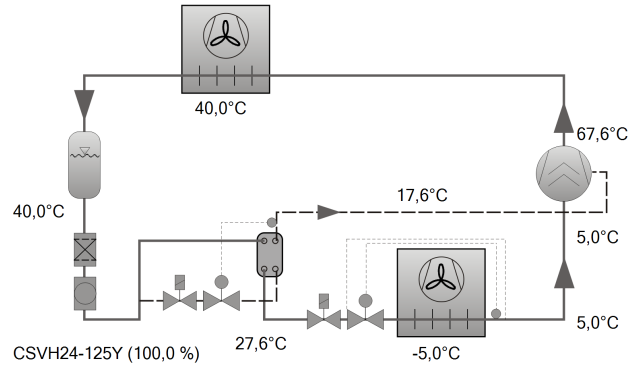




Selection: Compact Screw Compressors CS // CSV

Input Values

Compressor model	CSVH24-125Y
Refrigerant	R134a
Reference temperature	Dew point temp.
Evaporating SST	-5,00 °C
Condensing SDT	40,0 °C
Liq. subc. (in condenser)	0 K
Auto. subcooling	Auto
Suct. gas superheat	10,00 K
Useful superheat	100%
Operating mode	Economiser
Power supply	400V-3-50Hz
Additional cooling	Automatic
Max. discharge gas temp.	110,0 °C
Subcooling (after condenser)	0 K



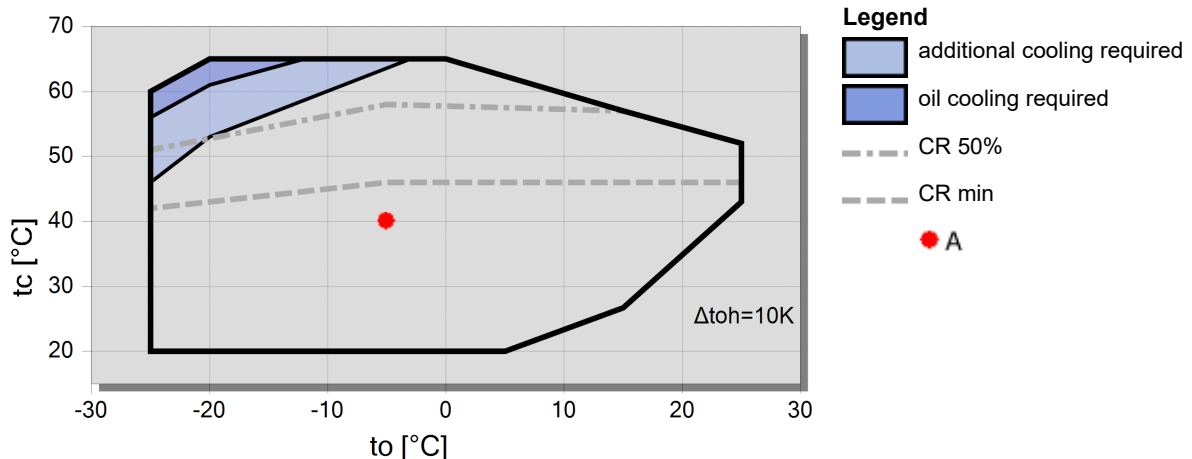
Result

Compressor	CSVH24-125Y-40A
Compressor frequency	100,0 %
Cooling capacity	240 kW
Cooling capacity *	244 kW
Evaporator capacity	240 kW
Power input	72,2 kW
Current (400V)	121,3 A
Voltage range	400V
Condenser capacity	312 kW
COP/EER	3,32
COP/EER *	3,32
Mass flow LP	5211 kg/h
Mass flow HP	5843 kg/h
min. cooling capacity	60,4 kW
max. cooling capacity	240 kW
Operating mode	Economiser
Liquid temp. (sc)	27,6 °C
Mass flow ECO	632 kg/h
sub cooler load	26,6 kW
sat. ECO Temp.	17,61 °C
ECO pressure	5,30 bar(a)
Oil volume flow	0,37 m³/h
Cooling method	--
Discharge gas temp. w/o cooling	67,6 °C

Tentative Data.

*According to EN12900 (10K suction gas superheat, liquid subcooling in Economiser with 5K temperature difference)

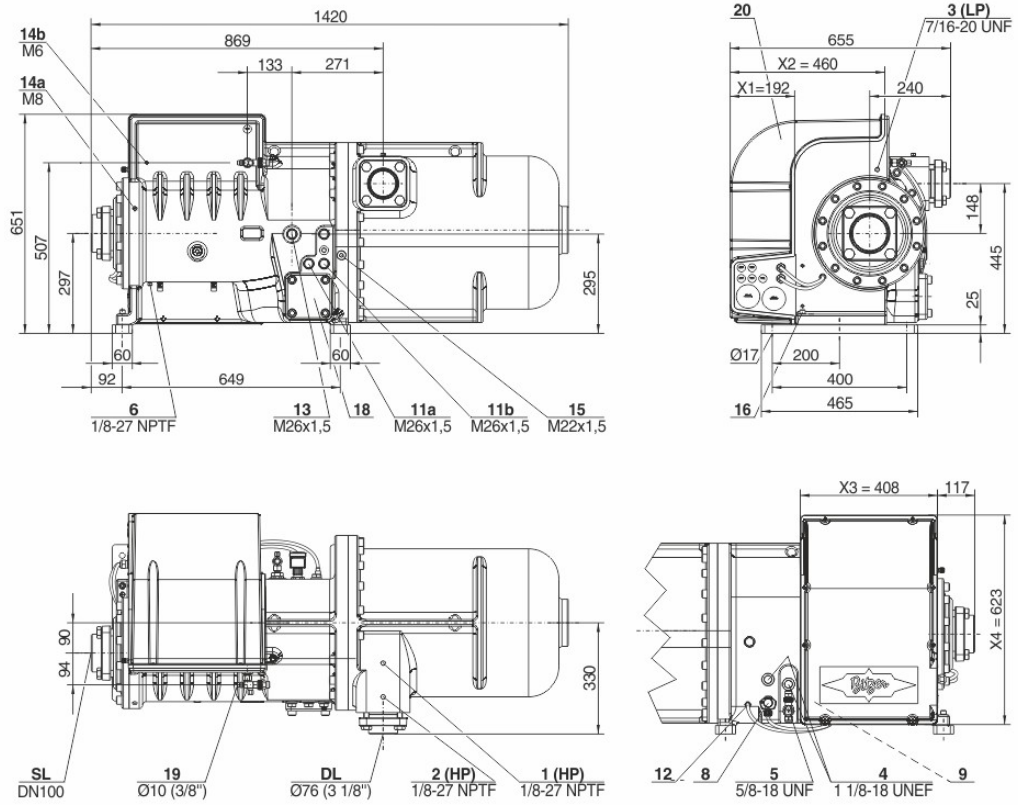
Application Limits ECO





Technical Data: CSVH24-125Y

Dimensions and Connections





Technical Data

Technical Data

Displacement (max. compressor speed)	464 m ³ /h
Displacement (min. compressor speed)	110 m ³ /h
Weight	740 kg
Max. pressure (LP/HP)	15 / 24 bar
Connection suction line	D105L - 4 1/8" (DN 100)
Connection discharge line	D76L - 3 1/8" (DN 80)
Oil type R1234yf/R1234ze(E)/R450A/R513A/R515B	BSE170 (Standard)
Oil type R134a	BSE170 (Standard)

Motor data

Motor voltage (more on request)	400V -3-50Hz
Max. operating current	220.0 A
Starting current (Rotor locked)	<20.0 A
Max. power input	130,0 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 (FI)
Capacity Control - infinite	100-25%
Built-in check valve	Standard
Motor protection	Standard (FI)
Oil charge	18 dm ³
Automatic application limit monitoring	Standard (FI)
Electrical failure monitoring	Standard (FI)
Oil level switch	min OLC-D1-S (Standard)

Available options

Permanent magnet motor	Option
Oil level switch	max OLC-D1-S (Option)
Adapter for external oil cooler	Option
Oil heater	200 W, 115 V (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
with sound jacket	Option
Vibration dampers	Option
Line reactor	Option
RFI filter	Option
Connection suction line	DN125
BEST interface converter	Option



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 component 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.