



Compressor Selection: Open-Type Reciprocating Compressors

Input Values

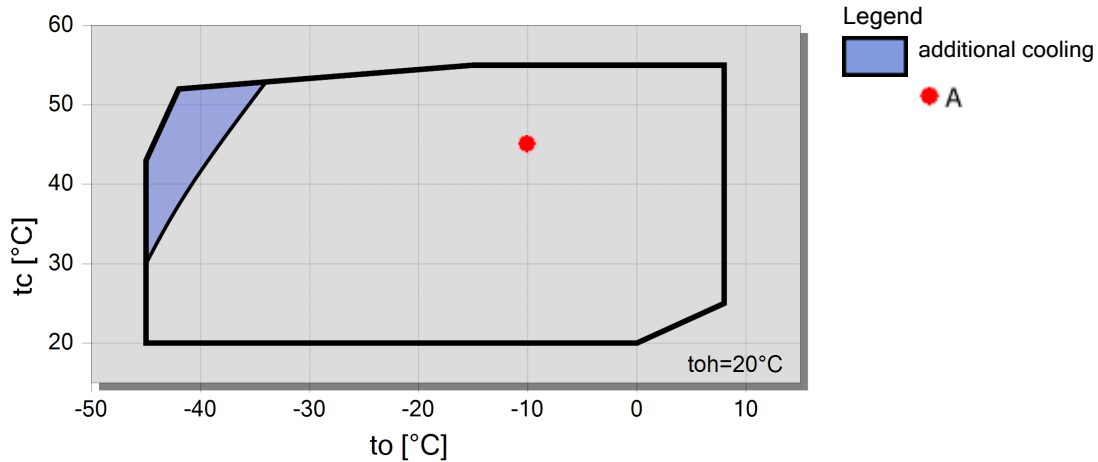
Compressor model	4N.2Y-K	Useful superheat	100%
Refrigerant	R404A	Motor speed	1450 /min
Reference temperature	Dew point temp.	Drive	Coupling (1:1)
Liq. subc. (in condenser)	0 K	Capacity Control	100%
Suction gas temperature	20,00 °C		

Result

tc [W]	Cooling capacity	COP [-]	COP/EER						
				Q* [W]	Qc [W]	COP* [-]	COP/EER*	m [kg/h]	n [min]
P [kW]	Power input	m [kg/h]	Mass flow						
Qc [W]	Condenser Capacity	n [min]	Compr. speed						
tc	to	0°C	-10°C	-20°C	-30°C	-40°C	-50°C	-60°C	-70°C
30°C	Q [W]	55782	38512	25606	16127	9342	--	--	--
	Q* [W]	55782	38512	25606	16127	9342	--	--	--
	P [kW]	11,18	10,28	8,90	7,25	5,55	--	--	--
	Qc [W]	66961	48794	34505	23376	14892	--	--	--
	COP [-]	4,99	3,75	2,88	2,22	1,68	--	--	--
	COP* [-]	4,99	3,75	2,88	2,22	1,68	--	--	--
	m [kg/h]	1418	958	627	391	225	--	--	--
	n [/min]	1450	1450	1450	1450	1450	--	--	--
40°C	Q [W]	47861	32907	21674	13395	7456	--	--	--
	Q* [W]	47861	32907	21674	13395	7456	--	--	--
	P [kW]	12,70	11,36	9,64	7,75	5,91	--	--	--
	Qc [W]	60559	44271	31317	21148	13368	--	--	--
	COP [-]	3,77	2,90	2,25	1,73	1,26	--	--	--
	COP* [-]	3,77	2,90	2,25	1,73	1,26	--	--	--
	m [kg/h]	1373	921	596	364	201	--	--	--
	n [/min]	1450	1450	1450	1450	1450	--	--	--
50°C	Q [W]	39849	27292	17777	10715	5614	--	--	--
	Q* [W]	39849	27292	17777	10715	5614	--	--	--
	P [kW]	14,36	12,62	10,60	8,51	6,56	--	--	--
	Qc [W]	54205	39913	28378	19223	12171	--	--	--
	COP [-]	2,78	2,16	1,68	1,26	0,86	--	--	--
	COP* [-]	2,78	2,16	1,68	1,26	0,86	--	--	--
	m [kg/h]	1327	884	564	335	173,9	--	--	--
	n [/min]	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)

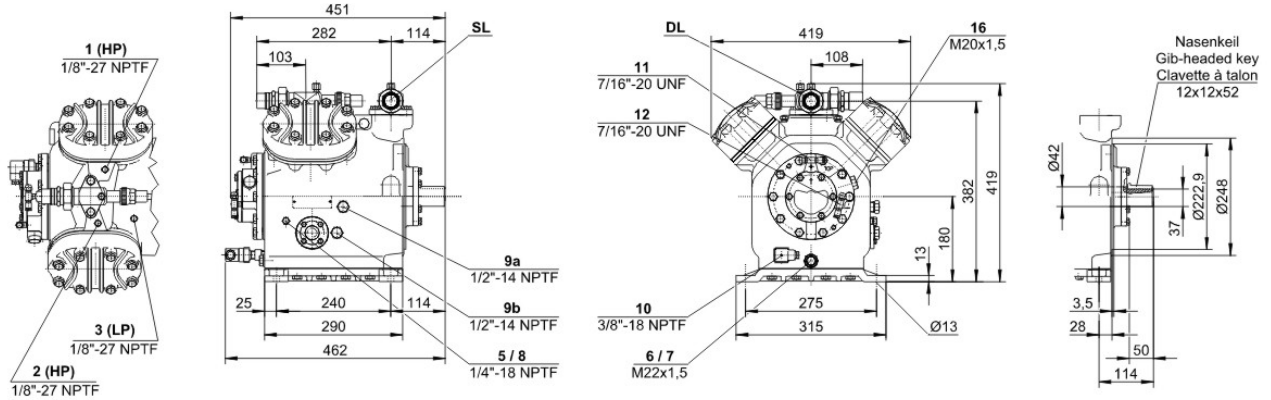
Application Limits Standard





Technical Data: 4N.2Y-K

Dimensions and Connections



Technical Data

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Displacement (1450 RPM 50Hz)	56,1 m3/h
Displacement (1750 RPM 60Hz)	67,7 m3/h
No. of cylinder x bore x stroke	4 x 60 mm x 57 mm
Allowed speed range	750 .. 1750 1/min
Weight	77 kg
Max. pressure (LP/HP)	19 / 25 bar
Connection suction line	35 mm - 1 3/8"
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	4,0 dm3
Protective charge	Standard
Suction shut-off valve	Standard
Discharge shut-off valve	Standard

Available Options

Coupling (...-K) w. A/C + medium	KK411 [<11kW] / KK420 [<22kW] (Option)
Coupling (...-K) w. low temp.	KK415 [<7.5kW] / KK425 [<22kW] (Option)
Coupling housing	Option
Motor pulley (...-S)	190, 210, 230 mm (Option)
V-belts	3 x SPA (Option)
Discharge gas temperature sensor	Option (incl. INT69VS)
Start unloading	Option
Connection cooling water	R 1/2" (Option)
Capacity control	100-50% (Option)
Additional fan	Option
Water-cooled cylinder heads	Option
Oil service valve	Option
Crankcase heater	100 W (Option)
Oil pressure monitoring	MP54 (Option)
Kit for marine application	Option