



Compressor Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model Mode	(6H-25.2Y) 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

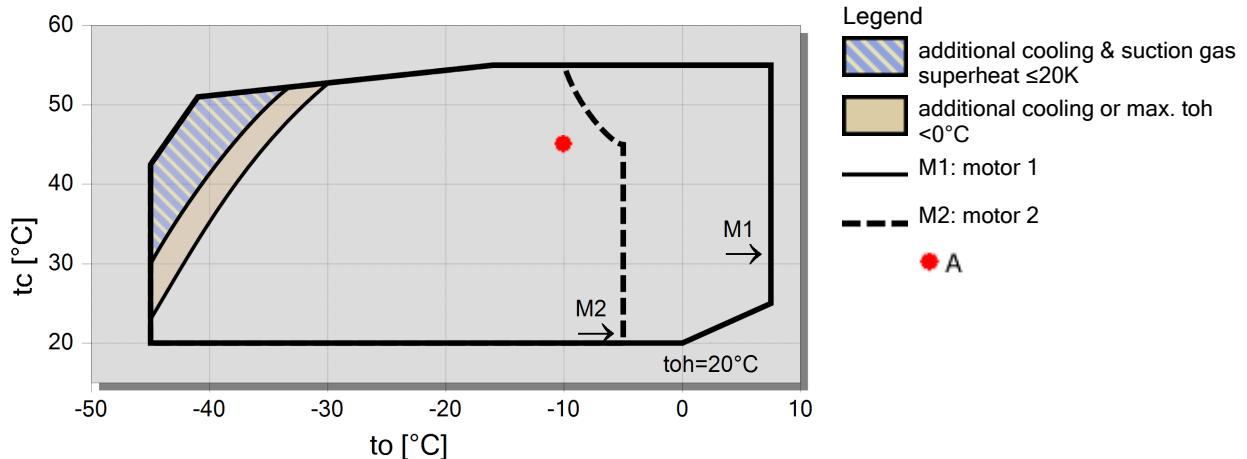
Q [W]	Cooling capacity	COP [-]	COP/EER
Q* [W]	Cooling capacity *	COP* [-]	COP/EER *
P [kW]	Power input	m [kg/h]	Mass flow
I [A]	Current	Op.	Operating mode
Qc [W]	Condenser Capacity	th [°C]	Discharge gas temp. w/o cooling

tc	to	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C	-35°C	-40°C
30°C	Q [W]	87943	72553	59256	47812	38014	29678	22638	16741
	Q* [W]	87943	72553	59256	47812	38014	29678	22638	16741
	P [kW]	23,5	22,1	20,6	18,83	16,94	14,95	12,89	10,81
	I [A]	39,7	37,6	35,2	32,6	29,8	27,0	24,2	21,5
	Qc [W]	111443	94703	79836	66643	54955	44627	35531	27555
	COP [-]	3,74	3,28	2,88	2,54	2,24	1,99	1,76	1,55
	COP* [-]	3,74	3,28	2,88	2,54	2,24	1,99	1,76	1,55
	m [kg/h]	2209	1805	1462	1171	926	719	546	403
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	70,7	77,4	84,5	92,1	100,2	109,1	119,0	130,1
40°C	Q [W]	74665	61562	50196	40375	31933	24718	18595	13438
	Q* [W]	74665	61562	50196	40375	31933	24718	18595	13438
	P [kW]	27,2	25,2	23,0	20,7	18,28	15,83	13,36	10,92
	I [A]	45,5	42,3	38,9	35,4	31,8	28,2	24,8	21,7
	Qc [W]	101872	86750	73196	61060	50213	40544	31954	24357
	COP [-]	2,74	2,44	2,18	1,95	1,75	1,56	1,39	1,23
	COP* [-]	2,74	2,44	2,18	1,95	1,75	1,56	1,39	1,23
	m [kg/h]	2114	1723	1392	1111	873	672	503	362
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	82,4	89,1	96,3	103,9	112,2	121,2	131,4	0
50°C	Q [W]	--	50514	41135	32992	25960	19920	14765	10395
	Q* [W]	--	50514	41135	32992	25960	19920	14765	10395
	P [kW]	--	27,8	25,0	22,2	19,31	16,43	13,59	10,83
	I [A]	--	46,4	42,1	37,7	33,3	29,0	25,1	21,6
	Qc [W]	--	78300	66159	55178	45268	36350	28356	21223
	COP [-]	--	1,82	1,64	1,49	1,34	1,21	1,09	0,96
	COP* [-]	--	1,82	1,64	1,49	1,34	1,21	1,09	0,96
	m [kg/h]	--	1635	1317	1047	818	623	460	322
	Op.	--	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	--	101,1	108,3	116,0	124,3	133,5	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%



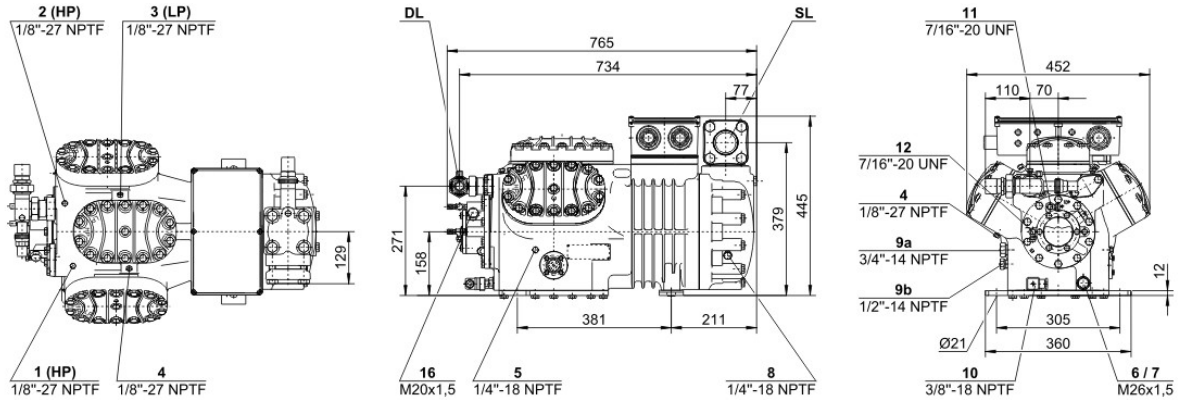
Legend

- additional cooling & suction gas superheat ≤20K
- additional cooling or max. toh <0°C
- M1: motor 1
- M2: motor 2
- A



Technical Data: (6H-25.2Y)

Dimensions and Connections



Technical Data

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Displacement (1450 RPM 50Hz)	110,5 m ³ /h
Displacement (1750 RPM 60Hz)	133,4 m ³ /h
No. of cylinder x bore x stroke	6 x 70 mm x 55 mm
Weight	224 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	54 mm - 2 1/8"
Connection discharge line	35 mm - 1 3/8"
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)	380-420V PW-3-50Hz
Max operating current	45.0 A
Winding ratio	50/50
Starting current (Rotor locked)	116.0 A Y / 193.0 A YY
Max. Power input	28,9 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
CIC System	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 (-10°C / 45°C)	82,0 dB(A) @ 50Hz
Sound power level (-35°C / 40°C)	90,5 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 45°C)	74,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-35°C / 40°C)	82,5 dB(A) @ 50Hz