



Compressor Selection: Open-Type Reciprocating Compressors

Input Values

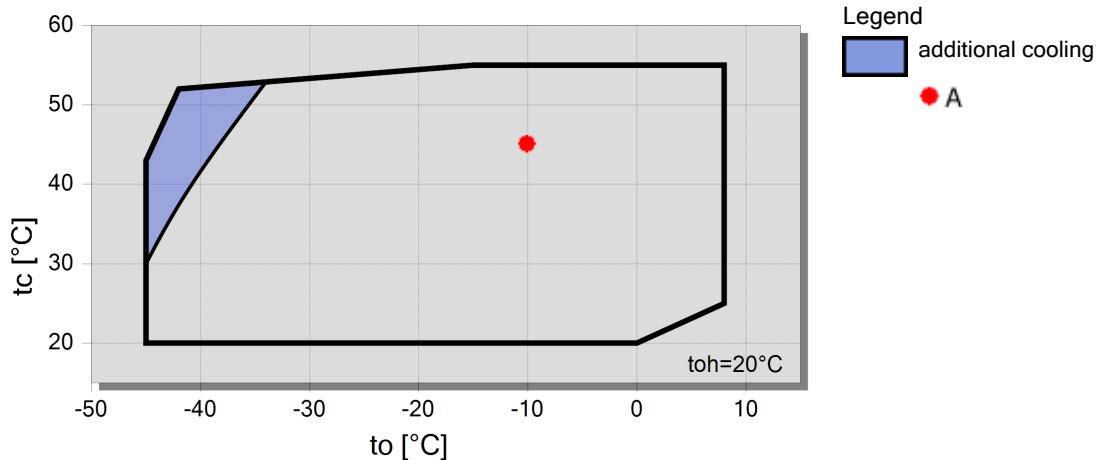
Compressor model	4G.2Y-K	Useful superheat	100%
Refrigerant	R404A	Motor speed	1450 /min
Reference temperature	Dew point temp.	Drive	Coupling (1:1)
Liq. subc. (in condenser)	0 K	Capacity Control	100%
Suction gas temperature	20,00 °C		

Result

		Cooling capacity		COP [-]		COP/EER			
		5°C	0°C	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C
30°C	Q [W]	98215	82119	68179	56124	45732	36814	29205	22758
	Q* [W]	98215	82119	68179	56124	45732	36814	29205	22758
	P [kW]	17,84	17,52	16,90	16,02	14,93	13,68	12,30	10,85
	Qc [W]	116058	99642	85080	72146	60664	50489	41503	33604
	COP [-]	5,50	4,69	4,03	3,50	3,06	2,69	2,37	2,10
	COP* [-]	5,50	4,69	4,03	3,50	3,06	2,69	2,37	2,10
	m [kg/h]	2532	2087	1713	1396	1128	902	711	551
	n [/min]	1450	1450	1450	1450	1450	1450	1450	1450
40°C	Q [W]	84798	70812	58656	48114	39007	31179	24493	18824
	Q* [W]	84798	70812	58656	48114	39007	31179	24493	18824
	P [kW]	20,6	19,82	18,78	17,55	16,16	14,65	13,05	11,41
	Qc [W]	105416	90630	77440	65667	55170	45829	37545	30230
	COP [-]	4,11	3,57	3,12	2,74	2,41	2,13	1,88	1,65
	COP* [-]	4,11	3,57	3,12	2,74	2,41	2,13	1,88	1,65
	m [kg/h]	2472	2031	1660	1347	1082	858	669	512
	n [/min]	1450	1450	1450	1450	1450	1450	1450	1450
50°C	Q [W]	70803	59048	48780	39843	32101	25435	19733	14898
	Q* [W]	70803	59048	48780	39843	32101	25435	19733	14898
	P [kW]	23,4	22,2	20,8	19,25	17,57	15,80	13,95	12,07
	Qc [W]	94218	81245	69578	59090	49672	41231	33687	26966
	COP [-]	3,02	2,66	2,35	2,07	1,83	1,61	1,41	1,23
	COP* [-]	3,02	2,66	2,35	2,07	1,83	1,61	1,41	1,23
	m [kg/h]	2402	1967	1600	1290	1028	807	621	466
	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)

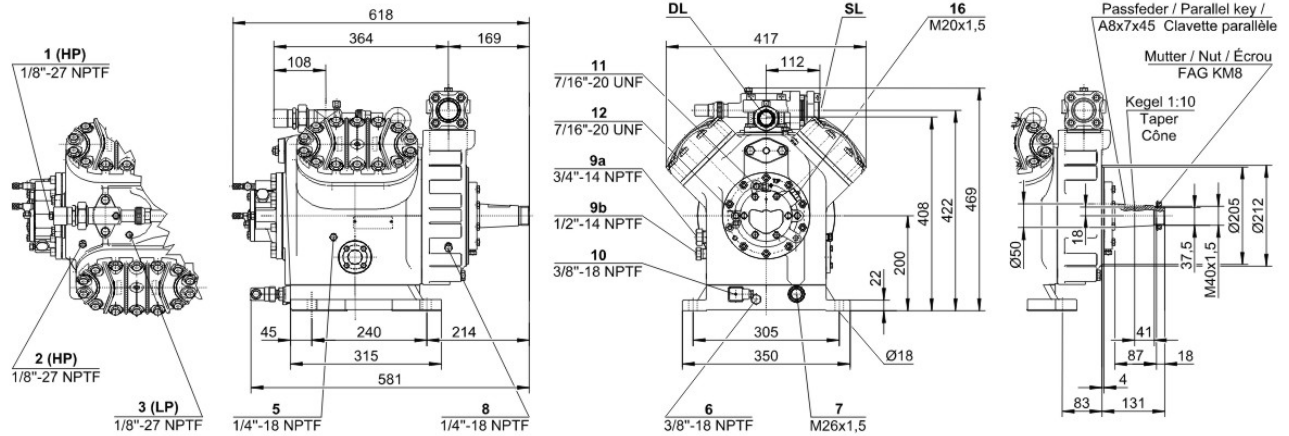
Application Limits Standard





Technical Data: 4G.2Y-K

Dimensions and Connections



Technical Data

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Displacement (1450 RPM 50Hz)	84,5 m3/h
Displacement (1750 RPM 60Hz)	102,0 m3/h
No. of cylinder x bore x stroke	4 x 75 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