



### Compressor Selection: Compact Screw Compressors CS

#### Input Values

Compressor model	(CSH8561-90Y)	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%		

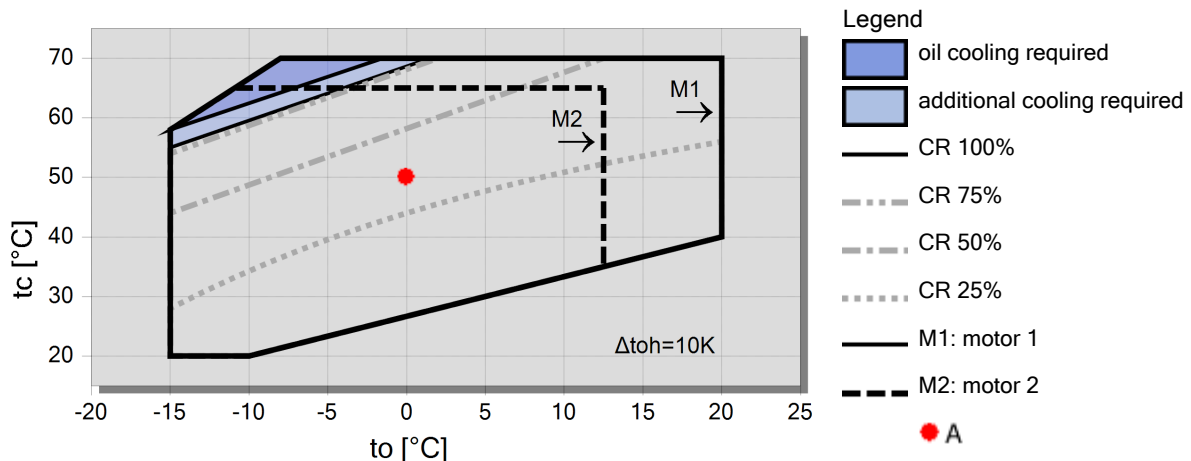
#### Result

		10°C	5°C	0°C	-5°C	-10°C	-15°C	-20°C	-25°C
tc [°C]	to [°C]	10°C	5°C	0°C	-5°C	-10°C	-15°C	-20°C	-25°C
30°C	Q [W]	--	264364	217220	176638	141788	111890	--	--
	P [kW]	--	43,4	41,9	40,8	39,9	39,1	--	--
	I [A]	--	73,6	71,4	69,9	68,6	67,5	--	--
	COP [-]	--	6,09	5,18	4,33	3,55	2,86	--	--
	mLP [kg/h]	--	5650	4732	3924	3214	2590	--	--
	mHP [kg/h]	--	5650	4732	3924	3214	2590	--	--
	Qac [kW]	--	--	--	--	--	--	--	--
	tcu [°C]	--	30,0	30,0	30,0	30,0	30,0	--	--
	pm [bar(a)]	--	--	--	--	--	--	--	--
	Qsc [kW]	--	--	--	--	--	--	--	--
40°C	Q [W]	288349	237433	193523	155766	123367	95579	--	--
	P [kW]	53,4	51,6	49,9	48,5	47,2	46,1	--	--
	I [A]	88,1	85,4	83,0	80,9	79,0	77,4	--	--
	COP [-]	5,40	4,60	3,88	3,21	2,61	2,07	--	--
	mLP [kg/h]	6624	5565	4632	3809	3085	2446	--	--
	mHP [kg/h]	6624	5565	4632	3809	3085	2446	--	--
	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]	252856	206305	166269	131952	102611	77553	--	--
	P [kW]	63,5	61,7	60,0	58,3	56,9	55,6	--	--
	I [A]	103,2	100,5	97,9	95,4	93,2	91,4	--	--
	COP [-]	3,98	3,34	2,77	2,26	1,80	1,39	--	--
	mLP [kg/h]	6438	5372	4431	3602	2872	2227	--	--
	mHP [kg/h]	6438	5372	4431	3602	2872	2227	--	--
	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)

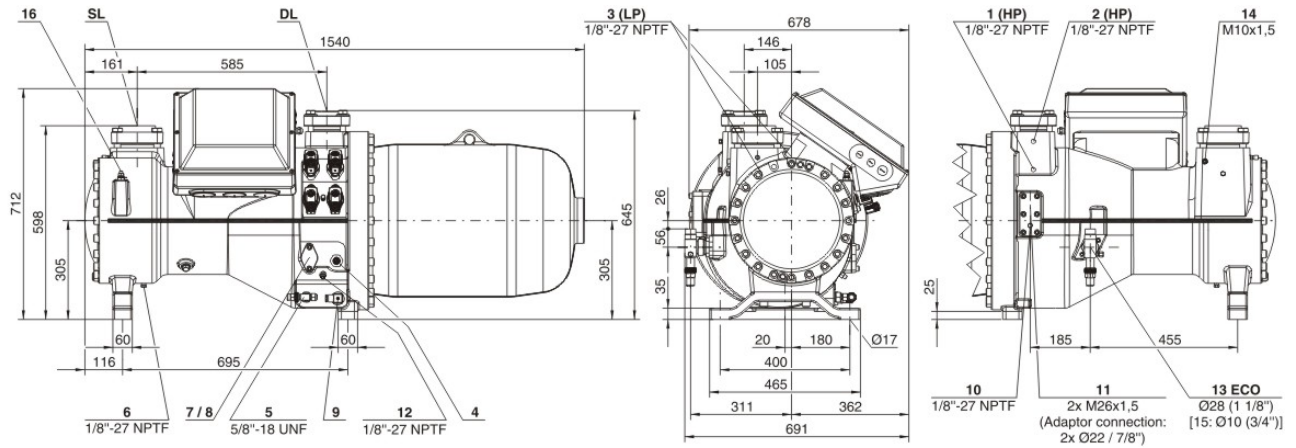
#### Application Limits Standard





## Technical Data: (CSH8561-90Y)

### Dimensions and Connections



### Technical Data

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Displacement (2900 RPM 50 Hz)	359 m <sup>3</sup> /h
Displacement (3500 RPM 60 Hz)	433 m <sup>3</sup> /h
Weight	830kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	DN 100
Connection discharge line	76 mm - 3 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	155.0 A
Winding ratio	50/50
Starting current (Rotor locked)	439.0 A D / 675.0 A DD
Max. Power input	96,0 kW

#### Extent of delivery (Standard)

Enclosure class	IP54
Oil heater	300 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	22,0 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