



Compressor Selection: Open-Type Reciprocating Compressors

Input Values

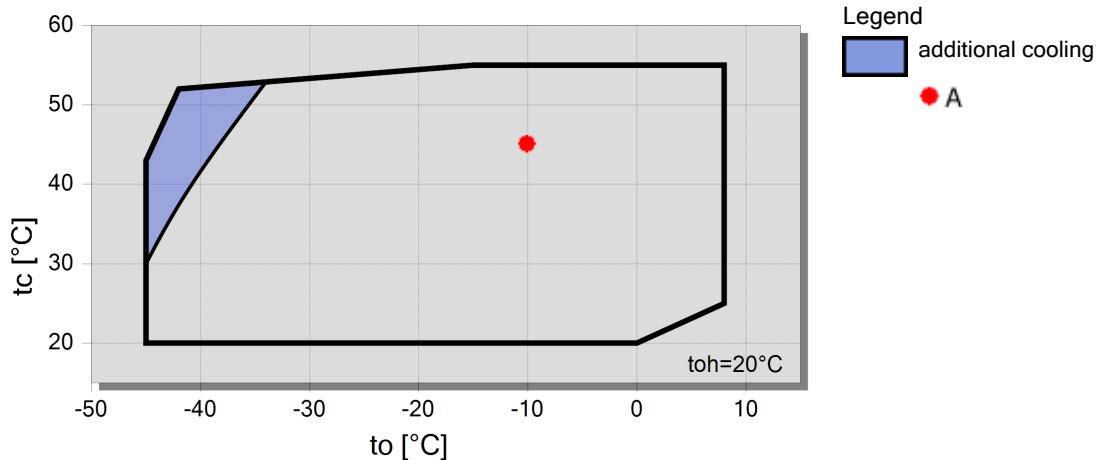
Compressor model	4H.2Y-K	Useful superheat	100%
Refrigerant	R404A	Motor speed	1450 /min
Reference temperature	Dew point temp.	Drive	Coupling (1:1)
Liq. subc. (in condenser)	0 K	Capacity Control	100%
Suction gas temperature	20,00 °C		

Result

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

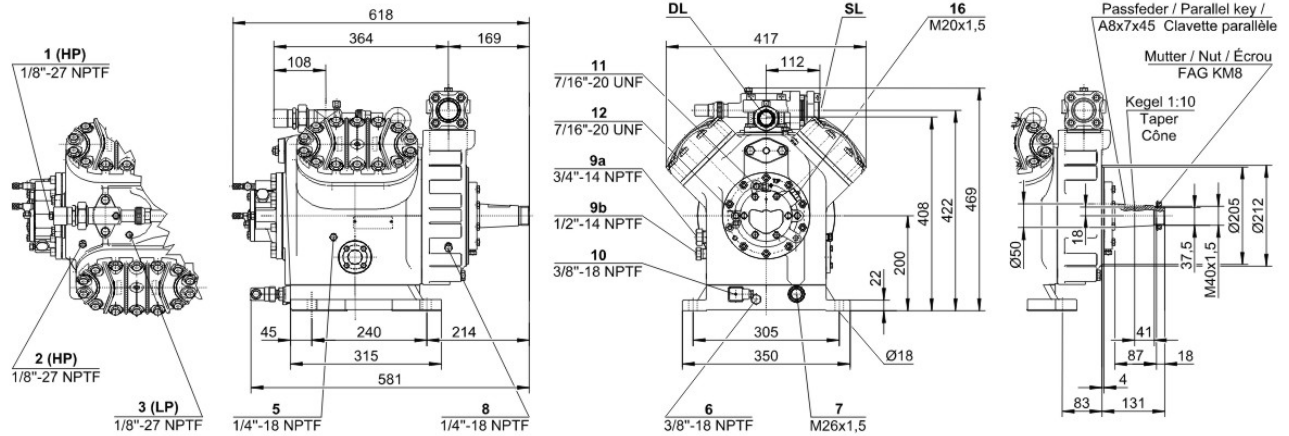
Application Limits Standard





Technical Data: 4H.2Y-K

Dimensions and Connections



Technical Data

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Displacement (1450 RPM 50Hz)	73,6 m3/h
Displacement (1750 RPM 60Hz)	88,8 m3/h
No. of cylinder x bore x stroke	4 x 70 mm x 55 mm
Allowed speed range	750 .. 1750 1/min
Weight	129 kg
Max. pressure (LP/HP)	19 / 25 bar
Connection suction line	42 mm - 1 5/8"
Connection discharge line	28 mm - 1 1/8"
Oil type R134a/R407C/R404A/R507A/R407A/R407F	tc<55°C: BSE32 / tc>55°C: BSE55 (Option)
Oil type R22 (R12/R502)	B5.2 (Standard)

Extent of delivery (Standard)

Oil charge	4,7 dm3
Protective charge	Standard
Suction shut-off valve	Standard
Discharge shut-off valve	Standard
Pressure relief valve	Standard

Available Options

Coupling (...-K) w. A/C + medium	KK620 [<22kW] / KK630 [<45kW] (Option)
Coupling (...-K) w. low temp.	KK625 [<22kW] / KK630 [<45kW] (Option)
Coupling housing	Option
Motor pulley (...-S)	190, 210, 230 mm (Option)
V-belts	5 x SPA (Option)
Discharge gas temperature sensor	Option (incl. INT69VS)
Start unloading	Option
Connection cooling water	R 3/4" (Option)
Capacity control	100-50% (Option)
Additional fan	Option
Water-cooled cylinder heads	Option
Oil service valve	Option
Crankcase heater	140 W (Option)
Oil pressure monitoring	MP54 (Option)
Kit for marine application	Option