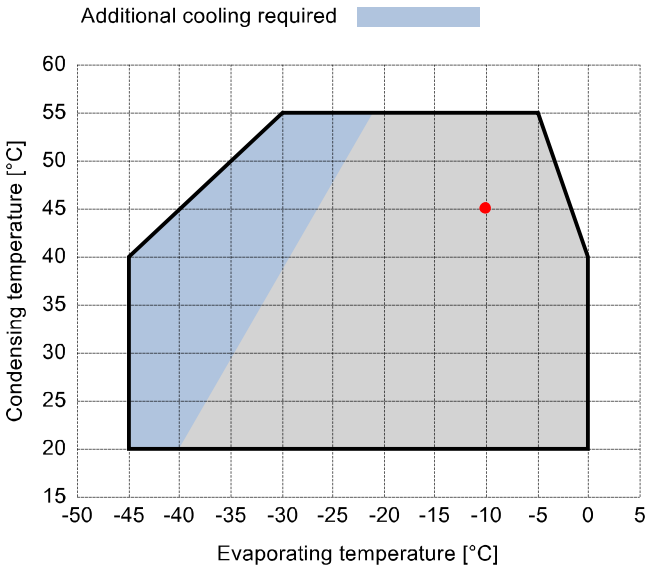
Input data

Refrigerant		R404A
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	20,47
Liquid subcooling	K	0
Liquid temperature	°C	44,67
Evaporating temperature	°C	-10
Evaporating pressure	bar	4,34
Suction gas superheating	K	10
Useful fraction of superheating	%	100



Output data

Compressor :		**W40-142Y**
Number of compressors :		FSx1
Refrigerating capacity	kW	73,089
Refrigerating capacity [*ref]	kW	78,313
Evaporator capacity	kW	73,089
Power input	W	33992
Condenser capacity, theor.	kW	107,082
Current	A	59,62
COP/EER	W/W	2,15
Mass flow	kg/h	2592
Operating frequency	Hz	50
Connection	-	PWS
Operating mode	-	100%
Discharge temperature	°C	71,27
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:

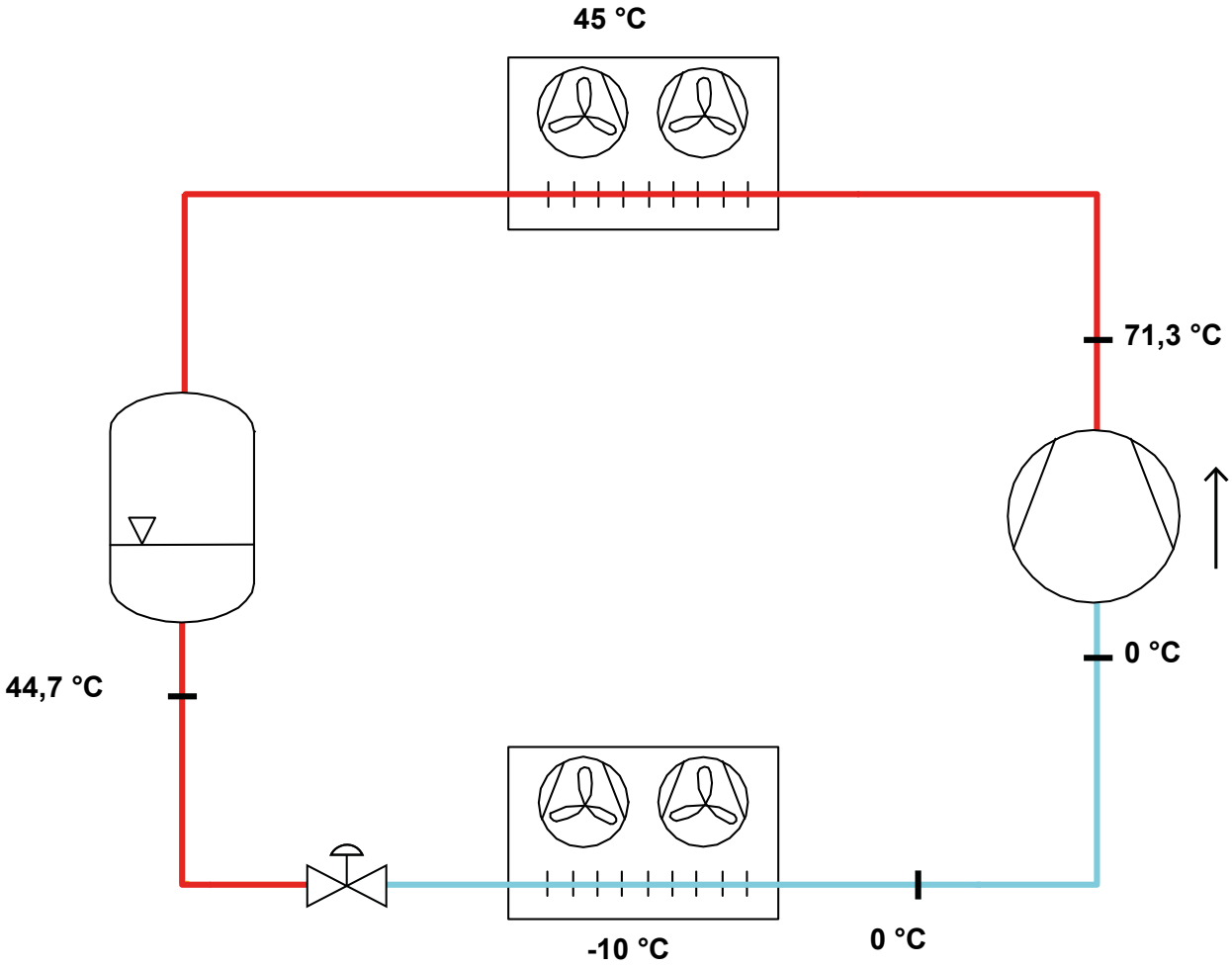
- Frascold tentative data

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:



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Model: W40-142Y

Refrigerant: R404A

Power supply: 400/3/50 PWS

Technical data:

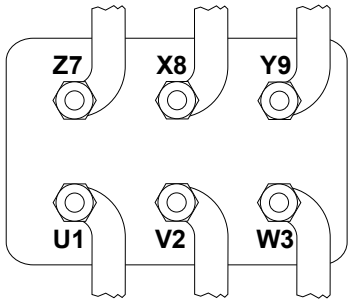
Displacement	141,5 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	89,3 A
Locked rotor current (LRA)	215 A
Locked rotor current (LRA), DOL	298 A
Number of pistons	8
Net weight	295 kg
Lubricant	FRASCOLD POE68
Oil charge	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	84 dB(A)
Sound pressure (*) - Distance: 1 m	76 dB(A)
Sound power level -10/45°C R404A @50Hz	83,5 dB(A)
Sound pressure (*) - Distance: 1 m	75,5 dB(A)

*half sphere model

Motor connections:



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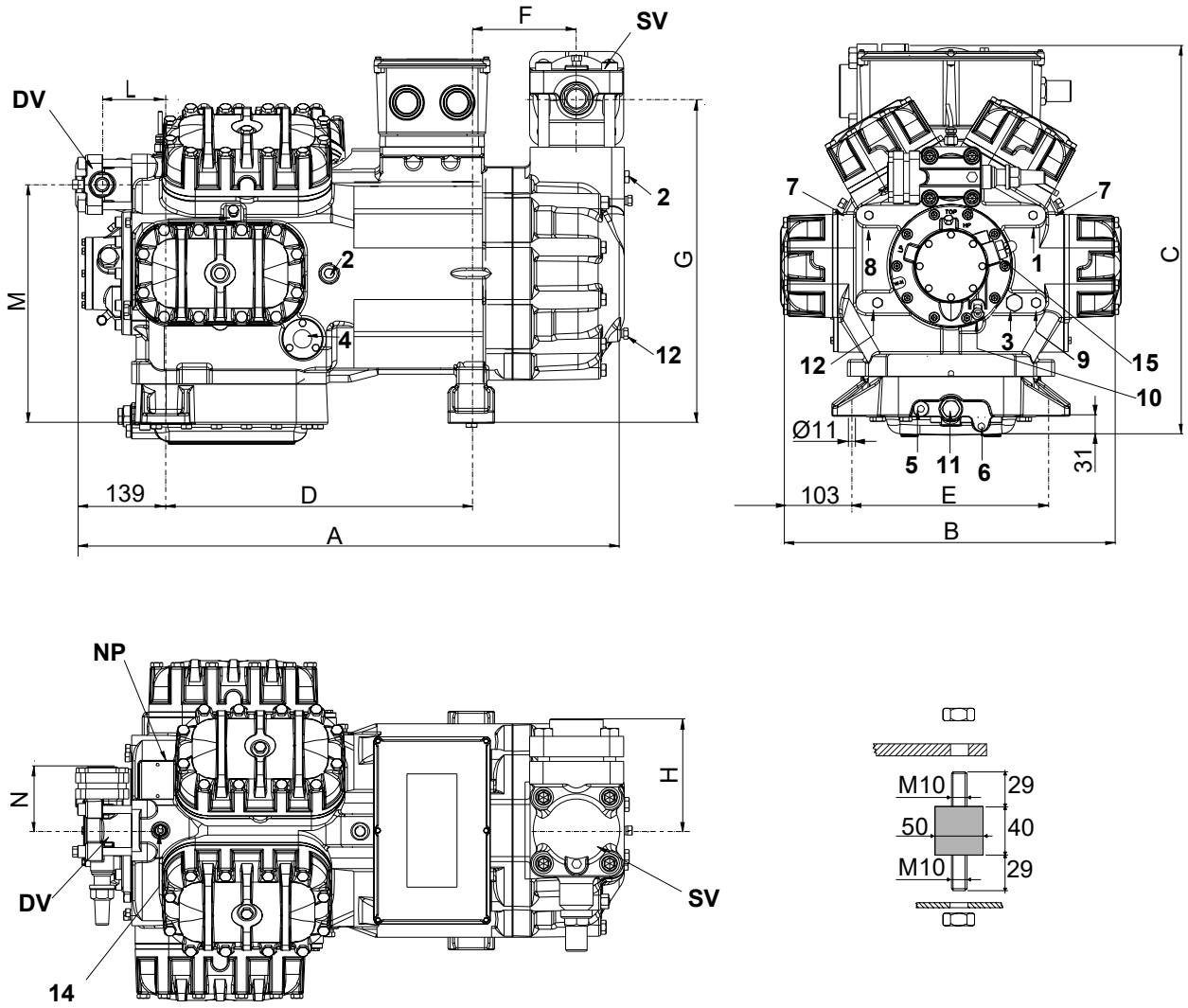
Model: W40-142Y

Refrigerant: R404A

Power supply: 400/3/50 PWS

Dimensions:



Legend:

SV: Suction Valve	2 5/8" in - 67 mm	3: Oil charge plug	3/8" GAS
DV: Discharge valve	1 5/8" - 42 mm	4: Oil level sight glass	-
A: Length	838 mm	5: Crankcase heater seat	-
B: Width	511 mm	6: Oil drain plug	1/4" GAS
C: Height	588 mm	7: Liquid injection plug	1/4" NPT
D: Base mounting	458 mm	8: Liquid injection sensor plug	1/8" NPT
E: Base mounting	305 mm	9: Oil pressure switch connection (LP)	1/4" NPT
F: Suction Valve	158 mm	10: Oil pressure switch connection (HP)	1/4" SAE
G: Suction Valve	486 mm	11: Oil filter	3/8" GAS
H: Suction Valve	160 mm	12: Oil return plug	1/4" NPT
L: Discharge valve	95 mm	14: Max discharge temperature sensor connection	1/8" NPT
M: Discharge valve	358 mm	15: Electronic oil pressure switch connection	-
N: Discharge valve	95 mm	NP: Nameplate	
1: High pressure connection	1/8" NPT	DIMENSION UNITS:	mm
2: Low pressure connection	1/4" NPT	SECONDARY DIMENSION UNITS:	[in]

All data subject to change without notice

Model: W40-142Y

Refrigerant: R404A

Power supply: 400/3/50 PWS

Polynomial coefficients according to EN12900 for W40-142Y:

*S = Tevap ; D = Tcond

Reference conditions	
Refrigerant	R404A
Ambient temperature	35 °C
Suction gas temperature	20 °C
Liquid subcooling	0 K
Frequency	50 Hz

	Refrigerating capacity [W]	Power input [W]
C1	1,876493E+005	2,981218E+003
C2	6,679410E+003	-8,646211E+002
C3	-7,679838E+002	1,056059E+003
C4	8,824291E+001	-2,059636E+001
C5	-3,380827E+001	3,344509E+001
C6	-2,298165E+001	-5,783059E+000
C7	4,290278E-001	-1,267685E-001
C8	-5,871614E-001	2,379314E-001
C9	-3,994946E-001	-1,243714E-001
C10	1,042346E-001	-5,833570E-004

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

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