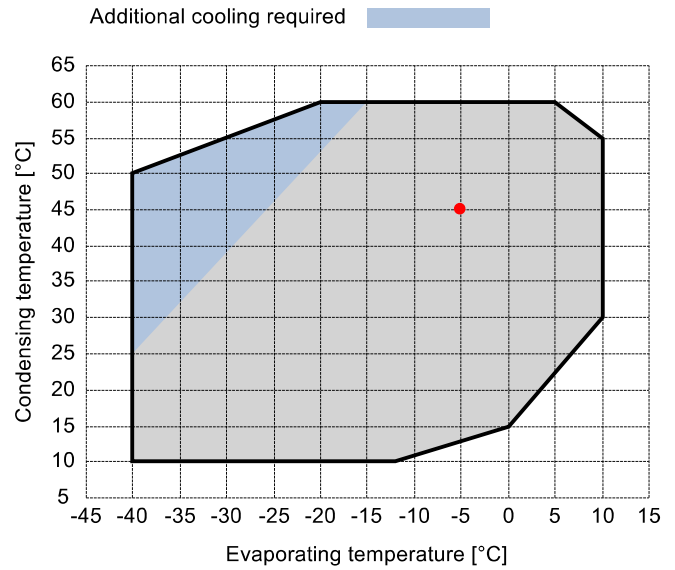


Input data

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 :		W80-240Y
Number of compressors :		FSx1
Refrigerating capacity	kW	147.322
Refrigerating capacity [*ref]	kW	144.235
Evaporator capacity	kW	130.483
Power input	W	50946
Condenser capacity, theor.	kW	198.268
Current	A	93.75
COP/EER	W/W	2.56
Mass flow	kg/h	3301
Operating frequency	Hz	50
Connection	-	PWS
Operating mode	-	100%
Discharge temperature	°C	95.38
Ratio (%)	%	100.0%
Note	-	
Oil flow	l/min	-
Heat Exchanged (oil Cooler)	kW	-
Oil Temp. at Oil Cooler Outlet	°C	-
Certified by	-	Frascold

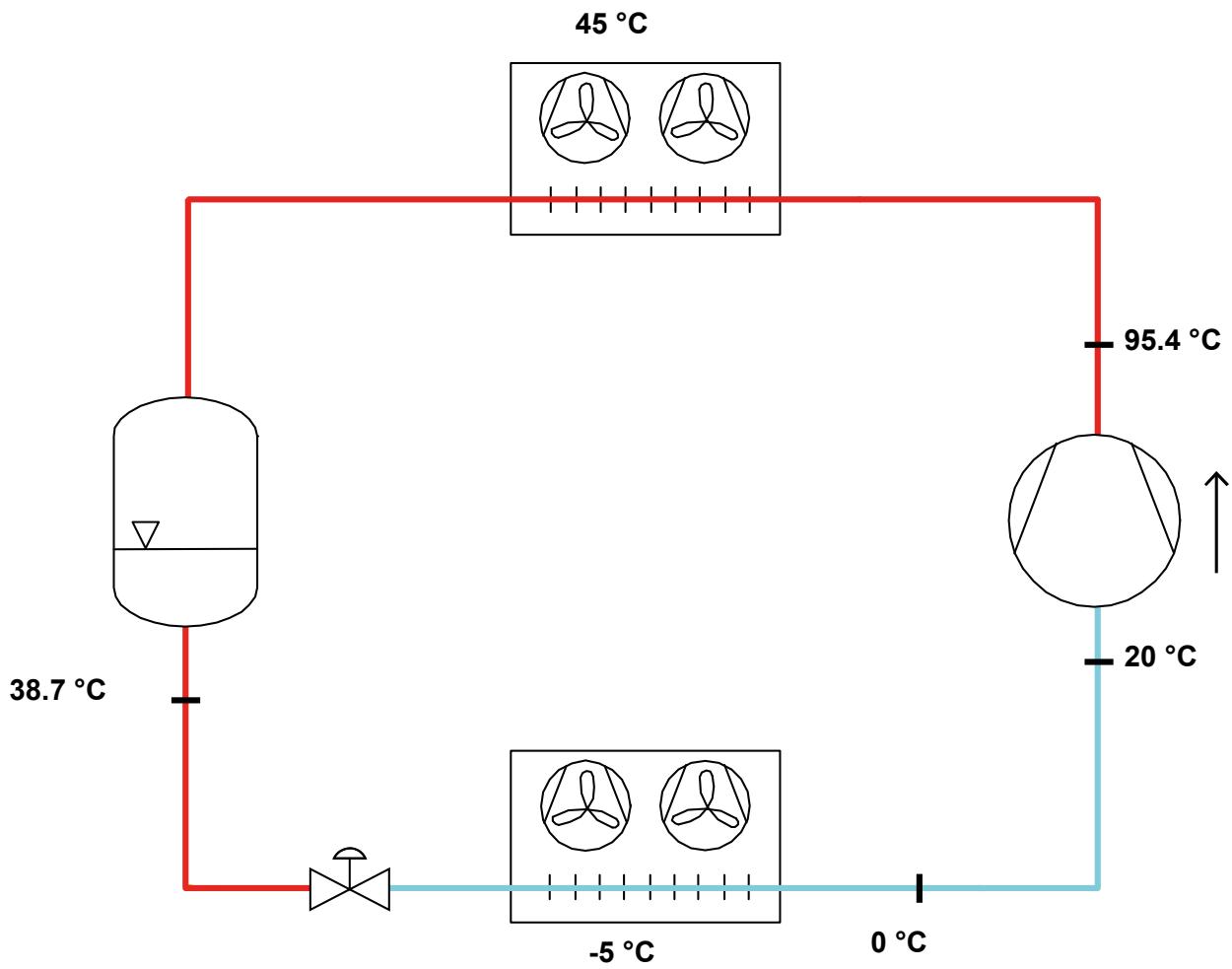
Certified by:

- Frascold tentative data

Legend:

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

P&I Diagram:



Model: W80-240Y

Refrigerant: R449A

Power supply: 400/3/50 PWS

Technical data:

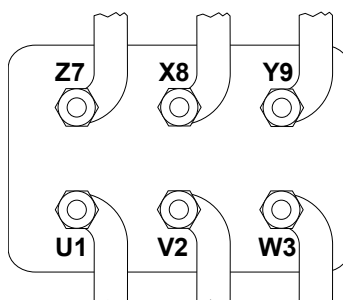
Displacement	239.02 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	135.7 A
Locked rotor current (LRA)	417 A
Locked rotor current (LRA), DOL	584 A
Number of pistons	8
Net weight	328 kg
Lubricant	FRASCOLD POE68
Oil charge	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	88 dB(A)
Sound pressure (*) - Distance: 1 m	80 dB(A)
Sound power level -10/45°C R404A @50Hz	91 dB(A)
Sound pressure (*) - Distance: 1 m	83 dB(A)

*half sphere model

Motor connections:



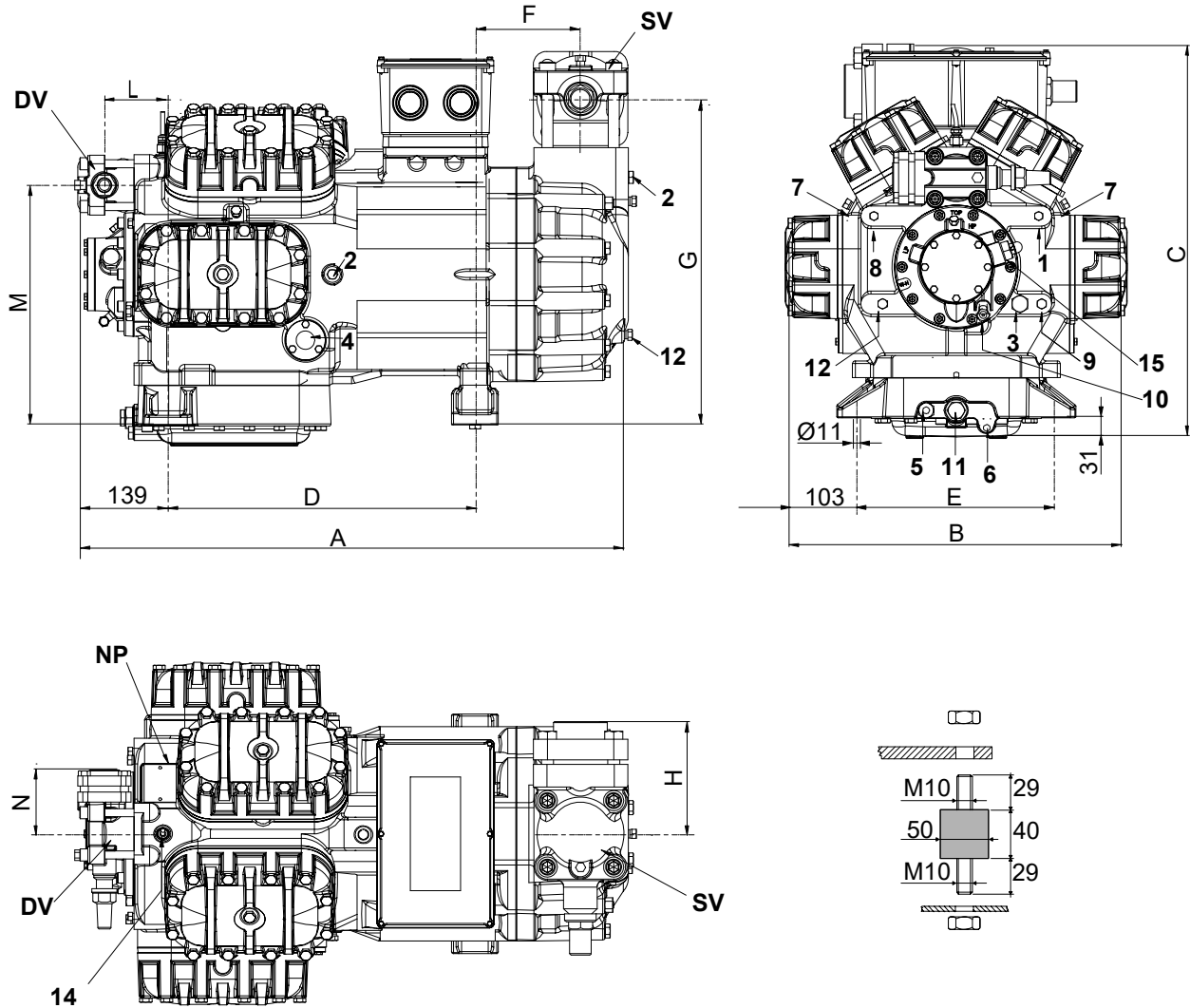
All data subject to change without notice

Model: W80-240Y

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	519 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	-

All data subject to change without notice

Model: W80-240Y

Refrigerant: R449A

Power supply: 400/3/50 PWS

Polynomial coefficients according to EN12900 for W80-240Y:

*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	3.005520E+005	1.690540E+004
C2	1.135100E+004	-5.853760E+002
C3	-2.682920E+003	1.013960E+003
C4	1.530760E+002	-1.904920E+001
C5	-1.026160E+002	3.158820E+001
C6	-2.169900E+000	-4.287970E+000
C7	6.695170E-001	-1.475690E-001
C8	-1.256810E+000	1.837920E-001
C9	-1.070030E-002	-8.650830E-002
C10	4.093660E-004	7.148060E-003

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