



Compressor Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model Mode	(4DC-5.2Y) Refrigeration and Air conditioning	Suction gas temperature Operating mode	20,00 °C Auto
Refrigerant Reference temperature Liq. subc. (in condenser)	R404A Dew point temp. 0 K	Power supply Capacity Control Useful superheat	400V-3-50Hz 100% 100%

Result

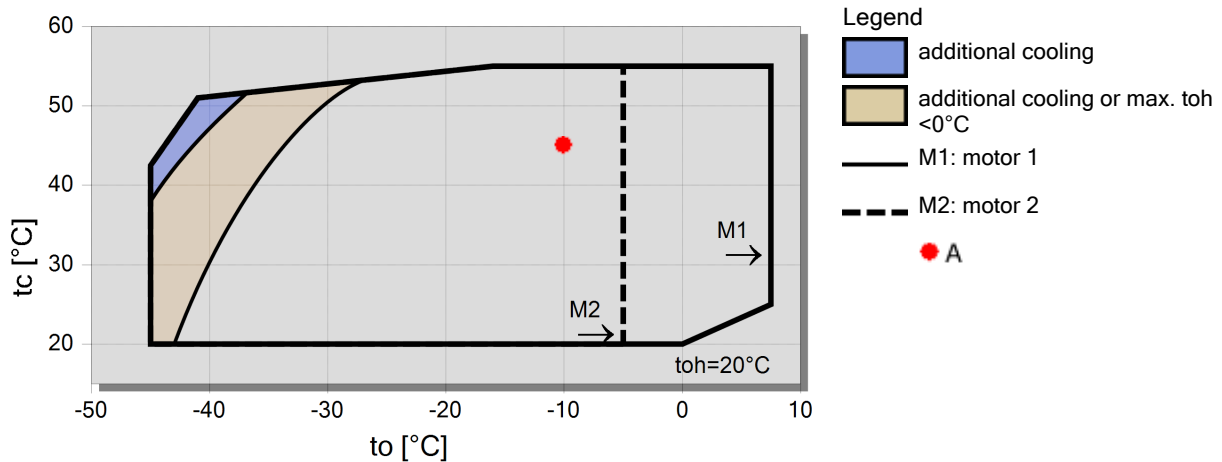
Q [W] Qu* [W] P [kW] I [A] Qc [W]	Cooling capacity Evaporator capacity Power input Current Condenser Capacity	COP [-] m [kg/h] Op. th [°C]	COP/EER Mass flow Operating mode Discharge gas temp. w/o cooling
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tc	to	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C	-35°C	-40°C
30°C	Q [W]	21119	17422	14223	11466	9100	7081	5369	3930
	Qu* [W]	21119	17422	14223	11466	9100	7081	5369	3930
	P [kW]	5,52	5,29	4,99	4,62	4,18	3,70	3,19	2,66
	I [A]	9,64	9,32	8,89	8,37	7,78	7,17	6,56	5,99
	Qc [W]	26635	22717	19214	16081	13282	10784	8560	6586
	COP [-]	3,83	3,29	2,85	2,48	2,18	1,91	1,68	1,48
	m [kg/h]	531	433	351	281	222	171,5	129,5	94,5
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	69,9	77,2	85,0	93,2	102,1	111,8	122,3	134,2
	40°C	Q [W]	17654	14523	11807	9460	7441	5715	4250
Qu* [W]		17654	14523	11807	9460	7441	5715	4250	3014
P [kW]		6,34	5,95	5,50	4,99	4,43	3,83	3,22	2,60
I [A]		10,84	10,28	9,61	8,88	8,11	7,33	6,60	5,93
Qc [W]		23992	20478	17307	14446	11868	9549	7470	5612
COP [-]		2,79	2,44	2,15	1,90	1,68	1,49	1,32	1,16
m [kg/h]		500	407	327	260	203	155,3	115,0	81,2
Op.		Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
th [°C]		81,8	89,2	97,2	105,7	114,8	124,8	136,0	0
50°C		Q [W]	14301	11733	9494	7553	5879	4444	3222
	Qu* [W]	14301	11733	9494	7553	5879	4444	3222	2188
	P [kW]	7,07	6,53	5,93	5,29	4,62	3,92	3,22	2,52
	I [A]	11,92	11,12	10,24	9,32	8,37	7,45	6,59	5,86
	Qc [W]	21367	18261	15428	12846	10497	8366	6441	4709
	COP [-]	2,02	1,80	1,60	1,43	1,27	1,13	1,00	0,87
	m [kg/h]	469	380	304	240	185,2	139,0	100,3	67,8
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	94,1	101,7	109,9	118,7	128,4	139,2	0	0

-- No calculation possible (see message in single point selection)

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

Application Limits 100% Octagon



Legend

- additional cooling
- additional cooling or max. toh < 0°C
- M1: motor 1
- M2: motor 2
- A