



### Compressor Selection: Semi-hermetic Reciprocating Compressors

#### Input Values

Compressor model Mode	(6F-40.2Y) Refrigeration and Air conditioning	Suction gas temperature Operating mode	20,00 °C Auto
Refrigerant Reference temperature Liq. subc. (in condenser)	R404A Dew point temp. 0 K	Power supply Capacity Control Useful superheat	400V-3-50Hz 100% 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]	118731	98040	80128	64678	51411	40082	30468	22368
	Q* [W]	118731	98040	80128	64678	51411	40082	30468	22368
	P [kW]	31,5	29,7	27,7	25,4	22,8	20,1	17,34	14,49
	I [A]	56,9	54,6	51,9	48,9	45,6	42,3	39,0	36,0
	Qc [W]	150191	127774	107814	90046	74247	60224	47809	36854
	COP [-]	3,77	3,30	2,89	2,55	2,25	1,99	1,76	1,54
	COP* [-]	3,77	3,30	2,89	2,55	2,25	1,99	1,76	1,54
	m [kg/h]	2983	2439	1976	1584	1252	971	735	538
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	70,4	77,1	84,2	91,8	100,0	109,0	118,9	130,4
40°C	Q [W]	100899	83090	67634	54274	42783	32956	24607	17567
	Q* [W]	100899	83090	67634	54274	42783	32956	24607	17567
	P [kW]	36,0	33,4	30,6	27,5	24,4	21,1	17,73	14,40
	I [A]	63,2	59,6	55,8	51,7	47,5	43,4	39,4	35,9
	Qc [W]	136897	116514	98223	81822	67137	54018	42334	31967
	COP [-]	2,80	2,49	2,21	1,97	1,76	1,56	1,39	1,22
	COP* [-]	2,80	2,49	2,21	1,97	1,76	1,56	1,39	1,22
	m [kg/h]	2856	2326	1876	1493	1169	896	666	473
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	81,5	88,4	95,6	103,4	111,8	121,1	131,6	0
50°C	Q [W]	--	68309	55295	44026	34324	26027	18984	13056
	Q* [W]	--	68309	55295	44026	34324	26027	18984	13056
	P [kW]	--	36,7	33,1	29,3	25,5	21,6	17,76	13,98
	I [A]	--	64,1	59,1	54,1	49,0	44,1	39,5	35,5
	Qc [W]	--	104988	88368	73351	59812	47643	36746	27037
	COP [-]	--	1,86	1,67	1,50	1,35	1,20	1,07	0,93
	COP* [-]	--	1,86	1,67	1,50	1,35	1,20	1,07	0,93
	m [kg/h]	--	2212	1771	1397	1081	814	591	404
	Op.	--	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	--	99,9	107,3	115,4	124,2	134,0	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%



