

Selection: Compact Screw Compressors CS // CSV

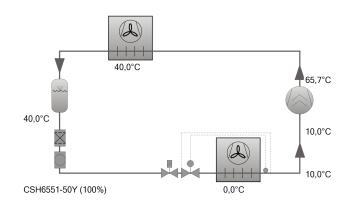
Input Values

Bitzer

BITZER Software v7.0.0 rev0

(CSH6551-50Y) Compressor model Refrigerant R134a Reference temperature Dew point temp. **Evaporating SST** 0°C Condensing SDT 40,0 °C Liq. subc. (in condenser) 0 K Suct. gas superheat 10,00 K Useful superheat 100% Operating mode Standard Power supply 400V-3-50Hz Capacity control

Capacity control 100%
Additional cooling Automatic
Max. discharge gas temp. 110,0 °C

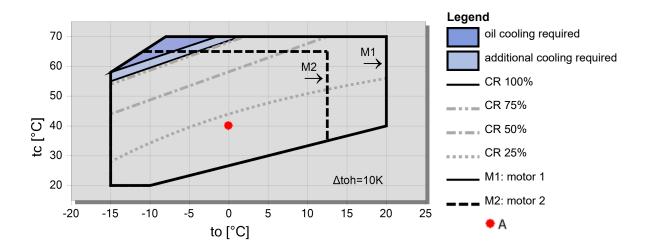


Result

Compressor	CSH6551-50Y-40P
Capacity steps	100%
Cooling capacity	70,2 kW
Cooling capacity *	70,2 kW
Evaporator capacity	70,2 kW
Power input	19,06 kW
Current (400V)	38,8 A
Voltage range	380-415V
Condenser capacity	89,3 kW
COP/EER	3,68
COP/EER *	3,68
Mass flow LP	1680 kg/h
Mass flow HP	1680 kg/h
Operating mode	Standard
Liquid temp.	40,0 °C
Oil volume flow	0,51 m³/h
Cooling method	
Discharge gas temp. w/o cooling	65,7 °C

*According to EN12900 (10K suction gas superheat, 0K liquid subcooling, see tech. data/ notes)

Application Limits Standard CSH6551-50

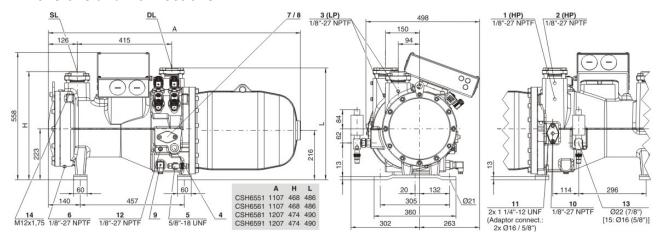


1/4



Technical Data: (CSH6551-50Y)

Dimensions and Connections







Bitzer

Technical Data	
Displacement (2900 RPM 50 Hz)	137 m³/h
Displacement (3500 RPM 60 Hz)	165 m³/h
Weight	322 kg
Max. pressure (LP/HP)	19 / 28 bar
Connection suction line	54 mm - 2 1/8"
Connection discharge line	42 mm - 1 5/8"
Oil type R134a/R407C/R404A/R507A/R407A/R407F	BSE170 (Option)
Oil type R22	B320SH (Standard)
Motor data	
Motor version	1
Motor voltage (more on request)	380-415V PW-3-50Hz
Max operating current	86.0 A
Winding ratio	50/50
Starting current (Rotor locked)	218.0 A D / 411.0 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	9,5 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

BITZER Software v7.0.0 rev0

12.03.2024 / All data subject to change

4/4

Compact Screw Compressors CS

Reference points for evaporating and condensing pressures

Connection positions 1 (HP) and 3 (LP) on the compressor (see dimensions). The pressure drop for shut-off valves and check valves has not been taken into consideration. This is the worldwide state of the art for compact screws, as in factory-produced chillers shut-off valves are often omitted and the check valve can also be arranged as an external com-ponent in the discharge line. For the sake of the international comparability of performance data, this standard has been adopted for the screw compressors of the CSH/CSW/CSVH series.

ASERCOM certified performance data

The Association of European Refrigeration Component Manufacturers has implemented a procedure of certifying performance data. The high standard of these certifications is assured by:

- * plausibility tests of the data performed by experts.
- * regular measurements at independent institutes.

These high efforts result in the fact that only a limited number of compressors can be submitted. Due to this not all BITZER compressors are certified up to now.Performance data of compressors which fulfil the strict requirements may carry the label "ASERCOM certified". In this software you will find the label at the respective compressors on the right side below the field "result" or in the print out of the performance data. All certified compressors and further information are listed on the homepage of ASERCOM.