

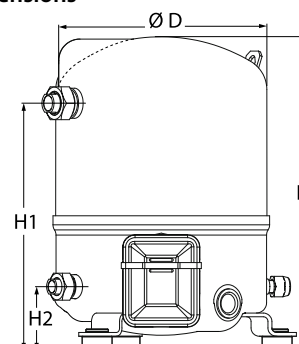
Datasheets

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



**General Characteristics**

Model number (on compressor nameplate)		<b>MTZ36JG4BVE</b>
Code number for Singlepack*		MTZ36-4VI
Code number for Industrial pack**		MTZ36-4VM
Drawing number		8501025f
Suction and discharge connections		Rotolock
Suction connection		1-1/4" Rotolock
Discharge connection		1" Rotolock
Suction connection with supplied sleeve		5/8" ODF
Discharge connection with supplied sleeve		1/2" ODF
Oil sight glass		Threaded
Oil equalisation connection		3/8" flare SAE
Oil drain connection		None
LP gauge port		Schrader
IPR valve		None
Cylinders	1	
Swept volume	60.47 cm <sup>3</sup> /rev	
Displacement @ Nominal speed	10.5 m <sup>3</sup> /h @ 2900 rpm - 12.7 m <sup>3</sup> /h @ 3500 rpm	
Net weight	25 kg	
Oil charge	0.95 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	2.5 kg	
Approved refrigerants	R404A, R134a, R407A/C/F, R448A, R449A, R452A, R513A	

**Dimensions**


D=224 mm

H=356 mm

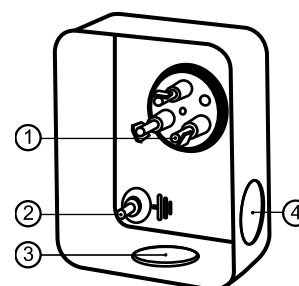
H1=263 mm

H2=68 mm

H3= mm

**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	5.8 Ω
Maximum Continuous Current (MCC)	9 A
Locked Rotor Amps (LRA)	38 A
Motor protection	Internal overload protector

**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")

**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: 12 Unboxed compressors on pallet (order per multiples of 12)

**Rotolock accessories, suction side**

**Code no.**

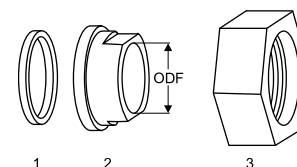
Solder sleeve, P09 (1-1/4" Rotolock, 5/8" ODF)	8153011
Rotolock valve, V09 (1-1/4" Rotolock, 5/8" ODF)	8168033
Gasket, 1-1/4"	8156131

**Gaskets, sleeves and nuts**

**Rotolock accessories, discharge side**

**Code no.**

Solder sleeve, P06 (1" Rotolock, 1/2" ODF)	8153007
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130



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

**Rotolock accessories, sets**

**Code no.**

Valve set, V09 (1-1/4"~5/8"), V06 (1"~1/2")	7703005
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.**

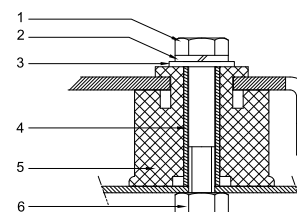
PTC heater 27W, CE mark, UL	120Z0459
Belt type crankcase heater, 54 W, 230 V, CE mark, UL	7773106
Belt type crankcase heater, 54 W, 400 V, UL	7773013

**Mounting kit**

**Miscellaneous accessories**

**Code no.**

Electronic soft start kit, MCI 15 C	7705006
Acoustic hood for 1 cylinder compressor	120Z0575
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. MTZ036-4

## 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	3 688	4 851	6 219	7 815	9 660	11 776	14 186	-	-
40	3 346	4 445	5 728	7 216	8 930	10 894	13 128	-	-
45	2 994	4 036	5 239	6 624	8 215	10 032	12 097	-	-
50	-	3 617	4 746	6 036	7 508	9 184	11 087	-	-
55	-	-	4 246	5 445	6 805	8 346	10 092	-	-
60	-	-	-	4 846	6 100	7 513	9 107	-	-
65	-	-	-	4 235	5 388	6 678	8 127	-	-

### Power input in W

35	1 724	1 932	2 106	2 247	2 355	2 429	2 470	-	-
40	1 779	2 025	2 233	2 405	2 540	2 637	2 698	-	-
45	1 813	2 104	2 355	2 565	2 735	2 863	2 951	-	-
50	-	2 166	2 466	2 722	2 934	3 101	3 224	-	-
55	-	-	2 560	2 870	3 132	3 345	3 511	-	-
60	-	-	-	3 003	3 323	3 591	3 807	-	-
65	-	-	-	3 117	3 502	3 831	4 105	-	-

### Current consumption in A

35	4.01	4.27	4.46	4.62	4.74	4.85	4.96	-	-
40	4.08	4.40	4.64	4.84	4.99	5.13	5.26	-	-
45	4.12	4.51	4.82	5.07	5.28	5.45	5.61	-	-
50	-	4.59	4.99	5.31	5.58	5.81	6.01	-	-
55	-	-	5.13	5.54	5.89	6.19	6.45	-	-
60	-	-	-	5.74	6.18	6.57	6.91	-	-
65	-	-	-	5.90	6.46	6.94	7.37	-	-

### Mass flow in kg/h

35	80	104	131	161	197	236	281	-	-
40	76	100	126	156	191	229	272	-	-
45	72	95	122	151	185	222	264	-	-
50	-	91	117	146	178	215	255	-	-
55	-	-	111	140	172	207	246	-	-
60	-	-	-	133	165	199	237	-	-
65	-	-	-	126	157	191	228	-	-

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

35	2.14	2.51	2.95	3.48	4.10	4.85	5.74	-	-
40	1.88	2.20	2.56	3.00	3.52	4.13	4.87	-	-
45	1.65	1.92	2.22	2.58	3.00	3.50	4.10	-	-
50	-	1.67	1.92	2.22	2.56	2.96	3.44	-	-
55	-	-	1.66	1.90	2.17	2.49	2.87	-	-
60	-	-	-	1.61	1.84	2.09	2.39	-	-
65	-	-	-	1.36	1.54	1.74	1.98	-	-

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

Cooling capacity	7 508	W
Power input	2 934	W
Current consumption	5.58	A
Mass flow	178	kg/h
C.O.P.	2.56	



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	74	dB(A)
With acoustic hood	68	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	3 970	5 215	6 678	8 382	10 349	12 604	15 167	-	-
40	3 621	4 804	6 182	7 778	9 615	11 716	14 103	-	-
45	3 261	4 389	5 688	7 183	8 895	10 849	13 066	-	-
50	-	3 962	5 191	6 590	8 185	9 998	12 052	-	-
55	-	-	4 683	5 995	7 478	9 157	11 055	-	-
60	-	-	-	5 390	6 771	8 323	10 071	-	-
65	-	-	-	4 772	6 056	7 490	9 096	-	-

**Power input in W**

35	1 724	1 932	2 106	2 247	2 355	2 429	2 470	-	-
40	1 779	2 025	2 233	2 405	2 540	2 637	2 698	-	-
45	1 813	2 104	2 355	2 565	2 735	2 863	2 951	-	-
50	-	2 166	2 466	2 722	2 934	3 101	3 224	-	-
55	-	-	2 560	2 870	3 132	3 345	3 511	-	-
60	-	-	-	3 003	3 323	3 591	3 807	-	-
65	-	-	-	3 117	3 502	3 831	4 105	-	-

**Current consumption in A**

35	4.01	4.27	4.46	4.62	4.74	4.85	4.96	-	-
40	4.08	4.40	4.64	4.84	4.99	5.13	5.26	-	-
45	4.12	4.51	4.82	5.07	5.28	5.45	5.61	-	-
50	-	4.59	4.99	5.31	5.58	5.81	6.01	-	-
55	-	-	5.13	5.54	5.89	6.19	6.45	-	-
60	-	-	-	5.74	6.18	6.57	6.91	-	-
65	-	-	-	5.90	6.46	6.94	7.37	-	-

**Mass flow in kg/h**

35	80	103	130	161	196	235	280	-	-
40	76	99	126	156	190	228	271	-	-
45	72	95	121	150	183	221	262	-	-
50	-	90	116	145	177	213	253	-	-
55	-	-	111	139	171	206	245	-	-
60	-	-	-	133	164	198	236	-	-
65	-	-	-	125	156	190	226	-	-

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

35	2.30	2.70	3.17	3.73	4.40	5.19	6.14	-	-
40	2.04	2.37	2.77	3.23	3.79	4.44	5.23	-	-
45	1.80	2.09	2.42	2.80	3.25	3.79	4.43	-	-
50	-	1.83	2.10	2.42	2.79	3.22	3.74	-	-
55	-	-	1.83	2.09	2.39	2.74	3.15	-	-
60	-	-	-	1.79	2.04	2.32	2.65	-	-
65	-	-	-	1.53	1.73	1.96	2.22	-	-

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

Cooling capacity	8 283	W
Power input	3 206	W
Current consumption	5.98	A
Mass flow	187	kg/h
C.O.P.	2.58	

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	74	dB(A)
With acoustic hood	68	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	1 238	1 773	3 226	4 178	5 304	6 623	8 152	9 907	11 908
40	1 091	1 609	2 997	3 904	4 975	6 228	7 682	9 354	11 262
45	939	1 435	2 753	3 609	4 621	5 806	7 182	8 766	10 577
50	786	1 258	2 497	3 300	4 249	5 362	6 656	8 148	9 858
55	-	-	2 235	2 981	3 863	4 900	6 108	7 506	9 111
60	-	-	-	2 656	3 468	4 425	5 544	6 843	8 340
65	-	-	-	-	3 070	3 943	4 969	6 165	7 550
75	-	-	-	-	-	-	3 804	4 784	5 934

**Power input in W**

35	921	1 060	1 329	1 450	1 556	1 640	1 699	1 728	1 720
40	961	1 104	1 393	1 528	1 650	1 753	1 834	1 887	1 906
45	987	1 139	1 450	1 600	1 740	1 865	1 969	2 047	2 096
50	1 000	1 161	1 499	1 666	1 826	1 973	2 102	2 209	2 287
55	-	-	1 538	1 724	1 906	2 077	2 233	2 369	2 480
60	-	-	-	1 774	1 979	2 176	2 361	2 528	2 673
65	-	-	-	-	2 043	2 268	2 484	2 685	2 865
75	-	-	-	-	-	-	2 712	2 985	3 242

**Current consumption in A**

35	2.85	2.98	3.22	3.32	3.42	3.50	3.56	3.59	3.60
40	2.87	3.00	3.27	3.40	3.52	3.62	3.71	3.78	3.82
45	2.88	3.02	3.32	3.47	3.62	3.75	3.87	3.98	4.06
50	2.88	3.04	3.37	3.55	3.72	3.88	4.04	4.18	4.31
55	-	-	3.42	3.62	3.82	4.02	4.21	4.40	4.57
60	-	-	-	3.69	3.92	4.16	4.39	4.62	4.84
65	-	-	-	-	4.02	4.29	4.57	4.84	5.11
75	-	-	-	-	-	-	4.94	5.31	5.68

**Mass flow in kg/h**

35	31	44	77	97	121	148	178	213	252
40	29	42	75	95	119	146	176	211	249
45	27	40	73	93	116	143	173	207	246
50	24	37	70	90	113	140	169	203	241
55	-	-	67	87	109	135	165	198	235
60	-	-	-	82	105	130	159	192	228
65	-	-	-	-	100	125	153	185	220
75	-	-	-	-	-	-	138	168	202

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

35	1.34	1.67	2.43	2.88	3.41	4.04	4.80	5.74	6.92
40	1.14	1.46	2.15	2.55	3.02	3.55	4.19	4.96	5.91
45	0.95	1.26	1.90	2.26	2.66	3.11	3.65	4.28	5.05
50	0.79	1.08	1.67	1.98	2.33	2.72	3.17	3.69	4.31
55	-	-	1.45	1.73	2.03	2.36	2.74	3.17	3.67
60	-	-	-	1.50	1.75	2.03	2.35	2.71	3.12
65	-	-	-	-	1.50	1.74	2.00	2.30	2.63
75	-	-	-	-	-	-	1.40	1.60	1.83

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

Cooling capacity	5 362	W
Power input	1 973	W
Current consumption	3.88	A
Mass flow	140	kg/h
C.O.P.	2.72	

**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

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**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	1 346	1 924	3 488	4 510	5 717	7 128	8 760	10 633	12 763
40	1 193	1 755	3 258	4 235	5 388	6 735	8 294	10 083	12 122
45	1 033	1 576	3 010	3 939	5 033	6 312	7 794	9 497	11 440
50	-	1 392	2 749	3 625	4 657	5 865	7 265	8 878	10 722
55	-	-	2 480	3 300	4 266	5 398	6 714	8 232	9 973
60	-	-	-	2 968	3 864	4 916	6 144	7 565	9 198
65	-	-	-	-	-	4 425	5 561	6 880	8 403
75	-	-	-	-	-	-	4 377	5 483	6 776

**Power input in W**

35	921	1 060	1 329	1 450	1 556	1 640	1 699	1 728	1 720
40	961	1 104	1 393	1 528	1 650	1 753	1 834	1 887	1 906
45	987	1 139	1 450	1 600	1 740	1 865	1 969	2 047	2 096
50	-	1 161	1 499	1 666	1 826	1 973	2 102	2 209	2 287
55	-	-	1 538	1 724	1 906	2 077	2 233	2 369	2 480
60	-	-	-	1 774	1 979	2 176	2 361	2 528	2 673
65	-	-	-	-	-	2 268	2 484	2 685	2 865
75	-	-	-	-	-	-	2 712	2 985	3 242

**Current consumption in A**

35	2.85	2.98	3.22	3.32	3.42	3.50	3.56	3.59	3.60
40	2.87	3.00	3.27	3.40	3.52	3.62	3.71	3.78	3.82
45	2.88	3.02	3.32	3.47	3.62	3.75	3.87	3.98	4.06
50	-	3.04	3.37	3.55	3.72	3.88	4.04	4.18	4.31
55	-	-	3.42	3.62	3.82	4.02	4.21	4.40	4.57
60	-	-	-	3.69	3.92	4.16	4.39	4.62	4.84
65	-	-	-	-	-	4.29	4.57	4.84	5.11
75	-	-	-	-	-	-	4.94	5.31	5.68

**Mass flow in kg/h**

35	31	44	76	97	120	147	177	212	251
40	29	42	75	95	118	145	175	210	248
45	27	40	72	93	116	142	172	206	244
50	-	37	70	90	113	139	168	202	239
55	-	-	66	86	109	135	164	197	234
60	-	-	-	82	104	130	158	191	227
65	-	-	-	-	-	124	152	184	219
75	-	-	-	-	-	-	137	167	200

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

35	1.46	1.82	2.62	3.11	3.68	4.35	5.16	6.15	7.42
40	1.24	1.59	2.34	2.77	3.27	3.84	4.52	5.34	6.36
45	1.05	1.38	2.08	2.46	2.89	3.39	3.96	4.64	5.46
50	-	1.20	1.83	2.18	2.55	2.97	3.46	4.02	4.69
55	-	-	1.61	1.91	2.24	2.60	3.01	3.47	4.02
60	-	-	-	1.67	1.95	2.26	2.60	2.99	3.44
65	-	-	-	-	-	1.95	2.24	2.56	2.93
75	-	-	-	-	-	-	1.61	1.84	2.09

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

Cooling capacity	6 014	W
Power input	2 134	W
Current consumption	4.09	A
Mass flow	148	kg/h
C.O.P.	2.82	

**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

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# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	2 064	2 857	3 827	4 996	6 384	8 013	9 904	12 078	14 557
35	1 809	2 550	3 451	4 533	5 817	7 324	9 076	11 093	13 398
40	1 554	2 243	3 073	4 067	5 245	6 630	8 241	10 101	12 230
45	1 300	1 934	2 693	3 598	4 670	5 930	7 400	9 101	11 054
50	1 046	1 624	2 311	3 125	4 089	5 225	6 552	8 093	9 868
55	-	1 313	1 926	2 649	3 504	4 513	5 697	7 077	8 674
60	-	1 001	1 538	2 169	2 914	3 796	4 835	6 052	7 469

### Power input in W

30	1 473	1 685	1 882	2 060	2 216	2 346	2 446	2 512	2 541
35	1 495	1 730	1 953	2 159	2 344	2 506	2 640	2 743	2 811
40	1 504	1 764	2 013	2 248	2 465	2 660	2 830	2 970	3 078
45	1 498	1 784	2 061	2 327	2 576	2 806	3 013	3 192	3 340
50	1 476	1 789	2 096	2 393	2 677	2 942	3 187	3 407	3 598
55	-	1 778	2 116	2 446	2 764	3 068	3 352	3 613	3 848
60	-	1 748	2 119	2 483	2 838	3 180	3 505	3 809	4 089

### Current consumption in A

30	3.53	3.76	4.01	4.27	4.52	4.74	4.91	5.02	5.05
35	3.56	3.81	4.09	4.37	4.64	4.89	5.09	5.23	5.29
40	3.59	3.86	4.17	4.48	4.79	5.07	5.31	5.49	5.60
45	3.59	3.90	4.25	4.60	4.95	5.28	5.57	5.80	5.95
50	3.56	3.92	4.31	4.71	5.12	5.50	5.84	6.13	6.34
55	-	3.89	4.34	4.80	5.27	5.71	6.12	6.48	6.76
60	-	3.81	4.33	4.86	5.39	5.91	6.39	6.82	7.18

### Mass flow in kg/h

30	65	88	115	146	182	223	270	324	384
35	61	84	111	142	177	217	263	315	374
40	57	80	106	137	171	211	256	307	364
45	52	75	101	131	166	204	248	298	353
50	47	70	96	125	159	197	240	288	342
55	-	64	90	119	152	189	231	278	331
60	-	57	82	111	144	180	221	267	319

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

30	1.40	1.70	2.03	2.42	2.88	3.42	4.05	4.81	5.73
35	1.21	1.47	1.77	2.10	2.48	2.92	3.44	4.04	4.77
40	1.03	1.27	1.53	1.81	2.13	2.49	2.91	3.40	3.97
45	0.87	1.08	1.31	1.55	1.81	2.11	2.46	2.85	3.31
50	0.71	0.91	1.10	1.31	1.53	1.78	2.06	2.38	2.74
55	-	0.74	0.91	1.08	1.27	1.47	1.70	1.96	2.25
60	-	0.57	0.73	0.87	1.03	1.19	1.38	1.59	1.83

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

Cooling capacity	4 670	W
Power input	2 576	W
Current consumption	4.95	A
Mass flow	166	kg/h
C.O.P.	1.81	



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	70	dB(A)
With acoustic hood	64	dB(A)

Tolerance according EN12900



# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	2 297	3 172	4 238	5 518	7 036	8 812	10 869	13 228	15 913
35	2 035	2 860	3 859	5 054	6 469	8 124	10 044	12 249	14 763
40	1 772	2 547	3 478	4 587	5 898	7 432	9 214	11 264	13 605
45	1 507	2 231	3 093	4 116	5 323	6 736	8 378	10 273	12 441
50	1 239	1 913	2 707	3 643	4 745	6 036	7 540	9 278	11 275
55	-	1 592	2 317	3 167	4 165	5 336	6 701	8 286	10 112
60	-	1 265	1 926	2 692	3 589	4 641	5 872	7 306	8 966

### Power input in W

30	1 473	1 685	1 882	2 060	2 216	2 346	2 446	2 512	2 541
35	1 495	1 730	1 953	2 159	2 344	2 506	2 640	2 743	2 811
40	1 504	1 764	2 013	2 248	2 465	2 660	2 830	2 970	3 078
45	1 498	1 784	2 061	2 327	2 576	2 806	3 013	3 192	3 340
50	1 476	1 789	2 096	2 393	2 677	2 942	3 187	3 407	3 598
55	-	1 778	2 116	2 446	2 764	3 068	3 352	3 613	3 848
60	-	1 748	2 119	2 483	2 838	3 180	3 505	3 809	4 089

### Current consumption in A

30	3.53	3.76	4.01	4.27	4.52	4.74	4.91	5.02	5.05
35	3.56	3.81	4.09	4.37	4.64	4.89	5.09	5.23	5.29
40	3.59	3.86	4.17	4.48	4.79	5.07	5.31	5.49	5.60
45	3.59	3.90	4.25	4.60	4.95	5.28	5.57	5.80	5.95
50	3.56	3.92	4.31	4.71	5.12	5.50	5.84	6.13	6.34
55	-	3.89	4.34	4.80	5.27	5.71	6.12	6.48	6.76
60	-	3.81	4.33	4.86	5.39	5.91	6.39	6.82	7.18

### Mass flow in kg/h

30	65	87	114	145	181	222	269	321	381
35	61	84	110	141	176	216	262	313	371
40	57	80	106	136	170	210	254	305	361
45	52	75	101	131	165	203	247	296	351
50	46	69	95	125	158	196	238	286	340
55	-	63	89	118	151	188	230	276	329
60	-	56	82	111	143	179	220	266	317

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

30	1.56	1.88	2.25	2.68	3.17	3.76	4.44	5.27	6.26
35	1.36	1.65	1.98	2.34	2.76	3.24	3.80	4.47	5.25
40	1.18	1.44	1.73	2.04	2.39	2.79	3.26	3.79	4.42
45	1.01	1.25	1.50	1.77	2.07	2.40	2.78	3.22	3.72
50	0.84	1.07	1.29	1.52	1.77	2.05	2.37	2.72	3.13
55	-	0.90	1.10	1.29	1.51	1.74	2.00	2.29	2.63
60	-	0.72	0.91	1.08	1.26	1.46	1.68	1.92	2.19

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

Cooling capacity	5 323	W
Power input	2 576	W
Current consumption	4.95	A
Mass flow	165	kg/h
C.O.P.	2.07	

### 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	70	dB(A)
With acoustic hood	64	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

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	1 527	2 272	3 178	4 269	5 565	7 089	8 863	10 908	13 247
35	1 315	2 028	2 890	3 923	5 149	6 590	8 267	10 204	12 421
40	1 095	1 773	2 587	3 559	4 711	6 065	7 643	9 467	11 559
45	873	1 512	2 275	3 182	4 257	5 521	6 996	8 704	10 667
50	-	1 250	1 957	2 797	3 791	4 962	6 330	7 918	9 749
55	-	-	1 641	2 409	3 319	4 392	5 651	7 116	8 811
60	-	-	-	2 024	2 846	3 818	4 963	6 302	7 858

### Power input in W

30	1 120	1 341	1 549	1 738	1 906	2 047	2 158	2 234	2 271
35	1 114	1 358	1 591	1 810	2 009	2 185	2 334	2 450	2 531
40	1 094	1 362	1 622	1 871	2 103	2 315	2 502	2 660	2 785
45	1 060	1 353	1 642	1 921	2 187	2 435	2 662	2 863	3 033
50	-	1 331	1 648	1 959	2 260	2 546	2 813	3 057	3 274
55	-	-	1 642	1 986	2 322	2 647	2 955	3 244	3 508
60	-	-	-	1 999	2 372	2 736	3 088	3 421	3 734

### Current consumption in A

30	3.15	3.38	3.63	3.88	4.13	4.36	4.54	4.65	4.69
35	3.18	3.41	3.67	3.95	4.22	4.47	4.68	4.83	4.91
40	3.20	3.44	3.73	4.03	4.33	4.61	4.87	5.07	5.20
45	3.20	3.47	3.78	4.11	4.45	4.78	5.08	5.34	5.53
50	-	3.46	3.81	4.19	4.57	4.96	5.32	5.63	5.89
55	-	-	3.81	4.24	4.68	5.12	5.55	5.94	6.27
60	-	-	-	4.25	4.76	5.27	5.77	6.24	6.66

### Mass flow in kg/h

30	36	53	73	96	123	154	189	230	275
35	33	50	70	93	120	150	185	225	271
40	29	46	66	89	115	146	181	220	265
45	25	42	62	84	111	141	175	214	258
50	-	37	57	79	105	135	168	207	250
55	-	-	51	73	99	128	161	198	241
60	-	-	-	67	92	120	153	189	231

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

30	1.36	1.69	2.05	2.46	2.92	3.46	4.11	4.88	5.83
35	1.18	1.49	1.82	2.17	2.56	3.02	3.54	4.16	4.91
40	1.00	1.30	1.59	1.90	2.24	2.62	3.05	3.56	4.15
45	0.82	1.12	1.39	1.66	1.95	2.27	2.63	3.04	3.52
50	-	0.94	1.19	1.43	1.68	1.95	2.25	2.59	2.98
55	-	-	1.00	1.21	1.43	1.66	1.91	2.19	2.51
60	-	-	-	1.01	1.20	1.40	1.61	1.84	2.10

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

Cooling capacity	4 257	W
Power input	2 187	W
Current consumption	4.45	A
Mass flow	111	kg/h
C.O.P.	1.95	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

### Pressure switch settings

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

### Sound power data

Sound power level	69	dB(A)
With acoustic hood	63	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## Performance data at 50 Hz, ARI rating conditions

# R407A

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

### Cooling capacity in W

30	1 651	2 453	3 428	4 597	5 986	7 615	9 509	11 691	14 182
35	1 430	2 203	3 134	4 248	5 567	7 115	8 915	10 989	13 361
40	1 200	1 939	2 824	3 878	5 125	6 588	8 290	10 253	12 502
45	964	1 667	2 502	3 493	4 664	6 039	7 639	9 489	11 611
50	-	1 391	2 173	3 098	4 190	5 472	6 968	8 701	10 694
55	-	-	1 843	2 699	3 708	4 895	6 284	7 897	9 758
60	-	-	-	2 300	3 224	4 313	5 592	7 082	8 810

### Power input in W

30	1 120	1 341	1 549	1 738	1 906	2 047	2 158	2 234	2 271
35	1 114	1 358	1 591	1 810	2 009	2 185	2 334	2 450	2 531
40	1 094	1 362	1 622	1 871	2 103	2 315	2 502	2 660	2 785
45	1 060	1 353	1 642	1 921	2 187	2 435	2 662	2 863	3 033
50	-	1 331	1 648	1 959	2 260	2 546	2 813	3 057	3 274
55	-	-	1 642	1 986	2 322	2 647	2 955	3 244	3 508
60	-	-	-	1 999	2 372	2 736	3 088	3 421	3 734

### Current consumption in A

30	3.15	3.38	3.63	3.88	4.13	4.36	4.54	4.65	4.69
35	3.18	3.41	3.67	3.95	4.22	4.47	4.68	4.83	4.91
40	3.20	3.44	3.73	4.03	4.33	4.61	4.87	5.07	5.20
45	3.20	3.47	3.78	4.11	4.45	4.78	5.08	5.34	5.53
50	-	3.46	3.81	4.19	4.57	4.96	5.32	5.63	5.89
55	-	-	3.81	4.24	4.68	5.12	5.55	5.94	6.27
60	-	-	-	4.25	4.76	5.27	5.77	6.24	6.66

### Mass flow in kg/h

30	36	53	73	96	122	153	188	228	274
35	33	50	69	92	119	149	184	224	269
40	29	46	66	88	115	145	180	219	263
45	25	42	61	84	110	140	174	213	256
50	-	37	56	79	104	134	167	205	248
55	-	-	51	73	98	127	160	197	239
60	-	-	-	67	91	120	152	188	230

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

30	1.47	1.83	2.21	2.64	3.14	3.72	4.41	5.23	6.24
35	1.28	1.62	1.97	2.35	2.77	3.26	3.82	4.48	5.28
40	1.10	1.42	1.74	2.07	2.44	2.85	3.31	3.85	4.49
45	0.91	1.23	1.52	1.82	2.13	2.48	2.87	3.31	3.83
50	-	1.05	1.32	1.58	1.85	2.15	2.48	2.85	3.27
55	-	-	1.12	1.36	1.60	1.85	2.13	2.43	2.78
60	-	-	-	1.15	1.36	1.58	1.81	2.07	2.36

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

Cooling capacity	4 664	W
Power input	2 187	W
Current consumption	4.45	A
Mass flow	110	kg/h
C.O.P.	2.13	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

### Pressure switch settings

Maximum HP switch setting	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	69	dB(A)
With acoustic hood	63	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	-	2 466	3 489	4 723	6 193	7 926	9 947	12 281	14 955
35	-	2 139	3 079	4 207	5 551	7 135	8 985	11 127	13 588
40	-	1 857	2 728	3 767	4 999	6 449	8 144	10 109	12 370
45	-	1 607	2 425	3 389	4 524	5 855	7 410	9 213	11 290
50	-	-	2 157	3 061	4 114	5 342	6 771	8 427	10 335
55	-	-	-	2 770	3 756	4 896	6 215	7 738	9 493
60	-	-	-	-	-	-	-	-	-

### Power input in W

30	-	1 420	1 636	1 837	2 011	2 149	2 240	2 272	2 235
35	-	1 441	1 680	1 910	2 122	2 305	2 447	2 539	2 569
40	-	1 462	1 719	1 976	2 221	2 444	2 634	2 782	2 875
45	-	1 492	1 763	2 041	2 315	2 574	2 809	3 007	3 159
50	-	-	1 817	2 113	2 412	2 704	2 978	3 224	3 431
55	-	-	-	2 200	2 520	2 840	3 150	3 439	3 696
60	-	-	-	-	-	-	-	-	-

### Current consumption in A

30	-	3.38	3.65	3.93	4.20	4.43	4.60	4.70	4.69
35	-	3.46	3.73	4.03	4.32	4.58	4.80	4.94	4.98
40	-	3.51	3.80	4.12	4.44	4.75	5.01	5.20	5.31
45	-	3.54	3.86	4.21	4.58	4.93	5.25	5.50	5.68
50	-	-	3.91	4.31	4.72	5.13	5.52	5.85	6.10
55	-	-	-	4.41	4.89	5.37	5.82	6.23	6.58
60	-	-	-	-	-	-	-	-	-

### Mass flow in kg/h

30	-	51	71	95	122	155	192	234	282
35	-	46	66	88	115	146	181	221	267
40	-	42	61	83	109	138	172	210	254
45	-	39	58	79	104	132	165	202	244
50	-	-	54	76	100	128	159	195	236
55	-	-	-	73	97	125	156	190	230
60	-	-	-	-	-	-	-	-	-

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

30	-	1.74	2.13	2.57	3.08	3.69	4.44	5.41	6.69
35	-	1.48	1.83	2.20	2.62	3.10	3.67	4.38	5.29
40	-	1.27	1.59	1.91	2.25	2.64	3.09	3.63	4.30
45	-	1.08	1.38	1.66	1.95	2.27	2.64	3.06	3.57
50	-	-	1.19	1.45	1.71	1.98	2.27	2.61	3.01
55	-	-	-	1.26	1.49	1.72	1.97	2.25	2.57
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	4 524	W
Power input	2 315	W
Current consumption	4.58	A
Mass flow	104	kg/h
C.O.P.	1.95	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

### Pressure switch settings

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

### Sound power data

Sound power level	69	dB(A)
With acoustic hood	63	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## Performance data at 50 Hz, ARI rating conditions

# R407F

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

### Cooling capacity in W

30	-	2 643	3 736	5 052	6 618	8 461	10 609	13 088	15 924
35	-	2 303	3 311	4 520	5 957	7 649	9 624	11 907	14 526
40	-	2 010	2 950	4 068	5 391	6 948	8 764	10 868	13 286
45	-	1 751	2 639	3 682	4 908	6 345	8 020	9 960	12 192
50	-	-	2 365	3 350	4 496	5 829	7 379	9 171	11 234
55	-	-	-	3 061	4 143	5 390	6 831	8 493	10 404
60	-	-	-	-	-	-	-	-	-

### Power input in W

30	-	1 420	1 636	1 837	2 011	2 149	2 240	2 272	2 235
35	-	1 441	1 680	1 910	2 122	2 305	2 447	2 539	2 569
40	-	1 462	1 719	1 976	2 221	2 444	2 634	2 782	2 875
45	-	1 492	1 763	2 041	2 315	2 574	2 809	3 007	3 159
50	-	-	1 817	2 113	2 412	2 704	2 978	3 224	3 431
55	-	-	-	2 200	2 520	2 840	3 150	3 439	3 696
60	-	-	-	-	-	-	-	-	-

### Current consumption in A

30	-	3.38	3.65	3.93	4.20	4.43	4.60	4.70	4.69
35	-	3.46	3.73	4.03	4.32	4.58	4.80	4.94	4.98
40	-	3.51	3.80	4.12	4.44	4.75	5.01	5.20	5.31
45	-	3.54	3.86	4.21	4.58	4.93	5.25	5.50	5.68
50	-	-	3.91	4.31	4.72	5.13	5.52	5.85	6.10
55	-	-	-	4.41	4.89	5.37	5.82	6.23	6.58
60	-	-	-	-	-	-	-	-	-

### Mass flow in kg/h

30	-	51	71	94	122	154	190	232	280
35	-	46	65	88	114	145	180	220	265
40	-	42	61	83	108	137	171	209	253
45	-	39	57	79	103	131	164	201	242
50	-	-	54	75	99	127	158	194	234
55	-	-	-	73	97	124	155	189	228
60	-	-	-	-	-	-	-	-	-

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

30	-	1.86	2.28	2.75	3.29	3.94	4.74	5.76	7.13
35	-	1.60	1.97	2.37	2.81	3.32	3.93	4.69	5.65
40	-	1.37	1.72	2.06	2.43	2.84	3.33	3.91	4.62
45	-	1.17	1.50	1.80	2.12	2.46	2.86	3.31	3.86
50	-	-	1.30	1.59	1.86	2.16	2.48	2.84	3.27
55	-	-	-	1.39	1.64	1.90	2.17	2.47	2.81
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	4 908	W
Power input	2 315	W
Current consumption	4.58	A
Mass flow	103	kg/h
C.O.P.	2.12	

### 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	69	dB(A)
With acoustic hood	63	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 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	1 238	1 773	3 226	4 178	5 304	6 623	8 152	9 907	11 908
40	1 091	1 609	2 997	3 904	4 975	6 228	7 682	9 354	11 262
45	939	1 435	2 753	3 609	4 621	5 806	7 182	8 766	10 577
50	786	1 258	2 497	3 300	4 249	5 362	6 656	8 148	9 858
55	-	-	2 235	2 981	3 863	4 900	6 108	7 506	9 111
60	-	-	-	2 656	3 468	4 425	5 544	6 843	8 340
65	-	-	-	-	3 070	3 943	4 969	6 165	7 550
75	-	-	-	-	-	-	3 804	4 784	5 934

**Power input in W**

35	921	1 060	1 329	1 450	1 556	1 640	1 699	1 728	1 720
40	961	1 104	1 393	1 528	1 650	1 753	1 834	1 887	1 906
45	987	1 139	1 450	1 600	1 740	1 865	1 969	2 047	2 096
50	1 000	1 161	1 499	1 666	1 826	1 973	2 102	2 209	2 287
55	-	-	1 538	1 724	1 906	2 077	2 233	2 369	2 480
60	-	-	-	1 774	1 979	2 176	2 361	2 528	2 673
65	-	-	-	-	2 043	2 268	2 484	2 685	2 865
75	-	-	-	-	-	-	2 712	2 985	3 242

**Current consumption in A**

35	2.85	2.98	3.22	3.32	3.42	3.50	3.56	3.59	3.60
40	2.87	3.00	3.27	3.40	3.52	3.62	3.71	3.78	3.82
45	2.88	3.02	3.32	3.47	3.62	3.75	3.87	3.98	4.06
50	2.88	3.04	3.37	3.55	3.72	3.88	4.04	4.18	4.31
55	-	-	3.42	3.62	3.82	4.02	4.21	4.40	4.57
60	-	-	-	3.69	3.92	4.16	4.39	4.62	4.84
65	-	-	-	-	4.02	4.29	4.57	4.84	5.11
75	-	-	-	-	-	-	4.94	5.31	5.68

**Mass flow in kg/h**

35	31	44	77	97	121	148	178	213	252
40	29	42	75	95	119	146	176	211	249
45	27	40	73	93	116	143	173	207	246
50	24	37	70	90	113	140	169	203	241
55	-	-	67	87	109	135	165	198	235
60	-	-	-	82	105	130	159	192	228
65	-	-	-	-	100	125	153	185	220
75	-	-	-	-	-	-	138	168	202

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

35	1.34	1.67	2.43	2.88	3.41	4.04	4.80	5.74	6.92
40	1.14	1.46	2.15	2.55	3.02	3.55	4.19	4.96	5.91
45	0.95	1.26	1.90	2.26	2.66	3.11	3.65	4.28	5.05
50	0.79	1.08	1.67	1.98	2.33	2.72	3.17	3.69	4.31
55	-	-	1.45	1.73	2.03	2.36	2.74	3.17	3.67
60	-	-	-	1.50	1.75	2.03	2.35	2.71	3.12
65	-	-	-	-	1.50	1.74	2.00	2.30	2.63
75	-	-	-	-	-	-	1.40	1.60	1.83

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

Cooling capacity	5 362	W
Power input	1 973	W
Current consumption	3.88	A
Mass flow	140	kg/h
C.O.P.	2.72	

**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

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**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	1 346	1 924	3 488	4 510	5 717	7 128	8 760	10 633	12 763
40	1 193	1 755	3 258	4 235	5 388	6 735	8 294	10 083	12 122
45	1 033	1 576	3 010	3 939	5 033	6 312	7 794	9 497	11 440
50	-	1 392	2 749	3 625	4 657	5 865	7 265	8 878	10 722
55	-	-	2 480	3 300	4 266	5 398	6 714	8 232	9 973
60	-	-	-	2 968	3 864	4 916	6 144	7 565	9 198
65	-	-	-	-	-	4 425	5 561	6 880	8 403
75	-	-	-	-	-	-	4 377	5 483	6 776

**Power input in W**

35	921	1 060	1 329	1 450	1 556	1 640	1 699	1 728	1 720
40	961	1 104	1 393	1 528	1 650	1 753	1 834	1 887	1 906
45	987	1 139	1 450	1 600	1 740	1 865	1 969	2 047	2 096
50	-	1 161	1 499	1 666	1 826	1 973	2 102	2 209	2 287
55	-	-	1 538	1 724	1 906	2 077	2 233	2 369	2 480
60	-	-	-	1 774	1 979	2 176	2 361	2 528	2 673
65	-	-	-	-	-	2 268	2 484	2 685	2 865
75	-	-	-	-	-	-	2 712	2 985	3 242

**Current consumption in A**

35	2.85	2.98	3.22	3.32	3.42	3.50	3.56	3.59	3.60
40	2.87	3.00	3.27	3.40	3.52	3.62	3.71	3.78	3.82
45	2.88	3.02	3.32	3.47	3.62	3.75	3.87	3.98	4.06
50	-	3.04	3.37	3.55	3.72	3.88	4.04	4.18	4.31
55	-	-	3.42	3.62	3.82	4.02	4.21	4.40	4.57
60	-	-	-	3.69	3.92	4.16	4.39	4.62	4.84
65	-	-	-	-	-	4.29	4.57	4.84	5.11
75	-	-	-	-	-	-	4.94	5.31	5.68

**Mass flow in kg/h**

35	31	44	76	97	120	147	177	212	251
40	29	42	75	95	118	145	175	210	248
45	27	40	72	93	116	142	172	206	244
50	-	37	70	90	113	139	168	202	239
55	-	-	66	86	109	135	164	197	234
60	-	-	-	82	104	130	158	191	227
65	-	-	-	-	-	124	152	184	219
75	-	-	-	-	-	-	137	167	200

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

35	1.46	1.82	2.62	3.11	3.68	4.35	5.16	6.15	7.42
40	1.24	1.59	2.34	2.77	3.27	3.84	4.52	5.34	6.36
45	1.05	1.38	2.08	2.46	2.89	3.39	3.96	4.64	5.46
50	-	1.20	1.83	2.18	2.55	2.97	3.46	4.02	4.69
55	-	-	1.61	1.91	2.24	2.60	3.01	3.47	4.02
60	-	-	-	1.67	1.95	2.26	2.60	2.99	3.44
65	-	-	-	-	-	1.95	2.24	2.56	2.93
75	-	-	-	-	-	-	1.61	1.84	2.09

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

Cooling capacity	6 014	W
Power input	2 134	W
Current consumption	4.09	A
Mass flow	148	kg/h
C.O.P.	2.82	

**Pressure switch settings**

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

**Sound power data**

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	3 688	4 851	6 219	7 815	9 660	11 776	14 186	-	-
40	3 346	4 445	5 728	7 216	8 930	10 894	13 128	-	-
45	2 994	4 036	5 239	6 624	8 215	10 032	12 097	-	-
50	-	3 617	4 746	6 036	7 508	9 184	11 087	-	-
55	-	-	4 246	5 445	6 805	8 346	10 092	-	-
60	-	-	-	4 846	6 100	7 513	9 107	-	-
65	-	-	-	4 235	5 388	6 678	8 127	-	-

### Power input in W

35	1 724	1 932	2 106	2 247	2 355	2 429	2 470	-	-
40	1 779	2 025	2 233	2 405	2 540	2 637	2 698	-	-
45	1 813	2 104	2 355	2 565	2 735	2 863	2 951	-	-
50	-	2 166	2 466	2 722	2 934	3 101	3 224	-	-
55	-	-	2 560	2 870	3 132	3 345	3 511	-	-
60	-	-	-	3 003	3 323	3 591	3 807	-	-
65	-	-	-	3 117	3 502	3 831	4 105	-	-

### Current consumption in A

35	4.01	4.27	4.46	4.62	4.74	4.85	4.96	-	-
40	4.08	4.40	4.64	4.84	4.99	5.13	5.26	-	-
45	4.12	4.51	4.82	5.07	5.28	5.45	5.61	-	-
50	-	4.59	4.99	5.31	5.58	5.81	6.01	-	-
55	-	-	5.13	5.54	5.89	6.19	6.45	-	-
60	-	-	-	5.74	6.18	6.57	6.91	-	-
65	-	-	-	5.90	6.46	6.94	7.37	-	-

### Mass flow in kg/h

35	80	104	131	161	197	236	281	-	-
40	76	100	126	156	191	229	272	-	-
45	72	95	122	151	185	222	264	-	-
50	-	91	117	146	178	215	255	-	-
55	-	-	111	140	172	207	246	-	-
60	-	-	-	133	165	199	237	-	-
65	-	-	-	126	157	191	228	-	-

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

35	2.14	2.51	2.95	3.48	4.10	4.85	5.74	-	-
40	1.88	2.20	2.56	3.00	3.52	4.13	4.87	-	-
45	1.65	1.92	2.22	2.58	3.00	3.50	4.10	-	-
50	-	1.67	1.92	2.22	2.56	2.96	3.44	-	-
55	-	-	1.66	1.90	2.17	2.49	2.87	-	-
60	-	-	-	1.61	1.84	2.09	2.39	-	-
65	-	-	-	1.36	1.54	1.74	1.98	-	-

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

Cooling capacity	7 508	W
Power input	2 934	W
Current consumption	5.58	A
Mass flow	178	kg/h
C.O.P.	2.56	



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	74	dB(A)
With acoustic hood	68	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	3 970	5 215	6 678	8 382	10 349	12 604	15 167	-	-
40	3 621	4 804	6 182	7 778	9 615	11 716	14 103	-	-
45	3 261	4 389	5 688	7 183	8 895	10 849	13 066	-	-
50	-	3 962	5 191	6 590	8 185	9 998	12 052	-	-
55	-	-	4 683	5 995	7 478	9 157	11 055	-	-
60	-	-	-	5 390	6 771	8 323	10 071	-	-
65	-	-	-	4 772	6 056	7 490	9 096	-	-

**Power input in W**

35	1 724	1 932	2 106	2 247	2 355	2 429	2 470	-	-
40	1 779	2 025	2 233	2 405	2 540	2 637	2 698	-	-
45	1 813	2 104	2 355	2 565	2 735	2 863	2 951	-	-
50	-	2 166	2 466	2 722	2 934	3 101	3 224	-	-
55	-	-	2 560	2 870	3 132	3 345	3 511	-	-
60	-	-	-	3 003	3 323	3 591	3 807	-	-
65	-	-	-	3 117	3 502	3 831	4 105	-	-

**Current consumption in A**

35	4.01	4.27	4.46	4.62	4.74	4.85	4.96	-	-
40	4.08	4.40	4.64	4.84	4.99	5.13	5.26	-	-
45	4.12	4.51	4.82	5.07	5.28	5.45	5.61	-	-
50	-	4.59	4.99	5.31	5.58	5.81	6.01	-	-
55	-	-	5.13	5.54	5.89	6.19	6.45	-	-
60	-	-	-	5.74	6.18	6.57	6.91	-	-
65	-	-	-	5.90	6.46	6.94	7.37	-	-

**Mass flow in kg/h**

35	80	103	130	161	196	235	280	-	-
40	76	99	126	156	190	228	271	-	-
45	72	95	121	150	183	221	262	-	-
50	-	90	116	145	177	213	253	-	-
55	-	-	111	139	171	206	245	-	-
60	-	-	-	133	164	198	236	-	-
65	-	-	-	125	156	190	226	-	-

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

35	2.30	2.70	3.17	3.73	4.40	5.19	6.14	-	-
40	2.04	2.37	2.77	3.23	3.79	4.44	5.23	-	-
45	1.80	2.09	2.42	2.80	3.25	3.79	4.43	-	-
50	-	1.83	2.10	2.42	2.79	3.22	3.74	-	-
55	-	-	1.83	2.09	2.39	2.74	3.15	-	-
60	-	-	-	1.79	2.04	2.32	2.65	-	-
65	-	-	-	1.53	1.73	1.96	2.22	-	-

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

Cooling capacity	8 283	W
Power input	3 206	W
Current consumption	5.98	A
Mass flow	187	kg/h
C.O.P.	2.58	

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	74	dB(A)
With acoustic hood	68	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	-	3 196	4 258	5 568	7 150	-	-	-	-
20	-	2 795	3 755	4 936	6 359	8 050	10 035	-	-
30	-	2 398	3 253	4 300	5 561	7 060	8 821	10 871	13 243
40	-	-	2 751	3 662	4 758	6 061	7 595	9 383	11 453
50	-	-	-	3 023	3 951	5 056	6 360	7 883	9 650
60	-	-	-	-	3 141	4 046	5 117	6 374	7 836

### Power input in W

10	-	1 106	1 196	1 260	1 294	-	-	-	-
20	-	1 272	1 407	1 521	1 611	1 672	1 701	-	-
30	-	1 394	1 574	1 739	1 886	2 010	2 108	2 175	2 209
40	-	-	1 706	1 923	2 127	2 315	2 483	2 626	2 741
50	-	-	-	2 081	2 343	2 595	2 833	3 053	3 251
60	-	-	-	-	2 543	2 860	3 169	3 466	3 747

### Current consumption in A

10	-	2.96	3.05	3.10	3.10	-	-	-	-
20	-	3.47	3.61	3.74	3.83	3.86	3.81	-	-
30	-	3.70	3.89	4.08	4.27	4.41	4.49	4.48	4.36
40	-	-	4.01	4.27	4.54	4.79	4.99	5.13	5.17
50	-	-	-	4.43	4.77	5.12	5.45	5.72	5.93
60	-	-	-	-	5.10	5.54	5.98	6.39	6.75

### Mass flow in kg/h

10	-	52	70	91	118	-	-	-	-
20	-	49	66	87	113	144	181	-	-
30	-	46	62	83	107	137	173	216	267
40	-	-	58	77	101	129	164	205	254
50	-	-	-	71	93	120	153	192	239
60	-	-	-	-	85	110	141	178	223

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

10	-	2.89	3.56	4.42	5.53	-	-	-	-
20	-	2.20	2.67	3.24	3.95	4.82	5.90	-	-
30	-	1.72	2.07	2.47	2.95	3.51	4.18	5.00	6.00
40	-	-	1.61	1.90	2.24	2.62	3.06	3.57	4.18
50	-	-	-	1.45	1.69	1.95	2.24	2.58	2.97
60	-	-	-	-	1.24	1.41	1.61	1.84	2.09

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

Cooling capacity	4 355	W
Power input	2 238	W
Current consumption	4.65	A
Mass flow	97	kg/h
C.O.P.	1.95	

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	72	dB(A)
With acoustic hood	66	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	2 368	3 211	4 282	5 602	7 196	-	-	-	-
20	2 014	2 777	3 740	4 925	6 357	8 059	10 054	-	-
30	1 670	2 349	3 200	4 248	5 515	7 024	8 800	10 865	13 243
40	1 338	1 929	2 666	3 572	4 670	5 984	7 537	9 352	11 453
50	-	1 520	2 139	2 900	3 826	4 940	6 267	7 829	9 650
60	-	-	1 621	2 233	2 984	3 896	4 993	6 299	7 836

### Power input in W

10	992	1 106	1 196	1 260	1 294	-	-	-	-
20	1 120	1 272	1 407	1 521	1 611	1 672	1 701	-	-
30	1 204	1 394	1 574	1 739	1 886	2 010	2 108	2 175	2 209
40	1 252	1 481	1 706	1 923	2 127	2 315	2 483	2 626	2 741
50	-	1 541	1 812	2 081	2 343	2 595	2 833	3 053	3 251
60	-	-	1 900	2 221	2 543	2 860	3 169	3 466	3 747

### Current consumption in A

10	2.87	2.96	3.05	3.10	3.10	-	-	-	-
20	3.35	3.47	3.61	3.74	3.83	3.86	3.81	-	-
30	3.55	3.70	3.89	4.08	4.27	4.41	4.49	4.48	4.36
40	3.62	3.79	4.01	4.27	4.54	4.79	4.99	5.13	5.17
50	-	3.85	4.11	4.43	4.77	5.12	5.45	5.72	5.93
60	-	-	4.32	4.68	5.10	5.54	5.98	6.39	6.75

### Mass flow in kg/h

10	45	61	80	102	129	-	-	-	-
20	42	57	76	98	124	155	190	-	-
30	38	53	71	92	118	148	182	222	267
40	34	48	66	86	111	139	172	210	254
50	-	43	60	79	102	129	161	197	239
60	-	-	53	71	93	119	149	183	223

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

10	2.39	2.90	3.58	4.44	5.56	-	-	-	-
20	1.80	2.18	2.66	3.24	3.95	4.82	5.91	-	-
30	1.39	1.68	2.03	2.44	2.92	3.49	4.18	4.99	6.00
40	1.07	1.30	1.56	1.86	2.20	2.58	3.04	3.56	4.18
50	-	0.99	1.18	1.39	1.63	1.90	2.21	2.56	2.97
60	-	-	0.85	1.01	1.17	1.36	1.58	1.82	2.09

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

Cooling capacity	4 248	W
Power input	2 238	W
Current consumption	4.65	A
Mass flow	107	kg/h
C.O.P.	1.90	

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	72	dB(A)
With acoustic hood	66	dB(A)

Tolerance according EN12900

**Datasheet, performance data**
**Maneurop reciprocating compressor. MTZ036-4**
**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	-	3 201	4 264	5 574	7 156	-	-	-	-
20	-	2 801	3 762	4 943	6 366	8 056	10 041	-	-
30	-	2 404	3 260	4 307	5 568	7 067	8 826	10 874	13 243
40	-	-	2 758	3 669	4 766	6 068	7 601	9 386	11 453
50	-	-	-	3 031	3 959	5 063	6 366	7 887	9 650
60	-	-	-	-	3 149	4 053	5 123	6 378	7 836

**Power input in W**

10	-	1 106	1 196	1 260	1 294	-	-	-	-
20	-	1 272	1 407	1 521	1 611	1 672	1 701	-	-
30	-	1 394	1 574	1 739	1 886	2 010	2 108	2 175	2 209
40	-	-	1 706	1 923	2 127	2 315	2 483	2 626	2 741
50	-	-	-	2 081	2 343	2 595	2 833	3 053	3 251
60	-	-	-	-	2 543	2 860	3 169	3 466	3 747

**Current consumption in A**

10	-	2.96	3.05	3.10	3.10	-	-	-	-
20	-	3.47	3.61	3.74	3.83	3.86	3.81	-	-
30	-	3.70	3.89	4.08	4.27	4.41	4.49	4.48	4.36
40	-	-	4.01	4.27	4.54	4.79	4.99	5.13	5.17
50	-	-	-	4.43	4.77	5.12	5.45	5.72	5.93
60	-	-	-	-	5.10	5.54	5.98	6.39	6.75

**Mass flow in kg/h**

10	-	53	72	94	121	-	-	-	-
20	-	50	68	89	116	147	185	-	-
30	-	46	63	84	110	140	176	220	272
40	-	-	59	79	103	132	167	209	259
50	-	-	-	72	95	123	156	196	244
60	-	-	-	-	87	113	145	182	228

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

10	-	2.90	3.56	4.42	5.53	-	-	-	-
20	-	2.20	2.67	3.25	3.95	4.82	5.90	-	-
30	-	1.72	2.07	2.48	2.95	3.52	4.19	5.00	6.00
40	-	-	1.62	1.91	2.24	2.62	3.06	3.57	4.18
50	-	-	-	1.46	1.69	1.95	2.25	2.58	2.97
60	-	-	-	-	1.24	1.42	1.62	1.84	2.09

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

Cooling capacity	4 363	W
Power input	2 238	W
Current consumption	4.65	A
Mass flow	99	kg/h
C.O.P.	1.95	

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	72	dB(A)
With acoustic hood	66	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	2 368	3 211	4 282	5 602	7 196	-	-	-	-
20	2 014	2 777	3 740	4 925	6 357	8 059	10 054	-	-
30	1 670	2 349	3 200	4 248	5 515	7 024	8 800	10 865	13 243
40	1 338	1 929	2 666	3 572	4 670	5 984	7 537	9 352	11 453
50	-	1 520	2 139	2 900	3 826	4 940	6 267	7 829	9 650
60	-	-	1 621	2 233	2 984	3 896	4 993	6 299	7 836

### Power input in W

10	992	1 106	1 196	1 260	1 294	-	-	-	-
20	1 120	1 272	1 407	1 521	1 611	1 672	1 701	-	-
30	1 204	1 394	1 574	1 739	1 886	2 010	2 108	2 175	2 209
40	1 252	1 481	1 706	1 923	2 127	2 315	2 483	2 626	2 741
50	-	1 541	1 812	2 081	2 343	2 595	2 833	3 053	3 251
60	-	-	1 900	2 221	2 543	2 860	3 169	3 466	3 747

### Current consumption in A

10	2.87	2.96	3.05	3.10	3.10	-	-	-	-
20	3.35	3.47	3.61	3.74	3.83	3.86	3.81	-	-
30	3.55	3.70	3.89	4.08	4.27	4.41	4.49	4.48	4.36
40	3.62	3.79	4.01	4.27	4.54	4.79	4.99	5.13	5.17
50	-	3.85	4.11	4.43	4.77	5.12	5.45	5.72	5.93
60	-	-	4.32	4.68	5.10	5.54	5.98	6.39	6.75

### Mass flow in kg/h

10	46	62	82	105	133	-	-	-	-
20	42	58	77	100	127	158	194	-	-
30	39	54	72	94	120	151	186	226	272
40	35	50	67	88	113	142	176	214	259
50	-	45	61	81	105	132	165	202	244
60	-	-	54	73	95	121	152	187	228

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

10	2.39	2.90	3.58	4.44	5.56	-	-	-	-
20	1.80	2.18	2.66	3.24	3.95	4.82	5.91	-	-
30	1.39	1.68	2.03	2.44	2.92	3.49	4.18	4.99	6.00
40	1.07	1.30	1.56	1.86	2.20	2.58	3.04	3.56	4.18
50	-	0.99	1.18	1.39	1.63	1.90	2.21	2.56	2.97
60	-	-	0.85	1.01	1.17	1.36	1.58	1.82	2.09

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

Cooling capacity	4 248	W
Power input	2 238	W
Current consumption	4.65	A
Mass flow	109	kg/h
C.O.P.	1.90	

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	72	dB(A)
With acoustic hood	66	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	-	3 442	4 357	5 504	6 910	-	-	-	-
20	-	3 196	4 063	5 134	6 434	7 988	9 824	-	-
30	-	2 850	3 646	4 619	5 791	7 188	8 833	10 754	12 984
40	-	2 423	3 127	3 979	5 002	6 218	7 651	9 325	11 266
50	-	-	2 524	3 233	4 085	5 101	6 301	7 706	9 338
60	-	-	-	2 401	3 061	3 856	4 804	5 922	7 224

### Power input in W

10	-	1 290	1 378	1 439	1 468	-	-	-	-
20	-	1 465	1 591	1 694	1 771	1 817	1 830	-	-
30	-	1 618	1 790	1 944	2 076	2 183	2 261	2 306	2 314
40	-	1 722	1 948	2 160	2 355	2 530	2 681	2 803	2 894
50	-	-	2 034	2 313	2 579	2 830	3 061	3 269	3 450
60	-	-	-	2 374	2 719	3 053	3 373	3 674	3 953

### Current consumption in A

10	-	2.03	2.00	1.93	1.83	-	-	-	-
20	-	3.30	3.38	3.44	3.48	3.46	3.38	-	-
30	-	3.82	4.00	4.17	4.33	4.45	4.52	4.52	4.42
40	-	3.92	4.18	4.45	4.72	4.97	5.17	5.31	5.37
50	-	-	4.24	4.60	4.97	5.32	5.64	5.92	6.12
60	-	-	-	4.94	5.39	5.84	6.27	6.66	7.00

### Mass flow in kg/h

10	-	70	89	112	140	-	-	-	-
20	-	71	90	114	144	179	222	-	-
30	-	69	89	113	143	178	221	273	336
40	-	65	85	109	138	173	215	266	327
50	-	-	78	101	128	162	203	253	312
60	-	-	-	89	115	147	186	233	290

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

10	-	2.67	3.16	3.83	4.71	-	-	-	-
20	-	2.18	2.55	3.03	3.63	4.40	5.37	-	-
30	-	1.76	2.04	2.38	2.79	3.29	3.91	4.66	5.61
40	-	1.41	1.61	1.84	2.12	2.46	2.85	3.33	3.89
50	-	-	1.24	1.40	1.58	1.80	2.06	2.36	2.71
60	-	-	-	1.01	1.13	1.26	1.42	1.61	1.83

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

Cooling capacity	4 558	W
Power input	2 476	W
Current consumption	4.84	A
Mass flow	134	kg/h
C.O.P.	1.84	

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	72	dB(A)
With acoustic hood	66	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	2 647	3 351	4 266	5 419	6 837	-	-	-	-
20	2 383	3 059	3 921	4 993	6 304	7 880	9 748	-	-
30	2 043	2 670	3 455	4 424	5 605	7 025	8 710	10 688	12 984
40	1 653	2 207	2 892	3 736	4 764	6 004	7 484	9 229	11 266
50	1 235	1 693	2 257	2 951	3 804	4 843	6 093	7 583	9 338
60	-	1 154	1 572	2 095	2 750	3 563	4 562	5 773	7 224

### Power input in W

10	1 179	1 290	1 378	1 439	1 468	-	-	-	-
20	1 320	1 465	1 591	1 694	1 771	1 817	1 830	-	-
30	1 433	1 618	1 790	1 944	2 076	2 183	2 261	2 306	2 314
40	1 488	1 722	1 948	2 160	2 355	2 530	2 681	2 803	2 894
50	1 457	1 748	2 034	2 313	2 579	2 830	3 061	3 269	3 450
60	-	1 665	2 021	2 374	2 719	3 053	3 373	3 674	3 953

### Current consumption in A

10	2.07	2.03	2.00	1.93	1.83	-	-	-	-
20	3.23	3.30	3.38	3.44	3.48	3.46	3.38	-	-
30	3.66	3.82	4.00	4.17	4.33	4.45	4.52	4.52	4.42
40	3.68	3.92	4.18	4.45	4.72	4.97	5.17	5.31	5.37
50	3.61	3.91	4.24	4.60	4.97	5.32	5.64	5.92	6.12
60	-	4.11	4.51	4.94	5.39	5.84	6.27	6.66	7.00

### Mass flow in kg/h

10	65	82	101	125	154	-	-	-	-
20	65	83	103	128	158	193	234	-	-
30	63	81	102	127	157	192	233	281	336
40	59	76	97	122	151	186	227	273	327
50	53	69	89	113	141	175	214	260	312
60	-	60	78	100	127	159	196	239	290

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

10	2.25	2.60	3.10	3.77	4.66	-	-	-	-
20	1.80	2.09	2.46	2.95	3.56	4.34	5.33	-	-
30	1.43	1.65	1.93	2.28	2.70	3.22	3.85	4.64	5.61
40	1.11	1.28	1.49	1.73	2.02	2.37	2.79	3.29	3.89
50	0.85	0.97	1.11	1.28	1.48	1.71	1.99	2.32	2.71
60	-	0.69	0.78	0.88	1.01	1.17	1.35	1.57	1.83

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

Cooling capacity	4 298	W
Power input	2 476	W
Current consumption	4.84	A
Mass flow	147	kg/h
C.O.P.	1.74	

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	72	dB(A)
With acoustic hood	66	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	4 238	5 572	7 204	9 169	11 502	14 238	17 413	-	-
40	3 903	5 138	6 651	8 477	10 651	13 209	16 185	-	-
45	3 585	4 718	6 110	7 795	9 808	12 184	14 958	-	-
50	-	4 317	5 585	7 126	8 975	11 167	13 736	-	-
55	-	-	5 078	6 474	8 156	10 161	12 523	-	-
60	-	-	-	5 841	7 354	9 169	11 320	-	-
65	-	-	-	5 229	6 571	8 193	10 130	-	-

**Power input in W**

35	2 105	2 388	2 642	2 858	3 027	3 141	3 190	-	-
40	2 154	2 463	2 750	3 006	3 222	3 390	3 499	-	-
45	2 209	2 542	2 859	3 152	3 412	3 630	3 797	-	-
50	-	2 626	2 971	3 298	3 599	3 865	4 086	-	-
55	-	-	3 087	3 446	3 785	4 096	4 368	-	-
60	-	-	-	3 599	3 973	4 326	4 647	-	-
65	-	-	-	3 759	4 165	4 557	4 924	-	-

**Current consumption in A**

35	3.68	4.00	4.27	4.50	4.69	4.85	4.97	-	-
40	3.70	4.07	4.39	4.67	4.91	5.12	5.30	-	-
45	3.75	4.16	4.52	4.85	5.14	5.41	5.66	-	-
50	-	4.26	4.67	5.05	5.39	5.72	6.03	-	-
55	-	-	4.82	5.24	5.64	6.03	6.40	-	-
60	-	-	-	5.43	5.89	6.33	6.76	-	-
65	-	-	-	5.60	6.11	6.61	7.10	-	-

**Mass flow in kg/h**

35	92	119	151	189	234	286	345	-	-
40	89	115	147	184	227	278	336	-	-
45	86	112	142	178	220	269	326	-	-
50	-	108	137	172	213	261	316	-	-
55	-	-	133	166	206	252	305	-	-
60	-	-	-	161	199	243	294	-	-
65	-	-	-	156	191	234	284	-	-

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

35	2.01	2.33	2.73	3.21	3.80	4.53	5.46	-	-
40	1.81	2.09	2.42	2.82	3.31	3.90	4.63	-	-
45	1.62	1.86	2.14	2.47	2.87	3.36	3.94	-	-
50	-	1.64	1.88	2.16	2.49	2.89	3.36	-	-
55	-	-	1.65	1.88	2.15	2.48	2.87	-	-
60	-	-	-	1.62	1.85	2.12	2.44	-	-
65	-	-	-	1.39	1.58	1.80	2.06	-	-

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

Cooling capacity	8 975	W
Power input	3 599	W
Current consumption	5.39	A
Mass flow	213	kg/h
C.O.P.	2.49	

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	77	dB(A)
With acoustic hood	71	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	4 562	5 990	7 735	9 834	12 323	15 238	18 618	-	-
40	4 224	5 553	7 178	9 138	11 468	14 205	17 386	-	-
45	3 905	5 131	6 634	8 452	10 620	13 176	16 156	-	-
50	-	4 729	6 107	7 780	9 784	12 156	14 932	-	-
55	-	-	5 601	7 127	8 964	11 149	13 718	-	-
60	-	-	-	6 496	8 163	10 158	12 518	-	-
65	-	-	-	5 892	7 387	9 189	11 337	-	-

**Power input in W**

35	2 105	2 388	2 642	2 858	3 027	3 141	3 190	-	-
40	2 154	2 463	2 750	3 006	3 222	3 390	3 499	-	-
45	2 209	2 542	2 859	3 152	3 412	3 630	3 797	-	-
50	-	2 626	2 971	3 298	3 599	3 865	4 086	-	-
55	-	-	3 087	3 446	3 785	4 096	4 368	-	-
60	-	-	-	3 599	3 973	4 326	4 647	-	-
65	-	-	-	3 759	4 165	4 557	4 924	-	-

**Current consumption in A**

35	3.68	4.00	4.27	4.50	4.69	4.85	4.97	-	-
40	3.70	4.07	4.39	4.67	4.91	5.12	5.30	-	-
45	3.75	4.16	4.52	4.85	5.14	5.41	5.66	-	-
50	-	4.26	4.67	5.05	5.39	5.72	6.03	-	-
55	-	-	4.82	5.24	5.64	6.03	6.40	-	-
60	-	-	-	5.43	5.89	6.33	6.76	-	-
65	-	-	-	5.60	6.11	6.61	7.10	-	-

**Mass flow in kg/h**

35	91	118	150	188	233	284	343	-	-
40	89	115	146	183	226	276	334	-	-
45	86	111	141	177	219	268	324	-	-
50	-	108	137	171	212	259	314	-	-
55	-	-	132	165	205	250	303	-	-
60	-	-	-	160	197	241	293	-	-
65	-	-	-	155	190	233	282	-	-

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

35	2.17	2.51	2.93	3.44	4.07	4.85	5.84	-	-
40	1.96	2.25	2.61	3.04	3.56	4.19	4.97	-	-
45	1.77	2.02	2.32	2.68	3.11	3.63	4.26	-	-
50	-	1.80	2.06	2.36	2.72	3.15	3.65	-	-
55	-	-	1.81	2.07	2.37	2.72	3.14	-	-
60	-	-	-	1.81	2.05	2.35	2.69	-	-
65	-	-	-	1.57	1.77	2.02	2.30	-	-

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

Cooling capacity	9 987	W
Power input	3 901	W
Current consumption	5.78	A
Mass flow	225	kg/h
C.O.P.	2.56	

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	77	dB(A)
With acoustic hood	71	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	1 486	2 128	3 871	5 013	6 365	7 948	9 782	11 889	14 290
40	1 309	1 931	3 597	4 684	5 970	7 474	9 219	11 225	13 514
45	1 126	1 722	3 303	4 331	5 546	6 967	8 618	10 519	12 692
50	943	1 509	2 996	3 960	5 099	6 434	7 987	9 778	11 829
55	-	-	2 682	3 577	4 636	5 880	7 329	9 007	10 933
60	-	-	-	3 187	4 162	5 310	6 653	8 212	10 008
65	-	-	-	-	3 683	4 731	5 962	7 398	9 060
75	-	-	-	-	-	-	4 565	5 741	7 121

**Power input in W**

35	1 106	1 272	1 595	1 740	1 867	1 968	2 039	2 073	2 064
40	1 153	1 325	1 672	1 834	1 980	2 104	2 201	2 264	2 287
45	1 185	1 366	1 740	1 920	2 088	2 238	2 362	2 457	2 515
50	1 200	1 393	1 798	1 999	2 191	2 367	2 522	2 650	2 745
55	-	-	1 846	2 069	2 287	2 492	2 680	2 843	2 976
60	-	-	-	2 129	2 374	2 611	2 833	3 034	3 208
65	-	-	-	-	2 452	2 722	2 981	3 221	3 439
75	-	-	-	-	-	-	3 255	3 582	3 891

**Current consumption in A**

35	2.97	3.10	3.35	3.47	3.57	3.65	3.71	3.74	3.75
40	2.99	3.13	3.41	3.54	3.67	3.78	3.87	3.94	3.99
45	3.00	3.15	3.47	3.62	3.77	3.91	4.04	4.15	4.24
50	3.00	3.17	3.52	3.70	3.88	4.05	4.21	4.36	4.50
55	-	-	3.57	3.77	3.98	4.19	4.39	4.59	4.76
60	-	-	-	3.85	4.09	4.33	4.58	4.81	5.04
65	-	-	-	-	4.19	4.48	4.77	5.05	5.33
75	-	-	-	-	-	-	5.15	5.54	5.92

**Mass flow in kg/h**

35	38	53	92	117	145	177	214	256	303
40	35	51	90	115	143	175	212	253	299
45	32	48	87	112	140	172	208	249	295
50	29	45	84	108	136	167	203	244	289
55	-	-	80	104	131	162	198	237	282
60	-	-	-	99	126	156	191	230	274
65	-	-	-	-	120	149	183	222	264
75	-	-	-	-	-	-	165	201	242

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

35	1.34	1.67	2.43	2.88	3.41	4.04	4.80	5.74	6.92
40	1.14	1.46	2.15	2.55	3.02	3.55	4.19	4.96	5.91
45	0.95	1.26	1.90	2.26	2.66	3.11	3.65	4.28	5.05
50	0.79	1.08	1.67	1.98	2.33	2.72	3.17	3.69	4.31
55	-	-	1.45	1.73	2.03	2.36	2.74	3.17	3.67
60	-	-	-	1.50	1.75	2.03	2.35	2.71	3.12
65	-	-	-	-	1.50	1.74	2.00	2.30	2.63
75	-	-	-	-	-	-	1.40	1.60	1.83

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

Cooling capacity	6 434	W
Power input	2 367	W
Current consumption	4.05	A
Mass flow	167	kg/h
C.O.P.	2.72	

**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

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# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## Performance data at 60 Hz, ARI rating conditions

# R134a

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

### Cooling capacity in W

35	1 615	2 309	4 185	5 412	6 861	8 554	10 512	12 759	15 316
40	1 431	2 106	3 910	5 082	6 466	8 082	9 953	12 100	14 547
45	1 240	1 891	3 612	4 726	6 040	7 574	9 353	11 396	13 728
50	-	1 670	3 299	4 350	5 589	7 037	8 718	10 654	12 866
55	-	-	2 976	3 960	5 119	6 477	8 056	9 879	11 967
60	-	-	-	3 561	4 636	5 899	7 372	9 078	11 038
65	-	-	-	-	-	5 311	6 673	8 256	10 084
75	-	-	-	-	-	-	5 252	6 580	8 131

### Power input in W

35	1 106	1 272	1 595	1 740	1 867	1 968	2 039	2 073	2 064
40	1 153	1 325	1 672	1 834	1 980	2 104	2 201	2 264	2 287
45	1 185	1 366	1 740	1 920	2 088	2 238	2 362	2 457	2 515
50	-	1 393	1 798	1 999	2 191	2 367	2 522	2 650	2 745
55	-	-	1 846	2 069	2 287	2 492	2 680	2 843	2 976
60	-	-	-	2 129	2 374	2 611	2 833	3 034	3 208
65	-	-	-	-	-	2 722	2 981	3 221	3 439
75	-	-	-	-	-	-	3 255	3 582	3 891

### Current consumption in A

35	2.97	3.10	3.35	3.47	3.57	3.65	3.71	3.74	3.75
40	2.99	3.13	3.41	3.54	3.67	3.78	3.87	3.94	3.99
45	3.00	3.15	3.47	3.62	3.77	3.91	4.04	4.15	4.24
50	-	3.17	3.52	3.70	3.88	4.05	4.21	4.36	4.50
55	-	-	3.57	3.77	3.98	4.19	4.39	4.59	4.76
60	-	-	-	3.85	4.09	4.33	4.58	4.81	5.04
65	-	-	-	-	-	4.48	4.77	5.05	5.33
75	-	-	-	-	-	-	5.15	5.54	5.92

### Mass flow in kg/h

35	38	53	92	116	144	176	213	254	301
40	35	50	90	114	142	174	210	252	298
45	32	48	87	111	139	171	207	247	293
50	-	44	84	108	135	167	202	242	287
55	-	-	80	103	131	162	197	236	280
60	-	-	-	98	125	156	190	229	272
65	-	-	-	-	-	149	182	220	263
75	-	-	-	-	-	-	164	200	241

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

35	1.46	1.82	2.62	3.11	3.68	4.35	5.16	6.15	7.42
40	1.24	1.59	2.34	2.77	3.27	3.84	4.52	5.34	6.36
45	1.05	1.38	2.08	2.46	2.89	3.39	3.96	4.64	5.46
50	-	1.20	1.83	2.18	2.55	2.97	3.46	4.02	4.69
55	-	-	1.61	1.91	2.24	2.60	3.01	3.47	4.02
60	-	-	-	1.67	1.95	2.26	2.60	2.99	3.44
65	-	-	-	-	-	1.95	2.24	2.56	2.93
75	-	-	-	-	-	-	1.61	1.84	2.09

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

Cooling capacity	7 217	W
Power input	2 561	W
Current consumption	4.26	A
Mass flow	177	kg/h
C.O.P.	2.82	

### Pressure switch settings

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

### Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## Performance data at 60 Hz, EN 12900 rating conditions

## R404A

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

### Cooling capacity in W

30	2 330	3 277	4 439	5 844	7 520	9 496	11 801	14 461	17 507
35	2 014	2 899	3 980	5 285	6 842	8 680	10 826	13 310	16 160
40	1 705	2 526	3 524	4 727	6 163	7 860	9 847	12 151	14 803
45	1 404	2 159	3 072	4 171	5 483	7 037	8 862	10 985	13 436
50	1 110	1 798	2 623	3 615	4 802	6 211	7 872	9 812	12 060
55	-	1 441	2 177	3 061	4 119	5 382	6 876	8 631	10 674
60	-	1 089	1 734	2 507	3 435	4 549	5 875	7 441	9 277

### Power input in W

30	1 681	1 951	2 214	2 465	2 702	2 918	3 112	3 277	3 412
35	1 686	1 979	2 269	2 550	2 820	3 074	3 308	3 518	3 700
40	1 683	1 998	2 314	2 625	2 928	3 219	3 494	3 748	3 977
45	1 671	2 009	2 350	2 691	3 027	3 355	3 669	3 967	4 244
50	1 650	2 011	2 378	2 748	3 117	3 480	3 835	4 176	4 500
55	-	2 004	2 397	2 796	3 197	3 597	3 991	4 376	4 746
60	-	1 990	2 408	2 836	3 269	3 705	4 138	4 566	4 982

### Current consumption in A

30	3.21	3.44	3.72	4.01	4.30	4.58	4.81	4.98	5.08
35	3.22	3.48	3.78	4.11	4.44	4.76	5.05	5.27	5.42
40	3.22	3.50	3.84	4.20	4.58	4.94	5.28	5.56	5.77
45	3.20	3.51	3.88	4.29	4.70	5.12	5.50	5.84	6.12
50	3.17	3.51	3.92	4.36	4.82	5.28	5.72	6.12	6.46
55	-	3.50	3.94	4.42	4.93	5.44	5.93	6.39	6.79
60	-	3.46	3.94	4.47	5.02	5.59	6.14	6.66	7.12

### Mass flow in kg/h

30	73	101	133	171	214	265	322	387	461
35	68	96	128	165	208	258	314	378	451
40	63	90	122	159	201	250	306	369	440
45	57	84	116	152	194	243	297	359	430
50	50	78	109	145	187	234	288	350	419
55	-	70	102	138	179	226	279	339	407
60	-	62	93	129	170	216	269	328	395

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

30	1.39	1.68	2.01	2.37	2.78	3.25	3.79	4.41	5.13
35	1.19	1.46	1.75	2.07	2.43	2.82	3.27	3.78	4.37
40	1.01	1.26	1.52	1.80	2.10	2.44	2.82	3.24	3.72
45	0.84	1.07	1.31	1.55	1.81	2.10	2.42	2.77	3.17
50	0.67	0.89	1.10	1.32	1.54	1.78	2.05	2.35	2.68
55	-	0.72	0.91	1.09	1.29	1.50	1.72	1.97	2.25
60	-	0.55	0.72	0.88	1.05	1.23	1.42	1.63	1.86

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

Cooling capacity	5 483	W
Power input	3 027	W
Current consumption	4.70	A
Mass flow	194	kg/h
C.O.P.	1.81	

### 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	76	dB(A)
With acoustic hood	69	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

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## Performance data at 60 Hz, ARI rating conditions

# R404A

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

### Cooling capacity in W

30	2 594	3 638	4 916	6 455	8 288	10 443	12 950	15 839	19 139
35	2 266	3 251	4 450	5 893	7 609	9 628	11 981	14 697	17 806
40	1 944	2 869	3 988	5 332	6 929	8 812	11 008	13 550	16 466
45	1 627	2 491	3 529	4 772	6 250	7 994	10 034	12 400	15 123
50	1 315	2 117	3 073	4 214	5 571	7 176	9 059	11 249	13 779
55	-	1 746	2 620	3 659	4 897	6 363	8 089	10 106	12 444
60	-	1 377	2 171	3 111	4 231	5 561	7 135	8 983	11 136

### Power input in W

30	1 681	1 951	2 214	2 465	2 702	2 918	3 112	3 277	3 412
35	1 686	1 979	2 269	2 550	2 820	3 074	3 308	3 518	3 700
40	1 683	1 998	2 314	2 625	2 928	3 219	3 494	3 748	3 977
45	1 671	2 009	2 350	2 691	3 027	3 355	3 669	3 967	4 244
50	1 650	2 011	2 378	2 748	3 117	3 480	3 835	4 176	4 500
55	-	2 004	2 397	2 796	3 197	3 597	3 991	4 376	4 746
60	-	1 990	2 408	2 836	3 269	3 705	4 138	4 566	4 982

### Current consumption in A

30	3.21	3.44	3.72	4.01	4.30	4.58	4.81	4.98	5.08
35	3.22	3.48	3.78	4.11	4.44	4.76	5.05	5.27	5.42
40	3.22	3.50	3.84	4.20	4.58	4.94	5.28	5.56	5.77
45	3.20	3.51	3.88	4.29	4.70	5.12	5.50	5.84	6.12
50	3.17	3.51	3.92	4.36	4.82	5.28	5.72	6.12	6.46
55	-	3.50	3.94	4.42	4.93	5.44	5.93	6.39	6.79
60	-	3.46	3.94	4.47	5.02	5.59	6.14	6.66	7.12

### Mass flow in kg/h

30	73	100	133	170	213	263	320	385	458
35	68	95	127	164	207	256	312	376	448
40	63	90	121	158	200	249	304	367	437
45	56	84	115	152	193	241	295	357	427
50	50	77	108	144	186	233	287	347	416
55	-	70	101	137	178	224	277	337	404
60	-	61	93	128	169	215	267	326	393

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

30	1.54	1.86	2.22	2.62	3.07	3.58	4.16	4.83	5.61
35	1.34	1.64	1.96	2.31	2.70	3.13	3.62	4.18	4.81
40	1.15	1.44	1.72	2.03	2.37	2.74	3.15	3.62	4.14
45	0.97	1.24	1.50	1.77	2.06	2.38	2.73	3.13	3.56
50	0.80	1.05	1.29	1.53	1.79	2.06	2.36	2.69	3.06
55	-	0.87	1.09	1.31	1.53	1.77	2.03	2.31	2.62
60	-	0.69	0.90	1.10	1.29	1.50	1.72	1.97	2.24

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

Cooling capacity	6 250	W
Power input	3 027	W
Current consumption	4.70	A
Mass flow	193	kg/h
C.O.P.	2.06	

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	76	dB(A)
With acoustic hood	69	dB(A)

Tolerance according EN12900

**Performance data at 60 Hz, EN 12900 rating conditions**
**R407A**

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

**Cooling capacity in W**

30	1 832	2 726	3 814	5 123	6 678	8 507	10 635	13 089	15 896
35	1 578	2 434	3 468	4 708	6 179	7 908	9 921	12 244	14 905
40	1 314	2 128	3 105	4 271	5 654	7 279	9 172	11 361	13 871
45	1 047	1 814	2 729	3 819	5 109	6 625	8 395	10 445	12 800
50	-	1 500	2 349	3 357	4 550	5 954	7 596	9 502	11 699
55	-	-	1 969	2 891	3 983	5 271	6 781	8 540	10 573
60	-	-	-	2 429	3 415	4 582	5 956	7 563	9 430

**Power input in W**

30	1 344	1 609	1 858	2 086	2 287	2 456	2 589	2 681	2 725
35	1 336	1 629	1 910	2 172	2 411	2 622	2 801	2 941	3 037
40	1 312	1 634	1 947	2 245	2 524	2 778	3 002	3 192	3 342
45	1 272	1 624	1 970	2 305	2 624	2 922	3 194	3 435	3 640
50	-	1 597	1 978	2 351	2 712	3 055	3 376	3 669	3 929
55	-	-	1 970	2 383	2 786	3 176	3 546	3 892	4 209
60	-	-	-	2 399	2 847	3 284	3 705	4 106	4 480

**Current consumption in A**

30	3.29	3.52	3.78	4.05	4.31	4.55	4.73	4.85	4.89
35	3.32	3.56	3.83	4.12	4.40	4.66	4.88	5.04	5.12
40	3.34	3.60	3.89	4.20	4.52	4.82	5.08	5.29	5.42
45	3.34	3.62	3.94	4.29	4.65	4.99	5.31	5.57	5.77
50	-	3.62	3.98	4.37	4.78	5.18	5.55	5.88	6.15
55	-	-	3.98	4.43	4.89	5.35	5.79	6.20	6.55
60	-	-	-	4.44	4.97	5.50	6.02	6.51	6.95

**Mass flow in kg/h**

30	44	64	88	115	147	185	227	276	330
35	40	60	84	111	143	180	222	270	325
40	35	55	79	107	139	175	217	264	318
45	30	50	74	101	133	169	210	257	309
50	-	45	68	95	126	162	202	248	300
55	-	-	61	88	119	153	193	238	289
60	-	-	-	80	110	144	183	227	277

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

30	1.36	1.69	2.05	2.46	2.92	3.46	4.11	4.88	5.83
35	1.18	1.49	1.82	2.17	2.56	3.02	3.54	4.16	4.91
40	1.00	1.30	1.59	1.90	2.24	2.62	3.05	3.56	4.15
45	0.82	1.12	1.39	1.66	1.95	2.27	2.63	3.04	3.52
50	-	0.94	1.19	1.43	1.68	1.95	2.25	2.59	2.98
55	-	-	1.00	1.21	1.43	1.66	1.91	2.19	2.51
60	-	-	-	1.01	1.20	1.40	1.61	1.84	2.10

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

Cooling capacity	5 109	W
Power input	2 624	W
Current consumption	4.65	A
Mass flow	133	kg/h
C.O.P.	1.95	

**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	72	dB(A)
With acoustic hood	66	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	1 981	2 944	4 113	5 517	7 183	9 139	11 411	14 029	17 018
35	1 717	2 643	3 761	5 098	6 681	8 538	10 698	13 187	16 033
40	1 440	2 327	3 389	4 654	6 150	7 906	9 948	12 304	15 002
45	1 157	2 000	3 002	4 192	5 597	7 246	9 167	11 387	13 933
50	-	1 669	2 608	3 718	5 028	6 567	8 362	10 442	12 833
55	-	-	2 212	3 238	4 450	5 874	7 541	9 476	11 710
60	-	-	-	2 760	3 869	5 176	6 710	8 499	10 572

**Power input in W**

30	1 344	1 609	1 858	2 086	2 287	2 456	2 589	2 681	2 725
35	1 336	1 629	1 910	2 172	2 411	2 622	2 801	2 941	3 037
40	1 312	1 634	1 947	2 245	2 524	2 778	3 002	3 192	3 342
45	1 272	1 624	1 970	2 305	2 624	2 922	3 194	3 435	3 640
50	-	1 597	1 978	2 351	2 712	3 055	3 376	3 669	3 929
55	-	-	1 970	2 383	2 786	3 176	3 546	3 892	4 209
60	-	-	-	2 399	2 847	3 284	3 705	4 106	4 480

**Current consumption in A**

30	3.29	3.52	3.78	4.05	4.31	4.55	4.73	4.85	4.89
35	3.32	3.56	3.83	4.12	4.40	4.66	4.88	5.04	5.12
40	3.34	3.60	3.89	4.20	4.52	4.82	5.08	5.29	5.42
45	3.34	3.62	3.94	4.29	4.65	4.99	5.31	5.57	5.77
50	-	3.62	3.98	4.37	4.78	5.18	5.55	5.88	6.15
55	-	-	3.98	4.43	4.89	5.35	5.79	6.20	6.55
60	-	-	-	4.44	4.97	5.50	6.02	6.51	6.95

**Mass flow in kg/h**

30	43	63	87	115	147	184	226	274	328
35	39	60	83	111	143	179	221	269	323
40	35	55	79	106	138	174	215	263	316
45	30	50	74	101	132	168	209	255	307
50	-	44	68	95	125	161	201	246	298
55	-	-	61	88	118	153	192	237	287
60	-	-	-	80	110	144	182	226	275

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

30	1.47	1.83	2.21	2.64	3.14	3.72	4.41	5.23	6.24
35	1.28	1.62	1.97	2.35	2.77	3.26	3.82	4.48	5.28
40	1.10	1.42	1.74	2.07	2.44	2.85	3.31	3.85	4.49
45	0.91	1.23	1.52	1.82	2.13	2.48	2.87	3.31	3.83
50	-	1.05	1.32	1.58	1.85	2.15	2.48	2.85	3.27
55	-	-	1.12	1.36	1.60	1.85	2.13	2.43	2.78
60	-	-	-	1.15	1.36	1.58	1.81	2.07	2.36

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

Cooling capacity	5 597	W
Power input	2 624	W
Current consumption	4.65	A
Mass flow	132	kg/h
C.O.P.	2.13	

**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	72	dB(A)
With acoustic hood	66	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

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	-	2 960	4 187	5 668	7 432	9 511	11 936	14 737	17 946
35	-	2 567	3 694	5 049	6 661	8 562	10 782	13 353	16 305
40	-	2 228	3 274	4 520	5 998	7 739	9 773	12 131	14 844
45	-	1 929	2 910	4 067	5 428	7 027	8 892	11 056	13 548
50	-	-	2 589	3 673	4 937	6 410	8 125	10 112	12 402
55	-	-	-	3 324	4 508	5 875	7 457	9 286	11 391
60	-	-	-	-	-	-	-	-	-

### Power input in W

30	-	1 704	1 963	2 204	2 414	2 579	2 687	2 726	2 682
35	-	1 729	2 016	2 292	2 547	2 766	2 937	3 047	3 083
40	-	1 755	2 063	2 371	2 665	2 933	3 161	3 338	3 450
45	-	1 790	2 115	2 449	2 778	3 089	3 370	3 609	3 791
50	-	-	2 181	2 535	2 894	3 244	3 574	3 869	4 117
55	-	-	-	2 640	3 024	3 408	3 780	4 127	4 436
60	-	-	-	-	-	-	-	-	-

### Current consumption in A

30	-	3.53	3.81	4.10	4.38	4.62	4.80	4.90	4.89
35	-	3.61	3.90	4.20	4.51	4.78	5.00	5.15	5.19
40	-	3.66	3.97	4.30	4.64	4.95	5.22	5.43	5.53
45	-	3.69	4.02	4.39	4.77	5.14	5.47	5.74	5.92
50	-	-	4.08	4.49	4.93	5.36	5.75	6.10	6.36
55	-	-	-	4.61	5.10	5.60	6.07	6.50	6.86
60	-	-	-	-	-	-	-	-	-

### Mass flow in kg/h

30	-	61	85	114	147	185	230	280	338
35	-	55	79	106	138	174	217	265	320
40	-	51	73	99	130	165	206	252	305
45	-	46	69	94	124	158	197	242	292
50	-	-	65	90	119	153	190	234	282
55	-	-	-	87	116	149	186	228	275
60	-	-	-	-	-	-	-	-	-

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

30	-	1.74	2.13	2.57	3.08	3.69	4.44	5.41	6.69
35	-	1.48	1.83	2.20	2.62	3.10	3.67	4.38	5.29
40	-	1.27	1.59	1.91	2.25	2.64	3.09	3.63	4.30
45	-	1.08	1.38	1.66	1.95	2.27	2.64	3.06	3.57
50	-	-	1.19	1.45	1.71	1.98	2.27	2.61	3.01
55	-	-	-	1.26	1.49	1.72	1.97	2.25	2.57
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	5 428	W
Power input	2 778	W
Current consumption	4.77	A
Mass flow	124	kg/h
C.O.P.	1.95	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

### Pressure switch settings

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

### Sound power data

Sound power level	72	dB(A)
With acoustic hood	66	dB(A)

Tolerance according EN12900



**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	-	3 172	4 483	6 062	7 942	10 154	12 731	15 705	19 109
35	-	2 764	3 974	5 424	7 149	9 179	11 548	14 288	17 432
40	-	2 412	3 540	4 881	6 470	8 337	10 517	13 042	15 943
45	-	2 102	3 166	4 418	5 890	7 614	9 624	11 952	14 630
50	-	-	2 838	4 020	5 395	6 995	8 855	11 006	13 481
55	-	-	-	3 673	4 971	6 468	8 197	10 192	12 485
60	-	-	-	-	-	-	-	-	-

**Power input in W**

30	-	1 704	1 963	2 204	2 414	2 579	2 687	2 726	2 682
35	-	1 729	2 016	2 292	2 547	2 766	2 937	3 047	3 083
40	-	1 755	2 063	2 371	2 665	2 933	3 161	3 338	3 450
45	-	1 790	2 115	2 449	2 778	3 089	3 370	3 609	3 791
50	-	-	2 181	2 535	2 894	3 244	3 574	3 869	4 117
55	-	-	-	2 640	3 024	3 408	3 780	4 127	4 436
60	-	-	-	-	-	-	-	-	-

**Current consumption in A**

30	-	3.53	3.81	4.10	4.38	4.62	4.80	4.90	4.89
35	-	3.61	3.90	4.20	4.51	4.78	5.00	5.15	5.19
40	-	3.66	3.97	4.30	4.64	4.95	5.22	5.43	5.53
45	-	3.69	4.02	4.39	4.77	5.14	5.47	5.74	5.92
50	-	-	4.08	4.49	4.93	5.36	5.75	6.10	6.36
55	-	-	-	4.61	5.10	5.60	6.07	6.50	6.86
60	-	-	-	-	-	-	-	-	-

**Mass flow in kg/h**

30	-	61	85	113	146	184	228	279	336
35	-	55	78	105	137	173	215	263	318
40	-	50	73	99	129	164	205	251	303
45	-	46	68	94	123	157	196	240	290
50	-	-	64	90	119	152	189	232	280
55	-	-	-	87	115	148	185	226	273
60	-	-	-	-	-	-	-	-	-

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

30	-	1.86	2.28	2.75	3.29	3.94	4.74	5.76	7.13
35	-	1.60	1.97	2.37	2.81	3.32	3.93	4.69	5.65
40	-	1.37	1.72	2.06	2.43	2.84	3.33	3.91	4.62
45	-	1.17	1.50	1.80	2.12	2.46	2.86	3.31	3.86
50	-	-	1.30	1.59	1.86	2.16	2.48	2.84	3.27
55	-	-	-	1.39	1.64	1.90	2.17	2.47	2.81
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	5 890	W
Power input	2 778	W
Current consumption	4.77	A
Mass flow	123	kg/h
C.O.P.	2.12	

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	72	dB(A)
With acoustic hood	66	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	1 486	2 128	3 871	5 013	6 365	7 948	9 782	11 889	14 290
40	1 309	1 931	3 597	4 684	5 970	7 474	9 219	11 225	13 514
45	1 126	1 722	3 303	4 331	5 546	6 967	8 618	10 519	12 692
50	943	1 509	2 996	3 960	5 099	6 434	7 987	9 778	11 829
55	-	-	2 682	3 577	4 636	5 880	7 329	9 007	10 933
60	-	-	-	3 187	4 162	5 310	6 653	8 212	10 008
65	-	-	-	-	3 683	4 731	5 962	7 398	9 060
75	-	-	-	-	-	-	4 565	5 741	7 121

**Power input in W**

35	1 106	1 272	1 595	1 740	1 867	1 968	2 039	2 073	2 064
40	1 153	1 325	1 672	1 834	1 980	2 104	2 201	2 264	2 287
45	1 185	1 366	1 740	1 920	2 088	2 238	2 362	2 457	2 515
50	1 200	1 393	1 798	1 999	2 191	2 367	2 522	2 650	2 745
55	-	-	1 846	2 069	2 287	2 492	2 680	2 843	2 976
60	-	-	-	2 129	2 374	2 611	2 833	3 034	3 208
65	-	-	-	-	2 452	2 722	2 981	3 221	3 439
75	-	-	-	-	-	-	3 255	3 582	3 891

**Current consumption in A**

35	2.97	3.10	3.35	3.47	3.57	3.65	3.71	3.74	3.75
40	2.99	3.13	3.41	3.54	3.67	3.78	3.87	3.94	3.99
45	3.00	3.15	3.47	3.62	3.77	3.91	4.04	4.15	4.24
50	3.00	3.17	3.52	3.70	3.88	4.05	4.21	4.36	4.50
55	-	-	3.57	3.77	3.98	4.19	4.39	4.59	4.76
60	-	-	-	3.85	4.09	4.33	4.58	4.81	5.04
65	-	-	-	-	4.19	4.48	4.77	5.05	5.33
75	-	-	-	-	-	-	5.15	5.54	5.92

**Mass flow in kg/h**

35	38	53	92	117	145	177	214	256	303
40	35	51	90	115	143	175	212	253	299
45	32	48	87	112	140	172	208	249	295
50	29	45	84	108	136	167	203	244	289
55	-	-	80	104	131	162	198	237	282
60	-	-	-	99	126	156	191	230	274
65	-	-	-	-	120	149	183	222	264
75	-	-	-	-	-	-	165	201	242

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

35	1.34	1.67	2.43	2.88	3.41	4.04	4.80	5.74	6.92
40	1.14	1.46	2.15	2.55	3.02	3.55	4.19	4.96	5.91
45	0.95	1.26	1.90	2.26	2.66	3.11	3.65	4.28	5.05
50	0.79	1.08	1.67	1.98	2.33	2.72	3.17	3.69	4.31
55	-	-	1.45	1.73	2.03	2.36	2.74	3.17	3.67
60	-	-	-	1.50	1.75	2.03	2.35	2.71	3.12
65	-	-	-	-	1.50	1.74	2.00	2.30	2.63
75	-	-	-	-	-	-	1.40	1.60	1.83

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

Cooling capacity	6 434	W
Power input	2 367	W
Current consumption	4.05	A
Mass flow	167	kg/h
C.O.P.	2.72	

**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

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**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	1 615	2 309	4 185	5 412	6 861	8 554	10 512	12 759	15 316
40	1 431	2 106	3 910	5 082	6 466	8 082	9 953	12 100	14 547
45	1 240	1 891	3 612	4 726	6 040	7 574	9 353	11 396	13 728
50	-	1 670	3 299	4 350	5 589	7 037	8 718	10 654	12 866
55	-	-	2 976	3 960	5 119	6 477	8 056	9 879	11 967
60	-	-	-	3 561	4 636	5 899	7 372	9 078	11 038
65	-	-	-	-	-	5 311	6 673	8 256	10 084
75	-	-	-	-	-	-	5 252	6 580	8 131

**Power input in W**

35	1 106	1 272	1 595	1 740	1 867	1 968	2 039	2 073	2 064
40	1 153	1 325	1 672	1 834	1 980	2 104	2 201	2 264	2 287
45	1 185	1 366	1 740	1 920	2 088	2 238	2 362	2 457	2 515
50	-	1 393	1 798	1 999	2 191	2 367	2 522	2 650	2 745
55	-	-	1 846	2 069	2 287	2 492	2 680	2 843	2 976
60	-	-	-	2 129	2 374	2 611	2 833	3 034	3 208
65	-	-	-	-	-	2 722	2 981	3 221	3 439
75	-	-	-	-	-	-	3 255	3 582	3 891

**Current consumption in A**

35	2.97	3.10	3.35	3.47	3.57	3.65	3.71	3.74	3.75
40	2.99	3.13	3.41	3.54	3.67	3.78	3.87	3.94	3.99
45	3.00	3.15	3.47	3.62	3.77	3.91	4.04	4.15	4.24
50	-	3.17	3.52	3.70	3.88	4.05	4.21	4.36	4.50
55	-	-	3.57	3.77	3.98	4.19	4.39	4.59	4.76
60	-	-	-	3.85	4.09	4.33	4.58	4.81	5.04
65	-	-	-	-	-	4.48	4.77	5.05	5.33
75	-	-	-	-	-	-	5.15	5.54	5.92

**Mass flow in kg/h**

35	38	53	92	116	144	176	213	254	301
40	35	50	90	114	142	174	210	252	298
45	32	48	87	111	139	171	207	247	293
50	-	44	84	108	135	167	202	242	287
55	-	-	80	103	131	162	197	236	280
60	-	-	-	98	125	156	190	229	272
65	-	-	-	-	-	149	182	220	263
75	-	-	-	-	-	-	164	200	241

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

35	1.46	1.82	2.62	3.11	3.68	4.35	5.16	6.15	7.42
40	1.24	1.59	2.34	2.77	3.27	3.84	4.52	5.34	6.36
45	1.05	1.38	2.08	2.46	2.89	3.39	3.96	4.64	5.46
50	-	1.20	1.83	2.18	2.55	2.97	3.46	4.02	4.69
55	-	-	1.61	1.91	2.24	2.60	3.01	3.47	4.02
60	-	-	-	1.67	1.95	2.26	2.60	2.99	3.44
65	-	-	-	-	-	1.95	2.24	2.56	2.93
75	-	-	-	-	-	-	1.61	1.84	2.09

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

Cooling capacity	7 217	W
Power input	2 561	W
Current consumption	4.26	A
Mass flow	177	kg/h
C.O.P.	2.82	

**Pressure switch settings**

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

**Sound power data**

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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**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	4 238	5 572	7 204	9 169	11 502	14 238	17 413	-	-
40	3 903	5 138	6 651	8 477	10 651	13 209	16 185	-	-
45	3 585	4 718	6 110	7 795	9 808	12 184	14 958	-	-
50	-	4 317	5 585	7 126	8 975	11 167	13 736	-	-
55	-	-	5 078	6 474	8 156	10 161	12 523	-	-
60	-	-	-	5 841	7 354	9 169	11 320	-	-
65	-	-	-	5 229	6 571	8 193	10 130	-	-

**Power input in W**

35	2 105	2 388	2 642	2 858	3 027	3 141	3 190	-	-
40	2 154	2 463	2 750	3 006	3 222	3 390	3 499	-	-
45	2 209	2 542	2 859	3 152	3 412	3 630	3 797	-	-
50	-	2 626	2 971	3 298	3 599	3 865	4 086	-	-
55	-	-	3 087	3 446	3 785	4 096	4 368	-	-
60	-	-	-	3 599	3 973	4 326	4 647	-	-
65	-	-	-	3 759	4 165	4 557	4 924	-	-

**Current consumption in A**

35	3.68	4.00	4.27	4.50	4.69	4.85	4.97	-	-
40	3.70	4.07	4.39	4.67	4.91	5.12	5.30	-	-
45	3.75	4.16	4.52	4.85	5.14	5.41	5.66	-	-
50	-	4.26	4.67	5.05	5.39	5.72	6.03	-	-
55	-	-	4.82	5.24	5.64	6.03	6.40	-	-
60	-	-	-	5.43	5.89	6.33	6.76	-	-
65	-	-	-	5.60	6.11	6.61	7.10	-	-

**Mass flow in kg/h**

35	92	119	151	189	234	286	345	-	-
40	89	115	147	184	227	278	336	-	-
45	86	112	142	178	220	269	326	-	-
50	-	108	137	172	213	261	316	-	-
55	-	-	133	166	206	252	305	-	-
60	-	-	-	161	199	243	294	-	-
65	-	-	-	156	191	234	284	-	-

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

35	2.01	2.33	2.73	3.21	3.80	4.53	5.46	-	-
40	1.81	2.09	2.42	2.82	3.31	3.90	4.63	-	-
45	1.62	1.86	2.14	2.47	2.87	3.36	3.94	-	-
50	-	1.64	1.88	2.16	2.49	2.89	3.36	-	-
55	-	-	1.65	1.88	2.15	2.48	2.87	-	-
60	-	-	-	1.62	1.85	2.12	2.44	-	-
65	-	-	-	1.39	1.58	1.80	2.06	-	-

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

Cooling capacity	8 975	W
Power input	3 599	W
Current consumption	5.39	A
Mass flow	213	kg/h
C.O.P.	2.49	

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	77	dB(A)
With acoustic hood	71	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	4 562	5 990	7 735	9 834	12 323	15 238	18 618	-	-
40	4 224	5 553	7 178	9 138	11 468	14 205	17 386	-	-
45	3 905	5 131	6 634	8 452	10 620	13 176	16 156	-	-
50	-	4 729	6 107	7 780	9 784	12 156	14 932	-	-
55	-	-	5 601	7 127	8 964	11 149	13 718	-	-
60	-	-	-	6 496	8 163	10 158	12 518	-	-
65	-	-	-	5 892	7 387	9 189	11 337	-	-

**Power input in W**

35	2 105	2 388	2 642	2 858	3 027	3 141	3 190	-	-
40	2 154	2 463	2 750	3 006	3 222	3 390	3 499	-	-
45	2 209	2 542	2 859	3 152	3 412	3 630	3 797	-	-
50	-	2 626	2 971	3 298	3 599	3 865	4 086	-	-
55	-	-	3 087	3 446	3 785	4 096	4 368	-	-
60	-	-	-	3 599	3 973	4 326	4 647	-	-
65	-	-	-	3 759	4 165	4 557	4 924	-	-

**Current consumption in A**

35	3.68	4.00	4.27	4.50	4.69	4.85	4.97	-	-
40	3.70	4.07	4.39	4.67	4.91	5.12	5.30	-	-
45	3.75	4.16	4.52	4.85	5.14	5.41	5.66	-	-
50	-	4.26	4.67	5.05	5.39	5.72	6.03	-	-
55	-	-	4.82	5.24	5.64	6.03	6.40	-	-
60	-	-	-	5.43	5.89	6.33	6.76	-	-
65	-	-	-	5.60	6.11	6.61	7.10	-	-

**Mass flow in kg/h**

35	91	118	150	188	233	284	343	-	-
40	89	115	146	183	226	276	334	-	-
45	86	111	141	177	219	268	324	-	-
50	-	108	137	171	212	259	314	-	-
55	-	-	132	165	205	250	303	-	-
60	-	-	-	160	197	241	293	-	-
65	-	-	-	155	190	233	282	-	-

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

35	2.17	2.51	2.93	3.44	4.07	4.85	5.84	-	-
40	1.96	2.25	2.61	3.04	3.56	4.19	4.97	-	-
45	1.77	2.02	2.32	2.68	3.11	3.63	4.26	-	-
50	-	1.80	2.06	2.36	2.72	3.15	3.65	-	-
55	-	-	1.81	2.07	2.37	2.72	3.14	-	-
60	-	-	-	1.81	2.05	2.35	2.69	-	-
65	-	-	-	1.57	1.77	2.02	2.30	-	-

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

Cooling capacity	9 987	W
Power input	3 901	W
Current consumption	5.78	A
Mass flow	225	kg/h
C.O.P.	2.56	

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	77	dB(A)
With acoustic hood	71	dB(A)

Tolerance according EN12900

**Datasheet, performance data**
**Maneurop reciprocating compressor. MTZ036-4**
**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	-	3 835	5 109	6 681	8 580	-	-	-	-
20	-	3 354	4 507	5 923	7 631	9 660	12 042	-	-
30	-	2 877	3 903	5 160	6 673	8 472	10 585	13 045	15 891
40	-	-	3 301	4 394	5 709	7 274	9 114	11 259	13 744
50	-	-	-	3 627	4 741	6 067	7 631	9 460	11 580
60	-	-	-	-	3 769	4 855	6 141	7 649	9 404

**Power input in W**

10	-	1 327	1 436	1 512	1 552	-	-	-	-
20	-	1 526	1 688	1 825	1 933	2 006	2 041	-	-
30	-	1 673	1 889	2 087	2 263	2 412	2 529	2 610	2 650
40	-	-	2 048	2 307	2 552	2 778	2 979	3 151	3 290
50	-	-	-	2 497	2 812	3 114	3 400	3 664	3 902
60	-	-	-	-	3 051	3 432	3 803	4 159	4 497

**Current consumption in A**

10	-	3.09	3.18	3.23	3.23	-	-	-	-
20	-	3.62	3.76	3.90	3.99	4.03	3.97	-	-
30	-	3.86	4.06	4.26	4.45	4.60	4.68	4.67	4.54
40	-	-	4.19	4.46	4.73	4.99	5.21	5.35	5.39
50	-	-	-	4.62	4.98	5.34	5.68	5.97	6.18
60	-	-	-	-	5.32	5.78	6.23	6.66	7.04

**Mass flow in kg/h**

10	-	63	84	110	141	-	-	-	-
20	-	59	80	105	136	173	217	-	-
30	-	55	75	99	129	165	208	259	320
40	-	-	69	92	121	155	196	246	305
50	-	-	-	85	112	144	184	231	287
60	-	-	-	-	102	132	169	214	267

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

10	-	2.89	3.56	4.42	5.53	-	-	-	-
20	-	2.20	2.67	3.24	3.95	4.82	5.90	-	-
30	-	1.72	2.07	2.47	2.95	3.51	4.18	5.00	6.00
40	-	-	1.61	1.90	2.24	2.62	3.06	3.57	4.18
50	-	-	-	1.45	1.69	1.95	2.24	2.58	2.97
60	-	-	-	-	1.24	1.41	1.61	1.84	2.09

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

Cooling capacity	5 226	W
Power input	2 685	W
Current consumption	4.85	A
Mass flow	116	kg/h
C.O.P.	1.95	

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	73	dB(A)
With acoustic hood	66	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	2 841	3 853	5 138	6 722	8 635	-	-	-	-
20	2 417	3 333	4 488	5 910	7 629	9 671	12 065	-	-
30	2 005	2 819	3 841	5 097	6 618	8 429	10 560	13 038	15 891
40	1 606	2 315	3 199	4 286	5 604	7 181	9 044	11 223	13 744
50	-	1 824	2 567	3 479	4 591	5 928	7 521	9 395	11 580
60	-	-	1 945	2 680	3 581	4 675	5 992	7 559	9 404

### Power input in W

10	1 190	1 327	1 436	1 512	1 552	-	-	-	-
20	1 345	1 526	1 688	1 825	1 933	2 006	2 041	-	-
30	1 445	1 673	1 889	2 087	2 263	2 412	2 529	2 610	2 650
40	1 503	1 778	2 048	2 307	2 552	2 778	2 979	3 151	3 290
50	-	1 850	2 175	2 497	2 812	3 114	3 400	3 664	3 902
60	-	-	2 280	2 666	3 051	3 432	3 803	4 159	4 497

### Current consumption in A

10	3.00	3.09	3.18	3.23	3.23	-	-	-	-
20	3.49	3.62	3.76	3.90	3.99	4.03	3.97	-	-
30	3.71	3.86	4.06	4.26	4.45	4.60	4.68	4.67	4.54
40	3.77	3.95	4.19	4.46	4.73	4.99	5.21	5.35	5.39
50	-	4.02	4.29	4.62	4.98	5.34	5.68	5.97	6.18
60	-	-	4.50	4.89	5.32	5.78	6.23	6.66	7.04

### Mass flow in kg/h

10	55	73	96	123	155	-	-	-	-
20	50	69	91	117	149	186	229	-	-
30	46	64	85	111	141	177	218	266	320
40	41	58	79	103	133	167	207	252	305
50	-	52	72	95	123	155	193	237	287
60	-	-	64	86	112	142	178	220	267

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

10	2.39	2.90	3.58	4.44	5.56	-	-	-	-
20	1.80	2.18	2.66	3.24	3.95	4.82	5.91	-	-
30	1.39	1.68	2.03	2.44	2.92	3.49	4.18	4.99	6.00
40	1.07	1.30	1.56	1.86	2.20	2.58	3.04	3.56	4.18
50	-	0.99	1.18	1.39	1.63	1.90	2.21	2.56	2.97
60	-	-	0.85	1.01	1.17	1.36	1.58	1.82	2.09

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

Cooling capacity	5 097	W
Power input	2 685	W
Current consumption	4.85	A
Mass flow	128	kg/h
C.O.P.	1.90	

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	73	dB(A)
With acoustic hood	66	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	-	3 842	5 117	6 689	8 588	-	-	-	-
20	-	3 362	4 515	5 931	7 639	9 668	12 049	-	-
30	-	2 885	3 912	5 169	6 682	8 480	10 591	13 049	15 891
40	-	-	3 310	4 403	5 719	7 282	9 121	11 263	13 744
50	-	-	-	3 637	4 750	6 076	7 639	9 464	11 580
60	-	-	-	-	3 779	4 864	6 148	7 653	9 404

### Power input in W

10	-	1 327	1 436	1 512	1 552	-	-	-	-
20	-	1 526	1 688	1 825	1 933	2 006	2 041	-	-
30	-	1 673	1 889	2 087	2 263	2 412	2 529	2 610	2 650
40	-	-	2 048	2 307	2 552	2 778	2 979	3 151	3 290
50	-	-	-	2 497	2 812	3 114	3 400	3 664	3 902
60	-	-	-	-	3 051	3 432	3 803	4 159	4 497

### Current consumption in A

10	-	3.09	3.18	3.23	3.23	-	-	-	-
20	-	3.62	3.76	3.90	3.99	4.03	3.97	-	-
30	-	3.86	4.06	4.26	4.45	4.60	4.68	4.67	4.54
40	-	-	4.19	4.46	4.74	4.99	5.21	5.35	5.39
50	-	-	-	4.62	4.98	5.34	5.68	5.97	6.18
60	-	-	-	-	5.32	5.78	6.23	6.66	7.04

### Mass flow in kg/h

10	-	63	86	113	145	-	-	-	-
20	-	60	81	107	139	177	222	-	-
30	-	55	76	101	132	168	212	264	326
40	-	-	71	94	123	158	200	251	310
50	-	-	-	87	114	148	188	236	293
60	-	-	-	-	104	135	173	219	274

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

10	-	2.90	3.56	4.42	5.53	-	-	-	-
20	-	2.20	2.67	3.25	3.95	4.82	5.90	-	-
30	-	1.72	2.07	2.48	2.95	3.52	4.19	5.00	6.00
40	-	-	1.62	1.91	2.24	2.62	3.06	3.57	4.18
50	-	-	-	1.46	1.69	1.95	2.25	2.58	2.97
60	-	-	-	-	1.24	1.42	1.62	1.84	2.09

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

Cooling capacity	5 235	W
Power input	2 685	W
Current consumption	4.85	A
Mass flow	119	kg/h
C.O.P.	1.95	

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	73	dB(A)
With acoustic hood	66	dB(A)

Tolerance according EN12900



# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	2 841	3 853	5 138	6 722	8 635	-	-	-	-
20	2 417	3 333	4 488	5 910	7 629	9 671	12 065	-	-
30	2 005	2 819	3 841	5 097	6 618	8 429	10 560	13 038	15 891
40	1 606	2 315	3 199	4 286	5 604	7 181	9 044	11 223	13 744
50	-	1 824	2 567	3 479	4 591	5 928	7 521	9 395	11 580
60	-	-	1 945	2 680	3 581	4 675	5 992	7 559	9 404

### Power input in W

10	1 190	1 327	1 436	1 512	1 552	-	-	-	-
20	1 345	1 526	1 688	1 825	1 933	2 006	2 041	-	-
30	1 445	1 673	1 889	2 087	2 263	2 412	2 529	2 610	2 650
40	1 503	1 778	2 048	2 307	2 552	2 778	2 979	3 151	3 290
50	-	1 850	2 175	2 497	2 812	3 114	3 400	3 664	3 902
60	-	-	2 280	2 666	3 051	3 432	3 803	4 159	4 497

### Current consumption in A

10	3.00	3.09	3.18	3.23	3.23	-	-	-	-
20	3.49	3.62	3.76	3.90	3.99	4.03	3.97	-	-
30	3.71	3.86	4.06	4.26	4.45	4.60	4.68	4.67	4.54
40	3.77	3.95	4.19	4.46	4.74	4.99	5.21	5.35	5.39
50	-	4.02	4.29	4.62	4.98	5.34	5.68	5.97	6.18
60	-	-	4.50	4.89	5.32	5.78	6.23	6.66	7.04

### Mass flow in kg/h

10	54	74	98	126	159	-	-	-	-
20	50	69	92	120	152	190	233	-	-
30	46	64	87	113	144	181	223	271	326
40	42	59	80	106	136	170	211	257	310
50	-	54	73	97	126	159	197	242	293
60	-	-	65	88	114	146	182	225	274

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

10	2.39	2.90	3.58	4.44	5.56	-	-	-	-
20	1.80	2.18	2.66	3.24	3.95	4.82	5.91	-	-
30	1.39	1.68	2.03	2.44	2.92	3.49	4.18	4.99	6.00
40	1.07	1.30	1.56	1.86	2.20	2.58	3.04	3.56	4.18
50	-	0.99	1.18	1.39	1.63	1.90	2.21	2.56	2.97
60	-	-	0.85	1.01	1.17	1.36	1.58	1.82	2.09

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

Cooling capacity	5 097	W
Power input	2 685	W
Current consumption	4.85	A
Mass flow	131	kg/h
C.O.P.	1.90	

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	73	dB(A)
With acoustic hood	66	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	-	4 130	5 228	6 605	8 291	-	-	-	-
20	-	3 836	4 875	6 161	7 721	9 586	11 789	-	-
30	-	3 420	4 375	5 542	6 949	8 625	10 599	12 905	15 581
40	-	2 907	3 752	4 774	6 002	7 462	9 182	11 190	13 520
50	-	-	3 028	3 879	4 902	6 121	7 561	9 248	11 206
60	-	-	-	2 881	3 673	4 627	5 765	7 107	8 669

### Power input in W

10	-	1 548	1 654	1 726	1 761	-	-	-	-
20	-	1 758	1 909	2 033	2 125	2 181	2 196	-	-
30	-	1 942	2 148	2 333	2 491	2 620	2 713	2 767	2 777
40	-	2 067	2 337	2 592	2 826	3 036	3 217	3 364	3 473
50	-	-	2 441	2 775	3 095	3 396	3 673	3 923	4 140
60	-	-	-	2 848	3 262	3 664	4 047	4 408	4 743

### Current consumption in A

10	-	2.12	2.08	2.02	1.91	-	-	-	-
20	-	3.44	3.52	3.59	3.62	3.61	3.53	-	-
30	-	3.99	4.17	4.35	4.52	4.64	4.72	4.71	4.61
40	-	4.09	4.36	4.65	4.93	5.18	5.39	5.54	5.60
50	-	-	4.43	4.80	5.18	5.55	5.88	6.17	6.39
60	-	-	-	5.15	5.62	6.09	6.54	6.95	7.30

### Mass flow in kg/h

10	-	84	106	134	168	-	-	-	-
20	-	85	108	137	172	215	267	-	-
30	-	83	107	136	171	214	266	328	403
40	-	78	102	130	165	207	258	319	393
50	-	-	94	121	154	195	244	303	375
60	-	-	-	107	138	177	223	280	348

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

10	-	2.67	3.16	3.83	4.71	-	-	-	-
20	-	2.18	2.55	3.03	3.63	4.40	5.37	-	-
30	-	1.76	2.04	2.38	2.79	3.29	3.91	4.66	5.61
40	-	1.41	1.61	1.84	2.12	2.46	2.85	3.33	3.89
50	-	-	1.24	1.40	1.58	1.80	2.06	2.36	2.71
60	-	-	-	1.01	1.13	1.26	1.42	1.61	1.83

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

Cooling capacity	5 470	W
Power input	2 971	W
Current consumption	5.05	A
Mass flow	160	kg/h
C.O.P.	1.84	

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	73	dB(A)
With acoustic hood	66	dB(A)

Tolerance according EN12900

# Datasheet, performance data

# Maneurop reciprocating compressor. MTZ036-4

## 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	3 176	4 021	5 119	6 502	8 204	-	-	-	-
20	2 859	3 671	4 705	5 992	7 565	9 456	11 698	-	-
30	2 452	3 204	4 146	5 309	6 726	8 430	10 452	12 825	15 581
40	1 983	2 648	3 471	4 483	5 717	7 205	8 980	11 074	13 520
50	1 481	2 032	2 708	3 542	4 565	5 811	7 312	9 099	11 206
60	-	1 384	1 886	2 514	3 300	4 276	5 475	6 928	8 669

### Power input in W

10	1 415	1 548	1 654	1 726	1 761	-	-	-	-
20	1 584	1 758	1 909	2 033	2 125	2 181	2 196	-	-
30	1 719	1 942	2 148	2 333	2 491	2 620	2 713	2 767	2 777
40	1 785	2 067	2 337	2 592	2 826	3 036	3 217	3 364	3 473
50	1 748	2 097	2 441	2 775	3 095	3 396	3 673	3 923	4 140
60	-	1 999	2 425	2 848	3 262	3 664	4 047	4 408	4 743

### Current consumption in A

10	2.16	2.12	2.08	2.02	1.91	-	-	-	-
20	3.37	3.44	3.52	3.59	3.62	3.61	3.53	-	-
30	3.82	3.99	4.17	4.35	4.52	4.64	4.72	4.71	4.61
40	3.84	4.09	4.36	4.65	4.93	5.18	5.39	5.54	5.60
50	3.77	4.07	4.43	4.80	5.18	5.55	5.88	6.17	6.39
60	-	4.29	4.70	5.15	5.62	6.09	6.54	6.95	7.30

### Mass flow in kg/h

10	78	98	122	150	185	-	-	-	-
20	78	99	124	154	190	232	281	-	-
30	76	97	122	153	188	231	280	337	403
40	70	91	117	146	182	223	272	328	393
50	63	83	107	136	170	210	257	312	375
60	-	72	94	120	152	190	235	287	348

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

10	2.25	2.60	3.10	3.77	4.66	-	-	-	-
20	1.80	2.09	2.46	2.95	3.56	4.34	5.33	-	-
30	1.43	1.65	1.93	2.28	2.70	3.22	3.85	4.64	5.61
40	1.11	1.28	1.49	1.73	2.02	2.37	2.79	3.29	3.89
50	0.85	0.97	1.11	1.28	1.48	1.71	1.99	2.32	2.71
60	-	0.69	0.78	0.88	1.01	1.17	1.35	1.57	1.83

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

Cooling capacity	5 157	W
Power input	2 971	W
Current consumption	5.05	A
Mass flow	176	kg/h
C.O.P.	1.74	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

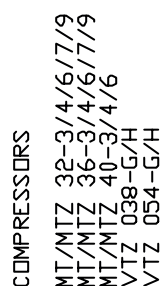
### Pressure switch settings

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	73	dB(A)
With acoustic hood	66	dB(A)

Tolerance according EN12900



page drawings