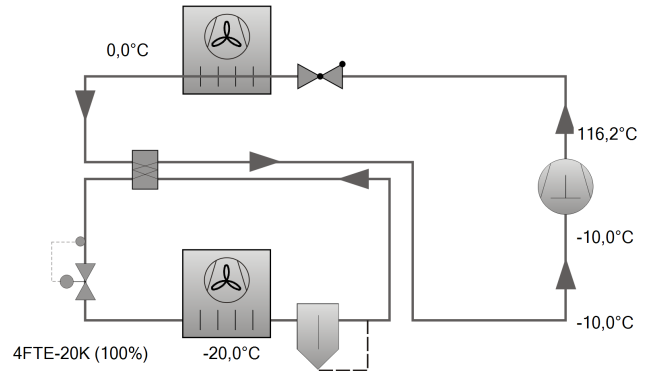




Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model	4FTE-20K
Mode	Refrigeration and air conditioning
Refrigerant	R744
Reference temperature	Dew point temp.
Evaporating SST	-20,00 °C
High pressure	Auto
Gas cooler outlet	0 °C
Suct. gas superheat	10,00 K
Operating mode	Transcritical
Power supply	400V-3-50Hz
Capacity control	100%
Useful superheat	100%

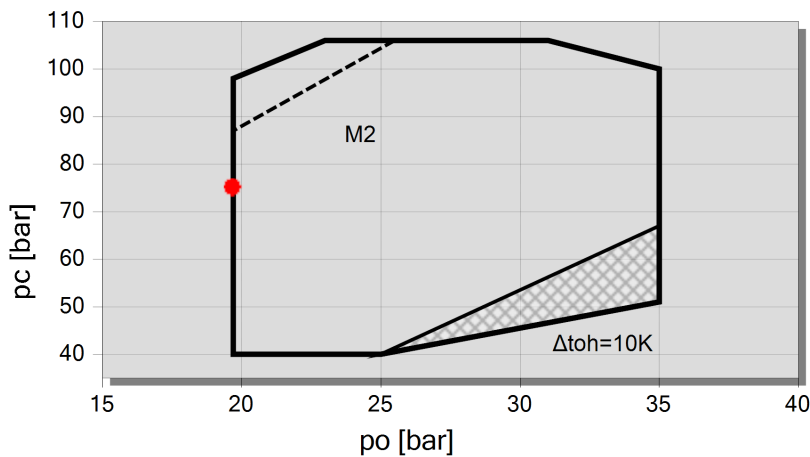


Result

Compressor	4FTE-20K-40P
Capacity steps	100%
Cooling capacity	44,3 kW
Cooling capacity *	44,3 kW
Evaporator capacity	44,3 kW
Power input	16,65 kW
Current (400V)	28,1 A
Voltage range	380-420V
Gas cooler capacity	60,9 kW
COP/EER	2,66
Mass flow	632 kg/h
Discharge gas temp. w/o cooling	116,2 °C
optimal high pressure	75,0 bar(a)

Tentative Data.
 *according to EN12900 (10K suction gas superheat)

Application Limits 100% 4FTE-20K



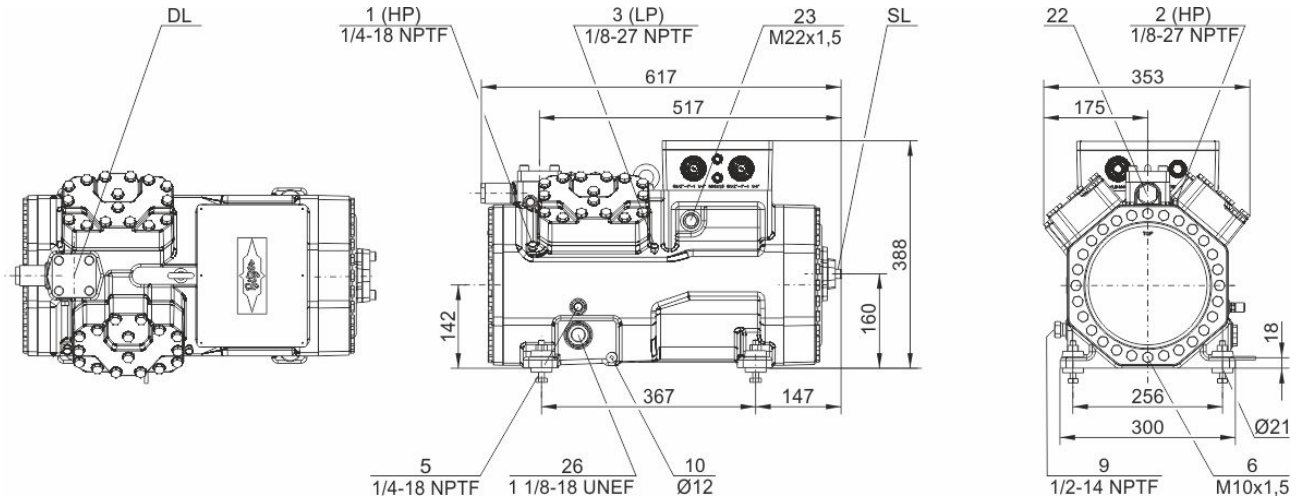
Legend

- M2: motor 2
- Operation above designated line not allowed for following compressor models: 4PTE, 4PTC
- mind operating parameters
- A



Technical Data: 4FTE-20K

Dimensions and Connections





Technical Data

Technical Data

Displacement (1450rpm 50Hz)	17,5 m ³ /h
Displacement (1750rpm 60Hz)	21,1 m ³ /h
No. of cylinder x bore x stroke	4 x 41mm x 38mm
Weight	187 kg
Max. pressure (LP/HP)	100/160 bar
Connection suction line	28 mm - 1 1/8"
Connection discharge line	18 mm - 3/4"
Oil type R744 (CO ₂)	BSE85K (Standard), BSG68K (Option)

Motor data

Motor version	2
Motor voltage (more on request)	380-420V PW-3-50Hz
Max. operating current	42.0 A
Winding ratio	50/50
Starting current (Rotor locked)	97.0 A Y / 158.0 A YY
Max. power input	24,3 kW

Extent of delivery (standard)

Motor protection	SE-B3 (Option), SE-B2 (Option), CM-RC-02 (Standard)
Enclosure class	IP65
Vibration dampers	Standard
Oil charge	2,60 dm ³
Oil heater	0..140 W PTC (Standard)

Available options

Connection suction line	Option
Discharge shut-off valve	Option
Oil level monitoring	OLC-K1 (Option)

Sound measurement

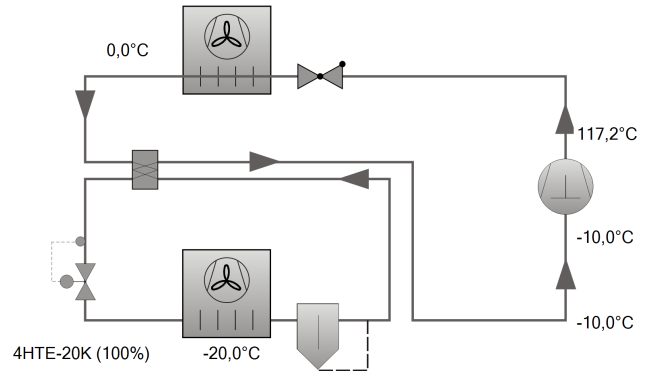
Sound power level (-10°C / 90bar)	81 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 90bar)	73 dB(A) @ 50Hz



Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model	4HTE-20K
Mode	Refrigeration and air conditioning
Refrigerant	R744
Reference temperature	Dew point temp.
Evaporating SST	-20,00 °C
High pressure	Auto
Gas cooler outlet	0 °C
Suct. gas superheat	10,00 K
Operating mode	Transcritical
Power supply	400V-3-50Hz
Capacity control	100%
Useful superheat	100%

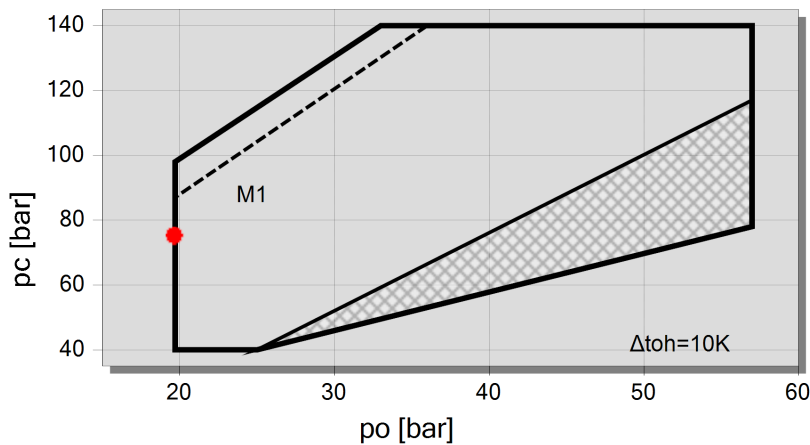


Result

Compressor	4HTE-20K-40P
Capacity steps	100%
Cooling capacity	30,0 kW
Cooling capacity *	30,0 kW
Evaporator capacity	30,0 kW
Power input	11,43 kW
Current (400V)	20,4 A
Voltage range	380-420V
Gas cooler capacity	41,4 kW
COP/EER	2,62
Mass flow	428 kg/h
Discharge gas temp. w/o cooling	117,2 °C
optimal high pressure	75,0 bar(a)

Tentative Data.
 *according to EN12900 (10K suction gas superheat)

Application Limits 100% 4HTE-20K



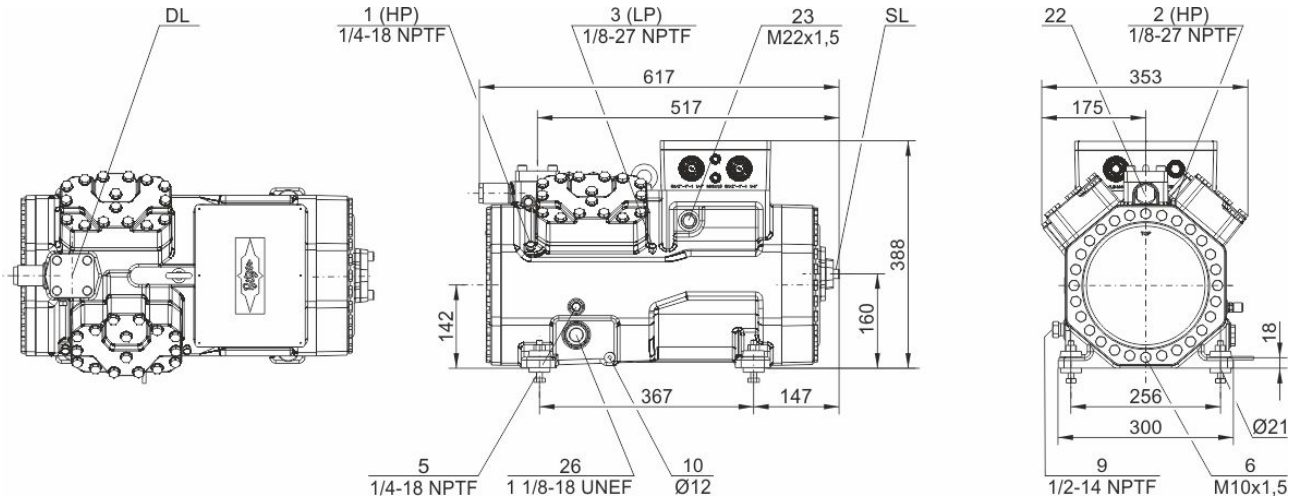
Legend

- mind operating parameters
- M1: motor 1
- Operation above designated line not allowed for following compressor models: 4PTE, 4PTC
- A



Technical Data: 4HTE-20K

Dimensions and Connections





Technical Data

Technical Data

Displacement (1450rpm 50Hz)	12,0 m ³ /h
Displacement (1750rpm 60Hz)	14,5 m ³ /h
No. of cylinder x bore x stroke	4 x 34mm x 38mm
Weight	187 kg
Max. pressure (LP/HP)	100/160 bar
Connection suction line	28 mm - 1 1/8"
Connection discharge line	18 mm - 3/4"
Oil type R744 (CO ₂)	BSE85K (Standard), BSG68K (Option)

Motor data

Motor version	1
Motor voltage (more on request)	380-420V PW-3-50Hz
Max. operating current	39.6 A
Winding ratio	50/50
Starting current (Rotor locked)	97.0 A Y / 158.0 A YY
Max. power input	22,7 kW

Extent of delivery (standard)

Motor protection	SE-B3 (Option), SE-B2 (Option), CM-RC-02 (Standard)
Enclosure class	IP65
Vibration dampers	Standard
Oil charge	2,60 dm ³
Oil heater	0..140 W PTC (Standard)

Available options

Connection suction line	Option
Discharge shut-off valve	Option
Oil level monitoring	OLC-K1 (Option)

Sound measurement

Sound power level (-10°C / 90bar)	79 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 90bar)	71 dB(A) @ 50Hz