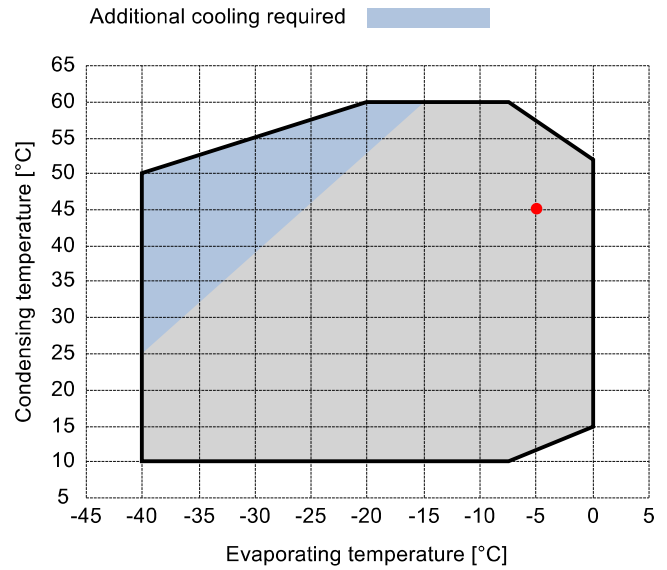


Input data

Refrigerant	R449A	
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	18.86
Liquid subcooling	K	2
Liquid temperature	°C	38.72
Evaporating temperature	°C	-5
Evaporating pressure	bar	4.33
Suction gas temperature	°C	20
Evaporator superheating	K	5



Output data

Compressor :		V25-103Y
Number of compressors :		FSx1
Refrigerating capacity	kW	64.782
Refrigerating capacity [*ref]	kW	63.425
Evaporator capacity	kW	57.377
Power input	W	22683
Condenser capacity, theor.	kW	87.466
Current	A	39.71
COP/EER	W/W	2.53
Mass flow	kg/h	1452
Operating frequency	Hz	50
Connection	-	PWS
Operating mode	-	100%
Discharge temperature	°C	96.01
Ratio (%)	%	100.0%
Note	-	
Oil flow	l/min	-
Heat Exchanged (oil Cooler)	kW	-
Oil Temp. at Oil Cooler Outlet	°C	-
Certified by	-	Frascold

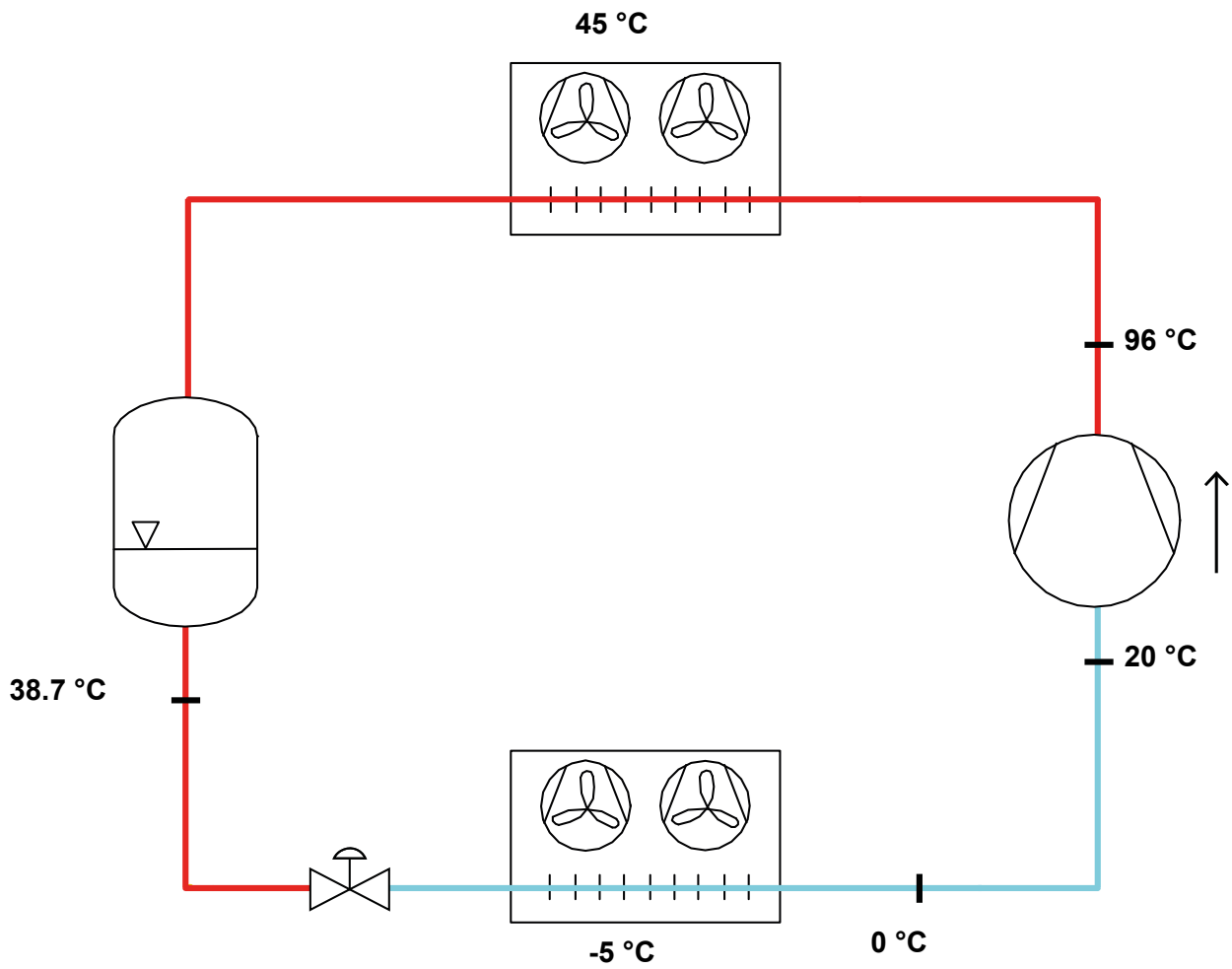
Certified by:

- Frascold tentative data

Legend:

- *ref: At conditions according to EN12900
- Suction gas temperature = 20 °C
- Liquid subcooling = 0 K

P&I Diagram:



Model: V25-103Y

Refrigerant: R449A

Power supply: 400/3/50 PWS

Technical data:

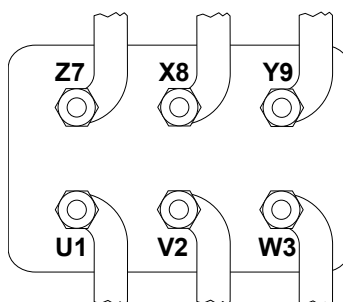
Displacement	102.9 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	52.3 A
Locked rotor current (LRA)	118.3 A
Locked rotor current (LRA), DOL	202.7 A
Number of pistons	4
Net weight	190 kg
Lubricant	FRASCOLD POE68
Oil charge	4 l
Maximum static pressure LP	20.5 bar
Maximum operating pressure HP	30 bar

Sound level:

Sound power level -10/45°C R404A @50Hz	80.5 dB(A)
Sound pressure (*) - Distance: 1 m	72.5 dB(A)
Sound power level -35/40°C R404A @50Hz	87 dB(A)
Sound pressure (*) - Distance: 1 m	79 dB(A)

*half sphere model

Motor connections:



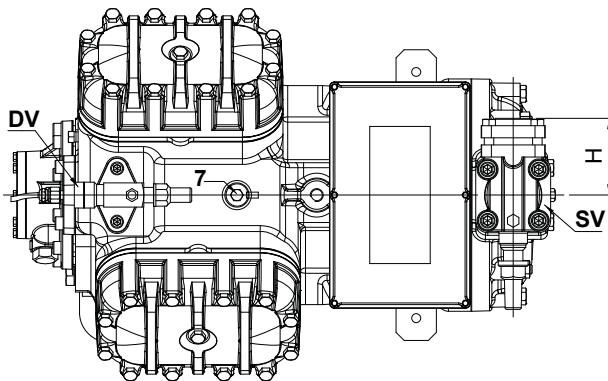
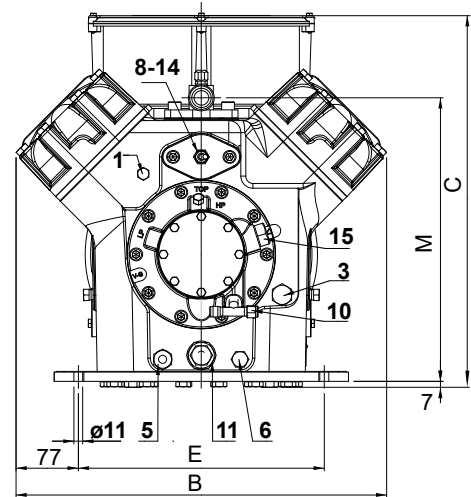
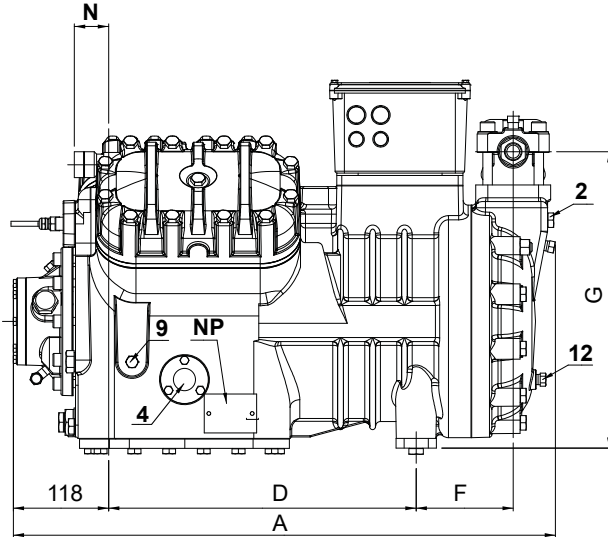
All data subject to change without notice

Model: V25-103Y

Refrigerant: R449A

Power supply: 400/3/50 PWS

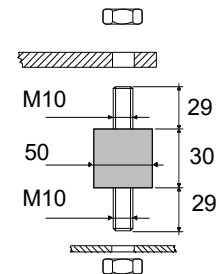
Dimensions:



Supporto antivibrante

Vibration absorber

Vibrationsabsorber



Legend:

SV: Suction Valve	2 1/8" in - 54 mm	2: Low pressure connection	1/4" NPT
DV: Discharge valve	1 3/8" in - 35 mm	3: Oil charge plug	3/8" GAS
A: Length	703 mm	4: Oil level sight glass	-
B: Width	460 mm	5: Crankcase heater seat	-
C: Height	463 mm	6: Oil drain plug	1/4" GAS
D: Base mounting	381 mm	7: Liquid injection plug	1/4" NPT
E: Base mounting	305 mm	8: Liquid injection sensor plug	1/8" NPT
F: Suction Valve	133 mm	9: Oil pressure switch connection (LP)	1/4" NPT
G: Suction Valve	389 mm	10: Oil pressure switch connection (HP)	1/4" SAE
H: Suction Valve	130 mm	11: Oil filter	3/8" GAS
L: Discharge valve	152 mm	12: Oil return plug	1/4" NPT
M: Discharge valve	352 mm	14: Max discharge temperature sensor connection	1/8" NPT
N: Discharge valve	48 mm	15: Electronic oil pressure switch connection	3/4 UNF
1: High pressure connection	1/8" NPT	NP: Nameplate	

All data subject to change without notice

Model: V25-103Y

Refrigerant: R449A

Power supply: 400/3/50 PWS

Polynomial coefficients according to EN12900 for V25-103Y:

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

Reference conditions

Refrigerant	R449A
Ambient temperature	35 °C
Suction gas temperature	20 °C
Liquid subcooling	0 K
Frequency	50 Hz

	Refrigerating capacity [W]	Power input [W]
C1	1.266980E+005	5.170130E+003
C2	4.611990E+003	-2.892530E+002
C3	-1.049660E+003	5.447620E+002
C4	6.107570E+001	-7.453930E+000
C5	-3.610680E+001	1.568400E+001
C6	-9.058410E-001	-2.858360E+000
C7	3.003730E-001	-4.019710E-002
C8	-3.860370E-001	8.377750E-002
C9	-1.329410E-002	-5.276960E-002
C10	-5.027180E-003	4.637920E-003

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