



Compressor Selection: Open-Type Reciprocating Compressors

Input Values

Compressor model	4H.2Y-K	Suction gas temperature	20,00 °C
Refrigerant	R404A	Useful superheat	100%
Reference temperature	Dew point temp.	Compressor speed	1186 /min
Liq. subc. (in condenser)	0 K	Capacity Control	100%

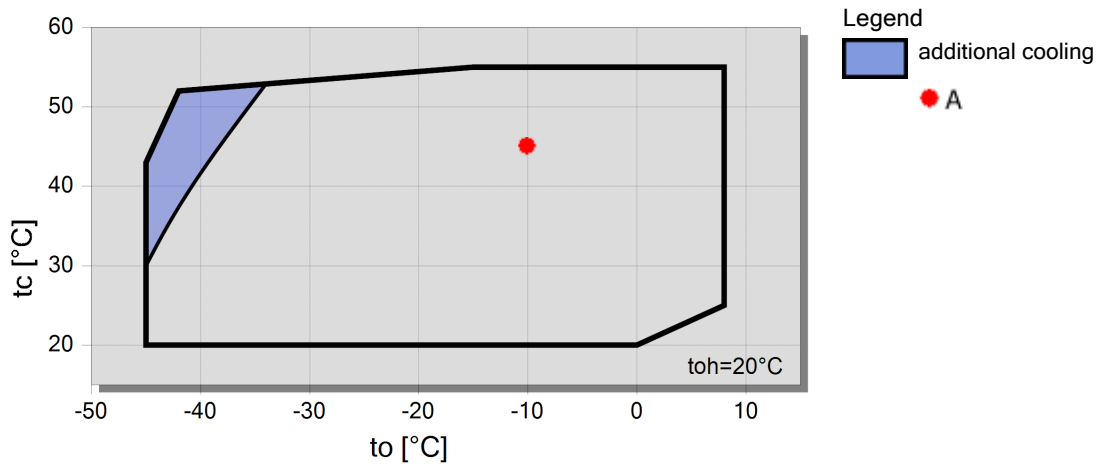
Result

Q [W]	Cooling capacity	COP [-]	COP/EER
Q* [W]	Cooling capacity *	COP* [-]	COP/EER *
P [kW]	Power input	m [kg/h]	Mass flow
Qc [W]	Condenser Capacity	n [/min]	Compr. speed

tc	to	10°C	0°C	-10°C	-20°C	-30°C	-40°C	-50°C	-60°C
30°C	Q [W]	--	57789	39856	26476	16672	9681	--	--
	Q* [W]	--	57789	39856	26476	16672	9681	--	--
	P [kW]	--	12,09	11,04	9,40	7,48	5,55	--	--
	Qc [W]	--	69876	50892	35878	24148	15230	--	--
	COP [-]	--	4,78	3,61	2,82	2,23	1,74	--	--
	COP* [-]	--	4,78	3,61	2,82	2,23	1,74	--	--
	m [kg/h]	--	1469	991	648	404	233	--	--
	n [/min]	--	1186	1186	1186	1186	1186	--	--
	40°C	Q [W]	--	49969	34342	22592	13920	7684	--
Q* [W]		--	49969	34342	22592	13920	7684	--	--
P [kW]		--	13,87	12,28	10,17	7,88	5,73	--	--
Qc [W]		--	63840	46621	32763	21796	13412	--	--
COP [-]		--	3,60	2,80	2,22	1,77	1,34	--	--
COP* [-]		--	3,60	2,80	2,22	1,77	1,34	--	--
m [kg/h]		--	1433	961	622	378	207	--	--
n [/min]		--	1186	1186	1186	1186	1186	--	--
50°C		Q [W]	--	41896	28689	18654	11170	5723	--
	Q* [W]	--	41896	28689	18654	11170	5723	--	--
	P [kW]	--	15,76	13,67	11,14	8,53	6,19	--	--
	Qc [W]	--	57661	42361	29791	19695	11917	--	--
	COP [-]	--	2,66	2,10	1,67	1,31	0,92	--	--
	COP* [-]	--	2,66	2,10	1,67	1,31	0,92	--	--
	m [kg/h]	--	1395	929	592	350	177,3	--	--
	n [/min]	--	1186	1186	1186	1186	1186	--	--

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

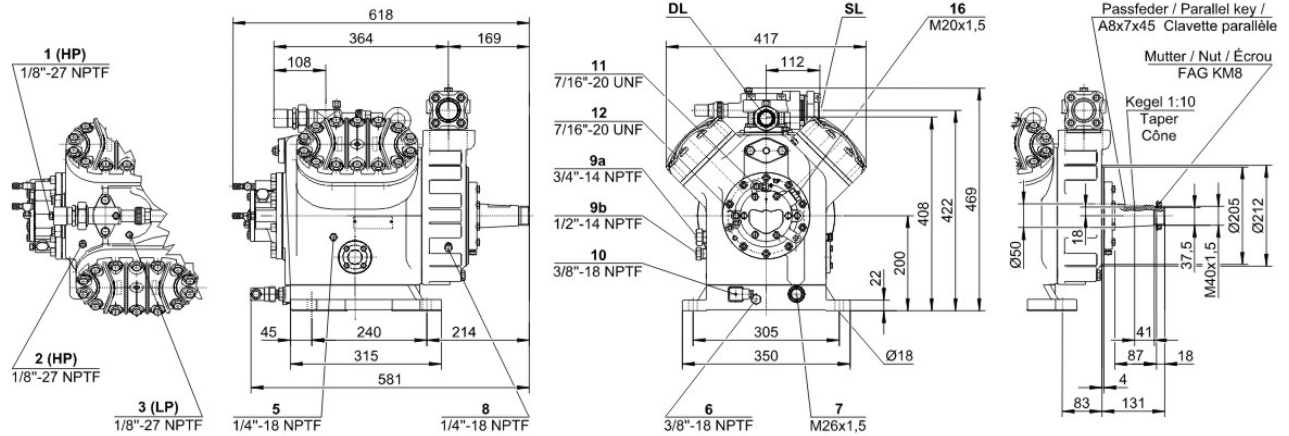
Application Limits Standard





Technical Data: 4H.2Y-K

Dimensions and Connections



Technical Data

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Displacement (1450 RPM 50Hz)	73,6 m ³ /h
Displacement (1750 RPM 60Hz)	88,8 m ³ /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 dm ³
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