



Bitzer 6H-25.2

BITZER Software v6.4.3 rev1353

28.05.2015 / All data subject to change.

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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)	R134a Dew point temp. 0 K	Power supply Capacity Control Useful superheat	400V-3-50Hz 100% 100%

Result

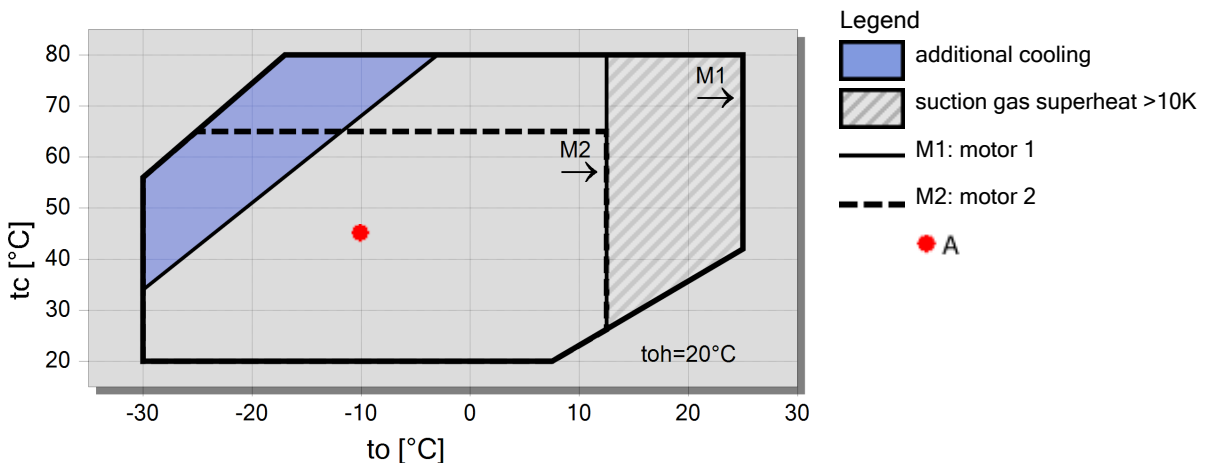
Q [W]	Cooling capacity	COP [-]	COP/EER
Q* [W]	Cooling capacity *	COP* [-]	COP/EER *
P [kW]	Power input	m [kg/h]	Mass flow
I [A]	Current	Op.	Operating mode
Qc [W]	Condenser Capacity	th [°C]	Discharge gas temp. w/o cooling

tc	to	5°C	0°C	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C
30°C	Q [W]	79506	64726	52179	41588	32709	25327	19250	14304
	Q* [W]	79506	64726	52179	41588	32709	25327	19250	14304
	P [kW]	13,98	13,48	12,74	11,83	10,78	9,64	8,45	7,27
	I [A]	25,6	24,9	24,0	22,8	21,5	20,2	18,85	17,65
	Qc [W]	93490	78203	64923	53416	43485	34962	27700	21572
	COP [-]	5,69	4,80	4,09	3,52	3,04	2,63	2,28	1,97
	COP* [-]	5,69	4,80	4,09	3,52	3,04	2,63	2,28	1,97
	m [kg/h]	1654	1337	1071	850	665	513	389	288
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	59,4	66,3	73,6	81,6	90,2	99,7	110,3	122,5
40°C	Q [W]	69528	56487	45391	36005	28120	21555	16142	11734
	Q* [W]	69528	56487	45391	36005	28120	21555	16142	11734
	P [kW]	16,81	15,77	14,55	13,20	11,75	10,25	8,73	7,24
	I [A]	29,6	28,1	26,4	24,6	22,7	20,9	19,16	17,63
	Qc [W]	86333	72257	59946	49207	39875	31806	24876	18978
	COP [-]	4,14	3,58	3,12	2,73	2,39	2,10	1,85	1,62
	COP* [-]	4,14	3,58	3,12	2,73	2,39	2,10	1,85	1,62
	m [kg/h]	1582	1275	1018	803	624	477	356	258
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	70,6	77,6	85,1	93,1	101,9	111,4	122,0	134,1
50°C	Q [W]	59860	48513	38823	30596	23662	17867	13073	9153
	Q* [W]	59860	48513	38823	30596	23662	17867	13073	9153
	P [kW]	19,30	17,76	16,08	14,31	12,48	10,62	8,78	6,97
	I [A]	33,3	31,0	28,5	26,1	23,6	21,3	19,20	17,36
	Qc [W]	79156	66268	54905	44909	36144	28492	21849	16126
	COP [-]	3,10	2,73	2,41	2,14	1,90	1,68	1,49	1,31
	COP* [-]	3,10	2,73	2,41	2,14	1,90	1,68	1,49	1,31
	m [kg/h]	1508	1212	963	754	580	436	318	222
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	81,9	89,0	96,6	104,9	113,8	123,6	134,5	0

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

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

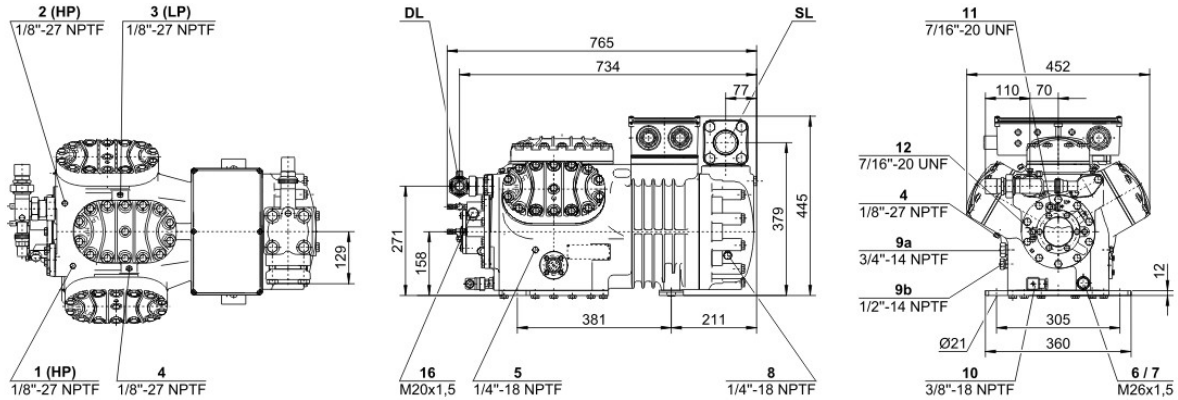
Application Limits 100%





Technical Data: (6H-25.2Y)

Dimensions and Connections



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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