

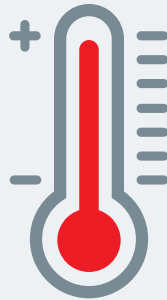
# How to choose the right **Multi Ejector Solution™**

3 main factors to consider when designing your transcritical CO<sub>2</sub> system with a Multi Ejector Solution™

## 1 Ambient temperatures

### Warm ambient temperatures

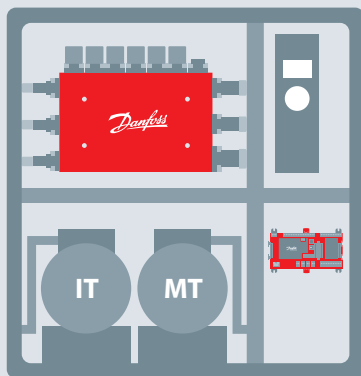
Historically, CO<sub>2</sub> system efficiency has been a challenge in warm ambient temperature. With the Multi Ejector Solution™, the CO<sub>2</sub> equator has been eliminated.



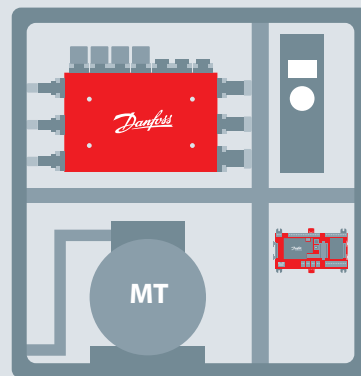
### Cold ambient temperatures

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

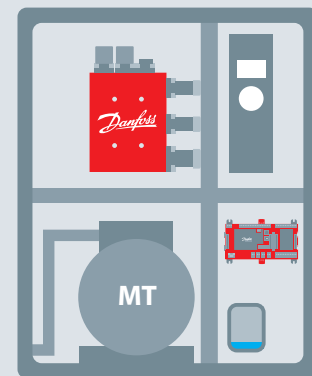
## 2 CO<sub>2</sub> system type



**Parallel compression**  
Multi Ejector - High Pressure



**Booster system**  
Multi Ejector - Low Pressure



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

## 3 Store type and system size



Cooling capacity  
**40 KW**



Cooling capacity  
**75 KW**



Cooling capacity  
**150 KW**

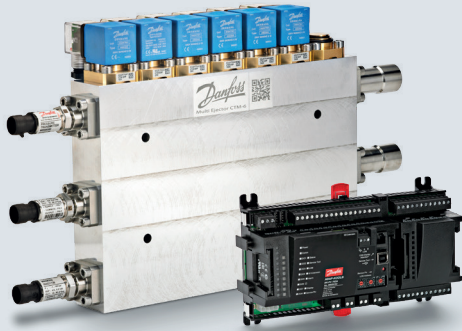


Cooling capacity  
**300 KW**

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# Four great ejector solutions for transcritical CO<sub>2</sub> refrigeration

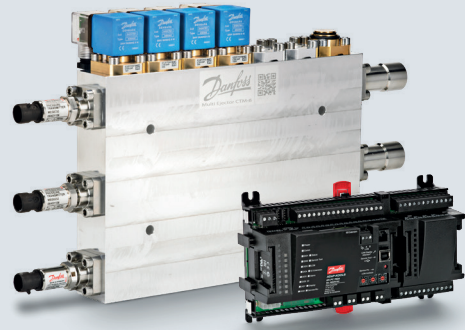


## The Multi Ejector Solution™ – High Pressure:

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™ – Low pressure

Recovers energy, otherwise lost in expansion, to lift the suction pressure. This reduces the energy consumption of the compressors.



## 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.

## The Multi Ejector Solution™ – Combi HP/LE

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 – @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 – @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

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