

Model: Q5-21.1Y

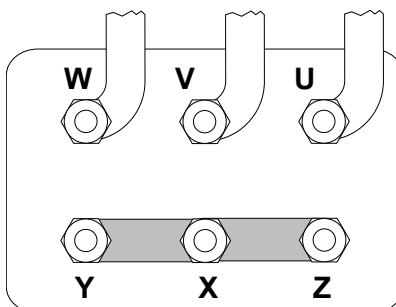
Refrigerant: R404A

Power supply: 400/3/50 DOL-STAR

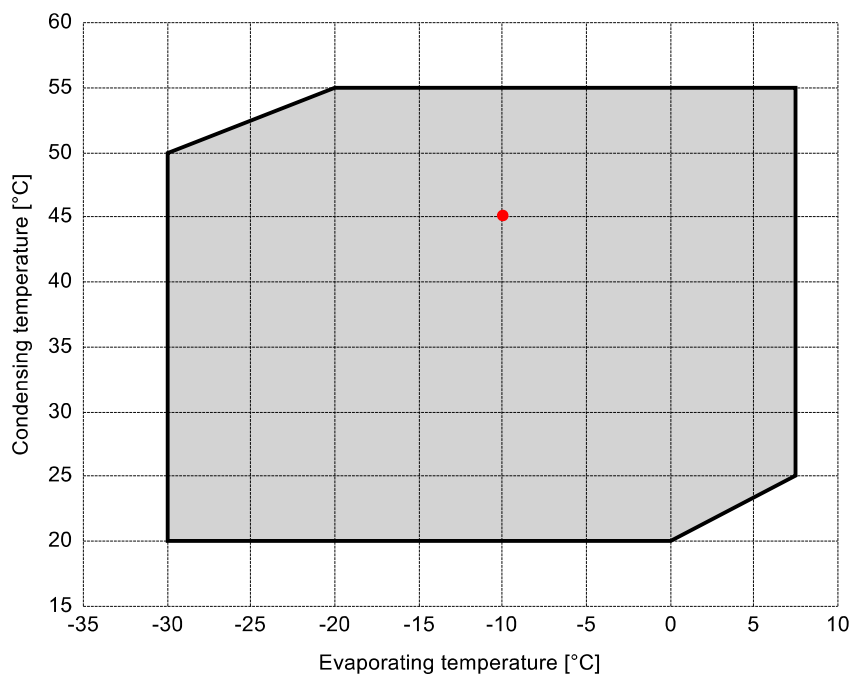
Technical data:

Displacement	21.18 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
maximum allowed operating current (MRA)	11.6 A
locked rotor current (LRA)	63.1 A
Number of pistons	4
Net weight	79 kg
Lubricant	FRASCOLD POE32
Oil charge	1.6 l

Motor connections:



Application range:



Reference conditions according to EN12900

- Suction gas temperature = 20 °C
- Liquid subcooling = 0 K
- 100% of the capacity

Certified by:

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

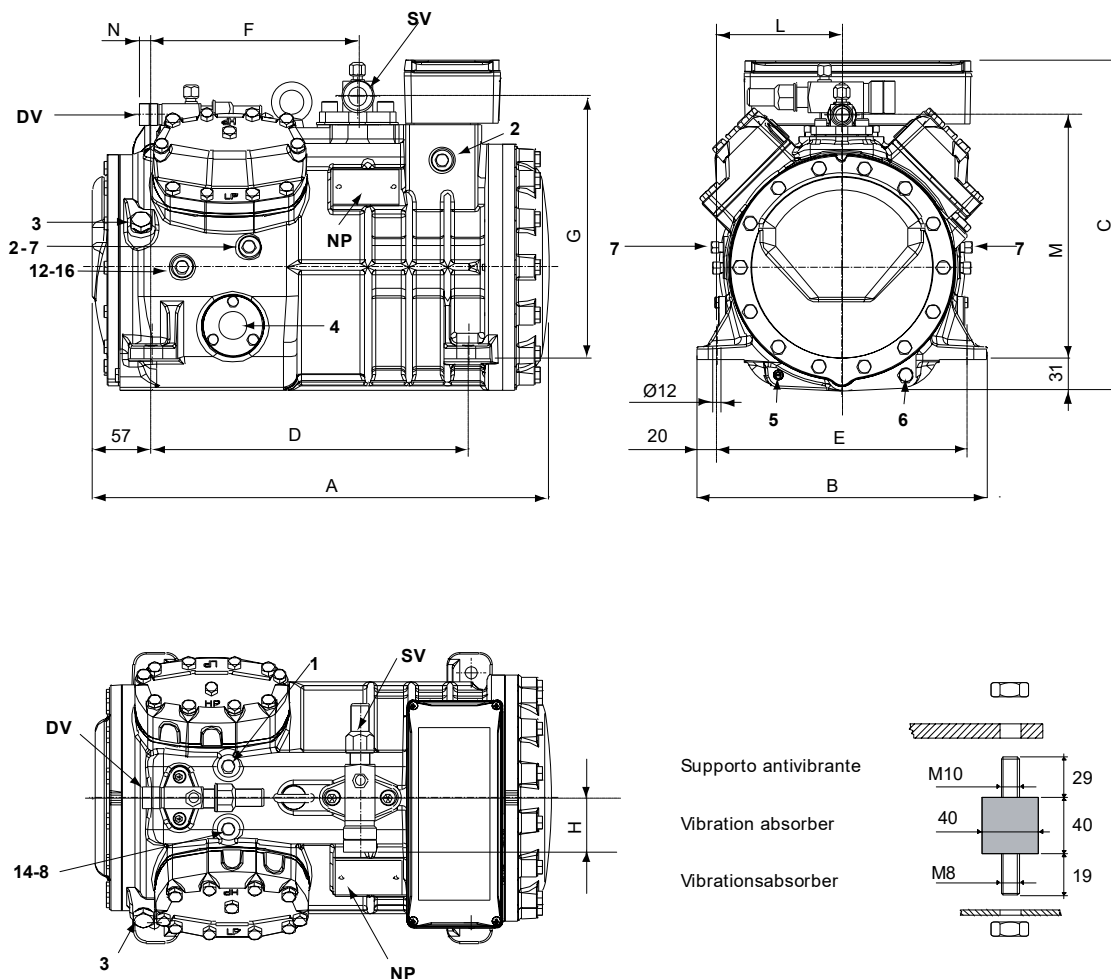
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Dimensions:



Legend:

SV: Suction Valve	1 1/8" in - 28.575 mm	1: High pressure connection	1/8" NPT
DV: Discharge valve	3/4" in - 19 mm	2: Low pressure connection	1/8" NPT
A: Length	449 mm	3: Oil charge plug	1/4" GAS
B: Width	286 mm	4: Oil level sight glass	-
C: Height	325 mm	5: Crankcase heater seat	-
D: Base mounting	312 mm	6: Oil drain plug	M8 x 22
E: Base mounting	246 mm	7: Liquid injection plug	1/8" NPT
F: Suction Valve	203 mm	8: Liquid injection sensor plug	1/8" NPT
G: Suction Valve	258 mm	12: Oil return plug	1/8" NPT
H: Suction Valve	53 mm	14: Max discharge temperature sensor connection	1/8" NPT
L: Discharge valve	123 mm	16: Crankcase pressure plug	1/8" NPT
M: Discharge valve	239 mm	NP: Nameplate	
N: Discharge valve	12 mm		

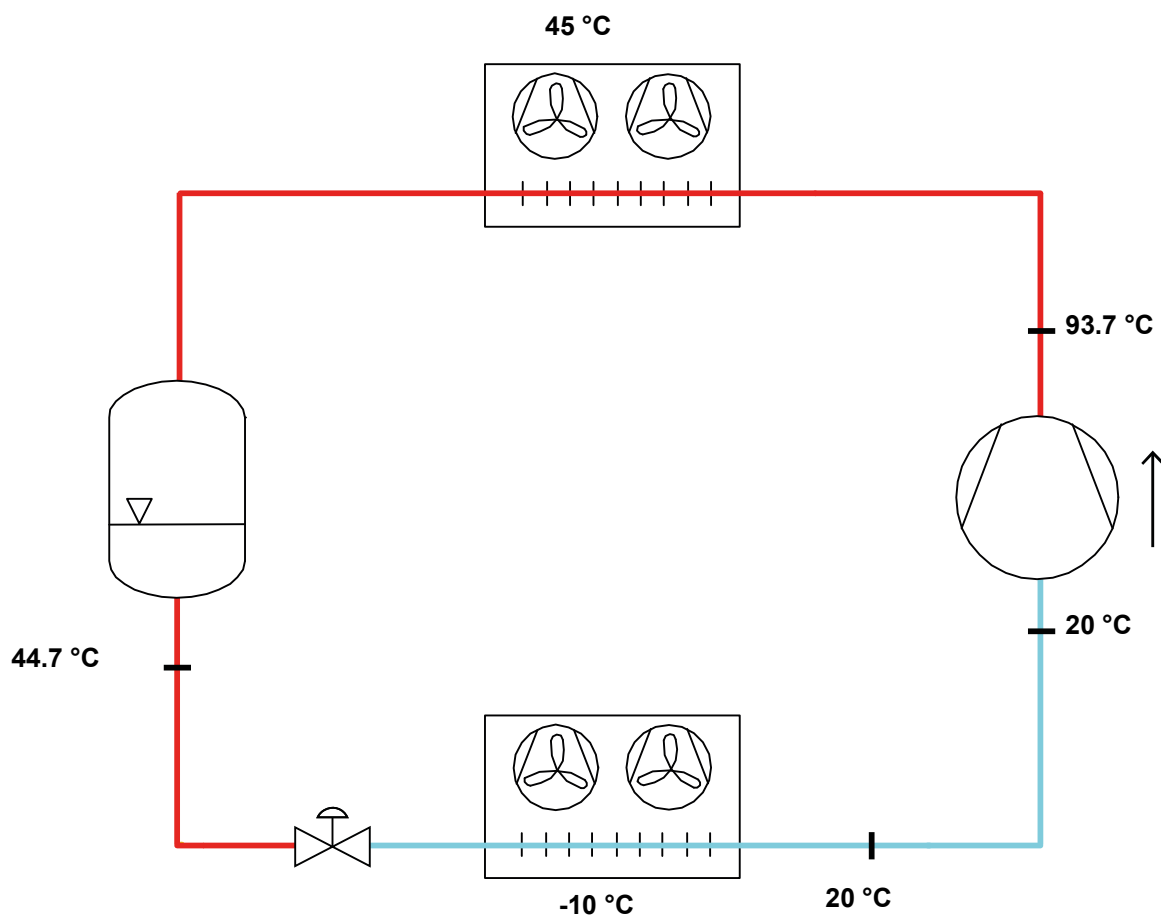
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P&I Diagram:



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Performance data:

Operating mode	Subcritical, 100 % of the capacity
Liquid subcooling	0 K
Suction gas temperature	20 °C
Useful fraction of superheating	100 %
Frequency	50 Hz
Additional cooling required	

Refrigerating capacity [kW]

T.Evap	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C	7.5 °C
T.Cond									
55 °C	-	-	4.766	6.225	7.87	9.728	11.825	14.186	15.475
50 °C	2.83	4.103	5.538	7.162	9.001	11.081	13.429	16.07	17.509
45 °C	3.363	4.742	6.313	8.101	10.133	12.435	15.033	17.953	19.543
40 °C	3.895	5.381	7.086	9.038	11.262	13.785	16.633	19.832	21.572
35 °C	4.424	6.016	7.856	9.97	12.386	15.13	18.227	21.705	23.594
30 °C	4.948	6.644	8.618	10.895	13.502	16.466	19.812	23.567	25.606
25 °C	5.462	7.263	9.37	11.809	14.607	17.79	21.384	25.416	27.604
20 °C	5.964	7.869	10.108	12.709	15.697	19.099	22.941	-	-

Power input [W]

T.Evap	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C	7.5 °C
T.Cond									
55 °C	-	-	3820	4417	4955	5426	5821	6134	6256
50 °C	2574	3213	3807	4348	4828	5239	5572	5820	5910
45 °C	2632	3219	3758	4242	4663	5013	5283	5466	5522
40 °C	2658	3191	3674	4100	4461	4748	4954	5071	5093
35 °C	2652	3130	3556	3923	4223	4447	4587	4636	4624
30 °C	2615	3037	3405	3712	3949	4109	4183	4163	4116
25 °C	2548	2913	3222	3468	3642	3736	3742	3653	3570
20 °C	2452	2759	3008	3191	3301	3328	3266	-	-

COP/EER [W/W]

T.Evap	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C	7.5 °C
T.Cond									
55 °C	-	-	1.25	1.41	1.59	1.79	2.03	2.31	2.47
50 °C	1.1	1.28	1.45	1.65	1.86	2.12	2.41	2.76	2.96
45 °C	1.28	1.47	1.68	1.91	2.17	2.48	2.85	3.28	3.54
40 °C	1.47	1.69	1.93	2.2	2.52	2.9	3.36	3.91	4.24
35 °C	1.67	1.92	2.21	2.54	2.93	3.4	3.97	4.68	5.1
30 °C	1.89	2.19	2.53	2.93	3.42	4.01	4.74	5.66	6.22
25 °C	2.14	2.49	2.91	3.41	4.01	4.76	5.71	6.96	7.73
20 °C	2.43	2.85	3.36	3.98	4.76	5.74	7.02	-	-

Current [A]

T.Evap	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C	7.5 °C
T.Cond									
55 °C	-	-	7.4	8.2	8.95	9.62	10.19	10.65	10.83
50 °C	5.92	6.64	7.38	8.1	8.77	9.35	9.83	10.19	10.32
45 °C	5.98	6.64	7.32	7.96	8.54	9.03	9.41	9.68	9.76
40 °C	6.01	6.61	7.21	7.77	8.26	8.66	8.95	9.11	9.14
35 °C	6	6.54	7.06	7.53	7.93	8.24	8.43	8.5	8.48
30 °C	5.96	6.43	6.87	7.26	7.57	7.78	7.88	7.85	7.79
25 °C	5.89	6.29	6.65	6.95	7.17	7.29	7.3	7.18	7.07
20 °C	5.79	6.11	6.39	6.61	6.74	6.77	6.7	-	-

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Performance data:

Operating mode	Subcritical, 100 % of the capacity
Liquid subcooling	0 K
Suction gas temperature	20 °C
Useful fraction of superheating	100 %
Frequency	50 Hz
Additional cooling required	

Mass flow [kg/h]

T.Evap	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C	7.5 °C
T.Cond									
55 °C	-	-	165	218	278	349	432	528	583
50 °C	89	129	176	229	291	363	447	545	600
45 °C	98	139	186	240	304	377	463	562	618
40 °C	106	147	195	251	315	390	477	578	635
35 °C	113	155	203	260	326	402	491	593	650
30 °C	120	162	211	269	336	414	504	608	665
25 °C	126	168	218	277	345	424	515	621	679
20 °C	131	174	224	284	353	434	526	-	-