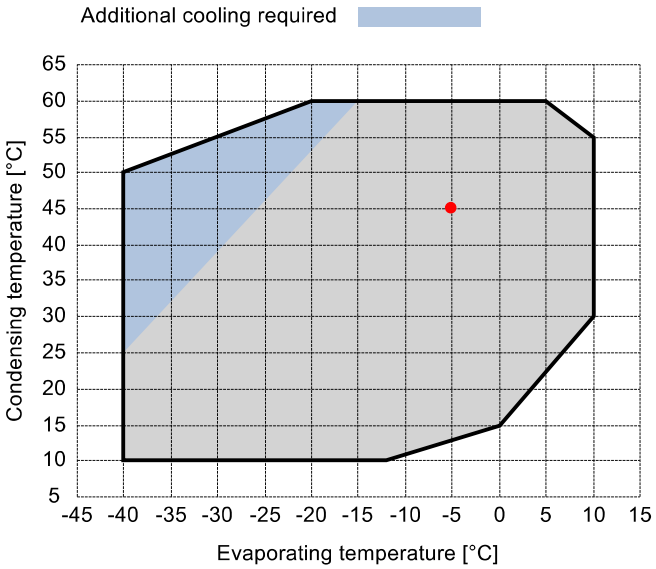
Input data

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 :		**W70-206Y**
Number of compressors :		FSx1
Refrigerating capacity	kW	127.63
Refrigerating capacity [*ref]	kW	124.955
Evaporator capacity	kW	113.042
Power input	W	45380
Condenser capacity, theor.	kW	173.01
Current	A	85.09
COP/EER	W/W	2.49
Mass flow	kg/h	2860
Operating frequency	Hz	50
Connection	-	PWS
Operating mode	-	100%
Discharge temperature	°C	96.79
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:

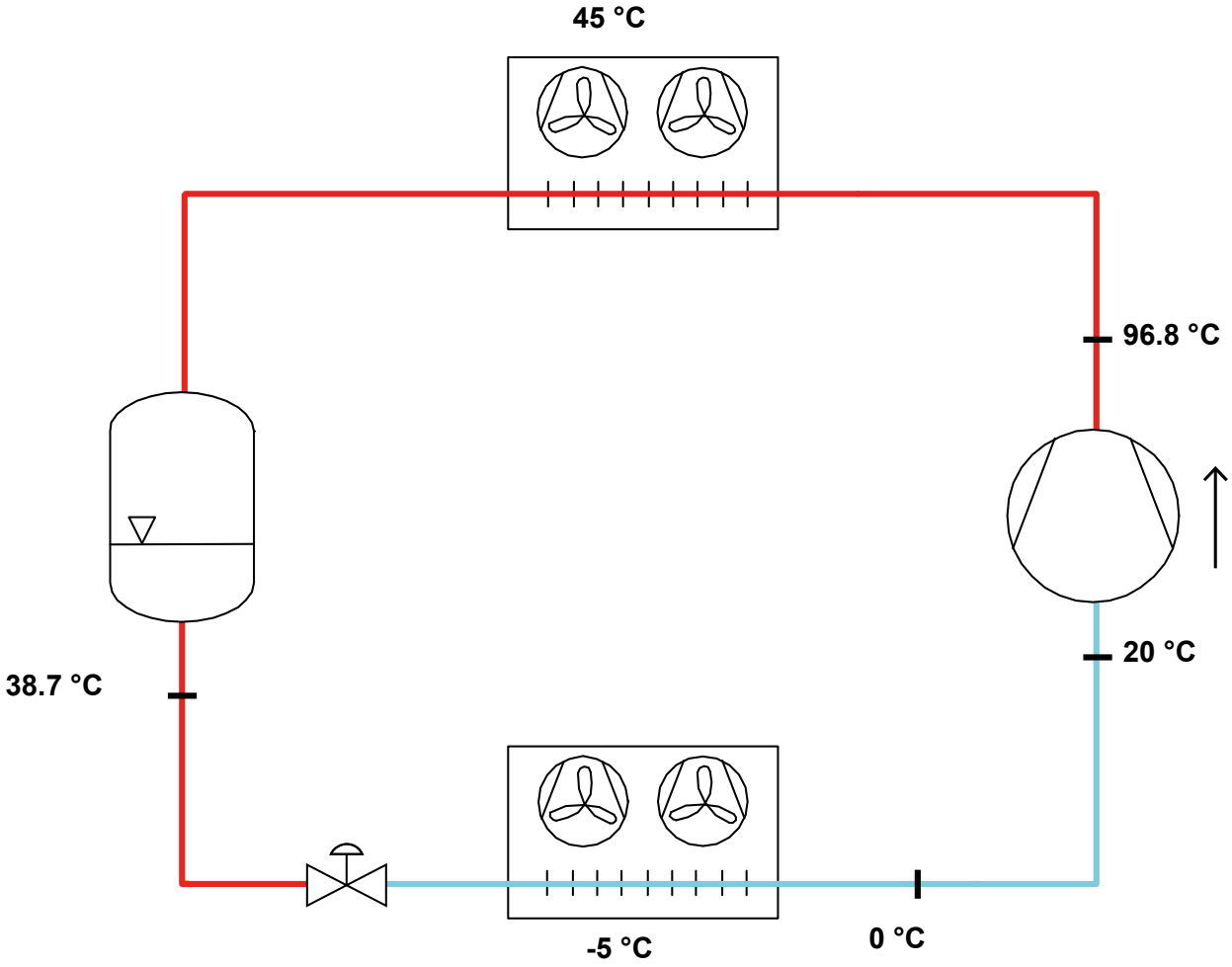
- Frascold tentative data

Legend:

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

All data subject to change without notice

P&I Diagram:



Model: W70-206Y

Refrigerant: R449A

Power supply: 400/3/50 PWS

Technical data:

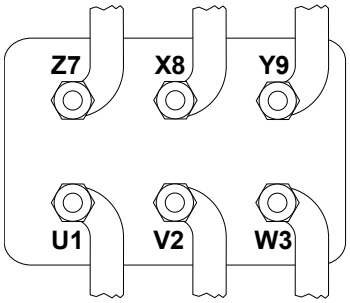
Displacement	205.8 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	116.8 A
Locked rotor current (LRA)	390 A
Locked rotor current (LRA), DOL	548 A
Number of pistons	8
Net weight	328 kg
Lubricant	FRASCOLD POE68
Oil charge	7.7 l
Maximum static pressure LP	20.5 bar
Maximum operating pressure HP	30 bar

Sound level:

Sound power level 5/50°C R404A @50Hz	87 dB(A)
Sound pressure (*) - Distance: 1 m	79 dB(A)
Sound power level -10/45°C R404A @50Hz	89 dB(A)
Sound pressure (*) - Distance: 1 m	81 dB(A)

*half sphere model

Motor connections:



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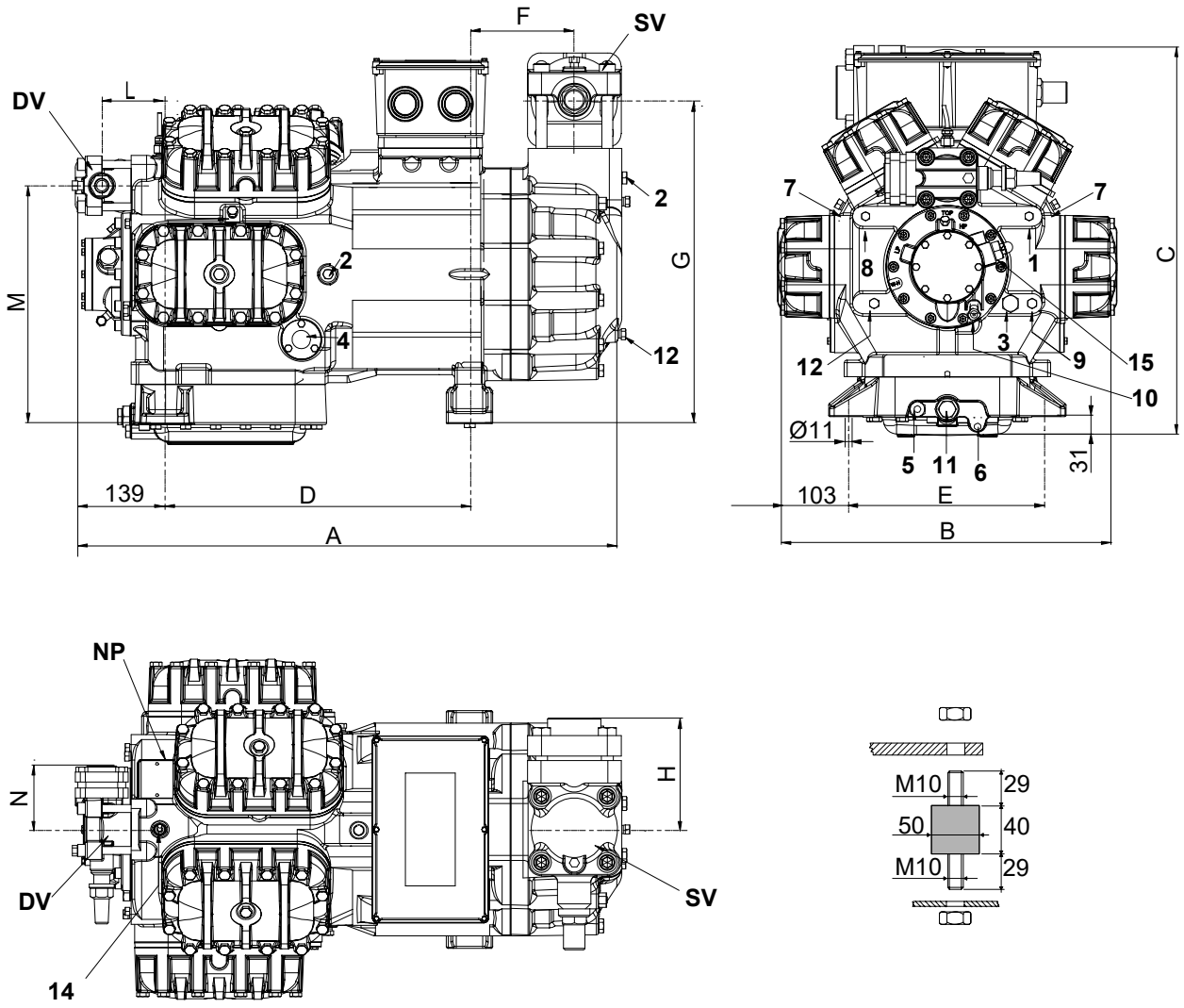
Model: W70-206Y

Refrigerant: R449A

Power supply: 400/3/50 PWS

Dimensions:



Legend:

SV: Suction Valve	3 1/8" in - 80 mm	2: Low pressure connection	1/4" NPT
DV: Discharge valve	2 1/8" in - 54 mm	3: Oil charge plug	3/8" GAS
A: Length	864 mm	4: Oil level sight glass	-
B: Width	511 mm	5: Crankcase heater seat	-
C: Height	588 mm	6: Oil drain plug	1/4" GAS
D: Base mounting	458 mm	7: Liquid injection plug	1/4" NPT
E: Base mounting	305 mm	8: Liquid injection sensor plug	1/8" NPT
F: Suction Valve	190 mm	9: Oil pressure switch connection (LP)	1/4" NPT
G: Suction Valve	486 mm	10: Oil pressure switch connection (HP)	1/4" SAE
H: Suction Valve	160 mm	11: Oil filter	3/8" GAS
L: Discharge valve	95 mm	12: Oil return plug	1/4" NPT
M: Discharge valve	358 mm	14: Max discharge temperature sensor connection	1/8" NPT
N: Discharge valve	162 mm	15: Electronic oil pressure switch connection	-
1: High pressure connection	1/8" NPT	NP: Nameplate	

Model: W70-206Y

Refrigerant: R449A

Power supply: 400/3/50 PWS

Polynomial coefficients according to EN12900 for W70-206Y:

*S = Tevap ; D = Tcond

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	2.626590E+005	1.471260E+004
C2	9.913050E+003	-5.589920E+002
C3	-2.626330E+003	7.245540E+002
C4	1.357970E+002	-1.766600E+001
C5	-9.155040E+001	2.973010E+001
C6	7.938830E+000	5.004550E+000
C7	6.216580E-001	-1.562520E-001
C8	-1.101650E+000	1.410610E-001
C9	3.028710E-002	-9.977320E-002
C10	-9.217650E-002	-9.793630E-002

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