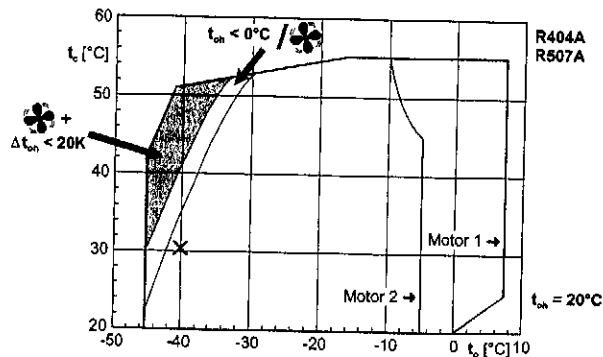


Compressor Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model	6F-40.2Y
Refrigerant	R404A
Reference temperature	Dew point temp.
Evaporating SST	-40°C
Condensing SDT	30°C
Liquid subcooling	0K
Suct. gas superheat	10K
Power supply	400V-3-50Hz
Useful superheat	100%
Capacity Control	100%

Application Limits (100%)



Output

Compressor model	6F-40.2Y-40P
Cooling capacity	19.20 kW
Cooling capacity *	22.4 kW
Evaporator capacity	19.20 kW
Power input	14.49 kW
Current (400V)	34.7 A
Voltage range	380-420V
Condensing cap. (with HR)	33.0 kW
COP/EER	1.33
COP/EER *	1.54
Mass flow	641 kg/h
Operating mode	Standard
Discharge gas temp. w/o cooling	77.6 °C



*Compressor-Performance data certified by ASERCOM (see T.Data/ Notes)

*According to EN12900 (20°C suction gas temp., 0K liquid subcooling)

Operating conditions / given values:	
Refrigerant:	R23
Evaporation temperature:	-75 °C
Condensing temperature:	-35 °C
Suction gas superheat:	20 K
Liquid subcooling:	0 K
Useful superheat:	10 K
Power supply:	50 Hz
Performance data :	
Compressor type, selected:	4NCS-12.2 Y
Refrigeration capacity, compressor:	14,5 kW
Refrigeration capacity, evaporator:	14,0 kW
Power consumption:	5,6 kW
Discharge gas temperature:	54,3 °C
Condensing capacity:	20,1 kW
Mass flow:	270,6 kg/h

Listed performance data are based on calculations and measured data. Under worst conditions given values might differ from common tolerances.

R23 will produce in conjunction with ambient temperatures higher pressures levels. This has to be taken into consideration e.g. by using additional pressure vessels. In similar applications we have reached good results with our oil type BSE32. We recommend to maintain a superheat of 20K, which will reduce the solubility of the refrigerant in the oil. Here it could be helpful to use a heat exchanger between the suction line and the liquid line.