



Compressor Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model Mode	(6F-50.2Y) 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

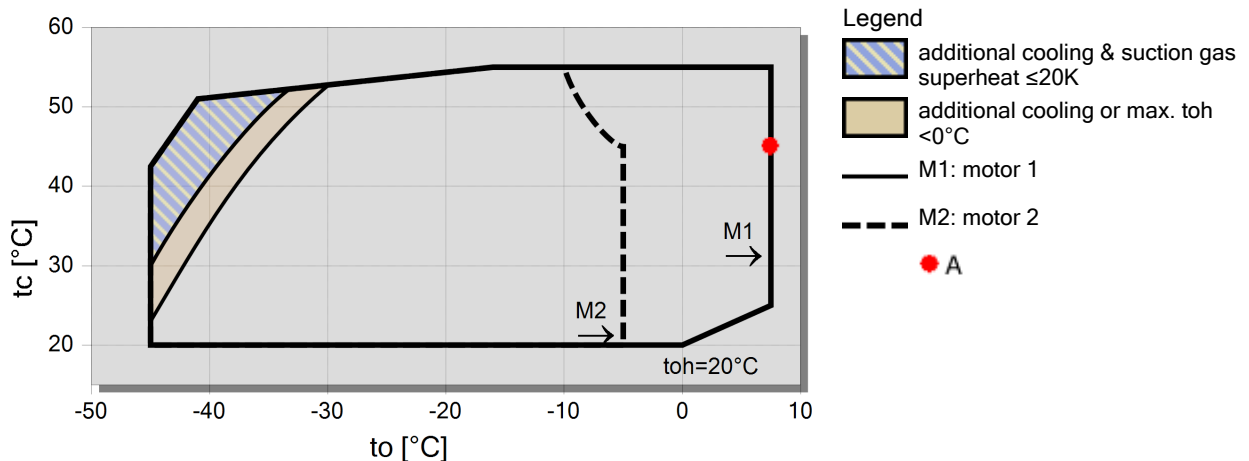
Q [W]	Cooling capacity	COP [-]	COP/EER
Q* [W]	Cooling capacity *	COP* [-]	COP/EER *
P [kW]	Power input	m [kg/h]	Mass flow
I [A]	Current	Op.	Operating mode
Qc [W]	Condenser Capacity	th [°C]	Discharge gas temp. w/o cooling

tc	to	10°C	0°C	-10°C	-20°C	-30°C	-40°C	-50°C	-60°C
30°C	Q [W]	--	142143	98113	65152	40878	23428	--	--
	Q* [W]	--	142143	98113	65152	40878	23428	--	--
	P [kW]	--	34,5	30,9	26,4	21,4	16,23	--	--
	I [A]	--	72,1	67,8	61,9	55,0	48,2	--	--
	Qc [W]	--	176632	129059	91580	62255	39659	--	--
	COP [-]	--	4,12	3,17	2,47	1,91	1,44	--	--
	COP* [-]	--	4,12	3,17	2,47	1,91	1,44	--	--
	m [kg/h]	--	3613	2440	1596	990	563	--	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	--	--
	th [°C]	--	65,6	78,7	93,7	111,8	136,5	--	--
40°C	Q [W]	--	121655	83614	54994	33850	18619	--	--
	Q* [W]	--	121655	83614	54994	33850	18619	--	--
	P [kW]	--	39,8	34,4	28,4	22,2	16,13	--	--
	I [A]	--	78,1	72,0	64,5	56,1	48,1	--	--
	Qc [W]	--	161446	118036	83390	56002	34754	--	--
	COP [-]	--	3,06	2,43	1,94	1,53	1,15	--	--
	COP* [-]	--	3,06	2,43	1,94	1,53	1,15	--	--
	m [kg/h]	--	3490	2341	1513	920	502	--	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	--	--
	th [°C]	--	76,3	89,4	104,4	122,9	0	--	--
50°C	Q [W]	--	100799	68915	44794	26936	14089	--	--
	Q* [W]	--	100799	68915	44794	26936	14089	--	--
	P [kW]	--	44,8	37,6	30,0	22,5	15,59	--	--
	I [A]	--	83,6	75,6	66,6	56,6	47,4	--	--
	Qc [W]	--	145645	106515	74809	49467	29679	--	--
	COP [-]	--	2,25	1,83	1,49	1,20	0,90	--	--
	COP* [-]	--	2,25	1,83	1,49	1,20	0,90	--	--
	m [kg/h]	--	3357	2231	1422	843	436	--	--
	Op.	--	Standard	Standard	Standard	Standard	Standard	--	--
	th [°C]	--	87,6	100,7	115,8	134,6	0	--	--

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

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

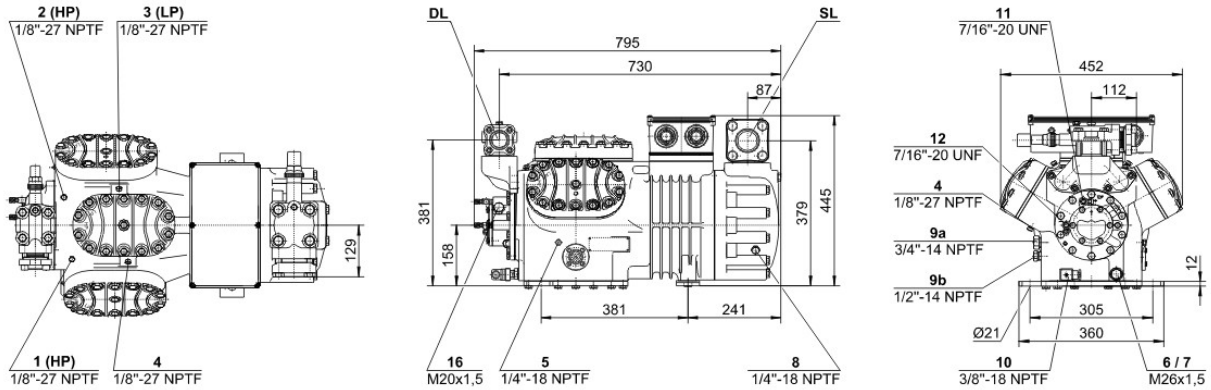
Application Limits 100%





Technical Data: (6F-50.2Y)

Dimensions and Connections



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Displacement (1450 RPM 50Hz)	151,6 m ³ /h
Displacement (1750 RPM 60Hz)	183,07 m ³ /h
No. of cylinder x bore x stroke	6 x 82 mm x 55 mm
Weight	241 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	54 mm - 2 1/8"
Connection discharge line	42 mm - 1 5/8"
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)	380-400V PW-3-50Hz
Max operating current	92.0 A
Winding ratio	50/50
Starting current (Rotor locked)	226.0 A Y / 404.0 A YY
Max. Power input	53,2 kW

Extent of delivery (Standard)

Motor protection	SE-B2
Enclosure class	IP54 (Standard), IP66 (Option)
Vibration dampers	Standard
Oil charge	4,75 dm ³

Available Options

Discharge gas temperature sensor	Option
Start unloading	Option
Capacity control	100-66-33% (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)	84,0 dB(A) @ 50Hz
Sound power level (-10°C / 45°C)	83,0 dB(A) @ 50Hz
Sound power level (-35°C / 40°C)	(91,5) dB(A) @ 50Hz
Sound pressure level @ 1m (+5°C / 50°C)	76,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 45°C)	75,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-35°C / 40°C)	(83,5) dB(A) @ 50Hz