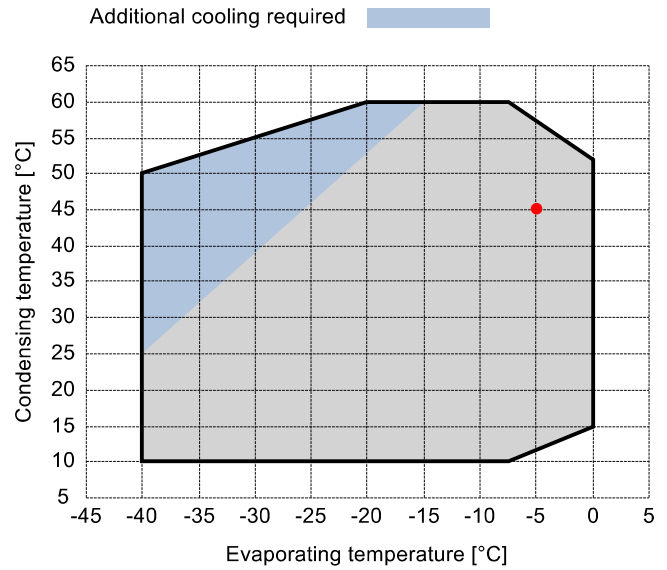


## Input data

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

<b>Compressor :</b>	<b>V15-71Y</b>	
Number of compressors :	FSx1	
Refrigerating capacity	kW	44.998
Refrigerating capacity [ *ref ]	kW	44.055
Evaporator capacity	kW	39.854
Power input	W	15908
Condenser capacity, theor.	kW	60.906
Current	A	27.46
COP/EER	W/W	2.51
Mass flow	kg/h	1008
Operating frequency	Hz	50
Connection	-	PWS
Operating mode	-	100%
Discharge temperature	°C	96.5
Ratio (%)	%	100.0%
Note	-	
Oil flow	l/min	-
Heat Exchanged (oil Cooler)	kW	-
Oil Temp. at Oil Cooler Outlet	°C	-
Certified by	-	Frascold

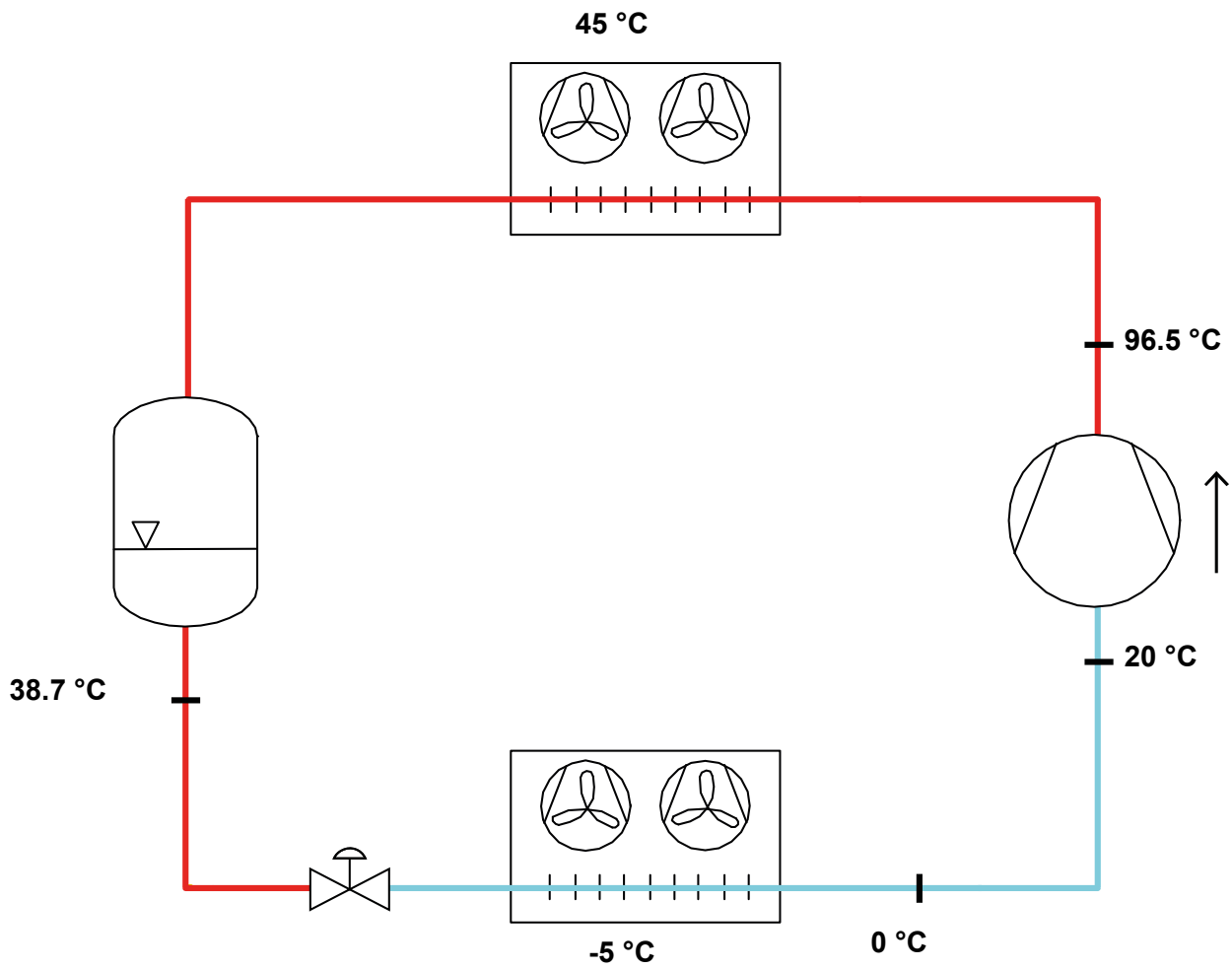
## Certified by:

- Frascold tentative data

## Legend:

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

**P&I Diagram:**



**Model: V15-71Y**

Refrigerant: R449A

Power supply: 400/3/50 PWS

**Technical data:**

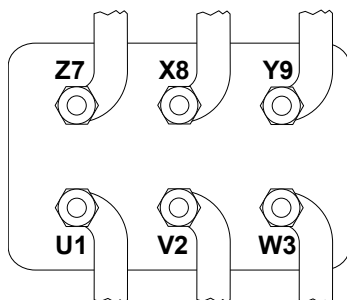
Displacement	70.77 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	32.2 A
Locked rotor current (LRA)	74.8 A
Locked rotor current (LRA), DOL	117.1 A
Number of pistons	4
Net weight	170 kg
Lubricant	FRASCOLD POE68
Oil charge	4 l
Maximum static pressure LP	20.5 bar
Maximum operating pressure HP	30 bar

**Sound level:**

Sound power level -10/45°C R404A @50Hz	78 dB(A)
Sound pressure (*) - Distance: 1 m	70 dB(A)
Sound power level -35/40°C R404A @50Hz	81 dB(A)
Sound pressure (*) - Distance: 1 m	73 dB(A)

\*half sphere model

**Motor connections:**



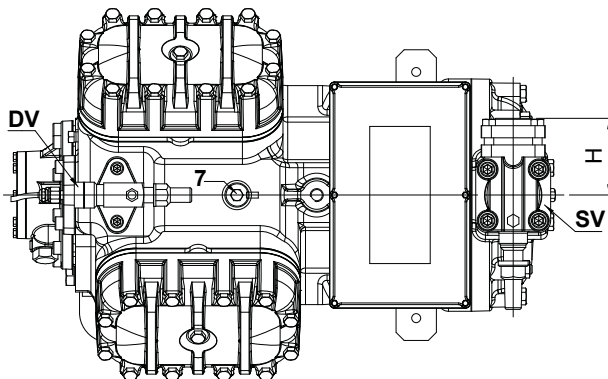
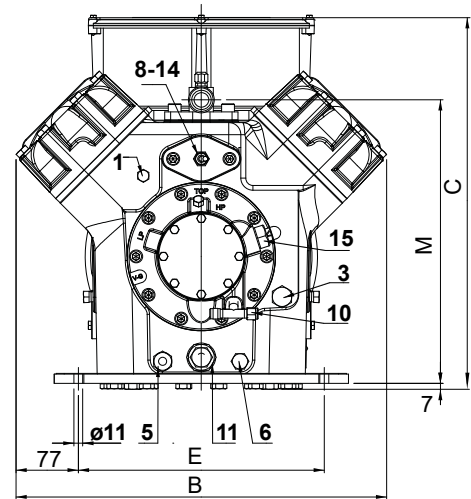
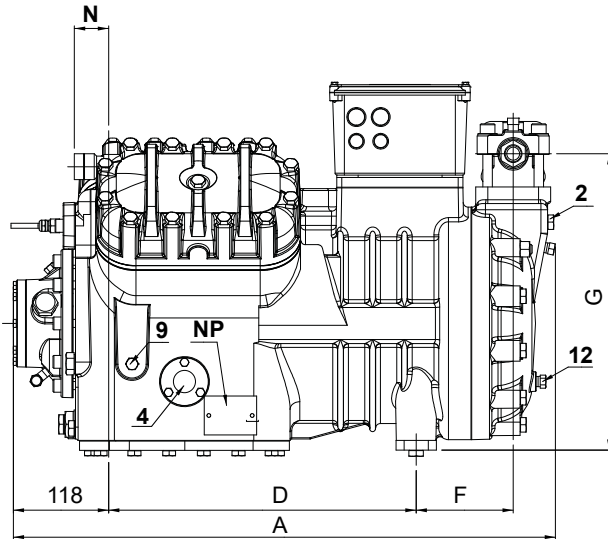
All data subject to change without notice

**Model: V15-71Y**

Refrigerant: R449A

Power supply: 400/3/50 PWS

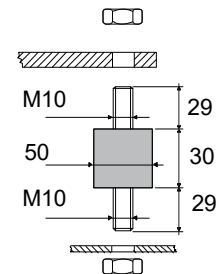
**Dimensions:**



Supporto antivibrante

Vibration absorber

Vibrationsabsorber



**Legend:**

SV: Suction Valve	1 5/8" in - 42 mm	2: Low pressure connection	1/4" NPT
DV: Discharge valve	1 1/8" in - 28.575 mm	3: Oil charge plug	3/8" GAS
A: Length	672 mm	4: Oil level sight glass	-
B: Width	460 mm	5: Crankcase heater seat	-
C: Height	463 mm	6: Oil drain plug	1/4" GAS
D: Base mounting	381 mm	7: Liquid injection plug	1/4" NPT
E: Base mounting	305 mm	8: Liquid injection sensor plug	1/8" NPT
F: Suction Valve	120 mm	9: Oil pressure switch connection (LP)	1/4" NPT
G: Suction Valve	367 mm	10: Oil pressure switch connection (HP)	1/4" SAE
H: Suction Valve	95 mm	11: Oil filter	3/8" GAS
L: Discharge valve	152 mm	12: Oil return plug	1/4" NPT
M: Discharge valve	352 mm	14: Max discharge temperature sensor connection	1/8" NPT
N: Discharge valve	43 mm	15: Electronic oil pressure switch connection	3/4 UNF
1: High pressure connection	1/8" NPT	NP: Nameplate	

All data subject to change without notice

**Model: V15-71Y**

Refrigerant: R449A

Power supply: 400/3/50 PWS

**Polynomial coefficients according to EN12900 for V15-71Y:**

\*S = T<sub>evap</sub> ; D = T<sub>cond</sub>

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]
<b>C1</b>	8.814650E+004	2.899690E+003
<b>C2</b>	3.181680E+003	-2.524650E+002
<b>C3</b>	-6.782890E+002	4.534560E+002
<b>C4</b>	4.044950E+001	-7.078160E+000
<b>C5</b>	-2.270840E+001	1.297960E+001
<b>C6</b>	-2.543090E+000	-3.617580E+000
<b>C7</b>	1.838000E-001	-5.502140E-002
<b>C8</b>	-2.254900E-001	6.625150E-002
<b>C9</b>	-2.420370E-002	-5.884060E-002
<b>C10</b>	1.536800E-002	1.191920E-002

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