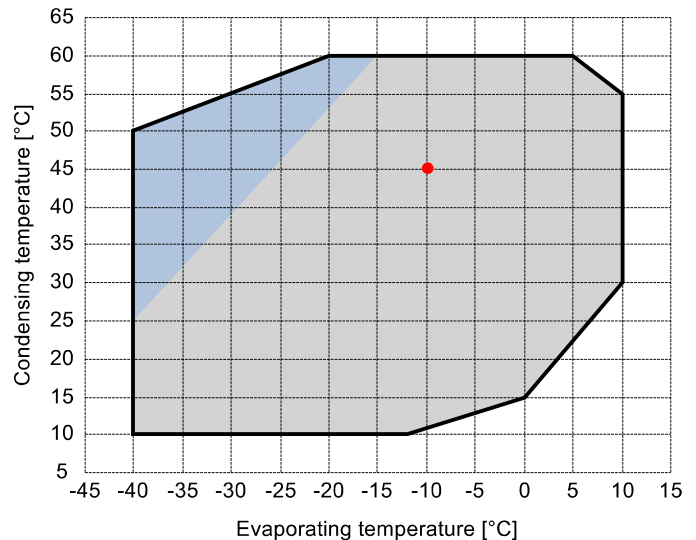


## Input data

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	0
Liquid temperature	°C	40,72
Evaporating temperature	°C	-10
Evaporating pressure	bar	3,61
Suction gas superheating	K	10
Useful fraction of superheating	%	100

Additional cooling required



## Output data

<b>Compressor :</b>	<b>B2-10.1Y</b>	
Number of compressors :	FSx1	
Refrigerating capacity	kW	4,306
Refrigerating capacity [ *ref ]	kW	4,423
Evaporator capacity	kW	4,306
Power input	W	2081
Condenser capacity, theor.	kW	6,387
Current	A	4,76
COP/EER	W/W	2,07
Mass flow	kg/h	110
Operating frequency	Hz	50
Connection	-	DOL-STAR
Operating mode	-	100%
Discharge temperature	°C	91,72
Ratio (%)	%	100,0%
Note	-	
Oil flow	l/min	-
Heat Exchanged (oil Cooler)	kW	-
Oil Temp. at Oil Cooler Outlet	°C	-
Certified by	-	Frascold

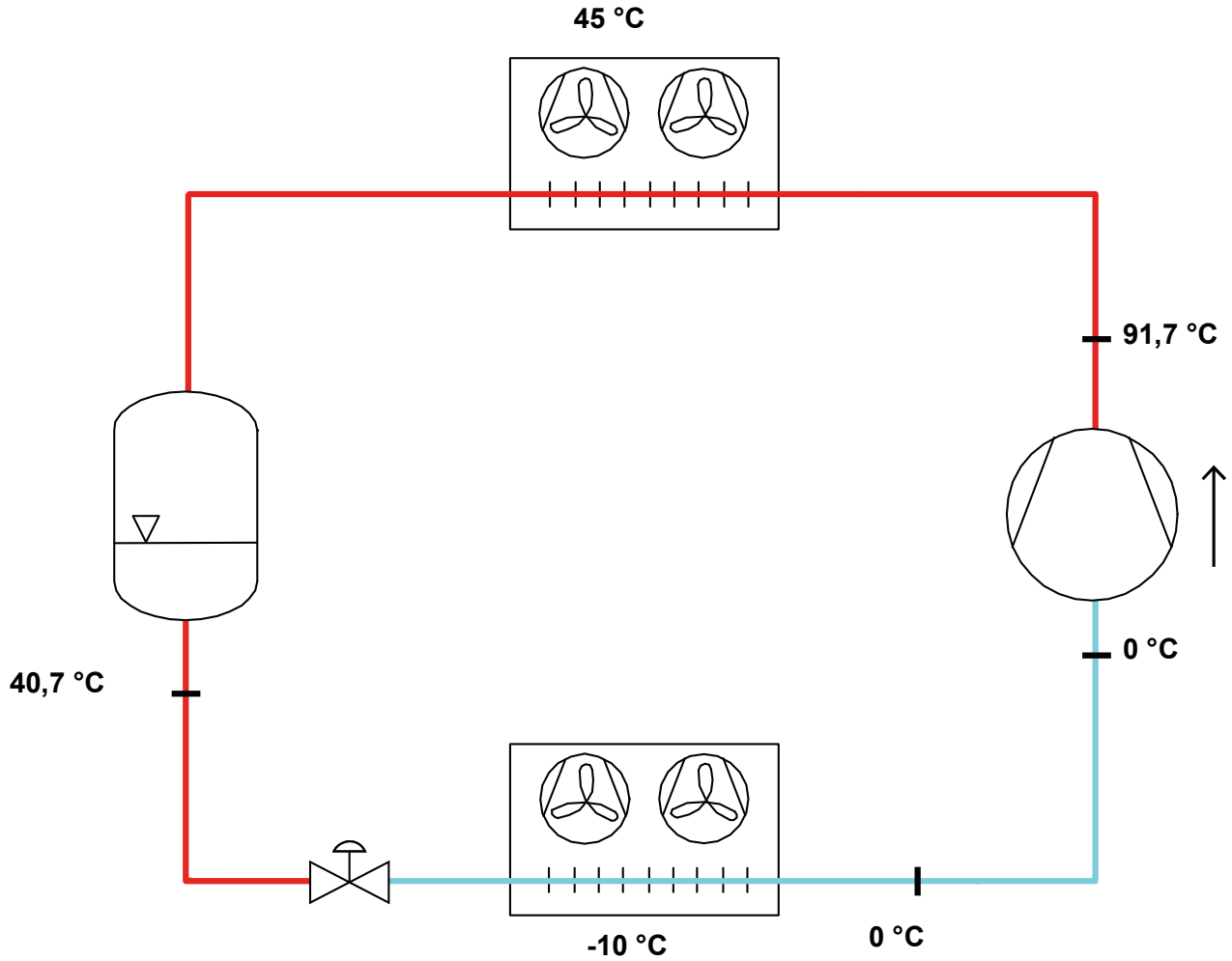
## Certified by:

- Frascold tentative data

## Legend:

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

**P&I Diagram:**



*All data subject to change without notice*

**Model: B2-10.1Y**

Refrigerant: R449A

Power supply: 400/3/50 DOL-STAR

**Technical data:**

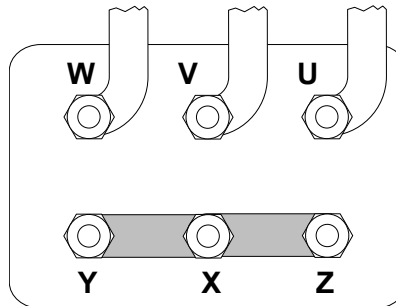
Displacement	9,88 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	6,7 A
Locked rotor current (LRA)	35,9 A
Number of pistons	2
Net weight	40 kg
Lubricant	FRASCOLD POE32
Oil charge	1 l
Maximum static pressure LP	20,5 bar
Maximum operating pressure HP	30 bar

**Sound level:**

Sound power level 5/50°C R404A @50Hz	66,5 dB(A)
Sound pressure (*) - Distance: 1 m	58,5 dB(A)
Sound power level -10/45°C R404A @50Hz	66,5 dB(A)
Sound pressure (*) - Distance: 1 m	58,5 dB(A)

\*half sphere model

**Motor connections:**



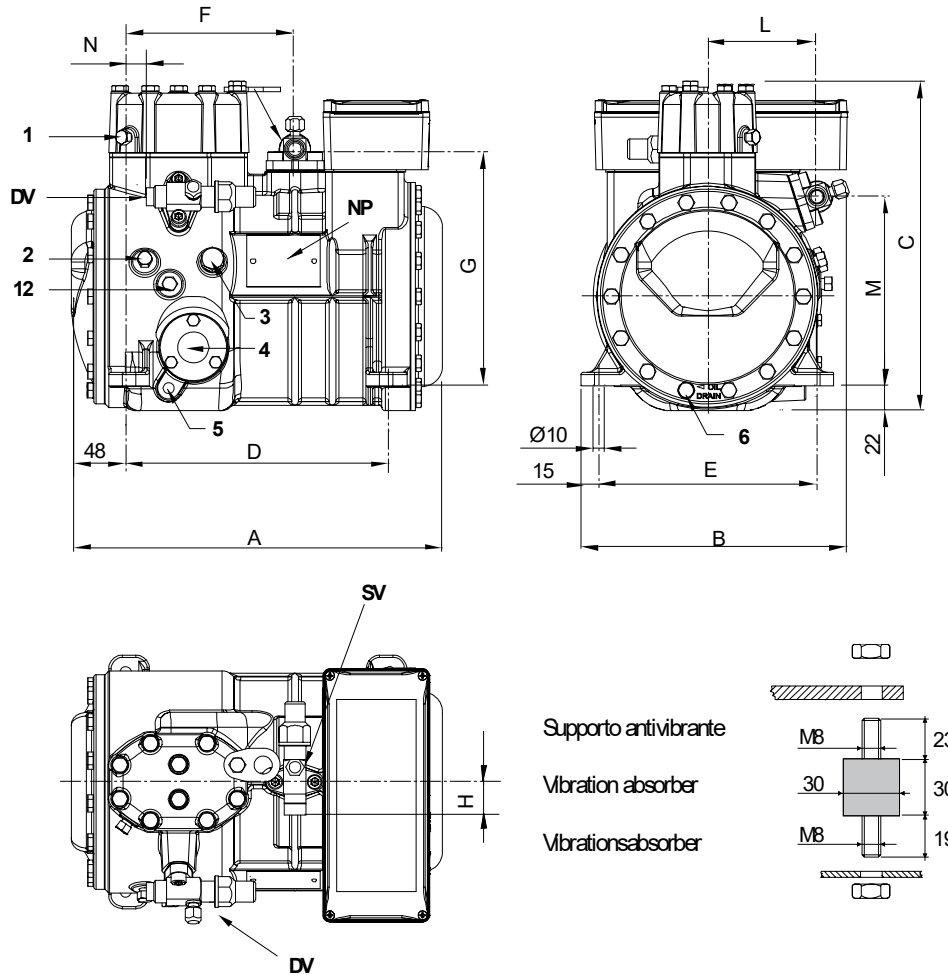
*All data subject to change without notice*

## Model: B2-10.1Y

Refrigerant: R449A

Power supply: 400/3/50 DOL-STAR

### Dimensions:



### Legend:

SV: Suction Valve	3/4" in - 19 mm	M: Discharge valve	167 mm
DV: Discharge valve	5/8" in - 16 mm	N: Discharge valve	18 mm
A: Length	334 mm	1: High pressure connection	1/8" NPT
B: Width	237 mm	2: Low pressure connection	1/8" NPT
C: Height	292 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	31 mm	NP: Nameplate	
L: Discharge valve	97 mm		

All data subject to change without notice

**Model: B2-10.1Y**

Refrigerant: R449A

Power supply: 400/3/50 DOL-STAR

**Polynomial coefficients according to EN12900 for B2-10.1Y:**

\*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>	1,201060E+004	1,249070E+002
<b>C2</b>	4,866860E+002	-5,399000E+001
<b>C3</b>	-9,621160E+001	9,456730E+001
<b>C4</b>	6,543710E+000	-1,699530E+000
<b>C5</b>	-4,640380E+000	2,063740E+000
<b>C6</b>	-5,559450E-001	-1,504260E+000
<b>C7</b>	2,843950E-002	-1,063470E-002
<b>C8</b>	-5,099370E-002	2,105130E-002
<b>C9</b>	2,685750E-003	-5,360760E-003
<b>C10</b>	3,341400E-003	1,197640E-002

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