



Compressor Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model	(2GC-2.2Y)	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

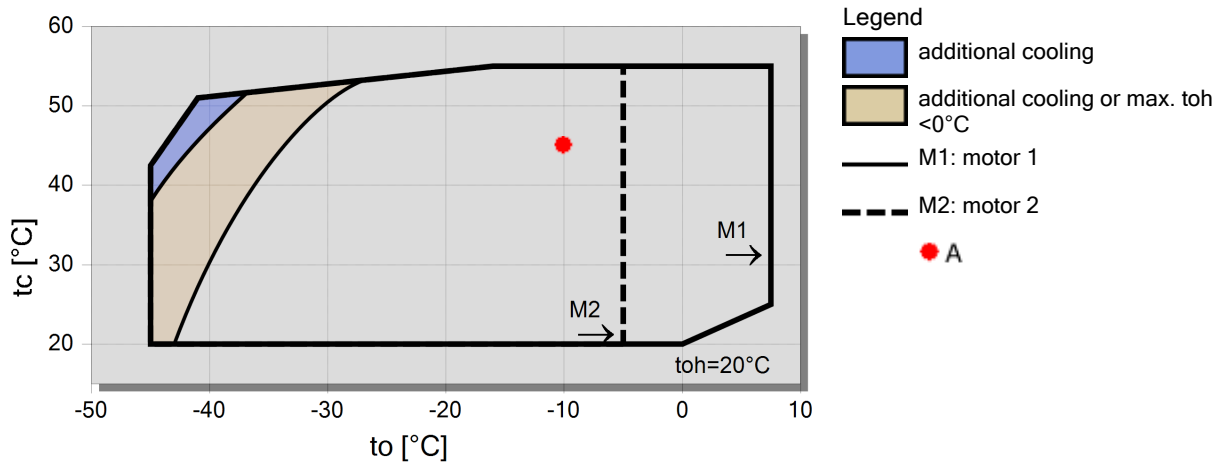
Q [W]	Cooling capacity	COP [-]	COP/EER
Qu* [W]	Evaporator capacity	m [kg/h]	Mass flow
P [kW]	Power input	Op.	Operating mode
I [A]	Current	th [°C]	Discharge gas temp. w/o cooling
Qc [W]	Condenser Capacity		

tc	to	0°C	-10°C	-20°C	-30°C	-40°C	-50°C	-60°C	-70°C
30°C	Q [W]	6889	4719	3093	1892	1027	--	--	--
	Qu* [W]	6889	4719	3093	1892	1027			
	P [kW]	1,65	1,53	1,34	1,10	0,81			
	I [A]	3,38	3,26	3,06	2,82	2,59			
	Qc [W]	8535	6251	4437	2992	1841			
	COP [-]	4,19	3,08	2,30	1,72	1,26			
	m [kg/h]	175,1	117,4	75,7	45,8	24,7			
	Op.	Standard	Standard	Standard	Standard	Standard			
	th [°C]	65,1	79,9	97,6	119,6	0			
	40°C	Q [W]	5779	3934	2544	1516	774	--	--
Qu* [W]		5779	3934	2544	1516	774			
P [kW]		1,93	1,72	1,45	1,13	0,79			
I [A]		3,71	3,47	3,17	2,86	2,57			
Qc [W]		7707	5652	3992	2649	1564			
COP [-]		3,00	2,29	1,76	1,34	0,98			
m [kg/h]		165,8	110,1	70,0	41,2	20,9			
Op.		Standard	Standard	Standard	Standard	Standard			
th [°C]		77,0	92,3	110,6	133,8	0			
50°C		Q [W]	4711	3178	2018	1159	541	--	--
	Qu* [W]	4711	3178	2018	1159	541			
	P [kW]	2,20	1,90	1,54	1,16	0,76			
	I [A]	4,03	3,67	3,27	2,88	2,55			
	Qc [W]	6911	5074	3561	2318	1299			
	COP [-]	2,14	1,68	1,31	1,00	0,71			
	m [kg/h]	156,9	102,9	64,1	36,3	16,77			
	Op.	Standard	Standard	Standard	Standard	Standard			
	th [°C]	89,6	105,5	125,0	0	0			

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

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

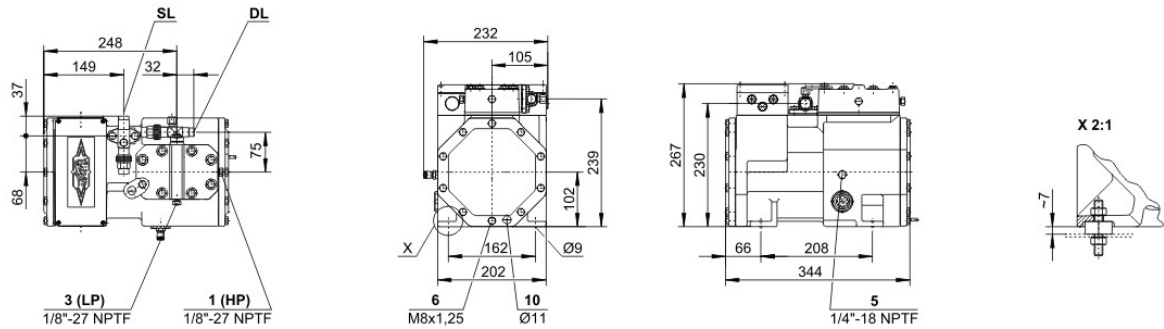
Application Limits 100% Octagon





Technical Data: (2GC-2.2Y)

Dimensions and Connections



Technical Data

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Displacement (1450 RPM 50Hz)	7,58 m ³ /h
Displacement (1750 RPM 60Hz)	9,15 m ³ /h
No. of cylinder x bore x stroke	2 x 41 mm x 33 mm
Weight	45 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	16 mm - 5/8"
Connection discharge line	12 mm - 1/2"
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	4.7 A
Starting current (Rotor locked)	22.5 A
Max. Power input	2,7 kW

Extent of delivery (Standard)

Motor protection	SE-B1
Enclosure class	IP65
Vibration dampers	Standard
Oil charge	1,00 dm ³

Available Options

Additional fan	Option
Crankcase heater	0..60 W PTC (Option)

Sound measurement

Sound power level (+5°C / 50°C)	64,0 dB(A) @ 50Hz
Sound power level (-10°C / 45°C)	63,0 dB(A) @ 50Hz
Sound power level (-35°C / 40°C)	63,5 dB(A) @ 50Hz
Sound pressure level @ 1m (+5°C / 50°C)	56,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 45°C)	55,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-35°C / 40°C)	55,5 dB(A) @ 50Hz