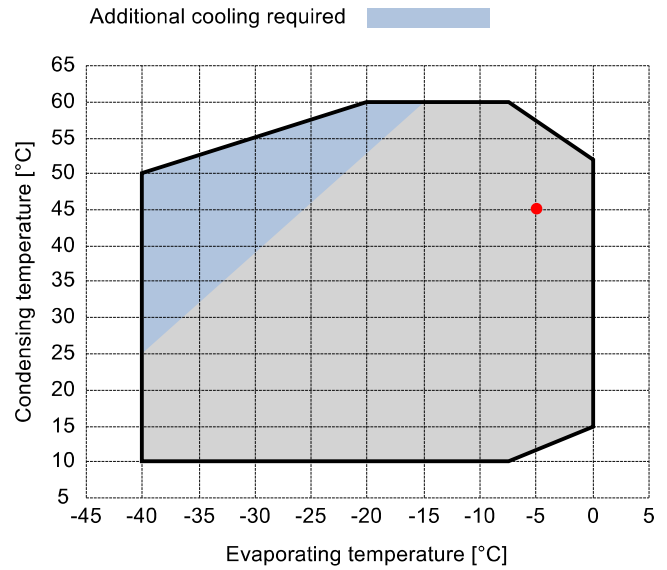


Input data

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 superheating	K	25
Evaporator superheating	K	5



Output data

Compressor :		A05-5Y
Number of compressors :		FSx1
Refrigerating capacity	kW	2.602
Refrigerating capacity [*ref]	kW	2.547
Evaporator capacity	kW	2.304
Power input	W	1052
Condenser capacity, theor.	kW	3.654
Current	A	2.12
COP/EER	W/W	2.19
Mass flow	kg/h	58
Operating frequency	Hz	50
Connection	-	DOL-STAR
Operating mode	-	100%
Discharge temperature	°C	103.84
Ratio (%)	%	100.0%
Note	-	
Oil flow	l/min	-
Heat Exchanged (oil Cooler)	kW	-
Oil Temp. at Oil Cooler Outlet	°C	-
Certified by	-	Frascold

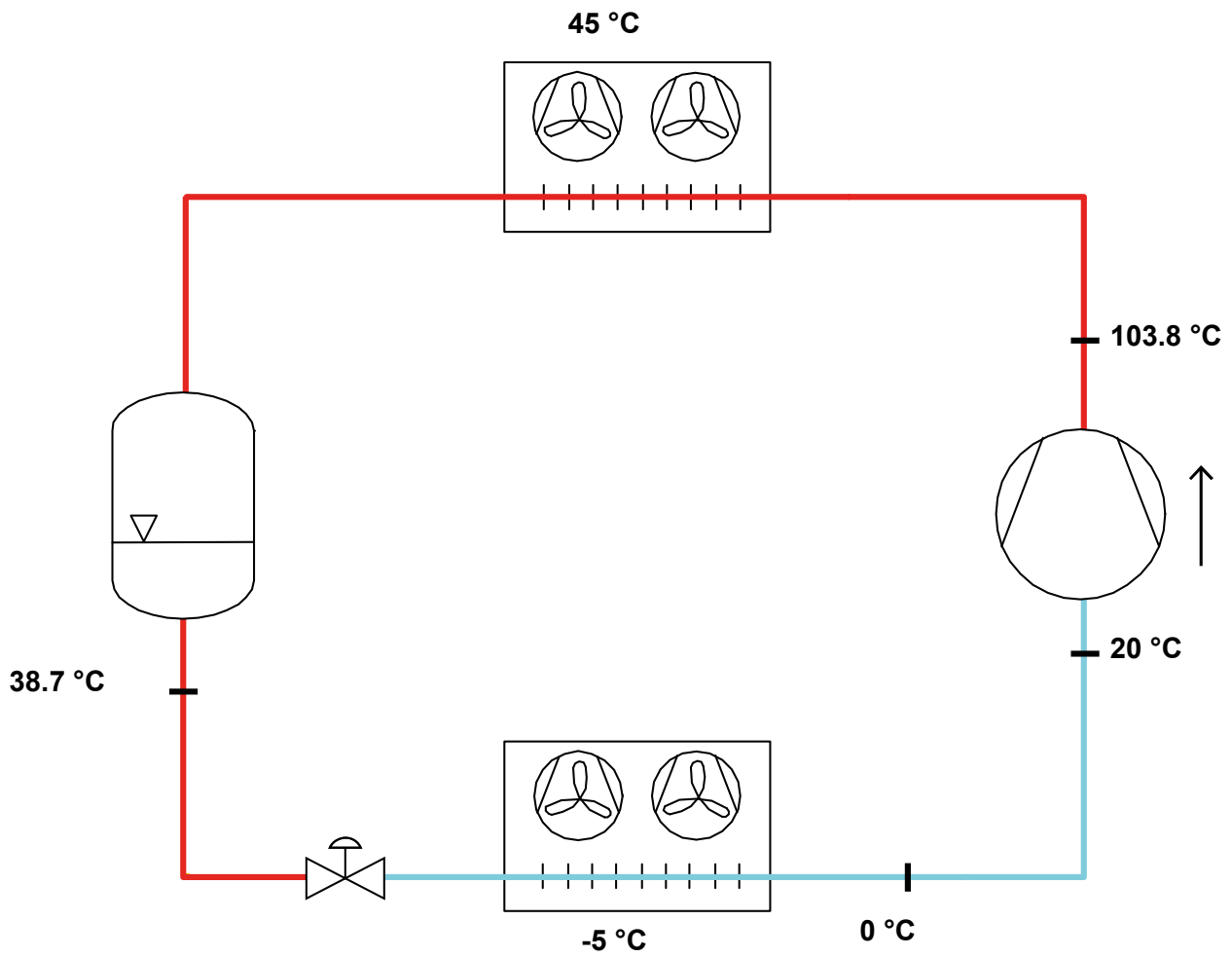
Certified by:

- Frascold tentative data

Legend:

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

P&I Diagram:



Model: A05-5Y

Refrigerant: R449A

Power supply: 400/3/50 DOL-STAR

Technical data:

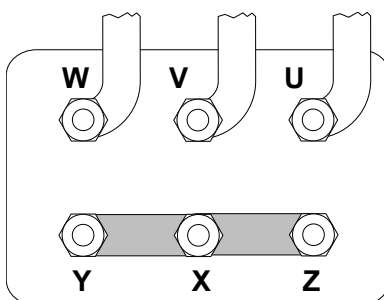
Displacement	4.93 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	2.7 A
Locked rotor current (LRA)	10.7 A
Number of pistons	2
Net weight	36 kg
Lubricant	FRASCOLD POE32
Oil charge	1 l
Maximum static pressure LP	20.5 bar
Maximum operating pressure HP	30 bar

Sound level:

Sound power level -10/45°C R404A @50Hz	62.5 dB(A)
Sound pressure (*) - Distance: 1 m	54.5 dB(A)
Sound power level -35/40°C R404A @50Hz	62.5 dB(A)
Sound pressure (*) - Distance: 1 m	54.5 dB(A)

*half sphere model

Motor connections:



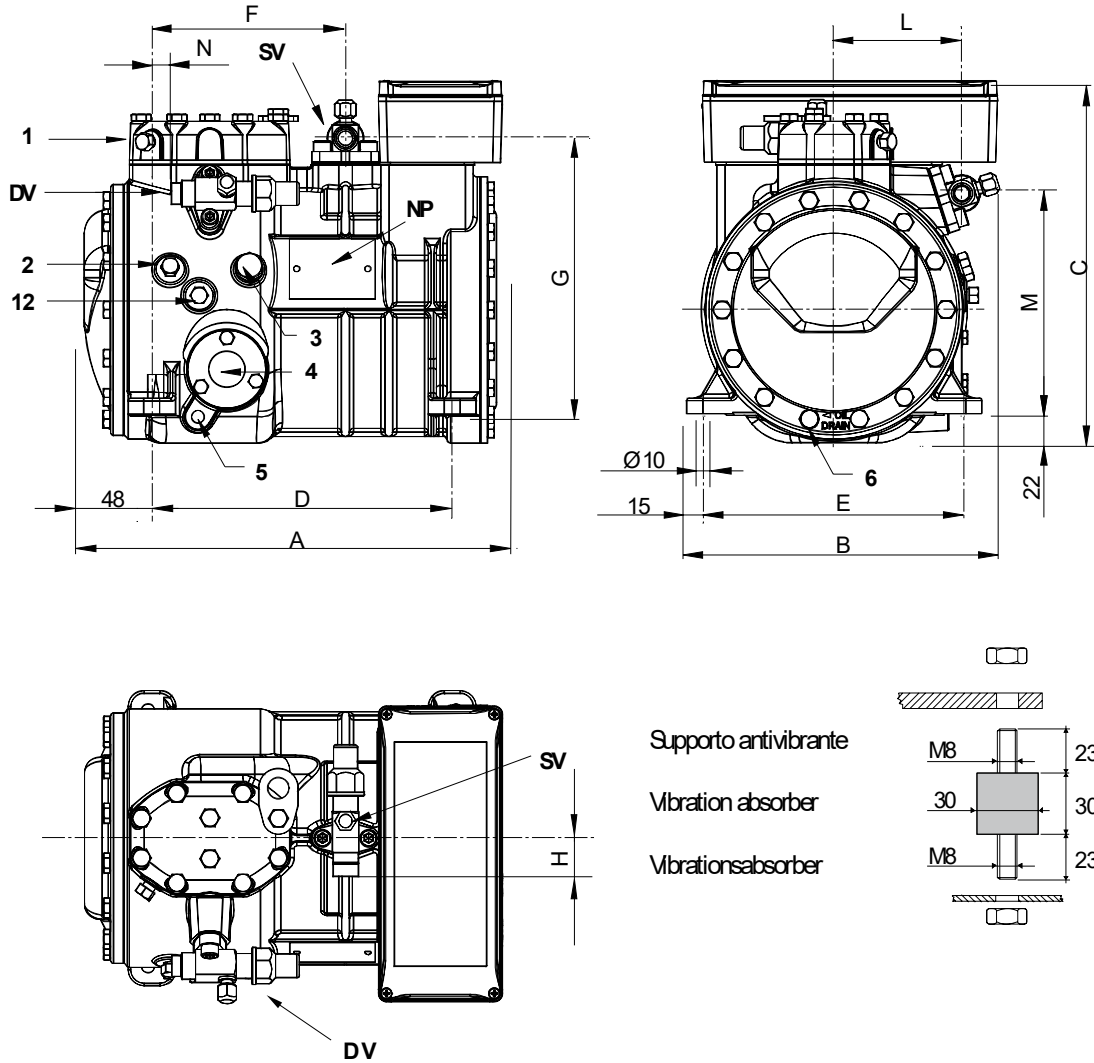
All data subject to change without notice

Model: A05-5Y

Refrigerant: R449A

Power supply: 400/3/50 DOL-STAR

Dimensions:



Legend:

SV: Suction Valve	5/8" in - 16 mm	M: Discharge valve	167 mm
DV: Discharge valve	1/2" in - 12.7 mm	N: Discharge valve	18 mm
A: Length	317 mm	1: High pressure connection	1/8" NPT
B: Width	237 mm	2: Low pressure connection	1/8" NPT
C: Height	275 mm	3: Oil charge plug	1/4" GAS
D: Base mounting	234 mm	4: Oil level sight glass	-
E: Base mounting	194 mm	5: Crankcase heater seat	-
F: Suction Valve	150 mm	6: Oil drain plug	M8 x 22
G: Suction Valve	209 mm	12: Oil return plug	1/8" NPT
H: Suction Valve	29 mm	NP: Nameplate	
L: Discharge valve	97 mm		

All data subject to change without notice

Model: A05-5Y

Refrigerant: R449A

Power supply: 400/3/50 DOL-STAR

Polynomial coefficients according to EN12900 for A05-5Y:

*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	5.835630E+003	6.264820E+001
C2	2.432870E+002	-2.535790E+001
C3	-4.304940E+001	4.930720E+001
C4	3.315600E+000	-7.747050E-001
C5	-2.296410E+000	1.041780E+000
C6	-5.041980E-001	-8.373310E-001
C7	1.402220E-002	-4.411130E-003
C8	-2.719130E-002	9.875140E-003
C9	-9.062110E-004	-2.649600E-003
C10	3.401540E-003	6.083970E-003

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