



### Compressor Selection: Semi-hermetic Reciprocating Compressors

#### Input Values

Compressor model Mode	(2DC-2.2Y) Refrigeration and Air conditioning	Suction gas temperature Operating mode	20,00 °C Auto
Refrigerant	R404A	Power supply	400V-3-50Hz
Reference temperature	Dew point temp.	Capacity Control	100%
Liq. subc. (in condenser)	0 K	Useful superheat	100%

#### Result

Q [W]	Cooling capacity	COP [ - ]	COP/EER
Q* [W]	Cooling capacity *	COP* [ - ]	COP/EER *
P [kW]	Power input	m [kg/h]	Mass flow
I [A]	Current	Op.	Operating mode
Qc [W]	Condenser Capacity	th [°C]	Discharge gas temp. w/o cooling

tc	to	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C	-35°C	-40°C
30°C	Q [W]	10113	8345	6814	5493	4360	3392	2571	1879
	Q* [W]	10113	8345	6814	5493	4360	3392	2571	1879
	P [kW]	2,72	2,59	2,43	2,25	2,05	1,83	1,59	1,35
	I [A]	4,86	4,69	4,48	4,25	3,99	3,73	3,46	3,21
	Qc [W]	12833	10936	9248	7746	6409	5220	4164	3227
	COP [ - ]	3,72	3,22	2,80	2,44	2,13	1,86	1,61	1,40
	COP* [ - ]	3,72	3,22	2,80	2,44	2,13	1,86	1,61	1,40
	m [kg/h]	254	208	168,1	134,6	106,2	82,2	62,0	45,2
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	70,9	78,1	85,8	94,2	103,6	114,0	125,8	139,7
40°C	Q [W]	8488	6977	5666	4532	3557	2724	2016	1419
	Q* [W]	8488	6977	5666	4532	3557	2724	2016	1419
	P [kW]	3,15	2,94	2,70	2,44	2,17	1,88	1,58	1,28
	I [A]	5,46	5,16	4,84	4,49	4,14	3,79	3,45	3,15
	Qc [W]	11640	9915	8366	6974	5724	4603	3599	2700
	COP [ - ]	2,69	2,37	2,10	1,86	1,64	1,45	1,27	1,11
	COP* [ - ]	2,69	2,37	2,10	1,86	1,64	1,45	1,27	1,11
	m [kg/h]	240	195,3	157,1	124,7	97,2	74,0	54,5	38,2
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	83,2	90,5	98,4	107,0	116,5	127,1	139,2	0
50°C	Q [W]	6900	5641	4545	3596	2779	2080	1487	987
	Q* [W]	6900	5641	4545	3596	2779	2080	1487	987
	P [kW]	3,55	3,25	2,93	2,59	2,25	1,90	1,54	1,19
	I [A]	6,03	5,60	5,15	4,70	4,25	3,81	3,41	3,06
	Qc [W]	10446	8888	7474	6191	5029	3978	3030	2176
	COP [ - ]	1,95	1,74	1,55	1,39	1,24	1,10	0,96	0,83
	COP* [ - ]	1,95	1,74	1,55	1,39	1,24	1,10	0,96	0,83
	m [kg/h]	226	182,6	145,6	114,1	87,5	65,1	46,3	30,6
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	95,9	103,6	111,8	120,8	130,8	0	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



