



Compressor Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model Mode	(4PC-15.2Y) 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

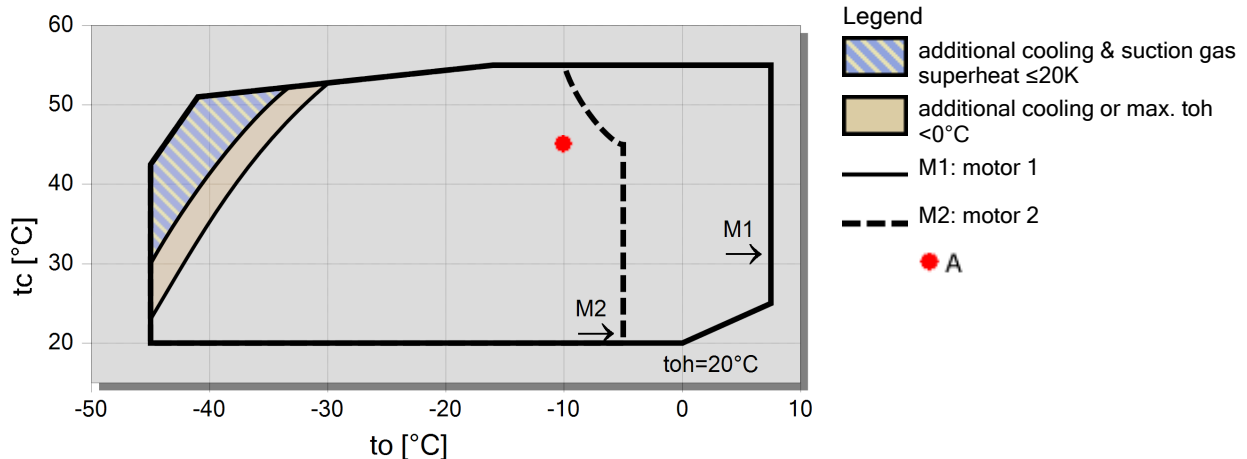
Q [W] Q* [W] P [kW] I [A] Qc [W]	Cooling capacity Cooling capacity * Power input Current Condenser Capacity	COP [-] COP* [-] m [kg/h] Op. th [°C]	COP/EER COP/EER * Mass flow Operating mode Discharge gas temp. w/o cooling
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tc	to	10°C	5°C	0°C	-5°C	-10°C	-15°C	-20°C	-25°C
30°C	Q [W]	--	56386	47117	39065	32077	26027	20807	16323
	Q* [W]	--	56386	47117	39065	32077	26027	20807	16323
	P [kW]	--	10,19	9,96	9,58	9,06	8,43	7,70	6,90
	I [A]	--	18,58	18,27	17,75	17,06	16,24	15,33	14,38
	Qc [W]	--	66572	57078	48646	41141	34457	28508	23220
	COP [-]	--	5,54	4,73	4,08	3,54	3,09	2,70	2,37
	COP* [-]	--	5,54	4,73	4,08	3,54	3,09	2,70	2,37
	m [kg/h]	--	1454	1198	981	798	642	510	397
	Op.	--	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	--		55,6	61,6	67,8	74,4	81,3	88,8
40°C	Q [W]	--	47866	39958	33063	27064	21858	17361	13494
	Q* [W]	--	47866	39958	33063	27064	21858	17361	13494
	P [kW]	--	12,14	11,51	10,79	9,99	9,11	8,18	7,19
	I [A]	--	21,4	20,5	19,43	18,31	17,13	15,92	14,72
	Qc [W]	--	60003	51468	43854	37050	30970	25537	20688
	COP [-]	--	3,94	3,47	3,06	2,71	2,40	2,12	1,88
	COP* [-]	--	3,94	3,47	3,06	2,71	2,40	2,12	1,88
	m [kg/h]	--	1395	1146	936	758	606	478	369
	Op.	--	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	--		66,3	72,1	78,2	84,6	91,5	99,1
50°C	Q [W]	--	39012	32481	26762	21770	17432	13680	10456
	Q* [W]	--	39012	32481	26762	21770	17432	13680	10456
	P [kW]	--	13,78	12,78	11,73	10,66	9,55	8,43	7,28
	I [A]	--	23,8	22,3	20,8	19,24	17,72	16,24	14,83
	Qc [W]	--	52797	45257	38495	32428	26986	22107	17735
	COP [-]	--	2,83	2,54	2,28	2,04	1,82	1,62	1,44
	COP* [-]	--	2,83	2,54	2,28	2,04	1,82	1,62	1,44
	m [kg/h]	--	1324	1082	878	705	558	434	329
	Op.	--	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	--		77,4	83,0	89,0	95,5	102,6	110,5

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

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

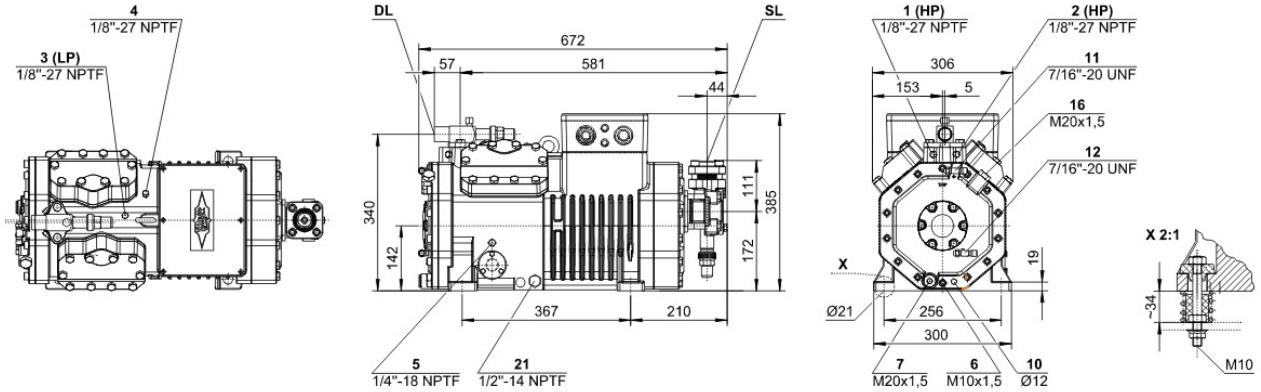
Application Limits 100%





Technical Data: (4PC-15.2Y)

Dimensions and Connections



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Displacement (1450 RPM 50Hz)	48,50 m ³ /h
Displacement (1750 RPM 60Hz)	58,53 m ³ /h
No. of cylinder x bore x stroke	4 x 65 mm x 42 mm
Weight	150 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 pressure monitoring	MP54 (Option), Delta-PII (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