

Datasheets

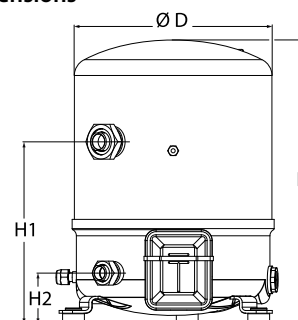
# Danfoss Reciprocating compressors **MT / MTZ / NTZ**



### General Characteristics

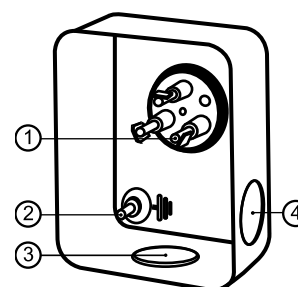
Model number (on compressor nameplate)		<b>MTZ80HP4AVE</b>
Code number for Singlepack*		MTZ80-4VI
Code number for Industrial pack**		MTZ80-4VM
Drawing number		8502012g
Suction and discharge connections		Rotolock
Suction connection		1-3/4" Rotolock
Discharge connection		1-1/4" Rotolock
Suction connection with supplied sleeve		1-1/8" ODF
Discharge connection with supplied sleeve		3/4" ODF
Oil sight glass		Threaded
Oil equalisation connection		3/8" flare SAE
Oil drain connection		None
LP gauge port		Schrader
IPR valve		30 bar / 8 bar
Cylinders	2	
Swept volume	135,78 cm <sup>3</sup> /rev	
Displacement @ Nominal speed	23.6 m <sup>3</sup> /h @ 2900 rpm - 28.5 m <sup>3</sup> /h @ 3500 rpm	
Net weight	40 kg	
Oil charge	1,8 litre, POE - 160PZ	
Maximum system test pressure Low Side / High side	25 bar(g) / 30 bar(g)	
Maximum differential test pressure	30 bar	
Maximum number of starts per hour	12	
Refrigerant charge limit	5 kg	
Approved refrigerants	R404A, R507A, R134a, R407C, R407A, R407F	

### Dimensions



D=288 mm  
H=413 mm  
H1=265 mm  
H2=74 mm  
H3=- mm

### Terminal box



IP55 (with cable gland)

- 1: Spade connectors 1/4"
- 2: Earth M4-12
- 3: Knock-out Ø 21 mm (0.83")
- 4: Hole Ø 21 mm (0.83")

### Electrical Characteristics

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-440 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance (between phases) +/- 7% at 25°C	1.9 Ω
Maximum Continuous Current (MCC)	18 A
Locked Rotor Amps (LRA)	80 A
Motor protection	Internal overload protector

### Recommended Installation torques

Oil sight glass	50 Nm
Power connections / Earth connection	Nm / 2 Nm
Mounting bolts	15 Nm

### Parts shipped with compressor

Mounting kit with grommets, bolts, nuts, sleeves and washers
Suction & Discharge solder sleeves, rotolock nuts and gaskets (shipped with rotolock version only)
Initial oil charge
Installation instructions

**Approvals** : CE certified, UL certified (file SA6873), -

\*Singlepack: Compressor in cardboard box

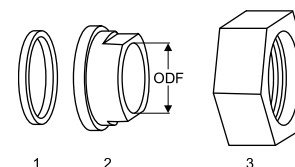
\*\*Industrial pack: 6 Unboxed compressors on pallet (order per multiples of 6)

**Rotolock accessories, suction side**

**Code no.**

Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

**Gaskets, sleeves and nuts**



- 1: Gasket  
2: Solder sleeve  
3: Rotolock nut

**Rotolock accessories, discharge side**

**Code no.**

Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008
Angle adapter, C04 (1-1/4" Rotolock, 3/4" ODF)	8168006
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029
Gasket, 1-1/4"	8156131

**Rotolock accessories, sets**

**Code no.**

Angle adapter set, C02 (1-3/4"~1-1/8"), C04 (1-1/4"~3/4")	7703014
Valve set, V02 (1-3/4"~1-1/8"), V04 (1-1/4"~3/4")	7703009
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

**Oil / lubricants**

**Code no.**

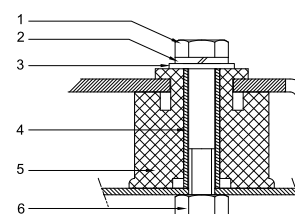
POE lubricant, 160PZ, 1 litre can	7754019
POE lubricant, 160PZ, 2.5 litre can	120Z0573

**Crankcase heaters**

**Code no.**

PTC heater 27W, CE mark, UL	120Z0459
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	7773107
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	7773117
Belt type crankcase heater, 65 W, 460 V, CE mark, UL	120Z0466

**Mounting kit**



**Miscellaneous accessories**

**Code no.**

Electronic soft start kit, MCI 15 C	7705006
Acoustic hood for 2 cylinder compressor	120Z0472
Oil equalisation nut	8153127

**Spare parts**

**Code no.**

Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts	8156001
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (black chloroprene)	8156145
Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp	8156134

- 1: Bolt (3x)  
2: Lock washer (3x)  
3: Flat washer (3x)  
4: Sleeve (3x)  
5: Grommet (3x)  
6: Nut (3x)

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ080-4

## Performance data at 50 Hz, EN 12900 rating conditions

## R407C

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-15	-10	-5	0	5	10	15	

### Cooling capacity in W

35	8 130	10 768	13 905	17 601	21 917	26 914	32 652	-	-
40	7 407	9 912	12 880	16 369	20 442	25 158	30 578	-	-
45	6 669	9 036	11 827	15 104	18 926	23 354	28 449	-	-
50	-	8 147	10 755	13 811	17 376	21 510	26 273	-	-
55	-	-	9 671	12 500	15 800	19 633	24 058	-	-
60	-	-	-	11 177	14 206	17 731	21 810	-	-
65	-	-	-	9 850	12 602	15 811	19 539	-	-

### Power input in W

35	3 837	4 234	4 566	4 839	5 061	5 239	5 378	-	-
40	3 980	4 453	4 856	5 196	5 481	5 717	5 910	-	-
45	4 080	4 637	5 119	5 535	5 891	6 193	6 448	-	-
50	-	4 782	5 353	5 852	6 286	6 663	6 989	-	-
55	-	-	5 552	6 143	6 665	7 125	7 529	-	-
60	-	-	-	6 405	7 022	7 573	8 065	-	-
65	-	-	-	6 634	7 355	8 006	8 592	-	-

### Current consumption in A

35	8.21	8.67	9.06	9.39	9.67	9.90	10.11	-	-
40	8.38	8.94	9.43	9.84	10.20	10.51	10.78	-	-
45	8.50	9.18	9.77	10.29	10.75	11.15	11.52	-	-
50	-	9.37	10.09	10.73	11.31	11.83	12.30	-	-
55	-	-	10.36	11.15	11.86	12.51	13.10	-	-
60	-	-	-	11.51	12.38	13.18	13.92	-	-
65	-	-	-	11.81	12.85	13.82	14.73	-	-

### Mass flow in kg/h

35	176	230	292	364	446	540	647	-	-
40	169	222	284	355	436	529	634	-	-
45	161	214	275	345	425	516	620	-	-
50	-	204	264	333	412	502	604	-	-
55	-	-	253	321	399	487	586	-	-
60	-	-	-	308	383	470	567	-	-
65	-	-	-	293	367	451	547	-	-

### Coefficient of performance (C.O.P.)

35	2.12	2.54	3.05	3.64	4.33	5.14	6.07	-	-
40	1.86	2.23	2.65	3.15	3.73	4.40	5.17	-	-
45	1.63	1.95	2.31	2.73	3.21	3.77	4.41	-	-
50	-	1.70	2.01	2.36	2.76	3.23	3.76	-	-
55	-	-	1.74	2.03	2.37	2.76	3.20	-	-
60	-	-	-	1.75	2.02	2.34	2.70	-	-
65	-	-	-	1.48	1.71	1.98	2.27	-	-

### Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	17 376	W
Power input	6 286	W
Current consumption	11.31	A
Mass flow	412	kg/h
C.O.P.	2.76	



to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

### Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

### Sound power data

Sound power level	82	dB(A)
With acoustic hood	76	dB(A)

All performance data +/- 5%

**Performance data at 50 Hz, ARI rating conditions**
**R407C**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-15	-10	-5	0	5	10	15	

**Cooling capacity in W**

35	8 751	11 576	14 930	18 878	23 481	28 805	34 911	-	-
40	8 016	10 713	13 901	17 646	22 009	27 055	32 848	-	-
45	7 264	9 826	12 843	16 377	20 493	25 256	30 729	-	-
50	-	8 924	11 761	15 079	18 942	23 415	28 561	-	-
55	-	-	10 666	13 761	17 364	21 541	26 354	-	-
60	-	-	-	12 432	15 769	19 643	24 119	-	-
65	-	-	-	11 100	14 166	17 733	21 867	-	-

**Power input in W**

35	3 837	4 234	4 566	4 839	5 061	5 239	5 378	-	-
40	3 980	4 453	4 856	5 196	5 481	5 717	5 910	-	-
45	4 080	4 637	5 119	5 535	5 891	6 193	6 448	-	-
50	-	4 782	5 353	5 852	6 286	6 663	6 989	-	-
55	-	-	5 552	6 143	6 665	7 125	7 529	-	-
60	-	-	-	6 405	7 022	7 573	8 065	-	-
65	-	-	-	6 634	7 355	8 006	8 592	-	-

**Current consumption in A**

35	8.21	8.67	9.06	9.39	9.67	9.90	10.11	-	-
40	8.38	8.94	9.43	9.84	10.20	10.51	10.78	-	-
45	8.50	9.18	9.77	10.29	10.75	11.15	11.52	-	-
50	-	9.37	10.09	10.73	11.31	11.83	12.30	-	-
55	-	-	10.36	11.15	11.86	12.51	13.10	-	-
60	-	-	-	11.51	12.38	13.18	13.92	-	-
65	-	-	-	11.81	12.85	13.82	14.73	-	-

**Mass flow in kg/h**

35	175	229	290	362	444	537	643	-	-
40	168	221	282	353	434	526	630	-	-
45	160	213	273	343	422	513	616	-	-
50	-	203	263	332	410	499	600	-	-
55	-	-	252	319	396	484	583	-	-
60	-	-	-	306	381	467	564	-	-
65	-	-	-	291	365	449	543	-	-

**Coefficient of performance (C.O.P.)**

35	2.28	2.73	3.27	3.90	4.64	5.50	6.49	-	-
40	2.01	2.41	2.86	3.40	4.02	4.73	5.56	-	-
45	1.78	2.12	2.51	2.96	3.48	4.08	4.77	-	-
50	-	1.87	2.20	2.58	3.01	3.51	4.09	-	-
55	-	-	1.92	2.24	2.61	3.02	3.50	-	-
60	-	-	-	1.94	2.25	2.59	2.99	-	-
65	-	-	-	1.67	1.93	2.22	2.55	-	-

**Nominal performance at to = 7.2 °C, tc = 54.4 °C**

Cooling capacity	19 333	W
Power input	6 825	W
Current consumption	12.08	A
Mass flow	435	kg/h
C.O.P.	2.83	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

**Pressure switch settings**

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)

**Sound power data**

Sound power level	82	dB(A)
With acoustic hood	76	dB(A)

All performance data +/- 5%

**Performance data at 50 Hz, EN 12900 rating conditions**
**R134a**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-15	-10	-5	0	5	10	15	20

**Cooling capacity in W**

35	5 041	6 798	8 952	11 562	14 682	18 368	22 678	27 668	-
40	4 586	6 253	8 293	10 763	13 718	17 215	21 311	26 061	-
45	4 127	5 702	7 625	9 952	12 740	16 044	19 922	24 430	-
50	3 669	5 148	6 951	9 133	11 750	14 860	18 517	22 779	-
55	3 215	4 596	6 275	8 309	10 753	13 664	17 099	21 112	-
60	-	4 049	5 603	7 485	9 753	12 463	15 671	19 433	-
65	-	-	-	6 664	8 753	11 259	14 238	17 746	-
70	-	-	-	-	-	10 056	12 803	16 054	-

**Power input in W**

35	2 501	2 763	3 002	3 219	3 414	3 588	3 740	3 873	-
40	2 544	2 842	3 117	3 368	3 598	3 806	3 992	4 157	-
45	2 590	2 929	3 244	3 535	3 804	4 050	4 275	4 478	-
50	2 627	3 011	3 370	3 706	4 019	4 309	4 576	4 822	-
55	2 641	3 075	3 484	3 869	4 230	4 568	4 883	5 176	-
60	-	3 108	3 571	4 010	4 424	4 815	5 182	5 527	-
65	-	-	-	4 116	4 589	5 037	5 461	5 863	-
70	-	-	-	-	-	5 220	5 707	6 170	-

**Current consumption in A**

35	6.72	6.98	7.25	7.52	7.75	7.95	8.10	8.17	-
40	6.82	7.11	7.40	7.70	7.97	8.21	8.39	8.51	-
45	6.90	7.22	7.55	7.89	8.20	8.49	8.72	8.89	-
50	6.94	7.31	7.69	8.07	8.44	8.78	9.08	9.32	-
55	6.94	7.36	7.80	8.25	8.68	9.09	9.46	9.77	-
60	-	7.37	7.88	8.39	8.90	9.39	9.84	10.24	-
65	-	-	-	8.51	9.10	9.68	10.22	10.72	-
70	-	-	-	-	-	9.94	10.59	11.19	-

**Mass flow in kg/h**

35	122	162	209	264	328	402	488	586	-
40	117	157	203	258	321	395	480	577	-
45	112	151	197	251	314	387	471	567	-
50	105	144	190	243	306	378	462	557	-
55	99	137	182	235	297	369	451	545	-
60	-	129	174	226	287	358	439	532	-
65	-	-	-	216	277	346	427	518	-
70	-	-	-	-	-	334	413	503	-

**Coefficient of performance (C.O.P.)**

35	2.02	2.46	2.98	3.59	4.30	5.12	6.06	7.14	-
40	1.80	2.20	2.66	3.20	3.81	4.52	5.34	6.27	-
45	1.59	1.95	2.35	2.82	3.35	3.96	4.66	5.46	-
50	1.40	1.71	2.06	2.46	2.92	3.45	4.05	4.72	-
55	1.22	1.49	1.80	2.15	2.54	2.99	3.50	4.08	-
60	-	1.30	1.57	1.87	2.20	2.59	3.02	3.52	-
65	-	-	-	1.62	1.91	2.24	2.61	3.03	-
70	-	-	-	-	-	1.93	2.24	2.60	-

**Nominal performance at to = 5 °C, tc = 50 °C**

Cooling capacity	11 750	W
Power input	4 019	W
Current consumption	8.44	A
Mass flow	306	kg/h
C.O.P.	2.92	

**Pressure switch settings**

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

**Sound power data**

Sound power level	0	dB(A)
With acoustic hood	0	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

All performance data +/- 5%

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss, the Danfoss logotype and Maneurop are trademarks of Danfoss A/S. All rights reserved.

**Performance data at 50 Hz, ARI rating conditions**
**R134a**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-15	-10	-5	0	5	10	15	20

**Cooling capacity in W**

35	5 460	7 350	9 664	12 461	15 801	19 740	24 339	29 654	-
40	4 994	6 796	8 998	11 657	14 833	18 586	22 972	28 052	-
45	4 522	6 234	8 320	10 839	13 849	17 411	21 583	26 424	-
50	4 049	5 668	7 635	10 010	12 852	16 221	20 176	24 775	-
55	3 578	5 101	6 947	9 175	11 846	15 019	18 754	23 110	-
60	-	4 538	6 259	8 338	10 836	13 811	17 324	21 434	-
65	-	-	-	7 504	9 825	12 600	15 889	19 752	-
70	-	-	-	-	-	11 393	14 456	18 071	-

**Power input in W**

35	2 501	2 763	3 002	3 219	3 414	3 588	3 740	3 873	-
40	2 544	2 842	3 117	3 368	3 598	3 806	3 992	4 157	-
45	2 590	2 929	3 244	3 535	3 804	4 050	4 275	4 478	-
50	2 627	3 011	3 370	3 706	4 019	4 309	4 576	4 822	-
55	2 641	3 075	3 484	3 869	4 230	4 568	4 883	5 176	-
60	-	3 108	3 571	4 010	4 424	4 815	5 182	5 527	-
65	-	-	-	4 116	4 589	5 037	5 461	5 863	-
70	-	-	-	-	-	5 220	5 707	6 170	-

**Current consumption in A**

35	6.72	6.98	7.25	7.52	7.75	7.95	8.10	8.17	-
40	6.82	7.11	7.40	7.70	7.97	8.21	8.39	8.51	-
45	6.90	7.22	7.55	7.89	8.20	8.49	8.72	8.89	-
50	6.94	7.31	7.69	8.07	8.44	8.78	9.08	9.32	-
55	6.94	7.36	7.80	8.25	8.68	9.09	9.46	9.77	-
60	-	7.37	7.88	8.39	8.90	9.39	9.84	10.24	-
65	-	-	-	8.51	9.10	9.68	10.22	10.72	-
70	-	-	-	-	-	9.94	10.59	11.19	-

**Mass flow in kg/h**

35	122	161	208	262	326	400	485	582	-
40	117	156	202	256	320	393	477	574	-
45	111	150	196	250	312	385	469	564	-
50	105	143	189	242	304	376	459	553	-
55	98	136	181	234	296	367	448	542	-
60	-	129	173	225	286	356	437	529	-
65	-	-	-	215	275	345	424	515	-
70	-	-	-	-	-	332	411	500	-

**Coefficient of performance (C.O.P.)**

35	2.18	2.66	3.22	3.87	4.63	5.50	6.51	7.66	-
40	1.96	2.39	2.89	3.46	4.12	4.88	5.75	6.75	-
45	1.75	2.13	2.57	3.07	3.64	4.30	5.05	5.90	-
50	1.54	1.88	2.27	2.70	3.20	3.76	4.41	5.14	-
55	1.35	1.66	1.99	2.37	2.80	3.29	3.84	4.46	-
60	-	1.46	1.75	2.08	2.45	2.87	3.34	3.88	-
65	-	-	-	1.82	2.14	2.50	2.91	3.37	-
70	-	-	-	-	-	2.18	2.53	2.93	-

**Nominal performance at to = 7.2 °C, tc = 54.4 °C**

Cooling capacity	13 308	W
Power input	4 354	W
Current consumption	8.83	A
Mass flow	327	kg/h
C.O.P.	3.06	

**Pressure switch settings**

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

**Sound power data**

Sound power level	0	dB(A)
With acoustic hood	0	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss, the Danfoss logotype and Maneurop are trademarks of Danfoss A/S. All rights reserved.

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ080-4

## Performance data at 50 Hz, EN 12900 rating conditions

## R404A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

### Cooling capacity in W

30	4 896	6 633	8 753	11 303	14 335	17 897	22 039	26 809	32 258
35	4 294	5 905	7 863	10 219	13 021	16 318	20 161	24 597	29 678
40	3 722	5 206	7 003	9 162	11 733	14 765	18 307	22 410	27 121
45	3 175	4 531	6 165	8 127	10 466	13 232	16 473	20 240	24 581
50	2 646	3 873	5 344	7 108	9 215	11 713	14 653	18 083	22 053
55	-	3 227	4 534	6 099	7 972	10 202	12 839	15 932	19 530
60	-	2 587	3 728	5 094	6 732	8 693	11 027	13 782	17 007

### Power input in W

30	3 159	3 667	4 129	4 552	4 941	5 301	5 637	5 953	6 257
35	3 181	3 745	4 261	4 733	5 167	5 568	5 941	6 291	6 624
40	3 179	3 806	4 380	4 906	5 391	5 838	6 254	6 643	7 010
45	3 151	3 845	4 483	5 069	5 609	6 108	6 572	7 005	7 413
50	3 093	3 859	4 566	5 217	5 819	6 375	6 892	7 375	7 828
55	-	3 846	4 627	5 348	6 016	6 635	7 211	7 748	8 252
60	-	3 800	4 661	5 458	6 198	6 885	7 524	8 121	8 681

### Current consumption in A

30	7.26	7.77	8.29	8.82	9.33	9.81	10.23	10.60	10.88
35	7.25	7.83	8.42	9.02	9.60	10.14	10.64	11.07	11.41
40	7.24	7.89	8.57	9.24	9.89	10.51	11.08	11.58	12.00
45	7.21	7.95	8.71	9.46	10.20	10.90	11.54	12.12	12.62
50	7.16	7.99	8.83	9.68	10.50	11.28	12.02	12.68	13.26
55	-	7.99	8.93	9.86	10.78	11.66	12.48	13.24	13.90
60	-	7.93	8.97	10.01	11.02	12.00	12.92	13.77	14.54

### Mass flow in kg/h

30	154	204	263	330	409	499	601	717	849
35	145	195	253	319	396	484	585	699	827
40	137	186	242	308	384	470	569	681	807
45	128	176	232	297	371	456	553	662	786
50	119	167	222	285	358	442	537	644	766
55	-	156	211	274	345	427	521	626	745
60	-	146	200	262	332	413	505	608	725

### Coefficient of performance (C.O.P.)

30	1.55	1.81	2.12	2.48	2.90	3.38	3.91	4.50	5.16
35	1.35	1.58	1.85	2.16	2.52	2.93	3.39	3.91	4.48
40	1.17	1.37	1.60	1.87	2.18	2.53	2.93	3.37	3.87
45	1.01	1.18	1.38	1.60	1.87	2.17	2.51	2.89	3.32
50	0.86	1.00	1.17	1.36	1.58	1.84	2.13	2.45	2.82
55	-	0.84	0.98	1.14	1.33	1.54	1.78	2.06	2.37
60	-	0.68	0.80	0.93	1.09	1.26	1.47	1.70	1.96

### Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	10 466	W
Power input	5 609	W
Current consumption	10.20	A
Mass flow	371	kg/h
C.O.P.	1.87	



to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

### Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

### Sound power data

Sound power level	79	dB(A)
With acoustic hood	73	dB(A)

All performance data +/- 5%



**Performance data at 50 Hz, ARI rating conditions**
**R404A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

30	5 450	7 364	9 692	12 486	15 798	19 681	24 185	29 363	35 265
35	4 831	6 623	8 793	11 395	14 480	18 102	22 311	27 160	32 701
40	4 243	5 912	7 925	10 334	13 192	16 553	20 468	24 989	30 169
45	3 680	5 227	7 082	9 299	11 931	15 030	18 651	22 846	27 667
50	3 134	4 562	6 260	8 285	10 692	13 532	16 861	20 732	25 197
55	-	3 911	5 456	7 292	9 476	12 061	15 103	18 654	22 770
60	-	3 271	4 669	6 323	8 291	10 629	13 392	16 636	20 416

**Power input in W**

30	3 159	3 667	4 129	4 552	4 941	5 301	5 637	5 953	6 257
35	3 181	3 745	4 261	4 733	5 167	5 568	5 941	6 291	6 624
40	3 179	3 806	4 380	4 906	5 391	5 838	6 254	6 643	7 010
45	3 151	3 845	4 483	5 069	5 609	6 108	6 572	7 005	7 413
50	3 093	3 859	4 566	5 217	5 819	6 375	6 892	7 375	7 828
55	-	3 846	4 627	5 348	6 016	6 635	7 211	7 748	8 252
60	-	3 800	4 661	5 458	6 198	6 885	7 524	8 121	8 681

**Current consumption in A**

30	7.26	7.77	8.29	8.82	9.33	9.81	10.23	10.60	10.88
35	7.25	7.83	8.42	9.02	9.60	10.14	10.64	11.07	11.41
40	7.24	7.89	8.57	9.24	9.89	10.51	11.08	11.58	12.00
45	7.21	7.95	8.71	9.46	10.20	10.90	11.54	12.12	12.62
50	7.16	7.99	8.83	9.68	10.50	11.28	12.02	12.68	13.26
55	-	7.99	8.93	9.86	10.78	11.66	12.48	13.24	13.90
60	-	7.93	8.97	10.01	11.02	12.00	12.92	13.77	14.54

**Mass flow in kg/h**

30	153	203	261	328	406	496	597	713	843
35	145	194	251	317	394	481	581	694	822
40	136	185	241	306	381	467	565	676	801
45	127	175	231	295	369	453	549	658	781
50	118	166	221	284	356	439	533	640	760
55	-	156	210	272	343	425	517	622	740
60	-	145	199	260	330	410	501	604	720

**Coefficient of performance (C.O.P.)**

30	1.73	2.01	2.35	2.74	3.20	3.71	4.29	4.93	5.64
35	1.52	1.77	2.06	2.41	2.80	3.25	3.76	4.32	4.94
40	1.33	1.55	1.81	2.11	2.45	2.84	3.27	3.76	4.30
45	1.17	1.36	1.58	1.83	2.13	2.46	2.84	3.26	3.73
50	1.01	1.18	1.37	1.59	1.84	2.12	2.45	2.81	3.22
55	-	1.02	1.18	1.36	1.58	1.82	2.09	2.41	2.76
60	-	0.86	1.00	1.16	1.34	1.54	1.78	2.05	2.35

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	11 931	W
Power input	5 609	W
Current consumption	10.20	A
Mass flow	369	kg/h
C.O.P.	2.13	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

**Sound power data**

Sound power level	79	dB(A)
With acoustic hood	73	dB(A)

All performance data +/- 5%

