

Model: Q7-28.1Y

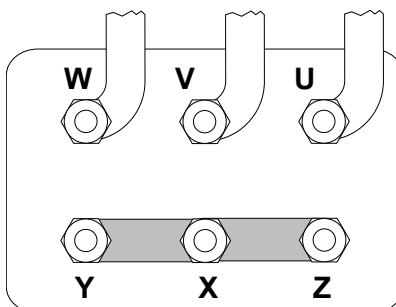
Refrigerant: R404A

Power supply: 400/3/50 DOL-STAR

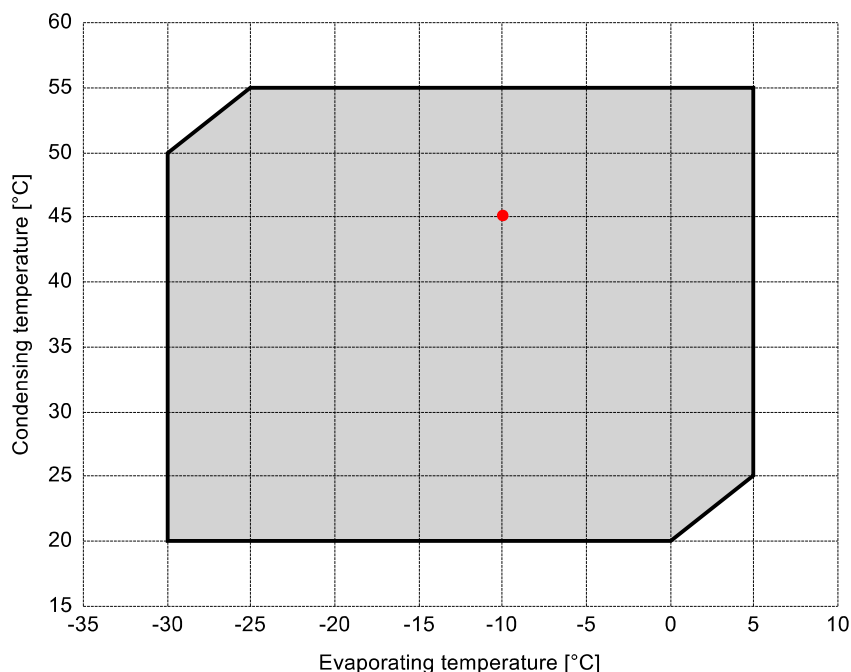
Technical data:

Displacement	28.02 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
maximum allowed operating current (MRA)	17.6 A
locked rotor current (LRA)	87.3 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.)

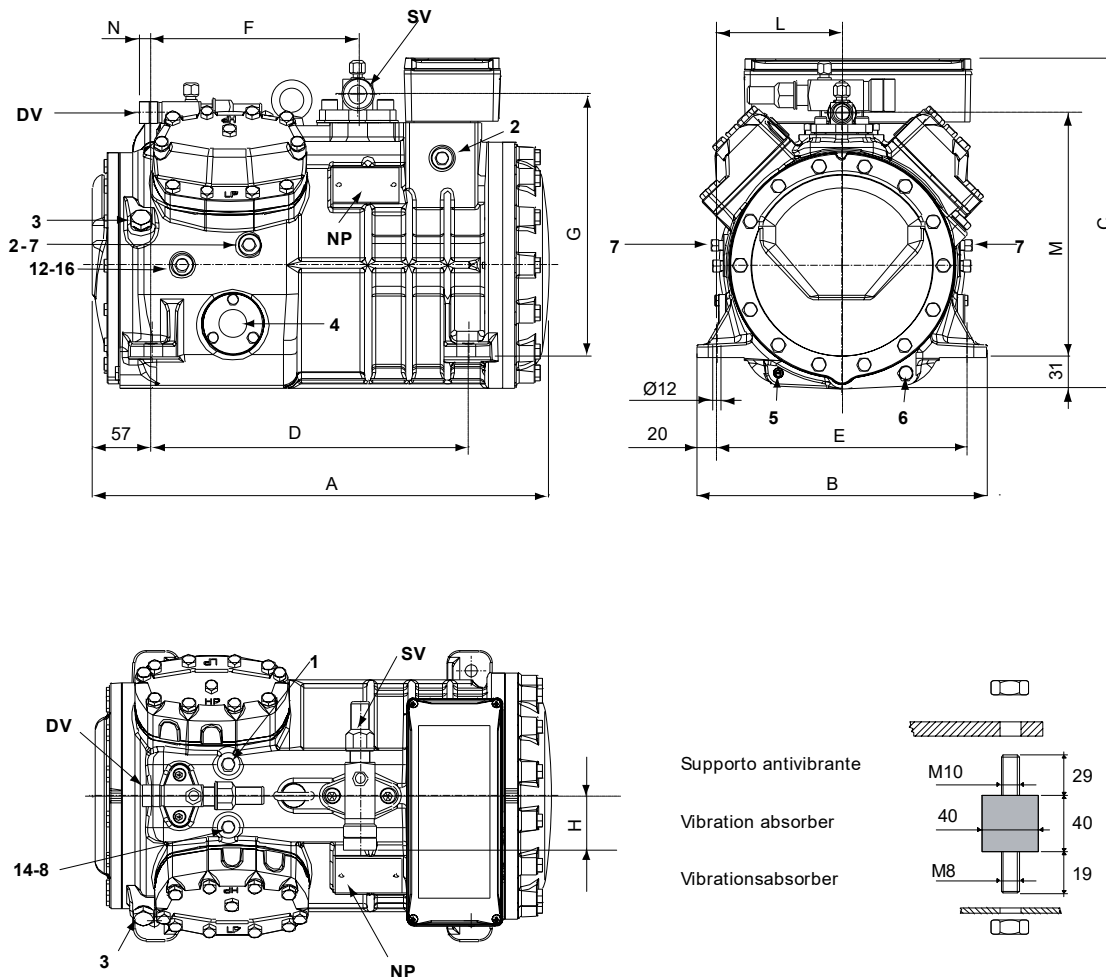
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Dimensions:



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		

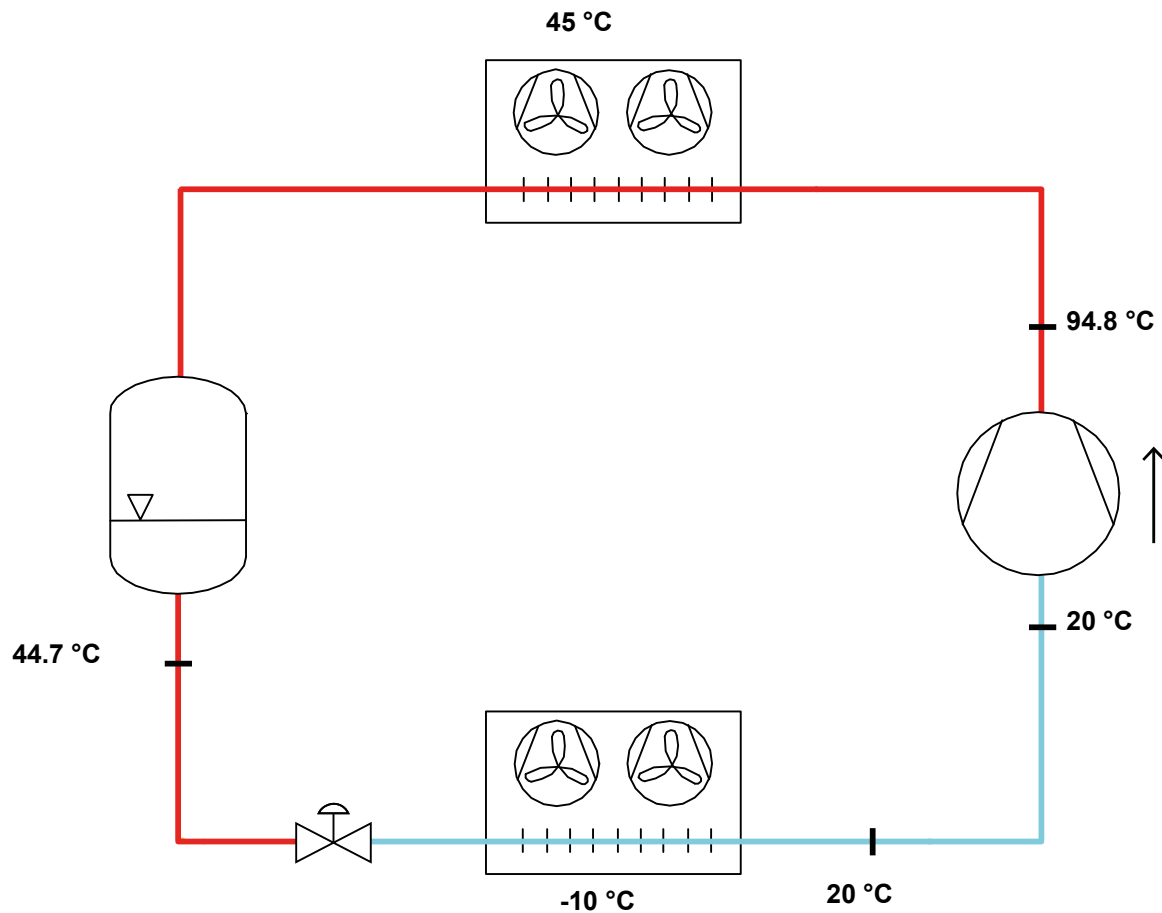
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P&I Diagram:



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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	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C
T.Cond								
55 °C	-	5.511	7.137	9.007	11.167	13.661	16.535	19.833
50 °C	4.741	6.31	8.117	10.205	12.621	15.409	18.615	22.283
45 °C	5.377	7.089	9.077	11.384	14.056	17.139	20.676	24.714
40 °C	6	7.855	10.024	12.55	15.479	18.856	22.726	27.134
35 °C	6.616	8.615	10.965	13.71	16.896	20.568	24.77	29.548
30 °C	7.231	9.374	11.906	14.87	18.314	22.28	26.815	31.964
25 °C	7.853	10.14	12.853	16.038	19.738	24	28.868	34.388
20 °C	8.487	10.918	13.814	17.218	21.176	25.734	30.935	-

Power input [W]

T.Evap	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C
T.Cond								
55 °C	-	5108	5820	6520	7205	7872	8516	9134
50 °C	4322	4993	5650	6290	6909	7504	8070	8604
45 °C	4253	4875	5476	6055	6607	7128	7616	8065
40 °C	4176	4747	5292	5809	6293	6740	7148	7512
35 °C	4086	4605	5093	5546	5961	6334	6661	6938
30 °C	3976	4443	4873	5262	5607	5904	6150	6340
25 °C	3843	4256	4627	4951	5225	5446	5608	5710
20 °C	3680	4039	4350	4608	4810	4953	5032	-

COP/EER [W/W]

T.Evap	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C
T.Cond								
55 °C	-	1.08	1.23	1.38	1.55	1.74	1.94	2.17
50 °C	1.1	1.26	1.44	1.62	1.83	2.05	2.31	2.59
45 °C	1.26	1.45	1.66	1.88	2.13	2.4	2.71	3.06
40 °C	1.44	1.65	1.89	2.16	2.46	2.8	3.18	3.61
35 °C	1.62	1.87	2.15	2.47	2.83	3.25	3.72	4.26
30 °C	1.82	2.11	2.44	2.83	3.27	3.77	4.36	5.04
25 °C	2.04	2.38	2.78	3.24	3.78	4.41	5.15	6.02
20 °C	2.31	2.7	3.18	3.74	4.4	5.2	6.15	-

Current [A]

T.Evap	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C
T.Cond								
55 °C	-	11.39	12.15	12.96	13.8	14.66	15.53	16.38
50 °C	10.64	11.27	11.96	12.69	13.43	14.18	14.93	15.65
45 °C	10.58	11.15	11.77	12.41	13.06	13.7	14.33	14.92
40 °C	10.51	11.03	11.58	12.14	12.69	13.22	13.73	14.19
35 °C	10.43	10.9	11.37	11.85	12.31	12.74	13.13	13.47
30 °C	10.34	10.75	11.15	11.55	11.91	12.24	12.52	12.74
25 °C	10.23	10.58	10.92	11.23	11.51	11.74	11.92	12.03
20 °C	10.11	10.39	10.66	10.9	11.09	11.23	11.31	-

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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]		-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C
T.Evap	T.Cond								
55 °C	-		189	247	315	395	490	603	739
50 °C	148	199	258	327	409	505	620	756	
45 °C	156	207	267	338	421	520	636	774	
40 °C	163	215	276	348	433	534	652	791	
35 °C	169	222	284	358	445	547	667	808	
30 °C	175	228	292	367	456	560	682	824	
25 °C	181	235	299	376	466	572	696	840	
20 °C	186	241	306	384	476	584	710	-	