



Selection: Compact Screw Compressors CS

Input Values

Compressor model	CSH6593-60Y	Operating mode	Standard
Refrigerant	R134a	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]	190982	158191	129905	105599	84791	67035	51919	--
	P [kW]	26,0	25,0	24,1	23,4	22,7	22,0	21,4	
	I [A]	50,4	49,2	48,1	47,2	46,4	45,7	45,0	
	COP [-]	7,35	6,33	5,38	4,52	3,74	3,04	2,42	
	mLP [kg/h]	4008	3381	2830	2346	1922	1552	1228	
	mHP [kg/h]	4008	3381	2830	2346	1922	1552	1228	
	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]	171606	141437	115472	93225	74250	58139	44520	--
	P [kW]	30,9	29,8	28,9	28,0	27,2	26,5	25,7	
	I [A]	56,6	55,2	54,0	52,9	51,9	51,0	50,1	
	COP [-]	5,55	4,74	4,00	3,33	2,73	2,20	1,73	
	mLP [kg/h]	3942	3315	2764	2280	1857	1488	1167	
	mHP [kg/h]	3942	3315	2764	2280	1857	1488	1167	
	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]	150075	122789	99393	79436	62509	48236	36279	--
	P [kW]	36,9	35,8	34,8	33,9	33,0	32,3	31,5	
	I [A]	64,6	63,1	61,7	60,5	59,4	58,4	57,4	
	COP [-]	4,07	3,43	2,86	2,35	1,89	1,50	1,15	
	mLP [kg/h]	3821	3197	2649	2168	1749	1385	1070	
	mHP [kg/h]	3821	3197	2649	2168	1749	1385	1070	
	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 CSH6593-60

