

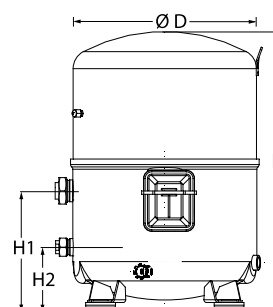
Datasheets

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



General Characteristics

Model number (on compressor nameplate)		MTZ100HS4VE
Code number for Singlepack*		MTZ100-4VI
Code number for Industrial pack**		MTZ100-4VM
Drawing number		8504010f
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	4	
Swept volume	171.26 cm ³ /rev	
Displacement @ Nominal speed	29.8 m ³ /h @ 2900 rpm - 36.0 m ³ /h @ 3500 rpm	
Net weight	60 kg	
Oil charge	3.9 litre, POE - 175PZ	
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	10 kg	
Approved refrigerants	R404A, R134a, R407C, R407A/F, R448A, R449A, R452A	

Dimensions


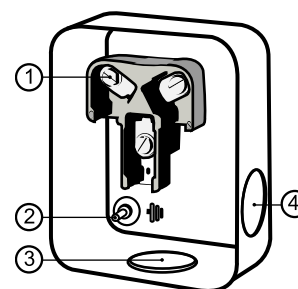
D=352 mm

H=519 mm

H1=233 mm

H2=125 mm

H3=- mm

Terminal box


IP54 (with cable gland)

1: Screw connectors 10-32 UNF x 9.5

2: Earth M4-12

3: Knock-out Ø 29 mm (1.14")

4: Knock-out Ø 25.5 mm (1.00")

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	1.85 Ω
Maximum Continuous Current (MCC)	22 A
Locked Rotor Amps (LRA)	90 A
Motor protection	Internal overload protector

Recommended Installation torques

Oil sight glass	50 Nm
Power connections / Earth connection	3 Nm / 2 Nm
Mounting bolts	50 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.

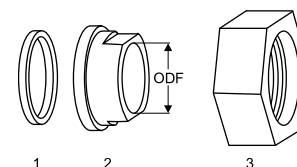
Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

Gaskets, sleeves and nuts

Rotolock accessories, discharge side

Code no.

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



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

Rotolock accessories, sets

Code no.

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, 175PZ, 1 litre can	120Z0638
POE lubricant, 175PZ, 2.5 litre can	120Z0639

Crankcase heaters

Code no.

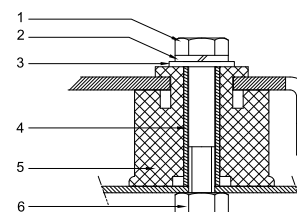
PTC heater 27W, CE mark, UL	120Z0459
Belt type crankcase heater, 75 W, 230 V, CE mark, UL	7773108
Belt type crankcase heater, 75 W, 400 V, CE mark, UL	7773118
Belt type crankcase heater, 75 W, 460 V, CE mark, UL	120Z0464

Mounting kit

Miscellaneous accessories

Code no.

Electronic soft start kit, MCI 25 C	7705007
Soft start kit with statoric resistors, prewired box, SCR03	7705001
Acoustic hood for 4 cylinder compressor	120Z0473
Oil equalisation nut	8153127



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

Spare parts

Code no.

Mounting kit for 4 cylinder compressor & MS, including 4 grommets, 4 bolts	8156007
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (black chloroprene)	8156145
Service kit for terminal box 96 x 115 mm, including 1 cover, 1 clamp	8156135
T block connector 52 x 57 mm	8173230

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

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	9 186	12 506	16 495	21 229	26 784	33 239	40 670	-	-
40	8 185	11 303	15 045	19 488	24 708	30 783	37 790	-	-
45	7 201	10 105	13 588	17 729	22 602	28 287	34 858	-	-
50	-	8 927	12 141	15 968	20 484	25 766	31 891	-	-
55	-	-	10 720	14 221	18 368	23 237	28 904	-	-
60	-	-	-	12 506	16 273	20 717	25 915	-	-
65	-	-	-	10 839	14 213	18 221	22 940	-	-

Power input in W

35	4 578	5 036	5 412	5 720	5 973	6 184	6 366	-	-
40	4 724	5 279	5 743	6 129	6 449	6 719	6 949	-	-
45	4 805	5 472	6 038	6 517	6 920	7 263	7 557	-	-
50	-	5 605	6 289	6 875	7 377	7 808	8 181	-	-
55	-	-	6 486	7 194	7 809	8 344	8 810	-	-
60	-	-	-	7 466	8 209	8 862	9 437	-	-
65	-	-	-	7 682	8 568	9 353	10 053	-	-

Current consumption in A

35	9.96	10.40	10.81	11.16	11.44	11.63	11.69	-	-
40	10.08	10.62	11.13	11.59	11.96	12.24	12.41	-	-
45	10.15	10.81	11.44	12.01	12.50	12.90	13.18	-	-
50	-	10.94	11.71	12.42	13.05	13.58	14.00	-	-
55	-	-	11.93	12.79	13.58	14.27	14.84	-	-
60	-	-	-	13.12	14.08	14.94	15.68	-	-
65	-	-	-	13.38	14.54	15.59	16.52	-	-

Mass flow in kg/h

35	200	267	347	439	545	667	806	-	-
40	187	254	332	423	527	647	784	-	-
45	174	239	316	405	508	626	760	-	-
50	-	224	299	386	486	602	733	-	-
55	-	-	281	366	464	576	705	-	-
60	-	-	-	345	440	549	674	-	-
65	-	-	-	323	415	521	642	-	-

Coefficient of performance (C.O.P.)

35	2.01	2.48	3.05	3.71	4.48	5.38	6.39	-	-
40	1.73	2.14	2.62	3.18	3.83	4.58	5.44	-	-
45	1.50	1.85	2.25	2.72	3.27	3.89	4.61	-	-
50	-	1.59	1.93	2.32	2.78	3.30	3.90	-	-
55	-	-	1.65	1.98	2.35	2.79	3.28	-	-
60	-	-	-	1.68	1.98	2.34	2.75	-	-
65	-	-	-	1.41	1.66	1.95	2.28	-	-

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

Cooling capacity	20 484	W
Power input	7 377	W
Current consumption	13.05	A
Mass flow	486	kg/h
C.O.P.	2.78	



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	1.4	bar(g)
LP pump down setting	1.7	bar(g)

Sound power data

Sound power level	87	dB(A)
With acoustic hood	81	dB(A)

Tolerance according EN12900

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	9 887	13 445	17 712	22 769	28 696	35 574	43 484	-	-
40	8 859	12 216	16 239	21 007	26 602	33 105	40 596	-	-
45	7 843	10 988	14 755	19 223	24 475	30 590	37 651	-	-
50	-	9 779	13 277	17 434	22 330	28 048	34 668	-	-
55	-	-	11 824	15 657	20 187	25 495	31 664	-	-
60	-	-	-	13 910	18 062	22 951	28 658	-	-
65	-	-	-	12 215	15 978	20 436	25 673	-	-

Power input in W

35	4 578	5 036	5 412	5 720	5 973	6 184	6 366	-	-
40	4 724	5 279	5 743	6 129	6 449	6 719	6 949	-	-
45	4 805	5 472	6 038	6 517	6 920	7 263	7 557	-	-
50	-	5 605	6 289	6 875	7 377	7 808	8 181	-	-
55	-	-	6 486	7 194	7 809	8 344	8 810	-	-
60	-	-	-	7 466	8 209	8 862	9 437	-	-
65	-	-	-	7 682	8 568	9 353	10 053	-	-

Current consumption in A

35	9.96	10.40	10.81	11.16	11.44	11.63	11.69	-	-
40	10.08	10.62	11.13	11.59	11.96	12.24	12.41	-	-
45	10.15	10.81	11.44	12.01	12.50	12.90	13.18	-	-
50	-	10.94	11.71	12.42	13.05	13.58	14.00	-	-
55	-	-	11.93	12.79	13.58	14.27	14.84	-	-
60	-	-	-	13.12	14.08	14.94	15.68	-	-
65	-	-	-	13.38	14.54	15.59	16.52	-	-

Mass flow in kg/h

35	199	266	345	436	542	663	801	-	-
40	186	252	330	420	524	644	779	-	-
45	173	238	314	403	505	622	755	-	-
50	-	223	297	384	484	598	729	-	-
55	-	-	280	364	461	573	700	-	-
60	-	-	-	343	437	546	670	-	-
65	-	-	-	321	412	518	638	-	-

Coefficient of performance (C.O.P.)

35	2.16	2.67	3.27	3.98	4.80	5.75	6.83	-	-
40	1.88	2.31	2.83	3.43	4.12	4.93	5.84	-	-
45	1.63	2.01	2.44	2.95	3.54	4.21	4.98	-	-
50	-	1.74	2.11	2.54	3.03	3.59	4.24	-	-
55	-	-	1.82	2.18	2.58	3.06	3.59	-	-
60	-	-	-	1.86	2.20	2.59	3.04	-	-
65	-	-	-	1.59	1.86	2.18	2.55	-	-

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

Cooling capacity	22 699	W
Power input	7 997	W
Current consumption	13.83	A
Mass flow	511	kg/h
C.O.P.	2.84	

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	1.4	bar(g)
LP pump down setting	1.7	bar(g)

Sound power data

Sound power level	87	dB(A)
With acoustic hood	81	dB(A)

Tolerance according EN12900

Performance data at 50 Hz, EN 12900 rating conditions
R134a

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

Cooling capacity in W

35	2 843	4 175	7 996	10 611	13 779	17 565	22 032	27 243	33 261
40	2 461	3 722	7 307	9 757	12 730	16 290	20 499	25 421	31 119
45	2 082	3 271	6 617	8 902	11 678	15 010	18 960	23 592	28 969
50	1 711	2 825	5 931	8 048	10 627	13 729	17 419	21 760	26 815
55	-	-	5 252	7 201	9 580	12 452	15 880	19 929	24 661
60	-	-	-	6 363	8 542	11 182	14 348	18 103	22 510
65	-	-	-	-	7 516	9 924	12 826	16 286	20 367
75	-	-	-	-	-	-	9 829	12 695	16 120

Power input in W

35	2 336	2 699	3 384	3 675	3 912	4 080	4 162	4 143	4 008
40	2 407	2 785	3 524	3 854	4 137	4 357	4 500	4 549	4 490
45	2 443	2 842	3 645	4 018	4 351	4 630	4 838	4 960	4 981
50	2 443	2 868	3 744	4 165	4 554	4 895	5 173	5 374	5 480
55	-	-	3 818	4 291	4 741	5 150	5 504	5 787	5 983
60	-	-	-	4 395	4 909	5 391	5 825	6 196	6 488
65	-	-	-	-	5 057	5 616	6 135	6 599	6 991
75	-	-	-	-	-	-	6 710	7 373	7 980

Current consumption in A

35	7.67	7.97	8.52	8.75	8.94	9.09	9.16	9.17	9.08
40	7.67	7.99	8.60	8.88	9.13	9.33	9.48	9.56	9.57
45	7.65	7.98	8.67	9.00	9.31	9.58	9.81	9.98	10.08
50	7.59	7.96	8.73	9.12	9.49	9.84	10.15	10.41	10.61
55	-	-	8.78	9.23	9.68	10.10	10.50	10.86	11.16
60	-	-	-	9.34	9.86	10.37	10.86	11.32	11.74
65	-	-	-	-	10.04	10.64	11.23	11.80	12.33
75	-	-	-	-	-	-	11.99	12.79	13.58

Mass flow in kg/h

35	72	104	190	247	313	392	482	586	705
40	66	98	183	239	304	381	470	573	690
45	59	91	175	229	294	370	457	558	673
50	52	83	166	220	283	357	443	542	656
55	-	-	156	209	271	344	428	525	637
60	-	-	-	197	258	329	412	507	616
65	-	-	-	-	244	314	395	488	595
75	-	-	-	-	-	-	356	445	547

Coefficient of performance (C.O.P.)

35	1.22	1.55	2.36	2.89	3.52	4.31	5.29	6.58	8.30
40	1.02	1.34	2.07	2.53	3.08	3.74	4.56	5.59	6.93
45	0.85	1.15	1.82	2.22	2.68	3.24	3.92	4.76	5.82
50	0.70	0.99	1.58	1.93	2.33	2.80	3.37	4.05	4.89
55	-	-	1.38	1.68	2.02	2.42	2.89	3.44	4.12
60	-	-	-	1.45	1.74	2.07	2.46	2.92	3.47
65	-	-	-	-	1.49	1.77	2.09	2.47	2.91
75	-	-	-	-	-	-	1.46	1.72	2.02

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

Cooling capacity	13 729	W
Power input	4 895	W
Current consumption	9.84	A
Mass flow	357	kg/h
C.O.P.	2.80	

Pressure switch settings

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	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

Tolerance according EN12900

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 subsequent 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. MTZ100-4

Performance data at 50 Hz, ARI rating conditions

R134a

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

Cooling capacity in W

35	3 090	4 530	8 646	11 454	14 852	18 904	23 678	29 237	35 649
40	2 691	4 062	7 942	10 586	13 788	17 614	22 130	27 403	33 497
45	2 292	3 592	7 236	9 714	12 719	16 317	20 575	25 559	31 334
50	-	3 126	6 530	8 841	11 647	15 017	19 015	23 709	29 165
55	-	-	5 829	7 971	10 578	13 717	17 455	21 859	26 994
60	-	-	-	7 109	9 516	12 423	15 900	20 012	24 827
65	-	-	-	-	-	11 139	14 354	18 175	22 669
75	-	-	-	-	-	-	11 310	14 550	18 407

Power input in W

35	2 336	2 699	3 384	3 675	3 912	4 080	4 162	4 143	4 008
40	2 407	2 785	3 524	3 854	4 137	4 357	4 500	4 549	4 490
45	2 443	2 842	3 645	4 018	4 351	4 630	4 838	4 960	4 981
50	-	2 868	3 744	4 165	4 554	4 895	5 173	5 374	5 480
55	-	-	3 818	4 291	4 741	5 150	5 504	5 787	5 983
60	-	-	-	4 395	4 909	5 391	5 825	6 196	6 488
65	-	-	-	-	-	5 616	6 135	6 599	6 991
75	-	-	-	-	-	-	6 710	7 373	7 980

Current consumption in A

35	7.67	7.97	8.52	8.75	8.94	9.09	9.16	9.17	9.08
40	7.67	7.99	8.60	8.88	9.13	9.33	9.48	9.56	9.57
45	7.65	7.98	8.67	9.00	9.31	9.58	9.81	9.98	10.08
50	-	7.96	8.73	9.12	9.49	9.84	10.15	10.41	10.61
55	-	-	8.78	9.23	9.68	10.10	10.50	10.86	11.16
60	-	-	-	9.34	9.86	10.37	10.86	11.32	11.74
65	-	-	-	-	-	10.64	11.23	11.80	12.33
75	-	-	-	-	-	-	11.99	12.79	13.58

Mass flow in kg/h

35	72	104	189	246	312	390	480	583	701
40	66	97	182	237	303	379	468	570	686
45	59	90	174	228	293	368	455	555	670
50	-	83	165	219	282	355	441	539	652
55	-	-	156	208	270	342	426	523	633
60	-	-	-	196	257	328	410	504	613
65	-	-	-	-	-	312	393	485	591
75	-	-	-	-	-	-	354	443	544

Coefficient of performance (C.O.P.)

35	1.32	1.68	2.56	3.12	3.80	4.63	5.69	7.06	8.89
40	1.12	1.46	2.25	2.75	3.33	4.04	4.92	6.02	7.46
45	0.94	1.26	1.99	2.42	2.92	3.52	4.25	5.15	6.29
50	-	1.09	1.74	2.12	2.56	3.07	3.68	4.41	5.32
55	-	-	1.53	1.86	2.23	2.66	3.17	3.78	4.51
60	-	-	-	1.62	1.94	2.30	2.73	3.23	3.83
65	-	-	-	-	-	1.98	2.34	2.75	3.24
75	-	-	-	-	-	-	1.69	1.97	2.31

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

Cooling capacity	15 453	W
Power input	5 279	W
Current consumption	10.24	A
Mass flow	379	kg/h
C.O.P.	2.93	

Pressure switch settings

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

Sound power data

Sound power level	0	dB(A)
With accoustic 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

Tolerance according EN12900

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. MTZ100-4

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	5 175	7 247	9 826	12 976	16 759	21 239	26 480	32 545	39 497
35	4 560	6 501	8 892	11 797	15 279	19 402	24 229	29 823	36 248
40	3 917	5 730	7 937	10 602	13 787	17 556	21 973	27 101	33 003
45	3 242	4 932	6 959	9 387	12 279	15 698	19 709	24 373	29 756
50	2 532	4 102	5 953	8 148	10 751	13 824	17 432	21 638	26 505
55	-	3 238	4 916	6 883	9 200	11 931	15 140	18 891	23 246
60	-	2 336	3 846	5 587	7 622	10 015	12 829	16 129	19 976

Power input in W

30	3 997	4 532	5 003	5 409	5 750	6 025	6 233	6 374	6 447
35	4 062	4 676	5 223	5 704	6 117	6 461	6 736	6 942	7 077
40	4 069	4 769	5 401	5 963	6 456	6 877	7 227	7 505	7 710
45	4 008	4 802	5 526	6 178	6 758	7 265	7 697	8 055	8 338
50	3 869	4 766	5 590	6 340	7 015	7 614	8 137	8 583	8 951
55	-	4 653	5 584	6 439	7 217	7 917	8 538	9 079	9 541
60	-	4 452	5 499	6 467	7 355	8 163	8 890	9 535	10 098

Current consumption in A

30	9.31	9.80	10.28	10.72	11.12	11.45	11.70	11.84	11.87
35	9.35	9.91	10.47	11.00	11.47	11.89	12.22	12.45	12.57
40	9.34	10.00	10.65	11.27	11.85	12.36	12.79	13.12	13.33
45	9.27	10.04	10.79	11.52	12.21	12.83	13.37	13.81	14.14
50	9.11	9.99	10.87	11.72	12.53	13.27	13.93	14.50	14.95
55	-	9.84	10.85	11.83	12.77	13.65	14.46	15.16	15.75
60	-	9.55	10.71	11.84	12.93	13.96	14.91	15.76	16.50

Mass flow in kg/h

30	163	223	294	379	477	592	724	875	1 047
35	154	215	285	368	464	575	703	848	1 013
40	144	204	275	356	450	558	682	822	981
45	130	192	262	343	435	540	660	796	950
50	113	176	247	327	418	521	638	770	918
55	-	157	229	309	399	500	614	742	886
60	-	132	206	286	376	476	587	712	852

Coefficient of performance (C.O.P.)

30	1.29	1.60	1.96	2.40	2.91	3.53	4.25	5.11	6.13
35	1.12	1.39	1.70	2.07	2.50	3.00	3.60	4.30	5.12
40	0.96	1.20	1.47	1.78	2.14	2.55	3.04	3.61	4.28
45	0.81	1.03	1.26	1.52	1.82	2.16	2.56	3.03	3.57
50	0.65	0.86	1.06	1.29	1.53	1.82	2.14	2.52	2.96
55	-	0.70	0.88	1.07	1.27	1.51	1.77	2.08	2.44
60	-	0.52	0.70	0.86	1.04	1.23	1.44	1.69	1.98

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

Cooling capacity	12 279	W
Power input	6 758	W
Current consumption	12.21	A
Mass flow	435	kg/h
C.O.P.	1.82	



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	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	85	dB(A)
With acoustic hood	79	dB(A)

Tolerance according EN12900

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	5 761	8 046	10 881	14 333	18 469	23 356	29 059	35 644	43 177
35	5 131	7 291	9 943	13 154	16 992	21 523	26 814	32 931	39 941
40	4 465	6 507	8 982	11 958	15 502	19 682	24 566	30 220	36 712
45	3 757	5 690	7 994	10 740	13 996	17 832	22 314	27 511	33 491
50	2 999	4 831	6 973	9 498	12 474	15 971	20 060	24 808	30 283
55	-	3 924	5 916	8 229	10 935	14 105	17 810	22 119	27 102
60	-	2 953	4 816	6 935	9 386	12 245	15 582	19 470	23 979

Power input in W

30	3 997	4 532	5 003	5 409	5 750	6 025	6 233	6 374	6 447
35	4 062	4 676	5 223	5 704	6 117	6 461	6 736	6 942	7 077
40	4 069	4 769	5 401	5 963	6 456	6 877	7 227	7 505	7 710
45	4 008	4 802	5 526	6 178	6 758	7 265	7 697	8 055	8 338
50	3 869	4 766	5 590	6 340	7 015	7 614	8 137	8 583	8 951
55	-	4 653	5 584	6 439	7 217	7 917	8 538	9 079	9 541
60	-	4 452	5 499	6 467	7 355	8 163	8 890	9 535	10 098

Current consumption in A

30	9.31	9.80	10.28	10.72	11.12	11.45	11.70	11.84	11.87
35	9.35	9.91	10.47	11.00	11.47	11.89	12.22	12.45	12.57
40	9.34	10.00	10.65	11.27	11.85	12.36	12.79	13.12	13.33
45	9.27	10.04	10.79	11.52	12.21	12.83	13.37	13.81	14.14
50	9.11	9.99	10.87	11.72	12.53	13.27	13.93	14.50	14.95
55	-	9.84	10.85	11.83	12.77	13.65	14.46	15.16	15.75
60	-	9.55	10.71	11.84	12.93	13.96	14.91	15.76	16.50

Mass flow in kg/h

30	162	222	293	376	474	588	720	869	1 039
35	154	213	284	366	461	571	698	843	1 006
40	143	203	273	354	447	555	677	817	974
45	129	191	261	341	433	537	656	791	943
50	112	175	246	326	416	518	634	765	912
55	-	156	227	307	396	497	610	737	880
60	-	131	204	285	374	473	584	707	846

Coefficient of performance (C.O.P.)

30	1.44	1.78	2.18	2.65	3.21	3.88	4.66	5.59	6.70
35	1.26	1.56	1.90	2.31	2.78	3.33	3.98	4.74	5.64
40	1.10	1.36	1.66	2.01	2.40	2.86	3.40	4.03	4.76
45	0.94	1.18	1.45	1.74	2.07	2.45	2.90	3.42	4.02
50	0.78	1.01	1.25	1.50	1.78	2.10	2.47	2.89	3.38
55	-	0.84	1.06	1.28	1.52	1.78	2.09	2.44	2.84
60	-	0.66	0.88	1.07	1.28	1.50	1.75	2.04	2.37

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

Cooling capacity	13 996	W
Power input	6 758	W
Current consumption	12.21	A
Mass flow	433	kg/h
C.O.P.	2.07	

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	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	85	dB(A)
With acoustic hood	79	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 50 Hz, EN 12900 rating conditions

R407A

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

Cooling capacity in W

30	3 851	5 799	8 207	11 140	14 660	18 830	23 714	29 376	35 877
35	3 323	5 187	7 471	10 239	13 554	17 480	22 079	27 416	33 552
40	2 761	4 536	6 692	9 291	12 398	16 074	20 384	25 391	31 158
45	2 173	3 855	5 878	8 304	11 197	14 620	18 636	23 309	28 702
50	-	3 151	5 037	7 285	9 960	13 126	16 844	21 179	26 193
55	-	-	4 176	6 242	8 695	11 598	15 014	19 006	23 638
60	-	-	-	5 183	7 410	10 046	13 155	16 800	21 044

Power input in W

30	3 048	3 620	4 131	4 579	4 960	5 271	5 509	5 671	5 753
35	3 031	3 679	4 267	4 793	5 252	5 642	5 959	6 201	6 364
40	2 959	3 689	4 361	4 970	5 513	5 988	6 391	6 719	6 969
45	2 825	3 644	4 405	5 105	5 739	6 305	6 800	7 221	7 564
50	-	3 539	4 396	5 191	5 923	6 587	7 180	7 700	8 142
55	-	-	4 326	5 225	6 060	6 828	7 526	8 150	8 699
60	-	-	-	5 199	6 143	7 022	7 831	8 567	9 227

Current consumption in A

30	8.34	8.82	9.30	9.76	10.18	10.53	10.81	10.98	11.03
35	8.35	8.88	9.41	9.94	10.43	10.87	11.24	11.51	11.67
40	8.34	8.92	9.53	10.13	10.71	11.25	11.72	12.10	12.38
45	8.27	8.93	9.61	10.30	10.98	11.62	12.21	12.72	13.13
50	-	8.85	9.63	10.42	11.21	11.97	12.69	13.33	13.89
55	-	-	9.55	10.46	11.37	12.26	13.12	13.91	14.63
60	-	-	-	10.38	11.42	12.46	13.47	14.42	15.31

Mass flow in kg/h

30	92	136	188	250	323	408	506	619	746
35	83	128	180	242	315	398	495	605	731
40	73	118	171	232	304	386	482	590	713
45	62	107	159	220	291	372	466	572	693
50	-	94	146	206	276	356	448	552	671
55	-	-	130	190	259	337	427	530	646
60	-	-	-	171	239	316	405	505	618

Coefficient of performance (C.O.P.)

30	1.26	1.60	1.99	2.43	2.96	3.57	4.30	5.18	6.24
35	1.10	1.41	1.75	2.14	2.58	3.10	3.71	4.42	5.27
40	0.93	1.23	1.53	1.87	2.25	2.68	3.19	3.78	4.47
45	0.77	1.06	1.33	1.63	1.95	2.32	2.74	3.23	3.79
50	-	0.89	1.15	1.40	1.68	1.99	2.35	2.75	3.22
55	-	-	0.97	1.19	1.43	1.70	2.00	2.33	2.72
60	-	-	-	1.00	1.21	1.43	1.68	1.96	2.28

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

Cooling capacity	11 197	W
Power input	5 739	W
Current consumption	10.98	A
Mass flow	291	kg/h
C.O.P.	1.95	

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	25.8	bar(g)
Minimum LP switch setting	0.9	bar(g)
LP pump down setting	1.2	bar(g)

Sound power data

Sound power level	84	dB(A)
With acoustic hood	78	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 50 Hz, ARI rating conditions

R407A

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

Cooling capacity in W

30	4 165	6 262	8 851	11 997	15 768	20 228	25 445	31 484	38 410
35	3 615	5 634	8 102	11 087	14 656	18 874	23 809	29 526	36 091
40	3 025	4 960	7 304	10 124	13 487	17 459	22 108	27 499	33 700
45	2 400	4 249	6 465	9 116	12 268	15 991	20 350	25 412	31 244
50	-	3 507	5 591	8 069	11 008	14 477	18 543	23 272	28 733
55	-	-	4 689	6 992	9 715	12 927	16 696	21 091	26 178
60	-	-	-	5 890	8 394	11 348	14 820	18 879	23 593

Power input in W

30	3 048	3 620	4 131	4 579	4 960	5 271	5 509	5 671	5 753
35	3 031	3 679	4 267	4 793	5 252	5 642	5 959	6 201	6 364
40	2 959	3 689	4 361	4 970	5 513	5 988	6 391	6 719	6 969
45	2 825	3 644	4 405	5 105	5 739	6 305	6 800	7 221	7 564
50	-	3 539	4 396	5 191	5 923	6 587	7 180	7 700	8 142
55	-	-	4 326	5 225	6 060	6 828	7 526	8 150	8 699
60	-	-	-	5 199	6 143	7 022	7 831	8 567	9 227

Current consumption in A

30	8.34	8.82	9.30	9.76	10.18	10.53	10.81	10.98	11.03
35	8.35	8.88	9.41	9.94	10.43	10.87	11.24	11.51	11.67
40	8.34	8.92	9.53	10.13	10.71	11.25	11.72	12.10	12.38
45	8.27	8.93	9.61	10.30	10.98	11.62	12.21	12.72	13.13
50	-	8.85	9.63	10.42	11.21	11.97	12.69	13.33	13.89
55	-	-	9.55	10.46	11.37	12.26	13.12	13.91	14.63
60	-	-	-	10.38	11.42	12.46	13.47	14.42	15.31

Mass flow in kg/h

30	91	135	187	249	322	406	504	615	742
35	83	127	179	241	313	396	492	602	726
40	73	117	170	231	302	384	479	587	709
45	61	106	158	219	289	370	463	569	689
50	-	93	145	205	274	354	445	549	667
55	-	-	129	189	257	336	425	527	642
60	-	-	-	170	238	315	402	502	614

Coefficient of performance (C.O.P.)

30	1.37	1.73	2.14	2.62	3.18	3.84	4.62	5.55	6.68
35	1.19	1.53	1.90	2.31	2.79	3.35	4.00	4.76	5.67
40	1.02	1.34	1.67	2.04	2.45	2.92	3.46	4.09	4.84
45	0.85	1.17	1.47	1.79	2.14	2.54	2.99	3.52	4.13
50	-	0.99	1.27	1.55	1.86	2.20	2.58	3.02	3.53
55	-	-	1.08	1.34	1.60	1.89	2.22	2.59	3.01
60	-	-	-	1.13	1.37	1.62	1.89	2.20	2.56

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

Cooling capacity	12 268	W
Power input	5 739	W
Current consumption	10.98	A
Mass flow	289	kg/h
C.O.P.	2.14	

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	25.8	bar(g)
Minimum LP switch setting	0.9	bar(g)
LP pump down setting	1.2	bar(g)

Sound power data

Sound power level	84	dB(A)
With acoustic hood	78	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 50 Hz, EN 12900 rating conditions

R407F

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

Cooling capacity in W

30	-	6 261	8 967	12 279	16 271	21 020	26 602	33 093	40 569
35	-	5 449	7 930	10 950	14 582	18 903	23 990	29 917	36 761
40	-	4 740	7 044	9 818	13 137	17 078	21 715	27 126	33 386
45	-	4 093	6 267	8 843	11 896	15 502	19 738	24 679	30 401
50	-	-	5 556	7 980	10 814	14 134	18 014	22 533	27 764
55	-	-	-	7 190	9 851	12 930	16 503	20 646	25 434
60	-	-	-	-	-	-	-	-	-

Power input in W

30	-	3 819	4 354	4 827	5 222	5 519	5 701	5 749	5 644
35	-	3 889	4 494	5 050	5 538	5 942	6 242	6 420	6 459
40	-	3 947	4 613	5 242	5 817	6 318	6 729	7 029	7 202
45	-	4 007	4 726	5 420	6 072	6 664	7 176	7 590	7 890
50	-	-	4 848	5 600	6 321	6 993	7 599	8 119	8 536
55	-	-	-	5 795	6 577	7 322	8 013	8 631	9 157
60	-	-	-	-	-	-	-	-	-

Current consumption in A

30	-	8.83	9.36	9.86	10.32	10.70	10.96	11.07	11.01
35	-	8.99	9.57	10.15	10.68	11.15	11.52	11.75	11.82
40	-	9.07	9.72	10.37	11.00	11.57	12.06	12.43	12.64
45	-	9.09	9.81	10.55	11.29	11.98	12.60	13.11	13.49
50	-	-	9.87	10.72	11.57	12.39	13.16	13.83	14.38
55	-	-	-	10.89	11.87	12.84	13.76	14.61	15.35
60	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

30	-	129	183	246	322	410	512	630	764
35	-	118	169	230	302	385	482	594	721
40	-	108	158	217	285	365	458	564	685
45	-	99	148	206	272	350	438	540	656
50	-	-	140	197	262	337	423	521	633
55	-	-	-	190	255	328	412	507	615
60	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

30	-	1.64	2.06	2.54	3.12	3.81	4.67	5.76	7.19
35	-	1.40	1.76	2.17	2.63	3.18	3.84	4.66	5.69
40	-	1.20	1.53	1.87	2.26	2.70	3.23	3.86	4.64
45	-	1.02	1.33	1.63	1.96	2.33	2.75	3.25	3.85
50	-	-	1.15	1.43	1.71	2.02	2.37	2.78	3.25
55	-	-	-	1.24	1.50	1.77	2.06	2.39	2.78
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	11 896	W
Power input	6 072	W
Current consumption	11.29	A
Mass flow	272	kg/h
C.O.P.	1.96	

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	24	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.26	bar(g)

Sound power data

Sound power level	84	dB(A)
With acoustic hood	78	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 50 Hz, ARI rating conditions

R407F

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

Cooling capacity in W

30	-	6 711	9 601	13 133	17 387	22 441	28 375	35 268	43 199
35	-	5 867	8 530	11 764	15 649	20 266	25 694	32 013	39 301
40	-	5 132	7 617	10 602	14 170	18 399	23 370	29 163	35 857
45	-	4 460	6 819	9 607	12 907	16 798	21 362	26 679	32 829
50	-	-	6 091	8 735	11 818	15 423	19 631	24 523	30 179
55	-	-	-	7 943	10 864	14 236	18 141	22 660	27 875
60	-	-	-	-	-	-	-	-	-

Power input in W

30	-	3 819	4 354	4 827	5 222	5 519	5 701	5 749	5 644
35	-	3 889	4 494	5 050	5 538	5 942	6 242	6 420	6 459
40	-	3 947	4 613	5 242	5 817	6 318	6 729	7 029	7 202
45	-	4 007	4 726	5 420	6 072	6 664	7 176	7 590	7 890
50	-	-	4 848	5 600	6 321	6 993	7 599	8 119	8 536
55	-	-	-	5 795	6 577	7 322	8 013	8 631	9 157
60	-	-	-	-	-	-	-	-	-

Current consumption in A

30	-	8.83	9.36	9.86	10.32	10.70	10.96	11.07	11.01
35	-	8.99	9.57	10.15	10.68	11.15	11.52	11.75	11.82
40	-	9.07	9.72	10.37	11.00	11.57	12.06	12.43	12.64
45	-	9.09	9.81	10.55	11.29	11.98	12.60	13.11	13.49
50	-	-	9.87	10.72	11.57	12.39	13.16	13.83	14.38
55	-	-	-	10.89	11.87	12.84	13.76	14.61	15.35
60	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

30	-	129	182	245	320	407	509	626	759
35	-	118	168	229	300	383	479	590	717
40	-	108	157	216	284	363	455	561	681
45	-	98	148	205	271	347	436	537	652
50	-	-	139	196	261	335	421	518	629
55	-	-	-	188	253	326	410	504	611
60	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

30	-	1.76	2.21	2.72	3.33	4.07	4.98	6.14	7.65
35	-	1.51	1.90	2.33	2.83	3.41	4.12	4.99	6.08
40	-	1.30	1.65	2.02	2.44	2.91	3.47	4.15	4.98
45	-	1.11	1.44	1.77	2.13	2.52	2.98	3.51	4.16
50	-	-	1.26	1.56	1.87	2.21	2.58	3.02	3.54
55	-	-	-	1.37	1.65	1.94	2.26	2.63	3.04
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	12 907	W
Power input	6 072	W
Current consumption	11.29	A
Mass flow	271	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	24	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.26	bar(g)

Sound power data

Sound power level	84	dB(A)
With acoustic hood	78	dB(A)

Tolerance according EN12900

Performance data at 50 Hz, EN 12900 rating conditions
R134a

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

Cooling capacity in W

35	2 843	4 175	7 996	10 611	13 779	17 565	22 032	27 243	33 261
40	2 461	3 722	7 307	9 757	12 730	16 290	20 499	25 421	31 119
45	2 082	3 271	6 617	8 902	11 678	15 010	18 960	23 592	28 969
50	1 711	2 825	5 931	8 048	10 627	13 729	17 419	21 760	26 815
55	-	-	5 252	7 201	9 580	12 452	15 880	19 929	24 661
60	-	-	-	6 363	8 542	11 182	14 348	18 103	22 510
65	-	-	-	-	7 516	9 924	12 826	16 286	20 367
75	-	-	-	-	-	-	9 829	12 695	16 120

Power input in W

35	2 336	2 699	3 384	3 675	3 912	4 080	4 162	4 143	4 008
40	2 407	2 785	3 524	3 854	4 137	4 357	4 500	4 549	4 490
45	2 443	2 842	3 645	4 018	4 351	4 630	4 838	4 960	4 981
50	2 443	2 868	3 744	4 165	4 554	4 895	5 173	5 374	5 480
55	-	-	3 818	4 291	4 741	5 150	5 504	5 787	5 983
60	-	-	-	4 395	4 909	5 391	5 825	6 196	6 488
65	-	-	-	-	5 057	5 616	6 135	6 599	6 991
75	-	-	-	-	-	-	6 710	7 373	7 980

Current consumption in A

35	7.67	7.97	8.52	8.75	8.94	9.09	9.16	9.17	9.08
40	7.67	7.99	8.60	8.88	9.13	9.33	9.48	9.56	9.57
45	7.65	7.98	8.67	9.00	9.31	9.58	9.81	9.98	10.08
50	7.59	7.96	8.73	9.12	9.49	9.84	10.15	10.41	10.61
55	-	-	8.78	9.23	9.68	10.10	10.50	10.86	11.16
60	-	-	-	9.34	9.86	10.37	10.86	11.32	11.74
65	-	-	-	-	10.04	10.64	11.23	11.80	12.33
75	-	-	-	-	-	-	11.99	12.79	13.58

Mass flow in kg/h

35	72	104	190	247	313	392	482	586	705
40	66	98	183	239	304	381	470	573	690
45	59	91	175	229	294	370	457	558	673
50	52	83	166	220	283	357	443	542	656
55	-	-	156	209	271	344	428	525	637
60	-	-	-	197	258	329	412	507	616
65	-	-	-	-	244	314	395	488	595
75	-	-	-	-	-	-	356	445	547

Coefficient of performance (C.O.P.)

35	1.22	1.55	2.36	2.89	3.52	4.31	5.29	6.58	8.30
40	1.02	1.34	2.07	2.53	3.08	3.74	4.56	5.59	6.93
45	0.85	1.15	1.82	2.22	2.68	3.24	3.92	4.76	5.82
50	0.70	0.99	1.58	1.93	2.33	2.80	3.37	4.05	4.89
55	-	-	1.38	1.68	2.02	2.42	2.89	3.44	4.12
60	-	-	-	1.45	1.74	2.07	2.46	2.92	3.47
65	-	-	-	-	1.49	1.77	2.09	2.47	2.91
75	-	-	-	-	-	-	1.46	1.72	2.02

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

Cooling capacity	13 729	W
Power input	4 895	W
Current consumption	9.84	A
Mass flow	357	kg/h
C.O.P.	2.80	

Pressure switch settings

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	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

Tolerance according EN12900

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 subsequent 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)								
	-25	-20	-10	-5	0	5	10	15	20

Cooling capacity in W

35	3 090	4 530	8 646	11 454	14 852	18 904	23 678	29 237	35 649
40	2 691	4 062	7 942	10 586	13 788	17 614	22 130	27 403	33 497
45	2 292	3 592	7 236	9 714	12 719	16 317	20 575	25 559	31 334
50	-	3 126	6 530	8 841	11 647	15 017	19 015	23 709	29 165
55	-	-	5 829	7 971	10 578	13 717	17 455	21 859	26 994
60	-	-	-	7 109	9 516	12 423	15 900	20 012	24 827
65	-	-	-	-	-	11 139	14 354	18 175	22 669
75	-	-	-	-	-	-	11 310	14 550	18 407

Power input in W

35	2 336	2 699	3 384	3 675	3 912	4 080	4 162	4 143	4 008
40	2 407	2 785	3 524	3 854	4 137	4 357	4 500	4 549	4 490
45	2 443	2 842	3 645	4 018	4 351	4 630	4 838	4 960	4 981
50	-	2 868	3 744	4 165	4 554	4 895	5 173	5 374	5 480
55	-	-	3 818	4 291	4 741	5 150	5 504	5 787	5 983
60	-	-	-	4 395	4 909	5 391	5 825	6 196	6 488
65	-	-	-	-	-	5 616	6 135	6 599	6 991
75	-	-	-	-	-	-	6 710	7 373	7 980

Current consumption in A

35	7.67	7.97	8.52	8.75	8.94	9.09	9.16	9.17	9.08
40	7.67	7.99	8.60	8.88	9.13	9.33	9.48	9.56	9.57
45	7.65	7.98	8.67	9.00	9.31	9.58	9.81	9.98	10.08
50	-	7.96	8.73	9.12	9.49	9.84	10.15	10.41	10.61
55	-	-	8.78	9.23	9.68	10.10	10.50	10.86	11.16
60	-	-	-	9.34	9.86	10.37	10.86	11.32	11.74
65	-	-	-	-	-	10.64	11.23	11.80	12.33
75	-	-	-	-	-	-	11.99	12.79	13.58

Mass flow in kg/h

35	72	104	189	246	312	390	480	583	701
40	66	97	182	237	303	379	468	570	686
45	59	90	174	228	293	368	455	555	670
50	-	83	165	219	282	355	441	539	652
55	-	-	156	208	270	342	426	523	633
60	-	-	-	196	257	328	410	504	613
65	-	-	-	-	-	312	393	485	591
75	-	-	-	-	-	-	354	443	544

Coefficient of performance (C.O.P.)

35	1.32	1.68	2.56	3.12	3.80	4.63	5.69	7.06	8.89
40	1.12	1.46	2.25	2.75	3.33	4.04	4.92	6.02	7.46
45	0.94	1.26	1.99	2.42	2.92	3.52	4.25	5.15	6.29
50	-	1.09	1.74	2.12	2.56	3.07	3.68	4.41	5.32
55	-	-	1.53	1.86	2.23	2.66	3.17	3.78	4.51
60	-	-	-	1.62	1.94	2.30	2.73	3.23	3.83
65	-	-	-	-	-	1.98	2.34	2.75	3.24
75	-	-	-	-	-	-	1.69	1.97	2.31

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

Cooling capacity	15 453	W
Power input	5 279	W
Current consumption	10.24	A
Mass flow	379	kg/h
C.O.P.	2.93	

Pressure switch settings

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	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

Tolerance according EN12900

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. MTZ100-4

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	9 186	12 506	16 495	21 229	26 784	33 239	40 670	-	-
40	8 185	11 303	15 045	19 488	24 708	30 783	37 790	-	-
45	7 201	10 105	13 588	17 729	22 602	28 287	34 858	-	-
50	-	8 927	12 141	15 968	20 484	25 766	31 891	-	-
55	-	-	10 720	14 221	18 368	23 237	28 904	-	-
60	-	-	-	12 506	16 273	20 717	25 915	-	-
65	-	-	-	10 839	14 213	18 221	22 940	-	-

Power input in W

35	4 578	5 036	5 412	5 720	5 973	6 184	6 366	-	-
40	4 724	5 279	5 743	6 129	6 449	6 719	6 949	-	-
45	4 805	5 472	6 038	6 517	6 920	7 263	7 557	-	-
50	-	5 605	6 289	6 875	7 377	7 808	8 181	-	-
55	-	-	6 486	7 194	7 809	8 344	8 810	-	-
60	-	-	-	7 466	8 209	8 862	9 437	-	-
65	-	-	-	7 682	8 568	9 353	10 053	-	-

Current consumption in A

35	9.96	10.40	10.81	11.16	11.44	11.63	11.69	-	-
40	10.08	10.62	11.13	11.59	11.96	12.24	12.41	-	-
45	10.15	10.81	11.44	12.01	12.50	12.90	13.18	-	-
50	-	10.94	11.71	12.42	13.05	13.58	14.00	-	-
55	-	-	11.93	12.79	13.58	14.27	14.84	-	-
60	-	-	-	13.12	14.08	14.94	15.68	-	-
65	-	-	-	13.38	14.54	15.59	16.52	-	-

Mass flow in kg/h

35	200	267	347	439	545	667	806	-	-
40	187	254	332	423	527	647	784	-	-
45	174	239	316	405	508	626	760	-	-
50	-	224	299	386	486	602	733	-	-
55	-	-	281	366	464	576	705	-	-
60	-	-	-	345	440	549	674	-	-
65	-	-	-	323	415	521	642	-	-

Coefficient of performance (C.O.P.)

35	2.01	2.48	3.05	3.71	4.48	5.38	6.39	-	-
40	1.73	2.14	2.62	3.18	3.83	4.58	5.44	-	-
45	1.50	1.85	2.25	2.72	3.27	3.89	4.61	-	-
50	-	1.59	1.93	2.32	2.78	3.30	3.90	-	-
55	-	-	1.65	1.98	2.35	2.79	3.28	-	-
60	-	-	-	1.68	1.98	2.34	2.75	-	-
65	-	-	-	1.41	1.66	1.95	2.28	-	-

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

Cooling capacity	20 484	W
Power input	7 377	W
Current consumption	13.05	A
Mass flow	486	kg/h
C.O.P.	2.78	



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	1.4	bar(g)
LP pump down setting	1.7	bar(g)

Sound power data

Sound power level	87	dB(A)
With acoustic hood	81	dB(A)

Tolerance according EN12900

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	9 887	13 445	17 712	22 769	28 696	35 574	43 484	-	-
40	8 859	12 216	16 239	21 007	26 602	33 105	40 596	-	-
45	7 843	10 988	14 755	19 223	24 475	30 590	37 651	-	-
50	-	9 779	13 277	17 434	22 330	28 048	34 668	-	-
55	-	-	11 824	15 657	20 187	25 495	31 664	-	-
60	-	-	-	13 910	18 062	22 951	28 658	-	-
65	-	-	-	12 215	15 978	20 436	25 673	-	-

Power input in W

35	4 578	5 036	5 412	5 720	5 973	6 184	6 366	-	-
40	4 724	5 279	5 743	6 129	6 449	6 719	6 949	-	-
45	4 805	5 472	6 038	6 517	6 920	7 263	7 557	-	-
50	-	5 605	6 289	6 875	7 377	7 808	8 181	-	-
55	-	-	6 486	7 194	7 809	8 344	8 810	-	-
60	-	-	-	7 466	8 209	8 862	9 437	-	-
65	-	-	-	7 682	8 568	9 353	10 053	-	-

Current consumption in A

35	9.96	10.40	10.81	11.16	11.44	11.63	11.69	-	-
40	10.08	10.62	11.13	11.59	11.96	12.24	12.41	-	-
45	10.15	10.81	11.44	12.01	12.50	12.90	13.18	-	-
50	-	10.94	11.71	12.42	13.05	13.58	14.00	-	-
55	-	-	11.93	12.79	13.58	14.27	14.84	-	-
60	-	-	-	13.12	14.08	14.94	15.68	-	-
65	-	-	-	13.38	14.54	15.59	16.52	-	-

Mass flow in kg/h

35	199	266	345	436	542	663	801	-	-
40	186	252	330	420	524	644	779	-	-
45	173	238	314	403	505	622	755	-	-
50	-	223	297	384	484	598	729	-	-
55	-	-	280	364	461	573	700	-	-
60	-	-	-	343	437	546	670	-	-
65	-	-	-	321	412	518	638	-	-

Coefficient of performance (C.O.P.)

35	2.16	2.67	3.27	3.98	4.80	5.75	6.83	-	-
40	1.88	2.31	2.83	3.43	4.12	4.93	5.84	-	-
45	1.63	2.01	2.44	2.95	3.54	4.21	4.98	-	-
50	-	1.74	2.11	2.54	3.03	3.59	4.24	-	-
55	-	-	1.82	2.18	2.58	3.06	3.59	-	-
60	-	-	-	1.86	2.20	2.59	3.04	-	-
65	-	-	-	1.59	1.86	2.18	2.55	-	-

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

Cooling capacity	22 699	W
Power input	7 997	W
Current consumption	13.83	A
Mass flow	511	kg/h
C.O.P.	2.84	

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	1.4	bar(g)
LP pump down setting	1.7	bar(g)

Sound power data

Sound power level	87	dB(A)
With acoustic hood	81	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 50 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R448A

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

Cooling capacity in W

10	-	9 252	12 395	16 279	20 984	-	-	-	-
20	-	7 748	10 520	13 949	18 110	23 081	28 948	-	-
30	-	6 360	8 777	11 764	15 396	19 746	24 893	30 924	37 941
40	-	-	7 150	9 711	12 829	16 573	21 018	26 241	32 331
50	-	-	-	7 775	10 394	13 549	17 309	21 743	26 927
60	-	-	-	-	8 078	10 662	13 754	17 417	21 714

Power input in W

10	-	3 115	3 303	3 387	3 345	-	-	-	-
20	-	3 512	3 852	4 114	4 279	4 325	4 231	-	-
30	-	3 750	4 224	4 647	5 000	5 262	5 412	5 429	5 293
40	-	-	4 466	5 033	5 558	6 018	6 393	6 663	6 807
50	-	-	-	5 320	5 998	6 639	7 223	7 728	8 135
60	-	-	-	-	6 369	7 174	7 948	8 671	9 323

Current consumption in A

10	-	9.75	10.25	10.62	10.82	-	-	-	-
20	-	9.07	9.58	10.01	10.33	10.49	10.46	-	-
30	-	8.87	9.42	9.93	10.37	10.72	10.92	10.94	10.75
40	-	-	9.53	10.15	10.75	11.29	11.74	12.06	12.22
50	-	-	-	10.46	11.22	11.99	12.71	13.35	13.88
60	-	-	-	-	11.59	12.60	13.61	14.59	15.50

Mass flow in kg/h

10	-	152	204	268	347	-	-	-	-
20	-	136	186	247	322	413	523	-	-
30	-	121	168	226	297	384	488	614	766
40	-	-	150	204	271	353	453	573	717
50	-	-	-	182	245	323	417	530	667
60	-	-	-	-	218	291	379	487	617

Coefficient of performance (C.O.P.)

10	-	2.97	3.75	4.81	6.27	-	-	-	-
20	-	2.21	2.73	3.39	4.23	5.34	6.84	-	-
30	-	1.70	2.08	2.53	3.08	3.75	4.60	5.70	7.17
40	-	-	1.60	1.93	2.31	2.75	3.29	3.94	4.75
50	-	-	-	1.46	1.73	2.04	2.40	2.81	3.31
60	-	-	-	-	1.27	1.49	1.73	2.01	2.33

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

Cooling capacity	11 596	W
Power input	5 789	W
Current consumption	10.99	A
Mass flow	258	kg/h
C.O.P.	2.00	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	84	dB(A)
With acoustic hood	78	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 50 Hz, EN 12900 rating conditions, Superheat = 10 K

R448A

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

Cooling capacity in W

10	6 803	9 298	12 465	16 380	21 119	-	-	-	-
20	5 509	7 698	10 476	13 920	18 106	23 108	29 002	-	-
30	4 334	6 231	8 636	11 623	15 267	19 646	24 834	30 907	37 941
40	3 265	4 885	6 929	9 473	12 592	16 361	20 857	26 155	32 331
50	-	3 645	5 343	7 458	10 065	13 239	17 057	21 595	26 927
60	-	-	3 865	5 565	7 673	10 267	13 421	17 212	21 714

Power input in W

10	2 843	3 115	3 303	3 387	3 345	-	-	-	-
20	3 116	3 512	3 852	4 114	4 279	4 325	4 231	-	-
30	3 248	3 750	4 224	4 647	5 000	5 262	5 412	5 429	5 293
40	3 284	3 876	4 466	5 033	5 558	6 018	6 393	6 663	6 807
50	-	3 938	4 627	5 320	5 998	6 639	7 223	7 728	8 135
60	-	-	4 753	5 556	6 369	7 174	7 948	8 671	9 323

Current consumption in A

10	9.16	9.75	10.25	10.62	10.82	-	-	-	-
20	8.51	9.07	9.58	10.01	10.33	10.49	10.46	-	-
30	8.33	8.87	9.42	9.93	10.37	10.72	10.92	10.94	10.75
40	8.39	8.93	9.53	10.15	10.75	11.29	11.74	12.06	12.22
50	-	9.04	9.72	10.46	11.22	11.99	12.71	13.35	13.88
60	-	-	9.75	10.63	11.59	12.60	13.61	14.59	15.50

Mass flow in kg/h

10	130	176	233	301	381	-	-	-	-
20	115	159	212	277	354	445	551	-	-
30	99	141	192	253	326	413	514	631	766
40	84	123	171	229	298	380	476	588	717
50	-	104	149	204	269	347	438	545	667
60	-	-	126	178	239	313	399	500	617

Coefficient of performance (C.O.P.)

10	2.39	2.98	3.77	4.84	6.31	-	-	-	-
20	1.77	2.19	2.72	3.38	4.23	5.34	6.85	-	-
30	1.33	1.66	2.04	2.50	3.05	3.73	4.59	5.69	7.17
40	0.99	1.26	1.55	1.88	2.27	2.72	3.26	3.93	4.75
50	-	0.93	1.15	1.40	1.68	1.99	2.36	2.79	3.31
60	-	-	0.81	1.00	1.20	1.43	1.69	1.98	2.33

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

Cooling capacity	11 310	W
Power input	5 789	W
Current consumption	10.99	A
Mass flow	284	kg/h
C.O.P.	1.95	

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	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	84	dB(A)
With acoustic hood	78	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 50 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R449A

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

Cooling capacity in W

10	-	9 269	12 414	16 299	21 004	-	-	-	-
20	-	7 765	10 539	13 969	18 130	23 100	28 963	-	-
30	-	6 376	8 795	11 785	15 417	19 765	24 909	30 934	37 941
40	-	-	7 169	9 732	12 850	16 593	21 034	26 251	32 331
50	-	-	-	7 795	10 415	13 569	17 326	21 753	26 927
60	-	-	-	-	8 098	10 681	13 770	17 427	21 714

Power input in W

10	-	3 115	3 303	3 387	3 345	-	-	-	-
20	-	3 512	3 852	4 114	4 279	4 325	4 231	-	-
30	-	3 750	4 224	4 647	5 000	5 262	5 412	5 429	5 293
40	-	-	4 466	5 033	5 558	6 018	6 393	6 663	6 807
50	-	-	-	5 320	5 998	6 639	7 223	7 728	8 135
60	-	-	-	-	6 369	7 174	7 948	8 671	9 323

Current consumption in A

10	-	9.75	10.25	10.62	10.82	-	-	-	-
20	-	9.07	9.58	10.01	10.33	10.49	10.46	-	-
30	-	8.87	9.42	9.93	10.37	10.72	10.92	10.94	10.75
40	-	-	9.53	10.15	10.75	11.29	11.74	12.06	12.22
50	-	-	-	10.46	11.22	11.99	12.71	13.35	13.88
60	-	-	-	-	11.59	12.60	13.61	14.59	15.50

Mass flow in kg/h

10	-	151	207	275	356	-	-	-	-
20	-	137	189	252	330	423	535	-	-
30	-	122	171	231	304	392	498	626	778
40	-	-	153	209	277	361	462	584	730
50	-	-	-	186	251	330	426	542	681
60	-	-	-	-	223	297	388	499	632

Coefficient of performance (C.O.P.)

10	-	2.98	3.76	4.81	6.28	-	-	-	-
20	-	2.21	2.74	3.40	4.24	5.34	6.84	-	-
30	-	1.70	2.08	2.54	3.08	3.76	4.60	5.70	7.17
40	-	-	1.61	1.93	2.31	2.76	3.29	3.94	4.75
50	-	-	-	1.47	1.74	2.04	2.40	2.81	3.31
60	-	-	-	-	1.27	1.49	1.73	2.01	2.33

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

Cooling capacity	11 617	W
Power input	5 789	W
Current consumption	10.99	A
Mass flow	264	kg/h
C.O.P.	2.01	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	84	dB(A)
With acoustic hood	78	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 50 Hz, EN 12900 rating conditions, Superheat = 10 K

R449A

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

Cooling capacity in W

10	6 803	9 298	12 465	16 380	21 119	-	-	-	-
20	5 509	7 698	10 476	13 920	18 106	23 108	29 002	-	-
30	4 334	6 231	8 636	11 623	15 267	19 646	24 834	30 907	37 941
40	3 265	4 885	6 929	9 473	12 592	16 361	20 857	26 155	32 331
50	-	3 645	5 343	7 458	10 065	13 239	17 057	21 595	26 927
60	-	-	3 865	5 565	7 673	10 267	13 421	17 212	21 714

Power input in W

10	2 843	3 115	3 303	3 387	3 345	-	-	-	-
20	3 116	3 512	3 852	4 114	4 279	4 325	4 231	-	-
30	3 248	3 750	4 224	4 647	5 000	5 262	5 412	5 429	5 293
40	3 284	3 876	4 466	5 033	5 558	6 018	6 393	6 663	6 807
50	-	3 938	4 627	5 320	5 998	6 639	7 223	7 728	8 135
60	-	-	4 753	5 556	6 369	7 174	7 948	8 671	9 323

Current consumption in A

10	9.16	9.75	10.25	10.62	10.82	-	-	-	-
20	8.51	9.07	9.58	10.01	10.33	10.49	10.46	-	-
30	8.33	8.87	9.42	9.93	10.37	10.72	10.92	10.94	10.75
40	8.39	8.93	9.53	10.15	10.75	11.29	11.74	12.06	12.22
50	-	9.04	9.72	10.46	11.22	11.99	12.71	13.35	13.88
60	-	-	9.75	10.63	11.59	12.60	13.61	14.59	15.50

Mass flow in kg/h

10	125	176	236	307	391	-	-	-	-
20	111	159	215	283	362	455	562	-	-
30	98	142	195	258	333	421	524	643	778
40	84	125	174	234	305	388	486	600	730
50	-	107	153	208	275	355	448	556	681
60	-	-	130	182	245	320	408	512	632

Coefficient of performance (C.O.P.)

10	2.39	2.98	3.77	4.84	6.31	-	-	-	-
20	1.77	2.19	2.72	3.38	4.23	5.34	6.85	-	-
30	1.33	1.66	2.04	2.50	3.05	3.73	4.59	5.69	7.17
40	0.99	1.26	1.55	1.88	2.27	2.72	3.26	3.93	4.75
50	-	0.93	1.15	1.40	1.68	1.99	2.36	2.79	3.31
60	-	-	0.81	1.00	1.20	1.43	1.69	1.98	2.33

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

Cooling capacity	11 310	W
Power input	5 789	W
Current consumption	10.99	A
Mass flow	290	kg/h
C.O.P.	1.95	

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	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	84	dB(A)
With acoustic hood	78	dB(A)

Tolerance according EN12900

Datasheet, performance data
Maneurop reciprocating compressor. MTZ100-4
Performance data at 50 Hz, EN 12900 rating conditions, Suction temp. = 20 °C
R452A

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

Cooling capacity in W

10	-	10 770	13 979	17 930	22 692	-	-	-	-
20	-	9 307	12 195	15 721	19 952	24 956	30 809	-	-
30	-	7 847	10 415	13 518	17 218	21 582	26 676	32 579	39 379
40	-	6 352	8 604	11 285	14 457	18 182	22 522	27 543	33 322
50	-	-	6 720	8 985	11 633	14 723	18 313	22 460	27 222
60	-	-	-	6 578	8 714	11 179	14 026	17 302	21 051

Power input in W

10	-	3 467	3 697	3 874	3 995	-	-	-	-
20	-	3 835	4 154	4 419	4 626	4 772	4 855	-	-
30	-	4 197	4 638	5 022	5 347	5 610	5 806	5 933	5 987
40	-	4 451	5 045	5 581	6 055	6 465	6 807	7 078	7 275
50	-	-	5 271	5 990	6 646	7 236	7 756	8 203	8 574
60	-	-	-	6 146	7 016	7 817	8 547	9 202	9 779

Current consumption in A

10	-	9.76	10.03	10.24	10.40	-	-	-	-
20	-	9.34	9.68	9.97	10.20	10.37	10.46	-	-
30	-	9.36	9.82	10.24	10.60	10.90	11.13	11.27	11.32
40	-	9.53	10.17	10.76	11.31	11.79	12.21	12.54	12.78
50	-	-	10.42	11.25	12.03	12.75	13.40	13.98	14.47
60	-	-	-	11.39	12.46	13.47	14.42	15.29	16.08

Mass flow in kg/h

10	-	222	291	375	479	-	-	-	-
20	-	206	272	352	450	568	710	-	-
30	-	190	254	331	424	536	671	832	1 024
40	-	172	234	308	397	504	632	784	967
50	-	-	208	280	366	469	590	735	908
60	-	-	-	244	328	426	543	681	845

Coefficient of performance (C.O.P.)

10	-	3.11	3.78	4.63	5.68	-	-	-	-
20	-	2.43	2.94	3.56	4.31	5.23	6.35	-	-
30	-	1.87	2.25	2.69	3.22	3.85	4.59	5.49	6.58
40	-	1.43	1.71	2.02	2.39	2.81	3.31	3.89	4.58
50	-	-	1.27	1.50	1.75	2.03	2.36	2.74	3.18
60	-	-	-	1.07	1.24	1.43	1.64	1.88	2.15

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

Cooling capacity	13 055	W
Power input	6 372	W
Current consumption	11.68	A
Mass flow	383	kg/h
C.O.P.	2.05	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	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)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 50 Hz, EN 12900 rating conditions, Superheat = 10 K

R452A

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

Cooling capacity in W

10	7 968	10 484	13 687	17 652	22 453	-	-	-	-
20	6 636	8 908	11 768	15 291	19 550	24 619	30 571	-	-
30	5 324	7 352	9 869	12 949	16 666	21 093	26 305	32 376	39 379
40	4 002	5 786	7 959	10 596	13 770	17 556	22 028	27 258	33 322
50	2 641	4 180	6 009	8 203	10 835	13 979	17 709	22 099	27 222
60	-	2 505	3 990	5 740	7 828	10 330	13 319	16 868	21 051

Power input in W

10	3 189	3 467	3 697	3 874	3 995	-	-	-	-
20	3 465	3 835	4 154	4 419	4 626	4 772	4 855	-	-
30	3 704	4 197	4 638	5 022	5 347	5 610	5 806	5 933	5 987
40	3 802	4 451	5 045	5 581	6 055	6 465	6 807	7 078	7 275
50	3 655	4 491	5 271	5 990	6 646	7 236	7 756	8 203	8 574
60	-	4 215	5 211	6 146	7 016	7 817	8 547	9 202	9 779

Current consumption in A

10	9.46	9.76	10.03	10.24	10.40	-	-	-	-
20	8.97	9.34	9.68	9.97	10.20	10.37	10.46	-	-
30	8.86	9.36	9.82	10.24	10.60	10.90	11.13	11.27	11.32
40	8.86	9.53	10.17	10.76	11.31	11.79	12.21	12.54	12.78
50	8.65	9.55	10.42	11.25	12.03	12.75	13.40	13.98	14.47
60	-	9.12	10.27	11.39	12.46	13.47	14.42	15.29	16.08

Mass flow in kg/h

10	198	259	332	421	527	-	-	-	-
20	182	240	311	395	495	613	749	-	-
30	164	222	291	372	467	578	707	855	1 024
40	142	200	267	346	437	543	666	806	967
50	112	171	238	315	403	505	622	756	908
60	-	130	198	274	361	459	572	700	845

Coefficient of performance (C.O.P.)

10	2.50	3.02	3.70	4.56	5.62	-	-	-	-
20	1.92	2.32	2.83	3.46	4.23	5.16	6.30	-	-
30	1.44	1.75	2.13	2.58	3.12	3.76	4.53	5.46	6.58
40	1.05	1.30	1.58	1.90	2.27	2.72	3.24	3.85	4.58
50	0.72	0.93	1.14	1.37	1.63	1.93	2.28	2.69	3.18
60	-	0.59	0.77	0.93	1.12	1.32	1.56	1.83	2.15

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

Cooling capacity	12 309	W
Power input	6 372	W
Current consumption	11.68	A
Mass flow	421	kg/h
C.O.P.	1.93	

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	1	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)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 60 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	11 781	15 687	20 352	25 874	32 351	39 883	48 568	-	-
40	10 671	14 369	18 765	23 957	30 044	37 124	45 296	-	-
45	9 537	13 026	17 154	22 018	27 716	34 346	42 005	-	-
50	-	11 663	15 523	20 060	25 369	31 549	38 696	-	-
55	-	-	13 875	18 084	23 005	28 734	35 369	-	-
60	-	-	-	16 091	20 623	25 902	32 023	-	-
65	-	-	-	14 084	18 224	23 049	28 654	-	-

Power input in W

35	5 651	6 195	6 630	6 987	7 296	7 587	7 891	-	-
40	5 849	6 524	7 068	7 511	7 883	8 215	8 537	-	-
45	5 954	6 787	7 465	8 020	8 482	8 880	9 246	-	-
50	-	6 968	7 807	8 500	9 076	9 567	10 003	-	-
55	-	-	8 077	8 933	9 651	10 260	10 792	-	-
60	-	-	-	9 306	10 191	10 944	11 597	-	-
65	-	-	-	9 602	10 679	11 603	12 404	-	-

Current consumption in A

35	9.60	10.15	10.64	11.06	11.41	11.71	11.96	-	-
40	9.80	10.48	11.06	11.57	11.99	12.34	12.62	-	-
45	9.92	10.75	11.48	12.11	12.64	13.08	13.42	-	-
50	-	10.95	11.86	12.64	13.32	13.87	14.32	-	-
55	-	-	12.15	13.14	13.98	14.70	15.29	-	-
60	-	-	-	13.54	14.60	15.51	16.28	-	-
65	-	-	-	13.84	15.14	16.28	17.26	-	-

Mass flow in kg/h

35	256	335	427	535	658	800	962	-	-
40	243	322	413	519	641	781	939	-	-
45	230	308	398	503	622	759	915	-	-
50	-	292	382	484	602	737	889	-	-
55	-	-	363	465	580	712	862	-	-
60	-	-	-	443	557	686	833	-	-
65	-	-	-	419	531	658	801	-	-

Coefficient of performance (C.O.P.)

35	2.08	2.53	3.07	3.70	4.43	5.26	6.16	-	-
40	1.82	2.20	2.65	3.19	3.81	4.52	5.31	-	-
45	1.60	1.92	2.30	2.75	3.27	3.87	4.54	-	-
50	-	1.67	1.99	2.36	2.80	3.30	3.87	-	-
55	-	-	1.72	2.02	2.38	2.80	3.28	-	-
60	-	-	-	1.73	2.02	2.37	2.76	-	-
65	-	-	-	1.47	1.71	1.99	2.31	-	-

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

Cooling capacity	25 369	W
Power input	9 076	W
Current consumption	13.32	A
Mass flow	602	kg/h
C.O.P.	2.80	

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	1.4	bar(g)
LP pump down setting	1.7	bar(g)

Sound power data

Sound power level	90	dB(A)
With acoustic hood	84	dB(A)

Tolerance according EN12900

Performance data at 60 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	12 681	16 865	21 854	27 751	34 660	42 685	51 928	-	-
40	11 549	15 529	20 253	25 825	32 348	39 924	48 659	-	-
45	10 387	14 165	18 627	23 874	30 012	37 143	45 370	-	-
50	-	12 776	16 976	21 902	27 656	34 343	42 065	-	-
55	-	-	15 304	19 909	25 282	31 527	38 745	-	-
60	-	-	-	17 898	22 892	28 695	35 412	-	-
65	-	-	-	15 871	20 486	25 851	32 069	-	-

Power input in W

35	5 651	6 195	6 630	6 987	7 296	7 587	7 891	-	-
40	5 849	6 524	7 068	7 511	7 883	8 215	8 537	-	-
45	5 954	6 787	7 465	8 020	8 482	8 880	9 246	-	-
50	-	6 968	7 807	8 500	9 076	9 567	10 003	-	-
55	-	-	8 077	8 933	9 651	10 260	10 792	-	-
60	-	-	-	9 306	10 191	10 944	11 597	-	-
65	-	-	-	9 602	10 679	11 603	12 404	-	-

Current consumption in A

35	9.60	10.15	10.64	11.06	11.41	11.71	11.96	-	-
40	9.80	10.48	11.06	11.57	11.99	12.34	12.62	-	-
45	9.92	10.75	11.48	12.11	12.64	13.08	13.42	-	-
50	-	10.95	11.86	12.64	13.32	13.87	14.32	-	-
55	-	-	12.15	13.14	13.98	14.70	15.29	-	-
60	-	-	-	13.54	14.60	15.51	16.28	-	-
65	-	-	-	13.84	15.14	16.28	17.26	-	-

Mass flow in kg/h

35	254	333	425	532	655	796	956	-	-
40	242	320	411	516	637	776	934	-	-
45	229	306	396	500	619	755	909	-	-
50	-	291	380	482	599	732	884	-	-
55	-	-	361	462	577	708	857	-	-
60	-	-	-	440	553	682	828	-	-
65	-	-	-	417	528	654	797	-	-

Coefficient of performance (C.O.P.)

35	2.24	2.72	3.30	3.97	4.75	5.63	6.58	-	-
40	1.97	2.38	2.87	3.44	4.10	4.86	5.70	-	-
45	1.74	2.09	2.50	2.98	3.54	4.18	4.91	-	-
50	-	1.83	2.17	2.58	3.05	3.59	4.21	-	-
55	-	-	1.89	2.23	2.62	3.07	3.59	-	-
60	-	-	-	1.92	2.25	2.62	3.05	-	-
65	-	-	-	1.65	1.92	2.23	2.59	-	-

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

Cooling capacity	28 225	W
Power input	9 856	W
Current consumption	14.23	A
Mass flow	635	kg/h
C.O.P.	2.86	

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	1.4	bar(g)
LP pump down setting	1.7	bar(g)

Sound power data

Sound power level	90	dB(A)
With acoustic hood	84	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 60 Hz, EN 12900 rating conditions

R134a

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

Cooling capacity in W

35	3 411	5 010	9 595	12 733	16 535	21 078	26 438	32 691	39 913
40	2 953	4 467	8 768	11 709	15 276	19 548	24 598	30 505	37 343
45	2 499	3 925	7 941	10 682	14 014	18 011	22 752	28 310	34 763
50	2 053	3 390	7 117	9 658	12 752	16 475	20 903	26 112	32 178
55	-	-	6 302	8 641	11 496	14 942	19 057	23 915	29 593
60	-	-	-	7 636	10 250	13 419	17 218	21 724	27 012
65	-	-	-	-	9 019	11 909	15 391	19 543	24 440
75	-	-	-	-	-	-	11 794	15 234	19 344

Power input in W

35	2 803	3 238	4 060	4 410	4 695	4 896	4 994	4 972	4 810
40	2 888	3 342	4 229	4 625	4 964	5 228	5 400	5 459	5 388
45	2 932	3 411	4 374	4 822	5 222	5 556	5 805	5 952	5 978
50	2 932	3 441	4 493	4 998	5 464	5 874	6 208	6 448	6 576
55	-	-	4 581	5 150	5 689	6 180	6 604	6 944	7 180
60	-	-	-	5 274	5 891	6 469	6 990	7 435	7 785
65	-	-	-	-	6 068	6 740	7 363	7 918	8 389
75	-	-	-	-	-	-	8 053	8 848	9 576

Current consumption in A

35	8.01	8.31	8.88	9.13	9.33	9.48	9.56	9.56	9.47
40	8.01	8.33	8.97	9.26	9.52	9.73	9.89	9.97	9.98
45	7.98	8.33	9.05	9.39	9.71	9.99	10.23	10.40	10.51
50	7.92	8.30	9.11	9.51	9.90	10.26	10.58	10.85	11.06
55	-	-	9.16	9.63	10.09	10.53	10.95	11.32	11.64
60	-	-	-	9.74	10.28	10.81	11.32	11.80	12.24
65	-	-	-	-	10.47	11.09	11.71	12.30	12.86
75	-	-	-	-	-	-	12.50	13.33	14.15

Mass flow in kg/h

35	86	125	228	296	376	470	579	704	846
40	79	117	220	286	365	457	564	687	828
45	71	109	210	275	353	443	549	670	808
50	63	100	199	264	340	429	532	651	787
55	-	-	188	251	325	412	514	630	764
60	-	-	-	237	310	395	494	609	739
65	-	-	-	-	293	376	473	585	713
75	-	-	-	-	-	-	427	534	657

Coefficient of performance (C.O.P.)

35	1.22	1.55	2.36	2.89	3.52	4.31	5.29	6.58	8.30
40	1.02	1.34	2.07	2.53	3.08	3.74	4.56	5.59	6.93
45	0.85	1.15	1.82	2.22	2.68	3.24	3.92	4.76	5.82
50	0.70	0.99	1.58	1.93	2.33	2.80	3.37	4.05	4.89
55	-	-	1.38	1.68	2.02	2.42	2.89	3.44	4.12
60	-	-	-	1.45	1.74	2.07	2.46	2.92	3.47
65	-	-	-	-	1.49	1.77	2.09	2.47	2.91
75	-	-	-	-	-	-	1.46	1.72	2.02

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

Cooling capacity	16 475	W
Power input	5 874	W
Current consumption	10.26	A
Mass flow	429	kg/h
C.O.P.	2.80	

Pressure switch settings

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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. MTZ100-4

Performance data at 60 Hz, ARI rating conditions

R134a

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

Cooling capacity in W

35	3 708	5 436	10 375	13 745	17 822	22 685	28 413	35 085	42 778
40	3 229	4 874	9 531	12 703	16 546	21 137	26 557	32 883	40 196
45	2 751	4 311	8 683	11 656	15 262	19 580	24 690	30 670	37 601
50	-	3 752	7 836	10 609	13 977	18 020	22 818	28 451	34 998
55	-	-	6 995	9 565	12 694	16 461	20 946	26 231	32 393
60	-	-	-	8 531	11 419	14 908	19 080	24 015	29 793
65	-	-	-	-	-	13 367	17 225	21 810	27 203
75	-	-	-	-	-	-	13 572	17 460	22 088

Power input in W

35	2 803	3 238	4 060	4 410	4 695	4 896	4 994	4 972	4 810
40	2 888	3 342	4 229	4 625	4 964	5 228	5 400	5 459	5 388
45	2 932	3 411	4 374	4 822	5 222	5 556	5 805	5 952	5 978
50	-	3 441	4 493	4 998	5 464	5 874	6 208	6 448	6 576
55	-	-	4 581	5 150	5 689	6 180	6 604	6 944	7 180
60	-	-	-	5 274	5 891	6 469	6 990	7 435	7 785
65	-	-	-	-	-	6 740	7 363	7 918	8 389
75	-	-	-	-	-	-	8 053	8 848	9 576

Current consumption in A

35	8.01	8.31	8.88	9.13	9.33	9.48	9.56	9.56	9.47
40	8.01	8.33	8.97	9.26	9.52	9.73	9.89	9.97	9.98
45	7.98	8.33	9.05	9.39	9.71	9.99	10.23	10.40	10.51
50	-	8.30	9.11	9.51	9.90	10.26	10.58	10.85	11.06
55	-	-	9.16	9.63	10.09	10.53	10.95	11.32	11.64
60	-	-	-	9.74	10.28	10.81	11.32	11.80	12.24
65	-	-	-	-	-	11.09	11.71	12.30	12.86
75	-	-	-	-	-	-	12.50	13.33	14.15

Mass flow in kg/h

35	86	124	227	295	374	467	576	700	842
40	79	117	218	285	363	455	561	684	823
45	71	108	209	274	351	441	546	666	803
50	-	99	198	262	338	426	529	647	782
55	-	-	187	249	324	410	511	627	759
60	-	-	-	236	308	393	492	605	735
65	-	-	-	-	-	374	471	582	709
75	-	-	-	-	-	-	425	531	653

Coefficient of performance (C.O.P.)

35	1.32	1.68	2.56	3.12	3.80	4.63	5.69	7.06	8.89
40	1.12	1.46	2.25	2.75	3.33	4.04	4.92	6.02	7.46
45	0.94	1.26	1.99	2.42	2.92	3.52	4.25	5.15	6.29
50	-	1.09	1.74	2.12	2.56	3.07	3.68	4.41	5.32
55	-	-	1.53	1.86	2.23	2.66	3.17	3.78	4.51
60	-	-	-	1.62	1.94	2.30	2.73	3.23	3.83
65	-	-	-	-	-	1.98	2.34	2.75	3.24
75	-	-	-	-	-	-	1.69	1.97	2.31

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

Cooling capacity	18 544	W
Power input	6 335	W
Current consumption	10.68	A
Mass flow	455	kg/h
C.O.P.	2.93	

Pressure switch settings

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

Sound power data

Sound power level	0	dB(A)
With accoustic 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

Tolerance according EN12900

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. MTZ100-4

Performance data at 60 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	6 602	9 153	12 243	15 941	20 315	25 437	31 375	38 199	45 980
35	5 637	8 021	10 896	14 333	18 400	23 169	28 707	35 085	42 374
40	4 696	6 901	9 552	12 718	16 469	20 874	26 003	31 926	38 712
45	3 787	5 803	8 220	11 106	14 530	18 562	23 271	28 728	35 002
50	2 915	4 734	6 906	9 502	12 589	16 238	20 518	25 499	31 251
55	-	3 701	5 619	7 914	10 655	13 911	17 752	22 247	27 466
60	-	2 712	4 366	6 350	8 735	11 588	14 980	18 979	23 655

Power input in W

30	4 956	5 638	6 215	6 697	7 090	7 403	7 642	7 816	7 932
35	4 912	5 702	6 385	6 970	7 464	7 875	8 210	8 477	8 684
40	4 796	5 700	6 495	7 189	7 789	8 304	8 740	9 105	9 408
45	4 607	5 630	6 542	7 351	8 063	8 686	9 229	9 699	10 103
50	4 343	5 491	6 526	7 454	8 283	9 022	9 677	10 256	10 767
55	-	5 281	6 444	7 497	8 449	9 308	10 081	10 775	11 398
60	-	4 998	6 294	7 478	8 559	9 543	10 439	11 254	11 995

Current consumption in A

30	8.74	9.42	10.03	10.57	11.01	11.36	11.61	11.74	11.75
35	8.70	9.48	10.20	10.84	11.40	11.87	12.25	12.51	12.66
40	8.59	9.48	10.30	11.06	11.75	12.34	12.85	13.25	13.54
45	8.41	9.41	10.35	11.23	12.04	12.77	13.41	13.96	14.39
50	8.15	9.26	10.33	11.33	12.28	13.14	13.93	14.62	15.22
55	-	9.04	10.23	11.37	12.45	13.46	14.40	15.25	16.00
60	-	8.74	10.06	11.34	12.56	13.73	14.82	15.82	16.74

Mass flow in kg/h

30	208	282	367	466	579	709	856	1 022	1 209
35	191	265	350	448	560	688	833	997	1 182
40	172	246	331	428	538	665	808	970	1 152
45	152	226	310	405	515	640	781	940	1 120
50	131	203	287	381	489	612	751	909	1 085
55	-	179	261	355	462	583	720	874	1 048
60	-	153	234	327	431	551	685	837	1 008

Coefficient of performance (C.O.P.)

30	1.33	1.62	1.97	2.38	2.87	3.44	4.11	4.89	5.80
35	1.15	1.41	1.71	2.06	2.47	2.94	3.50	4.14	4.88
40	0.98	1.21	1.47	1.77	2.11	2.51	2.98	3.51	4.11
45	0.82	1.03	1.26	1.51	1.80	2.14	2.52	2.96	3.46
50	0.67	0.86	1.06	1.27	1.52	1.80	2.12	2.49	2.90
55	-	0.70	0.87	1.06	1.26	1.49	1.76	2.06	2.41
60	-	0.54	0.69	0.85	1.02	1.21	1.43	1.69	1.97

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

Cooling capacity	14 530	W
Power input	8 063	W
Current consumption	12.04	A
Mass flow	515	kg/h
C.O.P.	1.80	

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	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	87	dB(A)
With acoustic hood	81	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 60 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	7 349	10 162	13 557	17 608	22 389	27 972	34 430	41 837	50 265
35	6 343	8 996	12 184	15 982	20 463	25 701	31 769	38 741	46 690
40	5 354	7 838	10 810	14 345	18 518	23 402	29 072	35 601	43 062
45	4 389	6 695	9 443	12 707	16 562	21 084	26 348	32 426	39 395
50	3 454	5 575	8 090	11 075	14 607	18 760	23 611	29 235	35 705
55	-	4 484	6 761	9 462	12 665	16 446	20 882	26 049	32 022
60	-	3 428	5 467	7 883	10 757	14 168	18 193	22 910	28 395

Power input in W

30	4 956	5 638	6 215	6 697	7 090	7 403	7 642	7 816	7 932
35	4 912	5 702	6 385	6 970	7 464	7 875	8 210	8 477	8 684
40	4 796	5 700	6 495	7 189	7 789	8 304	8 740	9 105	9 408
45	4 607	5 630	6 542	7 351	8 063	8 686	9 229	9 699	10 103
50	4 343	5 491	6 526	7 454	8 283	9 022	9 677	10 256	10 767
55	-	5 281	6 444	7 497	8 449	9 308	10 081	10 775	11 398
60	-	4 998	6 294	7 478	8 559	9 543	10 439	11 254	11 995

Current consumption in A

30	8.74	9.42	10.03	10.57	11.01	11.36	11.61	11.74	11.75
35	8.70	9.48	10.20	10.84	11.40	11.87	12.25	12.51	12.66
40	8.59	9.48	10.30	11.06	11.75	12.34	12.85	13.25	13.54
45	8.41	9.41	10.35	11.23	12.04	12.77	13.41	13.96	14.39
50	8.15	9.26	10.33	11.33	12.28	13.14	13.93	14.62	15.22
55	-	9.04	10.23	11.37	12.45	13.46	14.40	15.25	16.00
60	-	8.74	10.06	11.34	12.56	13.73	14.82	15.82	16.74

Mass flow in kg/h

30	206	280	365	463	576	704	850	1 015	1 201
35	190	263	348	445	556	683	828	990	1 174
40	171	245	329	425	535	661	803	964	1 144
45	152	224	308	403	512	636	776	934	1 112
50	130	202	285	379	487	609	747	903	1 078
55	-	178	260	353	459	579	715	869	1 041
60	-	152	233	325	429	547	681	832	1 001

Coefficient of performance (C.O.P.)

30	1.48	1.80	2.18	2.63	3.16	3.78	4.51	5.35	6.34
35	1.29	1.58	1.91	2.29	2.74	3.26	3.87	4.57	5.38
40	1.12	1.38	1.66	2.00	2.38	2.82	3.33	3.91	4.58
45	0.95	1.19	1.44	1.73	2.05	2.43	2.85	3.34	3.90
50	0.80	1.02	1.24	1.49	1.76	2.08	2.44	2.85	3.32
55	-	0.85	1.05	1.26	1.50	1.77	2.07	2.42	2.81
60	-	0.69	0.87	1.05	1.26	1.48	1.74	2.04	2.37

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

Cooling capacity	16 562	W
Power input	8 063	W
Current consumption	12.04	A
Mass flow	512	kg/h
C.O.P.	2.05	

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	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	87	dB(A)
With acoustic hood	81	dB(A)

Tolerance according EN12900

Performance data at 60 Hz, EN 12900 rating conditions
R407A

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

Cooling capacity in W

30	4 621	6 959	9 849	13 368	17 592	22 596	28 457	35 251	43 053
35	3 988	6 224	8 965	12 287	16 265	20 976	26 495	32 899	40 262
40	3 313	5 443	8 030	11 149	14 877	19 289	24 461	30 469	37 389
45	2 607	4 626	7 053	9 965	13 436	17 544	22 364	27 971	34 443
50	-	3 782	6 044	8 742	11 953	15 751	20 213	25 414	31 431
55	-	-	5 011	7 491	10 434	13 918	18 017	22 807	28 365
60	-	-	-	6 219	8 891	12 055	15 786	20 160	25 253

Power input in W

30	3 658	4 344	4 957	5 494	5 952	6 325	6 611	6 805	6 903
35	3 638	4 415	5 121	5 751	6 302	6 770	7 151	7 441	7 636
40	3 551	4 427	5 233	5 964	6 616	7 186	7 670	8 063	8 363
45	3 390	4 373	5 286	6 126	6 887	7 566	8 161	8 665	9 077
50	-	4 247	5 275	6 230	7 108	7 904	8 616	9 240	9 771
55	-	-	5 191	6 270	7 272	8 193	9 031	9 780	10 438
60	-	-	-	6 238	7 372	8 426	9 397	10 280	11 073

Current consumption in A

30	8.70	9.20	9.70	10.18	10.61	10.98	11.27	11.45	11.50
35	8.71	9.26	9.82	10.36	10.88	11.34	11.72	12.00	12.17
40	8.69	9.30	9.93	10.56	11.17	11.73	12.22	12.62	12.91
45	8.62	9.31	10.02	10.74	11.45	12.12	12.73	13.26	13.69
50	-	9.23	10.04	10.87	11.69	12.48	13.22	13.90	14.48
55	-	-	9.96	10.90	11.85	12.78	13.67	14.50	15.24
60	-	-	-	10.81	11.90	12.98	14.03	15.03	15.95

Mass flow in kg/h

30	110	163	226	300	388	490	608	742	896
35	100	153	216	291	377	478	594	727	877
40	88	142	205	278	364	464	578	708	856
45	74	128	191	264	349	447	559	687	832
50	-	112	175	247	331	427	538	663	805
55	-	-	156	228	310	405	513	636	775
60	-	-	-	206	287	380	486	606	742

Coefficient of performance (C.O.P.)

30	1.26	1.60	1.99	2.43	2.96	3.57	4.30	5.18	6.24
35	1.10	1.41	1.75	2.14	2.58	3.10	3.71	4.42	5.27
40	0.93	1.23	1.53	1.87	2.25	2.68	3.19	3.78	4.47
45	0.77	1.06	1.33	1.63	1.95	2.32	2.74	3.23	3.79
50	-	0.89	1.15	1.40	1.68	1.99	2.35	2.75	3.22
55	-	-	0.97	1.19	1.43	1.70	2.00	2.33	2.72
60	-	-	-	1.00	1.21	1.43	1.68	1.96	2.28

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

Cooling capacity	13 436	W
Power input	6 887	W
Current consumption	11.45	A
Mass flow	349	kg/h
C.O.P.	1.95	

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	25.8	bar(g)
Minimum LP switch setting	0.9	bar(g)
LP pump down setting	1.2	bar(g)

Sound power data

Sound power level	87	dB(A)
With acoustic hood	81	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 60 Hz, ARI rating conditions

R407A

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

Cooling capacity in W

30	4 998	7 515	10 621	14 397	18 921	24 274	30 534	37 781	46 092
35	4 338	6 760	9 722	13 304	17 587	22 649	28 571	35 431	43 310
40	3 630	5 952	8 765	12 149	16 184	20 951	26 529	32 999	40 440
45	2 880	5 099	7 758	10 939	14 722	19 189	24 420	30 494	37 493
50	-	4 208	6 709	9 683	13 210	17 373	22 251	27 927	34 480
55	-	-	5 627	8 390	11 657	15 512	20 035	25 309	31 414
60	-	-	-	7 068	10 073	13 618	17 784	22 655	28 311

Power input in W

30	3 658	4 344	4 957	5 494	5 952	6 325	6 611	6 805	6 903
35	3 638	4 415	5 121	5 751	6 302	6 770	7 151	7 441	7 636
40	3 551	4 427	5 233	5 964	6 616	7 186	7 670	8 063	8 363
45	3 390	4 373	5 286	6 126	6 887	7 566	8 161	8 665	9 077
50	-	4 247	5 275	6 230	7 108	7 904	8 616	9 240	9 771
55	-	-	5 191	6 270	7 272	8 193	9 031	9 780	10 438
60	-	-	-	6 238	7 372	8 426	9 397	10 280	11 073

Current consumption in A

30	8.70	9.20	9.70	10.18	10.61	10.98	11.27	11.45	11.50
35	8.71	9.26	9.82	10.36	10.88	11.34	11.72	12.00	12.17
40	8.69	9.30	9.93	10.56	11.17	11.73	12.22	12.62	12.91
45	8.62	9.31	10.02	10.74	11.45	12.12	12.73	13.26	13.69
50	-	9.23	10.04	10.87	11.69	12.48	13.22	13.90	14.48
55	-	-	9.96	10.90	11.85	12.78	13.67	14.50	15.24
60	-	-	-	10.81	11.90	12.98	14.03	15.03	15.95

Mass flow in kg/h

30	109	162	225	299	386	487	604	738	890
35	99	152	215	289	375	475	591	722	872
40	87	141	204	277	362	461	575	704	851
45	74	127	190	263	347	444	556	683	827
50	-	111	174	246	329	425	534	659	800
55	-	-	155	227	309	403	510	632	771
60	-	-	-	204	285	378	483	602	738

Coefficient of performance (C.O.P.)

30	1.37	1.73	2.14	2.62	3.18	3.84	4.62	5.55	6.68
35	1.19	1.53	1.90	2.31	2.79	3.35	4.00	4.76	5.67
40	1.02	1.34	1.67	2.04	2.45	2.92	3.46	4.09	4.84
45	0.85	1.17	1.47	1.79	2.14	2.54	2.99	3.52	4.13
50	-	0.99	1.27	1.55	1.86	2.20	2.58	3.02	3.53
55	-	-	1.08	1.34	1.60	1.89	2.22	2.59	3.01
60	-	-	-	1.13	1.37	1.62	1.89	2.20	2.56

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

Cooling capacity	14 722	W
Power input	6 887	W
Current consumption	11.45	A
Mass flow	347	kg/h
C.O.P.	2.14	

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	25.8	bar(g)
Minimum LP switch setting	0.9	bar(g)
LP pump down setting	1.2	bar(g)

Sound power data

Sound power level	87	dB(A)
With acoustic hood	81	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 60 Hz, EN 12900 rating conditions

R407F

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

Cooling capacity in W

30	-	7 514	10 761	14 734	19 525	25 224	31 923	39 712	48 683
35	-	6 539	9 517	13 139	17 498	22 684	28 787	35 900	44 113
40	-	5 688	8 453	11 782	15 765	20 493	26 058	32 551	40 063
45	-	4 912	7 521	10 611	14 275	18 602	23 685	29 614	36 481
50	-	-	6 668	9 576	12 977	16 960	21 617	27 039	33 317
55	-	-	-	8 627	11 821	15 516	19 804	24 775	30 520
60	-	-	-	-	-	-	-	-	-

Power input in W

30	-	4 582	5 224	5 793	6 266	6 623	6 841	6 898	6 773
35	-	4 667	5 393	6 060	6 646	7 130	7 490	7 705	7 751
40	-	4 736	5 536	6 291	6 980	7 582	8 074	8 435	8 643
45	-	4 808	5 671	6 505	7 287	7 996	8 611	9 108	9 468
50	-	-	5 818	6 720	7 585	8 392	9 118	9 743	10 244
55	-	-	-	6 954	7 892	8 786	9 615	10 357	10 989
60	-	-	-	-	-	-	-	-	-

Current consumption in A

30	-	9.21	9.76	10.29	10.77	11.16	11.43	11.55	11.48
35	-	9.38	9.98	10.58	11.14	11.63	12.01	12.26	12.33
40	-	9.47	10.13	10.81	11.47	12.07	12.58	12.96	13.19
45	-	9.48	10.23	11.01	11.77	12.49	13.14	13.68	14.07
50	-	-	10.30	11.18	12.07	12.93	13.73	14.43	15.00
55	-	-	-	11.36	12.38	13.40	14.36	15.24	16.01
60	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

30	-	156	219	296	386	492	614	756	917
35	-	142	203	276	362	462	579	713	865
40	-	130	190	260	343	438	549	677	822
45	-	119	178	247	327	419	526	648	787
50	-	-	168	236	315	405	507	625	758
55	-	-	-	228	305	394	494	608	737
60	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

30	-	1.64	2.06	2.54	3.12	3.81	4.67	5.76	7.19
35	-	1.40	1.76	2.17	2.63	3.18	3.84	4.66	5.69
40	-	1.20	1.53	1.87	2.26	2.70	3.23	3.86	4.64
45	-	1.02	1.33	1.63	1.96	2.33	2.75	3.25	3.85
50	-	-	1.15	1.43	1.71	2.02	2.37	2.78	3.25
55	-	-	-	1.24	1.50	1.77	2.06	2.39	2.78
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	14 275	W
Power input	7 287	W
Current consumption	11.77	A
Mass flow	327	kg/h
C.O.P.	1.96	

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	24	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.26	bar(g)

Sound power data

Sound power level	87	dB(A)
With acoustic hood	81	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 60 Hz, ARI rating conditions

R407F

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

Cooling capacity in W

30	-	8 053	11 521	15 760	20 864	26 929	34 050	42 322	51 839
35	-	7 041	10 236	14 116	18 779	24 319	30 833	38 415	47 161
40	-	6 158	9 140	12 723	17 004	22 079	28 044	34 996	43 029
45	-	5 352	8 182	11 528	15 488	20 158	25 635	32 015	39 395
50	-	-	7 309	10 481	14 182	18 508	23 557	29 428	36 215
55	-	-	-	9 531	13 037	17 083	21 769	27 192	33 450
60	-	-	-	-	-	-	-	-	-

Power input in W

30	-	4 582	5 224	5 793	6 266	6 623	6 841	6 898	6 773
35	-	4 667	5 393	6 060	6 646	7 130	7 490	7 705	7 751
40	-	4 736	5 536	6 291	6 980	7 582	8 074	8 435	8 643
45	-	4 808	5 671	6 505	7 287	7 996	8 611	9 108	9 468
50	-	-	5 818	6 720	7 585	8 392	9 118	9 743	10 244
55	-	-	-	6 954	7 892	8 786	9 615	10 357	10 989
60	-	-	-	-	-	-	-	-	-

Current consumption in A

30	-	9.21	9.76	10.29	10.77	11.16	11.43	11.55	11.48
35	-	9.38	9.98	10.58	11.14	11.63	12.01	12.26	12.33
40	-	9.47	10.13	10.81	11.47	12.07	12.58	12.96	13.19
45	-	9.48	10.23	11.01	11.77	12.49	13.14	13.68	14.07
50	-	-	10.30	11.18	12.07	12.93	13.73	14.43	15.00
55	-	-	-	11.36	12.38	13.40	14.36	15.24	16.01
60	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

30	-	155	218	294	384	489	611	751	911
35	-	141	202	275	360	460	575	708	860
40	-	129	189	259	341	436	546	673	817
45	-	118	177	246	325	417	523	644	782
50	-	-	167	235	313	402	504	621	754
55	-	-	-	226	304	391	491	604	732
60	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

30	-	1.76	2.21	2.72	3.33	4.07	4.98	6.14	7.65
35	-	1.51	1.90	2.33	2.83	3.41	4.12	4.99	6.08
40	-	1.30	1.65	2.02	2.44	2.91	3.47	4.15	4.98
45	-	1.11	1.44	1.77	2.13	2.52	2.98	3.51	4.16
50	-	-	1.26	1.56	1.87	2.21	2.58	3.02	3.54
55	-	-	-	1.37	1.65	1.94	2.26	2.63	3.04
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	15 488	W
Power input	7 287	W
Current consumption	11.77	A
Mass flow	325	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	24	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.26	bar(g)

Sound power data

Sound power level	87	dB(A)
With acoustic hood	81	dB(A)

Tolerance according EN12900

Performance data at 60 Hz, EN 12900 rating conditions
R134a

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

Cooling capacity in W

35	3 411	5 010	9 595	12 733	16 535	21 078	26 438	32 691	39 913
40	2 953	4 467	8 768	11 709	15 276	19 548	24 598	30 505	37 343
45	2 499	3 925	7 941	10 682	14 014	18 011	22 752	28 310	34 763
50	2 053	3 390	7 117	9 658	12 752	16 475	20 903	26 112	32 178
55	-	-	6 302	8 641	11 496	14 942	19 057	23 915	29 593
60	-	-	-	7 636	10 250	13 419	17 218	21 724	27 012
65	-	-	-	-	9 019	11 909	15 391	19 543	24 440
75	-	-	-	-	-	-	11 794	15 234	19 344

Power input in W

35	2 803	3 238	4 060	4 410	4 695	4 896	4 994	4 972	4 810
40	2 888	3 342	4 229	4 625	4 964	5 228	5 400	5 459	5 388
45	2 932	3 411	4 374	4 822	5 222	5 556	5 805	5 952	5 978
50	2 932	3 441	4 493	4 998	5 464	5 874	6 208	6 448	6 576
55	-	-	4 581	5 150	5 689	6 180	6 604	6 944	7 180
60	-	-	-	5 274	5 891	6 469	6 990	7 435	7 785
65	-	-	-	-	6 068	6 740	7 363	7 918	8 389
75	-	-	-	-	-	-	8 053	8 848	9 576

Current consumption in A

35	8.01	8.31	8.88	9.13	9.33	9.48	9.56	9.56	9.47
40	8.01	8.33	8.97	9.26	9.52	9.73	9.89	9.97	9.98
45	7.98	8.33	9.05	9.39	9.71	9.99	10.23	10.40	10.51
50	7.92	8.30	9.11	9.51	9.90	10.26	10.58	10.85	11.06
55	-	-	9.16	9.63	10.09	10.53	10.95	11.32	11.64
60	-	-	-	9.74	10.28	10.81	11.32	11.80	12.24
65	-	-	-	-	10.47	11.09	11.71	12.30	12.86
75	-	-	-	-	-	-	12.50	13.33	14.15

Mass flow in kg/h

35	86	125	228	296	376	470	579	704	846
40	79	117	220	286	365	457	564	687	828
45	71	109	210	275	353	443	549	670	808
50	63	100	199	264	340	429	532	651	787
55	-	-	188	251	325	412	514	630	764
60	-	-	-	237	310	395	494	609	739
65	-	-	-	-	293	376	473	585	713
75	-	-	-	-	-	-	427	534	657

Coefficient of performance (C.O.P.)

35	1.22	1.55	2.36	2.89	3.52	4.31	5.29	6.58	8.30
40	1.02	1.34	2.07	2.53	3.08	3.74	4.56	5.59	6.93
45	0.85	1.15	1.82	2.22	2.68	3.24	3.92	4.76	5.82
50	0.70	0.99	1.58	1.93	2.33	2.80	3.37	4.05	4.89
55	-	-	1.38	1.68	2.02	2.42	2.89	3.44	4.12
60	-	-	-	1.45	1.74	2.07	2.46	2.92	3.47
65	-	-	-	-	1.49	1.77	2.09	2.47	2.91
75	-	-	-	-	-	-	1.46	1.72	2.02

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

Cooling capacity	16 475	W
Power input	5 874	W
Current consumption	10.26	A
Mass flow	429	kg/h
C.O.P.	2.80	

Pressure switch settings

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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. MTZ100-4

Performance data at 60 Hz, ARI rating conditions

R134a

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

Cooling capacity in W

35	3 708	5 436	10 375	13 745	17 822	22 685	28 413	35 085	42 778
40	3 229	4 874	9 531	12 703	16 546	21 137	26 557	32 883	40 196
45	2 751	4 311	8 683	11 656	15 262	19 580	24 690	30 670	37 601
50	-	3 752	7 836	10 609	13 977	18 020	22 818	28 451	34 998
55	-	-	6 995	9 565	12 694	16 461	20 946	26 231	32 393
60	-	-	-	8 531	11 419	14 908	19 080	24 015	29 793
65	-	-	-	-	-	13 367	17 225	21 810	27 203
75	-	-	-	-	-	-	13 572	17 460	22 088

Power input in W

35	2 803	3 238	4 060	4 410	4 695	4 896	4 994	4 972	4 810
40	2 888	3 342	4 229	4 625	4 964	5 228	5 400	5 459	5 388
45	2 932	3 411	4 374	4 822	5 222	5 556	5 805	5 952	5 978
50	-	3 441	4 493	4 998	5 464	5 874	6 208	6 448	6 576
55	-	-	4 581	5 150	5 689	6 180	6 604	6 944	7 180
60	-	-	-	5 274	5 891	6 469	6 990	7 435	7 785
65	-	-	-	-	-	6 740	7 363	7 918	8 389
75	-	-	-	-	-	-	8 053	8 848	9 576

Current consumption in A

35	8.01	8.31	8.88	9.13	9.33	9.48	9.56	9.56	9.47
40	8.01	8.33	8.97	9.26	9.52	9.73	9.89	9.97	9.98
45	7.98	8.33	9.05	9.39	9.71	9.99	10.23	10.40	10.51
50	-	8.30	9.11	9.51	9.90	10.26	10.58	10.85	11.06
55	-	-	9.16	9.63	10.09	10.53	10.95	11.32	11.64
60	-	-	-	9.74	10.28	10.81	11.32	11.80	12.24
65	-	-	-	-	-	11.09	11.71	12.30	12.86
75	-	-	-	-	-	-	12.50	13.33	14.15

Mass flow in kg/h

35	86	124	227	295	374	467	576	700	842
40	79	117	218	285	363	455	561	684	823
45	71	108	209	274	351	441	546	666	803
50	-	99	198	262	338	426	529	647	782
55	-	-	187	249	324	410	511	627	759
60	-	-	-	236	308	393	492	605	735
65	-	-	-	-	-	374	471	582	709
75	-	-	-	-	-	-	425	531	653

Coefficient of performance (C.O.P.)

35	1.32	1.68	2.56	3.12	3.80	4.63	5.69	7.06	8.89
40	1.12	1.46	2.25	2.75	3.33	4.04	4.92	6.02	7.46
45	0.94	1.26	1.99	2.42	2.92	3.52	4.25	5.15	6.29
50	-	1.09	1.74	2.12	2.56	3.07	3.68	4.41	5.32
55	-	-	1.53	1.86	2.23	2.66	3.17	3.78	4.51
60	-	-	-	1.62	1.94	2.30	2.73	3.23	3.83
65	-	-	-	-	-	1.98	2.34	2.75	3.24
75	-	-	-	-	-	-	1.69	1.97	2.31

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

Cooling capacity	18 544	W
Power input	6 335	W
Current consumption	10.68	A
Mass flow	455	kg/h
C.O.P.	2.93	

Pressure switch settings

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	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

Tolerance according EN12900

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.

Performance data at 60 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	11 781	15 687	20 352	25 874	32 351	39 883	48 568	-	-
40	10 671	14 369	18 765	23 957	30 044	37 124	45 296	-	-
45	9 537	13 026	17 154	22 018	27 716	34 346	42 005	-	-
50	-	11 663	15 523	20 060	25 369	31 549	38 696	-	-
55	-	-	13 875	18 084	23 005	28 734	35 369	-	-
60	-	-	-	16 091	20 623	25 902	32 023	-	-
65	-	-	-	14 084	18 224	23 049	28 654	-	-

Power input in W

35	5 651	6 195	6 630	6 987	7 296	7 587	7 891	-	-
40	5 849	6 524	7 068	7 511	7 883	8 215	8 537	-	-
45	5 954	6 787	7 465	8 020	8 482	8 880	9 246	-	-
50	-	6 968	7 807	8 500	9 076	9 567	10 003	-	-
55	-	-	8 077	8 933	9 651	10 260	10 792	-	-
60	-	-	-	9 306	10 191	10 944	11 597	-	-
65	-	-	-	9 602	10 679	11 603	12 404	-	-

Current consumption in A

35	9.60	10.15	10.64	11.06	11.41	11.71	11.96	-	-
40	9.80	10.48	11.06	11.57	11.99	12.34	12.62	-	-
45	9.92	10.75	11.48	12.11	12.64	13.08	13.42	-	-
50	-	10.95	11.86	12.64	13.32	13.87	14.32	-	-
55	-	-	12.15	13.14	13.98	14.70	15.29	-	-
60	-	-	-	13.54	14.60	15.51	16.28	-	-
65	-	-	-	13.84	15.14	16.28	17.26	-	-

Mass flow in kg/h

35	256	335	427	535	658	800	962	-	-
40	243	322	413	519	641	781	939	-	-
45	230	308	398	503	622	759	915	-	-
50	-	292	382	484	602	737	889	-	-
55	-	-	363	465	580	712	862	-	-
60	-	-	-	443	557	686	833	-	-
65	-	-	-	419	531	658	801	-	-

Coefficient of performance (C.O.P.)

35	2.08	2.53	3.07	3.70	4.43	5.26	6.16	-	-
40	1.82	2.20	2.65	3.19	3.81	4.52	5.31	-	-
45	1.60	1.92	2.30	2.75	3.27	3.87	4.54	-	-
50	-	1.67	1.99	2.36	2.80	3.30	3.87	-	-
55	-	-	1.72	2.02	2.38	2.80	3.28	-	-
60	-	-	-	1.73	2.02	2.37	2.76	-	-
65	-	-	-	1.47	1.71	1.99	2.31	-	-

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

Cooling capacity	25 369	W
Power input	9 076	W
Current consumption	13.32	A
Mass flow	602	kg/h
C.O.P.	2.80	

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	1.4	bar(g)
LP pump down setting	1.7	bar(g)

Sound power data

Sound power level	90	dB(A)
With acoustic hood	84	dB(A)

Tolerance according EN12900

Datasheet, performance data
Maneurop reciprocating compressor. MTZ100-4
Performance data at 60 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	12 681	16 865	21 854	27 751	34 660	42 685	51 928	-	-
40	11 549	15 529	20 253	25 825	32 348	39 924	48 659	-	-
45	10 387	14 165	18 627	23 874	30 012	37 143	45 370	-	-
50	-	12 776	16 976	21 902	27 656	34 343	42 065	-	-
55	-	-	15 304	19 909	25 282	31 527	38 745	-	-
60	-	-	-	17 898	22 892	28 695	35 412	-	-
65	-	-	-	15 871	20 486	25 851	32 069	-	-

Power input in W

35	5 651	6 195	6 630	6 987	7 296	7 587	7 891	-	-
40	5 849	6 524	7 068	7 511	7 883	8 215	8 537	-	-
45	5 954	6 787	7 465	8 020	8 482	8 880	9 246	-	-
50	-	6 968	7 807	8 500	9 076	9 567	10 003	-	-
55	-	-	8 077	8 933	9 651	10 260	10 792	-	-
60	-	-	-	9 306	10 191	10 944	11 597	-	-
65	-	-	-	9 602	10 679	11 603	12 404	-	-

Current consumption in A

35	9.60	10.15	10.64	11.06	11.41	11.71	11.96	-	-
40	9.80	10.48	11.06	11.57	11.99	12.34	12.62	-	-
45	9.92	10.75	11.48	12.11	12.64	13.08	13.42	-	-
50	-	10.95	11.86	12.64	13.32	13.87	14.32	-	-
55	-	-	12.15	13.14	13.98	14.70	15.29	-	-
60	-	-	-	13.54	14.60	15.51	16.28	-	-
65	-	-	-	13.84	15.14	16.28	17.26	-	-

Mass flow in kg/h

35	254	333	425	532	655	796	956	-	-
40	242	320	411	516	637	776	934	-	-
45	229	306	396	500	619	755	909	-	-
50	-	291	380	482	599	732	884	-	-
55	-	-	361	462	577	708	857	-	-
60	-	-	-	440	553	682	828	-	-
65	-	-	-	417	528	654	797	-	-

Coefficient of performance (C.O.P.)

35	2.24	2.72	3.30	3.97	4.75	5.63	6.58	-	-
40	1.97	2.38	2.87	3.44	4.10	4.86	5.70	-	-
45	1.74	2.09	2.50	2.98	3.54	4.18	4.91	-	-
50	-	1.83	2.17	2.58	3.05	3.59	4.21	-	-
55	-	-	1.89	2.23	2.62	3.07	3.59	-	-
60	-	-	-	1.92	2.25	2.62	3.05	-	-
65	-	-	-	1.65	1.92	2.23	2.59	-	-

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

Cooling capacity	28 225	W
Power input	9 856	W
Current consumption	14.23	A
Mass flow	635	kg/h
C.O.P.	2.86	

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	1.4	bar(g)
LP pump down setting	1.7	bar(g)

Sound power data

Sound power level	90	dB(A)
With acoustic hood	84	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 60 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R448A

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

Cooling capacity in W

10	-	11 140	14 901	19 542	25 157	-	-	-	-
20	-	9 325	12 649	16 755	21 731	27 671	34 676	-	-
30	-	7 646	10 547	14 130	18 481	23 689	29 848	37 059	45 442
40	-	-	8 583	11 657	15 397	19 889	25 217	31 475	38 766
50	-	-	-	9 325	12 469	16 259	20 774	26 096	32 316
60	-	-	-	-	9 686	12 790	16 510	20 915	26 081

Power input in W

10	-	3 750	3 978	4 086	4 049	-	-	-	-
20	-	4 218	4 625	4 939	5 139	5 203	5 108	-	-
30	-	4 503	5 071	5 577	5 998	6 311	6 495	6 528	6 386
40	-	-	5 364	6 045	6 670	7 218	7 666	7 991	8 172
50	-	-	-	6 390	7 204	7 970	8 665	9 268	9 755
60	-	-	-	-	7 647	8 614	9 541	10 404	11 181

Current consumption in A

10	-	10.17	10.69	11.08	11.29	-	-	-	-
20	-	9.46	9.99	10.44	10.77	10.94	10.91	-	-
30	-	9.25	9.82	10.36	10.82	11.18	11.39	11.41	11.22
40	-	-	9.94	10.59	11.21	11.77	12.24	12.58	12.75
50	-	-	-	10.91	11.71	12.50	13.25	13.92	14.47
60	-	-	-	-	12.09	13.14	14.19	15.22	16.17

Mass flow in kg/h

10	-	183	245	322	416	-	-	-	-
20	-	164	224	297	387	495	627	-	-
30	-	146	202	271	357	460	586	736	917
40	-	-	180	245	326	424	543	687	860
50	-	-	-	218	294	387	500	637	801
60	-	-	-	-	261	349	455	585	741

Coefficient of performance (C.O.P.)

10	-	2.97	3.75	4.78	6.21	-	-	-	-
20	-	2.21	2.74	3.39	4.23	5.32	6.79	-	-
30	-	1.70	2.08	2.53	3.08	3.75	4.60	5.68	7.12
40	-	-	1.60	1.93	2.31	2.76	3.29	3.94	4.74
50	-	-	-	1.46	1.73	2.04	2.40	2.82	3.31
60	-	-	-	-	1.27	1.48	1.73	2.01	2.33

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

Cooling capacity	13 915	W
Power input	6 952	W
Current consumption	11.46	A
Mass flow	310	kg/h
C.O.P.	2.00	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	86	dB(A)
With acoustic hood	80	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 60 Hz, EN 12900 rating conditions, Superheat = 10 K

R448A

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

Cooling capacity in W

10	8 205	11 195	14 984	19 663	25 319	-	-	-	-
20	6 637	9 265	12 596	16 720	21 726	27 703	34 740	-	-
30	5 214	7 492	10 377	13 959	18 327	23 570	29 777	37 038	45 442
40	3 926	5 866	8 318	11 371	15 113	19 635	25 025	31 372	38 766
50	-	4 378	6 409	8 945	12 074	15 887	20 472	25 918	32 316
60	-	-	4 640	6 671	9 201	12 317	16 110	20 668	26 081

Power input in W

10	3 422	3 750	3 978	4 086	4 049	-	-	-	-
20	3 742	4 218	4 625	4 939	5 139	5 203	5 108	-	-
30	3 895	4 503	5 071	5 577	5 998	6 311	6 495	6 528	6 386
40	3 926	4 651	5 364	6 045	6 670	7 218	7 666	7 991	8 172
50	-	4 708	5 551	6 390	7 204	7 970	8 665	9 268	9 755
60	-	-	5 678	6 660	7 647	8 614	9 541	10 404	11 181

Current consumption in A

10	9.56	10.17	10.69	11.08	11.29	-	-	-	-
20	8.88	9.46	9.99	10.44	10.77	10.94	10.91	-	-
30	8.69	9.25	9.82	10.36	10.82	11.18	11.39	11.41	11.22
40	8.75	9.32	9.94	10.59	11.21	11.77	12.24	12.58	12.75
50	-	9.43	10.13	10.91	11.71	12.50	13.25	13.92	14.47
60	-	-	10.17	11.09	12.09	13.14	14.19	15.22	16.17

Mass flow in kg/h

10	157	212	279	360	457	-	-	-	-
20	138	191	255	332	424	533	659	-	-
30	120	169	230	304	391	495	616	756	917
40	101	147	205	274	358	456	572	706	860
50	-	125	179	244	323	416	526	654	801
60	-	-	152	213	287	375	479	600	741

Coefficient of performance (C.O.P.)

10	2.40	2.99	3.77	4.81	6.25	-	-	-	-
20	1.77	2.20	2.72	3.39	4.23	5.32	6.80	-	-
30	1.34	1.66	2.05	2.50	3.06	3.73	4.58	5.67	7.12
40	1.00	1.26	1.55	1.88	2.27	2.72	3.26	3.93	4.74
50	-	0.93	1.15	1.40	1.68	1.99	2.36	2.80	3.31
60	-	-	0.82	1.00	1.20	1.43	1.69	1.99	2.33

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

Cooling capacity	13 572	W
Power input	6 952	W
Current consumption	11.46	A
Mass flow	340	kg/h
C.O.P.	1.95	

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	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	86	dB(A)
With acoustic hood	80	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 60 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R449A

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

Cooling capacity in W

10	-	11 161	14 923	19 566	25 181	-	-	-	-
20	-	9 345	12 672	16 779	21 755	27 694	34 694	-	-
30	-	7 666	10 569	14 154	18 506	23 712	29 866	37 070	45 442
40	-	-	8 605	11 681	15 423	19 912	25 236	31 486	38 766
50	-	-	-	9 349	12 494	16 283	20 794	26 108	32 316
60	-	-	-	-	9 710	12 814	16 529	20 927	26 081

Power input in W

10	-	3 750	3 978	4 086	4 049	-	-	-	-
20	-	4 218	4 625	4 939	5 139	5 203	5 108	-	-
30	-	4 503	5 071	5 577	5 998	6 311	6 495	6 528	6 386
40	-	-	5 364	6 045	6 670	7 218	7 666	7 991	8 172
50	-	-	-	6 390	7 204	7 970	8 665	9 268	9 755
60	-	-	-	-	7 647	8 614	9 541	10 404	11 181

Current consumption in A

10	-	10.17	10.69	11.08	11.29	-	-	-	-
20	-	9.46	9.99	10.44	10.77	10.94	10.91	-	-
30	-	9.25	9.82	10.36	10.82	11.18	11.39	11.41	11.22
40	-	-	9.94	10.59	11.21	11.77	12.24	12.58	12.75
50	-	-	-	10.91	11.71	12.50	13.25	13.92	14.47
60	-	-	-	-	12.09	13.14	14.19	15.22	16.17

Mass flow in kg/h

10	-	183	249	329	427	-	-	-	-
20	-	165	227	303	395	507	640	-	-
30	-	147	205	277	364	470	597	750	932
40	-	-	183	250	333	433	555	700	875
50	-	-	-	223	301	396	511	650	818
60	-	-	-	-	267	357	466	599	759

Coefficient of performance (C.O.P.)

10	-	2.98	3.75	4.79	6.22	-	-	-	-
20	-	2.22	2.74	3.40	4.23	5.32	6.79	-	-
30	-	1.70	2.08	2.54	3.09	3.76	4.60	5.68	7.12
40	-	-	1.60	1.93	2.31	2.76	3.29	3.94	4.74
50	-	-	-	1.46	1.73	2.04	2.40	2.82	3.31
60	-	-	-	-	1.27	1.49	1.73	2.01	2.33

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

Cooling capacity	13 940	W
Power input	6 952	W
Current consumption	11.46	A
Mass flow	317	kg/h
C.O.P.	2.01	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	86	dB(A)
With acoustic hood	80	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 60 Hz, EN 12900 rating conditions, Superheat = 10 K

R449A

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

Cooling capacity in W

10	8 205	11 195	14 984	19 663	25 319	-	-	-	-
20	6 637	9 265	12 596	16 720	21 726	27 703	34 740	-	-
30	5 214	7 492	10 377	13 959	18 327	23 570	29 777	37 038	45 442
40	3 926	5 866	8 318	11 371	15 113	19 635	25 025	31 372	38 766
50	-	4 378	6 409	8 945	12 074	15 887	20 472	25 918	32 316
60	-	-	4 640	6 671	9 201	12 317	16 110	20 668	26 081

Power input in W

10	3 422	3 750	3 978	4 086	4 049	-	-	-	-
20	3 742	4 218	4 625	4 939	5 139	5 203	5 108	-	-
30	3 895	4 503	5 071	5 577	5 998	6 311	6 495	6 528	6 386
40	3 926	4 651	5 364	6 045	6 670	7 218	7 666	7 991	8 172
50	-	4 708	5 551	6 390	7 204	7 970	8 665	9 268	9 755
60	-	-	5 678	6 660	7 647	8 614	9 541	10 404	11 181

Current consumption in A

10	9.56	10.17	10.69	11.08	11.29	-	-	-	-
20	8.88	9.46	9.99	10.44	10.77	10.94	10.91	-	-
30	8.69	9.25	9.82	10.36	10.82	11.18	11.39	11.41	11.22
40	8.75	9.32	9.94	10.59	11.21	11.77	12.24	12.58	12.75
50	-	9.43	10.13	10.91	11.71	12.50	13.25	13.92	14.47
60	-	-	10.17	11.09	12.09	13.14	14.19	15.22	16.17

Mass flow in kg/h

10	152	212	284	369	468	-	-	-	-
20	136	192	259	339	434	545	673	-	-
30	119	171	234	310	400	505	628	770	932
40	102	150	209	280	365	466	583	719	875
50	-	129	183	250	330	425	537	668	818
60	-	-	156	218	293	384	490	615	759

Coefficient of performance (C.O.P.)

10	2.40	2.99	3.77	4.81	6.25	-	-	-	-
20	1.77	2.20	2.72	3.39	4.23	5.32	6.80	-	-
30	1.34	1.66	2.05	2.50	3.06	3.73	4.58	5.67	7.12
40	1.00	1.26	1.55	1.88	2.27	2.72	3.26	3.93	4.74
50	-	0.93	1.15	1.40	1.68	1.99	2.36	2.80	3.31
60	-	-	0.82	1.00	1.20	1.43	1.69	1.99	2.33

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

Cooling capacity	13 572	W
Power input	6 952	W
Current consumption	11.46	A
Mass flow	348	kg/h
C.O.P.	1.95	

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	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	86	dB(A)
With acoustic hood	80	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 60 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R452A

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

Cooling capacity in W

10	-	12 923	16 775	21 516	27 231	-	-	-	-
20	-	11 168	14 634	18 865	23 942	29 948	36 971	-	-
30	-	9 416	12 498	16 221	20 662	25 898	32 012	39 095	47 255
40	-	7 622	10 324	13 542	17 348	21 818	27 026	33 052	39 986
50	-	-	8 064	10 782	13 960	17 668	21 976	26 951	32 667
60	-	-	-	7 894	10 457	13 415	16 831	20 762	25 262

Power input in W

10	-	4 161	4 436	4 649	4 795	-	-	-	-
20	-	4 602	4 985	5 303	5 551	5 727	5 825	-	-
30	-	5 037	5 566	6 027	6 417	6 731	6 967	7 119	7 185
40	-	5 341	6 054	6 697	7 267	7 758	8 169	8 494	8 730
50	-	-	6 325	7 188	7 976	8 683	9 307	9 843	10 288
60	-	-	-	7 376	8 419	9 381	10 256	11 042	11 734

Current consumption in A

10	-	10.18	10.46	10.68	10.85	-	-	-	-
20	-	9.74	10.09	10.39	10.64	10.81	10.91	-	-
30	-	9.76	10.24	10.68	11.06	11.37	11.60	11.75	11.80
40	-	9.94	10.60	11.23	11.79	12.30	12.73	13.08	13.33
50	-	-	10.86	11.73	12.54	13.30	13.98	14.58	15.09
60	-	-	-	11.88	13.00	14.05	15.04	15.95	16.77

Mass flow in kg/h

10	-	266	349	450	574	-	-	-	-
20	-	247	326	423	540	682	853	-	-
30	-	229	305	397	509	644	805	998	1 229
40	-	206	280	370	477	605	758	941	1 160
50	-	-	249	336	440	562	708	882	1 090
60	-	-	-	293	393	512	651	817	1 015

Coefficient of performance (C.O.P.)

10	-	3.11	3.78	4.63	5.68	-	-	-	-
20	-	2.43	2.94	3.56	4.31	5.23	6.35	-	-
30	-	1.87	2.25	2.69	3.22	3.85	4.59	5.49	6.58
40	-	1.43	1.71	2.02	2.39	2.81	3.31	3.89	4.58
50	-	-	1.27	1.50	1.75	2.03	2.36	2.74	3.18
60	-	-	-	1.07	1.24	1.43	1.64	1.88	2.15

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

Cooling capacity	15 666	W
Power input	7 646	W
Current consumption	12.19	A
Mass flow	459	kg/h
C.O.P.	2.05	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	85	dB(A)
With acoustic hood	79	dB(A)

Tolerance according EN12900

Datasheet, performance data

Maneurop reciprocating compressor. MTZ100-4

Performance data at 60 Hz, EN 12900 rating conditions, Superheat = 10 K

R452A

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

Cooling capacity in W

10	9 562	12 581	16 425	21 183	26 943	-	-	-	-
20	7 963	10 690	14 122	18 349	23 460	29 542	36 686	-	-
30	6 389	8 822	11 843	15 538	19 999	25 312	31 566	38 851	47 255
40	4 803	6 943	9 551	12 715	16 525	21 068	26 433	32 710	39 986
50	3 170	5 016	7 211	9 843	13 002	16 774	21 250	26 518	32 667
60	-	3 006	4 787	6 887	9 394	12 396	15 982	20 241	25 262

Power input in W

10	3 826	4 161	4 436	4 649	4 795	-	-	-	-
20	4 158	4 602	4 985	5 303	5 551	5 727	5 825	-	-
30	4 445	5 037	5 566	6 027	6 417	6 731	6 967	7 119	7 185
40	4 562	5 341	6 054	6 697	7 267	7 758	8 169	8 494	8 730
50	4 386	5 390	6 325	7 188	7 976	8 683	9 307	9 843	10 288
60	-	5 058	6 254	7 376	8 419	9 381	10 256	11 042	11 734

Current consumption in A

10	9.87	10.18	10.46	10.68	10.85	-	-	-	-
20	9.35	9.74	10.09	10.39	10.64	10.81	10.91	-	-
30	9.25	9.76	10.24	10.68	11.06	11.37	11.60	11.75	11.80
40	9.24	9.94	10.60	11.23	11.79	12.30	12.73	13.08	13.33
50	9.02	9.96	10.86	11.73	12.54	13.30	13.98	14.58	15.09
60	-	9.51	10.72	11.88	13.00	14.05	15.04	15.95	16.77

Mass flow in kg/h

10	238	310	399	505	632	-	-	-	-
20	218	288	373	475	594	735	898	-	-
30	197	266	349	446	560	694	848	1 026	1 229
40	171	240	321	415	525	652	799	968	1 160
50	134	205	285	378	484	606	747	907	1 090
60	-	157	238	329	433	551	686	840	1 015

Coefficient of performance (C.O.P.)

10	2.50	3.02	3.70	4.56	5.62	-	-	-	-
20	1.92	2.32	2.83	3.46	4.23	5.16	6.30	-	-
30	1.44	1.75	2.13	2.58	3.12	3.76	4.53	5.46	6.58
40	1.05	1.30	1.58	1.90	2.27	2.72	3.24	3.85	4.58
50	0.72	0.93	1.14	1.37	1.63	1.93	2.28	2.69	3.18
60	-	0.59	0.77	0.93	1.12	1.32	1.56	1.83	2.15

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

Cooling capacity	14 771	W
Power input	7 646	W
Current consumption	12.19	A
Mass flow	505	kg/h
C.O.P.	1.93	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

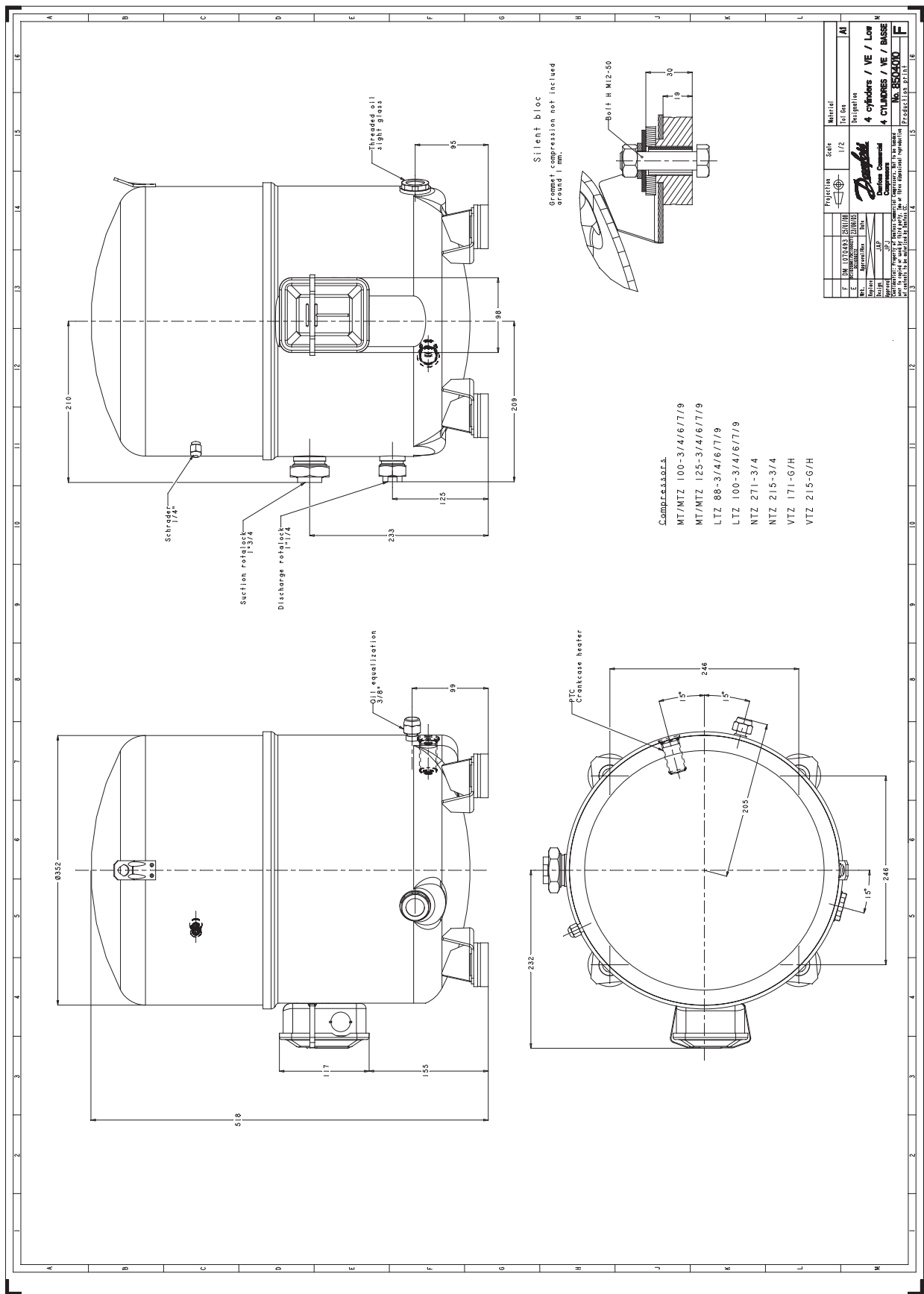
Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	85	dB(A)
With acoustic hood	79	dB(A)

Tolerance according EN12900



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 consequential 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.