



Compressor Selection: Open-Type Reciprocating Compressors

Input Values

Compressor model	4H.2Y-K	Useful superheat	100%
Refrigerant	R404A	Motor speed	1450 /min
Reference temperature	Dew point temp.	Drive	Coupling (1:1)
Liq. subc. (in condenser)	0 K	Capacity Control	100%
Suction gas temperature	20,00 °C		

Result

		5°C	0°C	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C	
30°C	Q [W]	82602	69315	57790	47805	39179	31756	25402	19997	
	Q* [W]	82602	69315	57790	47805	39179	31756	25402	19997	
	P [kW]	15,19	14,93	14,39	13,63	12,69	11,61	10,44	9,23	
	Qc [W]	97795	84242	72181	61435	51867	43368	35847	29230	
	COP [-]	5,44	4,64	4,02	3,51	3,09	2,73	2,43	2,17	
	COP* [-]	5,44	4,64	4,02	3,51	3,09	2,73	2,43	2,17	
	m [kg/h]	2129	1762	1452	1189	966	778	619	484	
	n [/min]	1450	1450	1450	1450	1450	1450	1450	1450	
	40°C	Q [W]	71438	59935	49911	41191	33629	27098	21487	16696
		Q* [W]	71438	59935	49911	41191	33629	27098	21487	16696
P [kW]		17,75	17,13	16,25	15,17	13,92	12,56	11,15	9,73	
Qc [W]		89185	77066	66165	56357	47546	39659	32635	26424	
COP [-]		4,03	3,50	3,07	2,72	2,42	2,16	1,93	1,72	
COP* [-]		4,03	3,50	3,07	2,72	2,42	2,16	1,93	1,72	
m [kg/h]		2082	1719	1413	1153	933	746	587	454	
n [/min]		1450	1450	1450	1450	1450	1450	1450	1450	
50°C		Q [W]	59883	50252	41803	34411	27967	22374	17544	13398
		Q* [W]	59883	50252	41803	34411	27967	22374	17544	13398
	P [kW]	20,4	19,47	18,27	16,88	15,36	13,76	12,13	10,53	
	Qc [W]	80303	69722	60077	51296	43327	36130	29671	23927	
	COP [-]	2,93	2,58	2,29	2,04	1,82	1,63	1,45	1,27	
	COP* [-]	2,93	2,58	2,29	2,04	1,82	1,63	1,45	1,27	
	m [kg/h]	2032	1674	1371	1114	896	710	553	419	
	n [/min]	1450	1450	1450	1450	1450	1450	1450	1450	

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

Application Limits Standard



