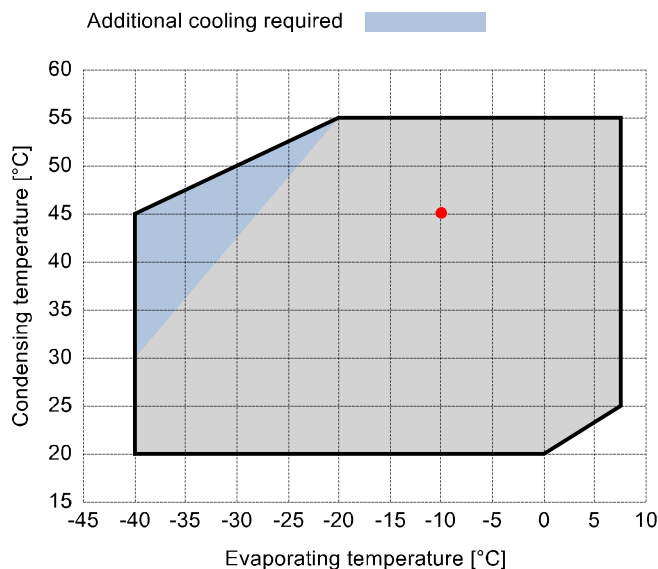


Input data

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 :		Q10-39.1Y
Number of compressors :		FSx1
Refrigerating capacity	kW	18,851
Refrigerating capacity [*ref]	kW	20,198
Evaporator capacity	kW	18,851
Power input	W	9288
Condenser capacity, theor.	kW	28,139
Current	A	16,76
COP/EER	W/W	2,03
Mass flow	kg/h	668
Operating frequency	Hz	50
Connection	-	DOL-STAR
Operating mode	-	100%
Discharge temperature	°C	73,57
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

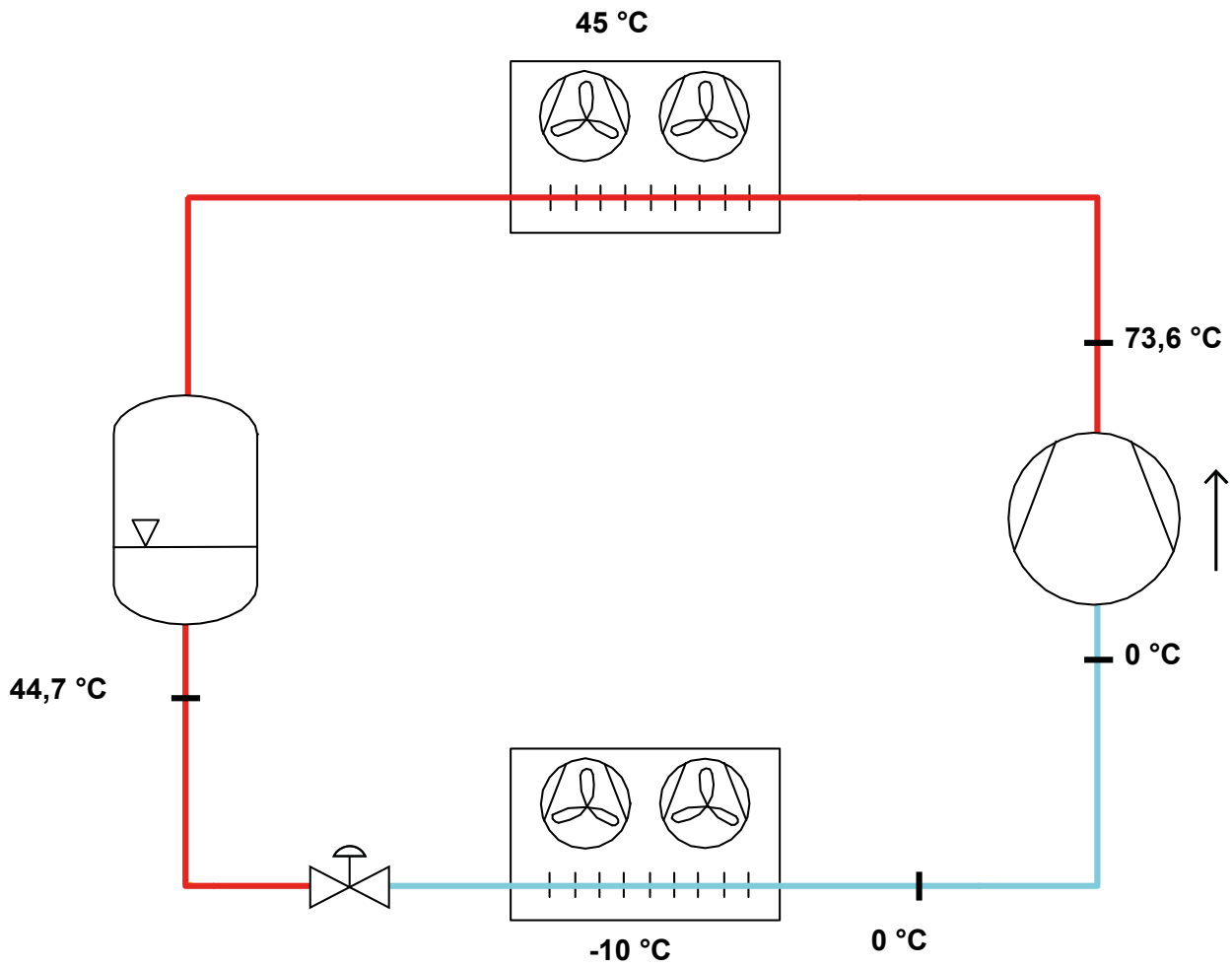


Legend:

- *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:



Model: Q10-39.1Y

Refrigerant: R404A

Power supply: 400/3/50 DOL-STAR

Technical data:

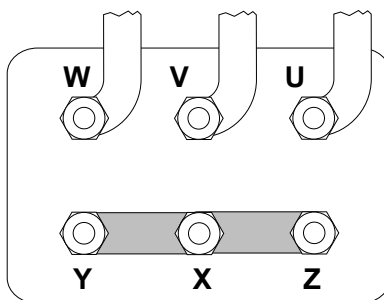
Displacement	38,57 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	23,7 A
Locked rotor current (LRA)	116 A
Number of pistons	4
Net weight	88 kg
Lubricant	FRASCOLD POE32
Oil charge	1,3 l
Maximum static pressure LP	20,5 bar
Maximum operating pressure HP	30 bar

Sound level:

Sound power level -10/45°C R404A @50Hz	74,5 dB(A)
Sound pressure (*) - Distance: 1 m	66,5 dB(A)

*half sphere model

Motor connections:



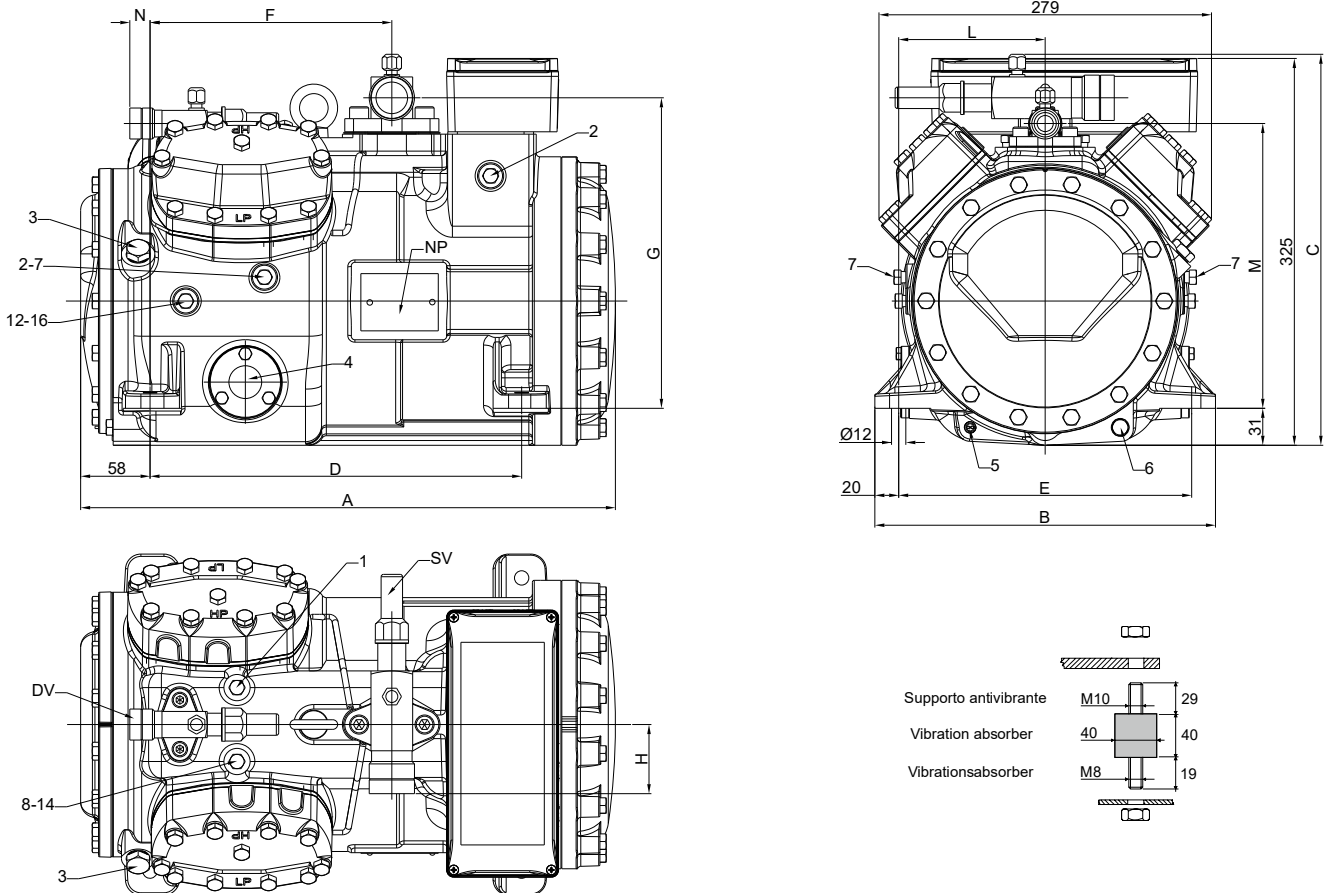
All data subject to change without notice

Model: Q10-39.1Y

Refrigerant: R404A

Power supply: 400/3/50 DOL-STAR

Dimensions:



Legend:

SV: Suction Valve	1 3/8" in - 35 mm	2: Low pressure connection	1/8" NPT
DV: Discharge valve	1 1/8" - 28,575 mm	3: Oil charge plug	1/4" GAS
A: Length	480 mm	4: Oil level sight glass	-
B: Width	286 mm	5: Crankcase heater seat	-
C: Height	328 mm	6: Oil drain plug	M8 x 22
D: Base mounting	312 mm	7: Liquid injection plug	1/8" NPT
E: Base mounting	246 mm	8: Liquid injection sensor plug	1/8" NPT
F: Suction Valve	203 mm	12: Oil return plug	1/8" NPT
G: Suction Valve	261 mm	14: Max discharge temperature sensor connection	1/8" NPT
H: Suction Valve	58 mm	16: Crankcase pressure plug	1/8" NPT
L: Discharge valve	123 mm	NP: Nameplate	
M: Discharge valve	239 mm	DIMENSION UNITS:	mm
N: Discharge valve	28 mm	SECONDARY DIMENSION UNITS:	[in]
1: High pressure connection	1/8" NPT		

All data subject to change without notice

Model: Q10-39.1Y

Refrigerant: R404A

Power supply: 400/3/50 DOL-STAR

Polynomial coefficients according to EN12900 for Q10-39.1Y:

*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	5,548628E+004	2,573054E+003
C2	1,831037E+003	-1,209628E+002
C3	-5,675820E+002	2,423019E+002
C4	2,021457E+001	-3,253031E+000
C5	-1,663730E+001	6,904793E+000
C6	-2,989694E-001	-1,287585E+000
C7	6,750230E-002	-1,869041E-002
C8	-1,487858E-001	4,596370E-002
C9	-5,851237E-003	-1,554854E-002
C10	3,065388E-003	1,107306E-003

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