



Selection: Compact Screw Compressors CS // CSV

Input Values

Compressor model	CSH9593-240Y	Operating mode	Standard
Refrigerant	R513A	Power supply	400V-3-50Hz
Reference temperature	Dew point temp.	Capacity control	100%
Liq. subc. (in condenser)	0 K	Additional cooling	Automatic
Suct. gas superheat	10,00 K	Max. discharge gas temp.	110,0 °C
Useful superheat	100%		

Result

Q [W]	Cooling capacity	mHP [kg/h]	Mass flow HP
P [kW]	Power input	Qac [kW]	Additional cooling
I [A]	Current	tcu [°C]	Liquid temp.
COP [-]	COP/EER	pm [bar(a)]	ECO pressure
mLP [kg/h]	Mass flow LP	Qsc [kW]	sub cooler capacity (ECO)

tc	to	10°C	5°C	0°C	-5°C	-10°C	-15°C	-20°C	-25°C
30°C	Q [W]	851918	709912	587599	482722	393238	317287	253182	--
	P [kW]	110,0	107,6	105,7	103,9	102,0	99,6	96,6	
	I [A]	190,2	186,9	184,2	181,8	179,2	176,0	172,1	
	COP [-]	7,74	6,60	5,56	4,65	3,86	3,18	2,62	
	mLP [kg/h]	19752	16828	14251	11989	10008	8282	6783	
	mHP [kg/h]	19752	16828	14251	11989	10008	8282	6783	
	Qac [kW]	--	--	--	--	--	--	--	
	tcu [°C]	30,0	30,0	30,0	30,0	30,0	30,0	30,0	
	pm [bar(a)]	--	--	--	--	--	--	--	
	Qsc [kW]	--	--	--	--	--	--	--	
40°C	Q [W]	764170	634045	522168	426426	344903	275859	217719	--
	P [kW]	134,1	131,2	128,3	125,4	122,5	119,6	116,5	
	I [A]	225	220	216	212	208	204	199,3	
	COP [-]	5,70	4,83	4,07	3,40	2,82	2,31	1,87	
	mLP [kg/h]	19609	16674	14086	11811	9818	8078	6565	
	mHP [kg/h]	19609	16674	14086	11811	9818	8078	6565	
	Qac [kW]	--	--	--	--	--	--	--	
	tcu [°C]	40,0	40,0	40,0	40,0	40,0	40,0	40,0	
	pm [bar(a)]	--	--	--	--	--	--	--	
	Qsc [kW]	--	--	--	--	--	--	--	
50°C	Q [W]	670169	552200	451051	364748	291505	229703	177876	--
	P [kW]	163,4	159,5	155,6	151,7	148,0	144,6	141,5	
	I [A]	269	263	257	251	245	240	236	
	COP [-]	4,10	3,46	2,90	2,40	1,97	1,59	1,26	
	mLP [kg/h]	19375	16412	13797	11497	9480	7716	6179	
	mHP [kg/h]	19375	16412	13797	11497	9480	7716	6179	
	Qac [kW]	--	--	--	--	--	--	--	
	tcu [°C]	50,0	50,0	50,0	50,0	50,0	50,0	50,0	
	pm [bar(a)]	--	--	--	--	--	--	--	
	Qsc [kW]	--	--	--	--	--	--	--	

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

*According to EN12900 (10K suction gas superheat, 0K liquid subcooling, see tech. data/ notes)

Application Limits Standard CSH9593-240

