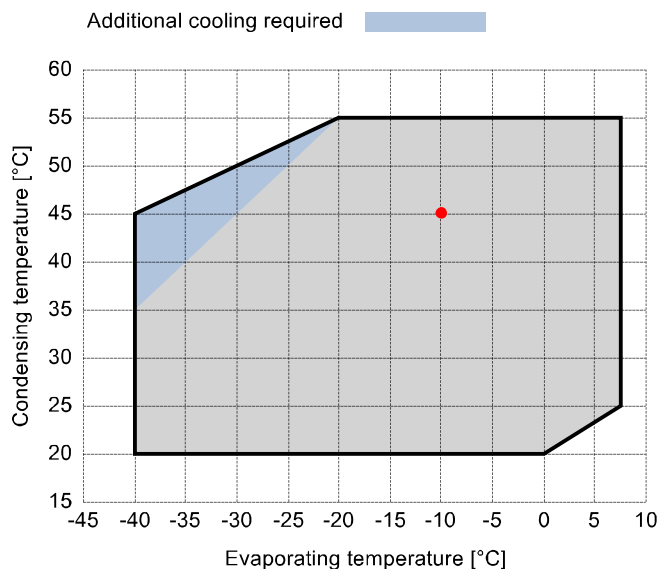


## Input data

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

<b>Compressor :</b>	<b>V30-84Y</b>	
Number of compressors :	FSx1	
Refrigerating capacity	kW	39,354
Refrigerating capacity [ *ref ]	kW	42,167
Evaporator capacity	kW	39,354
Power input	W	19087
Condenser capacity, theor.	kW	58,441
Current	A	34,62
COP/EER	W/W	2,06
Mass flow	kg/h	1395
Operating frequency	Hz	50
Connection	-	PWS
Operating mode	-	100%
Discharge temperature	°C	72,93
Ratio (%)	%	100,0%
Note	-	
Oil flow	l/min	-
Heat Exchanged (oil Cooler)	kW	-
Oil Temp. at Oil Cooler Outlet	°C	-
Certified by	-	ASERCOM

## Certified by:

- ASERCOM (ref. EN12900, 50 Hz, 100% cap.)

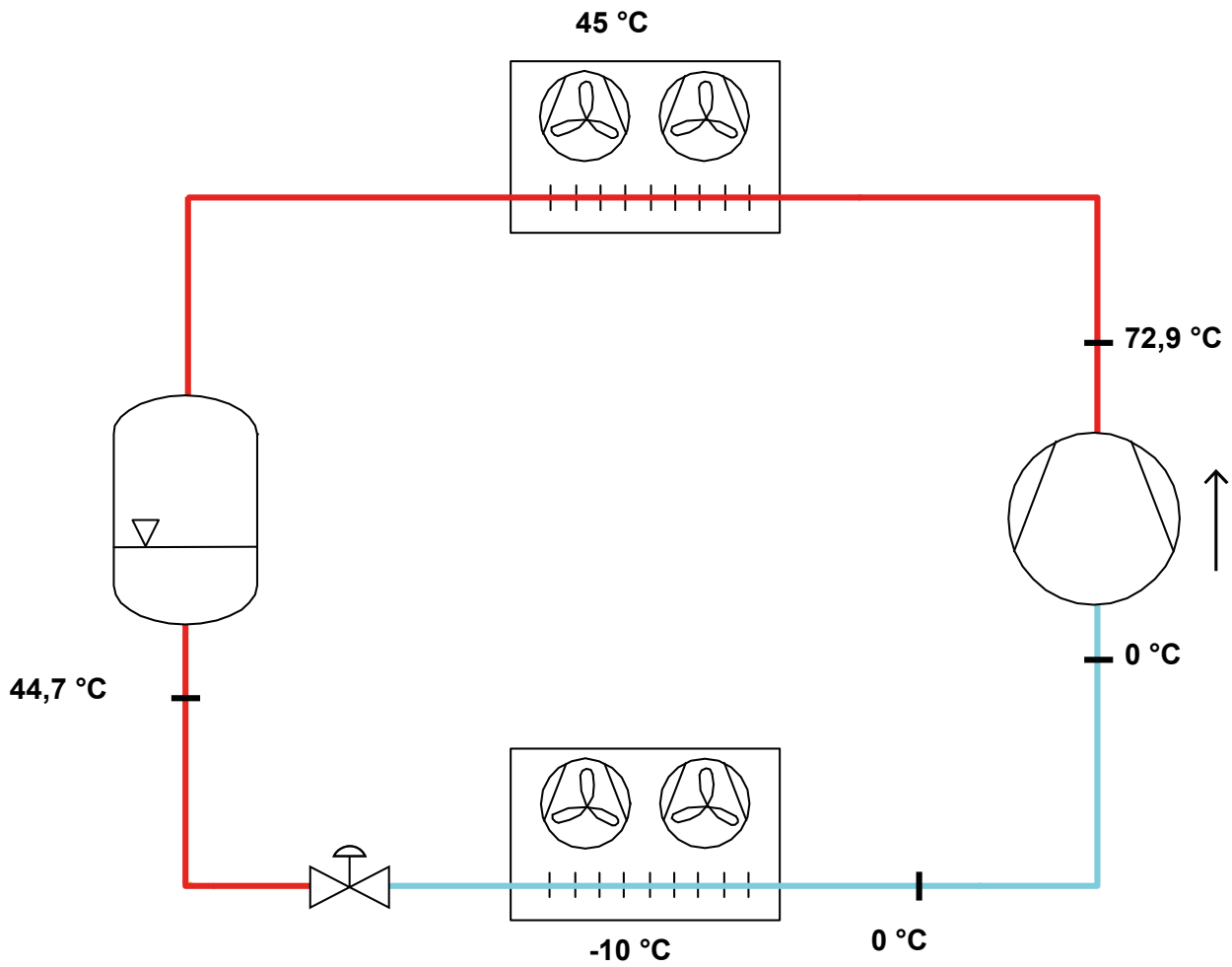


## Legend:

- \*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: V30-84Y**

Refrigerant: R404A

Power supply: 400/3/50 PWS

**Technical data:**

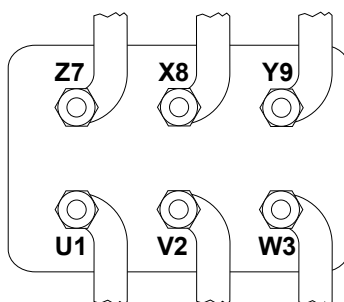
Displacement	83,81 m <sup>3</sup> /h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	49,2 A
Locked rotor current (LRA)	132,6 A
Locked rotor current (LRA), DOL	224,4 A
Number of pistons	4
Net weight	187 kg
Lubricant	FRASCOLD POE68
Oil charge	4 l
Maximum static pressure LP	20,5 bar
Maximum operating pressure HP	30 bar

**Sound level:**

Sound power level 5/50°C R404A @50Hz	81,5 dB(A)
Sound pressure (*) - Distance: 1 m	73,5 dB(A)
Sound power level -10/45°C R404A @50Hz	81 dB(A)
Sound pressure (*) - Distance: 1 m	73 dB(A)

\*half sphere model

**Motor connections:**



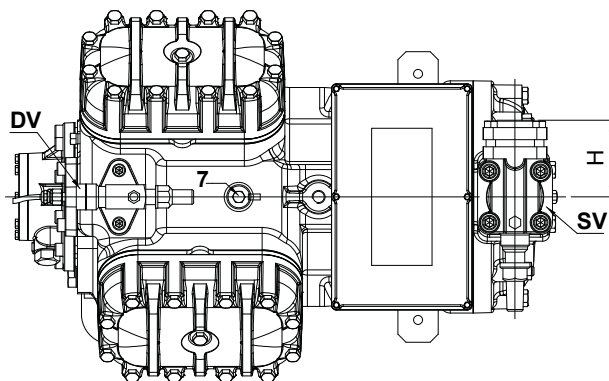
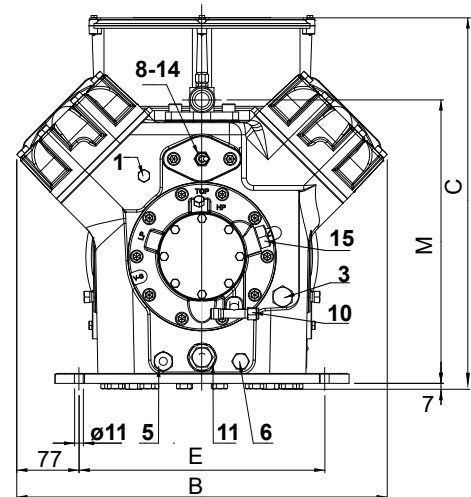
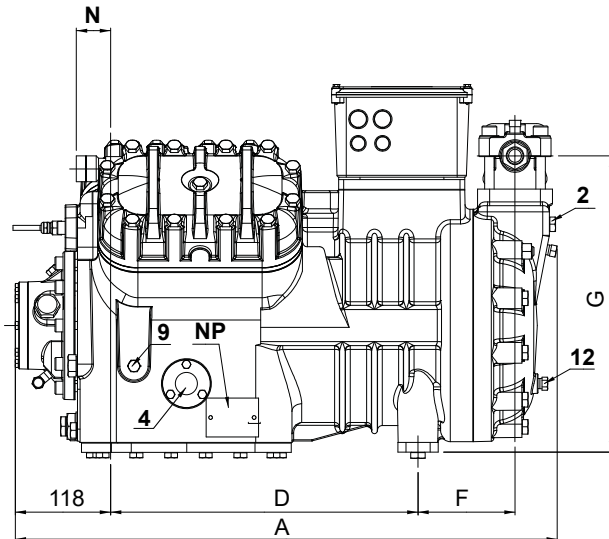
All data subject to change without notice

**Model: V30-84Y**

Refrigerant: R404A

Power supply: 400/3/50 PWS

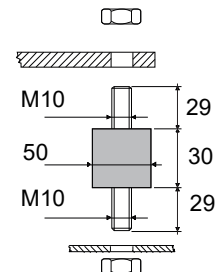
## Dimensions:



Supporto antivibrante

Vibration absorber

Vibrationsabsorber



## Legend:

SV: Suction Valve	2 1/8" - 54 mm	3: Oil charge plug	3/8" GAS
DV: Discharge valve	1 3/8" - 35 mm	4: Oil level sight glass	-
A: Length	703 mm	5: Crankcase heater seat	-
B: Width	460 mm	6: Oil drain plug	1/4" GAS
C: Height	463 mm	7: Liquid injection plug	1/4" NPT
D: Base mounting	381 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	133 mm	10: Oil pressure switch connection (HP)	1/4" SAE
G: Suction Valve	389 mm	11: Oil filter	3/8" GAS
H: Suction Valve	130 mm	12: Oil return plug	1/4" NPT
L: Discharge valve	152 mm	14: Max discharge temperature sensor connection	1/8" NPT
M: Discharge valve	352 mm	15: Electronic oil pressure switch connection	3/4 UNF
N: Discharge valve	48 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: V30-84Y**

Refrigerant: R404A

Power supply: 400/3/50 PWS

**Polynomial coefficients according to EN12900 for V30-84Y:**

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

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]
<b>C1</b>	1,191032E+005	9,518507E+003
<b>C2</b>	4,112062E+003	-2,269936E+002
<b>C3</b>	-1,255140E+003	3,075184E+002
<b>C4</b>	4,836257E+001	-9,401719E+000
<b>C5</b>	-3,839374E+001	1,113501E+001
<b>C6</b>	-3,538758E-001	-8,839320E-001
<b>C7</b>	1,690753E-001	-6,589768E-002
<b>C8</b>	-3,798800E-001	1,034843E-001
<b>C9</b>	-1,952098E-002	-9,131576E-003
<b>C10</b>	8,254038E-003	5,315607E-003

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