



Compressor Selection: Compact Screw Compressors CS

Input Values

Compressor model	(CSH7551-50Y)	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%		

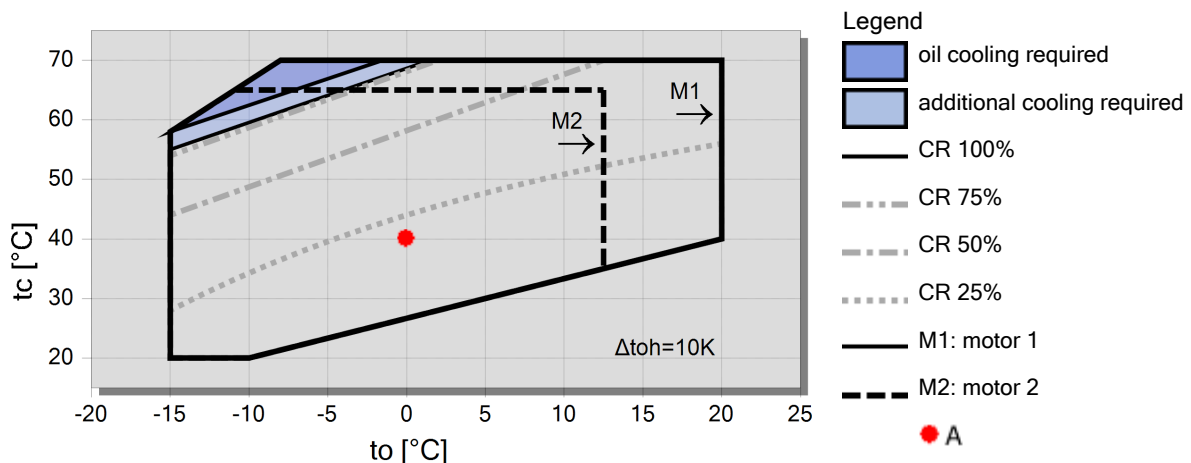
Result

		10°C	5°C	0°C	-5°C	-10°C	-15°C	-20°C	-25°C
30°C	Q [W]	--	143363	117255	94860	75741	59498	--	--
	P [kW]	--	25,4	24,8	24,0	23,2	22,5	--	--
	I [A]	--	46,7	45,9	44,9	43,9	43,0	--	--
	COP [-]	--	5,64	4,73	3,95	3,26	2,64	--	--
	mLP [kg/h]	--	3064	2554	2107	1717	1377	--	--
	mHP [kg/h]	--	3064	2554	2107	1717	1377	--	--
	Qac [kW]	--	--	--	--	--	--	--	--
	tcu [°C]	--	30,0	30,0	30,0	30,0	30,0	--	--
	pm [bar(a)]	--	--	--	--	--	--	--	--
	Qsc [kW]	--	--	--	--	--	--	--	--
40°C	Q [W]	154811	126723	102562	81877	64255	49318	--	--
	P [kW]	31,1	30,2	29,1	28,0	27,1	26,4	--	--
	I [A]	54,4	53,2	51,7	50,2	48,9	48,1	--	--
	COP [-]	4,98	4,20	3,53	2,92	2,38	1,87	--	--
	mLP [kg/h]	3556	2970	2455	2002	1607	1262	--	--
	mHP [kg/h]	3556	2970	2455	2002	1607	1262	--	--
	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]	132658	107386	85713	67222	51532	38297	--	--
	P [kW]	36,6	35,3	34,0	32,9	32,2	32,1	--	--
	I [A]	62,4	60,5	58,6	57,1	56,1	55,9	--	--
	COP [-]	3,62	3,04	2,52	2,04	1,60	1,19	--	--
	mLP [kg/h]	3378	2796	2284	1835	1442	1100	--	--
	mHP [kg/h]	3378	2796	2284	1835	1442	1100	--	--
	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)

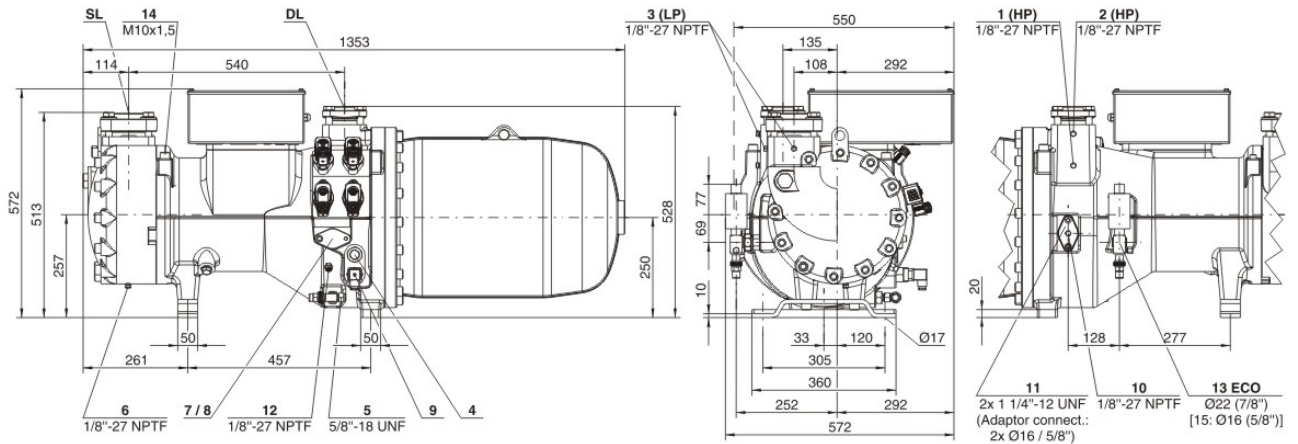
Application Limits Standard





Technical Data: (CSH7551-50Y)

Dimensions and Connections



Technical Data

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Displacement (2900 RPM 50 Hz)	197 m3/h
Displacement (3500 RPM 60 Hz)	238 m3/h
Weight	500kg
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 R134a/R407C/R404A/R507A/R407A/R407F	BSE170 (Standard)

Motor data

Motor voltage (more on request)	380-415V PW-3-50Hz
Max operating current	79.0 A
Winding ratio	50/50
Starting current (Rotor locked)	206.0 A D / 355.0 A DD
Max. Power input	52,0 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 dm3

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