

Model: Q5-33.1Y

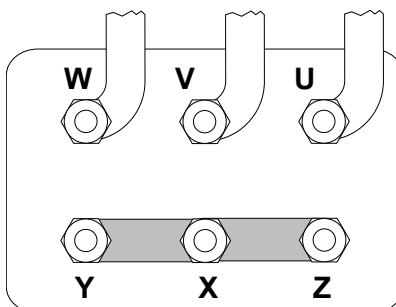
Refrigerant: R404A

Power supply: 400/3/50 DOL-STAR

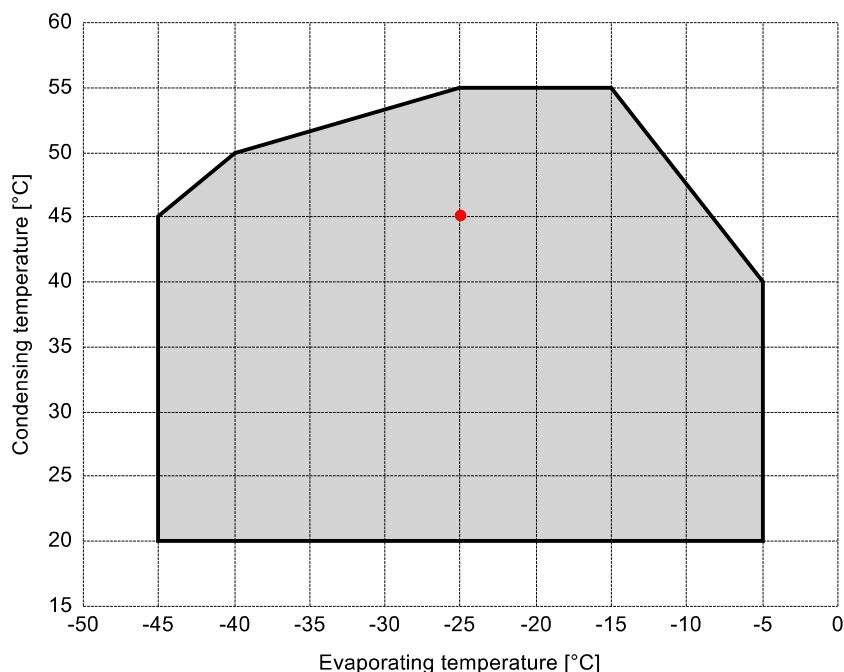
Technical data:

Displacement	32.66 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
maximum allowed operating current (MRA)	14.4 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.)

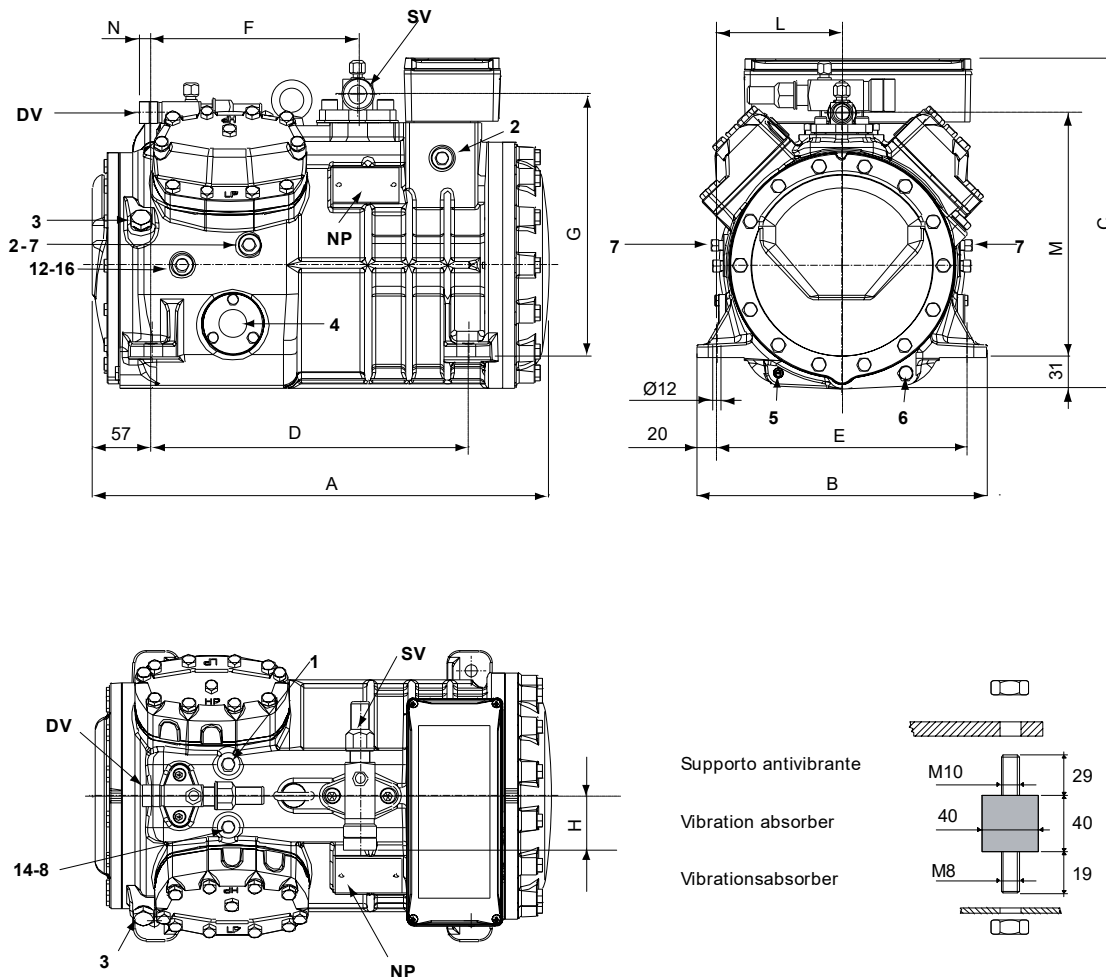
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Dimensions:



Legend:

SV: Suction Valve	1 3/8" in - 35 mm	1: High pressure connection	1/8" NPT
DV: Discharge valve	1 1/8" in - 28.575 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	328 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	261 mm	12: Oil return plug	1/8" NPT
H: Suction Valve	58 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	28 mm		

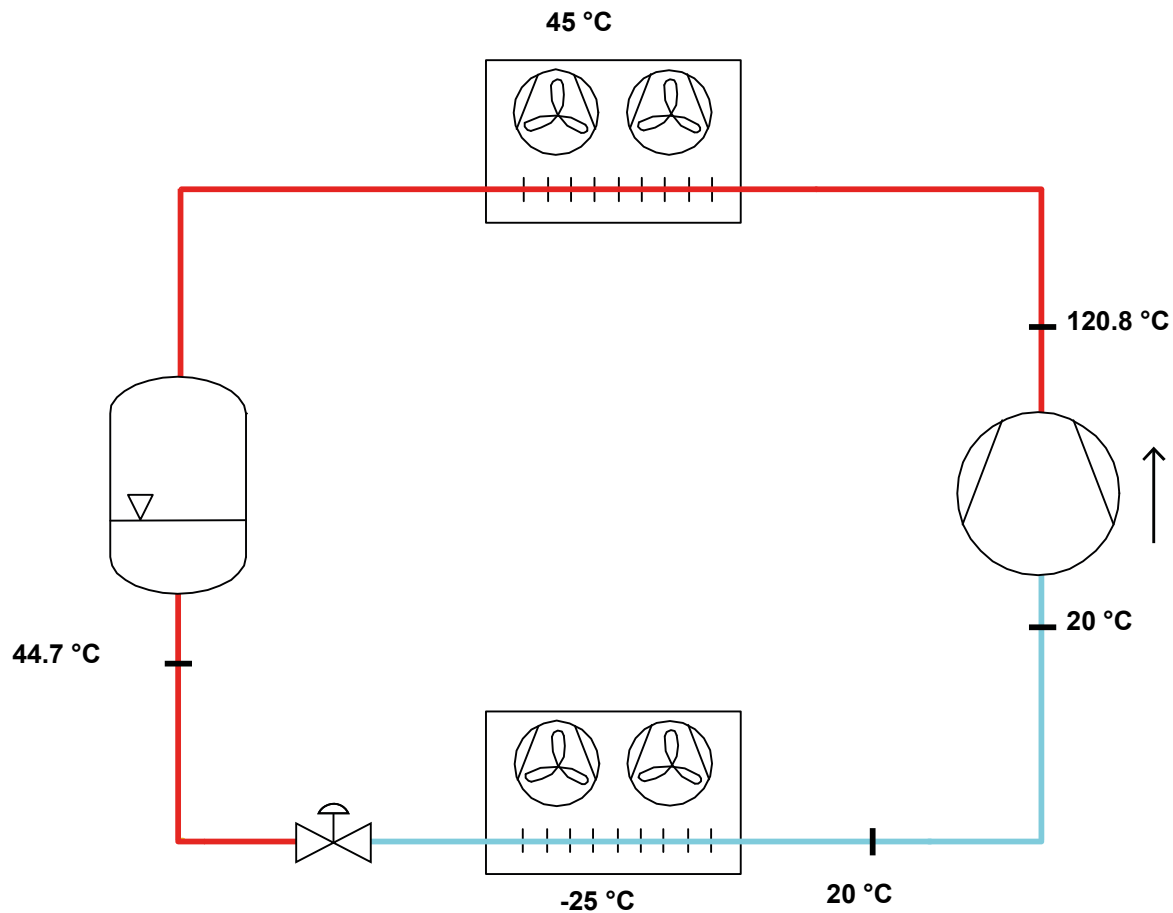
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P&I Diagram:



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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	-45 °C	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C
T.Cond									
55 °C	-	-	-	-	6.723	8.482	10.548	-	-
50 °C	-	3.24	4.45	5.868	7.537	9.5	11.799	-	-
45 °C	2.511	3.643	4.969	6.534	8.379	10.548	13.083	16.028	-
40 °C	2.847	4.068	5.514	7.227	9.251	11.628	14.401	17.614	21.309
35 °C	3.205	4.518	6.085	7.949	10.154	12.742	15.756	19.239	23.234
30 °C	3.588	4.994	6.685	8.703	11.091	13.892	17.148	20.904	25.201
25 °C	3.996	5.499	7.316	9.489	12.063	15.079	18.581	22.611	27.213
20 °C	4.433	6.034	7.979	10.31	13.072	16.305	20.055	24.362	29.271

Power input [W]

T.Evap	-45 °C	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C
T.Cond									
55 °C	-	-	-	-	5994	6961	7964	-	-
50 °C	-	3507	4195	4977	5827	6721	7632	-	-
45 °C	2912	3471	4132	4870	5659	6475	7291	8083	-
40 °C	2896	3441	4071	4761	5485	6218	6935	7609	8217
35 °C	2884	3411	4006	4644	5298	5944	6557	7110	7579
30 °C	2869	3374	3930	4511	5091	5647	6151	6578	6905
25 °C	2846	3325	3837	4357	4859	5319	5710	6008	6187
20 °C	2809	3257	3721	4175	4595	4955	5229	5393	5421

COP/EER [W/W]

T.Evap	-45 °C	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C
T.Cond									
55 °C	-	-	-	-	1.12	1.22	1.32	-	-
50 °C	-	0.92	1.06	1.18	1.29	1.41	1.55	-	-
45 °C	0.86	1.05	1.2	1.34	1.48	1.63	1.79	1.98	-
40 °C	0.98	1.18	1.35	1.52	1.69	1.87	2.08	2.31	2.59
35 °C	1.11	1.32	1.52	1.71	1.92	2.14	2.4	2.71	3.07
30 °C	1.25	1.48	1.7	1.93	2.18	2.46	2.79	3.18	3.65
25 °C	1.4	1.65	1.91	2.18	2.48	2.83	3.25	3.76	4.4
20 °C	1.58	1.85	2.14	2.47	2.84	3.29	3.84	4.52	5.4

Current [A]

T.Evap	-45 °C	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C
T.Cond									
55 °C	-	-	-	-	9.84	11.27	12.78	-	-
50 °C	-	6.4	7.29	8.38	9.6	10.91	12.28	-	-
45 °C	5.68	6.35	7.21	8.23	9.36	10.55	11.76	12.97	-
40 °C	5.67	6.31	7.13	8.07	9.11	10.17	11.23	12.24	13.17
35 °C	5.65	6.28	7.04	7.91	8.84	9.77	10.67	11.49	12.2
30 °C	5.64	6.23	6.94	7.73	8.54	9.34	10.07	10.7	11.19
25 °C	5.61	6.17	6.82	7.51	8.21	8.87	9.43	9.87	10.13
20 °C	5.57	6.09	6.67	7.27	7.84	8.35	8.74	8.97	9.01

All data subject to change without notice

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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	-45 °C	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C
T.Cond									
55 °C	-	-	-	-	231	294	369	-	-
50 °C	-	100	139	184	237	301	378	-	-
45 °C	72	105	144	190	245	310	388	480	-
40 °C	76	110	149	196	253	320	399	493	603
35 °C	81	115	155	203	261	330	411	506	618
30 °C	86	120	161	211	270	340	423	520	633
25 °C	91	126	168	219	279	351	435	534	649
20 °C	96	132	175	226	288	362	448	548	664