



Compressor Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model Mode	(2U-5.2Y) 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
Qu* [W]	Evaporator capacity	m [kg/h]	Mass flow
P [kW]	Power input	Op.	Operating mode
I [A]	Current	th [°C]	Discharge gas temp. w/o cooling
Qc [W]	Condenser Capacity		

tc	to	0°C	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C	-35°C
30°C	Q [W]	17578	14608	12040	9825	7919	6287	4897	--
	Qu* [W]	17578	14608	12040	9825	7919	6287	4897	--
	P [kW]	3,92	3,74	3,55	3,34	3,11	2,86	2,57	
	I [A]	7,45	7,24	7,01	6,77	6,52	6,25	5,97	
	Qc [W]	21493	18343	15586	13164	11032	9146	7468	
	COP [-]	4,49	3,91	3,40	2,94	2,54	2,20	1,90	
	m [kg/h]	449	370	303	245	196,6	155,4	120,5	
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	
	th [°C]	63,6	69,6	76,2	83,5	91,8	101,1	111,5	
	40°C	Q [W]	15178	12581	10331	8386	6710	5273	4047
Qu* [W]		15178	12581	10331	8386	6710	5273	4047	--
P [kW]		4,54	4,28	4,02	3,73	3,42	3,07	2,69	
I [A]		8,24	7,91	7,58	7,23	6,86	6,48	6,08	
Qc [W]		19713	16863	14347	12116	10128	8345	6734	
COP [-]		3,35	2,94	2,57	2,25	1,96	1,72	1,51	
m [kg/h]		444	364	296	239	189,6	148,2	113,2	
Op.		Standard	Standard	Standard	Standard	Standard	Standard	Standard	
th [°C]		73,6	79,8	86,7	94,4	102,9	112,3	122,5	
50°C		Q [W]	12532	10364	8477	6839	5424	4208	3169
	Qu* [W]	12532	10364	8477	6839	5424	4208	3169	--
	P [kW]	5,16	4,81	4,45	4,08	3,68	3,26	2,80	
	I [A]	9,07	8,60	8,13	7,65	7,17	6,68	6,20	
	Qc [W]	17695	15177	12929	10916	9105	7467	5974	
	COP [-]	2,43	2,15	1,90	1,68	1,47	1,29	1,13	
	m [kg/h]	435	355	288	230	181,0	139,5	104,5	
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	
	th [°C]	84,4	90,8	97,8	105,6	114,5	124,6	136,0	

-- No calculation possible (see message in single point selection)
 *According to EN12900 (20°C suction gas temp., 0K liquid subcooling)

Application Limits 100%

