



Compressor Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model Mode	(4PCS-15.2Y) Refrigeration and Air conditioning	Suction gas temperature Operating mode	20,00 °C 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

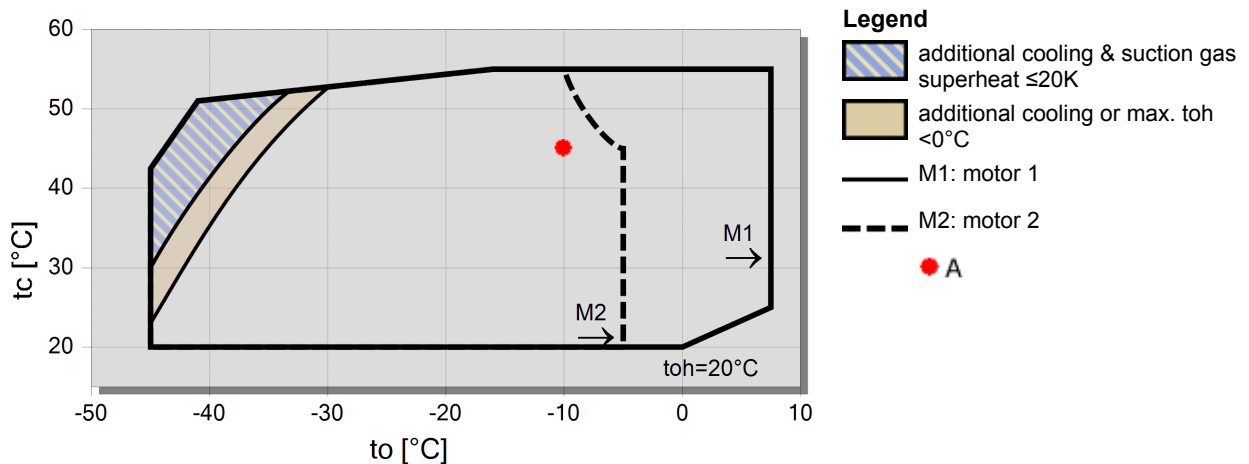
Q [W]	Cooling capacity	COP [-]	COP/EER
Qu* [W]	Evaporator capacity	m [kg/h]	Mass flow
P [kW]	Power input	Op.	Operating mode
I [A]	Current	th [°C]	Discharge gas temp. w/o cooling
Qc [W]	Condenser Capacity		

tc	to	10°C	0°C	-10°C	-20°C	-30°C	-40°C	-50°C	-60°C
30°C	Q [W]	--	47117	32077	20807	12493	6501	--	--
	Qu* [W]	--	47117	32077	20807	12493	6501	--	--
	P [kW]	--	9,96	9,06	7,70	6,04	4,23	--	--
	I [A]	--	18,27	17,06	15,33	13,43	11,70	--	--
	Qc [W]	--	57078	41141	28508	18530	10731	--	--
	COP [-]	--	4,73	3,54	2,70	2,07	1,54	--	--
	m [kg/h]	--	1198	798	510	303	156,3	--	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	--	--
	th [°C]	--	61,6	74,4	88,8	106,3	130,8	--	--
40°C	Q [W]	--	39958	27064	17361	10190	5023	--	--
	Qu* [W]	--	39958	27064	17361	10190	5023	--	--
	P [kW]	--	11,51	9,99	8,18	6,17	4,07	--	--
	I [A]	--	20,5	18,31	15,92	13,57	11,56	--	--
	Qc [W]	--	51468	37050	25537	16363	9092	--	--
	COP [-]	--	3,47	2,71	2,12	1,65	1,23	--	--
	m [kg/h]	--	1146	758	478	277	135,3	--	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	--	--
	th [°C]	--	72,1	84,6	99,1	117,2	0	--	--
50°C	Q [W]	--	32481	21770	13680	7704	3422	--	--
	Qu* [W]	--	32481	21770	13680	7704	3422	--	--
	P [kW]	--	12,78	10,66	8,43	6,11	3,75	--	--
	I [A]	--	22,3	19,24	16,24	13,51	11,30	--	--
	Qc [W]	--	45257	32428	22107	13819	7171	--	--
	COP [-]	--	2,54	2,04	1,62	1,26	0,91	--	--
	m [kg/h]	--	1082	705	434	241	106,0	--	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	--	--
	th [°C]	--	83,0	95,5	110,5	130,4	0	--	--

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

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

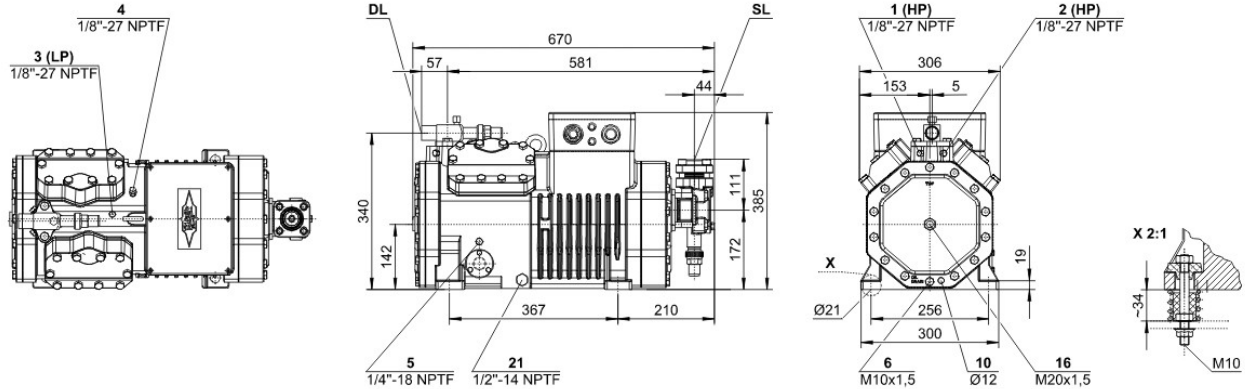
Application Limits 100%





Technical Data: (4PCS-15.2Y)

Dimensions and Connections



Technical Data

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Displacement (1450 RPM 50Hz)	48,50 m3/h
Displacement (1750 RPM 60Hz)	58,53 m3/h
No. of cylinder x bore x stroke	4 x 65 mm x 42 mm
Weight	142 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	42 mm - 1 5/8"
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)
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	16,3 kW

Extent of delivery (Standard)

Motor protection	SE-B1
Enclosure class	IP65
Vibration dampers	Standard
Oil charge	2,60 dm ³

Available Options

Discharge gas temperature sensor	Option
Start unloading	Option
Capacity control	100-50% (Option)
Additional fan	Option
Oil service valve	Option
Crankcase heater	0..140 W PTC (Option)
Oil level monitoring	OLC-K1 (Option, not for R290/R1270)

Sound measurement

Sound power level (+5°C / 50°C)	75,5 dB(A) @ 50Hz
Sound power level (-10°C / 45°C)	76,5 dB(A) @ 50Hz
Sound power level (-35°C / 40°C)	(81,0) dB(A) @ 50Hz
Sound pressure level @ 1m (+5°C / 50°C)	67,5 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 45°C)	68,5 dB(A) @ 50Hz
Sound pressure level @ 1m (-35°C / 40°C)	(73,0) dB(A) @ 50Hz