



Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model	(4CC-6.2Y)	Suction gas temperature	20,00 °C
Mode	Refrigeration and Air conditioning	Operating mode	Auto
Refrigerant	R404A	Power supply	400V-3-50Hz
Reference temperature	Dew point temp.	Capacity control	100%
Liq. subc. (in condenser)	0 K	Useful superheat	100%

Result

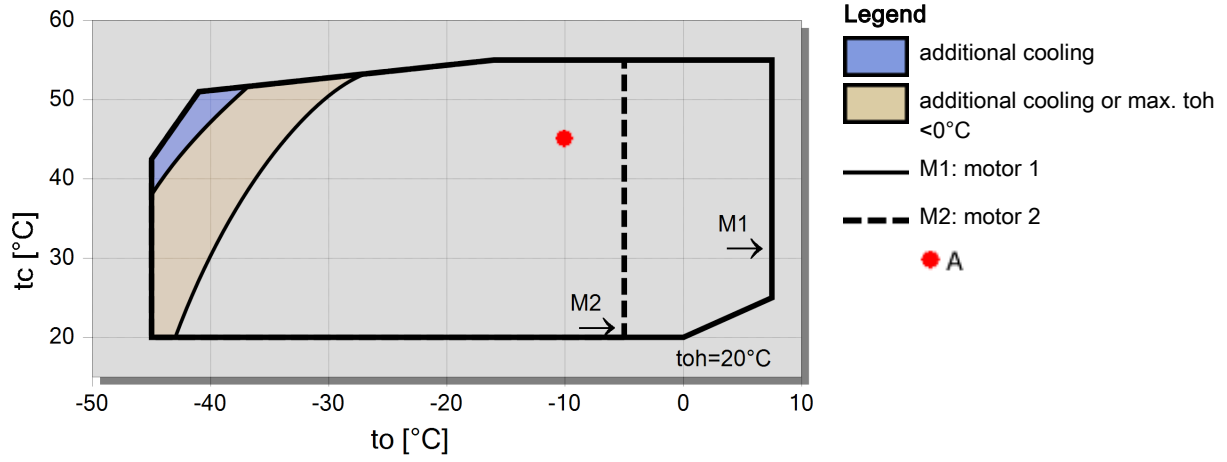
Q [W]	Cooling capacity	COP [-]	COP/EER
Qu* [W]	Evaporator capacity	m [kg/h]	Mass flow
P [kW]	Power input	Op.	Operating mode
I [A]	Current	th [°C]	Discharge gas temp. w/o cooling
Qc [W]	Condenser capacity		

tc	to	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C	-35°C	-40°C
10°C	Q [W]	--	26988	22149	18004	14471	11480	8965	6870
	Qu* [W]		26988	22149	18004	14471	11480	8965	6870
	P [kW]		4,37	4,33	4,19	3,97	3,68	3,36	3,00
	I [A]		8,76	8,71	8,55	8,31	8,01	7,67	7,33
	Qc [W]		31353	26474	22190	18438	15163	12320	9870
	COP [-]		6,18	5,12	4,30	3,65	3,12	2,67	2,29
	m [kg/h]		556	453	366	293	232	180,2	137,7
	Op.		Booster	Booster	Booster	Booster	Booster	Booster	Booster
	th [°C]		55,1	62,3	70,0	78,3	87,4	97,4	108,9
40°C	Q [W]	21143	17432	14211	11426	9030	6981	5240	3770
	Qu* [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
	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
	Qu* [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
	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)

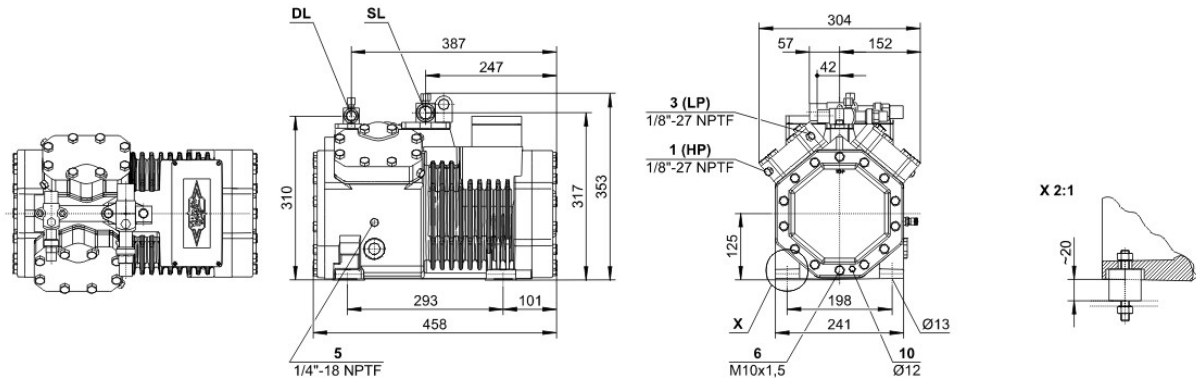
Application Limits 100% Octagon 4CC-6.2





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



Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model	(4DC-5.2Y)	Suction gas temperature	20,00 °C
Mode	Refrigeration and Air conditioning	Operating mode	Auto
Refrigerant	R404A	Power supply	400V-3-50Hz
Reference temperature	Dew point temp.	Capacity control	100%
Liq. subc. (in condenser)	0 K	Useful superheat	100%

Result

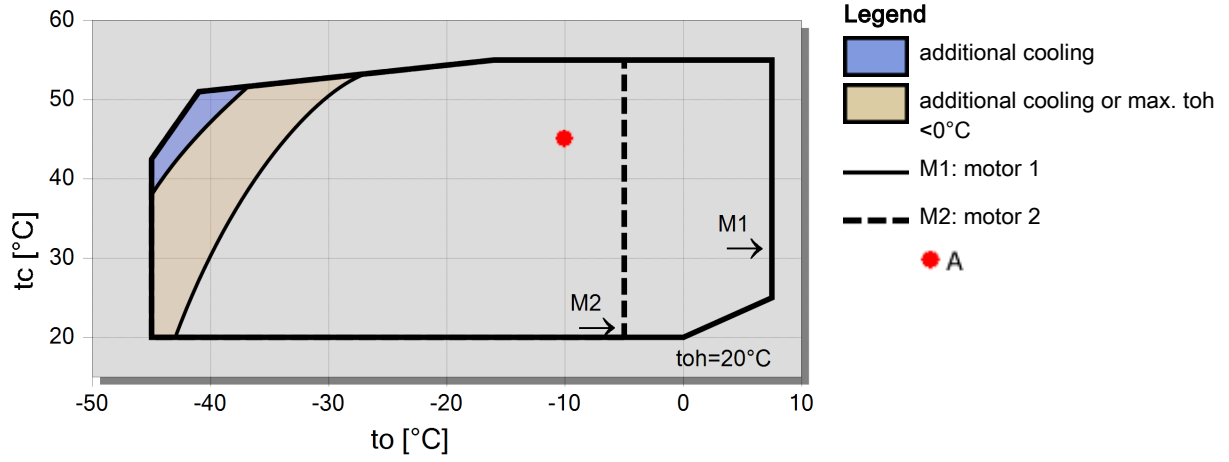
Q [W]	Cooling capacity	COP [-]	COP/EER
Qu* [W]	Evaporator capacity	m [kg/h]	Mass flow
P [kW]	Power input	Op.	Operating mode
I [A]	Current	th [°C]	Discharge gas temp. w/o cooling
Qc [W]	Condenser capacity		

tc	to	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C	-35°C	-40°C
10°C	Q [W]	--	22907	18756	15206	12185	9630	7488	5707
	Qu* [W]		22907	18756	15206	12185	9630	7488	5707
	P [kW]		3,53	3,54	3,45	3,29	3,06	2,79	2,50
	I [A]		6,96	6,97	6,87	6,68	6,42	6,13	5,83
	Qc [W]		26439	22298	18661	15475	12695	10282	8204
	COP [-]		6,48	5,30	4,40	3,70	3,14	2,68	2,29
	m [kg/h]		472	384	309	247	194,2	150,5	114,4
	Op.		Booster	Booster	Booster	Booster	Booster	Booster	Booster
	th [°C]		53,8	61,2	69,1	77,6	86,9	97,2	109,0
40°C	Q [W]	17654	14523	11807	9460	7441	5715	4250	3014
	Qu* [W]	17654	14523	11807	9460	7441	5715	4250	3014
	P [kW]	6,34	5,95	5,50	4,99	4,43	3,83	3,22	2,60
	I [A]	10,84	10,28	9,61	8,88	8,11	7,33	6,60	5,93
	Qc [W]	23992	20478	17307	14446	11868	9549	7470	5612
	COP [-]	2,79	2,44	2,15	1,90	1,68	1,49	1,32	1,16
	m [kg/h]	500	407	327	260	203	155,3	115,0	81,2
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	81,8	89,2	97,2	105,7	114,8	124,8	136,0	0
50°C	Q [W]	14301	11733	9494	7553	5879	4444	3222	2188
	Qu* [W]	14301	11733	9494	7553	5879	4444	3222	2188
	P [kW]	7,07	6,53	5,93	5,29	4,62	3,92	3,22	2,52
	I [A]	11,92	11,12	10,24	9,32	8,37	7,45	6,59	5,86
	Qc [W]	21367	18261	15428	12846	10497	8366	6441	4709
	COP [-]	2,02	1,80	1,60	1,43	1,27	1,13	1,00	0,87
	m [kg/h]	469	380	304	240	185,2	139,0	100,3	67,8
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	94,1	101,7	109,9	118,7	128,4	139,2	0	0

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

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

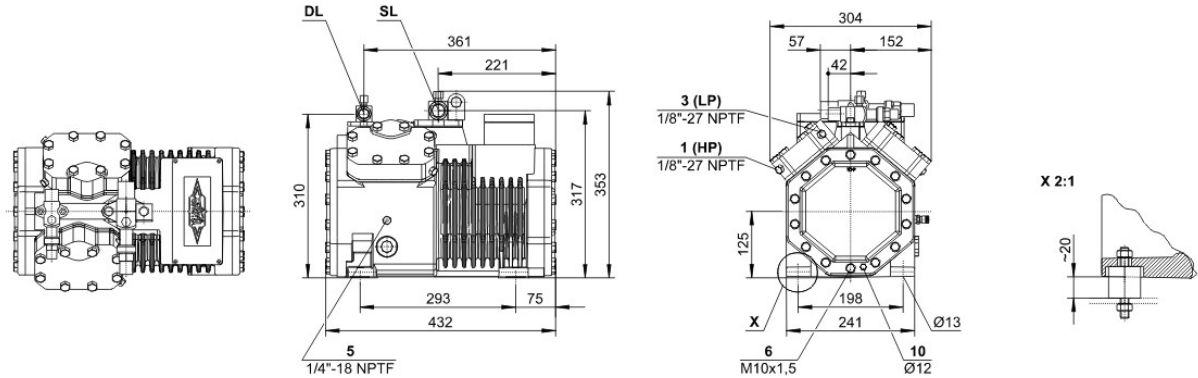
Application Limits 100% Octagon 4DC-5.2





Technical Data: (4DC-5.2Y)

Dimensions and Connections



Technical Data

Technical Data

Displacement (1450 RPM 50Hz)	26,84 m3/h
Displacement (1750 RPM 60Hz)	32,39 m3/h
No. of cylinder x bore x stroke	4 x 50 mm x 39,3 mm
Weight	85,5 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	13.5 A
Starting current (Rotor locked)	62.2 A
Max. Power input	8,0 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)	72,0 dB(A) @ 50Hz
Sound power level (-35°C / 40°C)	74,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 45°C)	64,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-35°C / 40°C)	66,0 dB(A) @ 50Hz



Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model	(4H-15.2Y)	Suction gas temperature	20,00 °C
Mode	Refrigeration and Air conditioning	Operating mode	Auto
Refrigerant	R404A	Power supply	400V-3-50Hz
Reference temperature	Dew point temp.	Capacity control	100%
Liq. subc. (in condenser)	0 K	Useful superheat	100%

Result

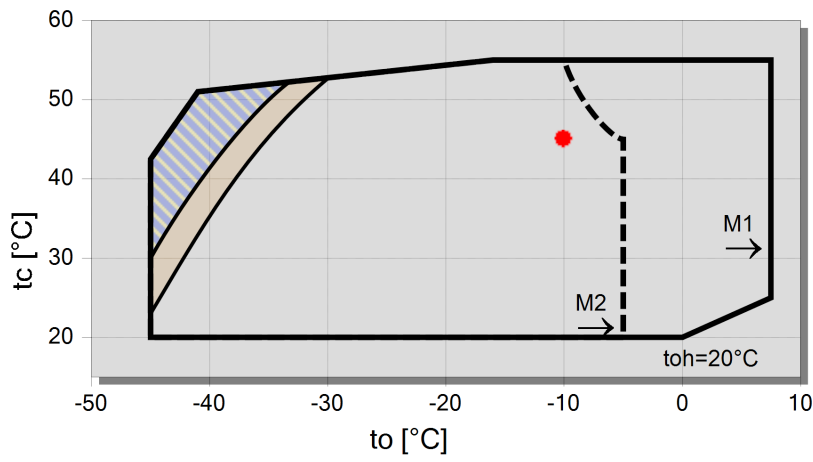
Q [W]	Cooling capacity	COP [-]	COP/EER
Qu* [W]	Evaporator capacity	m [kg/h]	Mass flow
P [kW]	Power input	Op.	Operating mode
I [A]	Current	th [°C]	Discharge gas temp. w/o cooling
Qc [W]	Condenser capacity		

tc	to	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C	-35°C	-40°C
10°C	Q [W]	--	62919	51696	42078	33877	26927	21079	16203
	Qu* [W]		62919	51696	42078	33877	26927	21079	16203
	P [kW]		10,10	9,88	9,46	8,89	8,20	7,43	6,63
	I [A]		18,47	18,16	17,59	16,84	15,95	15,01	14,07
	Qc [W]		73024	61576	51541	42767	35128	28513	22829
	COP [-]		6,23	5,23	4,45	3,81	3,28	2,84	2,45
	m [kg/h]		1297	1058	856	686	543	424	325
	Op.		Booster	Booster	Booster	Booster	Booster	Booster	Booster
	th [°C]		54,9	61,6	68,7	76,3	84,6	93,7	104,1
40°C	Q [W]	49793	41118	33591	27086	21493	16712	12652	9230
	Qu* [W]	49793	41118	33591	27086	21493	16712	12652	9230
	P [kW]	18,14	16,78	15,33	13,81	12,24	10,64	9,04	7,46
	I [A]	30,6	28,5	26,2	23,9	21,5	19,22	17,04	15,04
	Qc [W]	67934	57900	48922	40895	33732	27355	21695	16693
	COP [-]	2,74	2,45	2,19	1,96	1,76	1,57	1,40	1,24
	m [kg/h]	1410	1151	932	745	587	454	342	249
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	82,4	89,0	96,1	103,6	111,8	120,8	130,9	0
50°C	Q [W]	--	33906	27553	22051	17313	13259	9816	6917
	Qu* [W]		33906	27553	22051	17313	13259	9816	6917
	P [kW]		18,49	16,66	14,79	12,90	11,02	9,16	7,36
	I [A]		31,1	28,3	25,4	22,5	19,75	17,20	14,92
	Qc [W]		52395	44211	36839	30213	24278	18981	14278
	COP [-]		1,83	1,65	1,49	1,34	1,20	1,07	0,94
	m [kg/h]		1098	882	700	545	415	306	214
	Op.		Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]		100,7	108,0	115,8	124,4	134,1	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% 4H-15.2



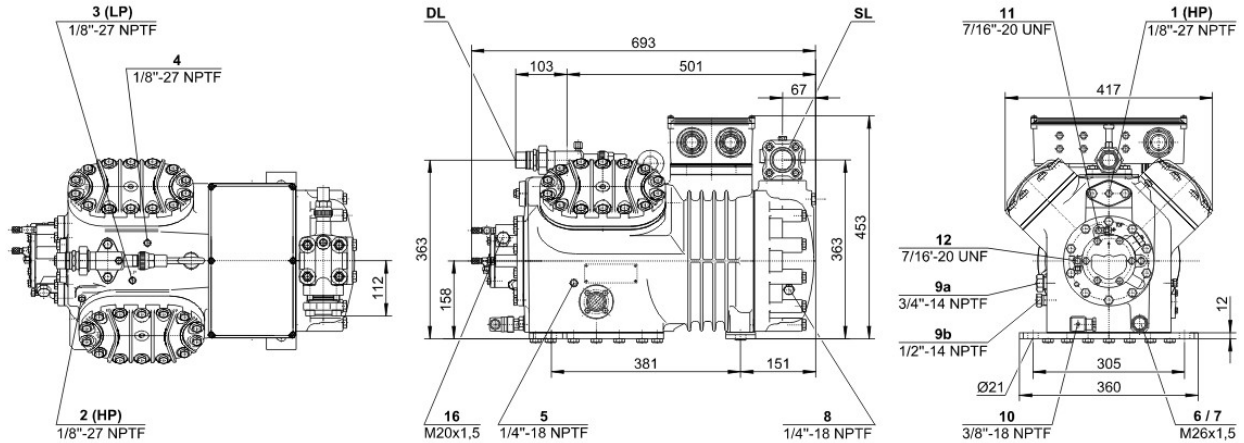
Legend

-  additional cooling & suction gas superheat $\leq 20K$
-  additional cooling or max. toh $< 0^\circ C$
-  M1: motor 1
-  M2: motor 2
-  A



Technical Data: (4H-15.2Y)

Dimensions and Connections



Technical Data

Technical Data

Displacement (1450 RPM 50Hz)	73,6 m ³ /h
Displacement (1750 RPM 60Hz)	88,83 m ³ /h
No. of cylinder x bore x stroke	4 x 70 mm x 55 mm
Weight	183 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	42 mm - 1 5/8"
Connection discharge line	28 mm - 1 1/8"
Connection cooling water	R 3/4"
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 PW-3-50Hz
Max operating current	31.0 A
Winding ratio	50/50
Starting current (Rotor locked)	81.0 A Y / 132.0 A YY
Max. Power input	19,3 kW

Extent of delivery (Standard)

Motor protection	SE-B2
Enclosure class	IP54 (Standard), IP66 (Option)
Vibration dampers	Standard
Oil charge	4,00 dm ³

Available Options

Discharge gas temperature sensor	Option
Start unloading	Option
Capacity control	100-50% (Option)
Additional fan	Option
Water-cooled cylinder heads	Option
CIC System	Option
Oil service valve	Option
Crankcase heater	140 W (Option)
Oil pressure monitoring	MP54 (Option), Delta-PII (Option, not for R290/R1270)

Sound measurement

Sound power level (-10°C / 45°C)	78,0 dB(A) @ 50Hz
Sound power level (-35°C / 40°C)	81,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 45°C)	70,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-35°C / 40°C)	73,0 dB(A) @ 50Hz



Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model	(4J-22.2Y)	Suction gas temperature	20,00 °C
Mode	Refrigeration and Air conditioning	Operating mode	Auto
Refrigerant	R404A	Power supply	400V-3-50Hz
Reference temperature	Dew point temp.	Capacity control	100%
Liq. subc. (in condenser)	0 K	Useful superheat	100%

Result

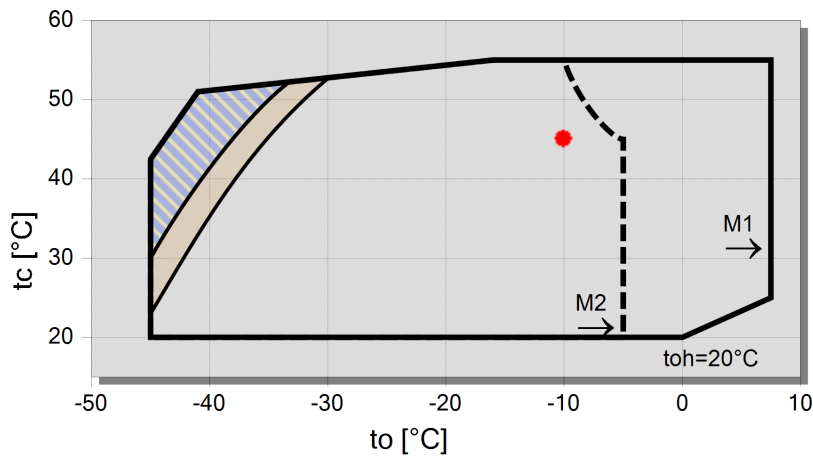
Q [W]	Cooling capacity	COP [-]	COP/EER
Qu* [W]	Evaporator capacity	m [kg/h]	Mass flow
P [kW]	Power input	Op.	Operating mode
I [A]	Current	th [°C]	Discharge gas temp. w/o cooling
Qc [W]	Condenser capacity		

tc	to	0°C	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C	-35°C
10°C	Q [W]	--	--	53933	44033	35558	28343	22238	17114
	Qu* [W]			53933	44033	35558	28343	22238	17114
	P [kW]			8,32	8,27	8,01	7,59	7,03	6,37
	I [A]			16,46	16,39	16,10	15,63	15,03	14,37
	Qc [W]			62255	52300	43569	35929	29266	23485
	COP [-]			6,48	5,33	4,44	3,74	3,16	2,69
	m [kg/h]			1112	901	724	574	448	344
	Op.			Booster	Booster	Booster	Booster	Booster	Booster
	th [°C]			53,8	61,0	68,8	77,2	86,5	97,1
	40°C	Q [W]	51467	42712	35094	28484	22774	17866	13672
Qu* [W]		51467	42712	35094	28484	22774	17866	13672	10112
P [kW]		15,49	14,67	13,69	12,58	11,37	10,08	8,74	7,37
I [A]		26,3	25,1	23,6	22,0	20,3	18,61	16,94	15,40
Qc [W]		66956	57382	48786	41067	34143	27943	22408	17485
COP [-]		3,32	2,91	2,56	2,26	2,00	1,77	1,56	1,37
m [kg/h]		1476	1209	982	790	627	488	372	274
Op.		Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
th [°C]		73,5	80,1	87,0	94,4	102,4	111,2	121,1	132,6
50°C		Q [W]	42871	35524	29112	23540	18723	14585	11054
	Qu* [W]	42871	35524	29112	23540	18723	14585	11054	8067
	P [kW]	17,85	16,62	15,26	13,80	12,28	10,71	9,12	7,54
	I [A]	30,0	28,1	26,0	23,8	21,6	19,43	17,40	15,58
	Qc [W]	60719	52141	44371	37344	31000	25290	20172	15607
	COP [-]	2,40	2,14	1,91	1,71	1,53	1,36	1,21	1,07
	m [kg/h]	1428	1165	943	754	594	459	346	251
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	85,1	91,7	98,7	106,2	114,4	123,3	133,5	0

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

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

Application Limits 100% 4J-22.2



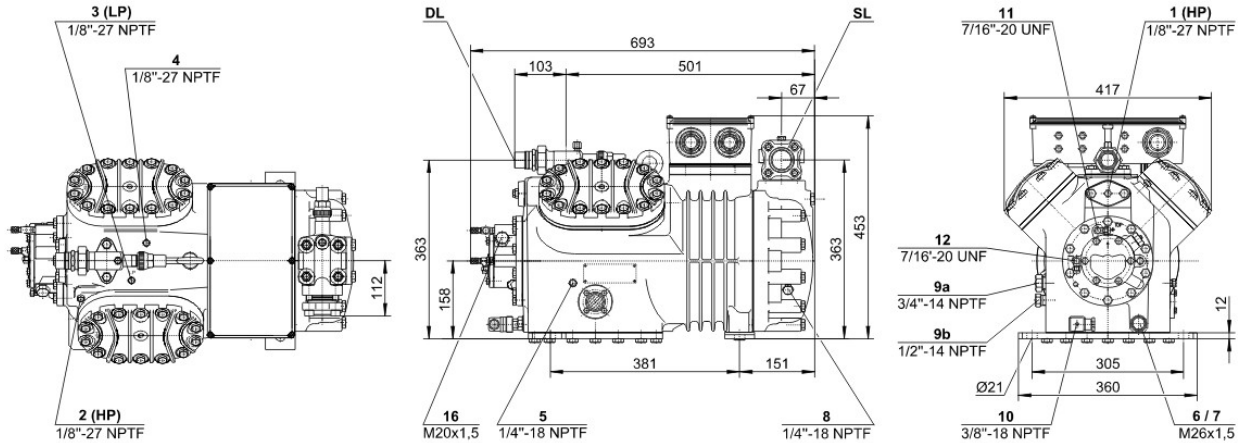
Legend

- additional cooling & suction gas superheat $\leq 20K$
- additional cooling or max. toh $< 0^\circ C$
- M1: motor 1
- M2: motor 2
- A



Technical Data: (4J-22.2Y)

Dimensions and Connections



Technical Data

Technical Data

Displacement (1450 RPM 50Hz)	63,5 m ³ /h
Displacement (1750 RPM 60Hz)	76,64 m ³ /h
No. of cylinder x bore x stroke	4 x 65 mm x 55 mm
Weight	190 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	42 mm - 1 5/8"
Connection discharge line	28 mm - 1 1/8"
Connection cooling water	R 3/4"
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 PW-3-50Hz
Max operating current	39.0 A
Winding ratio	50/50
Starting current (Rotor locked)	97.0 A Y / 158.0 A YY
Max. Power input	21,5 kW

Extent of delivery (Standard)

Motor protection	SE-B2
Enclosure class	IP54 (Standard), IP66 (Option)
Vibration dampers	Standard
Oil charge	4,00 dm ³

Available Options

Discharge gas temperature sensor	Option
Start unloading	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), Delta-PII (Option, not for R290/R1270)

Sound measurement

Sound power level (+5°C / 50°C)	75,0 dB(A) @ 50Hz
Sound power level (-10°C / 45°C)	77,5 dB(A) @ 50Hz
Sound power level (-35°C / 40°C)	(81,0) dB(A) @ 50Hz
Sound pressure level @ 1m (+5°C / 50°C)	67,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 45°C)	69,5 dB(A) @ 50Hz
Sound pressure level @ 1m (-35°C / 40°C)	(73,0) dB(A) @ 50Hz