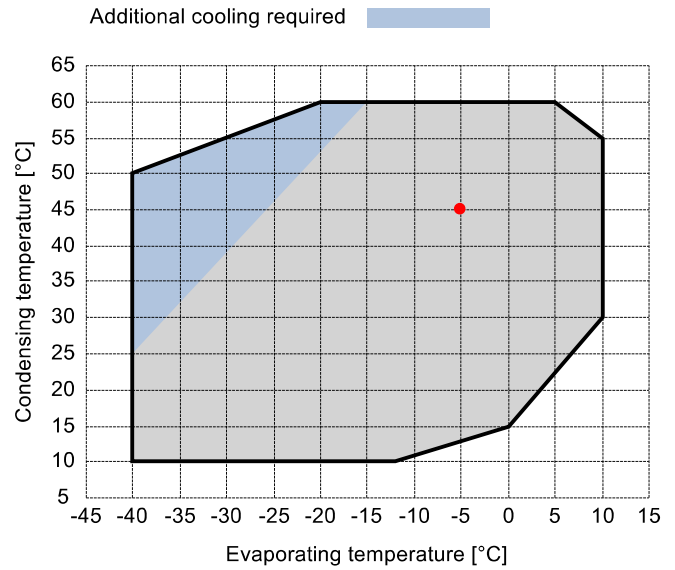


Input data

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 :	A05-4Y	
Number of compressors :	FSx1	
Refrigerating capacity	kW	2.086
Refrigerating capacity [*ref]	kW	2.042
Evaporator capacity	kW	1.847
Power input	W	845
Condenser capacity, theor.	kW	2.931
Current	A	1.91
COP/EER	W/W	2.18
Mass flow	kg/h	47
Operating frequency	Hz	50
Connection	-	DOL-STAR
Operating mode	-	100%
Discharge temperature	°C	104.01
Ratio (%)	%	100.0%
Note	-	
Oil flow	l/min	-
Heat Exchanged (oil Cooler)	kW	-
Oil Temp. at Oil Cooler Outlet	°C	-
Certified by	-	Frascold

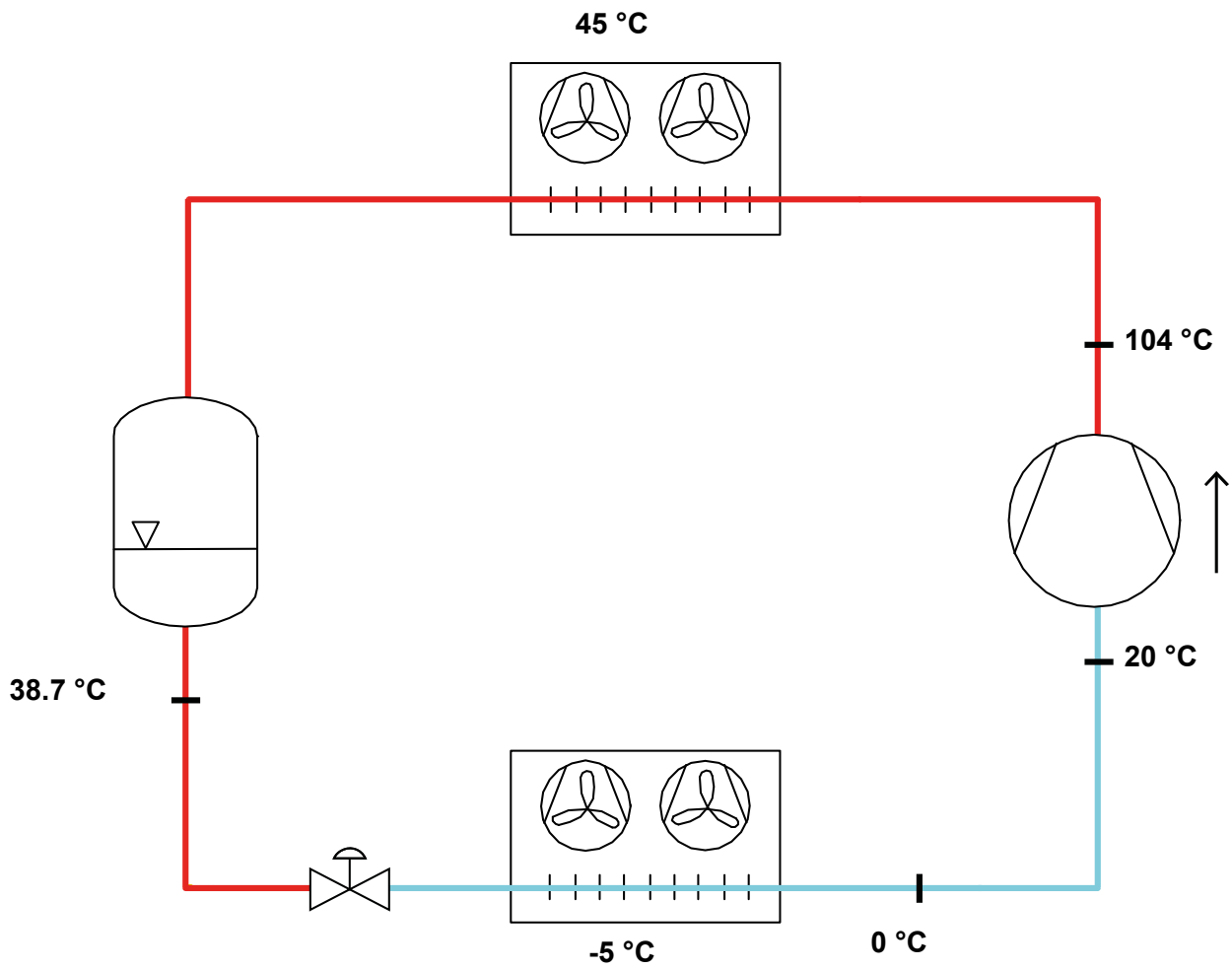
Certified by:

- Frascold tentative data

Legend:

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

P&I Diagram:



Model: A05-4Y

Refrigerant: R449A

Power supply: 400/3/50 DOL-STAR

Technical data:

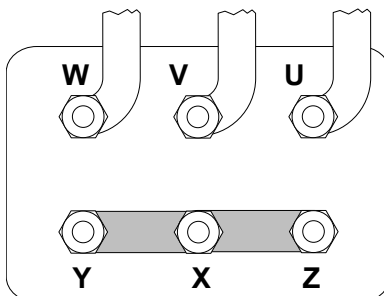
Displacement	3.95 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	2.8 A
Locked rotor current (LRA)	10.7 A
Number of pistons	2
Net weight	36 kg
Lubricant	FRASCOLD POE32
Oil charge	1 l
Maximum static pressure LP	20.5 bar
Maximum operating pressure HP	30 bar

Sound level:

Sound power level 5/50°C R404A @50Hz	62.5 dB(A)
Sound pressure (*) - Distance: 1 m	54.5 dB(A)
Sound power level -10/45°C R404A @50Hz	63 dB(A)
Sound pressure (*) - Distance: 1 m	55 dB(A)
Sound power level -35/40°C R404A @50Hz	55.5 dB(A)
Sound pressure (*) - Distance: 1 m	47.5 dB(A)

*half sphere model

Motor connections:



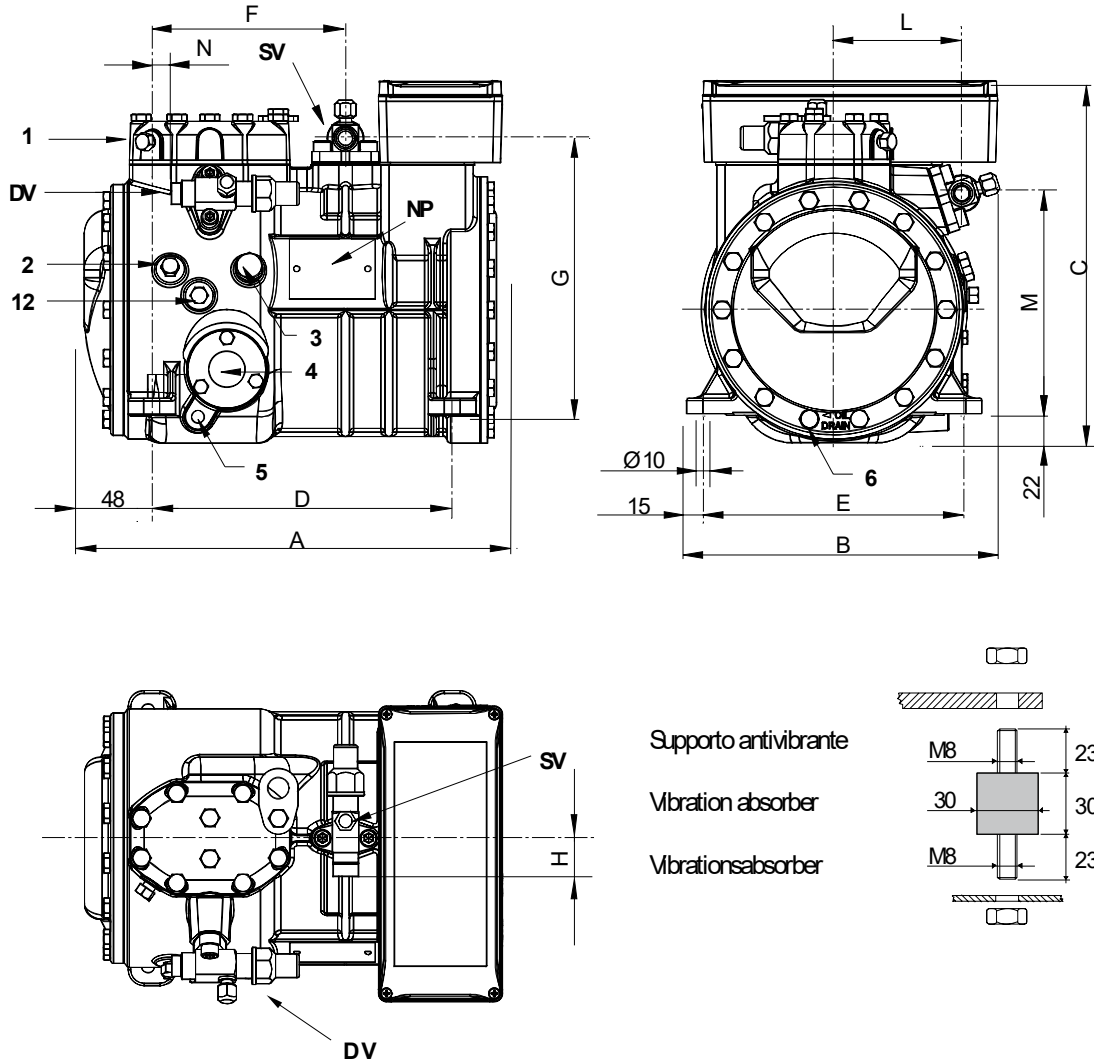
All data subject to change without notice

Model: A05-4Y

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: A05-4Y

Refrigerant: R449A

Power supply: 400/3/50 DOL-STAR

Polynomial coefficients according to EN12900 for A05-4Y:

*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	4.667520E+003	7.180040E+001
C2	1.941220E+002	-2.047000E+001
C3	-3.584280E+001	3.467470E+001
C4	2.678510E+000	-6.257510E-001
C5	-1.827670E+000	7.800850E-001
C6	-3.560090E-001	-4.965890E-001
C7	1.211940E-002	-3.625650E-003
C8	-2.091300E-002	7.213890E-003
C9	-2.285040E-005	-1.541810E-003
C10	2.473070E-003	3.111080E-003

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