ENGINEERING TOMORROW



Datasheets

Danfoss Reciprocating compressors MT / MTZ / NTZ





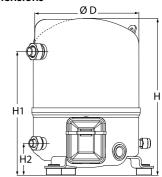


Datasheet, technical data

General Characteristics

Model number (on compressor nameplate)		MTZ36JG5AVE
Code number for Singlepack*		MTZ36-5VI
Code number for Industrial pack**		MTZ36-5VM
Drawing number		8501020e
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 c	m3/rev
Displacement @ Nominal speed	10.5 m3/h @	ຼື 2900 rpm
Net weight	25	kg
Oil charge	0.95 litre, P	OE - 175PZ
Maximum system test pressure Low Side / High side	25 bar(g) /	′ 30 bar(g)
Maximum differential test pressure	301	bar
Maximum number of starts per hour	1:	2
Refrigerant charge limit	2.5	kg
Approved refrigerants	R404A,R134a,R407A/C/F,R	448A,R449A,R452A,R513A

Dimensions

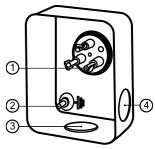


D=224 mm H=356 mm H1=263 mm H2=68 mm H3=- mm

Electrical Characteristics

Electrical characteristics	
Nominal voltage	220-240V/1/50Hz
Voltage range	220-240 V
Winding resistance (main / start) at 25°C	0.8 Ω / 4.22 Ω
Run capacitors A + C	25 μF + 10 μF
Start capacitor B	135 μF
Start relay	RVA-6AMKL
Maximum Continuous Current (MCC)	22 A
Locked Rotor Amps (LRA)	60 A
Motor protection	Internal overload protector

Terminal box



Recommended Installation torques

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

IP55 (with cable gland)

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

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, -, CCC certified

*Singlepack: Compressor in cardboard box

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





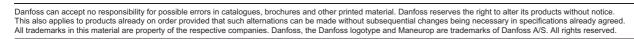
Datasheet, accessories and spare parts

Maneurop reciprocating compressor, MTZ036-5

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	
Rotolock accessories, sets	Code no.	1 2 3
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	1: Gasket
		2: Solder sleeve
Oil / lubricants	Code no.	3: Rotolock nut
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	
		Mounting kit
Miscellaneous accessories	Code no.	
PSC starting kit, 25 μ F, 10 μ F	7701024	1
CSR starting kit, 25 μ F, 10 μ F, 140 μ F	7701023	2
CSR starting kit, prewired box, 25 μ F, 10 μ F, 140 μ F	7701029	3
Acoustic hood for 1 cylinder compressor	120Z0575	
Oil equalisation nut	8153127	4
		5
Spare parts	Code no.	
Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts	8156001	6 ,
Oil sight glass with gaskets (black & white)	8156019	
Gasket for oil sight glass (black chloroprene)	8156145	
Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp	8156134	1: Bolt (3x)
		2: Lock washer (3x)
		3: Flat washer (3x)
		4: Sleeve (3x)

5: Grommet (3x)

6: Nut (3x)







Maneurop reciprocating compressor. MTZ036-5

Performance data at 50 Hz, EN 12900 rating conditions

R407C

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
		•	•	•		•			l .
Cooling capacit	ty in W								
35	3 538	4 766	6 211	7 896	9 844	12 078	14 619	-	-
40	3 157	4 326	5 692	7 278	9 106	11 200	13 582	-	-
45	2 762	3 876	5 167	6 658	8 371	10 329	12 556	-	-
50	-	3 411	4 631	6 031	7 633	9 461	11 536	-	-
55	-	-	4 082	5 395	6 890	8 591	10 519	-	-
60	-	-	-	4 744	6 137	7 715	9 500	-	-
65	-	-	-	4 076	5 370	6 829	8 476	-	-
Power input in	w								
35	1 700	1 920	2 105	2 258	2 379	2 469	2 530	-	-
40	1 734	1 991	2 212	2 396	2 545	2 660	2 742	-	-
45	1 756	2 057	2 318	2 539	2 722	2 868	2 978	-	-
50	-	2 113	2 420	2 685	2 908	3 091	3 234	-	-
55	-	-	2 516	2 830	3 099	3 325	3 508	-	-
60	-	-	-	2 971	3 292	3 567	3 795	-	-
65	-	-	-	3 104	3 483	3 813	4 093	-	-
Current consur	nption in A								
35	8.39	9.13	9.88	10.55	11.08	11.39	11.40	-	-
40	8.39	9.32	10.24	11.08	11.76	12.22	12.36	-	-
45	8.52	9.63	10.73	11.74	12.58	13.18	13.47	-	-
50	-	10.03	11.31	12.49	13.50	14.25	14.67	-	-
55	-	-	11.93	13.29	14.46	15.36	15.93	-	-
60	-	-	-	14.09	15.42	16.48	17.20	-	-
65	-	-	-	14.84	16.35	17.57	18.43	-	-
Mass flow in kg	/h								
35	77	102	130	163	200	243	290	-	-
40	72	97	125	158	194	235	282	-	-
45	67	92	120	152	188	228	273	-	-
50	-	86	114	146	181	221	265	-	-
55	-	-	107	139	174	213	256	-	-
60	-	-	-	131	166	204	247	-	-
65	-	-	-	121	156	195	237	-	-
	erformance (C.C	1			1	T	1		1
35	2.08	2.48	2.95	3.50	4.14	4.89	5.78	-	-
40	1.82	2.17	2.57	3.04	3.58	4.21	4.95	-	-
45	1.57	1.88	2.23	2.62	3.08	3.60	4.22	-	-
50	-	1.61	1.91	2.25	2.62	3.06	3.57	-	-
55	-	-	1.62	1.91	2.22	2.58	3.00	-	-
60	-	-	-	1.60	1.86	2.16	2.50	-	-
65	-	-	-	1.31	1.54	1.79	2.07	_	-

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

Cooling capacity	7 633	W
Power input	2 908	W
Current consumption	13.50	Α
Mass flow	181	kg/h
C.O.P.	2.62	

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 accoustic hood	68	dB(A)

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ036-5

Performance data at 50 Hz, ARI rating conditions

R407C

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
- 1		•	•	•	•	•	•	•	
Cooling capacit	y in W								
35	3 808	5 124	6 669	8 469	10 547	12 926	15 631	-	-
40	3 417	4 675	6 144	7 845	9 805	12 045	14 591	-	-
45	3 008	4 215	5 610	7 219	9 064	11 171	13 562	-	-
50	-	3 737	5 065	6 585	8 322	10 299	12 541	-	-
55	-	-	4 502	5 939	7 572	9 425	11 523	-	-
60	-	-	-	5 277	6 812	8 547	10 506	-	-
65	-	-	-	4 593	6 037	7 660	9 486	-	-
Power input in V		T	1	T	T	Т	T	Γ	
35	1 700	1 920	2 105	2 258	2 379	2 469	2 530	-	-
40	1 734	1 991	2 212	2 396	2 545	2 660	2 742	-	-
45	1 756	2 057	2 318	2 539	2 722	2 868	2 978	-	-
50	-	2 113	2 420	2 685	2 908	3 091	3 234	-	-
55	-	-	2 516	2 830	3 099	3 325	3 508	-	-
60	-	-	-	2 971	3 292	3 567	3 795	-	-
65	-	-	-	3 104	3 483	3 813	4 093	-	-
Current consum	nption in A								
35	8.39	9.13	9.88	10.55	11.08	11.39	11.40	-	-
40	8.39	9.32	10.24	11.08	11.76	12.22	12.36	-	-
45	8.52	9.63	10.73	11.74	12.58	13.18	13.47	-	-
50	-	10.03	11.31	12.49	13.50	14.25	14.67	-	-
55	-	-	11.93	13.29	14.46	15.36	15.93	-	-
60	-	-	-	14.09	15.42	16.48	17.20	-	-
65	-	-	-	14.84	16.35	17.57	18.43	-	-
Mass flow in kg/	/le								
35	76	101	130	162	199	241	288	-	_
40	72	96	125	157	193	234	280		_
45	66	91	119	151	187	227	272	-	_
50	-	85	113	145	180	220	263	-	_
55	-	-	106	138	173	212	255	-	-
60	-	-	-	130	165	203	246	-	-
65	-	-	-	121	155	194	236	-	-
			1	1		-			ı
Coefficient of po	erformance (C.C	1	1	T	T	T	1	T	T
35	2.24	2.67	3.17	3.75	4.43	5.23	6.18	-	-
40	1.97	2.35	2.78	3.27	3.85	4.53	5.32	-	-
45	1.71	2.05	2.42	2.84	3.33	3.89	4.55	-	-
50	-	1.77	2.09	2.45	2.86	3.33	3.88	-	-
55	-	-	1.79	2.10	2.44	2.83	3.28	-	-
60	-	-	-	1.78	2.07	2.40	2.77	-	-
65	-	_	-	1.48	1.73	2.01	2.32	_	_

Nominal performance at to = 7.2 °C, tc = 54.4 °C	С
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Cooling capacity	8 456	W
Power input	3 178	W
Current consumption	14.77	Α
Mass flow	190	kg/h
C.O.P.	2.66	

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 accoustic hood	68	dB(A)







Maneurop reciprocating compressor. MTZ036-5

Performance data at 50 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
Cooling consoits	. in 14/								
Cooling capacity 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	700	-	2 235	2 981	3 863	4 900	6 108	7 506	9 111
60	<u>-</u>	-	-	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
					l	I	0 00 .		
Power input in W		T	T	T	ı	1	T	1	1
35	958	1 102	1 382	1 508	1 618	1 706	1 767	1 797	1 789
40	999	1 149	1 449	1 589	1 716	1 824	1 907	1 962	1 982
45	1 027	1 184	1 508	1 664	1 810	1 939	2 047	2 129	2 180
50	1 040	1 207	1 559	1 733	1 899	2 052	2 186	2 297	2 379
55	-	-	1 600	1 793	1 982	2 160	2 322	2 464	2 580
60	-	-	-	1 845	2 058	2 263	2 455	2 629	2 780
65	-	-	-	-	2 125	2 359	2 583	2 792	2 980
75	-	-	-	-	-	-	2 821	3 104	3 372
Current consum	ption in A								
35	7.46	7.78	8.41	8.69	8.94	9.15	9.30	9.39	9.41
40	7.51	7.86	8.56	8.89	9.20	9.48	9.71	9.89	10.00
45	7.53	7.91	8.69	9.08	9.46	9.81	10.13	10.41	10.63
50	7.53	7.94	8.82	9.28	9.72	10.16	10.57	10.95	11.28
55	-	-	8.94	9.46	9.99	10.51	11.02	11.50	11.95
60	-	-	-	9.64	10.25	10.87	11.48	12.08	12.65
65	-	-	-	-	10.52	11.23	11.95	12.67	13.37
75	-	-	-	-	-	-	12.91	13.88	14.86
Mass flow in kg/l									
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 pe	rformance (C.O).P.)							
35	1.29	1.61	2.33	2.77	3.28	3.88	4.61	5.51	6.66
40	1.09	1.40	2.07	2.46	2.90	3.42	4.03	4.77	5.68
45	0.91	1.21	1.83	2.17	2.55	2.99	3.51	4.12	4.85
50	0.76	1.04	1.60	1.90	2.24	2.61	3.04	3.55	4.14
55	-	-	1.40	1.66	1.95	2.27	2.63	3.05	3.53
60	-	-	-	1.44	1.69	1.96	2.26	2.60	3.00
65	-	-	-	-	1.44	1.67	1.92	2.21	2.53
75	-	-	_	-	-	-	1.35	1.54	1.76

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

		•• •	
С	cooling capacity	5 362	W
Р	ower input	2 052	W
С	current consumption	10.16	Α
M	lass flow	140	kg/h
С	C.O.P.	2.61	

to: Evaporating temperature at dew point

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

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)

Tolerance according EN12900



tc: Condensing temperature at dew point



Maneurop reciprocating compressor. MTZ036-5

Performance data at 50 Hz, ARI rating conditions

R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
Cooling consoits	in M								
Cooling capacity 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
						1			
Power input in W		T	T	T	1	1		1	T
35	958	1 102	1 382	1 508	1 618	1 706	1 767	1 797	1 789
40	999	1 149	1 449	1 589	1 716	1 824	1 907	1 962	1 982
45	1 027	1 184	1 508	1 664	1 810	1 939	2 047	2 129	2 180
50	-	1 207	1 559	1 733	1 899	2 052	2 186	2 297	2 379
55	-	-	1 600	1 793	1 982	2 160	2 322	2 464	2 580
60	-	-	-	1 845	2 058	2 263	2 455	2 629	2 780
65	-	-	-	-	-	2 359	2 583	2 792	2 980
75	-	-	-	-	-	-	2 821	3 104	3 372
Current consum	ntion in A								
35	7.46	7.78	8.41	8.69	8.94	9.15	9.30	9.39	9.41
40	7.51	7.86	8.56	8.89	9.20	9.48	9.71	9.89	10.00
45	7.53	7.91	8.69	9.08	9.46	9.81	10.13	10.41	10.63
50	-	7.94	8.82	9.28	9.72	10.16	10.57	10.95	11.28
55	-	-	8.94	9.46	9.99	10.51	11.02	11.50	11.95
60	1-	_	-	9.64	10.25	10.87	11.48	12.08	12.65
65	_	_	_	_	_	11.23	11.95	12.67	13.37
75	_	-	-	_	_	-	12.91	13.88	14.86
<u> </u>		1	1	1	l .	U.	•	I.	
Mass flow in kg/l		T	T	T	1	1		1	T
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 pe	rformance (C.C	D.P.)							
35	1.40	1.75	2.52	2.99	3.53	4.18	4.96	5.92	7.14
40	1.19	1.53	2.25	2.67	3.14	3.69	4.35	5.14	6.11
45	1.01	1.33	2.00	2.37	2.78	3.25	3.81	4.46	5.25
50	-	1.15	1.76	2.09	2.45	2.86	3.32	3.87	4.51
55	-	-	1.55	1.84	2.15	2.50	2.89	3.34	3.87
60	-	-	-	1.61	1.88	2.17	2.50	2.88	3.31
65	-	-	-	-	-	1.88	2.15	2.46	2.82
75	-	-	_	-	-	-	1.55	1.77	2.01

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

	-,	
Cooling capacity	6 014	W
Power input	2 219	W
Current consumption	10.69	Α
Mass flow	148	kg/h
C.O.P.	2.71	

to: Evaporating temperature at dew point

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

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)

Tolerance according EN12900



tc: Condensing temperature at dew point $% \left(1\right) =\left(1\right) \left(1\right)$



Maneurop reciprocating compressor. MTZ036-5

Performance data at 50 Hz, EN 12900 rating conditions

R404A

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacit		1	1	T		T	T		T
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 \	N								
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
30	10.89	11.59	12.37	13.18	13.94	14.62	15.16	15.49	15.57
35	11.00	11.76	12.60	13.48	14.32	15.08	15.71	16.14	16.33
40	11.07	11.92	12.86	13.83	14.78	15.66	16.40	16.96	17.27
45	11.08	12.05	13.10	14.20	15.29	16.30	17.19	17.90	18.37
50	10.98	12.09	13.29	14.55	15.79	16.97	18.03	18.92	19.58
55	-	12.01	13.39	14.83	16.26	17.63	18.90	19.99	20.87
60	-	11.77	13.35	15.00	16.65	18.25	19.74	21.07	22.18
		•	•	•	•	1	•	•	
Mass flow in kg		1 00	445	140	400	222	070	224	204
30	65 61	88	115	146	182	223	270	324	384
35 40		84	111	142	177	217	263	315	374
	57	80	106	137	171	211	256	307	364
45	52	75 70	101	131	166	204	248	298	353
50 55	47 -	70	96	125	159	197	240	288	342
55 60	-	64 57	90 82	119 111	152 144	189 180	231 221	278 267	331 319
60	-	5/	82	111	144	180	221	207	319
Coefficient of pe	erformance (C.C).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	15.29	Α
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 settin	g 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 accoustic hood	64	dB(A)







Maneurop reciprocating compressor. MTZ036-5

Performance data at 50 Hz, ARI rating conditions

R404A

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacit									
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 \	N								
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 consum	nption in A	T.	T.						
30	10.89	11.59	12.37	13.18	13.94	14.62	15.16	15.49	15.57
35	11.00	11.76	12.60	13.48	14.32	15.08	15.71	16.14	16.33
40	11.07	11.92	12.86	13.83	14.78	15.66	16.40	16.96	17.27
45	11.08	12.05	13.10	14.20	15.29	16.30	17.19	17.90	18.37
50	10.98	12.09	13.29	14.55	15.79	16.97	18.03	18.92	19.58
55	-	12.01	13.39	14.83	16.26	17.63	18.90	19.99	20.87
60	-	11.77	13.35	15.00	16.65	18.25	19.74	21.07	22.18
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 n	erformance (C.C).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

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

Cooling capacity	5 323	W
Power input	2 576	W
Current consumption	15.29	Α
Mass flow	165	kg/h
C.O.P.	2.07	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

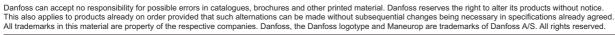
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

			_
Maximum HP switch setting	27.7	bar(g)	٦
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 accoustic hood	64	dB(A)







Maneurop reciprocating compressor. MTZ036-5

Performance data at 50 Hz, EN 12900 rating conditions

R407A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity 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	10 908	12 421
40	1 095				4 711	6 065	7 643		11 559
45	873	1 773 1 512	2 587 2 275	3 559 3 182	4 257	5 521	6 996	9 467 8 704	10 667
50	-	1 250	1 957		3 791		1	7 918	9 749
55	-	- 1 250		2 797 2 409	3 319	4 962 4 392	6 330		
60	<u> </u>	-	1 641	2 024	2 846	3 818	5 651 4 963	7 116 6 302	8 811 7 858
60	-	-	-	2 024	2 040	3010	4 903	6 302	7 000
Power input in W		T	T	1	1			T	1
30	1 165	1 395	1 610	1 808	1 982	2 129	2 244	2 323	2 362
35	1 158	1 412	1 655	1 882	2 090	2 273	2 427	2 548	2 632
40	1 137	1 416	1 687	1 946	2 187	2 407	2 602	2 767	2 897
45	1 102	1 407	1 707	1 998	2 274	2 533	2 768	2 977	3 154
50	-	1 384	1 714	2 038	2 350	2 648	2 926	3 179	3 405
55	-	-	1 707	2 065	2 415	2 752	3 073	3 373	3 648
60	-	-	-	2 079	2 467	2 846	3 211	3 558	3 883
Current consum	ption in A								
30	8.25	8.83	9.49	10.16	10.82	11.40	11.87	12.17	12.27
35	8.32	8.92	9.60	10.32	11.03	11.69	12.24	12.64	12.85
40	8.37	9.01	9.75	10.53	11.32	12.07	12.73	13.25	13.59
45	8.37	9.07	9.88	10.76	11.65	12.51	13.30	13.97	14.46
50	-	9.06	9.97	10.95	11.97	12.97	13.91	14.74	15.41
55	-	-	9.97	11.09	12.25	13.41	14.52	15.54	16.41
60	-	-	-	11.11	12.44	13.79	15.09	16.32	17.41
Mass flow in kg/l	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 pe	rformance (C.C).P.)							
30	1.31	1.63	1.97	2.36	2.81	3.33	3.95	4.70	5.61
35	1.14	1.44	1.75	2.08	2.46	2.90	3.41	4.00	4.72
40	0.96	1.25	1.53	1.83	2.15	2.52	2.94	3.42	3.99
45	0.79	1.07	1.33	1.59	1.87	2.18	2.53	2.92	3.38
50	-	0.90	1.14	1.37	1.61	1.87	2.16	2.49	2.86
+		-	0.96	1.17	1.37	1.60	1.84	2.11	2.42
55									

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

Cooling capacity	4 257	W
Power input	2 274	W
Current consumption	11.65	Α
Mass flow	111	kg/h
C.O.P.	1.87	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	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 accoustic hood	63	dB(A)







Maneurop reciprocating compressor. MTZ036-5

Performance data at 50 Hz, ARI rating conditions

R407A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
•		•	•	1	•	1	•	•	•
cooling capacity	r in W 1 651	2 453	3 428	4 597	5 986	7 615	9 509	44.004	14 182
30		1	1	1	1	1	1	11 691	
35 40	1 430	2 203	3 134	4 248	5 567	7 115	8 915	10 989	13 361
45	1 200 964	1 939 1 667	2 824 2 502	3 878 3 493	5 125 4 664	6 588 6 039	8 290 7 639	10 253 9 489	12 502 11 611
50	904			3 493	ł	1	1	•	
55	-	1 391	2 173	2 699	4 190 3 708	5 472 4 895	6 968 6 284	8 701 7 897	10 694 9 758
60	<u> </u>	-	1 843	2 300	3 224	4 313	5 592	7 082	8 810
60	-	-	-	2 300	3 224	4 3 13	5 592	7 002	0010
Power input in W	ı	_					_	_	
30	1 165	1 395	1 610	1 808	1 982	2 129	2 244	2 323	2 362
35	1 158	1 412	1 655	1 882	2 090	2 273	2 427	2 548	2 632
40	1 137	1 416	1 687	1 946	2 187	2 407	2 602	2 767	2 897
45	1 102	1 407	1 707	1 998	2 274	2 533	2 768	2 977	3 154
50	-	1 384	1 714	2 038	2 350	2 648	2 926	3 179	3 405
55	-	-	1 707	2 065	2 415	2 752	3 073	3 373	3 648
60	-	-	-	2 079	2 467	2 846	3 211	3 558	3 883
Current consum	ption in A								
30	8.25	8.83	9.49	10.16	10.82	11.40	11.87	12.17	12.27
35	8.32	8.92	9.60	10.32	11.03	11.69	12.24	12.64	12.85
40	8.37	9.01	9.75	10.53	11.32	12.07	12.73	13.25	13.59
45	8.37	9.07	9.88	10.76	11.65	12.51	13.30	13.97	14.46
50	-	9.06	9.97	10.95	11.97	12.97	13.91	14.74	15.41
55	-	-	9.97	11.09	12.25	13.41	14.52	15.54	16.41
60	-	-	-	11.11	12.44	13.79	15.09	16.32	17.41
/lass flow in kg/l	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 pe	rformance (C.C	D.P.)							
30	1.42	1.76	2.13	2.54	3.02	3.58	4.24	5.03	6.00
35	1.24	1.56	1.89	2.26	2.66	3.13	3.67	4.31	5.08
40	1.05	1.37	1.67	1.99	2.34	2.74	3.19	3.71	4.32
45	0.87	1.18	1.47	1.75	2.05	2.38	2.76	3.19	3.68
50	-	1.01	1.27	1.52	1.78	2.07	2.38	2.74	3.14
55	-	-	1.08	1.31	1.54	1.78	2.04	2.34	2.67
60	-	_	-	1.11	1.31	1.52	1.74	1.99	2.27

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

Cooling capacity	4 664	W
Power input	2 274	W
Current consumption	11.65	Α
Mass flow	110	kg/h
C.O.P.	2.05	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	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 accoustic hood	63	dB(A)

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ036-5

Performance data at 50 Hz, EN 12900 rating conditions

R407F

Cond. temp. in		T	Т	1	ting temperature		T	T	1
°C (tc)	-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	ı								
30	-	1 476	1 701	1 910	2 092	2 235	2 329	2 362	2 324
35	-	1 499	1 747	1 987	2 207	2 397	2 545	2 641	2 672
40	-	1 521	1 788	2 055	2 310	2 542	2 740	2 893	2 990
45	-	1 551	1 833	2 122	2 407	2 677	2 921	3 128	3 286
50	-	-	1 890	2 197	2 508	2 812	3 097	3 353	3 568
55	-	-	-	2 288	2 621	2 954	3 276	3 576	3 844
60	-	-	-	-	-	-	-	-	-
Current consum	ption in A								
30	-	8.85	9.55	10.28	10.98	11.58	12.04	12.29	12.26
35	-	9.05	9.77	10.54	11.30	11.99	12.55	12.91	13.02
40	-	9.17	9.94	10.78	11.63	12.42	13.10	13.61	13.88
45	-	9.25	10.09	11.02	11.97	12.89	13.72	14.40	14.85
50	-	-	10.23	11.27	12.35	13.43	14.43	15.29	15.96
55	-	-	-	11.54	12.79	14.04	15.23	16.30	17.20
60	-	-	-	-	-	-	-	-	-
Mass flow in kg/l	า								
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 pe	rformance (C.0	O.P.)							
30	-	1.67	2.05	2.47	2.96	3.55	4.27	5.20	6.43
35	-	1.43	1.76	2.12	2.51	2.98	3.53	4.21	5.08
40	-	1.22	1.53	1.83	2.16	2.54	2.97	3.49	4.14
45	-	1.04	1.32	1.60	1.88	2.19	2.54	2.95	3.44
50	_	-	1.14	1.39	1.64	1.90	2.19	2.51	2.90
+	_	-	-	1.21	1.43	1.66	1.90	2.16	2.47
55									

Nominal performance at to = -10 °C, to	= 45	°C
0 " "		

Cooling capacity	4 524	W
Power input	2 407	W
Current consumption	11.97	Α
Mass flow	104	kg/h
C.O.P.	1.88	

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(q)	

Sound power data

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







Maneurop reciprocating compressor. MTZ036-5

Performance data at 50 Hz, ARI rating conditions

R407F

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity		2.042	2.720	F 050	0.040	0.464	40.000	42.000	45.004
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 45	-	2 010	2 950	4 068	5 391	6 948	8 764	10 868	13 286
	-	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	-	1 476	1 701	1 910	2 092	2 235	2 329	2 362	2 324
35	-	1 499	1 747	1 987	2 207	2 397	2 545	2 641	2 672
40	-	1 521	1 788	2 055	2 310	2 542	2 740	2 893	2 990
45	-	1 551	1 833	2 122	2 407	2 677	2 921	3 128	3 286
50	-	-	1 890	2 197	2 508	2 812	3 097	3 353	3 568
55	-	-	-	2 288	2 621	2 954	3 276	3 576	3 844
60	-	-	-	-	-	-	_	-	-
Current consump		T	T	T	T	T	T	T	I
30	-	8.85	9.55	10.28	10.98	11.58	12.04	12.29	12.26
35	-	9.05	9.77	10.54	11.30	11.99	12.55	12.91	13.02
40	-	9.17	9.94	10.78	11.63	12.42	13.10	13.61	13.88
45	-	9.25	10.09	11.02	11.97	12.89	13.72	14.40	14.85
50	-	-	10.23	11.27	12.35	13.43	14.43	15.29	15.96
55	-	-	-	11.54	12.79	14.04	15.23	16.30	17.20
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	-	-	-	-	-	-	-	-	-
Onefficient of	· · · · · · · · · · · · · · · · · · ·								
Coefficient of per	formance (C.0	1	2.20	2.64	2.46	2.70	4 56	5.54	605
30 35	<u>-</u>	1.79 1.54	2.20 1.90	2.64	3.16 2.70	3.79 3.19	4.56 3.78	5.54 4.51	6.85 5.44
-	-	+	1	1	1	+	1	1	
40		1.32	1.65	1.98	2.33	2.73	3.20	3.76	4.44
45	-	1.13	1.44	1.73	2.04	2.37	2.75	3.18	3.71
50	-	-	1.25	1.52	1.79	2.07	2.38	2.74	3.15
55	-	-	-	1.34	1.58	1.82	2.09	2.37	2.71
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	4 908	W
Power input	2 407	W
Current consumption	11.97	Α
Mass flow	103	kg/h
C.O.P.	2.04	

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

Sound power data

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

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ036-5

Performance data at 50 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
Cooling consoits	. in 14/								
Cooling capacity 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	700	-	2 235	2 981	3 863	4 900	6 108	7 506	9 111
60	<u>-</u>	-	-	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
					l	I	0 00 .		
Power input in W		T	T	T	ı	1	T	1	1
35	958	1 102	1 382	1 508	1 618	1 706	1 767	1 797	1 789
40	999	1 149	1 449	1 589	1 716	1 824	1 907	1 962	1 982
45	1 027	1 184	1 508	1 664	1 810	1 939	2 047	2 129	2 180
50	1 040	1 207	1 559	1 733	1 899	2 052	2 186	2 297	2 379
55	-	-	1 600	1 793	1 982	2 160	2 322	2 464	2 580
60	-	-	-	1 845	2 058	2 263	2 455	2 629	2 780
65	-	-	-	-	2 125	2 359	2 583	2 792	2 980
75	-	-	-	-	-	-	2 821	3 104	3 372
Current consum	ption in A								
35	7.46	7.78	8.41	8.69	8.94	9.15	9.30	9.39	9.41
40	7.51	7.86	8.56	8.89	9.20	9.48	9.71	9.89	10.00
45	7.53	7.91	8.69	9.08	9.46	9.81	10.13	10.41	10.63
50	7.53	7.94	8.82	9.28	9.72	10.16	10.57	10.95	11.28
55	-	-	8.94	9.46	9.99	10.51	11.02	11.50	11.95
60	-	-	-	9.64	10.25	10.87	11.48	12.08	12.65
65	-	-	-	-	10.52	11.23	11.95	12.67	13.37
75	-	-	-	-	-	-	12.91	13.88	14.86
Mass flow in kg/l									
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 pe	rformance (C.O).P.)							
35	1.29	1.61	2.33	2.77	3.28	3.88	4.61	5.51	6.66
40	1.09	1.40	2.07	2.46	2.90	3.42	4.03	4.77	5.68
45	0.91	1.21	1.83	2.17	2.55	2.99	3.51	4.12	4.85
50	0.76	1.04	1.60	1.90	2.24	2.61	3.04	3.55	4.14
55	-	-	1.40	1.66	1.95	2.27	2.63	3.05	3.53
60	-	-	-	1.44	1.69	1.96	2.26	2.60	3.00
65	-	-	-	-	1.44	1.67	1.92	2.21	2.53
75	-	-	_	-	-	-	1.35	1.54	1.76

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

		•• •	
С	cooling capacity	5 362	W
Р	ower input	2 052	W
С	current consumption	10.16	Α
M	lass flow	140	kg/h
С	C.O.P.	2.61	

to: Evaporating temperature at dew point

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

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)

Tolerance according EN12900



tc: Condensing temperature at dew point



Maneurop reciprocating compressor. MTZ036-5

Performance data at 50 Hz, ARI rating conditions

R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
Cooling consoits	in M								
Cooling capacity 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
						1			
Power input in W		T	T	T	1	1		1	T
35	958	1 102	1 382	1 508	1 618	1 706	1 767	1 797	1 789
40	999	1 149	1 449	1 589	1 716	1 824	1 907	1 962	1 982
45	1 027	1 184	1 508	1 664	1 810	1 939	2 047	2 129	2 180
50	-	1 207	1 559	1 733	1 899	2 052	2 186	2 297	2 379
55	-	-	1 600	1 793	1 982	2 160	2 322	2 464	2 580
60	-	-	-	1 845	2 058	2 263	2 455	2 629	2 780
65	-	-	-	-	-	2 359	2 583	2 792	2 980
75	-	-	-	-	-	-	2 821	3 104	3 372
Current consum	ntion in A								
35	7.46	7.78	8.41	8.69	8.94	9.15	9.30	9.39	9.41
40	7.51	7.86	8.56	8.89	9.20	9.48	9.71	9.89	10.00
45	7.53	7.91	8.69	9.08	9.46	9.81	10.13	10.41	10.63
50	-	7.94	8.82	9.28	9.72	10.16	10.57	10.95	11.28
55	-	-	8.94	9.46	9.99	10.51	11.02	11.50	11.95
60	1-	_	-	9.64	10.25	10.87	11.48	12.08	12.65
65	_	_	_	_	_	11.23	11.95	12.67	13.37
75	_	-	-	_	_	-	12.91	13.88	14.86
<u> </u>		1	1	1	l .	U.	•	I.	
Mass flow in kg/l		T	T	T	1	1		1	T
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 pe	rformance (C.C	D.P.)							
35	1.40	1.75	2.52	2.99	3.53	4.18	4.96	5.92	7.14
40	1.19	1.53	2.25	2.67	3.14	3.69	4.35	5.14	6.11
45	1.01	1.33	2.00	2.37	2.78	3.25	3.81	4.46	5.25
50	-	1.15	1.76	2.09	2.45	2.86	3.32	3.87	4.51
55	-	-	1.55	1.84	2.15	2.50	2.89	3.34	3.87
60	-	-	-	1.61	1.88	2.17	2.50	2.88	3.31
65	-	-	-	-	-	1.88	2.15	2.46	2.82
75	-	-	_	-	-	-	1.55	1.77	2.01

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

	-,	
Cooling capacity	6 014	W
Power input	2 219	W
Current consumption	10.69	Α
Mass flow	148	kg/h
C.O.P.	2.71	

to: Evaporating temperature at dew point

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

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)

Tolerance according EN12900



tc: Condensing temperature at dew point $% \left(1\right) =\left(1\right) \left(1\right)$



Maneurop reciprocating compressor. MTZ036-5

Performance data at 50 Hz, EN 12900 rating conditions

R407C

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
		•	•	•		•			l .
Cooling capacit	ty in W								
35	3 538	4 766	6 211	7 896	9 844	12 078	14 619	-	-
40	3 157	4 326	5 692	7 278	9 106	11 200	13 582	-	-
45	2 762	3 876	5 167	6 658	8 371	10 329	12 556	-	-
50	-	3 411	4 631	6 031	7 633	9 461	11 536	-	-
55	-	-	4 082	5 395	6 890	8 591	10 519	-	-
60	-	-	-	4 744	6 137	7 715	9 500	-	-
65	-	-	-	4 076	5 370	6 829	8 476	-	-
Power input in	w								
35	1 700	1 920	2 105	2 258	2 379	2 469	2 530	-	-
40	1 734	1 991	2 212	2 396	2 545	2 660	2 742	-	-
45	1 756	2 057	2 318	2 539	2 722	2 868	2 978	-	-
50	-	2 113	2 420	2 685	2 908	3 091	3 234	-	-
55	-	-	2 516	2 830	3 099	3 325	3 508	-	-
60	-	-	-	2 971	3 292	3 567	3 795	-	-
65	-	-	-	3 104	3 483	3 813	4 093	-	-
Current consur	nption in A								
35	8.39	9.13	9.88	10.55	11.08	11.39	11.40	-	-
40	8.39	9.32	10.24	11.08	11.76	12.22	12.36	-	-
45	8.52	9.63	10.73	11.74	12.58	13.18	13.47	-	-
50	-	10.03	11.31	12.49	13.50	14.25	14.67	-	-
55	-	-	11.93	13.29	14.46	15.36	15.93	-	-
60	-	-	-	14.09	15.42	16.48	17.20	-	-
65	-	-	-	14.84	16.35	17.57	18.43	-	-
Mass flow in kg	/h								
35	77	102	130	163	200	243	290	-	-
40	72	97	125	158	194	235	282	-	-
45	67	92	120	152	188	228	273	-	-
50	-	86	114	146	181	221	265	-	-
55	-	-	107	139	174	213	256	-	-
60	-	-	-	131	166	204	247	-	-
65	-	-	-	121	156	195	237	-	-
	erformance (C.C	1			1	T	1		1
35	2.08	2.48	2.95	3.50	4.14	4.89	5.78	-	-
40	1.82	2.17	2.57	3.04	3.58	4.21	4.95	-	-
45	1.57	1.88	2.23	2.62	3.08	3.60	4.22	-	-
50	-	1.61	1.91	2.25	2.62	3.06	3.57	-	-
55	-	-	1.62	1.91	2.22	2.58	3.00	-	-
60	-	-	-	1.60	1.86	2.16	2.50	-	-
65	-	-	-	1.31	1.54	1.79	2.07	_	-

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

Cooling capacity	7 633	W
Power input	2 908	W
Current consumption	13.50	Α
Mass flow	181	kg/h
C.O.P.	2.62	

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 accoustic hood	68	dB(A)

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ036-5

Performance data at 50 Hz, ARI rating conditions

R407C

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
- 1		•	•	•	•	•	•	•	
Cooling capacit	y in W								
35	3 808	5 124	6 669	8 469	10 547	12 926	15 631	-	-
40	3 417	4 675	6 144	7 845	9 805	12 045	14 591	-	-
45	3 008	4 215	5 610	7 219	9 064	11 171	13 562	-	-
50	-	3 737	5 065	6 585	8 322	10 299	12 541	-	-
55	-	-	4 502	5 939	7 572	9 425	11 523	-	-
60	-	-	-	5 277	6 812	8 547	10 506	-	-
65	-	-	-	4 593	6 037	7 660	9 486	-	-
Power input in V		T	1	T	T	Т	T	Γ	
35	1 700	1 920	2 105	2 258	2 379	2 469	2 530	-	-
40	1 734	1 991	2 212	2 396	2 545	2 660	2 742	-	-
45	1 756	2 057	2 318	2 539	2 722	2 868	2 978	-	-
50	-	2 113	2 420	2 685	2 908	3 091	3 234	-	-
55	-	-	2 516	2 830	3 099	3 325	3 508	-	-
60	-	-	-	2 971	3 292	3 567	3 795	-	-
65	-	-	-	3 104	3 483	3 813	4 093	-	-
Current consum	nption in A								
35	8.39	9.13	9.88	10.55	11.08	11.39	11.40	-	-
40	8.39	9.32	10.24	11.08	11.76	12.22	12.36	-	-
45	8.52	9.63	10.73	11.74	12.58	13.18	13.47	-	-
50	-	10.03	11.31	12.49	13.50	14.25	14.67	-	-
55	-	-	11.93	13.29	14.46	15.36	15.93	-	-
60	-	-	-	14.09	15.42	16.48	17.20	-	-
65	-	-	-	14.84	16.35	17.57	18.43	-	-
Mass flow in kg/	/le								
35	76	101	130	162	199	241	288	-	_
40	72	96	125	157	193	234	280		_
45	66	91	119	151	187	227	272	-	_
50	-	85	113	145	180	220	263	-	_
55	-	-	106	138	173	212	255	-	-
60	-	-	-	130	165	203	246	-	-
65	-	-	-	121	155	194	236	-	-
			1	1		-			ı
Coefficient of po	erformance (C.C	1	1	T	T	T	1	T	T
35	2.24	2.67	3.17	3.75	4.43	5.23	6.18	-	-
40	1.97	2.35	2.78	3.27	3.85	4.53	5.32	-	-
45	1.71	2.05	2.42	2.84	3.33	3.89	4.55	-	-
50	-	1.77	2.09	2.45	2.86	3.33	3.88	-	-
55	-	-	1.79	2.10	2.44	2.83	3.28	-	-
60	-	-	-	1.78	2.07	2.40	2.77	-	-
65	-	_	-	1.48	1.73	2.01	2.32	_	_

Nominal performance at to = 7.2 °C, tc = 54.4 °C	С
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Cooling capacity	8 456	W
Power input	3 178	W
Current consumption	14.77	Α
Mass flow	190	kg/h
C.O.P.	2.66	

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 accoustic hood	68	dB(A)







Maneurop reciprocating compressor. MTZ036-5

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

R448A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
ooling capacity	in W								
10		3 184	4 124	5 254	6 594	_	_	_	_
20	_	2 846	3 744	4 811	6 065	7 527	9 218	_	_
30		2 431	3 279	4 273	5 432	6 774	8 321	10 094	12 122
40	_	-	2 742	3 655	4 710	5 924	7 316	8 908	10 723
50	_	-	-	2 973	3 916	4 993	6 222	7 623	9 215
60	-	-	-	-	3 064	3 997	5 056	6 257	7 616
· ·		-1	· I	1		1 222	1 2 2 2 2	3 -91	
ower input in W		1 293	1 354	1 385	1 383	_	_	_	_
20	-	1 437	1 551	1 637	1 693	1 718	1 709	-	_
30		1 529	1 699	1 843	1 960	2 047	2 103	2 126	2 115
40		1 329	1 790	1 995	2 175	2 327	2 451	2 545	2 606
50	-	_	-	2 087	2 332	2 552	2 747	2 913	3 050
60	<u> </u>	-	-	-	2 424	2 716	2 983	3 225	3 439
00	_		1	1	2 727	2710	2 903	3 223	3 433
urrent consump	tion in A	_	-						
10	-	4.82	5.58	6.21	6.71	-	-	-	-
20	-	6.62	7.40	8.06	8.59	8.99	9.27	-	-
30	-	7.71	8.62	9.40	10.06	10.60	11.01	11.30	11.48
40	-	-	9.27	10.28	11.16	11.93	12.57	13.10	13.51
50	-	-	-	10.74	11.94	13.03	14.01	14.86	15.61
60	-	-	-	-	12.45	13.96	15.36	16.64	17.81
lass flow in kg/h	ı								
10	-	53	69	88	111	-	-	_	-
20	-	50	66	86	108	135	167	_	-
30	-	46	63	82	105	132	163	201	245
40	-	-	57	77	100	126	158	194	238
50	-	-	-	70	92	119	150	186	228
60	-	-	-	-	83	109	139	175	217
L.		1	1	1	1	1	1		•
Coefficient of per	formance (C.0	O.P.)							
10	-	2.46	3.05	3.79	4.77	-	-	-	-
20	-	1.98	2.41	2.94	3.58	4.38	5.39	-	-
30	-	1.59	1.93	2.32	2.77	3.31	3.96	4.75	5.73
40	-	-	1.53	1.83	2.17	2.55	2.98	3.50	4.11
50	-	-	-	1.43	1.68	1.96	2.27	2.62	3.02
60	_	_	_	-	1.26	1.47	1.69	1.94	2.21

Nominal performa	nce at to = -10	°C, tc = 45 °C

Cooling capacity	4 321	W
Power input	2 261	W
Current consumption	11.59	Α
Mass flow	96	kg/h
C.O.P.	1.91	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 $^{\circ}\text{C}$, Subcooling = 0 K

Pressure switch settings

Max	imum HP switch setting	27.7	bar(g)
Mini	mum LP switch setting	1	bar(g)
LPp	oump down setting	1.3	bar(g)

Sound power data

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





Maneurop reciprocating compressor. MTZ036-5

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

R448A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	/ in W			•					
10	2 425	3 200	4 147	5 287	6 637	-	-	-	-
20	2 079	2 828	3 729	4 801	6 064	7 535	9 235	-	-
30	1 669	2 382	3 226	4 221	5 386	6 740	8 301	10 089	12 122
40	1 214	1 880	2 658	3 566	4 623	5 848	7 261	8 879	10 723
50	-	1 341	2 042	2 852	3 791	4 878	6 132	7 571	9 215
60	-	-	1 396	2 099	2 910	3 849	4 933	6 183	7 616
Power input in V	v								
10	1 203	1 293	1 354	1 385	1 383	-	-	_	-
20	1 297	1 437	1 551	1 637	1 693	1 718	1 709	-	-
30	1 336	1 529	1 699	1 843	1 960	2 047	2 103	2 126	2 115
40	1 313	1 562	1 790	1 995	2 175	2 327	2 451	2 545	2 606
50	-	1 530	1 819	2 087	2 332	2 552	2 747	2 913	3 050
60	-	-	1 777	2 111	2 424	2 716	2 983	3 225	3 439
						•	•		
Current consum	ption in A								
10	3.93	4.82	5.58	6.21	6.71	-	-	-	-
20	5.70	6.62	7.40	8.06	8.59	8.99	9.27	-	-
30	6.67	7.71	8.62	9.40	10.06	10.60	11.01	11.30	11.48
40	6.88	8.14	9.27	10.28	11.16	11.93	12.57	13.10	13.51
50	-	7.96	9.41	10.74	11.94	13.03	14.01	14.86	15.61
60	-	-	9.08	10.82	12.45	13.96	15.36	16.64	17.81
Mass flow in kg/		1	T	T	T	1	1	T	1
10	47	62	79	98	122	-	-	-	-
20	44	58	76	96	119	146	176	-	-
30	38	54	72	92	115	142	172	206	245
40	31	47	65	86	109	136	166	200	238
50	-	38	57	78	101	128	158	191	228
60	-	-	46	67	91	117	147	180	217
Coefficient of pe	erformance (C.0	D.P.)							
10	2.02	2.47	3.06	3.82	4.80	-	-	-	-
20	1.60	1.97	2.40	2.93	3.58	4.39	5.40	-	-
30	1.25	1.56	1.90	2.29	2.75	3.29	3.95	4.74	5.73
40	0.92	1.20	1.48	1.79	2.13	2.51	2.96	3.49	4.11
50	-	0.88	1.12	1.37	1.63	1.91	2.23	2.60	3.02
60	-	-	0.79	0.99	1.20	1.42	1.65	1.92	2.21
		•	•	•	•	•	•	•	•
Nominal perform	nance at to = -1	0 °C, tc = 45 °C				Pressure switch	settings		
					T.				

G.O.F.			

Cooling capacity

Current consumption

Power input

Mass flow

to: Evaporating temperature at dew point tc: Condensing temperature at dew point

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

4 214

2 261

11.59

106 1.86 W

W

Max	imum HP switch setting	27.7	bar(g)
Mini	mum LP switch setting	1	bar(g)
LPp	oump down setting	1.3	bar(g)

Sound power data

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





Maneurop reciprocating compressor. MTZ036-5

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

R449A

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	
Cooling capacity	in W									
10	-	3 190	4 131	5 261	6 600	-	-	-	-	
20	-	2 852	3 751	4 818	6 072	7 533	9 223	-	-	
30	-	2 437	3 286	4 280	5 439	6 781	8 326	10 098	12 122	
40	-	-	2 750	3 663	4 718	5 931	7 322	8 912	10 723	
50	-	-	-	2 981	3 923	5 000	6 228	7 627	9 215	
60	-	-	-	-	3 072	4 004	5 062	6 260	7 616	
Power input in W	1									
10	-	1 293	1 354	1 385	1 383	-	-	-	-	
20	-	1 437	1 551	1 637	1 694	1 718	1 709	-	-	
30	-	1 529	1 699	1 843	1 960	2 047	2 103	2 126	2 115	
40	-	-	1 791	1 995	2 175	2 327	2 452	2 545	2 607	
50	-	-	-	2 087	2 332	2 553	2 747	2 914	3 050	
60	-	-	-	-	2 425	2 716	2 983	3 225	3 440	
Current consump		T	T		T	T		1	T	
10	-	4.83	5.58	6.21	6.71	-	-	-	-	
20	-	6.62	7.40	8.06	8.59	8.99	9.27	-	-	
30	-	7.71	8.62	9.40	10.06	10.60	11.01	11.30	11.48	
40	-	-	9.27	10.28	11.16	11.93	12.57	13.10	13.51	
50	-	-	-	10.74	11.95	13.03	14.01	14.86	15.60	
60	-	-	-	-	12.45	13.96	15.36	16.64	17.81	
Mass flow in kg/h	1									
10	-	54	70	90	113	-	-	-	-	
20	-	51	68	87	111	138	171	-	-	
30	-	47	64	84	107	134	167	204	249	
40	-	-	59	79	102	129	161	198	242	
50	-	-	-	71	95	122	153	190	233	
60	-	-	-	-	85	112	143	179	222	
Coefficient of per	rformance (C.0	O.P.)								
10	-	2.47	3.05	3.80	4.77	-	-	-	-	
20	-	1.98	2.42	2.94	3.59	4.39	5.40	-	-	
30	-	1.59	1.93	2.32	2.78	3.31	3.96	4.75	5.73	
	-	-	1.54	1.84	2.17	2.55	2.99	3.50	4.11	
40		191		1			+			
40 50		_	_	1.43	1.68	1.96	2.27	2.62	3.02	

Nominal performan	ce at to = -10 °C, tc = 45 °C

Cooling capacity	4 329	W
Power input	2 261	W
Current consumption	11.59	Α
Mass flow	98	kg/h
C.O.P.	1.91	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 $^{\circ}\text{C}$, Subcooling = 0 K

Pressure switch settings

Max	imum HP switch setting	27.7	bar(g)
Mini	mum LP switch setting	1	bar(g)
LPp	oump down setting	1.3	bar(g)

Sound power data

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





Maneurop reciprocating compressor. MTZ036-5

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

R449A

Cond. temp. in	Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10		
Cooling capacity	/ in W			•							
10	2 425	3 200	4 147	5 287	6 637	-	-	-	-		
20	2 079	2 828	3 729	4 801	6 064	7 535	9 235	-	-		
30	1 669	2 382	3 226	4 221	5 386	6 740	8 301	10 089	12 122		
40	1 214	1 880	2 658	3 566	4 623	5 848	7 261	8 879	10 723		
50	-	1 341	2 042	2 852	3 791	4 878	6 132	7 571	9 215		
60	-	-	1 396	2 099	2 910	3 849	4 933	6 183	7 616		
Power input in V	v										
10	1 203	1 293	1 354	1 385	1 383	-	-	-	-		
20	1 297	1 437	1 551	1 637	1 694	1 718	1 709	-	-		
30	1 336	1 529	1 699	1 843	1 960	2 047	2 103	2 126	2 115		
40	1 313	1 563	1 791	1 995	2 175	2 327	2 452	2 545	2 607		
50	-	1 530	1 819	2 087	2 332	2 553	2 747	2 914	3 050		
60	-	-	1 778	2 111	2 425	2 716	2 983	3 225	3 440		
<u>'</u>				•	1	1					
Current consum	ption in A										
10	3.93	4.83	5.58	6.21	6.71	-	-	-	-		
20	5.70	6.62	7.40	8.06	8.59	8.99	9.27	-	-		
30	6.67	7.71	8.62	9.40	10.06	10.60	11.01	11.30	11.48		
40	6.88	8.14	9.27	10.28	11.16	11.93	12.57	13.10	13.51		
50	-	7.96	9.41	10.74	11.95	13.03	14.01	14.86	15.60		
60	-	-	9.08	10.83	12.45	13.96	15.36	16.64	17.81		
Mass flow in kg/		1	T			1	ı	ı			
10	48	63	80	101	124	-	-	-	-		
20	44	59	77	98	121	149	180	-	-		
30	39	55	73	94	117	144	175	210	249		
40	32	48	67	88	112	139	169	203	242		
50	-	39	58	80	104	131	161	195	233		
60	-	-	47	69	93	120	150	184	222		
Coefficient of pe	erformance (C.C	D.P.)									
10	2.02	2.47	3.06	3.82	4.80	-	-	-	-		
20	1.60	1.97	2.40	2.93	3.58	4.39	5.40	-	-		
30	1.25	1.56	1.90	2.29	2.75	3.29	3.95	4.74	5.73		
40	0.92	1.20	1.48	1.79	2.13	2.51	2.96	3.49	4.11		
50	-	0.88	1.12	1.37	1.63	1.91	2.23	2.60	3.02		
60	-	-	0.79	0.99	1.20	1.42	1.65	1.92	2.21		
				1			•	•			
Nominal perform	nance at to = -1	0 °C, tc = 45 °C				Pressure switch	settings				
					T.						

Cooling capacity

Current consumption

Power input

Mass flow

to: Evaporating temperature at dew point tc: Condensing temperature at dew point

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

4 214

2 261

11.59

108

W

W

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

Sound power data

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





Maneurop reciprocating compressor. MTZ036-5

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

R452A

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	
Cooling capacity	in W	1	1	1		1		1		
10	-	3 545	4 787	6 301	8 108	-	-	-	-	
20	-	3 105	4 275	5 682	7 347	9 292	11 541	-	-	
30	-	2 537	3 617	4 899	6 404	8 151	10 163	12 465	15 087	
40	-	1 880	2 853	3 994	5 320	6 852	8 609	10 613	12 888	
50	-	-	2 024	3 006	4 138	5 439	6 924	8 613	10 524	
60	-	-	-	1 976	2 901	3 956	5 155	6 514	8 044	
Power input in W										
10	-	1 522	1 606	1 657	1 677	-	-	-	-	
20	-	1 619	1 756	1 857	1 924	1 960	1 966	-	-	
30	-	1 671	1 872	2 034	2 158	2 249	2 306	2 334	2 334	
40	-	1 650	1 927	2 160	2 353	2 509	2 628	2 715	2 770	
50	-	-	1 892	2 208	2 481	2 712	2 905	3 061	3 183	
60	-	-	-	2 150	2 513	2 832	3 108	3 345	3 544	
· ·			•	•		•	1			
Current consump	otion in A									
10	-	9.02	9.86	10.42	10.72	-	-	-	-	
20	-	8.86	9.66	10.24	10.61	10.77	10.72	-	-	
30	-	9.23	10.06	10.72	11.22	11.57	11.77	11.83	11.76	
40	-	9.56	10.49	11.31	12.02	12.63	13.14	13.57	13.92	
50	-	-	10.43	11.47	12.45	13.39	14.29	15.16	16.00	
60	-	-	-	10.66	11.99	13.33	14.69	16.06	17.46	
Mass flow in kg/h		T	100	104	170	T		1		
10	-	76	102	134	172	-	-	-	-	
20	-	70	96	128	166	212	266	-	-	
30	-	62	88	120	158	203	255	318	391	
40	-	51	77	109	146	190	242	302	374	
50	-	-	63	94	130	173	223	282	352	
60	-	-	-	73	109	151	199	256	323	
Coefficient of per	formance (C.0	O.P.)								
10	-	2.33	2.98	3.80	4.83	-	-	-	-	
20	-	1.92	2.44	3.06	3.82	4.74	5.87	-	-	
30	-	1.52	1.93	2.41	2.97	3.63	4.41	5.34	6.46	
40	-	1.14	1.48	1.85	2.26	2.73	3.28	3.91	4.65	
50	-	-	1.07	1.36	1.67	2.01	2.38	2.81	3.31	
60	_	_	-	0.92	1.15	1.40	1.66	1.95	2.27	

Nominal perf	ormance at to	= -10 °C	, tc = 45 °C

Cooling capacity	4 739	W
Power input	2 427	W
Current consumption	12.31	Α
Mass flow	139	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 $^{\circ}\text{C}$, 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 accoustic hood	66	dB(A)





Maneurop reciprocating compressor. MTZ036-5

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

R452A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	/ in W	•							
10	2 470	3 451	4 688	6 203	8 022	-	-	-	-
20	2 042	2 972	4 126	5 527	7 199	9 166	11 452	-	-
30	1 518	2 377	3 427	4 693	6 198	7 967	10 022	12 387	15 087
40	946	1 713	2 639	3 750	5 068	6 617	8 420	10 503	12 888
50	372	1 027	1 810	2 744	3 854	5 164	6 696	8 475	10 524
60	-	367	986	1 724	2 606	3 655	4 895	6 351	8 044
Power input in V	v								
10	1 403	1 522	1 606	1 657	1 677	-	-	-	-
20	1 443	1 619	1 756	1 857	1 924	1 960	1 966	-	-
30	1 428	1 671	1 872	2 034	2 158	2 249	2 306	2 334	2 334
40	1 329	1 650	1 927	2 160	2 353	2 509	2 628	2 715	2 770
50	1 119	1 530	1 892	2 208	2 481	2 712	2 905	3 061	3 183
60	_	1 281	1 740	2 150	2 513	2 832	3 108	3 345	3 544
		•	•	•		1	•	•	•
Current consum	ption in A								
10	7.90	9.02	9.86	10.42	10.72	-	-	-	-
20	7.84	8.86	9.66	10.24	10.61	10.77	10.72	-	-
30	8.22	9.23	10.06	10.72	11.22	11.57	11.77	11.83	11.76
40	8.51	9.56	10.49	11.31	12.02	12.63	13.14	13.57	13.92
50	8.17	9.33	10.43	11.47	12.45	13.39	14.29	15.16	16.00
60	-	7.99	9.33	10.66	11.99	13.33	14.69	16.06	17.46
Maaa flaw in ka	L								
Mass flow in kg/ 10	64	88	116	150	189	_	-	_	_
20	57	81	110	144	183	228	280	_	_
30	47	72	101	135	174	218	269	327	391
40	34	59	89	122	161	205	255	311	374
50	16	42	72	105	143	187	235	290	352
60	-	19	49	82	120	162	210	263	323
00		13	45	02	120	102	210	200	323
Coefficient of pe	rformance (C.0	D.P.)							
10	1.76	2.27	2.92	3.74	4.78	-	-	-	-
20	1.41	1.84	2.35	2.98	3.74	4.68	5.82	-	-
30	1.06	1.42	1.83	2.31	2.87	3.54	4.35	5.31	6.46
40	0.71	1.04	1.37	1.74	2.15	2.64	3.20	3.87	4.65
50	0.33	0.67	0.96	1.24	1.55	1.90	2.30	2.77	3.31
60	-	0.29	0.57	0.80	1.04	1.29	1.58	1.90	2.27
Nominal perforn	nance at to = -1	0 °C, tc = 45 °C			_	Pressure switch	settings		

Mass now		
C O D		

Cooling capacity

Current consumption

Power input

to: Evaporating temperature at dew point tc: Condensing temperature at dew point

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

4 468

2 427

12.31 153

W

W

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

Sound power data

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





