



Compressor Selection: 2-stage Semi-hermetic Reciprocating Compressors

Input Values

Compressor model	S6H-20.2Y	Suction gas temperature	20,00 °C
Refrigerant	R404A	Useful superheat	100%
Reference temperature	Dew point temp.	Power supply	400V-3-50Hz
Operating mode	with sub cooler		

Result

Q [W]	Cooling capacity	COP [-]	COP/EER
Q* [W]	Cooling capacity *	COP* [-]	COP/EER *
P [kW]	Power input	mLP [kg/h]	Mass flow LP
I [A]	Current	pm [bar(a)]	Intermed. pressure
Qc [W]	Condenser Capacity		

tc	to	-20°C	-25°C	-30°C	-35°C	-40°C	-45°C	-50°C	-55°C
30°C	Q [W]	--	31866	27439	23291	19432	15902	12748	10007
	Q* [W]	--	27701	23092	18962	15299	12105	9384	7126
	P [kW]	--	16,43	15,02	13,64	12,30	11,00	9,76	8,56
	I [A]	--	27,2	25,2	23,3	21,4	19,67	18,06	16,60
	Qc [W]	--	48293	42459	36933	31734	26906	22504	18571
	COP [-]	--	1,94	1,83	1,71	1,58	1,45	1,31	1,17
	COP* [-]	--	1,69	1,54	1,39	1,24	1,10	0,96	0,83
	mLP [kg/h]	--	674	559	457	368	290	224	170,1
	pm [bar(a)]	--	6,87	6,01	5,20	4,46	3,78	3,17	2,64
	40°C	Q [W]	--	30586	26342	22327	18598	15217	12224
Q* [W]		--	24611	20410	16676	13403	10589	8217	6255
P [kW]		--	18,53	16,90	15,32	13,79	12,32	10,92	9,57
I [A]		--	30,3	27,9	25,6	23,5	21,4	19,56	17,83
Qc [W]		--	49120	43239	37642	32389	27542	23141	19200
COP [-]		--	1,65	1,56	1,46	1,35	1,23	1,12	1,01
COP* [-]		--	1,33	1,21	1,09	0,97	0,86	0,75	0,65
mLP [kg/h]		--	673	555	451	361	284	220	167,2
pm [bar(a)]		--	7,48	6,55	5,70	4,92	4,21	3,56	2,98
50°C		Q [W]	--	29312	25174	21322	17794	14614	11784
	Q* [W]	--	21116	17484	14276	11486	9096	7073	5367
	P [kW]	--	20,6	18,79	17,01	15,30	13,65	12,07	10,55
	I [A]	--	33,4	30,6	28,0	25,6	23,3	21,1	19,08
	Qc [W]	--	49942	43960	38330	33090	28265	23853	19821
	COP [-]	--	1,42	1,34	1,25	1,16	1,07	0,98	0,88
	COP* [-]	--	1,02	0,93	0,84	0,75	0,67	0,59	0,51
	mLP [kg/h]	--	665	547	444	356	281	218	164,8
	pm [bar(a)]	--	8,15	7,16	6,26	5,44	4,68	3,99	3,36

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

Application Limits

