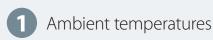
# How to choose the right Multi Ejector Solution™

3 main factors to consider when designing your transcritical CO₂ system with a Multi Ejector Solution™



### Warm ambient temperatures

Historically, CO<sub>2</sub> system efficiency has been a challenge in warm ambient temperature. With the Multi Ejector Solution™, the CO<sub>2</sub> equator has been eliminated.

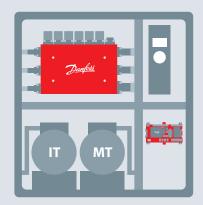




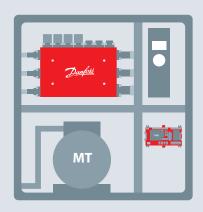
### **Cold ambient temperatures**

CO<sub>2</sub> is already widely used due to the optimum working conditions.

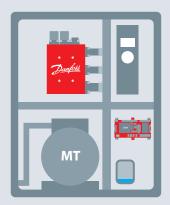
## CO<sub>2</sub> system type



**Parallel compression** Multi Ejector - High Pressure



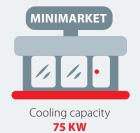
**Booster system** Multi Ejector - Low Pressure



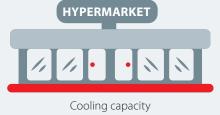
**Booster or parallel compression** Multi Ejector - Liquid Ejector

## Store type and system size









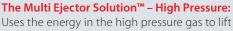
150 KW

**300 KW** 

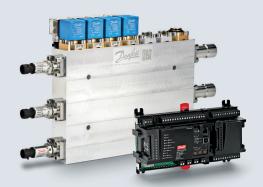
# Four great ejector solutions for transcritical CO2 refrigeration



The Multi Ejector Solution™ – Low pressure Recovers energy, otherwise lost in expansion, to lift the suction pressure. This reduces the energy consumption of the compressors.



Uses the energy in the high pressure gas to lift gas from the suction side (MT) moving it to the parallel compressors (IT). This provides a reduction in needed compressor capacity and energy consumption.



## The Multi Ejector Solution™ – Liquid Ejector

Utilizes the energy in the high pressure gas to lift liquid from the suction accumulator. Works in combination with CO<sub>2</sub> Adaptive Liquid Management ensuring full evaporator optimization resulting in reduced energy consumption.



Uses the energy in the high-pressure gas to lift gas and liquid from the suction side (MT) and move it to the parallel compressors (IT). This reduces the required compressor capacity and energy consumption. Works in combination with CO<sub>2</sub> Adaptive Liquid Management, ensuring full evaporator optimization and resulting in further reduced energy consumption.



|                                     | High Pressure (HP)   | Low Pressure (LP)  | Liquid Ejector (LE)                       | Combi (HP/LE)        |                  |
|-------------------------------------|----------------------|--------------------|---|----------------------|------------------|
| Ambient temperature                 | Warm                 | Warm               | Warm and cold                             | Warm and cold        |                  |
| CO <sub>2</sub> system              | Parallel compression | Booster            | All CO <sub>2</sub> transcritical systems | Parallel compression |                  |
| Min/Max system size per block       | 35-140 kW            | 18-72 kW           | 25-480 kW                                 | 35-120 kW            |                  |
| Media on suction side               | Primarily gas        | Primarily gas      | Primarily liquid                          | Gas                  | Liquid           |
| Lift/entrainment –<br>@low ambient  | 8 bar/24% @ 23°C     | 3.6 bar/59% @ 23°C | 5 bar/27% @ 5°C                           | 8 bar/24% @23°C      | 5 bar/27% @ 5°C  |
| Lift/entrainment –<br>@high ambient | 11 bar/26% @ 36°C    | 6 bar/44% @ 36°C   | 8 bar/62% @ 36°C                          | 11 bar/26% @ 36°C    | 8 bar/62% @ 36°C |