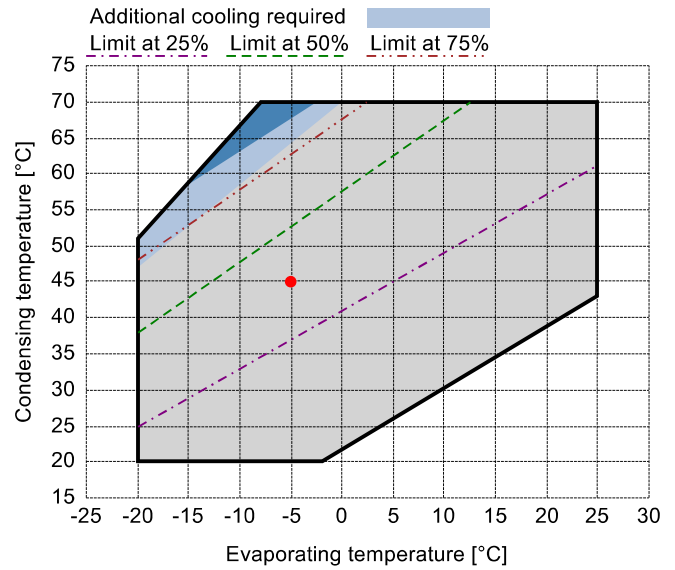


Input data

Refrigerant	R134a	
Reference temperature	Dew point temperature	
Calculation mode	Refrigeration / Air Cond.	
Operating mode	Subcritical	
Power supply	400/3/50	
Condensing temperature	°C	45
Condensing pressure	bar	11.6
Liquid subcooling	K	2
Liquid temperature	°C	43
Evaporating temperature	°C	-5
Evaporating pressure	bar	2.43
Suction gas temperature	°C	20
Evaporator superheating	K	5



Output data

Compressor :		CXH52-110-316Y
Number of compressors :		FSx1
Refrigerating capacity	kW	137.634
Refrigerating capacity [*ref]	kW	131.622
Evaporator capacity	kW	122.029
Power input	W	52420
Condenser capacity, theor.	kW	190.053
Current	A	88.92
COP/EER	W/W	2.33
Mass flow	kg/h	3177
Operating frequency	Hz	50
Connection	-	PWS
Operating mode	-	100%
Discharge temperature	°C	94.16
Ratio (%)	%	100.0%
Note	-	
Oil flow	l/min	17.66
Heat Exchanged (oil Cooler)	kW	-
Oil Temp. at Oil Cooler Outlet	°C	-
Certified by	-	Frascold

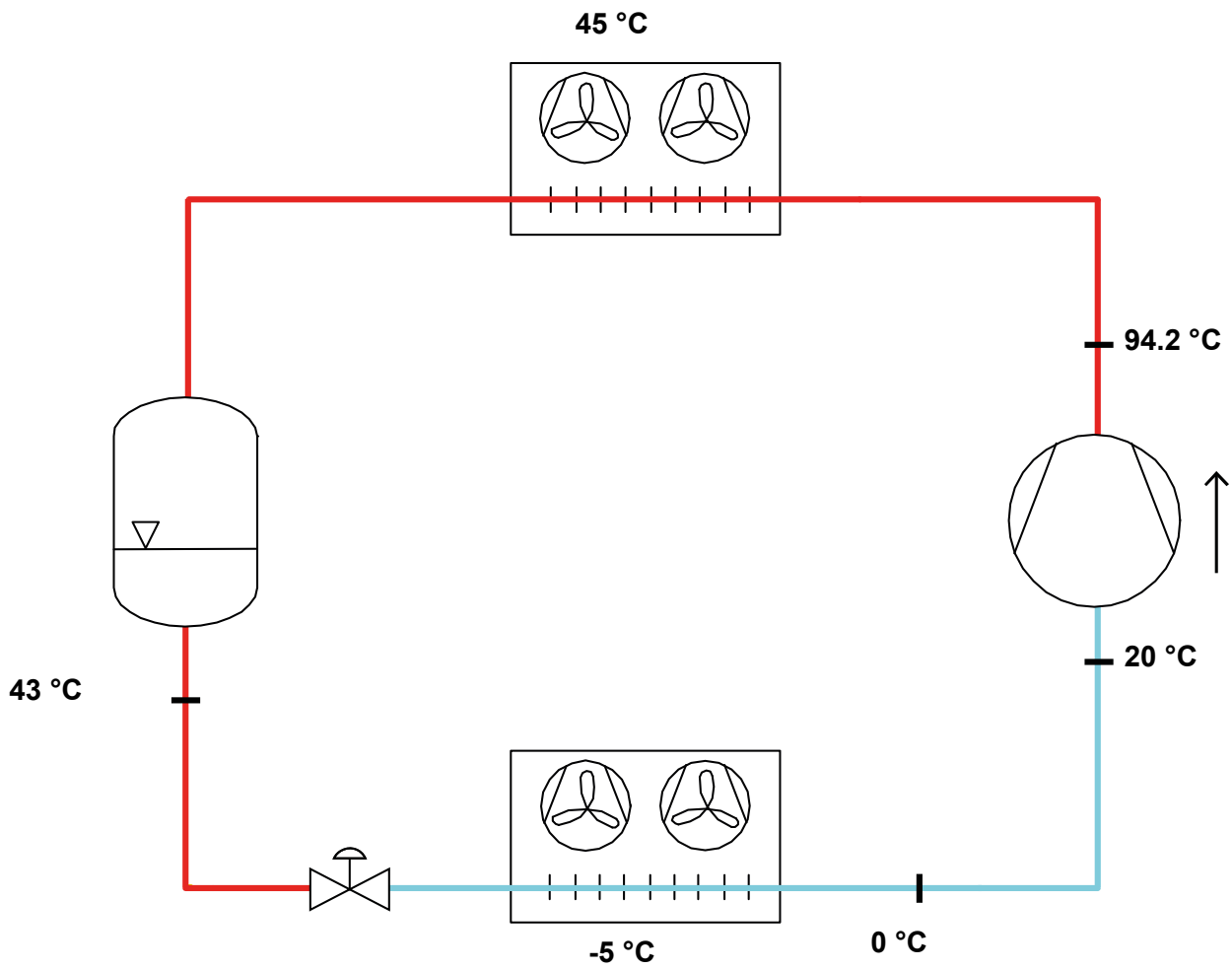
Certified by:

- Frascold tentative data

Legend:

- *ref: At conditions according to EN12900
- Suction gas superheating = 10 K
- Liquid subcooling = 0 K

P&I Diagram:



All data subject to change without notice

Oil separator:

Name	WK201
Number of separators	1

Results

Number of compressors, maximum		3
Utilization (Number of separators)	%	33.33
Refrigerant mass flow, maximum	kg/h	5279
Utilization (Refrigerant mass flow)	%	60.18
Oil flow, maximum	l/min	112.5
Utilization (Oil flow)	%	15.7

Selection parameters

Number of compressors		1
Mass flow, Compressors	kg/h	3177
Oil flow, Compressors	l/min	17.66

Operating conditions

Evaporating temperature	°C	-5
Suction gas temperature	°C	20
Condensing temperature	°C	45
Liquid temperature	°C	43

All data subject to change without notice

Model: CXH52-110-316Y

Refrigerant: R134a

Power supply: 400/3/50 PWS

Technical data:

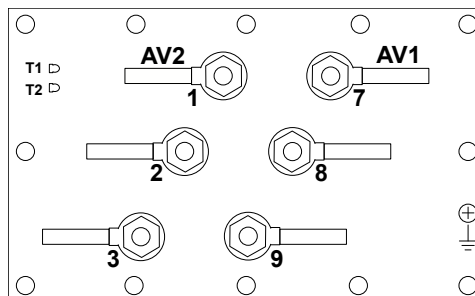
Displacement	316 m³/h
Nominal compressor speed	2900 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	184 A
Locked rotor current (LRA)	434 A
Locked rotor current (LRA), DOL	720 A
Net weight	798 kg
Lubricant	FRASCOLD POE170
Oil charge	19 l
Maximum static pressure LP	20.5 bar
Maximum operating pressure HP	30 bar

Sound level:

Sound power level 5/50°C R407C @50Hz	87.9 dB(A)
Sound pressure (*) - Distance: 1 m	79.9 dB(A)
Sound power level 5/50°C R134a @50Hz	86 dB(A)
Sound pressure (*) - Distance: 1 m	78 dB(A)

*half sphere model

Motor connections:



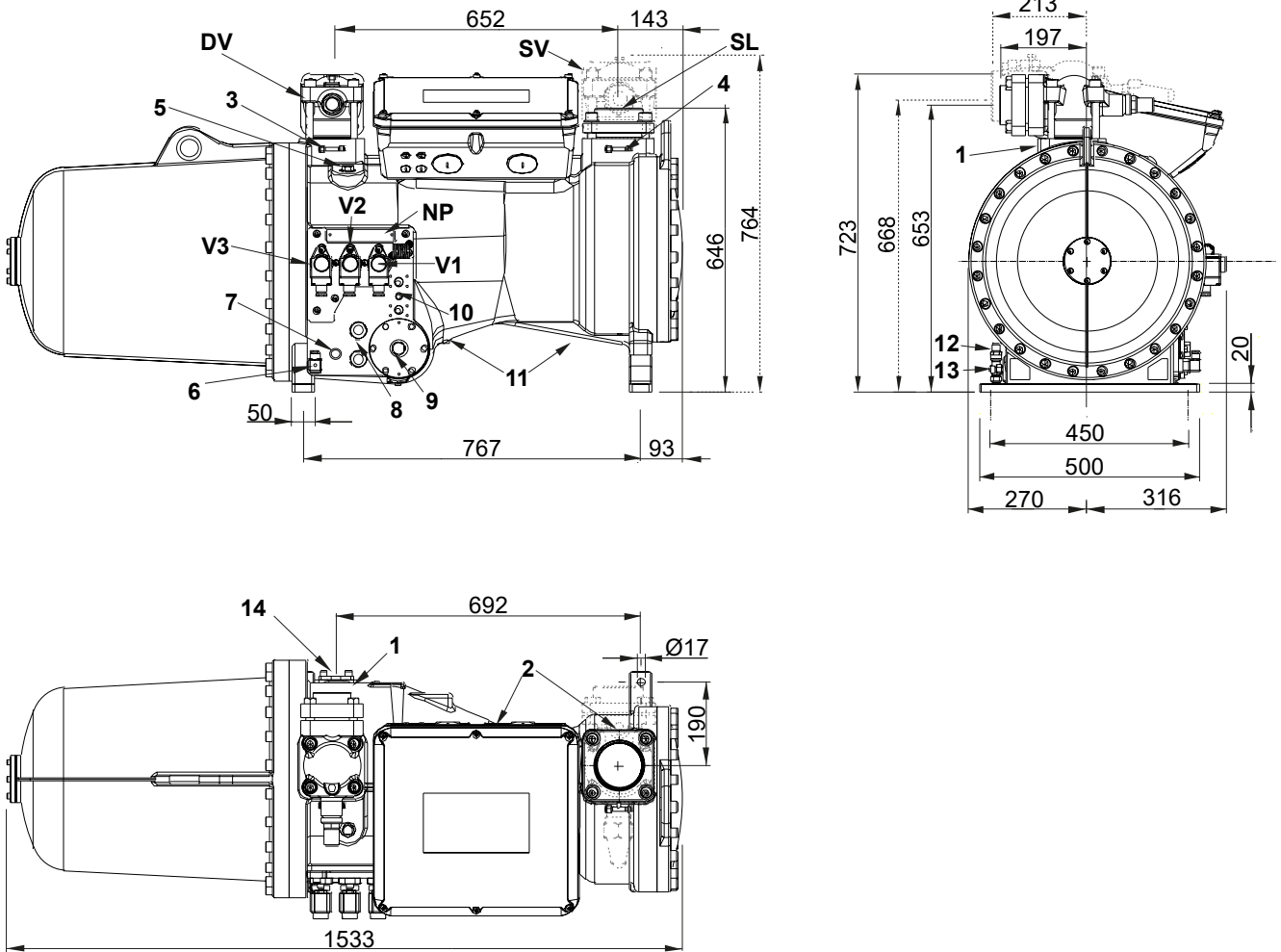
All data subject to change without notice

Model: CXH52-110-316Y

Refrigerant: R134a

Power supply: 400/3/50 PWS

Dimensions:



Legend:

SV: Suction Valve	4 1/8" in - 105 mm	6: Crankcase heater	-
DV: Discharge valve	DN80	7: Oil level regulator connection	3/4" NPT
SL: Suction line	4 1/8"	8: Oil level sight glass	-
V1: Capacity control valve	-	9: Filter clogging sensor connection	1/2" GAS
V2: Capacity control valve	-	10: Oil cooler connection	1/2" NPT
V3: Capacity control valve	-	11: Oil drain plug	1/4" NPT
1: High pressure connection	1/8" NPT	12: Oil drain valve	1/8" NPT
2: Low pressure connection	1/8" NPT	13: Maximum oil temperature sensor	-
3: High pressure connection	1/4" SAE x 1/4" SAE	14: ECO/liquid injection connection	1 1/8"
4: Low pressure connection	1/4" SAE x 1/4" SAE	NP: Nameplate	-
5: Oil charge plug	3/8" GAS		

All data subject to change without notice

Model: CXH52-110-316Y

Refrigerant: R134a

Power supply: 400/3/50 PWS

Polynomial coefficients according to EN12900 for CXH52-110-316Y:

*S = T_{evap} ; D = T_{cond}

Reference conditions

Refrigerant	R134a
Ambient temperature	35 °C
Suction gas superheating	10 K
Liquid subcooling	0 K
Frequency	50 Hz

	Refrigerating capacity [W]	Power input [W]
C1	2.183380E+005	4.541350E+004
C2	1.027330E+004	4.323820E+002
C3	1.381590E+003	-7.457760E+002
C4	1.492200E+002	1.023370E+001
C5	-3.939590E+001	-5.535620E+000
C6	-7.721120E+001	2.512910E+001
C7	4.630420E-001	1.674500E-001
C8	-6.997000E-001	-1.806930E-001
C9	-4.271950E-001	9.416730E-002
C10	4.692150E-001	-9.308390E-002

$$Y = C1 + C2*S + C3*D + C4*S^2 + C5*S*D + C6*D^2 + C7*S^3 + C8*D*S^2 + C9*S*D^2 + C10*D^3$$