



Selection: CO2 Systems

COP/EER Evaporator: 4,42

Input Values

System

Series

Operating mode

Number compressors

Evaporating SST

Evaporator superheat

Suction line superheat

High pressure

Gas cooler outlet

Intermed. pressure

Power frequency 50Hz

Power voltage 400V

MT-Stage

Flashgas

Standard

Transcritical

2

15,00 °C

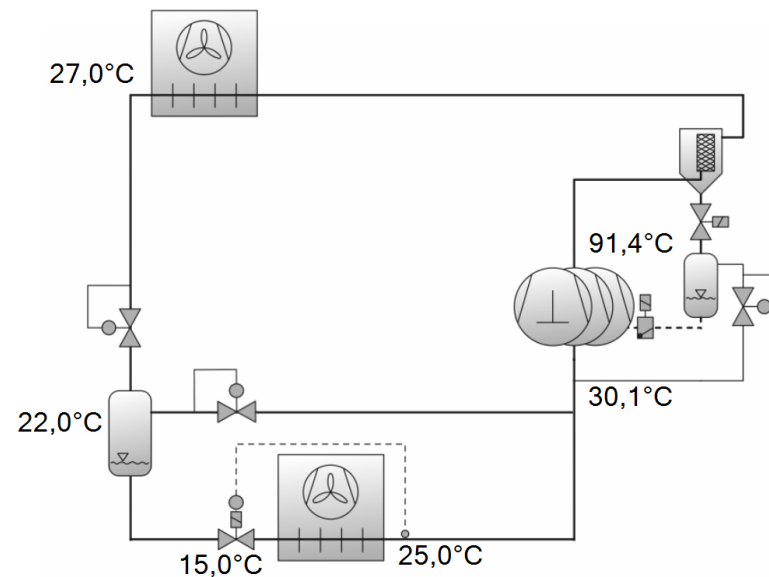
10,00 K

5,00 K

100,0 bar(a)

27,0 °C

60,0 bar(a) / 22,0 °C





Result

Compressor	MT-Stage	4JTE-15K	4GTE-30K
Frequency compressor	--	68,0 Hz	--
Evaporator capacity	161,2 kW	74,7 kW	86,5 kW
Ratio	--	46,3 %	53,7 %
Gas cooler capacity	206 kW	95,5 kW	110,6 kW
Power input	36,5 kW	16,89 kW	19,60 kW
Current	62,7 A	27,4 A	35,2 A
Voltage range	--	380-420V	380-420V
Mass flow	3249 kg/h	1505 kg/h	1744 kg/h
Flashgas mass flow	--	--	--
Total superheat	15,10 K	15,10 K	15,10 K
Discharge gas temp. w/o cooling	91,4 °C	91,3 °C	91,4 °C
optimal high pressure	75,0 bar(a)	--	--

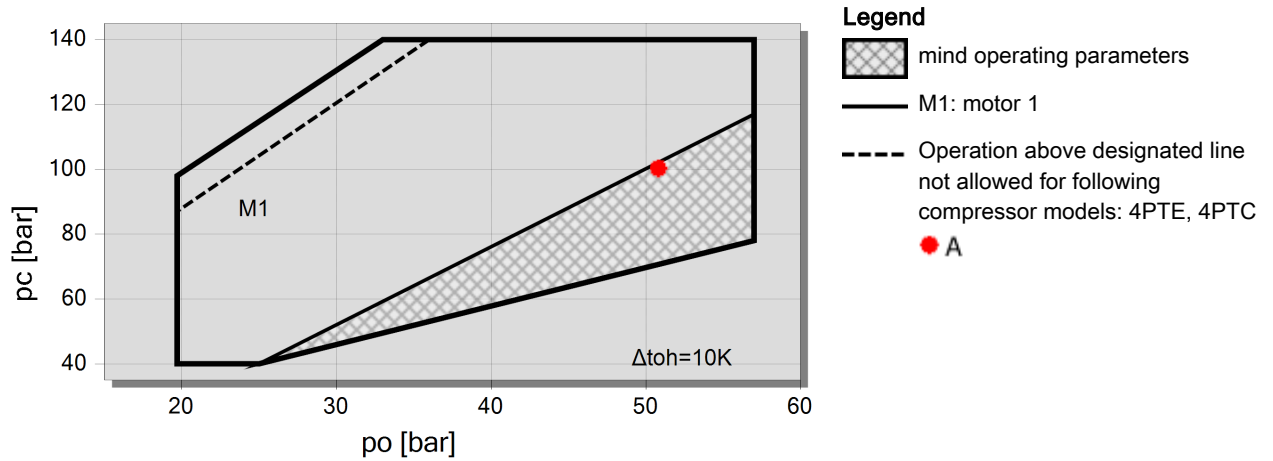
MT-Stage: Tentative Data.

MT-Stage: Attention, consider operating parameters. See KP-130 or consult BITZER.

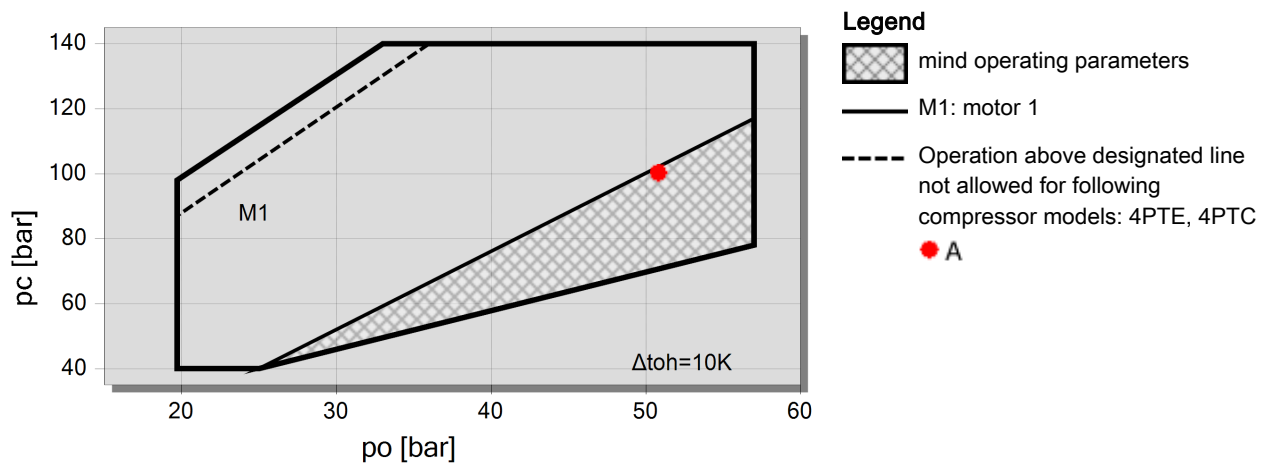
MT-Stage: Power consumption at compressor inlet.



Application Limits 4GTE-30K

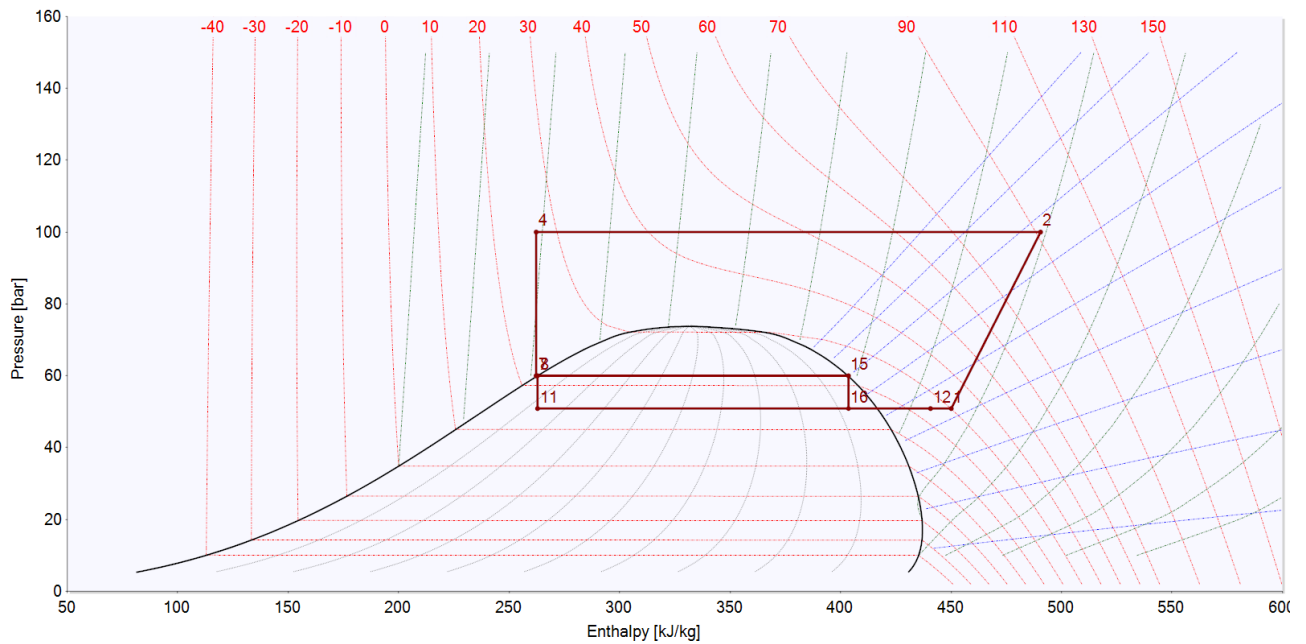


Application Limits 4JTE-15K





p,h Diagram



MT-Stage

- 1 - 2 Compression
- 2 - 4 Gas cooling/Condensation
- 4 - 7 Expansion to intermediate pressure
- 7 - 8 Intermediate receiver: liquid outlet
- 8 - 11 Expansion to evaporation pressure
- 11 - 12 Evaporation
- 12 - 1 Total superheat
- 7 - 15 Intermediate receiver: gas outlet
- 15 - 16 Expansion to evaporation pressure