



### Compressor Selection: Semi-hermetic Reciprocating Compressors

#### Input Values

Compressor model Mode	(6G-40.2Y) 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

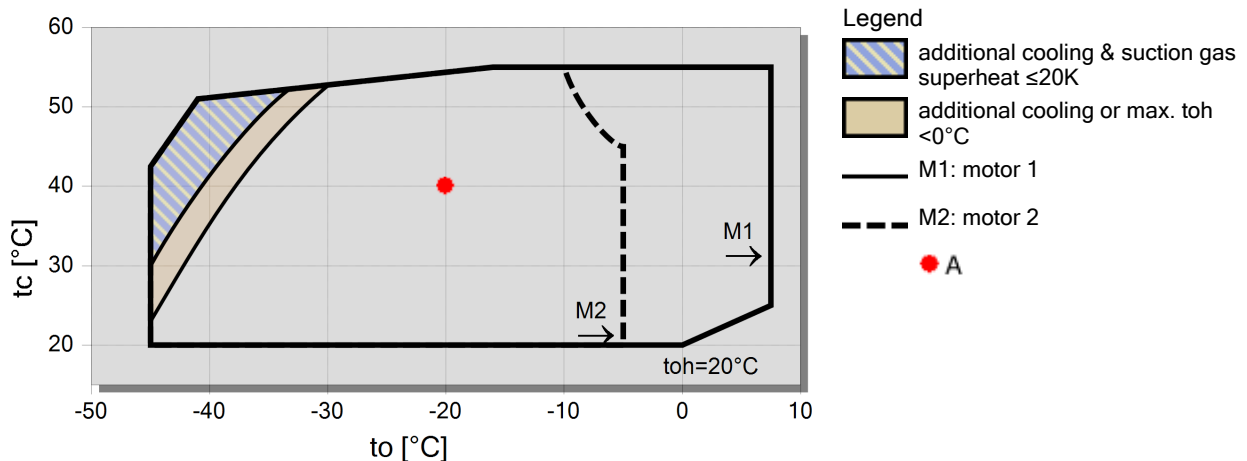
Q [W]	Cooling capacity	COP [-]	COP/EER
Q* [W]	Cooling capacity *	COP* [-]	COP/EER *
P [kW]	Power input	m [kg/h]	Mass flow
I [A]	Current	Op.	Operating mode
Qc [W]	Condenser Capacity	th [°C]	Discharge gas temp. w/o cooling

tc	to	5°C	0°C	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C
30°C	Q [W]	143139	119989	99886	82444	67348	54331	43157	33619
	Q* [W]	143139	119989	99886	82444	67348	54331	43157	33619
	P [kW]	29,9	28,6	27,2	25,6	23,8	21,8	19,74	17,56
	I [A]	54,8	53,2	51,2	49,1	46,8	44,3	41,8	39,2
	Qc [W]	173041	148636	127079	108002	91107	76144	62897	51175
	COP [-]	4,79	4,19	3,67	3,23	2,83	2,49	2,19	1,91
	COP* [-]	4,79	4,19	3,67	3,23	2,83	2,49	2,19	1,91
	m [kg/h]	3690	3050	2509	2051	1661	1331	1051	814
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	59,1	65,1	71,4	78,0	85,2	93,1	101,8	111,7
40°C	Q [W]	122407	102614	85353	70324	57276	45993	36283	27973
	Q* [W]	122407	102614	85353	70324	57276	45993	36283	27973
	P [kW]	34,6	32,7	30,6	28,4	26,0	23,5	21,0	18,29
	I [A]	61,2	58,6	55,8	52,8	49,7	46,5	43,3	40,1
	Qc [W]	157005	135300	115960	98700	83288	69524	57234	46264
	COP [-]	3,54	3,14	2,79	2,48	2,20	1,95	1,73	1,53
	COP* [-]	3,54	3,14	2,79	2,48	2,20	1,95	1,73	1,53
	m [kg/h]	3568	2944	2416	1969	1588	1265	992	760
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	69,4	75,4	81,7	88,5	95,8	103,8	112,8	122,8
50°C	Q [W]	101738	85319	70915	58311	47323	37785	29548	22476
	Q* [W]	101738	85319	70915	58311	47323	37785	29548	22476
	P [kW]	39,0	36,4	33,7	30,9	28,0	25,0	21,9	18,78
	I [A]	67,3	63,7	60,0	56,2	52,3	48,4	44,4	40,7
	Qc [W]	140701	121728	104632	89215	75309	62767	51457	41261
	COP [-]	2,61	2,34	2,10	1,89	1,69	1,51	1,35	1,20
	COP* [-]	2,61	2,34	2,10	1,89	1,69	1,51	1,35	1,20
	m [kg/h]	3452	2842	2326	1888	1516	1199	931	703
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	79,9	86,0	92,4	99,3	106,7	114,9	124,1	134,6

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

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

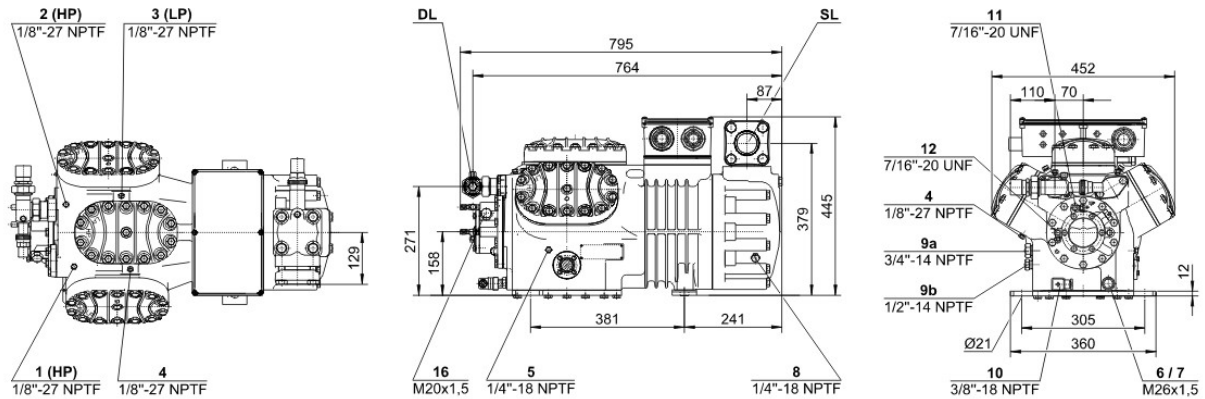
#### Application Limits 100%





## Technical Data: (6G-40.2Y)

### Dimensions and Connections



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Displacement (1450 RPM 50Hz)	126,8 m <sup>3</sup> /h
Displacement (1750 RPM 60Hz)	153,0 m <sup>3</sup> /h
No. of cylinder x bore x stroke	6 x 75 mm x 55 mm
Weight	238 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	78.0 A
Winding ratio	50/50
Starting current (Rotor locked)	180.0 A Y / 323.0 A YY
Max. Power input	45,1 kW

#### Extent of delivery (Standard)

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

#### 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)	83,5 dB(A) @ 50Hz
Sound power level (-35°C / 40°C)	(90,5) dB(A) @ 50Hz
Sound pressure level @ 1m (+5°C / 50°C)	76,0 dB(A) @ 50Hz
Sound pressure level @ 1m (-10°C / 45°C)	75,5 dB(A) @ 50Hz
Sound pressure level @ 1m (-35°C / 40°C)	(82,5) dB(A) @ 50Hz