



### Compressor Selection: 2-stage Semi-hermetic Reciprocating Compressors

#### Input Values

Compressor model	S6H-20.2Y	Suction gas temperature	20,00 °C
Refrigerant	R404A	Useful superheat	100%
Reference temperature	Dew point temp.	Power supply	400V-3-50Hz
Operating mode	with sub cooler		

#### Result

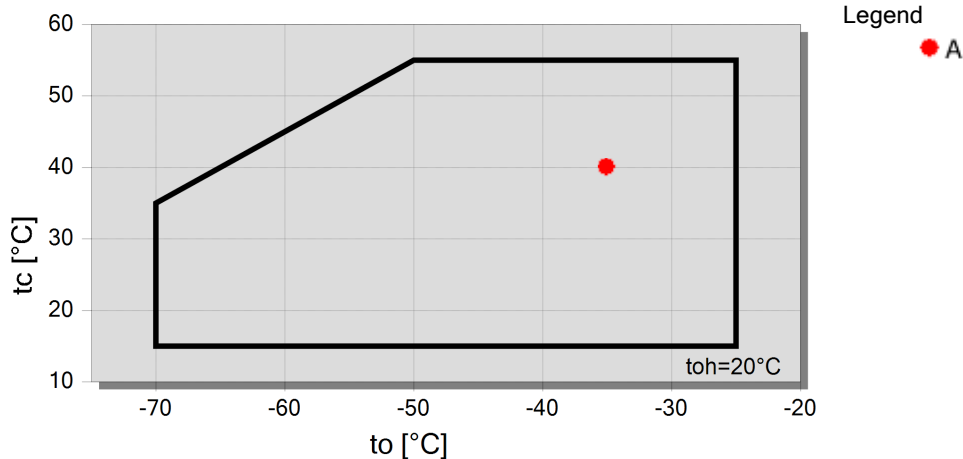
Q [W]	Cooling capacity	COP [-]	COP/EER
Q* [W]	Cooling capacity *	COP* [-]	COP/EER *
P [kW]	Power input	mLP [kg/h]	Mass flow LP
I [A]	Current	pm [bar(a)]	Intermed. pressure
Qc [W]	Condenser Capacity		

tc	to	-25°C	-30°C	-35°C	-40°C	-45°C	-50°C	-55°C	-60°C
30°C	Q [W]	31866	27439	23291	19432	15902	12748	10007	7685
	Q* [W]	27701	23092	18962	15299	12105	9384	7126	5297
	P [kW]	16,43	15,02	13,64	12,30	11,00	9,76	8,56	7,44
	I [A]	27,2	25,2	23,3	21,4	19,67	18,06	16,60	15,30
	Qc [W]	48293	42459	36933	31734	26906	22504	18571	15122
	COP [-]	1,94	1,83	1,71	1,58	1,45	1,31	1,17	1,03
	COP* [-]	1,69	1,54	1,39	1,24	1,10	0,96	0,83	0,71
	mLP [kg/h]	674	559	457	368	290	224	170,1	126,3
	pm [bar(a)]	6,87	6,01	5,20	4,46	3,78	3,17	2,64	2,17
	40°C	Q [W]	30586	26342	22327	18598	15217	12224	9628
Q* [W]		24611	20410	16676	13403	10589	8217	6255	4655
P [kW]		18,53	16,90	15,32	13,79	12,32	10,92	9,57	8,29
I [A]		30,3	27,9	25,6	23,5	21,4	19,56	17,83	16,27
Qc [W]		49120	43239	37642	32389	27542	23141	19200	15699
COP [-]		1,65	1,56	1,46	1,35	1,23	1,12	1,01	0,89
COP* [-]		1,33	1,21	1,09	0,97	0,86	0,75	0,65	0,56
mLP [kg/h]		673	555	451	361	284	220	167,2	124,2
pm [bar(a)]		7,48	6,55	5,70	4,92	4,21	3,56	2,98	2,46
50°C		Q [W]	29312	25174	21322	17794	14614	11784	9270
	Q* [W]	21116	17484	14276	11486	9096	7073	5367	
	P [kW]	20,6	18,79	17,01	15,30	13,65	12,07	10,55	
	I [A]	33,4	30,6	28,0	25,6	23,3	21,1	19,08	
	Qc [W]	49942	43960	38330	33090	28265	23853	19821	
	COP [-]	1,42	1,34	1,25	1,16	1,07	0,98	0,88	
	COP* [-]	1,02	0,93	0,84	0,75	0,67	0,59	0,51	
	mLP [kg/h]	665	547	444	356	281	218	164,8	
	pm [bar(a)]	8,15	7,16	6,26	5,44	4,68	3,99	3,36	

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

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

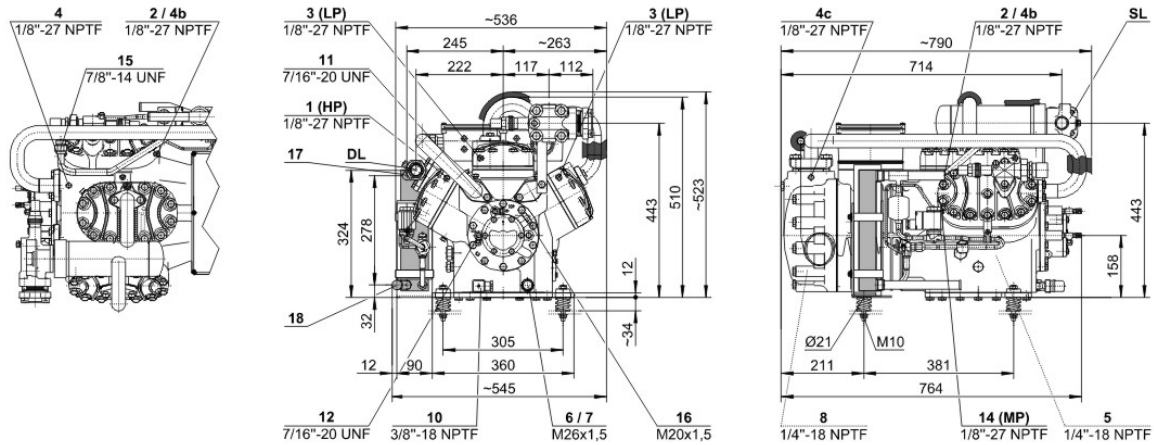
#### Application Limits





## Technical Data: S6H-20.2Y

### Dimensions and Connections



### Technical Data

#### Technical Data

Displacement (1450 RPM 50Hz)	73.60 / 36.90 m <sup>3</sup> /h
Displacement (1750 RPM 60Hz)	88.83 / 44.53 m <sup>3</sup> /h
No. of cylinder x bore LP/HP x stroke	6 x 70/ 70 mm x 55 mm
Weight	220 kg
Max. pressure (LP/MP/HP)	19 / 19 / 28 bar
Connection suction line	42 mm - 1 5/8"
Connection discharge line	35 mm - 1 3/8"
Oil type R404A/R507A	BSE32 (Option)
Oil type R22	B5.2 (Standard)

#### Motor data

Motor voltage (more on request)	380-420V PW-3-50Hz
Max operating current	37.0 A
Winding ratio	50/50
Starting current (Rotor locked)	97.0 A Y / 158.0 A YY
Max. Power input	20,8 kW

#### Extent of delivery (Standard)

Motor protection	SE-B2 (Standard)
Enclosure class	IP54 (Standard), IP66 (Option)
Vibration dampers	Standard
TX valve for liquid injection	Standard
Sight glass	Standard
Filter Drier	Standard
Solenoid valve	Standard
Oil charge	4.75 dm <sup>3</sup>

#### Available Options

Crankcase heater	140 W (Option)
Oil pressure monitoring	MP54 (Option), Delta P II (Option)
Oil service valve	Option
Discharge gas temperature sensor	Option
CIC (only for R22, instead of TX valve for LI)	Option
Liquid sub cooler (also mounted)	Option