



Compressor Selection: Open-Type Reciprocating Compressors

Input Values

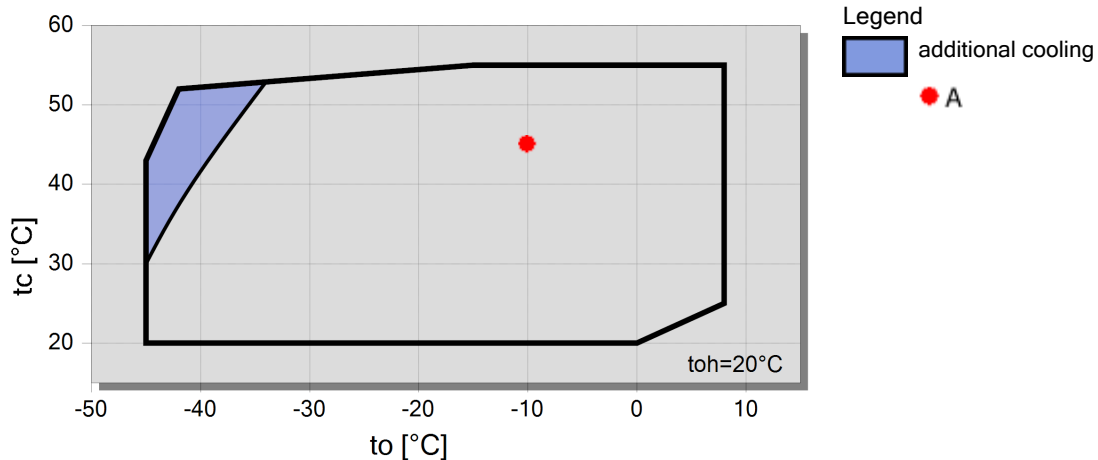
Compressor model	4T.2Y-K	Useful superheat	100%
Refrigerant	R404A	Motor speed	1450 /min
Reference temperature	Dew point temp.	Drive	Coupling (1:1)
Liq. subc. (in condenser)	0 K	Capacity Control	100%
Suction gas temperature	20,00 °C		

Result

		10°C	0°C	-10°C	-20°C	-30°C	-40°C	-50°C	-60°C	
30°C	Q [W]	--	38121	26355	17572	11134	6539	--	--	
	Q* [W]	--	38121	26355	17572	11134	6539	--	--	
	P [kW]	--	8,23	7,61	6,55	5,35	4,29	--	--	
	Qc [W]	--	46355	33961	24123	16483	10826	--	--	
	COP [-]	--	4,63	3,46	2,68	2,08	1,53	--	--	
	COP* [-]	--	4,63	3,46	2,68	2,08	1,53	--	--	
	m [kg/h]	--	969	656	430	270	157,2	--	--	
	n [/min]	--	1450	1450	1450	1450	1450	--	--	
	40°C	Q [W]	--	33057	22790	15064	9353	5236	--	--
		Q* [W]	--	33057	22790	15064	9353	5236	--	--
P [kW]		--	9,33	8,26	6,94	5,66	4,69	--	--	
Qc [W]		--	42387	31053	22008	15009	9921	--	--	
COP [-]		--	3,54	2,76	2,17	1,65	1,12	--	--	
COP* [-]		--	3,54	2,76	2,17	1,65	1,12	--	--	
m [kg/h]		--	948	638	414	254	141,1	--	--	
n [/min]		--	1450	1450	1450	1450	1450	--	--	
50°C		Q [W]	--	27768	19081	12471	7530	3918	--	--
		Q* [W]	--	27768	19081	12471	7530	3918	--	--
	P [kW]	--	10,40	9,00	7,53	6,27	5,49	--	--	
	Qc [W]	--	38165	28084	20004	13799	9406	--	--	
	COP [-]	--	2,67	2,12	1,66	1,20	0,71	--	--	
	COP* [-]	--	2,67	2,12	1,66	1,20	0,71	--	--	
	m [kg/h]	--	925	618	396	236	121,4	--	--	
	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)

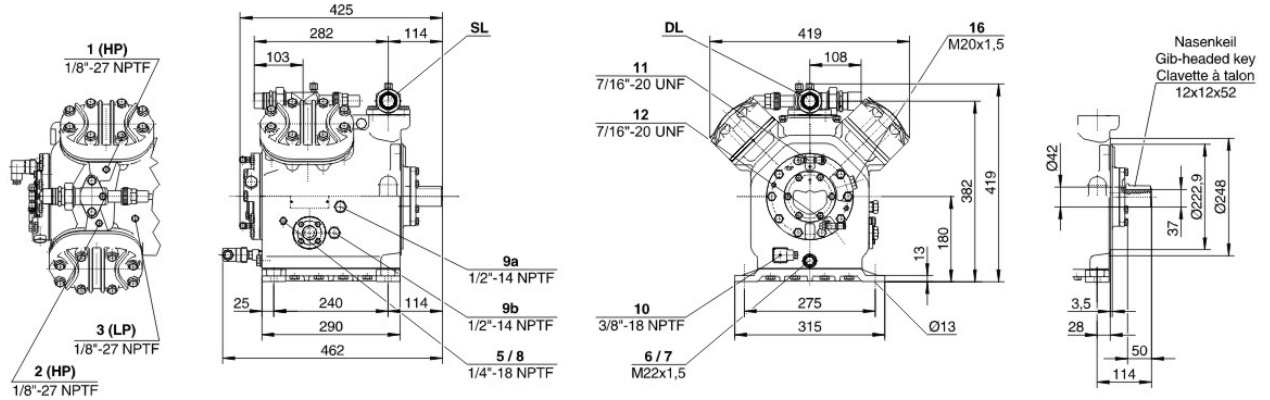
Application Limits Standard





Technical Data: 4T.2Y-K

Dimensions and Connections



Technical Data

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Displacement (1450 RPM 50Hz)	39,36 m3/h
Displacement (1750 RPM 60Hz)	47,5 m3/h
No. of cylinder x bore x stroke	4 x 60 mm x 40 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