

Datasheets

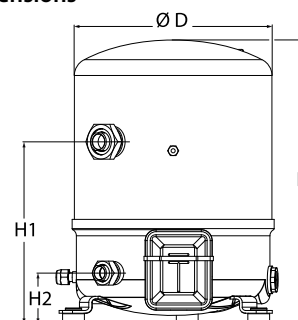
# Danfoss Reciprocating compressors **MT / MTZ / NTZ**



## General Characteristics

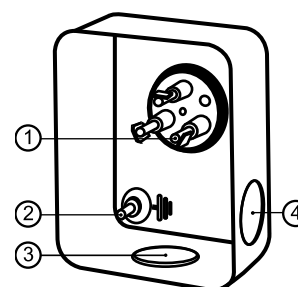
Model number (on compressor nameplate)		<b>MTZ44HJ4BVE</b>
Code number for Singlepack*		MTZ44-4VI
Code number for Industrial pack**		MTZ44-4VM
Drawing number		8502012g
Suction and discharge connections		Rotolock
Suction connection		1-3/4" Rotolock
Discharge connection		1-1/4" Rotolock
Suction connection with supplied sleeve		7/8" ODF
Discharge connection with supplied sleeve		3/4" ODF
Oil sight glass		Threaded
Oil equalisation connection		3/8" flare SAE
Oil drain connection		None
LP gauge port		Schrader
IPR valve		30 bar / 8 bar
Cylinders	2	
Swept volume	76.22 cm <sup>3</sup> /rev	
Displacement @ Nominal speed	13.3 m <sup>3</sup> /h @ 2900 rpm - 16.0 m <sup>3</sup> /h @ 3500 rpm	
Net weight	37 kg	
Oil charge	1.8 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	5 kg	
Approved refrigerants	R404A, R134a, R407A/C/F, R448A, R449A, R452A, R513A	

## Dimensions



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

## Terminal box



IP55 (with cable gland)

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

## Electrical Characteristics

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-440 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance (between phases) +/- 7% at 25°C	3.22 Ω
Maximum Continuous Current (MCC)	9.5 A
Locked Rotor Amps (LRA)	48.5 A
Motor protection	Internal overload protector

## Recommended Installation torques

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

## Parts shipped with compressor

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

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

\*Singlepack: Compressor in cardboard box

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

**Rotolock accessories, suction side**

**Code no.**

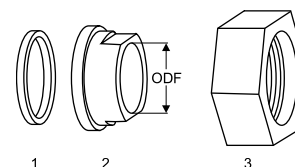
Solder sleeve, P07 (1-3/4" Rotolock, 7/8" ODF)	8153013
Rotolock valve, V07 (1-3/4" Rotolock, 7/8" ODF)	8168032
Gasket, 1-3/4"	8156132

**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, V07 (1-3/4"~7/8"), V04 (1-1/4"~3/4")	7703006
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.**

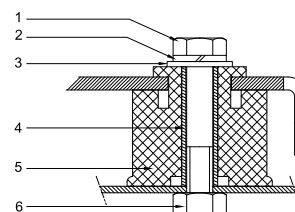
PTC heater 27W, CE mark, UL	120Z0459
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	7773107
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	7773117
Belt type crankcase heater, 65 W, 460 V, CE mark, UL	120Z0466

**Mounting kit**

**Miscellaneous accessories**

**Code no.**

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



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

**Spare parts**

**Code no.**

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

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ044-4

## 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	4 173	5 656	7 467	9 643	12 220	15 232	18 717	-	-
40	3 704	5 070	6 747	8 769	11 173	13 994	17 268	-	-
45	3 263	4 510	6 048	7 913	10 141	12 766	15 826	-	-
50	-	3 982	5 378	7 082	9 129	11 555	14 397	-	-
55	-	-	4 742	6 281	8 144	10 368	12 987	-	-
60	-	-	-	5 517	7 193	9 210	11 604	-	-
65	-	-	-	4 797	6 281	8 087	10 252	-	-

### Power input in W

35	1 919	2 133	2 306	2 444	2 556	2 649	2 729	-	-
40	1 957	2 216	2 430	2 607	2 753	2 877	2 985	-	-
45	1 967	2 276	2 537	2 756	2 942	3 101	3 242	-	-
50	-	2 311	2 623	2 890	3 120	3 320	3 498	-	-
55	-	-	2 688	3 007	3 286	3 532	3 751	-	-
60	-	-	-	3 106	3 438	3 734	4 000	-	-
65	-	-	-	3 183	3 574	3 925	4 243	-	-

### Current consumption in A

35	4.45	4.66	4.85	5.04	5.19	5.32	5.40	-	-
40	4.53	4.76	4.99	5.20	5.39	5.55	5.67	-	-
45	4.59	4.86	5.13	5.38	5.61	5.81	5.98	-	-
50	-	4.94	5.25	5.55	5.84	6.09	6.31	-	-
55	-	-	5.35	5.71	6.06	6.38	6.66	-	-
60	-	-	-	5.84	6.26	6.65	7.02	-	-
65	-	-	-	5.92	6.43	6.91	7.36	-	-

### Mass flow in kg/h

35	90	121	157	199	249	306	371	-	-
40	84	114	149	190	238	294	358	-	-
45	79	107	140	181	228	282	345	-	-
50	-	100	132	171	217	270	331	-	-
55	-	-	124	161	205	257	317	-	-
60	-	-	-	152	194	244	302	-	-
65	-	-	-	143	183	231	287	-	-

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

35	2.17	2.65	3.24	3.95	4.78	5.75	6.86	-	-
40	1.89	2.29	2.78	3.36	4.06	4.86	5.78	-	-
45	1.66	1.98	2.38	2.87	3.45	4.12	4.88	-	-
50	-	1.72	2.05	2.45	2.93	3.48	4.12	-	-
55	-	-	1.76	2.09	2.48	2.94	3.46	-	-
60	-	-	-	1.78	2.09	2.47	2.90	-	-
65	-	-	-	1.51	1.76	2.06	2.42	-	-

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

Cooling capacity	9 129	W
Power input	3 120	W
Current consumption	5.84	A
Mass flow	217	kg/h
C.O.P.	2.93	



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	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	84	dB(A)
With acoustic hood	78	dB(A)

Tolerance according EN12900

**Datasheet, performance data**
**Maneurop reciprocating compressor. MTZ044-4**
**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	4 492	6 080	8 018	10 343	13 092	16 303	20 012	-	-
40	4 008	5 479	7 282	9 453	12 029	15 049	18 550	-	-
45	3 554	4 905	6 567	8 580	10 981	13 806	17 094	-	-
50	-	4 362	5 881	7 732	9 952	12 579	15 650	-	-
55	-	-	5 231	6 915	8 951	11 375	14 227	-	-
60	-	-	-	6 137	7 984	10 203	12 832	-	-
65	-	-	-	5 405	7 060	9 070	11 473	-	-

**Power input in W**

35	1 919	2 133	2 306	2 444	2 556	2 649	2 729	-	-
40	1 957	2 216	2 430	2 607	2 753	2 877	2 985	-	-
45	1 967	2 276	2 537	2 756	2 942	3 101	3 242	-	-
50	-	2 311	2 623	2 890	3 120	3 320	3 498	-	-
55	-	-	2 688	3 007	3 286	3 532	3 751	-	-
60	-	-	-	3 106	3 438	3 734	4 000	-	-
65	-	-	-	3 183	3 574	3 925	4 243	-	-

**Current consumption in A**

35	4.45	4.66	4.85	5.04	5.19	5.32	5.40	-	-
40	4.53	4.76	4.99	5.20	5.39	5.55	5.67	-	-
45	4.59	4.86	5.13	5.38	5.61	5.81	5.98	-	-
50	-	4.94	5.25	5.55	5.84	6.09	6.31	-	-
55	-	-	5.35	5.71	6.06	6.38	6.66	-	-
60	-	-	-	5.84	6.26	6.65	7.02	-	-
65	-	-	-	5.92	6.43	6.91	7.36	-	-

**Mass flow in kg/h**

35	90	120	156	198	247	304	368	-	-
40	84	113	148	189	237	292	356	-	-
45	78	106	140	180	226	281	343	-	-
50	-	99	131	170	215	268	329	-	-
55	-	-	123	160	204	255	315	-	-
60	-	-	-	151	193	242	300	-	-
65	-	-	-	142	182	229	285	-	-

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

35	2.34	2.85	3.48	4.23	5.12	6.16	7.33	-	-
40	2.05	2.47	3.00	3.63	4.37	5.23	6.21	-	-
45	1.81	2.15	2.59	3.11	3.73	4.45	5.27	-	-
50	-	1.89	2.24	2.68	3.19	3.79	4.47	-	-
55	-	-	1.95	2.30	2.72	3.22	3.79	-	-
60	-	-	-	1.98	2.32	2.73	3.21	-	-
65	-	-	-	1.70	1.98	2.31	2.70	-	-

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

Cooling capacity	10 096	W
Power input	3 376	W
Current consumption	6.17	A
Mass flow	227	kg/h
C.O.P.	2.99	

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	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	1 338	1 929	3 633	4 816	6 267	8 021	10 113	12 578	15 452
40	1 138	1 692	3 273	4 372	5 722	7 359	9 319	11 636	14 346
45	944	1 462	2 926	3 941	5 193	6 715	8 545	10 715	13 263
50	756	1 241	2 590	3 525	4 680	6 090	7 791	9 818	12 205
55	-	-	2 267	3 123	4 183	5 483	7 057	8 942	11 172
60	-	-	-	2 735	3 702	4 894	6 344	8 088	10 162
65	-	-	-	-	3 237	4 322	5 650	7 257	9 177
75	-	-	-	-	-	-	4 323	5 659	7 277

**Power input in W**

35	887	1 089	1 418	1 545	1 648	1 724	1 776	1 803	1 805
40	848	1 079	1 462	1 614	1 741	1 841	1 915	1 963	1 986
45	791	1 052	1 494	1 675	1 828	1 954	2 054	2 126	2 172
50	711	1 006	1 512	1 723	1 906	2 062	2 189	2 288	2 359
55	-	-	1 513	1 757	1 973	2 160	2 317	2 446	2 546
60	-	-	-	1 773	2 024	2 245	2 436	2 597	2 728
65	-	-	-	-	2 056	2 314	2 540	2 737	2 902
75	-	-	-	-	-	-	2 697	2 971	3 213

**Current consumption in A**

35	3.43	3.66	3.99	4.10	4.19	4.25	4.30	4.35	4.39
40	3.40	3.65	4.03	4.16	4.26	4.34	4.41	4.48	4.54
45	3.34	3.62	4.06	4.21	4.34	4.45	4.55	4.63	4.71
50	3.24	3.57	4.07	4.26	4.43	4.57	4.69	4.80	4.91
55	-	-	4.07	4.30	4.50	4.68	4.83	4.98	5.13
60	-	-	-	4.31	4.55	4.77	4.97	5.16	5.35
65	-	-	-	-	4.58	4.85	5.10	5.33	5.56
75	-	-	-	-	-	-	5.26	5.61	5.95

**Mass flow in kg/h**

35	34	48	87	112	142	179	221	271	328
40	30	44	82	107	137	172	214	262	318
45	27	41	77	102	131	165	206	253	308
50	23	37	72	96	125	158	198	245	298
55	-	-	67	91	118	151	190	236	288
60	-	-	-	85	112	144	182	227	278
65	-	-	-	-	105	137	174	217	268
75	-	-	-	-	-	-	157	198	247

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

35	1.51	1.77	2.56	3.12	3.80	4.65	5.69	6.98	8.56
40	1.34	1.57	2.24	2.71	3.29	4.00	4.87	5.93	7.22
45	1.19	1.39	1.96	2.35	2.84	3.44	4.16	5.04	6.11
50	1.06	1.23	1.71	2.05	2.45	2.95	3.56	4.29	5.17
55	-	-	1.50	1.78	2.12	2.54	3.05	3.66	4.39
60	-	-	-	1.54	1.83	2.18	2.60	3.11	3.73
65	-	-	-	-	1.57	1.87	2.22	2.65	3.16
75	-	-	-	-	-	-	1.60	1.90	2.27

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

Cooling capacity	6 090	W
Power input	2 062	W
Current consumption	4.57	A
Mass flow	158	kg/h
C.O.P.	2.95	

**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 subsequential changes being necessary in specifications already agreed.  
All trademarks in this material are property of the respective companies. Danfoss, the Danfoss logotype and Maneurop are trademarks of Danfoss A/S. All rights reserved.

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

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

**Cooling capacity in W**

35	1 455	2 093	3 928	5 199	6 755	8 632	10 868	13 499	16 562
40	1 244	1 846	3 558	4 743	6 197	7 957	10 060	12 543	15 442
45	1 039	1 606	3 199	4 301	5 655	7 300	9 272	11 609	14 346
50	-	1 373	2 852	3 872	5 129	6 661	8 505	10 697	13 275
55	-	-	2 516	3 457	4 619	6 040	7 757	9 808	12 229
60	-	-	-	3 055	4 124	5 437	7 030	8 941	11 208
65	-	-	-	-	-	4 852	6 323	8 098	10 214
75	-	-	-	-	-	-	4 974	6 486	8 310

**Power input in W**

35	887	1 089	1 418	1 545	1 648	1 724	1 776	1 803	1 805
40	848	1 079	1 462	1 614	1 741	1 841	1 915	1 963	1 986
45	791	1 052	1 494	1 675	1 828	1 954	2 054	2 126	2 172
50	-	1 006	1 512	1 723	1 906	2 062	2 189	2 288	2 359
55	-	-	1 513	1 757	1 973	2 160	2 317	2 446	2 546
60	-	-	-	1 773	2 024	2 245	2 436	2 597	2 728
65	-	-	-	-	-	2 314	2 540	2 737	2 902
75	-	-	-	-	-	-	2 697	2 971	3 213

**Current consumption in A**

35	3.43	3.66	3.99	4.10	4.19	4.25	4.30	4.35	4.39
40	3.40	3.65	4.03	4.16	4.26	4.34	4.41	4.48	4.54
45	3.34	3.62	4.06	4.21	4.34	4.45	4.55	4.63	4.71
50	-	3.57	4.07	4.26	4.43	4.57	4.69	4.80	4.91
55	-	-	4.07	4.30	4.50	4.68	4.83	4.98	5.13
60	-	-	-	4.31	4.55	4.77	4.97	5.16	5.35
65	-	-	-	-	-	4.85	5.10	5.33	5.56
75	-	-	-	-	-	-	5.26	5.61	5.95

**Mass flow in kg/h**

35	34	48	86	111	142	178	220	269	326
40	30	44	82	106	136	171	212	261	316
45	27	40	77	101	130	164	205	252	307
50	-	36	72	96	124	158	197	243	297
55	-	-	67	90	118	151	189	234	287
60	-	-	-	84	111	143	181	225	277
65	-	-	-	-	-	136	173	216	266
75	-	-	-	-	-	-	156	197	245

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

35	1.64	1.92	2.77	3.36	4.10	5.01	6.12	7.49	9.18
40	1.47	1.71	2.43	2.94	3.56	4.32	5.25	6.39	7.78
45	1.31	1.53	2.14	2.57	3.09	3.74	4.51	5.46	6.61
50	-	1.37	1.89	2.25	2.69	3.23	3.89	4.67	5.63
55	-	-	1.66	1.97	2.34	2.80	3.35	4.01	4.80
60	-	-	-	1.72	2.04	2.42	2.89	3.44	4.11
65	-	-	-	-	-	2.10	2.49	2.96	3.52
75	-	-	-	-	-	-	1.84	2.18	2.59

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

Cooling capacity	6 837	W
Power input	2 220	W
Current consumption	4.73	A
Mass flow	168	kg/h
C.O.P.	3.08	

**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. MTZ044-4

## 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	2 260	3 170	4 298	5 674	7 331	9 300	11 613	14 301	17 396
35	1 963	2 818	3 869	5 149	6 689	8 520	10 674	13 183	16 079
40	1 663	2 460	3 433	4 613	6 033	7 724	9 717	12 044	14 737
45	1 362	2 098	2 990	4 069	5 366	6 913	8 743	10 885	13 374
50	1 062	1 735	2 543	3 517	4 689	6 090	7 753	9 708	11 989
55	-	1 371	2 092	2 959	4 003	5 256	6 749	8 515	10 584
60	-	1 008	1 640	2 397	3 310	4 411	5 733	7 306	9 162

### Power input in W

30	1 645	1 882	2 093	2 282	2 449	2 596	2 727	2 841	2 943
35	1 649	1 915	2 154	2 368	2 558	2 727	2 877	3 008	3 124
40	1 635	1 935	2 207	2 450	2 668	2 863	3 035	3 188	3 323
45	1 600	1 939	2 247	2 525	2 775	2 999	3 199	3 378	3 536
50	1 541	1 924	2 272	2 589	2 875	3 134	3 366	3 574	3 760
55	-	1 886	2 280	2 639	2 966	3 264	3 532	3 775	3 993
60	-	1 823	2 266	2 673	3 045	3 385	3 695	3 976	4 231

### Current consumption in A

30	4.13	4.32	4.52	4.74	4.97	5.22	5.51	5.82	6.17
35	4.13	4.37	4.60	4.84	5.08	5.35	5.63	5.94	6.27
40	4.11	4.40	4.67	4.94	5.22	5.49	5.79	6.09	6.42
45	4.07	4.41	4.73	5.05	5.35	5.66	5.97	6.28	6.61
50	3.98	4.39	4.77	5.14	5.49	5.83	6.16	6.49	6.83
55	-	4.34	4.79	5.21	5.61	5.99	6.36	6.72	7.07
60	-	4.24	4.76	5.25	5.71	6.14	6.55	6.95	7.33

### Mass flow in kg/h

30	71	98	129	166	209	259	317	383	458
35	66	93	124	161	203	253	310	375	449
40	61	88	119	155	197	246	302	366	439
45	55	82	113	149	190	238	293	356	428
50	48	75	106	141	182	230	284	346	416
55	-	67	97	133	174	220	274	335	404
60	-	57	88	123	164	210	262	322	390

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

30	1.37	1.68	2.05	2.49	2.99	3.58	4.26	5.03	5.91
35	1.19	1.47	1.80	2.17	2.61	3.12	3.71	4.38	5.15
40	1.02	1.27	1.56	1.88	2.26	2.70	3.20	3.78	4.43
45	0.85	1.08	1.33	1.61	1.93	2.31	2.73	3.22	3.78
50	0.69	0.90	1.12	1.36	1.63	1.94	2.30	2.72	3.19
55	-	0.73	0.92	1.12	1.35	1.61	1.91	2.26	2.65
60	-	0.55	0.72	0.90	1.09	1.30	1.55	1.84	2.17

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

Cooling capacity	5 366	W
Power input	2 775	W
Current consumption	5.35	A
Mass flow	190	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	80	dB(A)
With acoustic hood	74	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	2 516	3 520	4 759	6 268	8 079	10 227	12 743	15 663	19 017
35	2 208	3 160	4 327	5 741	7 438	9 451	11 813	14 557	17 717
40	1 895	2 793	3 885	5 203	6 783	8 659	10 863	13 431	16 394
45	1 578	2 421	3 435	4 655	6 117	7 853	9 898	12 287	15 052
50	1 258	2 043	2 979	4 099	5 440	7 036	8 922	11 131	13 698
55	-	1 661	2 518	3 538	4 758	6 213	7 939	9 970	12 340
60	-	1 275	2 054	2 975	4 076	5 393	6 963	8 819	10 998

**Power input in W**

30	1 645	1 882	2 093	2 282	2 449	2 596	2 727	2 841	2 943
35	1 649	1 915	2 154	2 368	2 558	2 727	2 877	3 008	3 124
40	1 635	1 935	2 207	2 450	2 668	2 863	3 035	3 188	3 323
45	1 600	1 939	2 247	2 525	2 775	2 999	3 199	3 378	3 536
50	1 541	1 924	2 272	2 589	2 875	3 134	3 366	3 574	3 760
55	-	1 886	2 280	2 639	2 966	3 264	3 532	3 775	3 993
60	-	1 823	2 266	2 673	3 045	3 385	3 695	3 976	4 231

**Current consumption in A**

30	4.13	4.32	4.52	4.74	4.97	5.22	5.51	5.82	6.17
35	4.13	4.37	4.60	4.84	5.08	5.35	5.63	5.94	6.27
40	4.11	4.40	4.67	4.94	5.22	5.49	5.79	6.09	6.42
45	4.07	4.41	4.73	5.05	5.35	5.66	5.97	6.28	6.61
50	3.98	4.39	4.77	5.14	5.49	5.83	6.16	6.49	6.83
55	-	4.34	4.79	5.21	5.61	5.99	6.36	6.72	7.07
60	-	4.24	4.76	5.25	5.71	6.14	6.55	6.95	7.33

**Mass flow in kg/h**

30	71	97	128	165	208	257	315	381	455
35	66	93	124	160	202	251	308	372	446
40	61	87	118	154	196	244	300	363	436
45	55	81	112	148	189	237	291	354	425
50	47	74	105	140	181	228	282	344	413
55	-	66	97	132	173	219	272	332	401
60	-	57	88	123	163	208	261	320	387

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

30	1.53	1.87	2.27	2.75	3.30	3.94	4.67	5.51	6.46
35	1.34	1.65	2.01	2.42	2.91	3.47	4.11	4.84	5.67
40	1.16	1.44	1.76	2.12	2.54	3.02	3.58	4.21	4.93
45	0.99	1.25	1.53	1.84	2.20	2.62	3.09	3.64	4.26
50	0.82	1.06	1.31	1.58	1.89	2.25	2.65	3.11	3.64
55	-	0.88	1.10	1.34	1.60	1.90	2.25	2.64	3.09
60	-	0.70	0.91	1.11	1.34	1.59	1.88	2.22	2.60

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

Cooling capacity	6 117	W
Power input	2 775	W
Current consumption	5.35	A
Mass flow	189	kg/h
C.O.P.	2.20	

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	80	dB(A)
With acoustic hood	74	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ044-4

## 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	1 667	2 518	3 573	4 861	6 412	8 254	10 418	12 931	15 824
35	1 422	2 234	3 236	4 459	5 931	7 681	9 738	12 133	14 893
40	1 169	1 937	2 882	4 034	5 421	7 074	9 020	11 290	13 912
45	915	1 633	2 516	3 591	4 890	6 439	8 270	10 410	12 890
50	-	1 330	2 145	3 139	4 343	5 785	7 494	9 500	11 831
55	-	-	1 776	2 684	3 788	5 117	6 699	8 566	10 744
60	-	-	-	2 231	3 231	4 441	5 893	7 614	9 634

### Power input in W

30	1 259	1 507	1 732	1 936	2 118	2 279	2 419	2 537	2 635
35	1 232	1 508	1 761	1 991	2 199	2 385	2 549	2 691	2 811
40	1 188	1 497	1 781	2 042	2 279	2 494	2 686	2 855	3 001
45	1 126	1 470	1 790	2 085	2 356	2 603	2 827	3 027	3 204
50	-	1 426	1 785	2 119	2 428	2 712	2 971	3 206	3 417
55	-	-	1 765	2 141	2 491	2 816	3 115	3 389	3 638
60	-	-	-	2 150	2 545	2 914	3 257	3 573	3 864

### Current consumption in A

30	3.70	3.89	4.09	4.31	4.55	4.80	5.09	5.40	5.74
35	3.69	3.91	4.14	4.37	4.62	4.89	5.18	5.49	5.82
40	3.67	3.92	4.18	4.44	4.71	5.00	5.30	5.62	5.96
45	3.63	3.92	4.22	4.51	4.82	5.13	5.45	5.78	6.14
50	-	3.89	4.23	4.57	4.91	5.26	5.61	5.97	6.34
55	-	-	4.22	4.61	4.99	5.38	5.77	6.16	6.56
60	-	-	-	4.61	5.05	5.48	5.92	6.35	6.79

### Mass flow in kg/h

30	40	59	82	109	142	179	222	272	329
35	36	55	78	105	138	175	218	268	324
40	31	50	73	101	133	170	213	262	319
45	26	45	68	95	127	164	207	256	312
50	-	39	62	89	120	157	199	248	303
55	-	-	55	82	113	149	191	239	294
60	-	-	-	74	104	140	181	229	283

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

30	1.32	1.67	2.06	2.51	3.03	3.62	4.31	5.10	6.00
35	1.15	1.48	1.84	2.24	2.70	3.22	3.82	4.51	5.30
40	0.98	1.29	1.62	1.98	2.38	2.84	3.36	3.96	4.64
45	0.81	1.11	1.41	1.72	2.08	2.47	2.93	3.44	4.02
50	-	0.93	1.20	1.48	1.79	2.13	2.52	2.96	3.46
55	-	-	1.01	1.25	1.52	1.82	2.15	2.53	2.95
60	-	-	-	1.04	1.27	1.52	1.81	2.13	2.49

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

Cooling capacity	4 890	W
Power input	2 356	W
Current consumption	4.82	A
Mass flow	127	kg/h
C.O.P.	2.08	

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	79	dB(A)
With acoustic hood	73	dB(A)

Tolerance according EN12900

**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	1 803	2 719	3 853	5 235	6 896	8 867	11 178	13 859	16 941
35	1 547	2 426	3 510	4 828	6 412	8 293	10 501	13 067	16 020
40	1 281	2 118	3 145	4 395	5 897	7 683	9 783	12 228	15 047
45	1 011	1 800	2 767	3 942	5 357	7 043	9 030	11 349	14 031
50	-	1 480	2 381	3 477	4 800	6 381	8 250	10 439	12 979
55	-	-	1 994	3 006	4 232	5 703	7 450	9 505	11 899
60	-	-	-	2 536	3 660	5 017	6 639	8 556	10 801

**Power input in W**

30	1 259	1 507	1 732	1 936	2 118	2 279	2 419	2 537	2 635
35	1 232	1 508	1 761	1 991	2 199	2 385	2 549	2 691	2 811
40	1 188	1 497	1 781	2 042	2 279	2 494	2 686	2 855	3 001
45	1 126	1 470	1 790	2 085	2 356	2 603	2 827	3 027	3 204
50	-	1 426	1 785	2 119	2 428	2 712	2 971	3 206	3 417
55	-	-	1 765	2 141	2 491	2 816	3 115	3 389	3 638
60	-	-	-	2 150	2 545	2 914	3 257	3 573	3 864

**Current consumption in A**

30	3.70	3.89	4.09	4.31	4.55	4.80	5.09	5.40	5.74
35	3.69	3.91	4.14	4.37	4.62	4.89	5.18	5.49	5.82
40	3.67	3.92	4.18	4.44	4.71	5.00	5.30	5.62	5.96
45	3.63	3.92	4.22	4.51	4.82	5.13	5.45	5.78	6.14
50	-	3.89	4.23	4.57	4.91	5.26	5.61	5.97	6.34
55	-	-	4.22	4.61	4.99	5.38	5.77	6.16	6.56
60	-	-	-	4.61	5.05	5.48	5.92	6.35	6.79

**Mass flow in kg/h**

30	39	59	82	109	141	178	221	271	327
35	35	55	78	105	137	174	217	266	322
40	31	50	73	100	132	169	212	261	317
45	26	45	68	95	126	163	206	254	310
50	-	39	62	88	120	156	198	246	301
55	-	-	55	81	112	148	190	237	292
60	-	-	-	73	104	139	180	227	281

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

30	1.43	1.80	2.22	2.70	3.26	3.89	4.62	5.46	6.43
35	1.26	1.61	1.99	2.42	2.92	3.48	4.12	4.86	5.70
40	1.08	1.42	1.77	2.15	2.59	3.08	3.64	4.28	5.01
45	0.90	1.22	1.55	1.89	2.27	2.71	3.19	3.75	4.38
50	-	1.04	1.33	1.64	1.98	2.35	2.78	3.26	3.80
55	-	-	1.13	1.40	1.70	2.03	2.39	2.80	3.27
60	-	-	-	1.18	1.44	1.72	2.04	2.39	2.79

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

Cooling capacity	5 357	W
Power input	2 356	W
Current consumption	4.82	A
Mass flow	126	kg/h
C.O.P.	2.27	

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	79	dB(A)
With acoustic hood	73	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ044-4

## 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	-	2 738	3 919	5 366	7 115	9 200	11 658	14 523	17 832
35	-	2 365	3 451	4 779	6 384	8 302	10 568	13 217	16 285
40	-	2 039	3 047	4 272	5 750	7 516	9 606	12 055	14 899
45	-	1 748	2 693	3 832	5 198	6 829	8 759	11 025	13 660
50	-	-	2 375	3 442	4 714	6 226	8 013	10 110	12 554
55	-	-	-	3 091	4 284	5 693	7 352	9 298	11 566
60	-	-	-	-	-	-	-	-	-

### Power input in W

30	-	1 587	1 821	2 035	2 221	2 373	2 485	2 548	2 557
35	-	1 594	1 853	2 097	2 318	2 510	2 665	2 777	2 840
40	-	1 603	1 883	2 153	2 406	2 633	2 829	2 987	3 100
45	-	1 621	1 920	2 213	2 493	2 753	2 986	3 186	3 345
50	-	-	1 973	2 285	2 589	2 878	3 145	3 383	3 586
55	-	-	-	2 378	2 703	3 017	3 314	3 587	3 830
60	-	-	-	-	-	-	-	-	-

### Current consumption in A

30	-	3.89	4.12	4.36	4.61	4.88	5.16	5.45	5.74
35	-	3.96	4.20	4.46	4.73	5.01	5.30	5.60	5.90
40	-	3.99	4.26	4.54	4.84	5.14	5.45	5.77	6.09
45	-	3.99	4.30	4.62	4.94	5.28	5.62	5.96	6.30
50	-	-	4.33	4.69	5.06	5.43	5.81	6.19	6.56
55	-	-	-	4.79	5.20	5.62	6.04	6.47	6.88
60	-	-	-	-	-	-	-	-	-

### Mass flow in kg/h

30	-	57	80	108	141	179	224	276	336
35	-	51	74	100	132	169	212	262	320
40	-	47	68	94	125	161	203	251	306
45	-	42	64	89	119	154	194	241	295
50	-	-	60	85	114	148	188	234	286
55	-	-	-	81	111	144	183	228	279
60	-	-	-	-	-	-	-	-	-

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

30	-	1.72	2.15	2.64	3.20	3.88	4.69	5.70	6.98
35	-	1.48	1.86	2.28	2.75	3.31	3.97	4.76	5.73
40	-	1.27	1.62	1.98	2.39	2.85	3.40	4.04	4.81
45	-	1.08	1.40	1.73	2.09	2.48	2.93	3.46	4.08
50	-	-	1.20	1.51	1.82	2.16	2.55	2.99	3.50
55	-	-	-	1.30	1.59	1.89	2.22	2.59	3.02
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	5 198	W
Power input	2 493	W
Current consumption	4.94	A
Mass flow	119	kg/h
C.O.P.	2.09	

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	79	dB(A)
With acoustic hood	73	dB(A)

Tolerance according EN12900

**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	-	2 934	4 196	5 740	7 603	9 822	12 434	15 477	18 988
35	-	2 546	3 712	5 135	6 852	8 901	11 319	14 143	17 410
40	-	2 208	3 295	4 614	6 202	8 098	10 338	12 961	16 002
45	-	1 904	2 930	4 163	5 640	7 400	9 480	11 918	14 752
50	-	-	2 604	3 768	5 152	6 794	8 732	11 003	13 646
55	-	-	-	3 415	4 725	6 267	8 082	10 205	12 676
60	-	-	-	-	-	-	-	-	-

**Power input in W**

30	-	1 587	1 821	2 035	2 221	2 373	2 485	2 548	2 557
35	-	1 594	1 853	2 097	2 318	2 510	2 665	2 777	2 840
40	-	1 603	1 883	2 153	2 406	2 633	2 829	2 987	3 100
45	-	1 621	1 920	2 213	2 493	2 753	2 986	3 186	3 345
50	-	-	1 973	2 285	2 589	2 878	3 145	3 383	3 586
55	-	-	-	2 378	2 703	3 017	3 314	3 587	3 830
60	-	-	-	-	-	-	-	-	-

**Current consumption in A**

30	-	3.89	4.12	4.36	4.61	4.88	5.16	5.45	5.74
35	-	3.96	4.20	4.46	4.73	5.01	5.30	5.60	5.90
40	-	3.99	4.26	4.54	4.84	5.14	5.45	5.77	6.09
45	-	3.99	4.30	4.62	4.94	5.28	5.62	5.96	6.30
50	-	-	4.33	4.69	5.06	5.43	5.81	6.19	6.56
55	-	-	-	4.79	5.20	5.62	6.04	6.47	6.88
60	-	-	-	-	-	-	-	-	-

**Mass flow in kg/h**

30	-	56	79	107	140	178	223	275	333
35	-	51	73	100	131	168	211	261	317
40	-	46	68	94	124	160	201	249	304
45	-	42	63	89	118	153	193	240	293
50	-	-	59	84	114	148	187	232	284
55	-	-	-	81	110	144	182	227	278
60	-	-	-	-	-	-	-	-	-

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

30	-	1.85	2.30	2.82	3.42	4.14	5.00	6.07	7.43
35	-	1.60	2.00	2.45	2.96	3.55	4.25	5.09	6.13
40	-	1.38	1.75	2.14	2.58	3.08	3.65	4.34	5.16
45	-	1.17	1.53	1.88	2.26	2.69	3.17	3.74	4.41
50	-	-	1.32	1.65	1.99	2.36	2.78	3.25	3.81
55	-	-	-	1.44	1.75	2.08	2.44	2.84	3.31
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	5 640	W
Power input	2 493	W
Current consumption	4.94	A
Mass flow	118	kg/h
C.O.P.	2.26	

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	79	dB(A)
With acoustic hood	73	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	1 338	1 929	3 633	4 816	6 267	8 021	10 113	12 578	15 452
40	1 138	1 692	3 273	4 372	5 722	7 359	9 319	11 636	14 346
45	944	1 462	2 926	3 941	5 193	6 715	8 545	10 715	13 263
50	756	1 241	2 590	3 525	4 680	6 090	7 791	9 818	12 205
55	-	-	2 267	3 123	4 183	5 483	7 057	8 942	11 172
60	-	-	-	2 735	3 702	4 894	6 344	8 088	10 162
65	-	-	-	-	3 237	4 322	5 650	7 257	9 177
75	-	-	-	-	-	-	4 323	5 659	7 277

**Power input in W**

35	887	1 089	1 418	1 545	1 648	1 724	1 776	1 803	1 805
40	848	1 079	1 462	1 614	1 741	1 841	1 915	1 963	1 986
45	791	1 052	1 494	1 675	1 828	1 954	2 054	2 126	2 172
50	711	1 006	1 512	1 723	1 906	2 062	2 189	2 288	2 359
55	-	-	1 513	1 757	1 973	2 160	2 317	2 446	2 546
60	-	-	-	1 773	2 024	2 245	2 436	2 597	2 728
65	-	-	-	-	2 056	2 314	2 540	2 737	2 902
75	-	-	-	-	-	-	2 697	2 971	3 213

**Current consumption in A**

35	3.43	3.66	3.99	4.10	4.19	4.25	4.30	4.35	4.39
40	3.40	3.65	4.03	4.16	4.26	4.34	4.41	4.48	4.54
45	3.34	3.62	4.06	4.21	4.34	4.45	4.55	4.63	4.71
50	3.24	3.57	4.07	4.26	4.43	4.57	4.69	4.80	4.91
55	-	-	4.07	4.30	4.50	4.68	4.83	4.98	5.13
60	-	-	-	4.31	4.55	4.77	4.97	5.16	5.35
65	-	-	-	-	4.58	4.85	5.10	5.33	5.56
75	-	-	-	-	-	-	5.26	5.61	5.95

**Mass flow in kg/h**

35	34	48	87	112	142	179	221	271	328
40	30	44	82	107	137	172	214	262	318
45	27	41	77	102	131	165	206	253	308
50	23	37	72	96	125	158	198	245	298
55	-	-	67	91	118	151	190	236	288
60	-	-	-	85	112	144	182	227	278
65	-	-	-	-	105	137	174	217	268
75	-	-	-	-	-	-	157	198	247

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

35	1.51	1.77	2.56	3.12	3.80	4.65	5.69	6.98	8.56
40	1.34	1.57	2.24	2.71	3.29	4.00	4.87	5.93	7.22
45	1.19	1.39	1.96	2.35	2.84	3.44	4.16	5.04	6.11
50	1.06	1.23	1.71	2.05	2.45	2.95	3.56	4.29	5.17
55	-	-	1.50	1.78	2.12	2.54	3.05	3.66	4.39
60	-	-	-	1.54	1.83	2.18	2.60	3.11	3.73
65	-	-	-	-	1.57	1.87	2.22	2.65	3.16
75	-	-	-	-	-	-	1.60	1.90	2.27

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

Cooling capacity	6 090	W
Power input	2 062	W
Current consumption	4.57	A
Mass flow	158	kg/h
C.O.P.	2.95	

**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 subsequential changes being necessary in specifications already agreed.  
All trademarks in this material are property of the respective companies. Danfoss, the Danfoss logotype and Maneurop are trademarks of Danfoss A/S. All rights reserved.

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

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

**Cooling capacity in W**

35	1 455	2 093	3 928	5 199	6 755	8 632	10 868	13 499	16 562
40	1 244	1 846	3 558	4 743	6 197	7 957	10 060	12 543	15 442
45	1 039	1 606	3 199	4 301	5 655	7 300	9 272	11 609	14 346
50	-	1 373	2 852	3 872	5 129	6 661	8 505	10 697	13 275
55	-	-	2 516	3 457	4 619	6 040	7 757	9 808	12 229
60	-	-	-	3 055	4 124	5 437	7 030	8 941	11 208
65	-	-	-	-	-	4 852	6 323	8 098	10 214
75	-	-	-	-	-	-	4 974	6 486	8 310

**Power input in W**

35	887	1 089	1 418	1 545	1 648	1 724	1 776	1 803	1 805
40	848	1 079	1 462	1 614	1 741	1 841	1 915	1 963	1 986
45	791	1 052	1 494	1 675	1 828	1 954	2 054	2 126	2 172
50	-	1 006	1 512	1 723	1 906	2 062	2 189	2 288	2 359
55	-	-	1 513	1 757	1 973	2 160	2 317	2 446	2 546
60	-	-	-	1 773	2 024	2 245	2 436	2 597	2 728
65	-	-	-	-	-	2 314	2 540	2 737	2 902
75	-	-	-	-	-	-	2 697	2 971	3 213

**Current consumption in A**

35	3.43	3.66	3.99	4.10	4.19	4.25	4.30	4.35	4.39
40	3.40	3.65	4.03	4.16	4.26	4.34	4.41	4.48	4.54
45	3.34	3.62	4.06	4.21	4.34	4.45	4.55	4.63	4.71
50	-	3.57	4.07	4.26	4.43	4.57	4.69	4.80	4.91
55	-	-	4.07	4.30	4.50	4.68	4.83	4.98	5.13
60	-	-	-	4.31	4.55	4.77	4.97	5.16	5.35
65	-	-	-	-	-	4.85	5.10	5.33	5.56
75	-	-	-	-	-	-	5.26	5.61	5.95

**Mass flow in kg/h**

35	34	48	86	111	142	178	220	269	326
40	30	44	82	106	136	171	212	261	316
45	27	40	77	101	130	164	205	252	307
50	-	36	72	96	124	158	197	243	297
55	-	-	67	90	118	151	189	234	287
60	-	-	-	84	111	143	181	225	277
65	-	-	-	-	-	136	173	216	266
75	-	-	-	-	-	-	156	197	245

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

35	1.64	1.92	2.77	3.36	4.10	5.01	6.12	7.49	9.18
40	1.47	1.71	2.43	2.94	3.56	4.32	5.25	6.39	7.78
45	1.31	1.53	2.14	2.57	3.09	3.74	4.51	5.46	6.61
50	-	1.37	1.89	2.25	2.69	3.23	3.89	4.67	5.63
55	-	-	1.66	1.97	2.34	2.80	3.35	4.01	4.80
60	-	-	-	1.72	2.04	2.42	2.89	3.44	4.11
65	-	-	-	-	-	2.10	2.49	2.96	3.52
75	-	-	-	-	-	-	1.84	2.18	2.59

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

Cooling capacity	6 837	W
Power input	2 220	W
Current consumption	4.73	A
Mass flow	168	kg/h
C.O.P.	3.08	

**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. MTZ044-4

## 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	4 173	5 656	7 467	9 643	12 220	15 232	18 717	-	-
40	3 704	5 070	6 747	8 769	11 173	13 994	17 268	-	-
45	3 263	4 510	6 048	7 913	10 141	12 766	15 826	-	-
50	-	3 982	5 378	7 082	9 129	11 555	14 397	-	-
55	-	-	4 742	6 281	8 144	10 368	12 987	-	-
60	-	-	-	5 517	7 193	9 210	11 604	-	-
65	-	-	-	4 797	6 281	8 087	10 252	-	-

### Power input in W

35	1 919	2 133	2 306	2 444	2 556	2 649	2 729	-	-
40	1 957	2 216	2 430	2 607	2 753	2 877	2 985	-	-
45	1 967	2 276	2 537	2 756	2 942	3 101	3 242	-	-
50	-	2 311	2 623	2 890	3 120	3 320	3 498	-	-
55	-	-	2 688	3 007	3 286	3 532	3 751	-	-
60	-	-	-	3 106	3 438	3 734	4 000	-	-
65	-	-	-	3 183	3 574	3 925	4 243	-	-

### Current consumption in A

35	4.45	4.66	4.85	5.04	5.19	5.32	5.40	-	-
40	4.53	4.76	4.99	5.20	5.39	5.55	5.67	-	-
45	4.59	4.86	5.13	5.38	5.61	5.81	5.98	-	-
50	-	4.94	5.25	5.55	5.84	6.09	6.31	-	-
55	-	-	5.35	5.71	6.06	6.38	6.66	-	-
60	-	-	-	5.84	6.26	6.65	7.02	-	-
65	-	-	-	5.92	6.43	6.91	7.36	-	-

### Mass flow in kg/h

35	90	121	157	199	249	306	371	-	-
40	84	114	149	190	238	294	358	-	-
45	79	107	140	181	228	282	345	-	-
50	-	100	132	171	217	270	331	-	-
55	-	-	124	161	205	257	317	-	-
60	-	-	-	152	194	244	302	-	-
65	-	-	-	143	183	231	287	-	-

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

35	2.17	2.65	3.24	3.95	4.78	5.75	6.86	-	-
40	1.89	2.29	2.78	3.36	4.06	4.86	5.78	-	-
45	1.66	1.98	2.38	2.87	3.45	4.12	4.88	-	-
50	-	1.72	2.05	2.45	2.93	3.48	4.12	-	-
55	-	-	1.76	2.09	2.48	2.94	3.46	-	-
60	-	-	-	1.78	2.09	2.47	2.90	-	-
65	-	-	-	1.51	1.76	2.06	2.42	-	-

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

Cooling capacity	9 129	W
Power input	3 120	W
Current consumption	5.84	A
Mass flow	217	kg/h
C.O.P.	2.93	



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	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	84	dB(A)
With acoustic hood	78	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	4 492	6 080	8 018	10 343	13 092	16 303	20 012	-	-
40	4 008	5 479	7 282	9 453	12 029	15 049	18 550	-	-
45	3 554	4 905	6 567	8 580	10 981	13 806	17 094	-	-
50	-	4 362	5 881	7 732	9 952	12 579	15 650	-	-
55	-	-	5 231	6 915	8 951	11 375	14 227	-	-
60	-	-	-	6 137	7 984	10 203	12 832	-	-
65	-	-	-	5 405	7 060	9 070	11 473	-	-

**Power input in W**

35	1 919	2 133	2 306	2 444	2 556	2 649	2 729	-	-
40	1 957	2 216	2 430	2 607	2 753	2 877	2 985	-	-
45	1 967	2 276	2 537	2 756	2 942	3 101	3 242	-	-
50	-	2 311	2 623	2 890	3 120	3 320	3 498	-	-
55	-	-	2 688	3 007	3 286	3 532	3 751	-	-
60	-	-	-	3 106	3 438	3 734	4 000	-	-
65	-	-	-	3 183	3 574	3 925	4 243	-	-

**Current consumption in A**

35	4.45	4.66	4.85	5.04	5.19	5.32	5.40	-	-
40	4.53	4.76	4.99	5.20	5.39	5.55	5.67	-	-
45	4.59	4.86	5.13	5.38	5.61	5.81	5.98	-	-
50	-	4.94	5.25	5.55	5.84	6.09	6.31	-	-
55	-	-	5.35	5.71	6.06	6.38	6.66	-	-
60	-	-	-	5.84	6.26	6.65	7.02	-	-
65	-	-	-	5.92	6.43	6.91	7.36	-	-

**Mass flow in kg/h**

35	90	120	156	198	247	304	368	-	-
40	84	113	148	189	237	292	356	-	-
45	78	106	140	180	226	281	343	-	-
50	-	99	131	170	215	268	329	-	-
55	-	-	123	160	204	255	315	-	-
60	-	-	-	151	193	242	300	-	-
65	-	-	-	142	182	229	285	-	-

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

35	2.34	2.85	3.48	4.23	5.12	6.16	7.33	-	-
40	2.05	2.47	3.00	3.63	4.37	5.23	6.21	-	-
45	1.81	2.15	2.59	3.11	3.73	4.45	5.27	-	-
50	-	1.89	2.24	2.68	3.19	3.79	4.47	-	-
55	-	-	1.95	2.30	2.72	3.22	3.79	-	-
60	-	-	-	1.98	2.32	2.73	3.21	-	-
65	-	-	-	1.70	1.98	2.31	2.70	-	-

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

Cooling capacity	10 096	W
Power input	3 376	W
Current consumption	6.17	A
Mass flow	227	kg/h
C.O.P.	2.99	

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	84	dB(A)
With acoustic hood	78	dB(A)

Tolerance according EN12900

**Datasheet, performance data**
**Maneurop reciprocating compressor. MTZ044-4**
**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	-	3 908	5 279	6 992	9 086	-	-	-	-
20	-	3 351	4 571	6 091	7 947	10 178	12 824	-	-
30	-	2 784	3 860	5 193	6 817	8 769	11 089	13 817	17 004
40	-	-	3 145	4 296	5 694	7 375	9 375	11 731	14 487
50	-	-	-	3 399	4 579	5 995	7 682	9 674	12 008
60	-	-	-	-	3 467	4 627	6 010	7 646	9 567

**Power input in W**

10	-	1 276	1 334	1 348	1 311	-	-	-	-
20	-	1 479	1 610	1 707	1 763	1 772	1 727	-	-
30	-	1 601	1 802	1 977	2 121	2 228	2 290	2 302	2 257
40	-	-	1 911	2 160	2 387	2 587	2 752	2 876	2 952
50	-	-	-	2 259	2 565	2 852	3 115	3 346	3 540
60	-	-	-	-	2 656	3 026	3 382	3 715	4 021

**Current consumption in A**

10	-	4.06	4.18	4.27	4.32	-	-	-	-
20	-	3.98	4.13	4.26	4.38	4.44	4.43	-	-
30	-	4.00	4.19	4.38	4.57	4.72	4.81	4.83	4.75
40	-	-	4.28	4.55	4.82	5.07	5.28	5.43	5.50
50	-	-	-	4.68	5.04	5.41	5.75	6.05	6.28
60	-	-	-	-	5.17	5.65	6.14	6.59	6.99

**Mass flow in kg/h**

10	-	65	88	116	151	-	-	-	-
20	-	59	81	108	142	183	233	-	-
30	-	53	74	100	131	170	218	275	344
40	-	-	66	90	120	157	202	256	321
50	-	-	-	80	108	143	185	236	297
60	-	-	-	-	94	126	166	214	272

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

10	-	3.06	3.96	5.19	6.93	-	-	-	-
20	-	2.27	2.84	3.57	4.51	5.74	7.42	-	-
30	-	1.74	2.14	2.63	3.21	3.94	4.84	6.00	7.53
40	-	-	1.65	1.99	2.39	2.85	3.41	4.08	4.91
50	-	-	-	1.50	1.79	2.10	2.47	2.89	3.39
60	-	-	-	-	1.31	1.53	1.78	2.06	2.38

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

Cooling capacity	5 136	W
Power input	2 487	W
Current consumption	4.94	A
Mass flow	114	kg/h
C.O.P.	2.06	

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	80	dB(A)
With acoustic hood	74	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ044-4

## 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	2 854	3 927	5 309	7 035	9 145	-	-	-	-
20	2 372	3 329	4 552	6 079	7 945	10 189	12 848	-	-
30	1 881	2 728	3 798	5 130	6 760	8 725	11 063	13 810	17 004
40	1 382	2 124	3 048	4 190	5 589	7 281	9 303	11 693	14 487
50	-	1 518	2 301	3 260	4 434	5 858	7 570	9 608	12 008
60	-	-	1 558	2 340	3 294	4 456	5 864	7 556	9 567

### Power input in W

10	1 181	1 276	1 334	1 348	1 311	-	-	-	-
20	1 319	1 479	1 610	1 707	1 763	1 772	1 727	-	-
30	1 383	1 601	1 802	1 977	2 121	2 228	2 290	2 302	2 257
40	1 375	1 647	1 911	2 160	2 387	2 587	2 752	2 876	2 952
50	-	1 619	1 942	2 259	2 565	2 852	3 115	3 346	3 540
60	-	-	1 896	2 277	2 656	3 026	3 382	3 715	4 021

### Current consumption in A

10	3.95	4.06	4.18	4.27	4.32	-	-	-	-
20	3.85	3.98	4.13	4.26	4.38	4.44	4.43	-	-
30	3.85	4.00	4.19	4.38	4.57	4.72	4.81	4.83	4.75
40	3.86	4.05	4.28	4.55	4.82	5.07	5.28	5.43	5.50
50	-	4.04	4.34	4.68	5.04	5.41	5.75	6.05	6.28
60	-	-	4.26	4.69	5.17	5.65	6.14	6.59	6.99

### Mass flow in kg/h

10	56	75	100	130	166	-	-	-	-
20	50	69	92	121	155	196	245	-	-
30	43	62	84	112	144	183	229	282	344
40	35	53	75	101	132	169	212	263	321
50	-	43	64	89	119	154	194	242	297
60	-	-	51	75	103	136	174	220	272

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

10	2.42	3.08	3.98	5.22	6.97	-	-	-	-
20	1.80	2.25	2.83	3.56	4.51	5.75	7.44	-	-
30	1.36	1.70	2.11	2.59	3.19	3.92	4.83	6.00	7.53
40	1.01	1.29	1.59	1.94	2.34	2.81	3.38	4.07	4.91
50	-	0.94	1.18	1.44	1.73	2.05	2.43	2.87	3.39
60	-	-	0.82	1.03	1.24	1.47	1.73	2.03	2.38

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

Cooling capacity	5 009	W
Power input	2 487	W
Current consumption	4.94	A
Mass flow	126	kg/h
C.O.P.	2.01	

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	80	dB(A)
With acoustic hood	74	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ044-4

## 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	-	3 915	5 287	7 001	9 095	-	-	-	-
20	-	3 358	4 579	6 100	7 956	10 186	12 831	-	-
30	-	2 791	3 869	5 202	6 826	8 778	11 096	13 821	17 004
40	-	-	3 153	4 305	5 704	7 384	9 382	11 735	14 487
50	-	-	-	3 408	4 588	6 004	7 689	9 678	12 008
60	-	-	-	-	3 476	4 636	6 017	7 650	9 567

### Power input in W

10	-	1 276	1 334	1 348	1 311	-	-	-	-
20	-	1 479	1 610	1 707	1 763	1 772	1 727	-	-
30	-	1 601	1 802	1 977	2 121	2 228	2 290	2 302	2 257
40	-	-	1 911	2 160	2 387	2 587	2 752	2 876	2 952
50	-	-	-	2 259	2 565	2 852	3 115	3 346	3 540
60	-	-	-	-	2 656	3 026	3 382	3 715	4 021

### Current consumption in A

10	-	4.06	4.18	4.27	4.32	-	-	-	-
20	-	3.98	4.13	4.26	4.38	4.44	4.43	-	-
30	-	4.00	4.19	4.38	4.57	4.72	4.81	4.83	4.75
40	-	-	4.28	4.55	4.82	5.07	5.28	5.43	5.50
50	-	-	-	4.68	5.04	5.41	5.75	6.05	6.28
60	-	-	-	-	5.17	5.65	6.14	6.59	6.99

### Mass flow in kg/h

10	-	66	89	118	154	-	-	-	-
20	-	60	82	110	144	186	237	-	-
30	-	54	75	102	134	174	222	280	350
40	-	-	67	92	123	161	206	261	327
50	-	-	-	81	111	146	189	241	304
60	-	-	-	-	96	129	170	219	278

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

10	-	3.07	3.96	5.19	6.94	-	-	-	-
20	-	2.27	2.84	3.57	4.51	5.75	7.43	-	-
30	-	1.74	2.15	2.63	3.22	3.94	4.85	6.00	7.53
40	-	-	1.65	1.99	2.39	2.85	3.41	4.08	4.91
50	-	-	-	1.51	1.79	2.11	2.47	2.89	3.39
60	-	-	-	-	1.31	1.53	1.78	2.06	2.38

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

Cooling capacity	5 145	W
Power input	2 487	W
Current consumption	4.94	A
Mass flow	117	kg/h
C.O.P.	2.07	

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	80	dB(A)
With acoustic hood	74	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ044-4

## 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	2 854	3 927	5 309	7 035	9 145	-	-	-	-
20	2 372	3 329	4 552	6 079	7 945	10 189	12 848	-	-
30	1 881	2 728	3 798	5 130	6 760	8 725	11 063	13 810	17 004
40	1 382	2 124	3 048	4 190	5 589	7 281	9 303	11 693	14 487
50	-	1 518	2 301	3 260	4 434	5 858	7 570	9 608	12 008
60	-	-	1 558	2 340	3 294	4 456	5 864	7 556	9 567

### Power input in W

10	1 181	1 276	1 334	1 348	1 311	-	-	-	-
20	1 319	1 479	1 610	1 707	1 763	1 772	1 727	-	-
30	1 383	1 601	1 802	1 977	2 121	2 228	2 290	2 302	2 257
40	1 375	1 647	1 911	2 160	2 387	2 587	2 752	2 876	2 952
50	-	1 619	1 942	2 259	2 565	2 852	3 115	3 346	3 540
60	-	-	1 896	2 277	2 656	3 026	3 382	3 715	4 021

### Current consumption in A

10	3.95	4.06	4.18	4.27	4.32	-	-	-	-
20	3.85	3.98	4.13	4.26	4.38	4.44	4.43	-	-
30	3.85	4.00	4.19	4.38	4.57	4.72	4.81	4.83	4.75
40	3.86	4.05	4.28	4.55	4.82	5.07	5.28	5.43	5.50
50	-	4.04	4.34	4.68	5.04	5.41	5.75	6.05	6.28
60	-	-	4.26	4.69	5.17	5.65	6.14	6.59	6.99

### Mass flow in kg/h

10	57	77	102	132	169	-	-	-	-
20	51	70	94	123	158	200	249	-	-
30	44	63	86	114	147	187	233	287	350
40	36	55	77	103	135	173	217	268	327
50	-	44	66	91	121	157	199	247	304
60	-	-	52	77	105	139	179	225	278

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

10	2.42	3.08	3.98	5.22	6.97	-	-	-	-
20	1.80	2.25	2.83	3.56	4.51	5.75	7.44	-	-
30	1.36	1.70	2.11	2.59	3.19	3.92	4.83	6.00	7.53
40	1.01	1.29	1.59	1.94	2.34	2.81	3.38	4.07	4.91
50	-	0.94	1.18	1.44	1.73	2.05	2.43	2.87	3.39
60	-	-	0.82	1.03	1.24	1.47	1.73	2.03	2.38

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

Cooling capacity	5 009	W
Power input	2 487	W
Current consumption	4.94	A
Mass flow	128	kg/h
C.O.P.	2.01	

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	80	dB(A)
With acoustic hood	74	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ044-4

## 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	-	4 571	5 988	7 737	9 847	-	-	-	-
20	-	3 994	5 282	6 857	8 748	10 986	13 602	-	-
30	-	3 366	4 517	5 911	7 575	9 537	11 827	14 478	17 530
40	-	2 695	3 702	4 906	6 334	8 013	9 969	12 232	14 835
50	-	-	2 840	3 848	5 034	6 423	8 039	9 908	12 056
60	-	-	-	2 742	3 681	4 776	6 048	7 518	9 204

### Power input in W

10	-	1 676	1 821	1 951	2 068	-	-	-	-
20	-	1 776	1 943	2 090	2 221	2 337	2 441	-	-
30	-	1 861	2 068	2 252	2 416	2 560	2 689	2 803	2 905
40	-	1 909	2 175	2 414	2 629	2 821	2 993	3 146	3 285
50	-	-	2 238	2 551	2 836	3 094	3 328	3 541	3 733
60	-	-	-	2 639	3 013	3 357	3 672	3 962	4 228

### Current consumption in A

10	-	4.55	4.87	5.22	5.60	-	-	-	-
20	-	4.25	4.49	4.75	5.02	5.31	5.64	-	-
30	-	4.22	4.46	4.68	4.91	5.15	5.40	5.68	6.00
40	-	4.28	4.57	4.84	5.10	5.34	5.59	5.85	6.12
50	-	-	4.65	5.03	5.38	5.70	6.01	6.31	6.61
60	-	-	-	5.06	5.56	6.03	6.47	6.88	7.28

### Mass flow in kg/h

10	-	94	124	160	205	-	-	-	-
20	-	89	118	153	197	249	312	-	-
30	-	82	110	145	187	237	297	369	455
40	-	73	101	134	174	222	280	349	431
50	-	-	88	120	158	204	259	325	403
60	-	-	-	102	139	182	234	296	370

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

10	-	2.73	3.29	3.96	4.76	-	-	-	-
20	-	2.25	2.72	3.28	3.94	4.70	5.57	-	-
30	-	1.81	2.18	2.62	3.14	3.72	4.40	5.17	6.03
40	-	1.41	1.70	2.03	2.41	2.84	3.33	3.89	4.52
50	-	-	1.27	1.51	1.78	2.08	2.42	2.80	3.23
60	-	-	-	1.04	1.22	1.42	1.65	1.90	2.18

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

Cooling capacity	5 691	W
Power input	2 734	W
Current consumption	5.24	A
Mass flow	167	kg/h
C.O.P.	2.08	

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	80	dB(A)
With acoustic hood	74	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ044-4

## 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	3 345	4 450	5 863	7 617	9 743	-	-	-	-
20	2 813	3 822	5 097	6 669	8 572	10 837	13 497	-	-
30	2 250	3 154	4 280	5 662	7 332	9 321	11 662	14 388	17 530
40	1 665	2 455	3 424	4 607	6 034	7 737	9 751	12 106	14 835
50	1 070	1 736	2 540	3 513	4 688	6 098	7 774	9 749	12 056
60	-	1 010	1 638	2 393	3 307	4 413	5 743	7 329	9 204

### Power input in W

10	1 513	1 676	1 821	1 951	2 068	-	-	-	-
20	1 588	1 776	1 943	2 090	2 221	2 337	2 441	-	-
30	1 629	1 861	2 068	2 252	2 416	2 560	2 689	2 803	2 905
40	1 613	1 909	2 175	2 414	2 629	2 821	2 993	3 146	3 285
50	1 516	1 893	2 238	2 551	2 836	3 094	3 328	3 541	3 733
60	-	1 792	2 233	2 639	3 013	3 357	3 672	3 962	4 228

### Current consumption in A

10	4.25	4.55	4.87	5.22	5.60	-	-	-	-
20	4.01	4.25	4.49	4.75	5.02	5.31	5.64	-	-
30	3.98	4.22	4.46	4.68	4.91	5.15	5.40	5.68	6.00
40	3.96	4.28	4.57	4.84	5.10	5.34	5.59	5.85	6.12
50	3.78	4.24	4.65	5.03	5.38	5.70	6.01	6.31	6.61
60	-	3.90	4.50	5.06	5.56	6.03	6.47	6.88	7.28

### Mass flow in kg/h

10	84	110	142	180	226	-	-	-	-
20	77	103	135	172	216	268	328	-	-
30	69	95	126	163	205	255	313	379	455
40	59	85	115	150	192	240	295	358	431
50	45	71	100	135	174	220	273	334	403
60	-	53	81	114	152	196	247	304	370

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

10	2.21	2.65	3.22	3.90	4.71	-	-	-	-
20	1.77	2.15	2.62	3.19	3.86	4.64	5.53	-	-
30	1.38	1.69	2.07	2.51	3.04	3.64	4.34	5.13	6.03
40	1.03	1.29	1.57	1.91	2.30	2.74	3.26	3.85	4.52
50	0.71	0.92	1.14	1.38	1.65	1.97	2.34	2.75	3.23
60	-	0.56	0.73	0.91	1.10	1.31	1.56	1.85	2.18

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

Cooling capacity	5 366	W
Power input	2 734	W
Current consumption	5.24	A
Mass flow	184	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	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	80	dB(A)
With acoustic hood	74	dB(A)

Tolerance according EN12900

**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	5 313	7 086	9 182	11 641	14 506	17 818	21 617	-	-
40	4 754	6 457	8 465	10 821	13 564	16 735	20 377	-	-
45	4 167	5 787	7 697	9 935	12 544	15 565	19 037	-	-
50	-	5 090	6 888	8 998	11 461	14 318	17 608	-	-
55	-	-	6 052	8 022	10 327	13 007	16 103	-	-
60	-	-	-	7 019	9 154	11 645	14 534	-	-
65	-	-	-	6 002	7 953	10 243	12 911	-	-

**Power input in W**

35	2 396	2 653	2 856	3 013	3 132	3 219	3 284	-	-
40	2 460	2 781	3 041	3 246	3 403	3 522	3 610	-	-
45	2 474	2 871	3 198	3 462	3 671	3 833	3 955	-	-
50	-	2 911	3 316	3 651	3 922	4 138	4 307	-	-
55	-	-	3 385	3 802	4 147	4 429	4 655	-	-
60	-	-	-	3 903	4 333	4 693	4 988	-	-
65	-	-	-	3 943	4 471	4 918	5 294	-	-

**Current consumption in A**

35	4.26	4.52	4.75	4.93	5.07	5.18	5.23	-	-
40	4.34	4.66	4.94	5.17	5.36	5.50	5.59	-	-
45	4.37	4.77	5.12	5.41	5.66	5.85	5.98	-	-
50	-	4.82	5.26	5.63	5.95	6.21	6.41	-	-
55	-	-	5.35	5.82	6.22	6.56	6.84	-	-
60	-	-	-	5.94	6.45	6.89	7.26	-	-
65	-	-	-	6.00	6.62	7.17	7.65	-	-

**Mass flow in kg/h**

35	115	151	193	241	295	358	428	-	-
40	108	145	187	235	289	352	423	-	-
45	100	137	179	227	282	344	415	-	-
50	-	128	169	217	272	334	405	-	-
55	-	-	158	206	260	322	392	-	-
60	-	-	-	193	247	308	378	-	-
65	-	-	-	178	232	292	361	-	-

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

35	2.22	2.67	3.21	3.86	4.63	5.53	6.58	-	-
40	1.93	2.32	2.78	3.33	3.99	4.75	5.64	-	-
45	1.68	2.02	2.41	2.87	3.42	4.06	4.81	-	-
50	-	1.75	2.08	2.46	2.92	3.46	4.09	-	-
55	-	-	1.79	2.11	2.49	2.94	3.46	-	-
60	-	-	-	1.80	2.11	2.48	2.91	-	-
65	-	-	-	1.52	1.78	2.08	2.44	-	-

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

Cooling capacity	11 461	W
Power input	3 922	W
Current consumption	5.95	A
Mass flow	272	kg/h
C.O.P.	2.92	

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 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	5 718	7 617	9 859	12 486	15 542	19 070	23 113	-	-
40	5 145	6 978	9 137	11 664	14 604	17 998	21 890	-	-
45	4 538	6 294	8 357	10 773	13 584	16 832	20 562	-	-
50	-	5 575	7 533	9 825	12 495	15 586	19 141	-	-
55	-	-	6 675	8 832	11 349	14 271	17 641	-	-
60	-	-	-	7 807	10 160	12 901	16 072	-	-
65	-	-	-	6 763	8 940	11 488	14 449	-	-

**Power input in W**

35	2 396	2 653	2 856	3 013	3 132	3 219	3 284	-	-
40	2 460	2 781	3 041	3 246	3 403	3 522	3 610	-	-
45	2 474	2 871	3 198	3 462	3 671	3 833	3 955	-	-
50	-	2 911	3 316	3 651	3 922	4 138	4 307	-	-
55	-	-	3 385	3 802	4 147	4 429	4 655	-	-
60	-	-	-	3 903	4 333	4 693	4 988	-	-
65	-	-	-	3 943	4 471	4 918	5 294	-	-

**Current consumption in A**

35	4.26	4.52	4.75	4.93	5.07	5.18	5.23	-	-
40	4.34	4.66	4.94	5.17	5.36	5.50	5.59	-	-
45	4.37	4.77	5.12	5.41	5.66	5.85	5.98	-	-
50	-	4.82	5.26	5.63	5.95	6.21	6.41	-	-
55	-	-	5.35	5.82	6.22	6.56	6.84	-	-
60	-	-	-	5.94	6.45	6.89	7.26	-	-
65	-	-	-	6.00	6.62	7.17	7.65	-	-

**Mass flow in kg/h**

35	115	150	192	239	294	355	426	-	-
40	108	144	185	233	288	350	420	-	-
45	100	136	178	225	280	342	412	-	-
50	-	127	168	216	270	332	402	-	-
55	-	-	158	205	259	320	390	-	-
60	-	-	-	192	246	307	376	-	-
65	-	-	-	177	230	291	359	-	-

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

35	2.39	2.87	3.45	4.14	4.96	5.92	7.04	-	-
40	2.09	2.51	3.00	3.59	4.29	5.11	6.06	-	-
45	1.83	2.19	2.61	3.11	3.70	4.39	5.20	-	-
50	-	1.92	2.27	2.69	3.19	3.77	4.44	-	-
55	-	-	1.97	2.32	2.74	3.22	3.79	-	-
60	-	-	-	2.00	2.34	2.75	3.22	-	-
65	-	-	-	1.72	2.00	2.34	2.73	-	-

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

Cooling capacity	12 732	W
Power input	4 249	W
Current consumption	6.34	A
Mass flow	287	kg/h
C.O.P.	3.00	

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 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	1 606	2 315	4 360	5 780	7 521	9 625	12 136	15 094	18 543
40	1 366	2 030	3 928	5 246	6 866	8 831	11 182	13 963	17 215
45	1 133	1 755	3 511	4 730	6 231	8 058	10 253	12 859	15 916
50	907	1 489	3 109	4 230	5 616	7 308	9 349	11 781	14 646
55	-	-	2 720	3 747	5 020	6 579	8 469	10 730	13 406
60	-	-	-	3 282	4 443	5 872	7 613	9 706	12 195
65	-	-	-	-	3 885	5 187	6 780	8 708	11 012
75	-	-	-	-	-	-	5 187	6 791	8 733

**Power input in W**

35	1 064	1 307	1 702	1 855	1 977	2 069	2 132	2 164	2 166
40	1 018	1 295	1 754	1 937	2 089	2 209	2 298	2 356	2 383
45	949	1 263	1 793	2 009	2 194	2 345	2 465	2 551	2 606
50	853	1 207	1 815	2 068	2 288	2 474	2 627	2 746	2 831
55	-	-	1 815	2 109	2 367	2 591	2 781	2 935	3 055
60	-	-	-	2 127	2 428	2 693	2 923	3 116	3 273
65	-	-	-	-	2 467	2 776	3 049	3 284	3 482
75	-	-	-	-	-	-	3 237	3 566	3 855

**Current consumption in A**

35	3.58	3.82	4.16	4.28	4.37	4.43	4.49	4.53	4.58
40	3.54	3.81	4.20	4.34	4.44	4.53	4.60	4.67	4.73
45	3.48	3.78	4.23	4.40	4.53	4.64	4.74	4.83	4.92
50	3.38	3.72	4.25	4.45	4.62	4.76	4.89	5.01	5.13
55	-	-	4.24	4.48	4.69	4.88	5.04	5.20	5.35
60	-	-	-	4.49	4.75	4.98	5.19	5.39	5.58
65	-	-	-	-	4.78	5.06	5.32	5.57	5.81
75	-	-	-	-	-	-	5.49	5.86	6.22

**Mass flow in kg/h**

35	41	58	104	134	171	214	265	325	394
40	36	53	98	128	164	206	256	315	382
45	32	49	93	122	157	198	247	304	370
50	28	44	87	115	150	190	238	294	358
55	-	-	81	109	142	182	228	283	346
60	-	-	-	102	134	173	219	272	334
65	-	-	-	-	126	164	209	261	321
75	-	-	-	-	-	-	188	238	296

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

35	1.51	1.77	2.56	3.12	3.80	4.65	5.69	6.98	8.56
40	1.34	1.57	2.24	2.71	3.29	4.00	4.87	5.93	7.22
45	1.19	1.39	1.96	2.35	2.84	3.44	4.16	5.04	6.11
50	1.06	1.23	1.71	2.05	2.45	2.95	3.56	4.29	5.17
55	-	-	1.50	1.78	2.12	2.54	3.05	3.66	4.39
60	-	-	-	1.54	1.83	2.18	2.60	3.11	3.73
65	-	-	-	-	1.57	1.87	2.22	2.65	3.16
75	-	-	-	-	-	-	1.60	1.90	2.27

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

Cooling capacity	7 308	W
Power input	2 474	W
Current consumption	4.76	A
Mass flow	190	kg/h
C.O.P.	2.95	

**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.

**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	1 746	2 512	4 714	6 239	8 106	10 359	13 042	16 199	19 874
40	1 493	2 215	4 270	5 692	7 437	9 549	12 072	15 051	18 530
45	1 247	1 927	3 839	5 161	6 786	8 760	11 127	13 931	17 215
50	-	1 648	3 423	4 647	6 155	7 993	10 206	12 836	15 930
55	-	-	3 019	4 148	5 543	7 248	9 309	11 769	14 675
60	-	-	-	3 666	4 949	6 524	8 436	10 730	13 450
65	-	-	-	-	-	5 822	7 588	9 718	12 257
75	-	-	-	-	-	-	5 969	7 783	9 972

**Power input in W**

35	1 064	1 307	1 702	1 855	1 977	2 069	2 132	2 164	2 166
40	1 018	1 295	1 754	1 937	2 089	2 209	2 298	2 356	2 383
45	949	1 263	1 793	2 009	2 194	2 345	2 465	2 551	2 606
50	-	1 207	1 815	2 068	2 288	2 474	2 627	2 746	2 831
55	-	-	1 815	2 109	2 367	2 591	2 781	2 935	3 055
60	-	-	-	2 127	2 428	2 693	2 923	3 116	3 273
65	-	-	-	-	-	2 776	3 049	3 284	3 482
75	-	-	-	-	-	-	3 237	3 566	3 855

**Current consumption in A**

35	3.58	3.82	4.16	4.28	4.37	4.43	4.49	4.53	4.58
40	3.54	3.81	4.20	4.34	4.44	4.53	4.60	4.67	4.73
45	3.48	3.78	4.23	4.40	4.53	4.64	4.74	4.83	4.92
50	-	3.72	4.25	4.45	4.62	4.76	4.89	5.01	5.13
55	-	-	4.24	4.48	4.69	4.88	5.04	5.20	5.35
60	-	-	-	4.49	4.75	4.98	5.19	5.39	5.58
65	-	-	-	-	-	5.06	5.32	5.57	5.81
75	-	-	-	-	-	-	5.49	5.86	6.22

**Mass flow in kg/h**

35	40	57	103	134	170	213	264	323	391
40	36	53	98	128	163	205	255	313	380
45	32	48	92	121	156	197	246	302	368
50	-	44	87	115	149	189	236	292	356
55	-	-	81	108	141	181	227	281	344
60	-	-	-	101	134	172	217	270	332
65	-	-	-	-	-	163	208	259	320
75	-	-	-	-	-	-	187	237	294

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

35	1.64	1.92	2.77	3.36	4.10	5.01	6.12	7.49	9.18
40	1.47	1.71	2.43	2.94	3.56	4.32	5.25	6.39	7.78
45	1.31	1.53	2.14	2.57	3.09	3.74	4.51	5.46	6.61
50	-	1.37	1.89	2.25	2.69	3.23	3.89	4.67	5.63
55	-	-	1.66	1.97	2.34	2.80	3.35	4.01	4.80
60	-	-	-	1.72	2.04	2.42	2.89	3.44	4.11
65	-	-	-	-	-	2.10	2.49	2.96	3.52
75	-	-	-	-	-	-	1.84	2.18	2.59

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

Cooling capacity	8 204	W
Power input	2 664	W
Current consumption	4.94	A
Mass flow	201	kg/h
C.O.P.	3.08	

**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 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.

**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	2 853	4 062	5 529	7 287	9 368	11 808	14 638	17 894	21 608
35	2 387	3 524	4 897	6 542	8 491	10 777	13 434	16 495	19 995
40	1 923	2 979	4 251	5 774	7 581	9 706	12 181	15 040	18 317
45	1 472	2 437	3 600	4 993	6 650	8 604	10 888	13 537	16 583
50	1 041	1 908	2 953	4 207	5 706	7 481	9 566	11 995	14 801
55	-	1 401	2 319	3 427	4 758	6 345	8 223	10 424	12 981
60	-	926	1 708	2 660	3 815	5 207	6 868	8 833	11 133

**Power input in W**

30	2 082	2 416	2 707	2 953	3 153	3 308	3 415	3 474	3 483
35	2 041	2 424	2 765	3 062	3 314	3 521	3 682	3 796	3 861
40	1 964	2 398	2 791	3 141	3 448	3 710	3 927	4 098	4 222
45	1 846	2 333	2 781	3 186	3 550	3 870	4 145	4 376	4 560
50	1 682	2 225	2 729	3 193	3 615	3 995	4 332	4 624	4 871
55	-	2 069	2 632	3 156	3 640	4 082	4 482	4 838	5 151
60	-	1 861	2 485	3 072	3 619	4 126	4 591	5 014	5 394

**Current consumption in A**

30	3.88	4.23	4.55	4.83	5.08	5.27	5.42	5.50	5.51
35	3.86	4.24	4.61	4.94	5.23	5.48	5.67	5.81	5.87
40	3.80	4.23	4.64	5.03	5.37	5.68	5.93	6.13	6.26
45	3.69	4.18	4.65	5.09	5.50	5.86	6.18	6.45	6.65
50	3.54	4.08	4.61	5.11	5.59	6.02	6.41	6.75	7.03
55	-	3.92	4.52	5.09	5.64	6.15	6.62	7.04	7.40
60	-	3.68	4.35	5.01	5.63	6.22	6.78	7.28	7.73

**Mass flow in kg/h**

30	90	125	166	213	267	329	399	478	568
35	81	116	157	204	258	320	390	469	558
40	71	106	147	194	248	309	379	457	545
45	59	95	136	182	236	296	365	443	531
50	47	82	123	169	222	282	350	428	514
55	-	68	108	154	206	266	333	410	496
60	-	52	92	137	189	247	314	390	474

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

30	1.37	1.68	2.04	2.47	2.97	3.57	4.29	5.15	6.20
35	1.17	1.45	1.77	2.14	2.56	3.06	3.65	4.35	5.18
40	0.98	1.24	1.52	1.84	2.20	2.62	3.10	3.67	4.34
45	0.80	1.04	1.29	1.57	1.87	2.22	2.63	3.09	3.64
50	0.62	0.86	1.08	1.32	1.58	1.87	2.21	2.59	3.04
55	-	0.68	0.88	1.09	1.31	1.55	1.83	2.15	2.52
60	-	0.50	0.69	0.87	1.05	1.26	1.50	1.76	2.06

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

Cooling capacity	6 650	W
Power input	3 550	W
Current consumption	5.50	A
Mass flow	236	kg/h
C.O.P.	1.87	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

**Pressure switch settings**

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

**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	3 176	4 510	6 122	8 049	10 324	12 984	16 064	19 598	23 621
35	2 686	3 952	5 476	7 295	9 442	11 955	14 867	18 214	22 032
40	2 193	3 383	4 811	6 513	8 524	10 881	13 618	16 771	20 376
45	1 706	2 812	4 135	5 713	7 580	9 773	12 328	15 279	18 664
50	1 233	2 247	3 459	4 904	6 620	8 643	11 008	13 752	16 911
55	-	1 698	2 790	4 097	5 655	7 501	9 673	12 205	15 135
60	-	1 170	2 139	3 302	4 699	6 366	8 342	10 662	13 364

**Power input in W**

30	2 082	2 416	2 707	2 953	3 153	3 308	3 415	3 474	3 483
35	2 041	2 424	2 765	3 062	3 314	3 521	3 682	3 796	3 861
40	1 964	2 398	2 791	3 141	3 448	3 710	3 927	4 098	4 222
45	1 846	2 333	2 781	3 186	3 550	3 870	4 145	4 376	4 560
50	1 682	2 225	2 729	3 193	3 615	3 995	4 332	4 624	4 871
55	-	2 069	2 632	3 156	3 640	4 082	4 482	4 838	5 151
60	-	1 861	2 485	3 072	3 619	4 126	4 591	5 014	5 394

**Current consumption in A**

30	3.88	4.23	4.55	4.83	5.08	5.27	5.42	5.50	5.51
35	3.86	4.24	4.61	4.94	5.23	5.48	5.67	5.81	5.87
40	3.80	4.23	4.64	5.03	5.37	5.68	5.93	6.13	6.26
45	3.69	4.18	4.65	5.09	5.50	5.86	6.18	6.45	6.65
50	3.54	4.08	4.61	5.11	5.59	6.02	6.41	6.75	7.03
55	-	3.92	4.52	5.09	5.64	6.15	6.62	7.04	7.40
60	-	3.68	4.35	5.01	5.63	6.22	6.78	7.28	7.73

**Mass flow in kg/h**

30	89	124	165	212	266	327	396	475	564
35	80	116	156	203	257	318	387	466	554
40	70	106	146	193	246	307	376	454	542
45	59	94	135	181	234	295	363	440	527
50	46	82	122	168	220	280	348	425	511
55	-	67	107	153	205	264	331	407	492
60	-	52	91	136	188	246	312	387	471

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

30	1.53	1.87	2.26	2.73	3.27	3.93	4.70	5.64	6.78
35	1.32	1.63	1.98	2.38	2.85	3.39	4.04	4.80	5.71
40	1.12	1.41	1.72	2.07	2.47	2.93	3.47	4.09	4.83
45	0.92	1.21	1.49	1.79	2.14	2.53	2.97	3.49	4.09
50	0.73	1.01	1.27	1.54	1.83	2.16	2.54	2.97	3.47
55	-	0.82	1.06	1.30	1.55	1.84	2.16	2.52	2.94
60	-	0.63	0.86	1.07	1.30	1.54	1.82	2.13	2.48

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

Cooling capacity	7 580	W
Power input	3 550	W
Current consumption	5.50	A
Mass flow	234	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	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. MTZ044-4

## 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	2 001	3 021	4 287	5 833	7 694	9 905	12 501	15 517	18 989
35	1 707	2 681	3 884	5 351	7 117	9 217	11 686	14 559	17 871
40	1 403	2 324	3 458	4 840	6 505	8 488	10 824	13 548	16 695
45	1 098	1 960	3 019	4 310	5 868	7 727	9 924	12 492	15 468
50	-	1 596	2 574	3 767	5 212	6 942	8 993	11 400	14 198
55	-	-	2 131	3 221	4 545	6 140	8 039	10 279	12 893
60	-	-	-	2 678	3 877	5 330	7 071	9 136	11 561

### Power input in W

30	1 511	1 808	2 079	2 323	2 542	2 735	2 902	3 045	3 162
35	1 479	1 810	2 113	2 390	2 639	2 862	3 058	3 229	3 373
40	1 426	1 796	2 137	2 450	2 735	2 993	3 223	3 426	3 601
45	1 351	1 764	2 148	2 502	2 827	3 124	3 392	3 632	3 845
50	-	1 712	2 142	2 543	2 913	3 254	3 565	3 847	4 100
55	-	-	2 118	2 569	2 990	3 379	3 738	4 066	4 365
60	-	-	-	2 579	3 054	3 497	3 908	4 288	4 637

### Current consumption in A

30	3.86	4.06	4.27	4.49	4.74	5.01	5.30	5.63	5.98
35	3.85	4.07	4.31	4.56	4.82	5.10	5.40	5.72	6.07
40	3.82	4.09	4.35	4.63	4.91	5.21	5.52	5.86	6.22
45	3.78	4.08	4.39	4.70	5.01	5.34	5.68	6.03	6.40
50	-	4.05	4.40	4.76	5.11	5.47	5.84	6.22	6.61
55	-	-	4.39	4.79	5.20	5.60	6.00	6.42	6.84
60	-	-	-	4.79	5.25	5.70	6.16	6.61	7.07

### Mass flow in kg/h

30	47	71	98	131	170	215	267	327	395
35	43	66	94	127	165	210	262	321	389
40	37	60	88	121	159	204	256	315	382
45	31	54	82	114	152	197	248	307	374
50	-	47	74	107	144	188	239	297	364
55	-	-	66	98	135	179	229	287	352
60	-	-	-	88	125	168	217	274	339

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

30	1.32	1.67	2.06	2.51	3.03	3.62	4.31	5.10	6.00
35	1.15	1.48	1.84	2.24	2.70	3.22	3.82	4.51	5.30
40	0.98	1.29	1.62	1.98	2.38	2.84	3.36	3.96	4.64
45	0.81	1.11	1.41	1.72	2.08	2.47	2.93	3.44	4.02
50	-	0.93	1.20	1.48	1.79	2.13	2.52	2.96	3.46
55	-	-	1.01	1.25	1.52	1.82	2.15	2.53	2.95
60	-	-	-	1.04	1.27	1.52	1.81	2.13	2.49

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

Cooling capacity	5 868	W
Power input	2 827	W
Current consumption	5.01	A
Mass flow	152	kg/h
C.O.P.	2.08	

### 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	82	dB(A)
With acoustic hood	76	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

**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	2 164	3 263	4 623	6 282	8 275	10 641	13 414	16 631	20 329
35	1 857	2 912	4 211	5 794	7 695	9 952	12 601	15 680	19 224
40	1 537	2 541	3 775	5 274	7 077	9 220	11 739	14 673	18 057
45	1 213	2 160	3 321	4 731	6 429	8 452	10 836	13 619	16 838
50	-	1 776	2 857	4 173	5 760	7 657	9 900	12 527	15 575
55	-	-	2 393	3 607	5 078	6 843	8 940	11 406	14 278
60	-	-	-	3 043	4 392	6 020	7 966	10 267	12 961

**Power input in W**

30	1 511	1 808	2 079	2 323	2 542	2 735	2 902	3 045	3 162
35	1 479	1 810	2 113	2 390	2 639	2 862	3 058	3 229	3 373
40	1 426	1 796	2 137	2 450	2 735	2 993	3 223	3 426	3 601
45	1 351	1 764	2 148	2 502	2 827	3 124	3 392	3 632	3 845
50	-	1 712	2 142	2 543	2 913	3 254	3 565	3 847	4 100
55	-	-	2 118	2 569	2 990	3 379	3 738	4 066	4 365
60	-	-	-	2 579	3 054	3 497	3 908	4 288	4 637

**Current consumption in A**

30	3.86	4.06	4.27	4.49	4.74	5.01	5.30	5.63	5.98
35	3.85	4.07	4.31	4.56	4.82	5.10	5.40	5.72	6.07
40	3.82	4.09	4.35	4.63	4.91	5.21	5.52	5.86	6.22
45	3.78	4.08	4.39	4.70	5.01	5.34	5.68	6.03	6.40
50	-	4.05	4.40	4.76	5.11	5.47	5.84	6.22	6.61
55	-	-	4.39	4.79	5.20	5.60	6.00	6.42	6.84
60	-	-	-	4.79	5.25	5.70	6.16	6.61	7.07

**Mass flow in kg/h**

30	47	70	98	131	169	214	265	325	392
35	42	66	93	126	164	209	260	320	387
40	37	60	88	120	158	203	254	313	380
45	31	54	81	114	151	196	247	305	372
50	-	47	74	106	143	187	238	296	362
55	-	-	66	97	134	178	228	285	350
60	-	-	-	88	124	167	216	273	337

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

30	1.43	1.80	2.22	2.70	3.26	3.89	4.62	5.46	6.43
35	1.26	1.61	1.99	2.42	2.92	3.48	4.12	4.86	5.70
40	1.08	1.42	1.77	2.15	2.59	3.08	3.64	4.28	5.01
45	0.90	1.22	1.55	1.89	2.27	2.71	3.19	3.75	4.38
50	-	1.04	1.33	1.64	1.98	2.35	2.78	3.26	3.80
55	-	-	1.13	1.40	1.70	2.03	2.39	2.80	3.27
60	-	-	-	1.18	1.44	1.72	2.04	2.39	2.79

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

Cooling capacity	6 429	W
Power input	2 827	W
Current consumption	5.01	A
Mass flow	151	kg/h
C.O.P.	2.27	

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	82	dB(A)
With acoustic hood	76	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ044-4

## 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	-	3 285	4 703	6 440	8 538	11 040	13 989	17 428	21 398
35	-	2 838	4 142	5 735	7 661	9 962	12 681	15 860	19 542
40	-	2 447	3 657	5 127	6 900	9 020	11 528	14 467	17 879
45	-	2 097	3 232	4 598	6 238	8 195	10 511	13 229	16 392
50	-	-	2 850	4 131	5 657	7 471	9 615	12 132	15 065
55	-	-	-	3 710	5 141	6 831	8 823	11 158	13 879
60	-	-	-	-	-	-	-	-	-

### Power input in W

30	-	1 905	2 186	2 442	2 665	2 848	2 981	3 057	3 068
35	-	1 913	2 224	2 516	2 782	3 011	3 198	3 333	3 408
40	-	1 923	2 260	2 584	2 887	3 160	3 395	3 584	3 720
45	-	1 945	2 304	2 656	2 991	3 303	3 583	3 823	4 015
50	-	-	2 367	2 742	3 107	3 453	3 774	4 060	4 303
55	-	-	-	2 854	3 243	3 620	3 977	4 305	4 596
60	-	-	-	-	-	-	-	-	-

### Current consumption in A

30	-	4.06	4.29	4.55	4.81	5.09	5.38	5.68	5.99
35	-	4.13	4.38	4.65	4.94	5.23	5.53	5.84	6.16
40	-	4.16	4.44	4.74	5.05	5.36	5.69	6.02	6.35
45	-	4.16	4.48	4.82	5.16	5.51	5.86	6.22	6.58
50	-	-	4.52	4.90	5.28	5.67	6.06	6.46	6.85
55	-	-	-	4.99	5.43	5.87	6.31	6.75	7.18
60	-	-	-	-	-	-	-	-	-

### Mass flow in kg/h

30	-	68	96	129	169	215	269	332	403
35	-	61	88	121	159	203	255	315	384
40	-	56	82	113	150	193	243	301	367
45	-	51	76	107	143	185	234	290	354
50	-	-	72	102	137	178	226	281	344
55	-	-	-	98	133	174	221	274	336
60	-	-	-	-	-	-	-	-	-

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

30	-	1.72	2.15	2.64	3.20	3.88	4.69	5.70	6.98
35	-	1.48	1.86	2.28	2.75	3.31	3.97	4.76	5.73
40	-	1.27	1.62	1.98	2.39	2.85	3.40	4.04	4.81
45	-	1.08	1.40	1.73	2.09	2.48	2.93	3.46	4.08
50	-	-	1.20	1.51	1.82	2.16	2.55	2.99	3.50
55	-	-	-	1.30	1.59	1.89	2.22	2.59	3.02
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	6 238	W
Power input	2 991	W
Current consumption	5.16	A
Mass flow	143	kg/h
C.O.P.	2.09	

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	82	dB(A)
With acoustic hood	76	dB(A)

Tolerance according EN12900



# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ044-4

## 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	-	3 521	5 035	6 888	9 123	11 786	14 921	18 573	22 785
35	-	3 055	4 454	6 162	8 222	10 681	13 582	16 971	20 892
40	-	2 649	3 954	5 536	7 443	9 718	12 406	15 553	19 203
45	-	2 285	3 516	4 995	6 768	8 880	11 376	14 302	17 702
50	-	-	3 124	4 521	6 182	8 153	10 478	13 204	16 375
55	-	-	-	4 098	5 670	7 521	9 698	12 246	15 212
60	-	-	-	-	-	-	-	-	-

### Power input in W

30	-	1 905	2 186	2 442	2 665	2 848	2 981	3 057	3 068
35	-	1 913	2 224	2 516	2 782	3 011	3 198	3 333	3 408
40	-	1 923	2 260	2 584	2 887	3 160	3 395	3 584	3 720
45	-	1 945	2 304	2 656	2 991	3 303	3 583	3 823	4 015
50	-	-	2 367	2 742	3 107	3 453	3 774	4 060	4 303
55	-	-	-	2 854	3 243	3 620	3 977	4 305	4 596
60	-	-	-	-	-	-	-	-	-

### Current consumption in A

30	-	4.06	4.29	4.55	4.81	5.09	5.38	5.68	5.99
35	-	4.13	4.38	4.65	4.94	5.23	5.53	5.84	6.16
40	-	4.16	4.44	4.74	5.05	5.36	5.69	6.02	6.35
45	-	4.16	4.48	4.82	5.16	5.51	5.86	6.22	6.58
50	-	-	4.52	4.90	5.28	5.67	6.06	6.46	6.85
55	-	-	-	4.99	5.43	5.87	6.31	6.75	7.18
60	-	-	-	-	-	-	-	-	-

### Mass flow in kg/h

30	-	67	95	128	168	214	268	330	400
35	-	61	88	120	158	202	254	313	381
40	-	55	82	113	149	192	242	299	365
45	-	50	76	106	142	184	232	288	352
50	-	-	71	101	137	177	225	279	341
55	-	-	-	97	132	173	219	273	334
60	-	-	-	-	-	-	-	-	-

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

30	-	1.85	2.30	2.82	3.42	4.14	5.00	6.07	7.43
35	-	1.60	2.00	2.45	2.96	3.55	4.25	5.09	6.13
40	-	1.38	1.75	2.14	2.58	3.08	3.65	4.34	5.16
45	-	1.17	1.53	1.88	2.26	2.69	3.17	3.74	4.41
50	-	-	1.32	1.65	1.99	2.36	2.78	3.25	3.81
55	-	-	-	1.44	1.75	2.08	2.44	2.84	3.31
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	6 768	W
Power input	2 991	W
Current consumption	5.16	A
Mass flow	142	kg/h
C.O.P.	2.26	

### 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	82	dB(A)
With acoustic hood	76	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

**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	1 606	2 315	4 360	5 780	7 521	9 625	12 136	15 094	18 543
40	1 366	2 030	3 928	5 246	6 866	8 831	11 182	13 963	17 215
45	1 133	1 755	3 511	4 730	6 231	8 058	10 253	12 859	15 916
50	907	1 489	3 109	4 230	5 616	7 308	9 349	11 781	14 646
55	-	-	2 720	3 747	5 020	6 579	8 469	10 730	13 406
60	-	-	-	3 282	4 443	5 872	7 613	9 706	12 195
65	-	-	-	-	3 885	5 187	6 780	8 708	11 012
75	-	-	-	-	-	-	5 187	6 791	8 733

**Power input in W**

35	1 064	1 307	1 702	1 855	1 977	2 069	2 132	2 164	2 166
40	1 018	1 295	1 754	1 937	2 089	2 209	2 298	2 356	2 383
45	949	1 263	1 793	2 009	2 194	2 345	2 465	2 551	2 606
50	853	1 207	1 815	2 068	2 288	2 474	2 627	2 746	2 831
55	-	-	1 815	2 109	2 367	2 591	2 781	2 935	3 055
60	-	-	-	2 127	2 428	2 693	2 923	3 116	3 273
65	-	-	-	-	2 467	2 776	3 049	3 284	3 482
75	-	-	-	-	-	-	3 237	3 566	3 855

**Current consumption in A**

35	3.58	3.82	4.16	4.28	4.37	4.43	4.49	4.53	4.58
40	3.54	3.81	4.20	4.34	4.44	4.53	4.60	4.67	4.73
45	3.48	3.78	4.23	4.40	4.53	4.64	4.74	4.83	4.92
50	3.38	3.72	4.25	4.45	4.62	4.76	4.89	5.01	5.13
55	-	-	4.24	4.48	4.69	4.88	5.04	5.20	5.35
60	-	-	-	4.49	4.75	4.98	5.19	5.39	5.58
65	-	-	-	-	4.78	5.06	5.32	5.57	5.81
75	-	-	-	-	-	-	5.49	5.86	6.22

**Mass flow in kg/h**

35	41	58	104	134	171	214	265	325	394
40	36	53	98	128	164	206	256	315	382
45	32	49	93	122	157	198	247	304	370
50	28	44	87	115	150	190	238	294	358
55	-	-	81	109	142	182	228	283	346
60	-	-	-	102	134	173	219	272	334
65	-	-	-	-	126	164	209	261	321
75	-	-	-	-	-	-	188	238	296

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

35	1.51	1.77	2.56	3.12	3.80	4.65	5.69	6.98	8.56
40	1.34	1.57	2.24	2.71	3.29	4.00	4.87	5.93	7.22
45	1.19	1.39	1.96	2.35	2.84	3.44	4.16	5.04	6.11
50	1.06	1.23	1.71	2.05	2.45	2.95	3.56	4.29	5.17
55	-	-	1.50	1.78	2.12	2.54	3.05	3.66	4.39
60	-	-	-	1.54	1.83	2.18	2.60	3.11	3.73
65	-	-	-	-	1.57	1.87	2.22	2.65	3.16
75	-	-	-	-	-	-	1.60	1.90	2.27

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

Cooling capacity	7 308	W
Power input	2 474	W
Current consumption	4.76	A
Mass flow	190	kg/h
C.O.P.	2.95	

**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.

**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	1 746	2 512	4 714	6 239	8 106	10 359	13 042	16 199	19 874
40	1 493	2 215	4 270	5 692	7 437	9 549	12 072	15 051	18 530
45	1 247	1 927	3 839	5 161	6 786	8 760	11 127	13 931	17 215
50	-	1 648	3 423	4 647	6 155	7 993	10 206	12 836	15 930
55	-	-	3 019	4 148	5 543	7 248	9 309	11 769	14 675
60	-	-	-	3 666	4 949	6 524	8 436	10 730	13 450
65	-	-	-	-	-	5 822	7 588	9 718	12 257
75	-	-	-	-	-	-	5 969	7 783	9 972

**Power input in W**

35	1 064	1 307	1 702	1 855	1 977	2 069	2 132	2 164	2 166
40	1 018	1 295	1 754	1 937	2 089	2 209	2 298	2 356	2 383
45	949	1 263	1 793	2 009	2 194	2 345	2 465	2 551	2 606
50	-	1 207	1 815	2 068	2 288	2 474	2 627	2 746	2 831
55	-	-	1 815	2 109	2 367	2 591	2 781	2 935	3 055
60	-	-	-	2 127	2 428	2 693	2 923	3 116	3 273
65	-	-	-	-	-	2 776	3 049	3 284	3 482
75	-	-	-	-	-	-	3 237	3 566	3 855

**Current consumption in A**

35	3.58	3.82	4.16	4.28	4.37	4.43	4.49	4.53	4.58
40	3.54	3.81	4.20	4.34	4.44	4.53	4.60	4.67	4.73
45	3.48	3.78	4.23	4.40	4.53	4.64	4.74	4.83	4.92
50	-	3.72	4.25	4.45	4.62	4.76	4.89	5.01	5.13
55	-	-	4.24	4.48	4.69	4.88	5.04	5.20	5.35
60	-	-	-	4.49	4.75	4.98	5.19	5.39	5.58
65	-	-	-	-	-	5.06	5.32	5.57	5.81
75	-	-	-	-	-	-	5.49	5.86	6.22

**Mass flow in kg/h**

35	40	57	103	134	170	213	264	323	391
40	36	53	98	128	163	205	255	313	380
45	32	48	92	121	156	197	246	302	368
50	-	44	87	115	149	189	236	292	356
55	-	-	81	108	141	181	227	281	344
60	-	-	-	101	134	172	217	270	332
65	-	-	-	-	-	163	208	259	320
75	-	-	-	-	-	-	187	237	294

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

35	1.64	1.92	2.77	3.36	4.10	5.01	6.12	7.49	9.18
40	1.47	1.71	2.43	2.94	3.56	4.32	5.25	6.39	7.78
45	1.31	1.53	2.14	2.57	3.09	3.74	4.51	5.46	6.61
50	-	1.37	1.89	2.25	2.69	3.23	3.89	4.67	5.63
55	-	-	1.66	1.97	2.34	2.80	3.35	4.01	4.80
60	-	-	-	1.72	2.04	2.42	2.89	3.44	4.11
65	-	-	-	-	-	2.10	2.49	2.96	3.52
75	-	-	-	-	-	-	1.84	2.18	2.59

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

Cooling capacity	8 204	W
Power input	2 664	W
Current consumption	4.94	A
Mass flow	201	kg/h
C.O.P.	3.08	

**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 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.

**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	5 313	7 086	9 182	11 641	14 506	17 818	21 617	-	-
40	4 754	6 457	8 465	10 821	13 564	16 735	20 377	-	-
45	4 167	5 787	7 697	9 935	12 544	15 565	19 037	-	-
50	-	5 090	6 888	8 998	11 461	14 318	17 608	-	-
55	-	-	6 052	8 022	10 327	13 007	16 103	-	-
60	-	-	-	7 019	9 154	11 645	14 534	-	-
65	-	-	-	6 002	7 953	10 243	12 911	-	-

**Power input in W**

35	2 396	2 653	2 856	3 013	3 132	3 219	3 284	-	-
40	2 460	2 781	3 041	3 246	3 403	3 522	3 610	-	-
45	2 474	2 871	3 198	3 462	3 671	3 833	3 955	-	-
50	-	2 911	3 316	3 651	3 922	4 138	4 307	-	-
55	-	-	3 385	3 802	4 147	4 429	4 655	-	-
60	-	-	-	3 903	4 333	4 693	4 988	-	-
65	-	-	-	3 943	4 471	4 918	5 294	-	-

**Current consumption in A**

35	4.26	4.52	4.75	4.93	5.07	5.18	5.23	-	-
40	4.34	4.66	4.94	5.17	5.36	5.50	5.59	-	-
45	4.37	4.77	5.12	5.41	5.66	5.85	5.98	-	-
50	-	4.82	5.26	5.63	5.95	6.21	6.41	-	-
55	-	-	5.35	5.82	6.22	6.56	6.84	-	-
60	-	-	-	5.94	6.45	6.89	7.26	-	-
65	-	-	-	6.00	6.62	7.17	7.65	-	-

**Mass flow in kg/h**

35	115	151	193	241	295	358	428	-	-
40	108	145	187	235	289	352	423	-	-
45	100	137	179	227	282	344	415	-	-
50	-	128	169	217	272	334	405	-	-
55	-	-	158	206	260	322	392	-	-
60	-	-	-	193	247	308	378	-	-
65	-	-	-	178	232	292	361	-	-

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

35	2.22	2.67	3.21	3.86	4.63	5.53	6.58	-	-
40	1.93	2.32	2.78	3.33	3.99	4.75	5.64	-	-
45	1.68	2.02	2.41	2.87	3.42	4.06	4.81	-	-
50	-	1.75	2.08	2.46	2.92	3.46	4.09	-	-
55	-	-	1.79	2.11	2.49	2.94	3.46	-	-
60	-	-	-	1.80	2.11	2.48	2.91	-	-
65	-	-	-	1.52	1.78	2.08	2.44	-	-

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

Cooling capacity	11 461	W
Power input	3 922	W
Current consumption	5.95	A
Mass flow	272	kg/h
C.O.P.	2.92	

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

**Datasheet, performance data**
**Maneurop reciprocating compressor. MTZ044-4**
**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	5 718	7 617	9 859	12 486	15 542	19 070	23 113	-	-
40	5 145	6 978	9 137	11 664	14 604	17 998	21 890	-	-
45	4 538	6 294	8 357	10 773	13 584	16 832	20 562	-	-
50	-	5 575	7 533	9 825	12 495	15 586	19 141	-	-
55	-	-	6 675	8 832	11 349	14 271	17 641	-	-
60	-	-	-	7 807	10 160	12 901	16 072	-	-
65	-	-	-	6 763	8 940	11 488	14 449	-	-

**Power input in W**

35	2 396	2 653	2 856	3 013	3 132	3 219	3 284	-	-
40	2 460	2 781	3 041	3 246	3 403	3 522	3 610	-	-
45	2 474	2 871	3 198	3 462	3 671	3 833	3 955	-	-
50	-	2 911	3 316	3 651	3 922	4 138	4 307	-	-
55	-	-	3 385	3 802	4 147	4 429	4 655	-	-
60	-	-	-	3 903	4 333	4 693	4 988	-	-
65	-	-	-	3 943	4 471	4 918	5 294	-	-

**Current consumption in A**

35	4.26	4.52	4.75	4.93	5.07	5.18	5.23	-	-
40	4.34	4.66	4.94	5.17	5.36	5.50	5.59	-	-
45	4.37	4.77	5.12	5.41	5.66	5.85	5.98	-	-
50	-	4.82	5.26	5.63	5.95	6.21	6.41	-	-
55	-	-	5.35	5.82	6.22	6.56	6.84	-	-
60	-	-	-	5.94	6.45	6.89	7.26	-	-
65	-	-	-	6.00	6.62	7.17	7.65	-	-

**Mass flow in kg/h**

35	115	150	192	239	294	355	426	-	-
40	108	144	185	233	288	350	420	-	-
45	100	136	178	225	280	342	412	-	-
50	-	127	168	216	270	332	402	-	-
55	-	-	158	205	259	320	390	-	-
60	-	-	-	192	246	307	376	-	-
65	-	-	-	177	230	291	359	-	-

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

35	2.39	2.87	3.45	4.14	4.96	5.92	7.04	-	-
40	2.09	2.51	3.00	3.59	4.29	5.11	6.06	-	-
45	1.83	2.19	2.61	3.11	3.70	4.39	5.20	-	-
50	-	1.92	2.27	2.69	3.19	3.77	4.44	-	-
55	-	-	1.97	2.32	2.74	3.22	3.79	-	-
60	-	-	-	2.00	2.34	2.75	3.22	-	-
65	-	-	-	1.72	2.00	2.34	2.73	-	-

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

Cooling capacity	12 732	W
Power input	4 249	W
Current consumption	6.34	A
Mass flow	287	kg/h
C.O.P.	3.00	

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. MTZ044-4

## 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	-	4 689	6 335	8 391	10 903	-	-	-	-
20	-	4 021	5 486	7 309	9 537	12 213	15 389	-	-
30	-	3 341	4 632	6 231	8 180	10 523	13 306	16 581	20 404
40	-	-	3 774	5 155	6 833	8 850	11 249	14 077	17 384
50	-	-	-	4 079	5 494	7 194	9 218	11 608	14 409
60	-	-	-	-	4 161	5 553	7 212	9 175	11 481

### Power input in W

10	-	1 531	1 601	1 618	1 574	-	-	-	-
20	-	1 774	1 932	2 049	2 116	2 127	2 073	-	-
30	-	1 922	2 162	2 372	2 545	2 673	2 748	2 762	2 708
40	-	-	2 294	2 592	2 865	3 104	3 302	3 451	3 543
50	-	-	-	2 711	3 078	3 423	3 737	4 015	4 247
60	-	-	-	-	3 187	3 632	4 058	4 458	4 825

### Current consumption in A

10	-	4.24	4.36	4.46	4.51	-	-	-	-
20	-	4.15	4.30	4.45	4.56	4.63	4.62	-	-
30	-	4.18	4.37	4.57	4.76	4.92	5.02	5.04	4.96
40	-	-	4.47	4.74	5.02	5.29	5.51	5.67	5.74
50	-	-	-	4.88	5.26	5.64	6.00	6.31	6.55
60	-	-	-	-	5.39	5.90	6.40	6.87	7.30

### Mass flow in kg/h

10	-	78	105	139	182	-	-	-	-
20	-	71	97	130	170	219	279	-	-
30	-	64	89	120	158	204	261	330	413
40	-	-	79	108	145	189	242	307	386
50	-	-	-	95	130	171	222	283	357
60	-	-	-	-	112	152	199	257	326

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

10	-	3.06	3.96	5.19	6.93	-	-	-	-
20	-	2.27	2.84	3.57	4.51	5.74	7.42	-	-
30	-	1.74	2.14	2.63	3.21	3.94	4.84	6.00	7.53
40	-	-	1.65	1.99	2.39	2.85	3.41	4.08	4.91
50	-	-	-	1.50	1.79	2.10	2.47	2.89	3.39
60	-	-	-	-	1.31	1.53	1.78	2.06	2.38

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

Cooling capacity	6 163	W
Power input	2 984	W
Current consumption	5.15	A
Mass flow	137	kg/h
C.O.P.	2.06	

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	81	dB(A)
With acoustic hood	75	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ044-4

## 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	3 424	4 712	6 370	8 443	10 974	-	-	-	-
20	2 846	3 995	5 463	7 294	9 534	12 227	15 418	-	-
30	2 257	3 273	4 558	6 156	8 112	10 470	13 275	16 572	20 404
40	1 658	2 549	3 657	5 029	6 707	8 737	11 164	14 031	17 384
50	-	1 822	2 761	3 912	5 320	7 029	9 084	11 529	14 409
60	-	-	1 870	2 808	3 952	5 347	7 037	9 067	11 481

### Power input in W

10	1 417	1 531	1 601	1 618	1 574	-	-	-	-
20	1 583	1 774	1 932	2 049	2 116	2 127	2 073	-	-
30	1 659	1 922	2 162	2 372	2 545	2 673	2 748	2 762	2 708
40	1 650	1 977	2 294	2 592	2 865	3 104	3 302	3 451	3 543
50	-	1 943	2 330	2 711	3 078	3 423	3 737	4 015	4 247
60	-	-	2 275	2 733	3 187	3 632	4 058	4 458	4 825

### Current consumption in A

10	4.12	4.24	4.36	4.46	4.51	-	-	-	-
20	4.02	4.15	4.30	4.45	4.56	4.63	4.62	-	-
30	4.02	4.18	4.37	4.57	4.76	4.92	5.02	5.04	4.96
40	4.03	4.22	4.47	4.74	5.02	5.29	5.51	5.67	5.74
50	-	4.21	4.52	4.88	5.26	5.64	6.00	6.31	6.55
60	-	-	4.44	4.90	5.39	5.90	6.40	6.87	7.30

### Mass flow in kg/h

10	67	90	120	156	199	-	-	-	-
20	60	83	111	145	186	236	294	-	-
30	52	74	101	134	173	220	275	339	413
40	42	64	90	121	159	203	255	315	386
50	-	52	77	107	142	184	233	291	357
60	-	-	61	90	123	163	209	264	326

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

10	2.42	3.08	3.98	5.22	6.97	-	-	-	-
20	1.80	2.25	2.83	3.56	4.51	5.75	7.44	-	-
30	1.36	1.70	2.11	2.59	3.19	3.92	4.83	6.00	7.53
40	1.01	1.29	1.59	1.94	2.34	2.81	3.38	4.07	4.91
50	-	0.94	1.18	1.44	1.73	2.05	2.43	2.87	3.39
60	-	-	0.82	1.03	1.24	1.47	1.73	2.03	2.38

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

Cooling capacity	6 011	W
Power input	2 984	W
Current consumption	5.15	A
Mass flow	151	kg/h
C.O.P.	2.01	

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	81	dB(A)
With acoustic hood	75	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ044-4

## 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	-	4 698	6 344	8 401	10 914	-	-	-	-
20	-	4 029	5 495	7 320	9 547	12 223	15 397	-	-
30	-	3 349	4 642	6 242	8 191	10 533	13 315	16 586	20 404
40	-	-	3 784	5 166	6 844	8 861	11 258	14 082	17 384
50	-	-	-	4 089	5 505	7 205	9 227	11 614	14 409
60	-	-	-	-	4 171	5 563	7 220	9 181	11 481

### Power input in W

10	-	1 531	1 601	1 618	1 574	-	-	-	-
20	-	1 774	1 932	2 049	2 116	2 127	2 073	-	-
30	-	1 922	2 162	2 372	2 545	2 673	2 748	2 762	2 708
40	-	-	2 294	2 592	2 865	3 104	3 302	3 451	3 543
50	-	-	-	2 711	3 078	3 423	3 737	4 015	4 247
60	-	-	-	-	3 187	3 632	4 058	4 458	4 825

### Current consumption in A

10	-	4.24	4.36	4.46	4.51	-	-	-	-
20	-	4.15	4.30	4.45	4.56	4.63	4.62	-	-
30	-	4.18	4.37	4.57	4.76	4.92	5.02	5.04	4.96
40	-	-	4.47	4.74	5.02	5.29	5.51	5.67	5.74
50	-	-	-	4.88	5.26	5.64	6.00	6.31	6.55
60	-	-	-	-	5.39	5.90	6.40	6.87	7.30

### Mass flow in kg/h

10	-	78	107	143	186	-	-	-	-
20	-	71	99	133	174	224	284	-	-
30	-	64	90	122	161	209	266	335	419
40	-	-	81	111	148	193	247	313	392
50	-	-	-	98	133	175	227	289	365
60	-	-	-	-	115	155	204	263	334

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

10	-	3.07	3.96	5.19	6.94	-	-	-	-
20	-	2.27	2.84	3.57	4.51	5.75	7.43	-	-
30	-	1.74	2.15	2.63	3.22	3.94	4.85	6.00	7.53
40	-	-	1.65	1.99	2.39	2.85	3.41	4.08	4.91
50	-	-	-	1.51	1.79	2.11	2.47	2.89	3.39
60	-	-	-	-	1.31	1.53	1.78	2.06	2.38

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

Cooling capacity	6 174	W
Power input	2 984	W
Current consumption	5.15	A
Mass flow	140	kg/h
C.O.P.	2.07	

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. MTZ044-4

## 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	3 424	4 712	6 370	8 443	10 974	-	-	-	-
20	2 846	3 995	5 463	7 294	9 534	12 227	15 418	-	-
30	2 257	3 273	4 558	6 156	8 112	10 470	13 275	16 572	20 404
40	1 658	2 549	3 657	5 029	6 707	8 737	11 164	14 031	17 384
50	-	1 822	2 761	3 912	5 320	7 029	9 084	11 529	14 409
60	-	-	1 870	2 808	3 952	5 347	7 037	9 067	11 481

### Power input in W

10	1 417	1 531	1 601	1 618	1 574	-	-	-	-
20	1 583	1 774	1 932	2 049	2 116	2 127	2 073	-	-
30	1 659	1 922	2 162	2 372	2 545	2 673	2 748	2 762	2 708
40	1 650	1 977	2 294	2 592	2 865	3 104	3 302	3 451	3 543
50	-	1 943	2 330	2 711	3 078	3 423	3 737	4 015	4 247
60	-	-	2 275	2 733	3 187	3 632	4 058	4 458	4 825

### Current consumption in A

10	4.12	4.24	4.36	4.46	4.51	-	-	-	-
20	4.02	4.15	4.30	4.45	4.56	4.63	4.62	-	-
30	4.02	4.18	4.37	4.57	4.76	4.92	5.02	5.04	4.96
40	4.03	4.22	4.47	4.74	5.02	5.29	5.51	5.67	5.74
50	-	4.21	4.52	4.88	5.26	5.64	6.00	6.31	6.55
60	-	-	4.44	4.90	5.39	5.90	6.40	6.87	7.30

### Mass flow in kg/h

10	65	91	122	160	204	-	-	-	-
20	58	83	113	148	191	241	299	-	-
30	51	75	103	137	177	224	280	345	419
40	43	65	92	124	162	207	260	322	392
50	-	54	79	109	146	188	239	297	365
60	-	-	63	92	126	167	214	270	334

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

10	2.42	3.08	3.98	5.22	6.97	-	-	-	-
20	1.80	2.25	2.83	3.56	4.51	5.75	7.44	-	-
30	1.36	1.70	2.11	2.59	3.19	3.92	4.83	6.00	7.53
40	1.01	1.29	1.59	1.94	2.34	2.81	3.38	4.07	4.91
50	-	0.94	1.18	1.44	1.73	2.05	2.43	2.87	3.39
60	-	-	0.82	1.03	1.24	1.47	1.73	2.03	2.38

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

Cooling capacity	6 011	W
Power input	2 984	W
Current consumption	5.15	A
Mass flow	154	kg/h
C.O.P.	2.01	

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. MTZ044-4

## 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	-	5 485	7 186	9 284	11 817	-	-	-	-
20	-	4 792	6 338	8 228	10 498	13 183	16 322	-	-
30	-	4 039	5 421	7 093	9 090	11 444	14 192	17 373	21 036
40	-	3 234	4 442	5 887	7 601	9 616	11 963	14 679	17 802
50	-	-	3 408	4 618	6 040	7 707	9 647	11 890	14 467
60	-	-	-	3 291	4 417	5 731	7 257	9 021	11 044

### Power input in W

10	-	2 011	2 186	2 342	2 482	-	-	-	-
20	-	2 131	2 331	2 508	2 665	2 804	2 929	-	-
30	-	2 234	2 482	2 703	2 899	3 072	3 226	3 363	3 486
40	-	2 290	2 610	2 897	3 154	3 385	3 591	3 776	3 942
50	-	-	2 685	3 061	3 403	3 713	3 994	4 249	4 480
60	-	-	-	3 167	3 616	4 028	4 406	4 754	5 073

### Current consumption in A

10	-	4.75	5.08	5.44	5.84	-	-	-	-
20	-	4.43	4.69	4.95	5.23	5.54	5.88	-	-
30	-	4.41	4.65	4.89	5.12	5.37	5.64	5.93	6.25
40	-	4.47	4.77	5.05	5.32	5.57	5.83	6.10	6.38
50	-	-	4.85	5.25	5.61	5.95	6.27	6.58	6.90
60	-	-	-	5.27	5.80	6.29	6.74	7.18	7.59

### Mass flow in kg/h

10	-	113	149	193	246	-	-	-	-
20	-	106	141	184	236	299	374	-	-
30	-	98	132	174	224	284	356	443	546
40	-	87	121	161	209	267	336	418	517
50	-	-	105	144	190	245	311	389	483
60	-	-	-	122	166	219	281	355	444

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

10	-	2.73	3.29	3.96	4.76	-	-	-	-
20	-	2.25	2.72	3.28	3.94	4.70	5.57	-	-
30	-	1.81	2.18	2.62	3.14	3.72	4.40	5.17	6.03
40	-	1.41	1.70	2.03	2.41	2.84	3.33	3.89	4.52
50	-	-	1.27	1.51	1.78	2.08	2.42	2.80	3.23
60	-	-	-	1.04	1.22	1.42	1.65	1.90	2.18

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

Cooling capacity	6 829	W
Power input	3 281	W
Current consumption	5.46	A
Mass flow	200	kg/h
C.O.P.	2.08	

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	81	dB(A)
With acoustic hood	75	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ044-4

## 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	4 014	5 340	7 036	9 140	11 692	-	-	-	-
20	3 376	4 587	6 116	8 003	10 286	13 004	16 196	-	-
30	2 700	3 784	5 137	6 795	8 798	11 185	13 994	17 265	21 036
40	1 998	2 946	4 109	5 528	7 240	9 285	11 701	14 527	17 802
50	1 284	2 084	3 048	4 216	5 626	7 317	9 329	11 699	14 467
60	-	1 212	1 965	2 871	3 968	5 295	6 891	8 795	11 044

### Power input in W

10	1 816	2 011	2 186	2 342	2 482	-	-	-	-
20	1 905	2 131	2 331	2 508	2 665	2 804	2 929	-	-
30	1 955	2 234	2 482	2 703	2 899	3 072	3 226	3 363	3 486
40	1 936	2 290	2 610	2 897	3 154	3 385	3 591	3 776	3 942
50	1 819	2 272	2 685	3 061	3 403	3 713	3 994	4 249	4 480
60	-	2 150	2 680	3 167	3 616	4 028	4 406	4 754	5 073

### Current consumption in A

10	4.43	4.75	5.08	5.44	5.84	-	-	-	-
20	4.18	4.43	4.69	4.95	5.23	5.54	5.88	-	-
30	4.15	4.41	4.65	4.89	5.12	5.37	5.64	5.93	6.25
40	4.13	4.47	4.77	5.05	5.32	5.57	5.83	6.10	6.38
50	3.94	4.42	4.85	5.25	5.61	5.95	6.27	6.58	6.90
60	-	4.06	4.70	5.27	5.80	6.29	6.74	7.18	7.59

### Mass flow in kg/h

10	100	132	170	216	271	-	-	-	-
20	93	124	162	207	260	322	394	-	-
30	83	114	151	195	246	306	376	455	546
40	71	102	138	180	230	288	354	430	517
50	55	85	121	162	209	264	328	400	483
60	-	63	98	137	183	236	296	365	444

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

10	2.21	2.65	3.22	3.90	4.71	-	-	-	-
20	1.77	2.15	2.62	3.19	3.86	4.64	5.53	-	-
30	1.38	1.69	2.07	2.51	3.04	3.64	4.34	5.13	6.03
40	1.03	1.29	1.57	1.91	2.30	2.74	3.26	3.85	4.52
50	0.71	0.92	1.14	1.38	1.65	1.97	2.34	2.75	3.23
60	-	0.56	0.73	0.91	1.10	1.31	1.56	1.85	2.18

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

Cooling capacity	6 439	W
Power input	3 281	W
Current consumption	5.46	A
Mass flow	220	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	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	81	dB(A)
With acoustic hood	75	dB(A)

Tolerance according EN12900

