



BITZER Output data

Created on : 08.03.2021 12:43:41



Selection: Semi-hermetic Reciprocating Compressors

Input Values

Compressor model	6HE-35Y	Suction gas temperature	20,00 °C
Mode	Refrigeration and Air conditioning	Operating mode	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
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]	105734	87953	72541	59220	47750	37925	29559	22488
	Qu* [W]	105734	87953	72541	59220	47750	37925	29559	22488
	P [kW]	22,4	21,5	20,4	19,06	17,52	15,84	14,06	12,25
	I [A]	40,9	39,7	38,2	36,3	34,3	32,2	30,1	28,1
	Qc [W]	128095	109485	92957	78282	65269	53761	43623	34738
	COP [-]	4,73	4,08	3,55	3,11	2,73	2,39	2,10	1,84
	m [kg/h]	2688	2209	1804	1461	1170	923	716	543
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	61,6	67,8	74,2	81,1	88,4	96,4	105,3	115,6
40°C	Q [W]	90284	74903	61546	49987	40031	31506	24256	18140
	Qu* [W]	90284	74903	61546	49987	40031	31506	24256	18140
	P [kW]	26,2	24,7	23,0	21,1	19,12	16,99	14,81	12,63
	I [A]	46,4	44,3	41,8	39,2	36,4	33,6	31,0	28,5
	Qc [W]	116438	99613	84570	71130	59147	48495	39068	30771
	COP [-]	3,45	3,03	2,67	2,36	2,09	1,85	1,64	1,44
	m [kg/h]	2590	2120	1723	1386	1101	861	659	491
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	72,3	78,6	85,2	92,2	99,9	108,3	117,7	128,8
50°C	Q [W]	74526	61626	50390	40652	32259	25075	18975	13843
	Qu* [W]	74526	61626	50390	40652	32259	25075	18975	13843
	P [kW]	29,4	27,4	25,2	22,8	20,3	17,72	15,14	12,59
	I [A]	51,2	48,2	44,9	41,5	38,0	34,6	31,4	28,5
	Qc [W]	103945	89019	75553	63427	52536	42791	34112	26431
	COP [-]	2,53	2,25	2,00	1,78	1,59	1,42	1,25	1,10
	m [kg/h]	2482	2021	1631	1302	1024	790	594	431
	Op.	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
	th [°C]	83,2	89,6	96,4	103,7	111,7	120,6	130,8	0

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

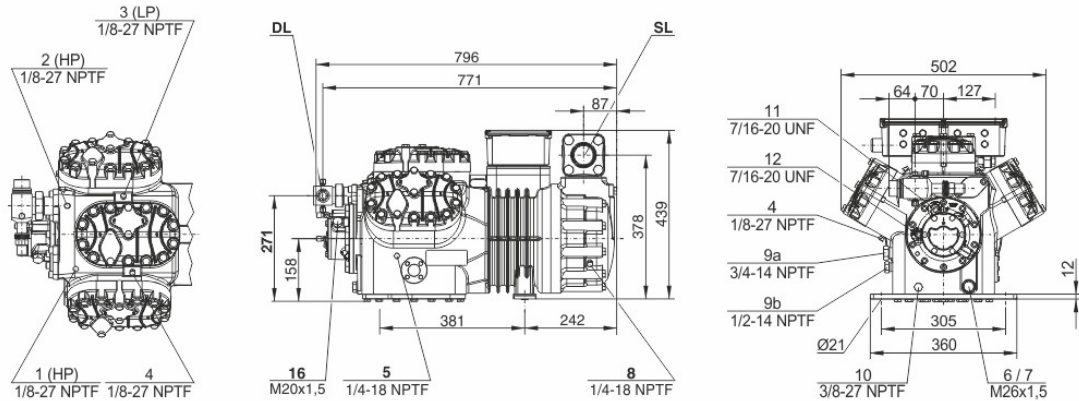
*According to EN12900 (20°C suction gas temp., 0K liquid subcooling)

Application Limits 100% 6HE-35



Technical Data: 6HE-35Y

Dimensions and Connections



Technical Data

Technical Data

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	241 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 R22 (R12/R502)	B5.2(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	1
Motor voltage (more on request)	380-420V PW-3-50Hz
Max operating current	64.4 A
Winding ratio	50/50
Starting current (Rotor locked)	165.0 A Y / 275.0 A YY
Max. Power input	36,0 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 (+5°C / 50°C)	81,4 dB(A) @50Hz
---------------------------------	------------------



Sound power level (-10°C / 45°C)	81,8 dB(A) @50Hz
Sound power level (-35°C / 40°C)	89,5 dB(A) @50Hz
Sound pressure level @ 1m (+5°C / 50°C)	73,4 dB(A) @50Hz
Sound pressure level @ 1m (-10°C / 45°C)	73,8 dB(A) @50Hz
Sound pressure level @ 1m (-35°C / 40°C)	81,5 dB(A) @50Hz
Sound power level (+5°C / 50°C) R134a	79,4 dB(A) @50Hz
Sound power level (-10°C / 45°C) R134a	79,8 dB(A) @50Hz
Sound pressure level @ 1m (+5°C / 50°C) R134a	71,4 dB(A) @50Hz
Sound pressure level @ 1m (-10°C / 45°C) R134a	71,8 dB(A) @50Hz