



Compressor Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model	(4DC-7.2Y)	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

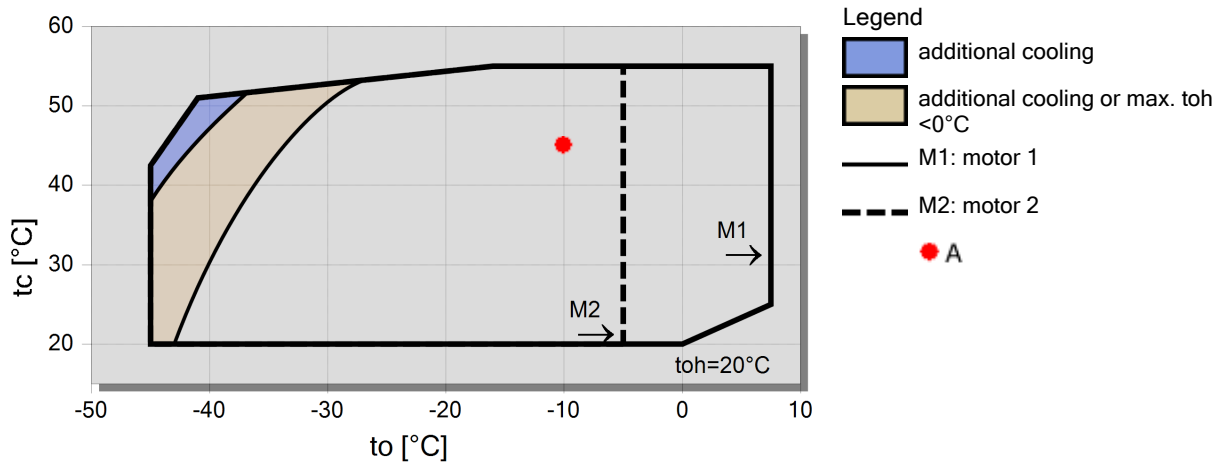
Q [W]	Cooling capacity	COP [-]	COP/EER
Qu* [W]	Evaporator capacity	m [kg/h]	Mass flow
P [kW]	Power input	Op.	Operating mode
I [A]	Current	th [°C]	Discharge gas temp. w/o cooling
Qc [W]	Condenser Capacity		

tc	to	10°C	0°C	-10°C	-20°C	-30°C	-40°C	-50°C	-60°C
30°C	Q [W]	--	25012	17123	11213	6857	3721	--	--
	Qu* [W]	--	25012	17123	11213	6857	3721	--	--
	P [kW]	--	5,51	5,18	4,52	3,63	2,59	--	--
	I [A]	--	10,17	9,75	8,94	7,95	6,98	--	--
	Qc [W]	--	30520	22300	15734	10486	6315	--	--
	COP [-]	--	4,54	3,31	2,48	1,89	1,43	--	--
	m [kg/h]	--	636	426	275	166,1	89,5	--	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	--	--
	th [°C]	--	62,7	77,0	93,3	112,6	137,0	--	--
	40°C	Q [W]	--	21087	14349	9272	5513	2795	--
Qu* [W]		--	21087	14349	9272	5513	2795	--	--
P [kW]		--	6,55	5,88	4,91	3,74	2,47	--	--
I [A]		--	11,59	10,66	9,42	8,07	6,88	--	--
Qc [W]		--	27640	20228	14184	9257	5261	--	--
COP [-]		--	3,22	2,44	1,89	1,47	1,13	--	--
m [kg/h]		--	605	402	255	149,8	75,3	--	--
Op.		--	Standard	Standard	Standard	Standard	Standard	--	--
th [°C]		--	74,5	89,2	106,0	125,8	0	--	--
50°C		Q [W]	--	17212	11616	7379	4240	1980	--
	Qu* [W]	--	17212	11616	7379	4240	1980	--	--
	P [kW]	--	7,46	6,46	5,20	3,78	2,28	--	--
	I [A]	--	12,87	11,46	9,78	8,11	6,73	--	--
	Qc [W]	--	24670	18075	12581	8018	4259	--	--
	COP [-]	--	2,31	1,80	1,42	1,12	0,87	--	--
	m [kg/h]	--	573	376	234	132,7	61,3	--	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	--	--
	th [°C]	--	86,6	101,7	119,2	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



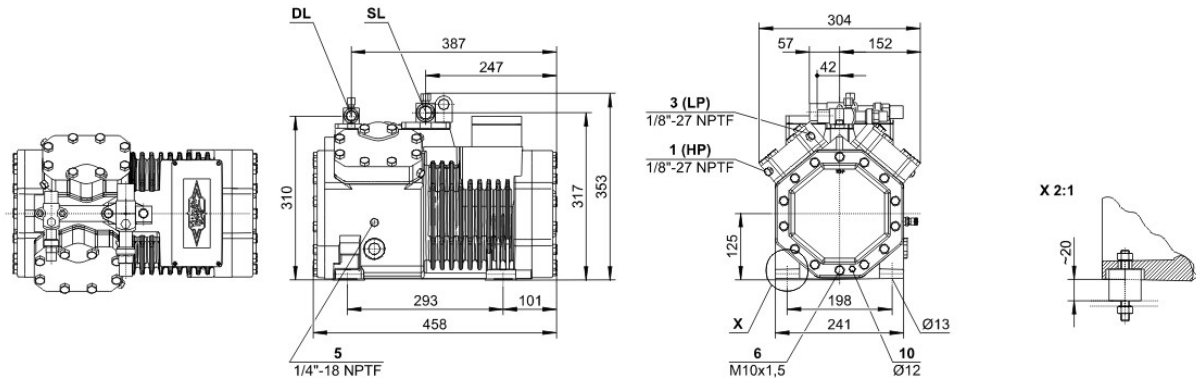
Legend

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



Technical Data: (4DC-7.2Y)

Dimensions and Connections



Technical Data

Technical Data

Displacement (1450 RPM 50Hz)	26,84 m ³ /h
Displacement (1750 RPM 60Hz)	32,39 m ³ /h
No. of cylinder x bore x stroke	4 x 50 mm x 39,3 mm
Weight	88,5 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 (+5°C / 50°C)	71,0 dB(A) @ 50Hz
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 (+5°C / 50°C)	63,0 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