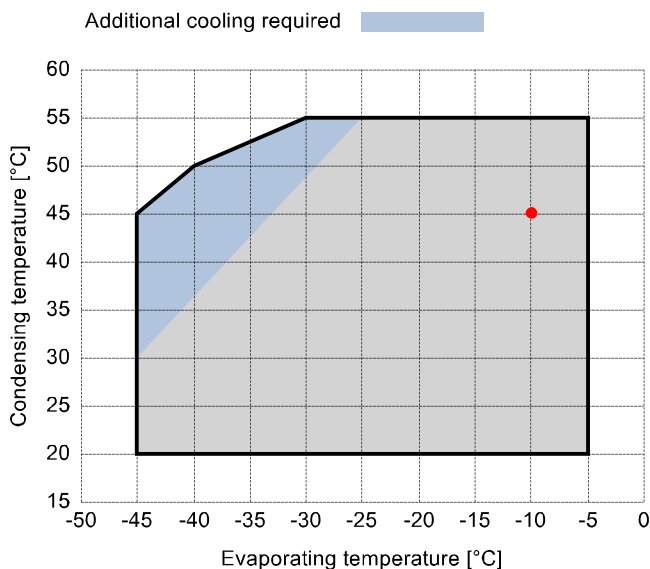


Input data

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 :	V20-84Y	
Number of compressors :	FSx1	
Refrigerating capacity	kW	37,977
Refrigerating capacity [*ref]	kW	40,692
Evaporator capacity	kW	37,977
Power input	W	19555
Condenser capacity, theor.	kW	57,533
Current	A	34,9
COP/EER	W/W	1,94
Mass flow	kg/h	1347
Operating frequency	Hz	50
Connection	-	PWS
Operating mode	-	100%
Discharge temperature	°C	75,43
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.)

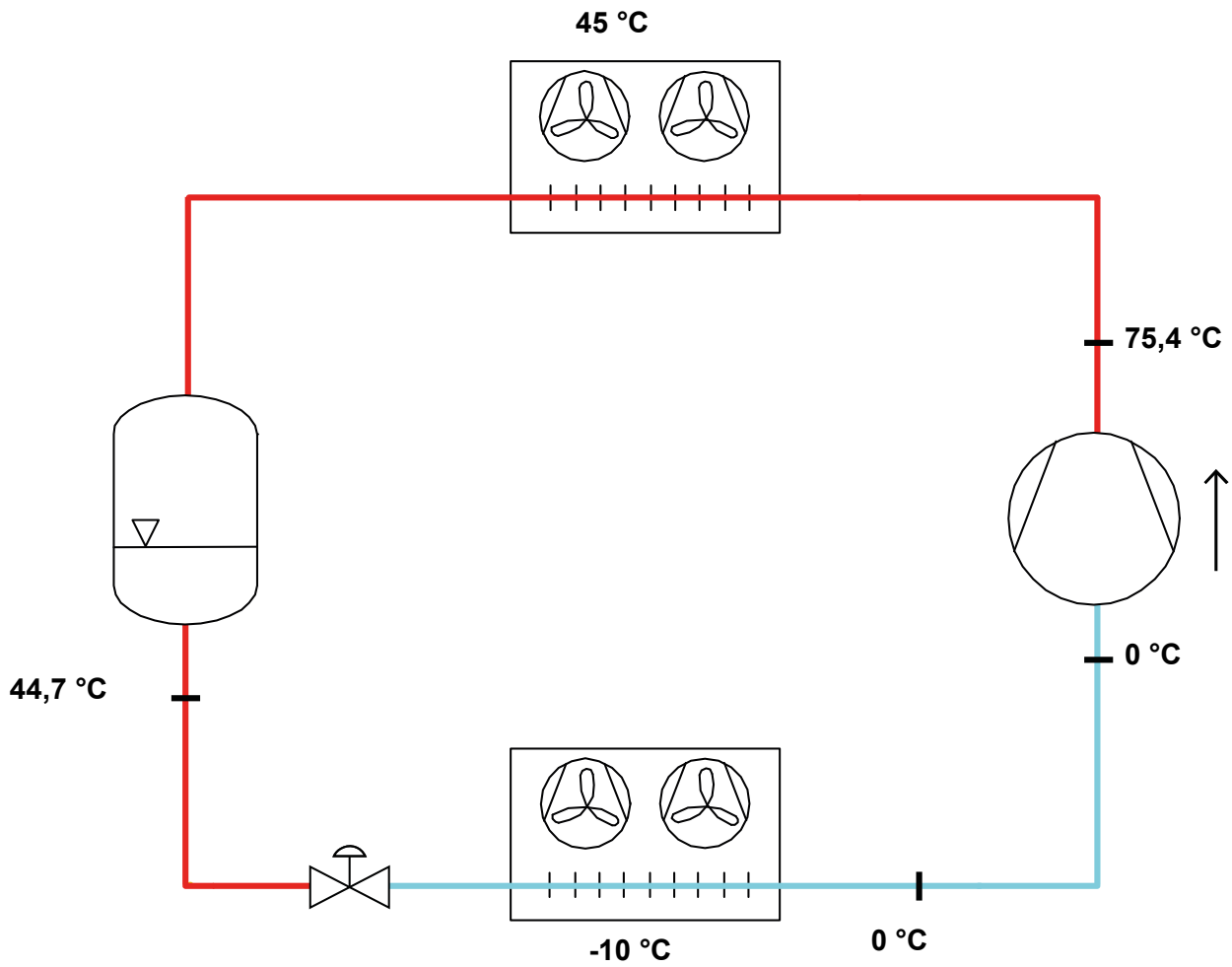


Legend:

- *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: V20-84Y

Refrigerant: R404A

Power supply: 400/3/50 PWS

Technical data:

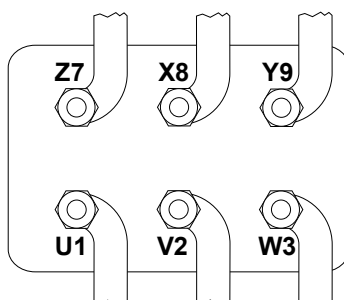
Displacement	83,81 m ³ /h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	42,6 A
Locked rotor current (LRA)	106,6 A
Locked rotor current (LRA), DOL	180,5 A
Number of pistons	4
Net weight	180 kg
Lubricant	FRASCOLD POE68
Oil 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	81 dB(A)
Sound pressure (*) - Distance: 1 m	73 dB(A)
Sound power level -35/40°C R404A @50Hz	86,5 dB(A)
Sound pressure (*) - Distance: 1 m	78,5 dB(A)

*half sphere model

Motor connections:



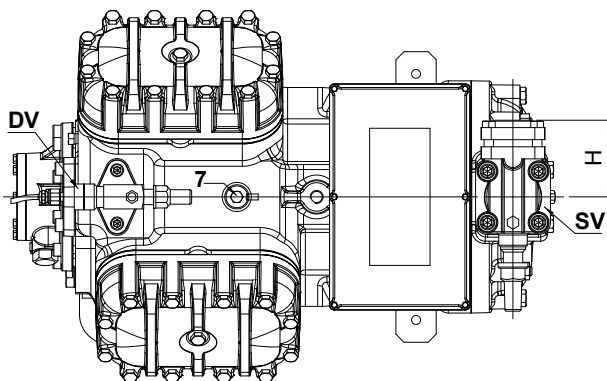
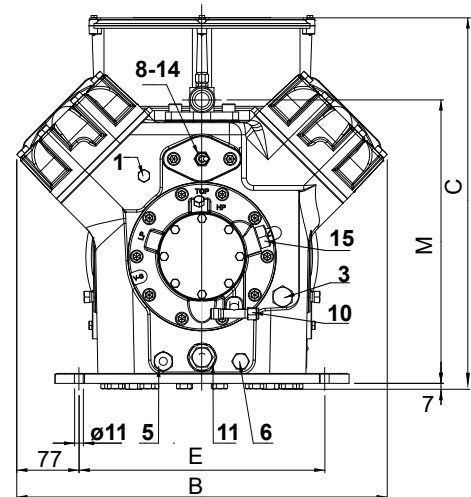
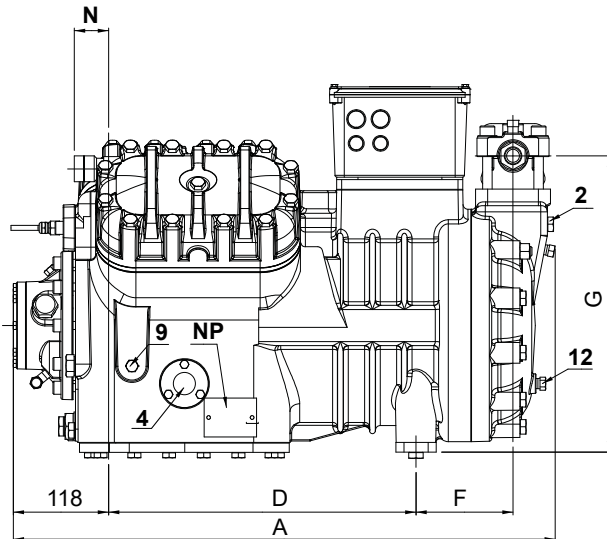
All data subject to change without notice

Model: V20-84Y

Refrigerant: R404A

Power supply: 400/3/50 PWS

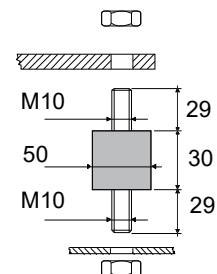
Dimensions:



Supporto antivibrante

Vibration absorber

Vibrationsabsorber



Legend:

SV: Suction Valve	1 5/8" in - 42 mm	3: Oil charge plug	3/8" GAS
DV: Discharge valve	1 1/8" - 28,575 mm	4: Oil level sight glass	-
A: Length	672 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	120 mm	10: Oil pressure switch connection (HP)	1/4" SAE
G: Suction Valve	367 mm	11: Oil filter	3/8" GAS
H: Suction Valve	95 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	43 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: V20-84Y

Refrigerant: R404A

Power supply: 400/3/50 PWS

Polynomial coefficients according to EN12900 for V20-84Y:

*S = T_{evap} ; D = T_{cond}

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	1,070443E+005	3,646734E+003
C2	3,714930E+003	-3,125154E+002
C3	-7,532752E+002	6,262472E+002
C4	4,128958E+001	-7,496042E+000
C5	-3,031404E+001	1,847355E+001
C6	-8,446595E+000	-4,378104E+000
C7	1,251987E-001	-4,173486E-002
C8	-3,332584E-001	1,149600E-001
C9	-1,156798E-001	-8,245311E-002
C10	3,632965E-002	3,313896E-003

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