



### Compressor Selection: Compact Screw Compressors CS

#### Input Values

Compressor model	(CSH7551-70Y)	Operating mode	Standard
Refrigerant	R134a	Power supply	400V-3-50Hz
Reference temperature	Dew point temp.	Capacity Control	100%
Liq. subc. (in condenser)	0 K	Additional cooling	Automatic
Suct. gas superheat	10,00 K	Max. discharge gas temp.	110,0 °C
Useful superheat	100%		

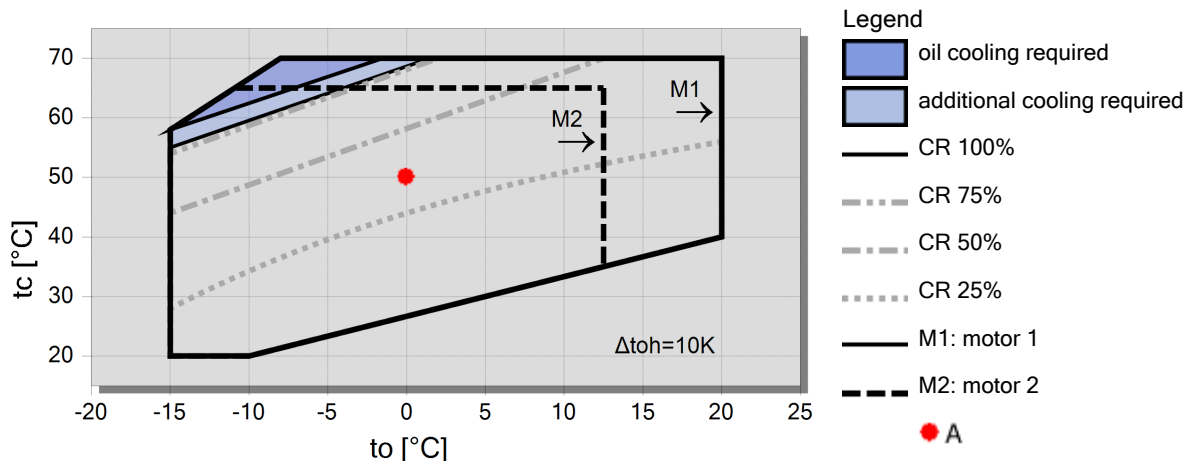
#### Result

		10°C	5°C	0°C	-5°C	-10°C	-15°C	-20°C	-25°C
30°C	Q [W]	--	144372	118049	95476	76212	59854	--	--
	P [kW]	--	24,5	23,9	23,2	22,4	21,7	--	--
	I [A]	--	49,6	48,9	48,0	47,1	46,3	--	--
	COP [-]	--	5,89	4,94	4,12	3,40	2,76	--	--
	mLP [kg/h]	--	3086	2572	2121	1728	1385	--	--
	mHP [kg/h]	--	3086	2572	2121	1728	1385	--	--
	Qac [kW]	--	--	--	--	--	--	--	--
	tcu [°C]	--	30,0	30,0	30,0	30,0	30,0	--	--
	pm [bar(a)]	--	--	--	--	--	--	--	--
	Qsc [kW]	--	--	--	--	--	--	--	--
40°C	Q [W]	156134	127766	103372	82494	64718	49661	--	--
	P [kW]	30,1	29,2	28,1	27,0	26,1	25,5	--	--
	I [A]	56,6	55,5	54,1	52,7	51,6	50,8	--	--
	COP [-]	5,19	4,38	3,68	3,05	2,48	1,95	--	--
	mLP [kg/h]	3587	2995	2474	2017	1618	1271	--	--
	mHP [kg/h]	3587	2995	2474	2017	1618	1271	--	--
	Qac [kW]	--	--	--	--	--	--	--	--
	tcu [°C]	40,0	40,0	40,0	40,0	40,0	40,0	--	--
	pm [bar(a)]	--	--	--	--	--	--	--	--
	Qsc [kW]	--	--	--	--	--	--	--	--
50°C	Q [W]	134041	108463	86536	67838	51983	38621	--	--
	P [kW]	35,6	34,3	33,0	31,9	31,2	31,1	--	--
	I [A]	64,0	62,2	60,5	59,1	58,2	57,9	--	--
	COP [-]	3,77	3,17	2,62	2,13	1,67	1,24	--	--
	mLP [kg/h]	3413	2824	2306	1852	1455	1109	--	--
	mHP [kg/h]	3413	2824	2306	1852	1455	1109	--	--
	Qac [kW]	--	--	--	--	--	--	--	--
	tcu [°C]	50,0	50,0	50,0	50,0	50,0	50,0	--	--
	pm [bar(a)]	--	--	--	--	--	--	--	--
	Qsc [kW]	--	--	--	--	--	--	--	--

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

\*According to EN12900 (10K suction gas superheat, 0K liquid subcooling, see T.Data/ Notes)

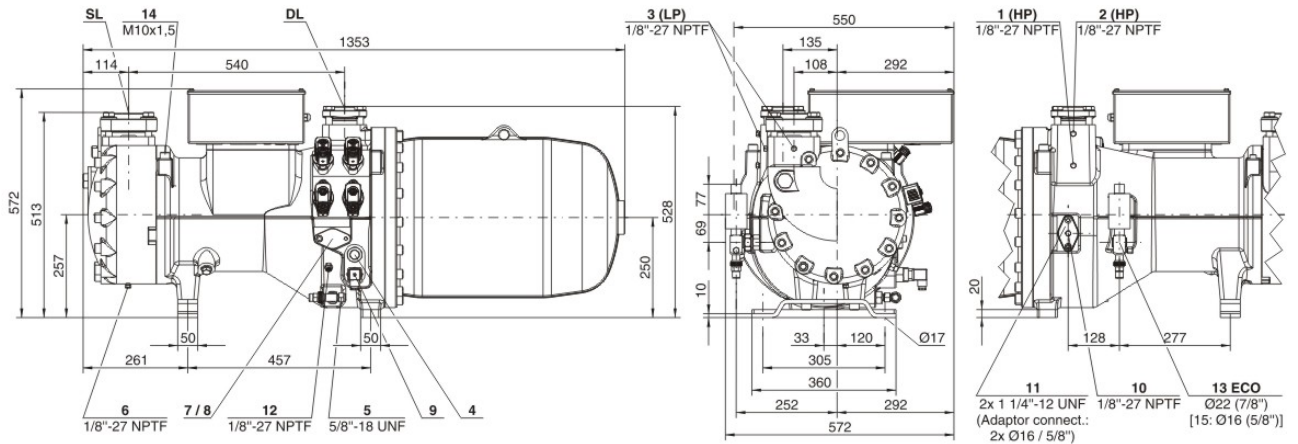
#### Application Limits Standard





## Technical Data: (CSH7551-70Y)

### Dimensions and Connections



### Technical Data

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Displacement (2900 RPM 50 Hz)	197 m <sup>3</sup> /h
Displacement (3500 RPM 60 Hz)	238 m <sup>3</sup> /h
Weight	510kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	76 mm - 3 1/8"
Connection discharge line	54 mm - 2 1/8"
Oil type R22	B320SH (Standard)
Oil type R134a/R407C/R404A/R507A/R407A/R407F	BSE170 (Option)

#### Motor data

Motor voltage (more on request)	380-415V PW-3-50Hz
Max operating current	128.0 A
Winding ratio	50/50
Starting current (Rotor locked)	290.0 A D / 485.0 A DD
Max. Power input	78,0 kW

#### Extent of delivery (Standard)

Enclosure class	IP54
Oil heater	200 W (Standard)
Oil separator	Standard
Oil filter	Standard
Discharge gas temperature sensor	Standard
Start unloading	Standard
Capacity Control - 4-step	100-75-50-25% (Standard)
Capacity Control - infinite	100-25% (Standard)
Built-in check valve	Standard
Motor protection	SE-E1 (Standard), INT69VSY-II(Standard for 660-690V)
Oil charge	15,0 dm <sup>3</sup>

#### Available Options

Oil level switch	Option
Discharge shut-off valve	Option
Suction shut-off valve	Option
Shut-off valve for ECO with muffler	Option
Liquid injection with integrated nozzle	Option
Bridges for DOL start	Option
Vibration dampers	Option