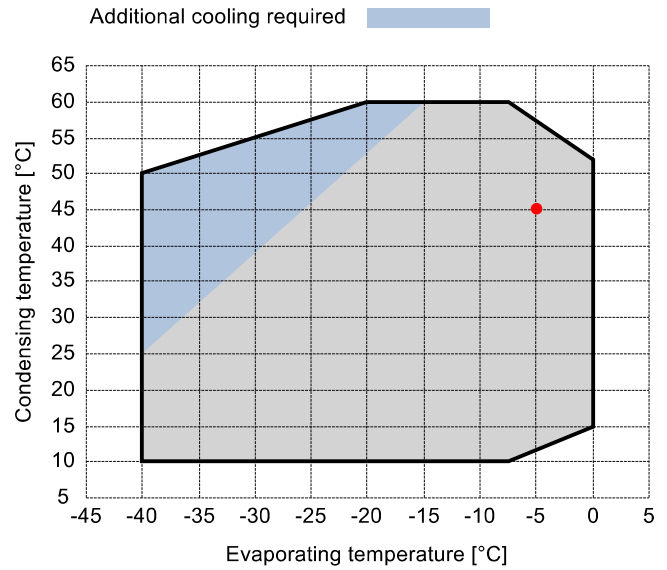


Input data

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 :		V15-59Y
Number of compressors :		FSx1
Refrigerating capacity	kW	36.901
Refrigerating capacity [*ref]	kW	36.128
Evaporator capacity	kW	32.683
Power input	W	12772
Condenser capacity, theor.	kW	49.673
Current	A	24.61
COP/EER	W/W	2.56
Mass flow	kg/h	827
Operating frequency	Hz	50
Connection	-	PWS
Operating mode	-	100%
Discharge temperature	°C	95.43
Ratio (%)	%	100.0%
Note	-	
Oil flow	l/min	-
Heat Exchanged (oil Cooler)	kW	-
Oil Temp. at Oil Cooler Outlet	°C	-
Certified by	-	Frascold

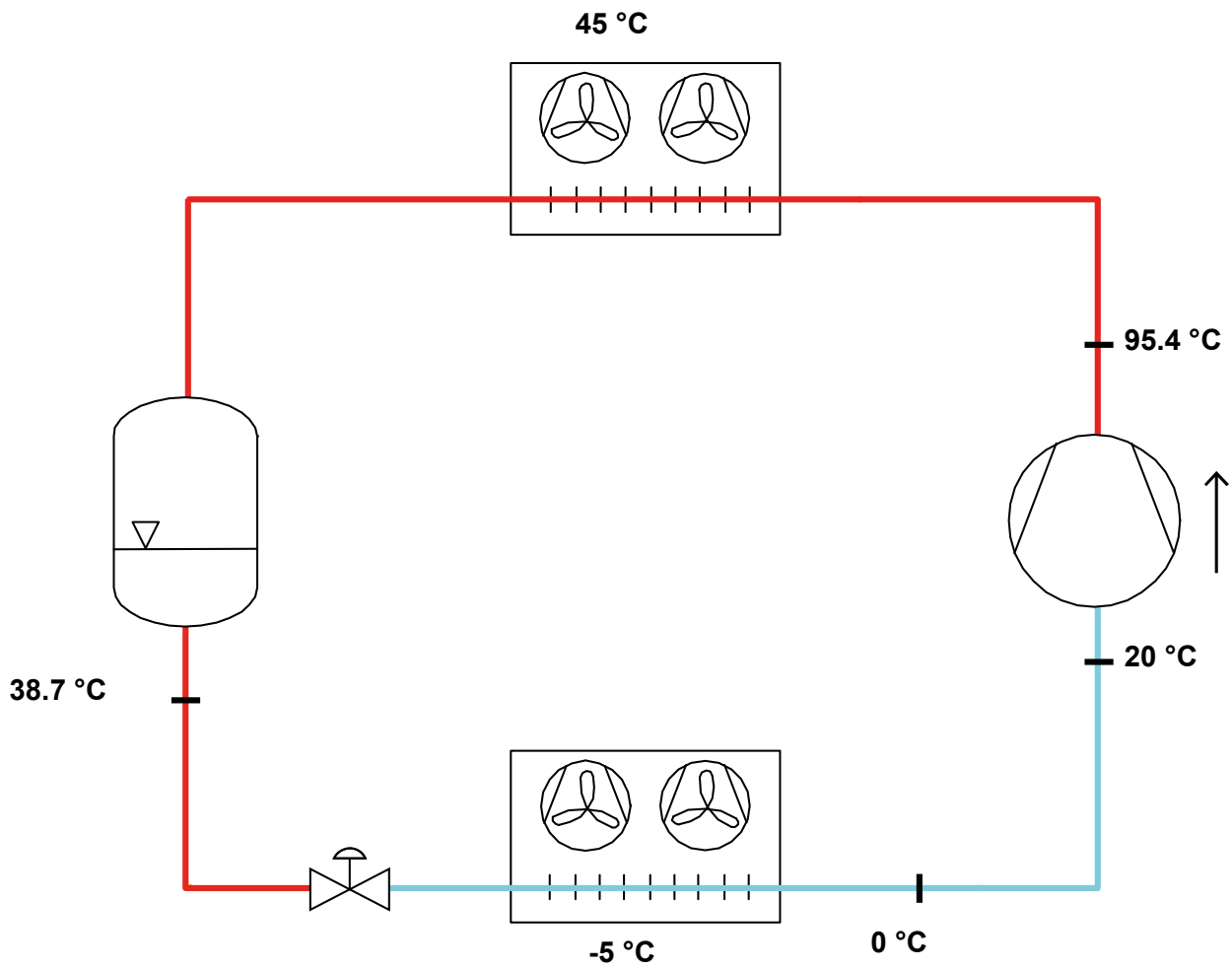
Certified by:

- Frascold tentative data

Legend:

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

P&I Diagram:



Model: V15-59Y

Refrigerant: R449A

Power supply: 400/3/50 PWS

Technical data:

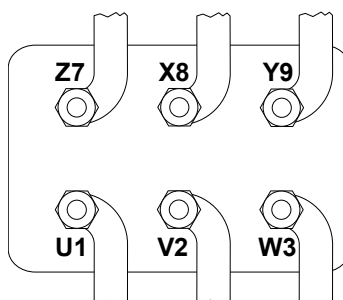
Displacement	58.48 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	31.1 A
Locked rotor current (LRA)	74.8 A
Locked rotor current (LRA), DOL	117.1 A
Number of pistons	4
Net weight	170 kg
Lubricant	FRASCOLD POE68
Oil charge	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	77.5 dB(A)
Sound pressure (*) - Distance: 1 m	69.5 dB(A)
Sound power level -35/40°C R404A @50Hz	81 dB(A)
Sound pressure (*) - Distance: 1 m	73 dB(A)

*half sphere model

Motor connections:



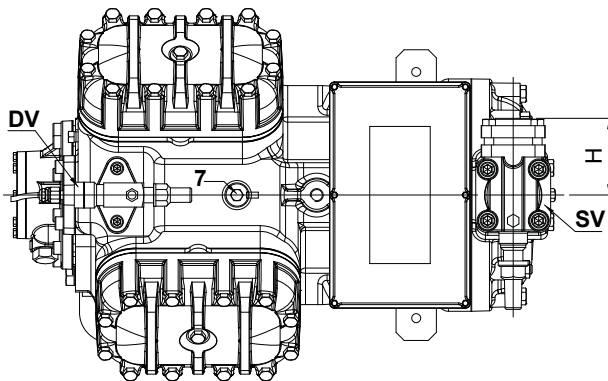
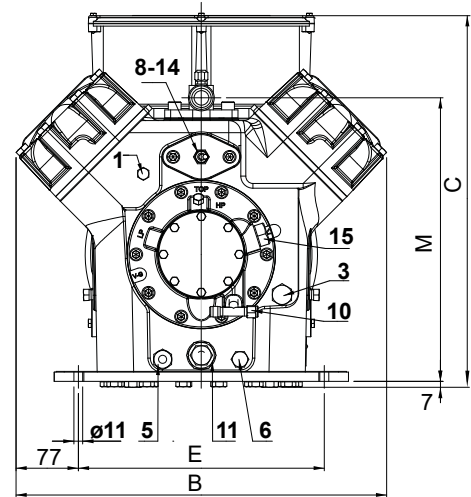
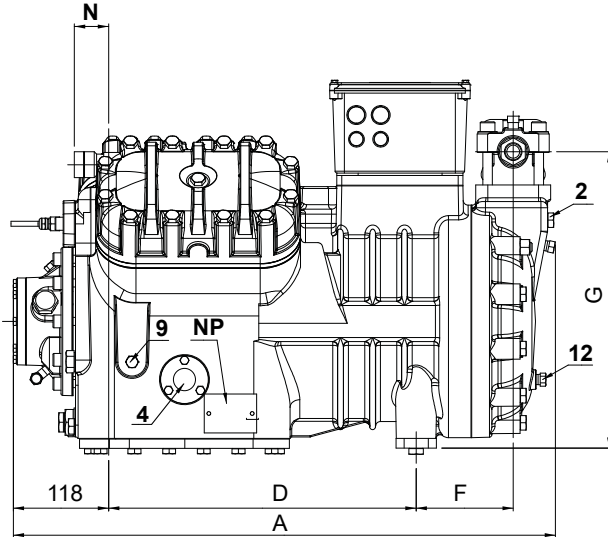
All data subject to change without notice

Model: V15-59Y

Refrigerant: R449A

Power supply: 400/3/50 PWS

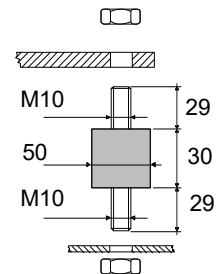
Dimensions:



Supporto antivibrante

Vibration absorber

Vibrationsabsorber



Legend:

SV: Suction Valve	1 5/8" in - 42 mm	2: Low pressure connection	1/4" NPT
DV: Discharge valve	1 1/8" in - 28.575 mm	3: Oil charge plug	3/8" GAS
A: Length	672 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	120 mm	9: Oil pressure switch connection (LP)	1/4" NPT
G: Suction Valve	367 mm	10: Oil pressure switch connection (HP)	1/4" SAE
H: Suction Valve	95 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	43 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: V15-59Y

Refrigerant: R449A

Power supply: 400/3/50 PWS

Polynomial coefficients according to EN12900 for V15-59Y:

*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	7.350240E+004	3.615750E+003
C2	2.597420E+003	-1.765190E+002
C3	-6.563310E+002	2.545210E+002
C4	3.234290E+001	-6.301020E+000
C5	-1.890360E+001	8.199140E+000
C6	5.859230E-001	6.444260E-002
C7	1.467830E-001	-6.085570E-002
C8	-1.776500E-001	3.475660E-002
C9	-9.679970E-003	-2.417660E-002
C10	-1.076340E-002	-1.754750E-002

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