

Model: D3-18.1Y

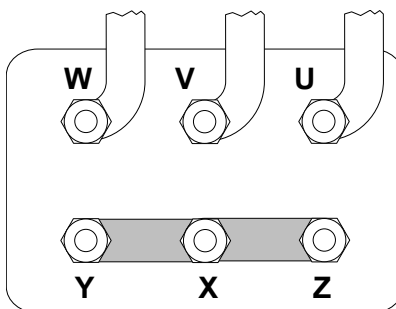
Refrigerant: R404A

Power supply: 400/3/50 DOL-STAR

Technical data:

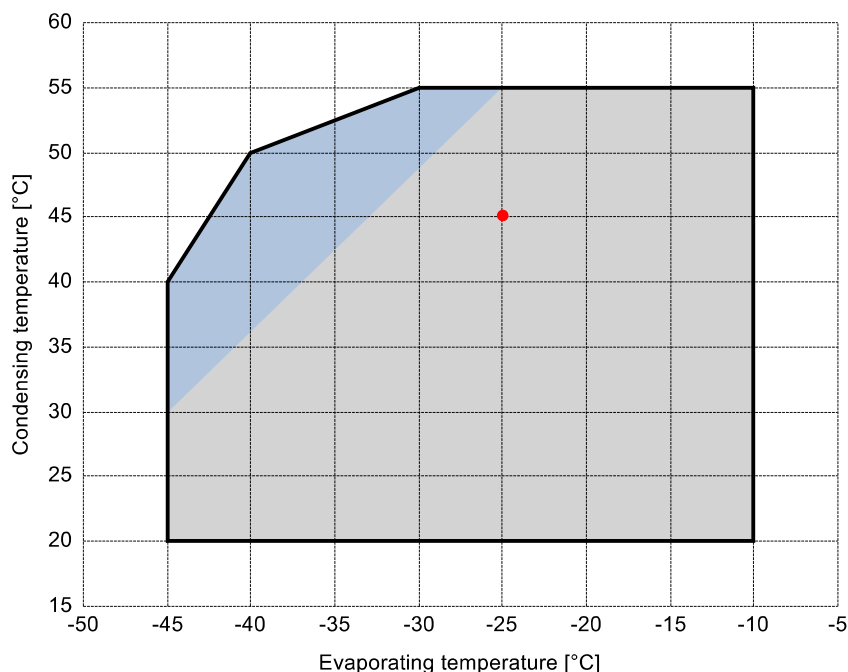
Displacement	17.93 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
maximum allowed operating current (MRA)	10 A
locked rotor current (LRA)	43.7 A
Number of pistons	2
Net weight	55 kg
Lubricant	FRASCOLD POE32
Oil charge	1.2 l

Motor connections:



Application range:

Additional cooling required



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.)

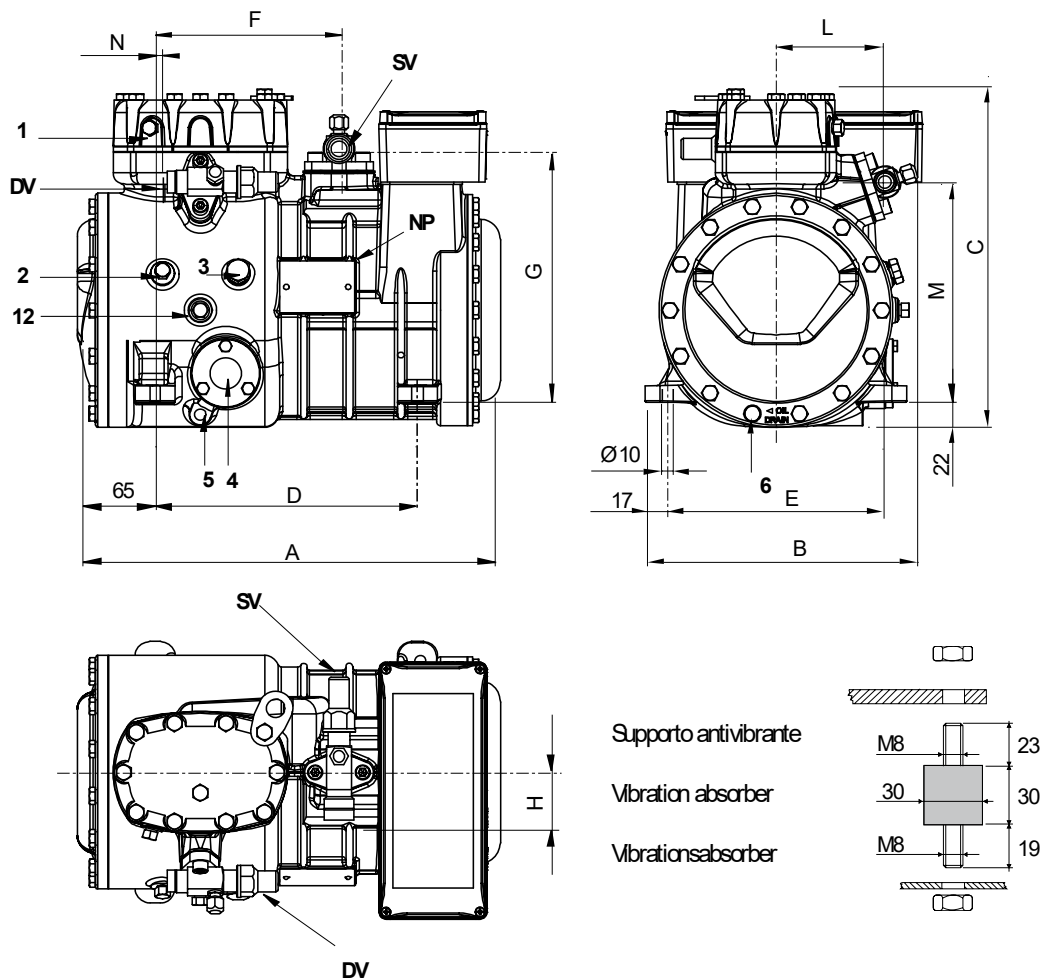
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Dimensions:



Legend:

SV: Suction Valve	1 1/8" in - 28.575 mm	M: Discharge valve	192 mm
DV: Discharge valve	5/8" in - 16 mm	N: Discharge valve	13 mm
A: Lenght	374 mm	1: High pressure connection	1/8" NPT
B: Width	242 mm	2: Low pressure connection	1/8" NPT
C: Height	317 mm	3: Oil charge plug	1/4" GAS
D: Base mounting	234 mm	4: Oil level sight glass	-
E: Base mounting	194 mm	5: Crankcase heater seat	-
F: Suction Valve	165 mm	6: Oil drain plug	M8 x 22
G: Suction Valve	225 mm	12: Oil return plug	1/8" NPT
H: Suction Valve	53 mm	NP: Nameplate	
L: Discharge valve	94 mm		

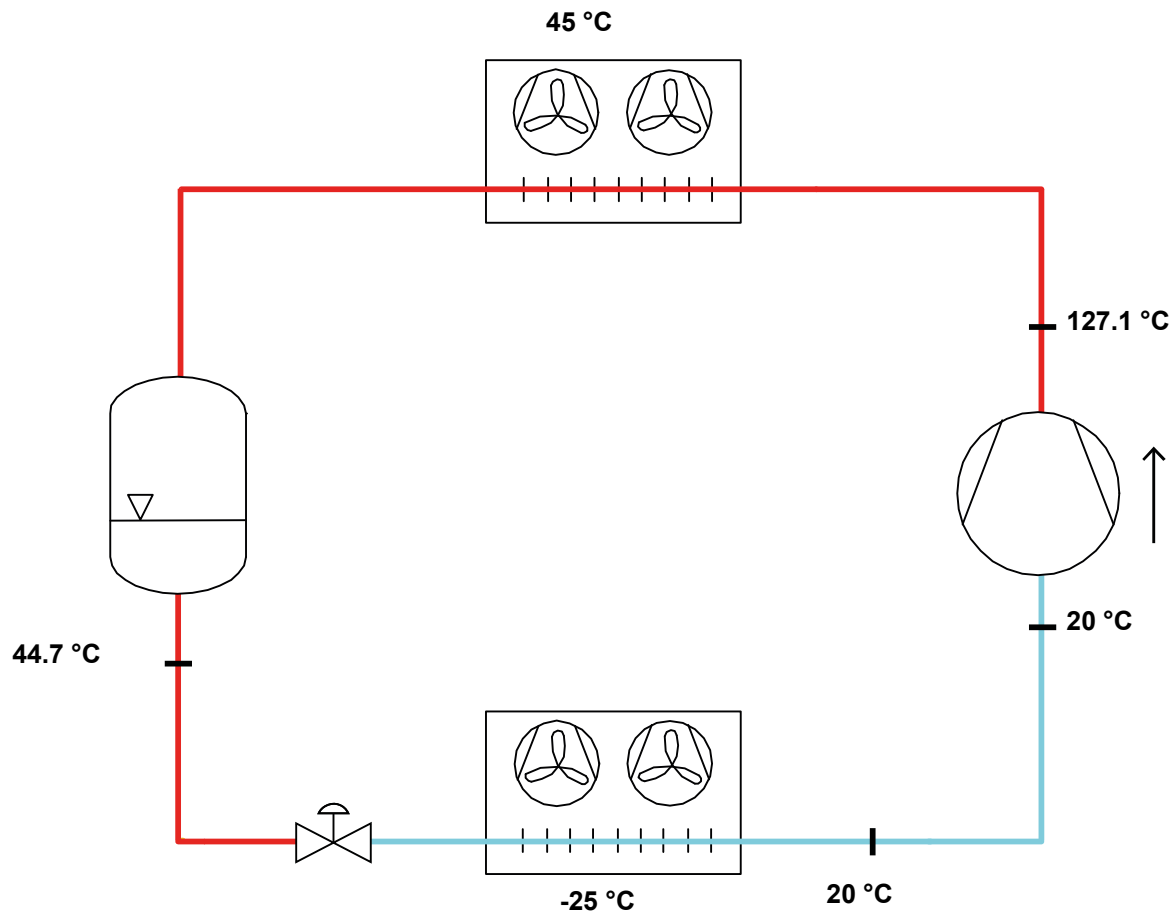
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P&I Diagram:



Model: D3-18.1Y

Refrigerant: R404A

Power supply: 400/3/50 DOL-STAR

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
T.Cond								
55 °C	-	-	-	2.952	3.77	4.735	5.869	7.194
50 °C	-	1.887	2.538	3.311	4.226	5.305	6.569	8.04
45 °C	-	2.109	2.825	3.679	4.692	5.884	7.279	8.896
40 °C	1.689	2.339	3.121	4.057	5.168	6.475	8	9.764
35 °C	1.881	2.58	3.428	4.446	5.655	7.077	8.733	10.646
30 °C	2.083	2.832	3.747	4.847	6.155	7.693	9.481	11.541
25 °C	2.296	3.096	4.078	5.261	6.669	8.322	10.242	12.451
20 °C	2.523	3.374	4.422	5.69	7.197	8.967	11.02	13.378

Power input [W]

T.Evap	-45 °C	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C
T.Cond								
55 °C	-	-	-	3123	3626	4158	4707	5259
50 °C	-	2220	2616	3058	3532	4026	4527	5022
45 °C	-	2194	2578	2997	3439	3892	4343	4778
40 °C	1846	2175	2542	2937	3345	3754	4151	4524
35 °C	1838	2157	2506	2873	3244	3607	3948	4256
30 °C	1829	2137	2466	2802	3133	3447	3730	3970
25 °C	1818	2112	2416	2720	3008	3270	3492	3661
20 °C	1799	2076	2354	2622	2865	3072	3230	3325

COP/EER [W/W]

T.Evap	-45 °C	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C
T.Cond								
55 °C	-	-	-	0.95	1.04	1.14	1.25	1.37
50 °C	-	0.85	0.97	1.08	1.2	1.32	1.45	1.6
45 °C	-	0.96	1.1	1.23	1.36	1.51	1.68	1.86
40 °C	0.91	1.08	1.23	1.38	1.54	1.72	1.93	2.16
35 °C	1.02	1.2	1.37	1.55	1.74	1.96	2.21	2.5
30 °C	1.14	1.33	1.52	1.73	1.96	2.23	2.54	2.91
25 °C	1.26	1.47	1.69	1.93	2.22	2.54	2.93	3.4
20 °C	1.4	1.63	1.88	2.17	2.51	2.92	3.41	4.02

Current [A]

T.Evap	-45 °C	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C
T.Cond								
55 °C	-	-	-	6.67	7.24	7.9	8.62	9.38
50 °C	-	5.81	6.15	6.6	7.13	7.73	8.38	9.05
45 °C	-	5.79	6.12	6.53	7.02	7.56	8.14	8.72
40 °C	5.53	5.77	6.09	6.47	6.91	7.39	7.89	8.38
35 °C	5.52	5.76	6.05	6.41	6.8	7.21	7.63	8.02
30 °C	5.52	5.74	6.02	6.33	6.68	7.03	7.36	7.66
25 °C	5.51	5.72	5.97	6.25	6.54	6.83	7.08	7.28
20 °C	5.5	5.69	5.92	6.16	6.4	6.61	6.78	6.89

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Refrigerant: R404A

Power supply: 400/3/50 DOL-STAR

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
T.Cond								
55 °C	-	-	-	101	129	164	205	255
50 °C	-	58	79	104	133	168	210	260
45 °C	-	61	82	107	137	173	216	267
40 °C	45	63	84	110	141	178	222	273
35 °C	48	66	87	114	146	183	228	280
30 °C	50	68	90	117	150	188	234	287
25 °C	52	71	94	121	154	194	240	294
20 °C	55	74	97	125	159	199	246	301