



BITZER Output data

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Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model	6GE-30Y	Suction gas temperature	20,00 °C
Mode	Refrigeration and Air conditioning	Operating mode	Auto
Refrigerant	R134a	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	0°C	-5°C	-10°C	-15°C	-20°C	-25°C	-30°C	-35°C
30°C	Q [W]	74864	60691	48687	38586	30150	23170	--	--
	Qu* [W]	74864	60691	48687	38586	30150	23170		
	P [kW]	15,21	14,37	13,37	12,23	11,01	9,72		
	I [A]	29,1	28,0	26,8	25,4	24,0	22,6		
	Qc [W]	90073	75062	62055	50820	41156	32889		
	COP [-]	4,92	4,22	3,64	3,15	2,74	2,38		
	m [kg/h]	1546	1246	995	785	611	468		
	Op.	Standard	Standard	Standard	Standard	Standard	Standard		
	th [°C]	65,4	72,4	79,9	88,1	97,1	107,0		
40°C	Q [W]	66306	53685	42976	33948	26396	20138	--	--
	Qu* [W]	66306	53685	42976	33948	26396	20138		
	P [kW]	18,07	16,70	15,20	13,62	11,99	10,35		
	I [A]	33,1	31,1	29,1	27,1	25,1	23,3		
	Qc [W]	84375	70382	58175	47564	38384	30488		
	COP [-]	3,67	3,22	2,83	2,49	2,20	1,95		
	m [kg/h]	1497	1204	959	754	584	444		
	Op.	Standard	Standard	Standard	Standard	Standard	Standard		
	th [°C]	76,6	83,6	91,2	99,3	108,2	117,9		
50°C	Q [W]	57635	46587	37186	29240	22575	17037	--	--
	Qu* [W]	57635	46587	37186	29240	22575	17037		
	P [kW]	20,5	18,61	16,67	14,69	12,71	10,78		
	I [A]	36,5	33,8	31,1	28,5	26,0	23,7		
	Qc [W]	78102	65197	53856	43929	35287	27816		
	COP [-]	2,82	2,50	2,23	1,99	1,78	1,58		
	m [kg/h]	1440	1155	917	717	551	414		
	Op.	Standard	Standard	Standard	Standard	Standard	Standard		
	th [°C]	87,6	94,7	102,3	110,4	119,4	129,4		

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

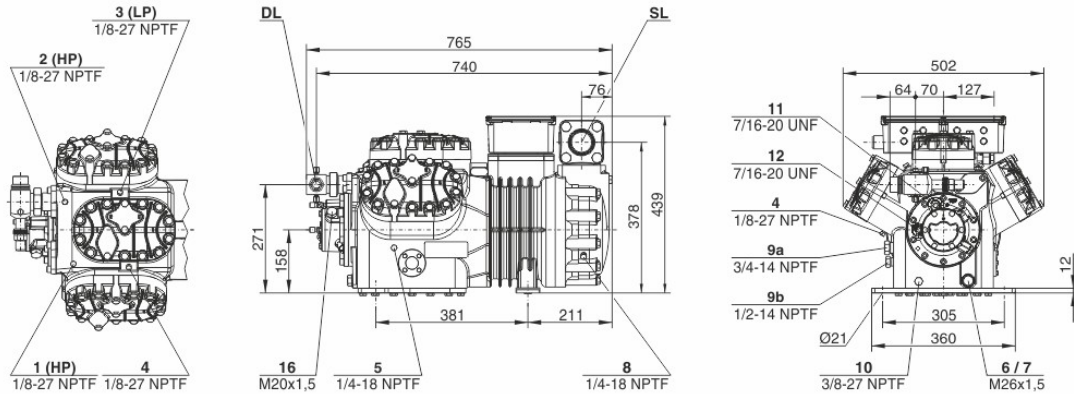
*According to EN12900 (20°C suction gas temp., 0K liquid subcooling)

Application Limits 100% 6GE-30



Technical Data: 6GE-30Y

Dimensions and Connections



Technical Data

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Displacement (1450 RPM 50Hz)	126,8 m ³ /h
Displacement (1750 RPM 60Hz)	153,0 m ³ /h
Frequency range	25..70 Hz
No. of cylinder x bore x stroke	6 x 75 mm x 55 mm
Weight	230 kg
Max. pressure (LP/HP)	19 / 32 bar
Connection suction line	54 mm - 2 1/8"
Connection discharge line	35 mm - 1 3/8"
Oil type R134a/R407C/R404A/R507A/R407A/R407F	BSE32(Standard) R134a tc>70°C: BSE55 (Option)
Oil type R1234yf	BSE32 (Standard) R1234yf tc>70°C : BSE55 (Option)
Oil type R1234ze	BSE55 (Standard) to>15°C: BSE85K (Option) tc>70°C: BSE85K (Option)
Ölfüllung R454C/R455A	BSE32 (Standard)

Motor data

Motor version	3
Motor voltage (more on request)	380-420V PW-3-50Hz
Max operating current	40.0 A
Max operating current 70Hz/400V/FI	58,4 A
Winding ratio	50/50
Starting current (Rotor locked)	141.0 A Y / 233.0 A YY
Max. Power input	23,0 kW

Extent of delivery (Standard)

Motor protection	SE-B2, CM-RC-01(OPTION)
Enclosure class	IP54 (Standard), IP66 (Option)
Vibration dampers	Standard
Oil charge	4,75 dm ³
Discharge shut-off valve	Standard
Suction shut-off valve	Standard

Available Options

Discharge gas temperature sensor	Option
Start unloading	Option
Capacity control	100-66-33% (Option)
Capacity Control - infinite	100-10% (Option)
Additional fan	Option
Oil service valve	Option
Crankcase heater	140 W (Option)
Oil pressure monitoring	MP54 (Option), Delta-PII

Sound measurement



Sound power level (-10°C / 45°C)

81,3 dB(A) @50Hz

Sound pressure level @ 1m (-10°C / 45°C)

73,3 dB(A) @50Hz