



Bitzer 2CC-4.2

BITZER Software v6.4.3 rev1353

28.05.2015 / All data subject to change.

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Compressor Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model Mode	(2CC-4.2Y) Refrigeration and Air conditioning	Suction gas temperature Operating mode	20,00 °C Auto
Refrigerant Reference temperature Liq. subc. (in condenser)	R404A Dew point temp. 0 K	Power supply Capacity Control Useful superheat	400V-3-50Hz 100% 100%

Result

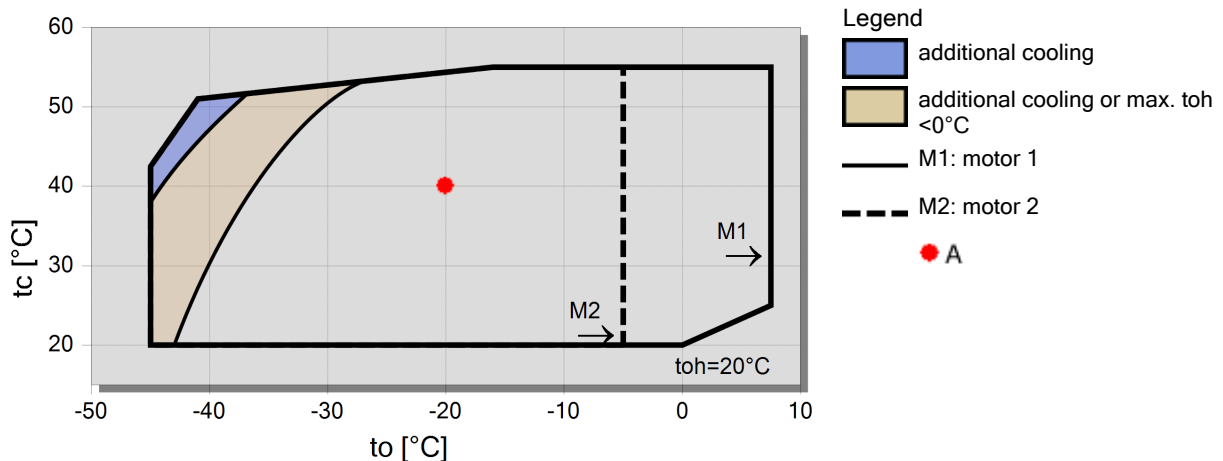
Q [W]	Cooling capacity	COP [-]	COP/EER
Q* [W]	Cooling capacity *	COP* [-]	COP/EER *
P [kW]	Power input	m [kg/h]	Mass flow
I [A]	Current	Op.	Operating mode
Qc [W]	Condenser Capacity	th [°C]	Discharge gas temp. w/o cooling

tc	to	5°C	0°C	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C
30°C	Q [W]	17837	14954	12451	10277	8396	6772	5377	4185
	Q* [W]	17837	14954	12451	10277	8396	6772	5377	4185
	P [kW]	3,48	3,42	3,32	3,17	2,98	2,76	2,50	2,23
	I [A]	6,45	6,38	6,24	6,05	5,81	5,54	5,26	4,97
	Qc [W]	21313	18377	15768	13445	11374	9527	7881	6415
	COP [-]	5,13	4,37	3,75	3,24	2,82	2,46	2,15	1,88
	COP* [-]	5,13	4,37	3,75	3,24	2,82	2,46	2,15	1,88
	m [kg/h]	460	380	313	256	207	165,9	130,9	101,4
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	57,4	63,8	70,6	77,8	85,5	93,8	103,0	113,1
40°C	Q [W]	15114	12662	10523	8662	7046	5648	4446	3417
	Q* [W]	15114	12662	10523	8662	7046	5648	4446	3417
	P [kW]	4,25	4,08	3,86	3,61	3,33	3,02	2,69	2,34
	I [A]	7,51	7,27	6,98	6,64	6,26	5,86	5,46	5,08
	Qc [W]	19360	16739	14387	12275	10375	8666	7131	5754
	COP [-]	3,56	3,11	2,72	2,40	2,12	1,87	1,66	1,46
	COP* [-]	3,56	3,11	2,72	2,40	2,12	1,87	1,66	1,46
	m [kg/h]	441	363	298	242	195,4	155,4	121,5	92,9
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	69,2	75,8	82,7	90,1	98,0	106,5	115,9	126,3
50°C	Q [W]	12431	10401	8623	7070	5719	4550	3544	2685
	Q* [W]	12431	10401	8623	7070	5719	4550	3544	2685
	P [kW]	4,96	4,68	4,36	4,01	3,63	3,23	2,82	2,40
	I [A]	8,54	8,13	7,67	7,18	6,66	6,14	5,62	5,15
	Qc [W]	17389	15077	12980	11077	9350	7785	6368	5087
	COP [-]	2,51	2,22	1,98	1,76	1,57	1,41	1,26	1,12
	COP* [-]	2,51	2,22	1,98	1,76	1,57	1,41	1,26	1,12
	m [kg/h]	422	346	283	229	183,2	144,4	111,6	84,0
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	81,3	88,0	95,1	102,7	110,9	119,8	129,5	0

-- No calculation possible (see message in single point selection)

*According to EN12900 (20°C suction gas temp., 0K liquid subcooling)

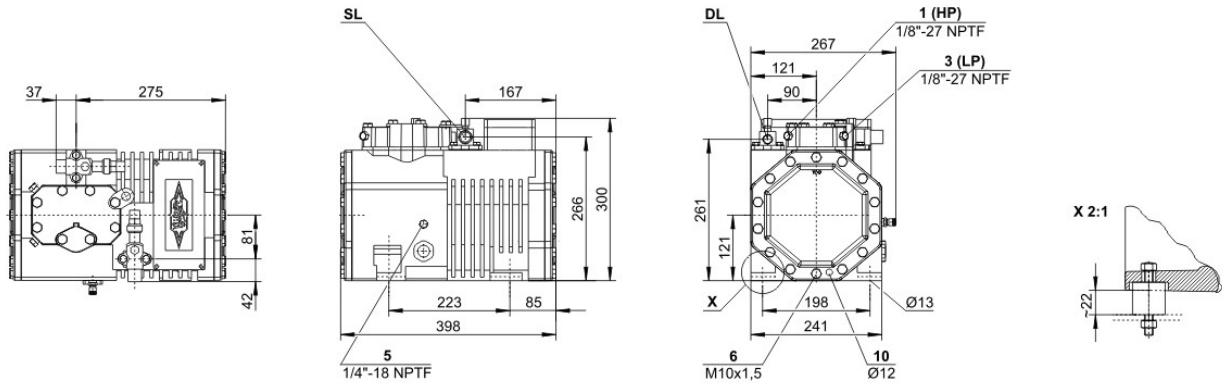
Application Limits 100% Octagon





Technical Data: (2CC-4.2Y)

Dimensions and Connections



Technical Data

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Displacement (1450 RPM 50Hz)	16,24 m ³ /h
Displacement (1750 RPM 60Hz)	19,60 m ³ /h
No. of cylinder x bore x stroke	2 x 55 mm x 39,3 mm
Weight	70 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	22 mm - 7/8"
Connection discharge line	16 mm - 5/8"
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)
Oil type R290/R1270	SHC226E (Standard)

Motor data

Motor voltage (more on request)	380-420V Y-3-50Hz
Max operating current	9.4 A
Starting current (Rotor locked)	44.2 A
Max. Power input	5,6 kW

Extent of delivery (Standard)

Motor protection	SE-B1
Enclosure class	IP65
Vibration dampers	Standard
Oil charge	1,50 dm ³

Available Options

Additional fan	Option
Crankcase heater	0..120 W PTC (Option)

Sound measurement

Sound power level (+5°C / 50°C)	67,5 dB(A) @ 50Hz
Sound power level (-10°C / 45°C)	67,0 dB(A) @ 50Hz
Sound power level (-35°C / 40°C)	(70,0) dB(A) @ 50Hz
Sound pressure level @ 1m (+5°C / 50°C)	59,5 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 45°C)	59,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-35°C / 40°C)	(62,0) dB(A) @ 50Hz