



Compressor Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model Mode	(4CC-6.2Y) 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

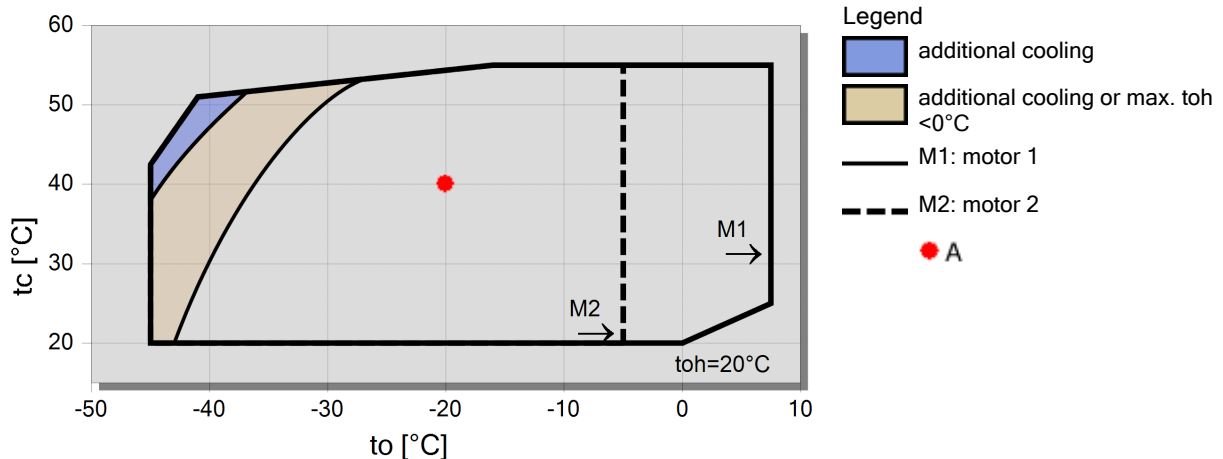
Q [W]	Cooling capacity	COP [-]	COP/EER
Q* [W]	Cooling capacity *	COP* [-]	COP/EER *
P [kW]	Power input	m [kg/h]	Mass flow
I [A]	Current	Op.	Operating mode
Qc [W]	Condenser Capacity	th [°C]	Discharge gas temp. w/o cooling

tc	to	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C	-35°C	-40°C
30°C	Q [W]	24971	20648	16905	13677	10904	8537	6528	4836
	Q* [W]	24971	20648	16905	13677	10904	8537	6528	4836
	P [kW]	6,65	6,36	5,98	5,52	5,01	4,45	3,86	3,25
	I [A]	11,73	11,31	10,79	10,19	9,54	8,86	8,20	7,57
	Qc [W]	31625	27005	22881	19199	15915	12990	10391	8088
	COP [-]	3,75	3,25	2,83	2,48	2,18	1,92	1,69	1,49
	COP* [-]	3,75	3,25	2,83	2,48	2,18	1,92	1,69	1,49
	m [kg/h]	627	514	417	335	266	207	157,5	116,3
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	70,6	77,7	85,3	93,4	102,1	111,6	122,0	133,7
40°C	Q [W]	21143	17432	14211	11426	9030	6981	5240	3770
	Q* [W]	21143	17432	14211	11426	9030	6981	5240	3770
	P [kW]	7,64	7,17	6,63	6,03	5,37	4,67	3,94	3,21
	I [A]	13,14	12,47	11,70	10,86	9,99	9,12	8,29	7,53
	Qc [W]	28780	24606	20844	17453	14398	11651	9184	6976
	COP [-]	2,77	2,43	2,14	1,90	1,68	1,50	1,33	1,18
	COP* [-]	2,77	2,43	2,14	1,90	1,68	1,50	1,33	1,18
	m [kg/h]	599	488	394	314	247	189,7	141,7	101,6
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	82,0	89,4	97,3	105,7	114,8	124,6	135,4	0
50°C	Q [W]	17323	14221	11523	9186	7175	5456	3996	2768
	Q* [W]	17323	14221	11523	9186	7175	5456	3996	2768
	P [kW]	8,61	7,98	7,28	6,51	5,71	4,87	4,01	3,14
	I [A]	14,57	13,64	12,61	11,53	10,43	9,36	8,35	7,46
	Qc [W]	25933	22200	18799	15700	12882	10322	8001	5905
	COP [-]	2,01	1,78	1,58	1,41	1,26	1,12	1,00	0,88
	COP* [-]	2,01	1,78	1,58	1,41	1,26	1,12	1,00	0,88
	m [kg/h]	568	460	369	292	226	170,7	124,4	85,8
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	94,4	102,2	110,5	119,6	129,4	0	0	0

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

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

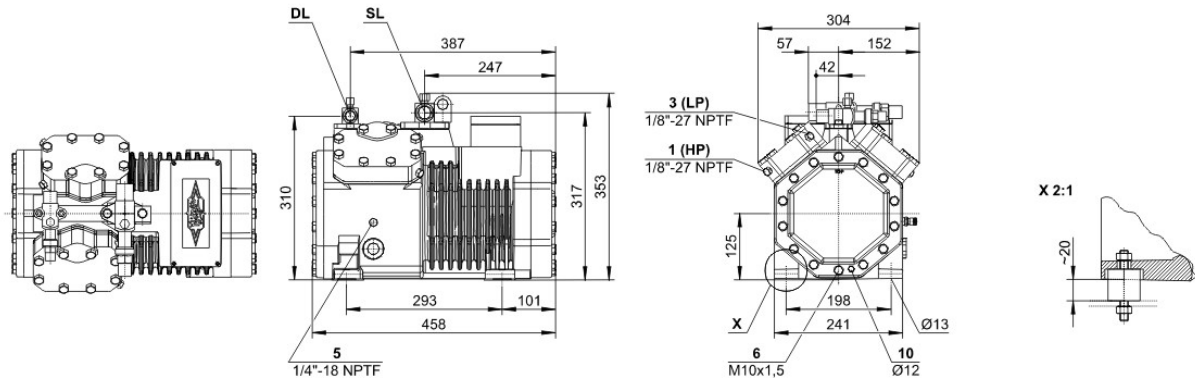
Application Limits 100% Octagon





Technical Data: (4CC-6.2Y)

Dimensions and Connections



Technical Data

Technical Data

Displacement (1450 RPM 50Hz)	32,48 m ³ /h
Displacement (1750 RPM 60Hz)	39,20 m ³ /h
No. of cylinder x bore x stroke	4 x 55 mm x 39,3 mm
Weight	90,5 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	28 mm - 1 1/8"
Connection discharge line	22 mm - 7/8"
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	15.9 A
Starting current (Rotor locked)	82.4 A
Max. Power input	9,0 kW

Extent of delivery (Standard)

Motor protection	SE-B1
Enclosure class	IP65
Vibration dampers	Standard
Oil charge	2,00 dm ³

Available Options

Discharge gas temperature sensor	Option
Start unloading	Option
Capacity control	100-50% (Option)
Additional fan	Option
Crankcase heater	0..120 W PTC (Option)
Oil level monitoring	OLC-K1 (Option, not for R290/R1270)

Sound measurement

Sound power level (-10°C / 45°C)	72,5 dB(A) @ 50Hz
Sound power level (-35°C / 40°C)	76,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 45°C)	64,5 dB(A) @ 50Hz
Sound pressure level @ 1m (-35°C / 40°C)	68,0 dB(A) @ 50Hz



Compressor Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model Mode	(2CC-3.2Y) 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

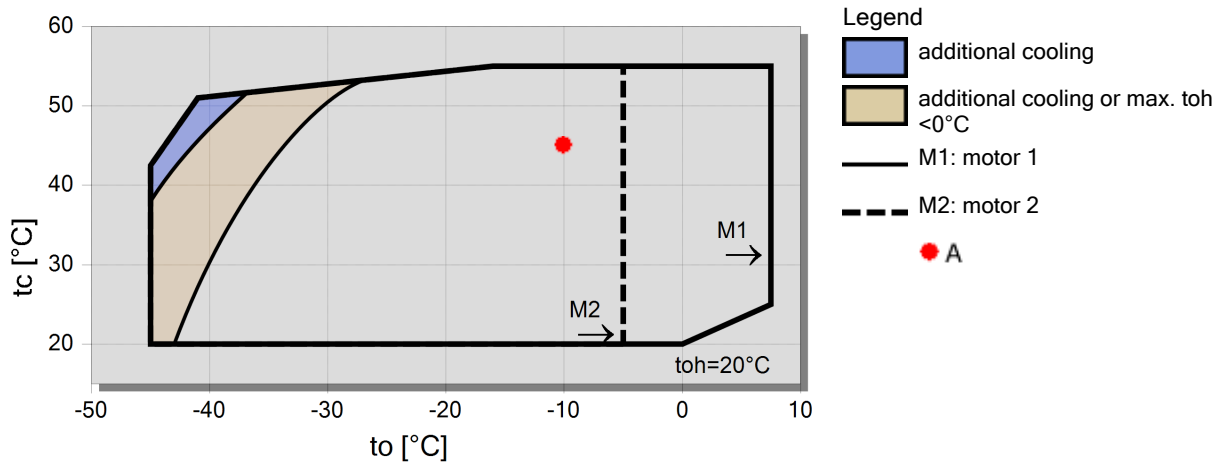
Q [W] Qu* [W] P [kW] I [A] Qc [W]	Cooling capacity Evaporator capacity Power input Current Condenser Capacity	COP [-] m [kg/h] Op. th [°C]	COP/EER Mass flow Operating mode Discharge gas temp. w/o cooling
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tc	to	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C	-35°C	-40°C
30°C	Q [W]	12468	10290	8404	6779	5384	4193	3184	2334
	Qu* [W]	12468	10290	8404	6779	5384	4193	3184	2334
	P [kW]	3,33	3,15	2,95	2,72	2,48	2,21	1,93	1,64
	I [A]	6,15	5,91	5,64	5,35	5,04	4,72	4,41	4,12
	Qc [W]	15795	13442	11354	9502	7859	6404	5116	3977
	COP [-]	3,75	3,26	2,85	2,49	2,17	1,90	1,65	1,42
	m [kg/h]	313	256	207	166,0	131,1	101,6	76,8	56,1
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	70,7	77,5	85,0	93,1	102,2	112,3	124,1	138,0
	40°C	Q [W]	10508	8649	7036	5642	4443	3418	2548
Qu* [W]		10508	8649	7036	5642	4443	3418	2548	1814
P [kW]		3,85	3,58	3,29	2,98	2,65	2,32	1,97	1,62
I [A]		6,88	6,50	6,10	5,68	5,26	4,85	4,45	4,10
Qc [W]		14363	12232	10326	8621	7096	5734	4518	3434
COP [-]		2,73	2,41	2,14	1,89	1,67	1,48	1,29	1,12
m [kg/h]		297	242	195,1	155,2	121,4	92,9	68,9	48,9
Op.		Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
th [°C]		82,7	89,7	97,4	105,8	115,1	125,6	137,9	0
50°C		Q [W]	8594	7053	5711	4548	3544	2685	1954
	Qu* [W]	8594	7053	5711	4548	3544	2685	1954	1336
	P [kW]	4,35	3,98	3,60	3,21	2,80	2,39	1,98	1,57
	I [A]	7,60	7,07	6,53	5,98	5,45	4,94	4,47	4,06
	Qc [W]	12942	11035	9311	7753	6347	5079	3937	2910
	COP [-]	1,98	1,77	1,59	1,42	1,26	1,12	0,98	0,85
	m [kg/h]	282	228	182,9	144,3	111,6	84,0	60,8	41,4
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	95,2	102,5	110,4	119,2	128,9	0	0	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



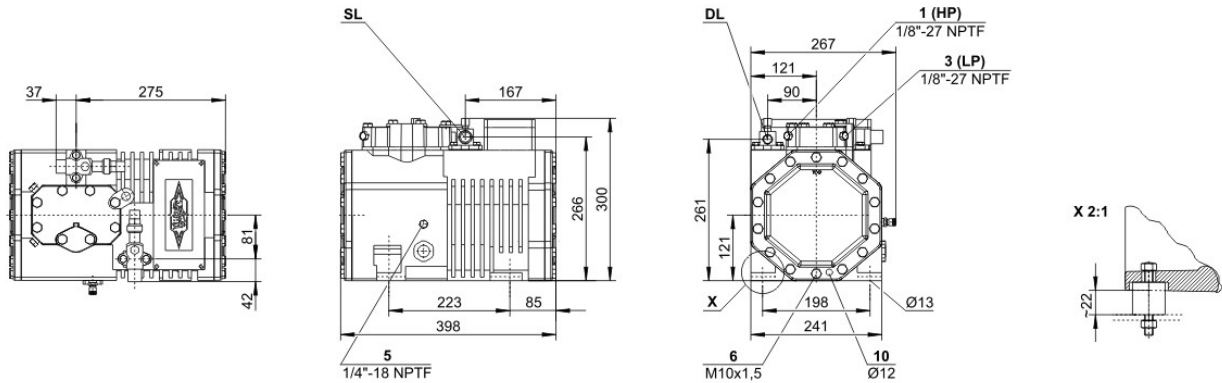
Legend

- additional cooling
- additional cooling or max. toh < 0°C
- M1: motor 1
- - - M2: motor 2
- A



Technical Data: (2CC-3.2Y)

Dimensions and Connections



Technical Data

Technical Data

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	8.5 A
Starting current (Rotor locked)	37.0 A
Max. Power input	5,0 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 (-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 (-10°C / 45°C)	59,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-35°C / 40°C)	62,0 dB(A) @ 50Hz