |
| 76,9                   |                  | MINI CR3-4H-4H-4F+CB2-2J/2H S  | 2JSL-2KB                    | 2HSL-3KB | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |
| 89,6                   |                  | MINI CR3-4H-4F-4F+CB2-2J/2H S  | 2JSL-2KB                    | 2HSL-3KB | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |
| 103,5                  |                  | MINI CR3-4FT20+CB2-2J/2H S     | 2JSL-2KB                    | 2HSL-3KB | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |
| 125,1                  |                  | MINI CR3-4F-4D-4D+CB2-2J/2H S  | 2JSL-2KB                    | 2HSL-3KB | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |
| 137                    |                  | MINI CR3-4DT25+CB2-2J/2H S     | 2JSL-2KB                    | 2HSL-3KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |
| 144,1                  |                  | MINI CR3-4F-4C-4C+CB2-2J/2H S  | 2JSL-2KB                    | 2HSL-3KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |
| 166,5                  |                  | MINI CR3-4CT30+CB2-2J/2H S     | 2JSL-2KB                    | 2HSL-3KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |
| 20.9                   |                  | 19,1                           | MINI CR3-4MT 7+CB2-2HSL 3 S | 2HSL-3KB | 2HSL-3KB  | 4MTE- 7KC | 4MTE- 7KC |
|                        | 26               | MINI CR3-4M-4M-4K+CB2-2HSL 3 S | 2HSL-3KB                    | 2HSL-3KB | 4MTE- 7KC | 4MTE- 7KC | 4KTE-10KC |
|                        | 26,7             | MINI CR3-4M-4K-4K+CB2-2M/2K S  | 2HSL-3KB                    | 2HSL-3KB | 4KTE-10KC | 4MTE- 7KC | 4MTE- 7KC |
|                        | 33               | MINI CR3-4M-4K-4K+CB2-2HSL 3 S | 2HSL-3KB                    | 2HSL-3KB | 4MTE- 7KC | 4KTE-10KC | 4KTE-10KC |
|                        | 40,6             | MINI CR3-4KT10+CB2-2HSL 3 S    | 2HSL-3KB                    | 2HSL-3KB | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |
|                        | 60,3             | MINI CR3-4HT15+CB2-2HSL 3 S    | 2HSL-3KB                    | 2HSL-3KB | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |
|                        | 72,9             | MINI CR3-4H-4H-4F+CB2-2HSL 3 S | 2HSL-3KB                    | 2HSL-3KB | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |
|                        | 85,6             | MINI CR3-4H-4F-4F+CB2-2HSL 3 S | 2HSL-3KB                    | 2HSL-3KB | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |
|                        | 99,5             | MINI CR3-4FT20+CB2-2HSL 3 S    | 2HSL-3KB                    | 2HSL-3KB | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |
|                        | 121,1            | MINI CR3-4F-4D-4D+CB2-2HSL 3 S | 2HSL-3KB                    | 2HSL-3KB | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |
|                        | 133              | MINI CR3-4DT25+CB2-2HSL 3 S    | 2HSL-3KB                    | 2HSL-3KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |
|                        | 140,1            | MINI CR3-4F-4C-4C+CB2-2HSL 3 S | 2HSL-3KB                    | 2HSL-3KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |
|                        | 162,5            | MINI CR3-4CT30+CB2-2HSL 3 S    | 2HSL-3KB                    | 2HSL-3KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |
|                        | 22.8             | 16,9                           | MINI CR3-4MT 7+CB2-2GSL 3 S | 2GSL-3KB | 2GSL-3KB  | 4MTE- 7KC | 4MTE- 7KC |
| 23,8                   |                  | MINI CR3-4M-4M-4K+CB2-2GSL 3 S | 2GSL-3KB                    | 2GSL-3KB | 4MTE- 7KC | 4MTE- 7KC | 4KTE-10KC |
| 24,5                   |                  | MINI CR3-4M-4K-4K+CB2-2M/2J S  | 2GSL-3KB                    | 2GSL-3KB | 4KTE-10KC | 4MTE- 7KC | 4MTE- 7KC |
| 30,8                   |                  | MINI CR3-4M-4K-4K+CB2-2GSL 3 S | 2GSL-3KB                    | 2GSL-3KB | 4MTE- 7KC | 4KTE-10KC | 4KTE-10KC |
| 38,4                   |                  | MINI CR3-4KT10+CB2-2GSL 3 S    | 2GSL-3KB                    | 2GSL-3KB | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |
| 58,1                   |                  | MINI CR3-4HT15+CB2-2GSL 3 S    | 2GSL-3KB                    | 2GSL-3KB | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |
| 70,7                   |                  | MINI CR3-4H-4H-4F+CB2-2GSL 3 S | 2GSL-3KB                    | 2GSL-3KB | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |
| 83,4                   |                  | MINI CR3-4H-4F-4F+CB2-2GSL 3 S | 2GSL-3KB                    | 2GSL-3KB | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |
| 97,3                   |                  | MINI CR3-4FT20+CB2-2GSL 3 S    | 2GSL-3KB                    | 2GSL-3KB | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |
| 118,9                  |                  | MINI CR3-4F-4D-4D+CB2-2GSL 3 S | 2GSL-3KB                    | 2GSL-3KB | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |
| 130,8                  |                  | MINI CR3-4DT25+CB2-2GSL 3 S    | 2GSL-3KB                    | 2GSL-3KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |
| 137,9                  |                  | MINI CR3-4F-4C-4C+CB2-2GSL 3 S | 2GSL-3KB                    | 2GSL-3KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |
| 160,3                  |                  | MINI CR3-4CT30+CB2-2GSL 3 S    | 2GSL-3KB                    | 2GSL-3KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |

| Absorbed / rejected power at 55 Hz |                               |                       | Piping diameter  |                       |               |              |              |
|------------------------------------|-------------------------------|-----------------------|------------------|-----------------------|---------------|--------------|--------------|
| Pabs MT<br>- 55 Hz (kW)            | Q gas cooler<br>- 55 Hz (kW)* | Pabs LT rack<br>(kW)* | Discharge pipe ø | Gascooler<br>return ø | Liquid line ø | MT suction ø | LT suction ø |
| 24,9                               | 69,4                          | 2,6                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 28,6                               | 80                            | 2,6                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 29                                 | 81,1                          | 2,6                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 32,3                               | 90,7                          | 2,6                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 36,4                               | 102,4                         | 2,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | "7/8         |
| 45,4                               | 131,1                         | 2,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 52,7                               | 151                           | 2,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 60                                 | 171                           | 2,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 68                                 | 192,9                         | 2,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 81,3                               | 227,8                         | 2,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 88,7                               | 247,1                         | 2,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 91                                 | 256,5                         | 2,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 103,7                              | 291,6                         | 2,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 24,9                               | 69,4                          | 3                     | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 28,6                               | 80                            | 3                     | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 29                                 | 81,1                          | 3                     | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 32,3                               | 90,7                          | 3                     | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 36,4                               | 102,4                         | 3                     | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | "7/8         |
| 45,4                               | 131,1                         | 3                     | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 52,7                               | 151                           | 3                     | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 60                                 | 171                           | 3                     | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 68                                 | 192,9                         | 3                     | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 81,3                               | 227,8                         | 3                     | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 88,7                               | 247,1                         | 3                     | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 91                                 | 256,5                         | 3                     | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 103,7                              | 291,6                         | 3                     | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 24,9                               | 69,4                          | 3,6                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 28,6                               | 80                            | 3,6                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 29                                 | 81,1                          | 3,6                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 32,3                               | 90,7                          | 3,6                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 36,4                               | 102,4                         | 3,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | "7/8         |
| 45,4                               | 131,1                         | 3,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 52,7                               | 151                           | 3,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 60                                 | 171                           | 3,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 68                                 | 192,9                         | 3,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 81,3                               | 227,8                         | 3,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 88,7                               | 247,1                         | 3,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 91                                 | 256,5                         | 3,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 103,7                              | 291,6                         | 3,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 24,9                               | 69,4                          | 3,9                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 28,6                               | 80                            | 3,9                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 29                                 | 81,1                          | 3,9                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 32,3                               | 90,7                          | 3,9                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 36,4                               | 102,4                         | 3,9                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | "7/8         |
| 45,4                               | 131,1                         | 3,9                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 52,7                               | 151                           | 3,9                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 60                                 | 171                           | 3,9                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 68                                 | 192,9                         | 3,9                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 81,3                               | 227,8                         | 3,9                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 88,7                               | 247,1                         | 3,9                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 91                                 | 256,5                         | 3,9                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 103,7                              | 291,6                         | 3,9                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 24,9                               | 69,4                          | 4,5                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 28,6                               | 80                            | 4,5                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 29                                 | 81,1                          | 4,5                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 32,3                               | 90,7                          | 4,5                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 36,4                               | 102,4                         | 4,5                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | "7/8         |
| 45,4                               | 131,1                         | 4,5                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 52,7                               | 151                           | 4,5                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 60                                 | 171                           | 4,5                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 68                                 | 192,9                         | 4,5                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 81,3                               | 227,8                         | 4,5                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 88,7                               | 247,1                         | 4,5                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 91                                 | 256,5                         | 4,5                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 103,7                              | 291,6                         | 4,5                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 24,9                               | 69,4                          | 4,8                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 28,6                               | 80                            | 4,8                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 29                                 | 81,1                          | 4,8                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 32,3                               | 90,7                          | 4,8                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | "7/8         |
| 36,4                               | 102,4                         | 4,8                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | "7/8         |
| 45,4                               | 131,1                         | 4,8                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 52,7                               | 151                           | 4,8                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 60                                 | 171                           | 4,8                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | "7/8         |
| 68                                 | 192,9                         | 4,8                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 81,3                               | 227,8                         | 4,8                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 88,7                               | 247,1                         | 4,8                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | "7/8         |
| 91                                 | 256,5                         | 4,8                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |
| 103,7                              | 291,6                         | 4,8                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | "7/8         |

# Compressor configurations


| LT/MT cooling capacity |                  |                                | Compressor types               |          |           |           |           |           |
|------------------------|------------------|--------------------------------|--------------------------------|----------|-----------|-----------|-----------|-----------|
| LT capacity (kW)       | MT capacity (kW) | Designation                    | CP LT1                         | CP LT2   | CP MT1    | CP MT2    | CP MT3    |           |
| 25.6                   | 13,4             | MINI CR3-4MT 7+CB2-2G/2F S     | 2GSL-3KB                       | 2FSL-4KB | 4MTE- 7KC | 4MTE- 7KC | 4MTE- 7KC |           |
|                        | 20,3             | MINI CR3-4M-4M-4K+CB2-2G/2F S  | 2GSL-3KB                       | 2FSL-4KB | 4MTE- 7KC | 4MTE- 7KC | 4MTE- 7KC |           |
|                        | 21               | MINI CR3-4M-4K-4K+CB2-2KSL 1 S | 2GSL-3KB                       | 2FSL-4KB | 4KTE-10KC | 4MTE- 7KC | 4MTE- 7KC |           |
|                        | 27,3             | MINI CR3-4M-4K-4K+CB2-2G/2F S  | 2GSL-3KB                       | 2FSL-4KB | 4MTE- 7KC | 4KTE-10KC | 4KTE-10KC |           |
|                        | 34,9             | MINI CR3-4KT10+CB2-2G/2F S     | 2GSL-3KB                       | 2FSL-4KB | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |           |
|                        | 54,6             | MINI CR3-4HT15+CB2-2G/2F S     | 2GSL-3KB                       | 2FSL-4KB | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |           |
|                        | 67,2             | MINI CR3-4H-4H-4F+CB2-2G/2F S  | 2GSL-3KB                       | 2FSL-4KB | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |           |
|                        | 79,9             | MINI CR3-4H-4F-4F+CB2-2G/2F S  | 2GSL-3KB                       | 2FSL-4KB | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |           |
|                        | 93,8             | MINI CR3-4FT20+CB2-2G/2F S     | 2GSL-3KB                       | 2FSL-4KB | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |           |
|                        | 115,4            | MINI CR3-4F-4D-4D+CB2-2G/2F S  | 2GSL-3KB                       | 2FSL-4KB | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |           |
|                        | 127,3            | MINI CR3-4DT25+CB2-2G/2F S     | 2GSL-3KB                       | 2FSL-4KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |           |
|                        | 134,4            | MINI CR3-4F-4C-4C+CB2-2G/2F S  | 2GSL-3KB                       | 2FSL-4KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |           |
|                        | 156,8            | MINI CR3-4CT30+CB2-2G/2F S     | 2GSL-3KB                       | 2FSL-4KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |           |
|                        | 31.7             | 6,1                            | MINI CR3-4MT 7+CB2-2FSL 4 S    | 2FSL-4KB | 2FSL-4KB  | 4MTE- 7KC | 4MTE- 7KC | 4MTE- 7KC |
| 13                     |                  | MINI CR3-4M-4M-4K+CB2-2FSL 4 S | 2FSL-4KB                       | 2FSL-4KB | 4MTE- 7KC | 4MTE- 7KC | 4KTE-10KC |           |
| 13,7                   |                  | MINI CR3-4M-4K-4K+CB2-2JSL 2 S | 2FSL-4KB                       | 2FSL-4KB | 4KTE-10KC | 4MTE- 7KC | 4MTE- 7KC |           |
| 20                     |                  | MINI CR3-4M-4K-4K+CB2-2FSL 4 S | 2FSL-4KB                       | 2FSL-4KB | 4MTE- 7KC | 4KTE-10KC | 4KTE-10KC |           |
| 27,6                   |                  | MINI CR3-4KT10+CB2-2FSL 4 S    | 2FSL-4KB                       | 2FSL-4KB | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |           |
| 47,3                   |                  | MINI CR3-4HT15+CB2-2FSL 4 S    | 2FSL-4KB                       | 2FSL-4KB | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |           |
| 59,9                   |                  | MINI CR3-4H-4H-4F+CB2-2FSL 4 S | 2FSL-4KB                       | 2FSL-4KB | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |           |
| 72,6                   |                  | MINI CR3-4H-4F-4F+CB2-2FSL 4 S | 2FSL-4KB                       | 2FSL-4KB | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |           |
| 86,5                   |                  | MINI CR3-4FT20+CB2-2FSL 4 S    | 2FSL-4KB                       | 2FSL-4KB | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |           |
| 108,1                  |                  | MINI CR3-4F-4D-4D+CB2-2FSL 4 S | 2FSL-4KB                       | 2FSL-4KB | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |           |
| 120                    |                  | MINI CR3-4DT25+CB2-2FSL 4 S    | 2FSL-4KB                       | 2FSL-4KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |           |
| 127,1                  |                  | MINI CR3-4F-4C-4C+CB2-2FSL 4 S | 2FSL-4KB                       | 2FSL-4KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |           |
| 149,5                  |                  | MINI CR3-4CT30+CB2-2FSL 4 S    | 2FSL-4KB                       | 2FSL-4KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |           |
| 35.8                   |                  | 22,8                           | MINI CR3-4KT10+CB2-2H/2C S     | 2HSL-3KB | 2CSL-6KB  | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |
|                        | 42,5             | MINI CR3-4HT15+CB2-2H/2C S     | 2HSL-3KB                       | 2CSL-6KB | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |           |
|                        | 55,1             | MINI CR3-4H-4H-4F+CB2-2H/2C S  | 2HSL-3KB                       | 2CSL-6KB | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |           |
|                        | 67,8             | MINI CR3-4H-4F-4F+CB2-2H/2C S  | 2HSL-3KB                       | 2CSL-6KB | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |           |
|                        | 81,7             | MINI CR3-4FT20+CB2-2H/2C S     | 2HSL-3KB                       | 2CSL-6KB | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |           |
|                        | 103,3            | MINI CR3-4F-4D-4D+CB2-2H/2C S  | 2HSL-3KB                       | 2CSL-6KB | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |           |
|                        | 115,2            | MINI CR3-4DT25+CB2-2H/2C S     | 2HSL-3KB                       | 2CSL-6KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |           |
|                        | 122,3            | MINI CR3-4F-4C-4C+CB2-2H/2C S  | 2HSL-3KB                       | 2CSL-6KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |           |
|                        | 144,7            | MINI CR3-4CT30+CB2-2H/2C S     | 2HSL-3KB                       | 2CSL-6KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |           |
|                        | 39.5             | 18,5                           | MINI CR3-4KT10+CB2-2ESL 4 S    | 2ESL-4KB | 2ESL-4KB  | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |
|                        |                  | 38,2                           | MINI CR3-4HT15+CB2-2ESL 4 S    | 2ESL-4KB | 2ESL-4KB  | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |
|                        |                  | 50,8                           | MINI CR3-4H-4H-4F+CB2-2ESL 4 S | 2ESL-4KB | 2ESL-4KB  | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |
|                        |                  | 63,5                           | MINI CR3-4H-4F-4F+CB2-2ESL 4 S | 2ESL-4KB | 2ESL-4KB  | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |
|                        |                  | 77,4                           | MINI CR3-4FT20+CB2-2ESL 4 S    | 2ESL-4KB | 2ESL-4KB  | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |
| 99                     |                  | MINI CR3-4F-4D-4D+CB2-2ESL 4 S | 2ESL-4KB                       | 2ESL-4KB | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |           |
| 110,9                  |                  | MINI CR3-4DT25+CB2-2ESL 4 S    | 2ESL-4KB                       | 2ESL-4KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |           |
| 118                    |                  | MINI CR3-4F-4C-4C+CB2-2ESL 4 S | 2ESL-4KB                       | 2ESL-4KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |           |
| 140,4                  |                  | MINI CR3-4CT30+CB2-2ESL 4 S    | 2ESL-4KB                       | 2ESL-4KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |           |
| 42.1                   |                  | 15,3                           | MINI CR3-4KT10+CB2-2F/2C S     | 2FSL-4KB | 2CSL-6KB  | 4KTE-10KC | 4KTE-10KC | 4KTE-10KC |
|                        |                  | 35                             | MINI CR3-4HT15+CB2-2F/2C S     | 2FSL-4KB | 2CSL-6KB  | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |
|                        |                  | 47,6                           | MINI CR3-4H-4H-4F+CB2-2F/2C S  | 2FSL-4KB | 2CSL-6KB  | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |
|                        |                  | 60,3                           | MINI CR3-4H-4F-4F+CB2-2F/2C S  | 2FSL-4KB | 2CSL-6KB  | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |
|                        |                  | 74,2                           | MINI CR3-4FT20+CB2-2F/2C S     | 2FSL-4KB | 2CSL-6KB  | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |
|                        | 95,8             | MINI CR3-4F-4D-4D+CB2-2F/2C S  | 2FSL-4KB                       | 2CSL-6KB | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |           |
|                        | 107,7            | MINI CR3-4DT25+CB2-2F/2C S     | 2FSL-4KB                       | 2CSL-6KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |           |
|                        | 114,8            | MINI CR3-4F-4C-4C+CB2-2F/2C S  | 2FSL-4KB                       | 2CSL-6KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |           |
|                        | 137,2            | MINI CR3-4CT30+CB2-2F/2C S     | 2FSL-4KB                       | 2CSL-6KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |           |
|                        | 46.6             | 29,6                           | MINI CR3-4HT15+CB2-2DSL 5 S    | 2DSL-5KB | 2DSL-5KB  | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |
|                        |                  | 42,2                           | MINI CR3-4H-4H-4F+CB2-2DSL 5 S | 2DSL-5KB | 2DSL-5KB  | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |
|                        |                  | 54,9                           | MINI CR3-4H-4F-4F+CB2-2DSL 5 S | 2DSL-5KB | 2DSL-5KB  | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |
|                        |                  | 68,8                           | MINI CR3-4FT20+CB2-2DSL 5 S    | 2DSL-5KB | 2DSL-5KB  | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |
|                        |                  | 90,4                           | MINI CR3-4F-4D-4D+CB2-2DSL 5 S | 2DSL-5KB | 2DSL-5KB  | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |
| 102,3                  |                  | MINI CR3-4DT25+CB2-2DSL 5 S    | 2DSL-5KB                       | 2DSL-5KB | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |           |
| 109,4                  |                  | MINI CR3-4F-4C-4C+CB2-2DSL 5 S | 2DSL-5KB                       | 2DSL-5KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |           |
| 131,8                  |                  | MINI CR3-4CT30+CB2-2DSL 5 S    | 2DSL-5KB                       | 2DSL-5KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |           |
| 50.7                   |                  | 24,7                           | MINI CR3-4HT15+CB2-2D/2C S     | 2DSL-5KB | 2CSL-6KB  | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |
|                        |                  | 37,3                           | MINI CR3-4H-4H-4F+CB2-2D/2C S  | 2DSL-5KB | 2CSL-6KB  | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |
|                        |                  | 50                             | MINI CR3-4H-4F-4F+CB2-2D/2C S  | 2DSL-5KB | 2CSL-6KB  | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |
|                        |                  | 63,9                           | MINI CR3-4FT20+CB2-2D/2C S     | 2DSL-5KB | 2CSL-6KB  | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |
|                        |                  | 85,5                           | MINI CR3-4F-4D-4D+CB2-2D/2C S  | 2DSL-5KB | 2CSL-6KB  | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |
|                        |                  | 97,4                           | MINI CR3-4DT25+CB2-2D/2C S     | 2DSL-5KB | 2CSL-6KB  | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |
|                        | 104,5            | MINI CR3-4F-4C-4C+CB2-2D/2C S  | 2DSL-5KB                       | 2CSL-6KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |           |
|                        | 126,9            | MINI CR3-4CT30+CB2-2D/2C S     | 2DSL-5KB                       | 2CSL-6KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |           |
|                        | 56.5             | 17,7                           | MINI CR3-4HT15+CB2-2CSL 6 S    | 2CSL-6KB | 2CSL-6KB  | 4HTE-15KC | 4HTE-15KC | 4HTE-15KC |
|                        |                  | 30,3                           | MINI CR3-4H-4H-4F+CB2-2CSL 6 S | 2CSL-6KB | 2CSL-6KB  | 4HTE-15KC | 4HTE-15KC | 4FTE-20KC |
|                        |                  | 43                             | MINI CR3-4H-4F-4F+CB2-2CSL 6 S | 2CSL-6KB | 2CSL-6KB  | 4HTE-15KC | 4FTE-20KC | 4FTE-20KC |
|                        |                  | 56,9                           | MINI CR3-4FT20+CB2-2CSL 6 S    | 2CSL-6KB | 2CSL-6KB  | 4FTE-20KC | 4FTE-20KC | 4FTE-20KC |
|                        |                  | 78,5                           | MINI CR3-4F-4D-4D+CB2-2CSL 6 S | 2CSL-6KB | 2CSL-6KB  | 4FTE-20KC | 4DTE-25KC | 4DTE-25KC |
|                        |                  | 90,4                           | MINI CR3-4DT25+CB2-2CSL 6 S    | 2CSL-6KB | 2CSL-6KB  | 4DTE-25KC | 4DTE-25KC | 4DTE-25KC |
| 97,5                   |                  | MINI CR3-4F-4C-4C+CB2-2CSL 6 S | 2CSL-6KB                       | 2CSL-6KB | 4FTE-20KC | 4CTE-30KC | 4CTE-30KC |           |
| 119,9                  |                  | MINI CR3-4CT30+CB2-2CSL 6 S    | 2CSL-6KB                       | 2CSL-6KB | 4CTE-30KC | 4CTE-30KC | 4CTE-30KC |           |



| Absorbed / rejected power at 55 Hz |                               |                       | Piping diameter  |                       |               |              |              |
|------------------------------------|-------------------------------|-----------------------|------------------|-----------------------|---------------|--------------|--------------|
| Pabs MT<br>- 55 Hz (kW)            | Q gas cooler<br>- 55 Hz (kW)* | Pabs LT rack<br>(kW)* | Discharge pipe ø | Gascooler<br>return ø | Liquid line ø | MT suction ø | LT suction ø |
| 24,9                               | 69,4                          | 5,4                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | 1"1/8        |
| 28,6                               | 80                            | 5,4                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | 1"1/8        |
| 29                                 | 81,1                          | 5,4                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | 1"1/8        |
| 32,3                               | 90,7                          | 5,4                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | 1"1/8        |
| 36,4                               | 102,4                         | 5,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | 1"1/8        |
| 45,4                               | 131,1                         | 5,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 52,7                               | 151                           | 5,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 60                                 | 171                           | 5,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 68                                 | 192,9                         | 5,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 81,3                               | 227,8                         | 5,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 88,7                               | 247,1                         | 5,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 91                                 | 256,5                         | 5,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"1/8        |
| 103,7                              | 291,6                         | 5,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"1/8        |
| 24,9                               | 69,4                          | 6,7                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | 1"1/8        |
| 28,6                               | 80                            | 6,7                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | 1"1/8        |
| 29                                 | 81,1                          | 6,7                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | 1"1/8        |
| 32,3                               | 90,7                          | 6,7                   | 1"1/8 K65        | "7/8 K65              | "7/8 K65      | 1"1/8 K65    | 1"1/8        |
| 36,4                               | 102,4                         | 6,7                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | 1"1/8        |
| 45,4                               | 131,1                         | 6,7                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 52,7                               | 151                           | 6,7                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 60                                 | 171                           | 6,7                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 68                                 | 192,9                         | 6,7                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 81,3                               | 227,8                         | 6,7                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 88,7                               | 247,1                         | 6,7                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 91                                 | 256,5                         | 6,7                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"1/8        |
| 103,7                              | 291,6                         | 6,7                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"1/8        |
| 36,4                               | 102,4                         | 7,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | 1"1/8        |
| 45,4                               | 131,1                         | 7,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 52,7                               | 151                           | 7,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 60                                 | 171                           | 7,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 68                                 | 192,9                         | 7,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 81,3                               | 227,8                         | 7,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 88,7                               | 247,1                         | 7,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 91                                 | 256,5                         | 7,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"1/8        |
| 103,7                              | 291,6                         | 7,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"1/8        |
| 36,4                               | 102,4                         | 8,0                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | 1"1/8        |
| 45,4                               | 131,1                         | 8,0                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 52,7                               | 151                           | 8,0                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 60                                 | 171                           | 8,0                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 68                                 | 192,9                         | 8,0                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 81,3                               | 227,8                         | 8,0                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 88,7                               | 247,1                         | 8,0                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 91                                 | 256,5                         | 8,0                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"1/8        |
| 103,7                              | 291,6                         | 8,0                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"1/8        |
| 36,4                               | 102,4                         | 8,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"1/8 K65    | 1"1/8        |
| 45,4                               | 131,1                         | 8,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 52,7                               | 151                           | 8,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 60                                 | 171                           | 8,6                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"1/8        |
| 68                                 | 192,9                         | 8,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 81,3                               | 227,8                         | 8,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 88,7                               | 247,1                         | 8,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"1/8        |
| 91                                 | 256,5                         | 8,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"1/8        |
| 103,7                              | 291,6                         | 8,6                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"1/8        |
| 45,4                               | 131,1                         | 9,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"3/8        |
| 52,7                               | 151                           | 9,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"3/8        |
| 60                                 | 171                           | 9,4                   | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"3/8        |
| 68                                 | 192,9                         | 9,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"3/8        |
| 81,3                               | 227,8                         | 9,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"3/8        |
| 88,7                               | 247,1                         | 9,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"3/8        |
| 91                                 | 256,5                         | 9,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"3/8        |
| 103,7                              | 291,6                         | 9,4                   | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"3/8        |
| 45,4                               | 131,1                         | 10,2                  | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"3/8        |
| 52,7                               | 151                           | 10,2                  | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"3/8        |
| 60                                 | 171                           | 10,2                  | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"3/8        |
| 68                                 | 192,9                         | 10,2                  | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"3/8        |
| 81,3                               | 227,8                         | 10,2                  | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"3/8        |
| 88,7                               | 247,1                         | 10,2                  | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"3/8        |
| 91                                 | 256,5                         | 10,2                  | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"3/8        |
| 103,7                              | 291,6                         | 10,2                  | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"3/8        |
| 45,4                               | 131,1                         | 11,4                  | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"3/8        |
| 52,7                               | 151                           | 11,4                  | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"3/8        |
| 60                                 | 171                           | 11,4                  | 1"1/8 K65        | 1"1/8 K65             | 1"1/8 K65     | 1"3/8 K65    | 1"3/8        |
| 68                                 | 192,9                         | 11,4                  | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"3/8        |
| 81,3                               | 227,8                         | 11,4                  | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"3/8        |
| 88,7                               | 247,1                         | 11,4                  | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 1"5/8 K65    | 1"3/8        |
| 91                                 | 256,5                         | 11,4                  | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"3/8        |
| 103,7                              | 291,6                         | 11,4                  | 1"3/8 K65        | 1"1/8 K65             | 1"3/8 K65     | 2"1/8 K65    | 1"3/8        |

# Available options and functions

| Function / option  | Description  | Main benefit  |
|--|--|---|
| <b>Mechanical systems</b>                                    |  |   |
| Active oil management  | The active oil management is recommended to ensure optimal compressors lubrication.<br>It includes: the separator, the oil tank, the oil level regulators on the compressors.  |    |
| Larger receiver volume (300L)                                | A larger receiver volume gives you more flexibility and safety, allows longer piping distances   |   |
| Heat recovery - heating                                      | Select the heat recovery with the selection table in appendix.<br>Option mounted on the rack with Isolating valve + anti-boiling 3-ways valve + gas Cooler Bypass + Muffler (if no active oil management).<br>Can be combined with heat recovery for sanitary hot water usage. |    |
| Heat recovery - tap water                                    | Select the heat recovery with the selection table in appendix<br>Option mounted on the rack with Isolating valve+ anti-boiling 3-ways valve + gas Cooler Bypass + Muffler (if no active oil management).<br>Can be combined with heat recovery for heating usage.              |   |
| Components labeling  | The 40 main components are identified with labels, having the same code than on the PID.   |    |
| Receiver emergency cooler                                    | Stabilize the pressure inside the liquid receiver in case of power failure.<br>Option mounted on the rack with the shut-off valve.   |   |
| LT suction accumulator                                       | Avoid liquid refrigerant to be sucked into the LT compressors. Option mounted on the rack with double safety valve.  |   |
| Optical oil level monitoring - OLCK1                         | Monitors the right oil level inside the compressor   |    |
| Connections for LT desuperheater                             | Allows to connect a heat exchanger in order to reduce the superheat at the MT compressors suction  |   |
| Muffler at common MT discharge line                          | Reduces pulsations in the circuit. Not necessary in case of active oil management. Mandatory in case of passive oil management combined with heat reclaim.   |   |
| <b>Instrumentation &amp; valves</b>                          |  |   |
| High and low level switch on CO <sub>2</sub> liquid receiver | Indicates if liquid CO <sub>2</sub> reached the low and high level in the receiver   |   |
| CO <sub>2</sub> manometers                                   | Indicates pressure of refrigerant at different points of the circuit   |  |
| LP safety switch for MT rack                                 | Reinforce MT rack safety (discharge)   |   |
| LP safety switch for LT rack                                 | Reinforce LT rack safety (suction)   |  |
| HP safety switch for LT rack                                 | Reinforce LT rack safety (discharge)   |   |
| CO <sub>2</sub> liquid level measurement (DNI)               | Connections only. When used in the dedicated system (not in the delivery) it allows to monitor the exact liquid level in the receiver. (Only available with Danfoss or Carel controller)   |  |
| CO <sub>2</sub> liquid level measurement (Ice Smart)         | Informations can be crossed with operational datas in order to give warnings if a refrigerant leak is detected.  |   |
| Suction valve and suction line filter (LT)                   | Maintain a clean circuit (LT side)   |  |
| Suction valve and suction line filter (MT)                   | Maintain a clean circuit (MT side)   |   |
| <b>Electrical devices &amp; Controls</b>                     |  |   |
| Plug&play electrical cabinet                                 | Delivery of the electrical cabinet fully assembled, wired and tested with the right protections and neutral system for managing the rack, the gascooler and the heat recovery if needed. More information in the electrical cabinet's section.                                 |  |
| Wiring of the cabinet and rack                               | Wiring of the power and controls from the electrical cabinet to the rack   |   |
| Additional cable length                                      | Allows to position the electrical cabinet at a certain distance from the rack (against a wall for instance). Cable lengths available in 2, 5 and 10 meters.  |   |
| Frequency Inverter on LT1 compressor                         | Variable speed drive for extended capacity control on LT racks   |   |
| Frequency Inverter FC301 Danfoss                             | Danfoss variable speed drive   |   |
| Capacity regulation (CR11)                                   | Capacity regulation from 10% to 100% fitted with Bitzer's IQ module.<br>The option includes: CR11 solenoid valves on compressors, specific compressor, discharge temperature sensor, control box (CM-RC-01), oil level controller type OLC-K1 / OLC-DP1.                       |  |
| Advanced Danfoss controller (AKPC782)                        | This controller provides more control capability, advanced energy management and communication features  |   |
| Electrical energy meter                                      | It measures the amount of electrical energy consumed   |   |
| Carel controller   | Pre-set & mounted Carel rack controller (+probes)  |  |
| Eckelmann controller   | Pre-set & mounted Eckelmann rack controller (+probes)  |  |
| Back-up controller (Danfoss)                                 | Delivered separately non programmed. Allows to quickly replace the controller in case of failure (Parameters need to be adjusted according to the installation)  |  |
| Back-up controller (Carel)                                   |  |   |

| Function / option   | Description   | Main benefit  |
|---|---|---|
| Technical support   |   |   |
| Support for commissioning from experts in CO <sub>2</sub> | Commissioning support with our CO <sub>2</sub> experts:<br>- Technical commissioning in your presence<br>- Control and backup of main controller parameters<br>- Tests off load: I/O modules, electrical cabinet, actuators, regulation and safety devices<br>- Tests under load: compressors, regulation devices and safety<br>- Commissioning reports |  |
| Warranty extension (1 extra year)                         | 1 year warranty extension to benefit from premium service (maximum 2 years)   |   |



-  Safety
-  Energy efficiency
-  Monitoring
-  Practicality

# Heat reclaim function

Heat can be reclaimed for sanitary hot water (tap water) or/and heating. Both usages can be combined by using 2 exchangers.

## Conditions:

- P CO<sub>2</sub>: 85 bar
- T CO<sub>2</sub> inlet: +115°C
- Pressure drop (water side): 30 kPa
- CO<sub>2</sub> flow rate: 60 % of the total
- CO<sub>2</sub> outlet: depending water temperatures

|   |                    | Heating water temperature* | Heat exchanger model & max capacity** |           |            |            | Tap water |
|---|--------------------|----------------------------|---------------------------------------|-----------|------------|------------|-----------|
|   |                    |                            | Type 1                                | Type 2    | Type 3     | Type 4     |           |
|  | Sanitary hot water | +25°C/65°C                 |                                       |           |            |            | 50 kW max |
|   |                    | +40°C/45°C                 |                                       | 63 kW max |            | 88 kW max  |           |
|  | Heating            | +20°C/45°C                 | 113 kW max                            |           | 204 kW max |            |           |
|   |                    | +25°C/45°C                 | 104 kW max                            |           | 187 kW max |            |           |
|   |                    | +30°C/50°C                 | 81 kW max                             |           | 141 kW max |            |           |
|   |                    | +35°C/45°C                 |                                       | 74 kW max |            | 130 kW max |           |
|   |                    | +50°C/60°C                 | 46 kW max                             |           | 80 kW max  |            |           |
|   |                    | +30°C/45°C                 | 81 kW max                             |           | 156 kW max |            |           |

\* Other water temperature can be considered, please contact us for specific demands

\*\* The capacities represent the maximum value of heat recovered. The real value can be lower depending on your rack. Each heat exchanger covers a part of the rack capacity range only. In order to select the right combination of rack + heat exchanger, please consult us.

# Electrical cabinet – simplicity and clarity

The design of the electrical cabinet is based on the essentials which are the control of the rack, the gascooler and the heat recovery.

## Controllers:

- The standard controller is a mini pack controller
- The outputs are connected directly to the devices to be controlled
- Some information are collected on one single entry in order to reduce the configuration effort of the controller while maintaining all its functionalities
- For programming details, refer to the controller documentation

## Heat reclaim:

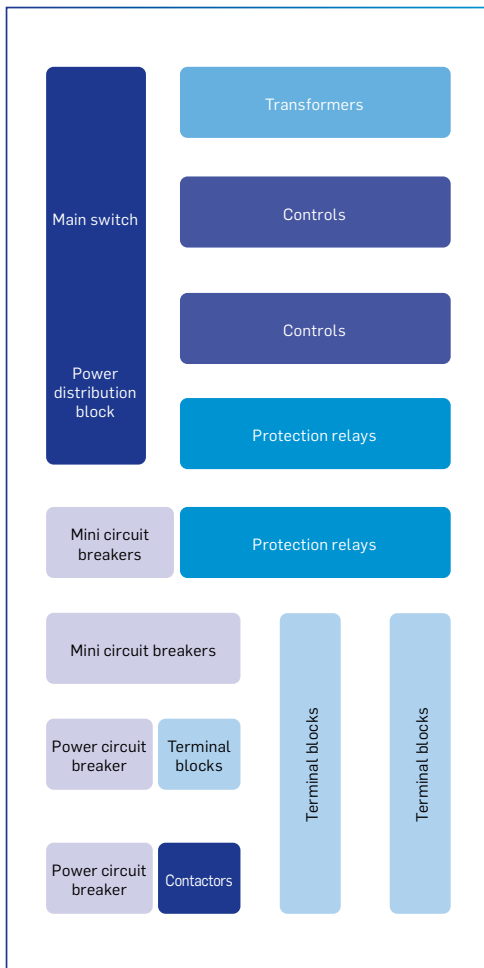
- Valves and pumps are managed by the controller
- For the pumps, a 0-10V setpoint signal and an enable signal are provided on terminal blocks. (The pump power supply is not included)

## Electrical cabinet:

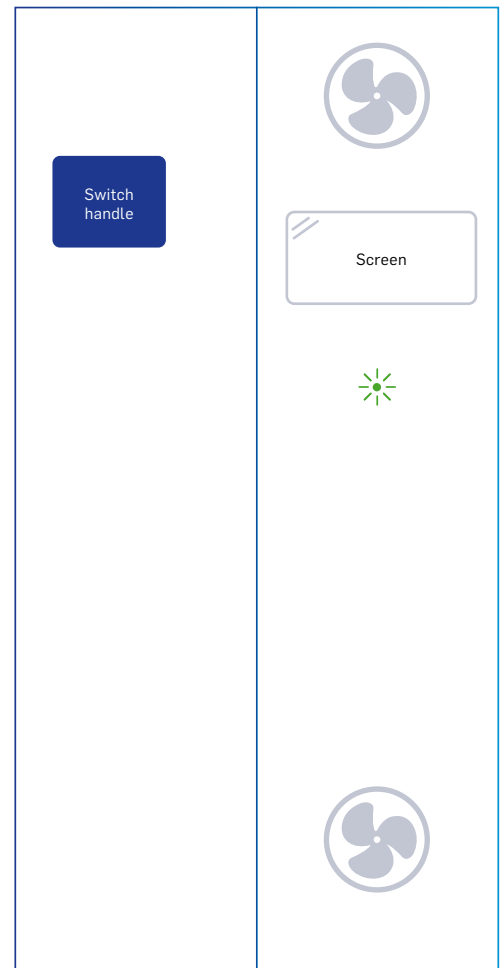
- The standard control cabinet has the following dimensions: H 2000 x W 1000 x D 400, with 2 doors

## Example of electrical cabinet layout with mini pack controller and heat reclaim controller

### Inside view



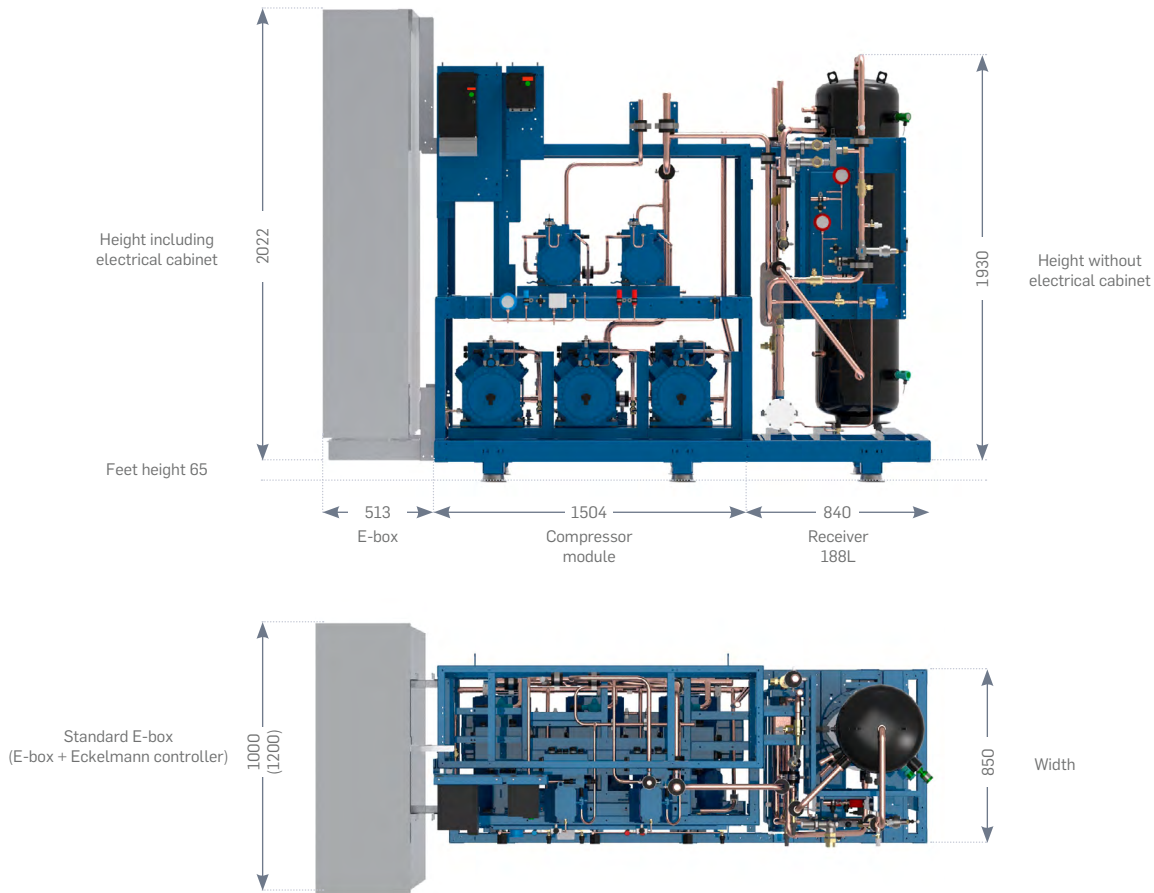
### Door view



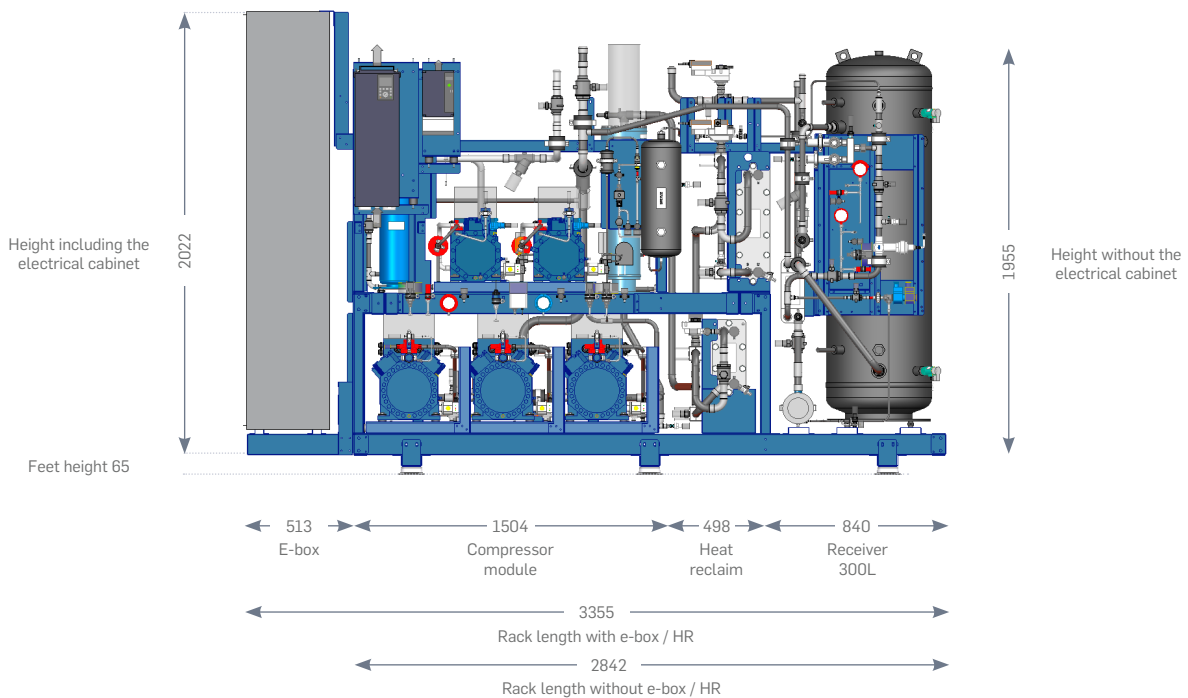


# Dimensions (mm)

## Simple model without heat reclaim



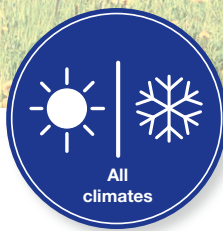
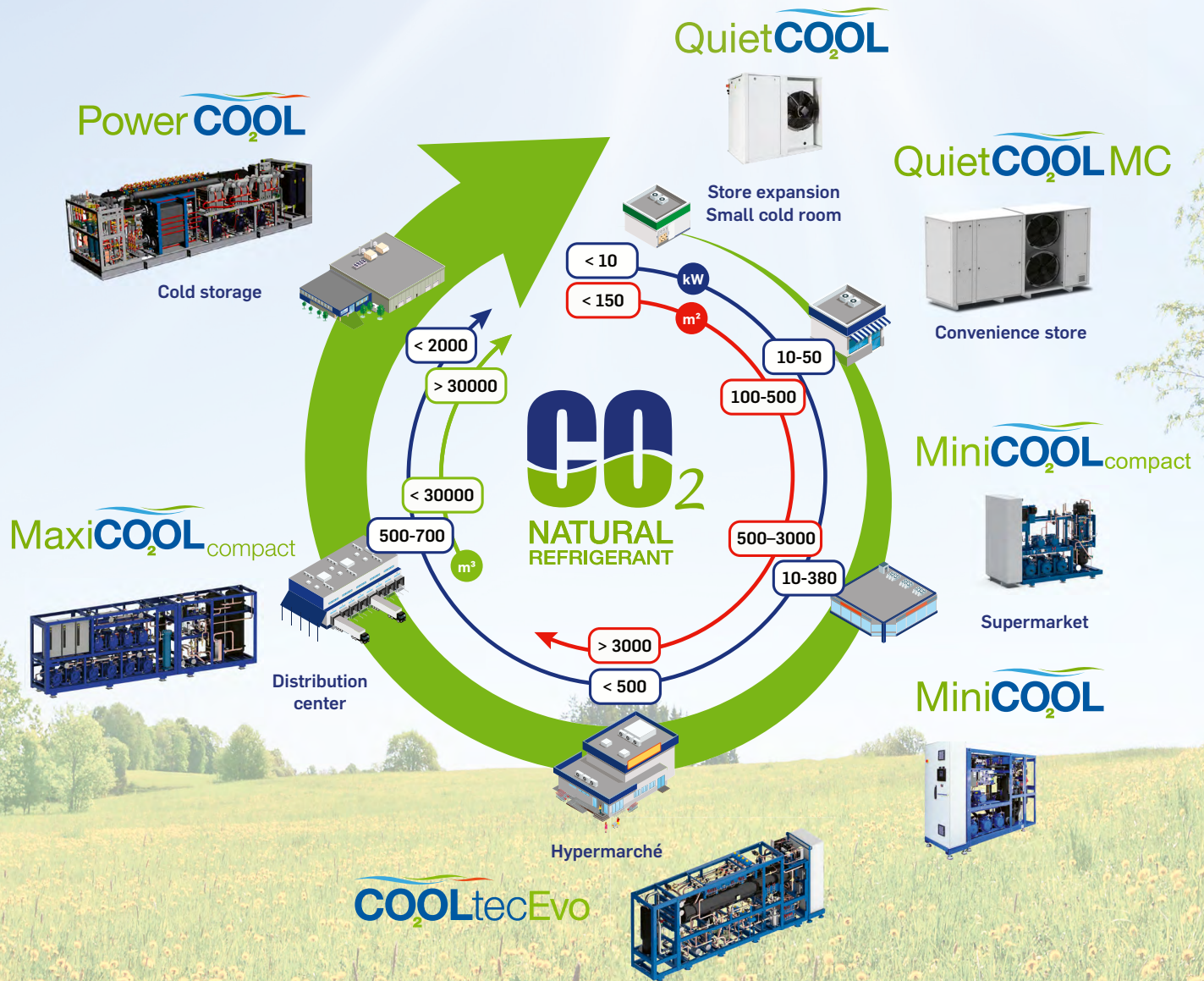
## Model with advanced functions and heat reclaim







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