ENGINEERING TOMORROW



Datasheets

# Danfoss Reciprocating compressors MT / MTZ / NTZ





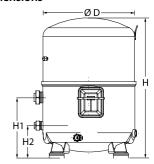


#### Datasheet, technical data

# **General Characteristics**

Model number (on compressor nameplate)	MTZ125HU4VE		
Code number for Singlepack*		MTZ125-4VI	
Code number for Industrial pack**	per for Industrial pack** MTZ125-4		
Drawing number		8504010f	
Suction and discharge connections		Rotolock	
Suction connection		1-3/4 " Rotolock	
Discharge connection		1-1/4 " Rotolock	
Suction connection with supplied sleeve		1-1/8 " ODF	
Discharge connection with supplied sleeve		3/4 " ODF	
Oil sight glass		Threaded	
Oil equalisation connection		3/8" flare SAE	
Oil drain connection		None	
LP gauge port		Schrader	
IPR valve		30 bar / 8 bar	
Cylinders		1	
Swept volume	215.44 (	cm3/rev	
Displacement @ Nominal speed	37.5 m3/h @ 2900 rpm	- 45.2 m3/h @ 3500 rpm	
Net weight	64	kg	
Oil charge	3.9 litre, P0	DE - 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	1	2	
Refrigerant charge limit	10	kg	
Approved refrigerants	R404A, R134a, R407C, R407	7A/F, R448A, R449A, R452A	

#### **Dimensions**



D=352 mm H=519 mm H1=233 mm H2=125 mm H3=- mm

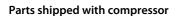
#### **Terminal box**

# **Electrical Characteristics**

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℃	1.57 Ω
Maximum Continuous Current (MCC)	27 A
Locked Rotor Amps (LRA)	105 A
Motor protection	Internal overload protector

**Recommended Installation torques** 

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



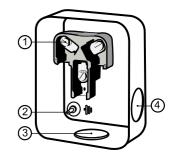
Mounting kit with grommets, bolts, nuts, sleeves and washers Suction & Discharge solder sleeves, rotolock nuts and gaskets (shipped with rotolock version only)

Initial oil charge Installation instructions

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

\*Singlepack: Compressor in cardboard box

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



IP54 (with cable gland)

Screw connectors 10-32 UNF x 9.5 1:

2:

3: Knock-out Ø 29 mm (1.14")

4: Knock-out Ø 25.5 mm (1.00")





# Datasheet, accessories and spare parts

# Maneurop reciprocating compressor, MTZ125-4

6: Nut (4x)

Rotolock accessories, suction side	Code no.	
Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004	
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028	
Gasket, 1-3/4"	8156132	Gaskets, sleeves and nuts
Rotolock accessories, discharge side	Code no.	
Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008	
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029	( ) ODF ( ) ( ) ( )
Gasket, 1-1/4"	8156131	
Rotolock accessories, sets	Code no.	1 2 3
Valve set, V02 (1-3/4"~1-1/8"), V04 (1-1/4"~3/4")	7703009	
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009	1: Gasket
disher see, 17, 17, 17, 1990 gashers black a Wille	0130003	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	
	•	<u> </u>
Crankcase heaters	Code no.	
PTC heater 27W,CE mark, UL	120Z0459	
Belt type crankcase heater, 75 W, 230 V, CE mark, UL	7773108	
Belt type crankcase heater, 75 W, 400 V, CE mark, UL	7773118	Mounting kit
Belt type crankcase heater, 75 W, 460 V, CE mark, UL	120Z0464	
Miscellaneous accessories	Code no.	1
Electronic soft start kit. MCI 25 C	7705007	3
Soft start kit with statoric resistors, prewired box, SCR03	7705007	
Acoustic hood for 4 cylinder compressor	120Z0473	
Oil equalisation nut	8153127	
On equalisation nut	0133127	5
Spare parts	Code no.	6—————————————————————————————————————
Mounting kit for 4 cylinder compressor & MS, including 4 grommets, 4 bolts	8156007	
Oil sight glass with gaskets (black & white)	8156019	
Gasket for oil sight glass (black chloroprene)	8156145	1: Bolt (4x)
Service kit for terminal box 96 x 115 mm, including 1 cover, 1 clamp	8156135	2: Lock washer (4x)
T block connector 52 x 57 mm	8173230	3: Flat washer (4x)
		4: Sleeve (4x)
		5: Grommet (4x)





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 50 Hz, EN 12900 rating conditions

**R407C** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
		•	•			1			•
Cooling capacit	ty in W								
35	13 025	17 106	21 947	27 643	34 289	41 980	50 812	-	-
40	11 788	15 658	20 230	25 599	31 861	39 112	47 445	-	-
45	10 525	14 178	18 476	23 514	29 388	36 192	44 022	-	-
50	-	12 676	16 695	21 396	26 876	33 229	40 551	-	-
55	-	-	14 893	19 254	24 335	30 232	37 040	-	-
60	-	-	-	17 094	21 771	27 208	33 498	-	-
65	-	-	-	14 925	19 194	24 164	29 931	-	-
Power input in	w	ı	•	1	T	_	1	T	•
35	5 760	6 328	6 807	7 209	7 548	7 834	8 081	-	-
40	5 986	6 676	7 265	7 766	8 191	8 552	8 861	-	-
45	6 132	6 965	7 686	8 307	8 840	9 297	9 691	-	-
50	-	7 175	8 050	8 813	9 476	10 051	10 550	-	-
55	-	-	8 336	9 262	10 077	10 791	11 418	-	-
60	-	-	-	9 635	10 622	11 498	12 274	-	-
65	-	-	-	9 911	11 093	12 152	13 099	-	-
Current consur		Т		1	1	_	1	ı	,
35	10.20	10.99	11.67	12.29	12.91	13.58	14.34	-	-
40	10.49	11.43	12.23	12.93	13.58	14.24	14.94	-	-
45	10.62	11.79	12.76	13.60	14.34	15.03	15.74	-	-
50	-	12.01	13.22	14.25	15.14	15.94	16.70	-	-
55	-	-	13.58	14.85	15.95	16.91	17.79	-	-
60	-	-	-	15.37	16.73	17.91	18.97	-	-
65	-	-	-	15.75	17.44	18.90	20.20	-	-
Mass flow in kg								T	
35	283	365	461	571	698	843	1 007	-	-
40	269	351	446	555	680	822	984	-	-
45	254	335	429	537	660	800	959	-	-
50	-	318	410	517	638	776	932	-	-
55	-	-	390	495	614	749	903	-	-
60	-	-	-	470	588	721	871	-	-
65	-	-	-	444	559	689	837	-	-
		).P.)							
Coefficient of p	erformance (C.C			1			6.29	_	-
35	2.26	2.70	3.22	3.83	4.54	5.36	0.29		
	,		3.22 2.78	3.83 3.30	4.54 3.89	5.36 4.57	5.35	-	-
35	2.26	2.70				1	1	-	-
35 40	2.26 1.97	2.70 2.35	2.78	3.30	3.89	4.57	5.35		
35 40 45 50	2.26 1.97 1.72	2.70 2.35 2.04	2.78 2.40 2.07	3.30 2.83 2.43	3.89 3.32 2.84	4.57 3.89 3.31	5.35 4.54 3.84	-	-
35 40 45	2.26 1.97 1.72	2.70 2.35 2.04 1.77	2.78 2.40	3.30 2.83	3.89 3.32	4.57 3.89	5.35 4.54	-	-

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

Cooling capacity	26 876	W
Power input	9 476	W
Current consumption	15.14	Α
Mass flow	638	kg/h
C.O.P.	2.84	

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)	ı
Minimum LP switch setting	1.4	bar(g)	ı
LP pump down setting	1.7	bar(g)	

Sound power data

Soun	d power level	86	dB(A)
With	accoustic hood	80	dB(A)

Tolerance according EN12900





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 50 Hz, ARI rating conditions

**R407C** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
•		•	•	•	•	•	•	•	•
Cooling capacit	y in W								
35	14 020	18 390	23 566	29 648	36 737	44 930	54 328	-	-
40	12 758	16 922	21 834	27 595	34 304	42 062	50 967	-	-
45	11 464	15 418	20 062	25 496	31 822	39 139	47 549	-	-
50	1	13 885	18 257	23 361	29 299	36 172	44 082	-	-
55	1	-	16 427	21 197	26 744	33 170	40 576	-	-
60	1	-	-	19 013	24 166	30 142	37 043	-	-
65	-	-	-	16 819	21 577	27 102	33 497	-	-
Power input in \	N								
35	5 760	6 328	6 807	7 209	7 548	7 834	8 081	-	-
40	5 986	6 676	7 265	7 766	8 191	8 552	8 861	-	-
45	6 132	6 965	7 686	8 307	8 840	9 297	9 691	-	-
50	-	7 175	8 050	8 813	9 476	10 051	10 550	-	-
55	-	-	8 336	9 262	10 077	10 791	11 418	-	-
60	-	-	-	9 635	10 622	11 498	12 274	-	-
65	-	-	-	9 911	11 093	12 152	13 099	-	-
Current consun	nption in A								
35	10.20	10.99	11.67	12.29	12.91	13.58	14.34	-	-
40	10.49	11.43	12.23	12.93	13.58	14.24	14.94	-	-
45	10.62	11.79	12.76	13.60	14.34	15.03	15.74	-	-
50	-	12.01	13.22	14.25	15.14	15.94	16.70	-	-
55	-	-	13.58	14.85	15.95	16.91	17.79	-	-
60	-	-	-	15.37	16.73	17.91	18.97	-	-
65	-	-	-	15.75	17.44	18.90	20.20	-	-
Mass flow in kg	/h								
35	281	363	458	568	694	838	1 000	-	-
40	268	349	443	552	676	817	978	-	-
45	252	333	427	534	656	795	953	-	-
50	-	316	408	514	634	771	926	-	-
55	-	-	388	492	610	745	897	-	-
60	-	-	-	468	584	716	866	-	-
65	-	-	-	442	556	685	832	-	-
Coefficient of p	erformance (C.O	).P.)							
35	2.43	2.91	3.46	4.11	4.87	5.73	6.72	-	-
40	2.13	2.53	3.01	3.55	4.19	4.92	5.75	-	-
45	1.87	2.21	2.61	3.07	3.60	4.21	4.91	-	-
50	-	1.94	2.27	2.65	3.09	3.60	4.18	-	-
55	-	-	1.97	2.29	2.65	3.07	3.55	-	-
			_	1.97	2.27	2.62	3.02	_	_
60	•	-	-	1.97	2.21	2.02	3.02		

Nominal performance at to = 7.2 °C, tc = 54.4 °C	С
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Cooling capacity	29 788	W
Power input	10 325	W
Current consumption	16.28	Α
Mass flow	671	kg/h
C.O.P.	2.89	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

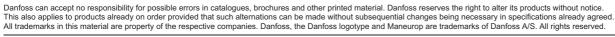
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)	٦
Minimum LP switch setting	1.4	bar(g)	
LP pump down setting	1.7	bar(q)	١

Sound power data

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







# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 50 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
Onellan "	. i \ \								
Cooling capacity		5.407	10 120	12 220	17 150	21.716	27.065	22 277	40.404
35	3 731	5 407	10 130	13 320	17 158	21 716	27 065	33 277	40 424
40	3 197	4 782	9 224	12 224	15 839	20 141	25 200	31 090	37 880
45	2 666	4 156	8 306	11 110	14 496	18 535	23 299	28 860	35 289
50	2 150	3 537	7 384	9 987	13 138	16 909	21 372	26 598	32 659
55	-	-	6 469	8 865	11 775	15 272	19 428	24 314	30 002
60	-	-	-	7 753	10 418	13 635	17 478	22 018	27 327
65 75	-	-	-	-	9 076	12 008	15 532	19 720	24 644
75	-	-	-	-	-	-	11 692	15 159	19 295
Power input in V	v								
35	2 510	3 006	3 954	4 366	4 712	4 970	5 121	5 146	5 023
40	2 547	3 063	4 082	4 545	4 950	5 278	5 509	5 622	5 599
45	2 528	3 071	4 174	4 693	5 164	5 568	5 885	6 094	6 177
50	2 452	3 028	4 227	4 809	5 353	5 840	6 249	6 560	6 754
55	-	-	4 240	4 891	5 515	6 090	6 598	7 017	7 330
60	-	-	-	4 938	5 647	6 317	6 930	7 465	7 902
65	-	-	-	-	5 747	6 520	7 244	7 900	8 468
75	-	-	-	-	-	-	7 809	8 727	9 576
Current consum	•	T	T	1	_	1		1	1
35	6.68	7.17	8.13	8.55	8.91	9.20	9.39	9.47	9.41
40	6.69	7.21	8.25	8.74	9.18	9.55	9.84	10.03	10.10
45	6.65	7.20	8.35	8.91	9.43	9.90	10.30	10.61	10.82
50	6.54	7.14	8.41	9.05	9.66	10.24	10.75	11.19	11.54
55	-	-	8.43	9.15	9.87	10.55	11.20	11.77	12.27
60	-	-	-	9.22	10.04	10.85	11.62	12.35	13.00
65	-	-	-	-	10.18	11.12	12.03	12.91	13.73
75	-	-	-	-	-	-	12.76	13.97	15.14
Mass flow in kg/	h								
35	95	135	241	310	390	484	592	716	857
40	86	126	231	299	378	471	578	701	840
45	76	115	219	286	365	456	562	683	820
50	66	104	207	272	350	440	544	663	799
55	-	-	193	257	333	422	524	641	775
60	-	_	-	240	315	401	502	617	748
65	-	-	-	-	295	380	478	591	720
75	-	-	-	-	-	-	424	532	655
L				1		1			
Coefficient of pe	•	1		1 0		1 ,		0 :-	T
35	1.49	1.80	2.56	3.05	3.64	4.37	5.28	6.47	8.05
40	1.26	1.56	2.26	2.69	3.20	3.82	4.57	5.53	6.77
45	1.05	1.35	1.99	2.37	2.81	3.33	3.96	4.74	5.71
50	0.88	1.17	1.75	2.08	2.45	2.90	3.42	4.05	4.84
55	-	-	1.53	1.81	2.14	2.51	2.94	3.46	4.09
60	-	-	-	1.57	1.84	2.16	2.52	2.95	3.46
65	-	-	-	-	1.58	1.84	2.14	2.50	2.91
75	-	-	-	-	-	-	1.50	1.74	2.01

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

	•• •	
Cooling capacity	16 909	W
Power input	5 840	W
Current consumption	10.24	Α
Mass flow	440	kg/h
C.O.P.	2.90	

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	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





# Maneurop reciprocating compressor. MTZ125-4

# 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
35	y in W 4 056	5 867	10 953	14 379	18 493	23 371	29 086	35 713	43 326
		1	10 953	†		1			
40	3 495	5 218		13 263	17 156	21 779	27 206	33 514	40 775
45	2 935	4 564	9 082	12 124	15 788	20 150	25 284	31 266	38 170
50	-	3 914	8 130	10 970	14 400	18 495	23 330	28 981	35 522
55	-	-	7 180	9 813	13 002	16 825	21 355	26 669	32 841
60	-	-	-	8 662	11 605	15 149	19 369	24 341	30 140
65 75	<u>-</u>	-	-	-	-	13 478	17 382 13 454	22 007 17 373	27 429 22 031
75		_	_	-	-		13 434	17 373	22 031
ower input in V	V			1	1	ı		1	1
35	2 510	3 006	3 954	4 366	4 712	4 970	5 121	5 146	5 023
40	2 547	3 063	4 082	4 545	4 950	5 278	5 509	5 622	5 599
45	2 528	3 071	4 174	4 693	5 164	5 568	5 885	6 094	6 177
50	-	3 028	4 227	4 809	5 353	5 840	6 249	6 560	6 754
55	-	-	4 240	4 891	5 515	6 090	6 598	7 017	7 330
60	-	-	-	4 938	5 647	6 317	6 930	7 465	7 902
65	-	-	-	-	-	6 520	7 244	7 900	8 468
75	-	-	-	-	-	-	7 809	8 727	9 576
Current consum	ention in A								
35	6.68	7.17	8.13	8.55	8.91	9.20	9.39	9.47	9.41
40	6.69	7.21	8.25	8.74	9.18	9.55	9.84	10.03	10.10
45	6.65	7.20	8.35	8.91	9.43	9.90	10.30	10.61	10.82
50	-	7.14	8.41	9.05	9.66	10.24	10.75	11.19	11.54
55	-	-	8.43	9.15	9.87	10.55	11.20	11.77	12.27
60	_	_	-	9.22	10.04	10.85	11.62	12.35	13.00
65	-	_	_	-	-	11.12	12.03	12.91	13.73
75	_	_	_	_	_	-	12.76	13.97	15.14
-					l.	1			
lass flow in kg/	/h			1	1	·	1		1
35	94	134	240	308	388	482	589	712	852
40	85	125	230	297	377	469	575	697	835
45	76	115	218	285	363	454	559	679	816
50	-	104	206	271	348	438	541	659	794
55	-	-	192	256	331	419	521	638	770
60	-	-	-	239	313	399	499	614	744
65	-	-	-	-	-	378	475	587	715
75	-	-	-	-	-	-	421	529	651
Coefficient of pe	erformance (C.C	).P.)							
35	1.62	1.95	2.77	3.29	3.92	4.70	5.68	6.94	8.62
40	1.37	1.70	2.46	2.92	3.47	4.13	4.94	5.96	7.28
45	1.16	1.49	2.18	2.58	3.06	3.62	4.30	5.13	6.18
50	-	1.29	1.92	2.28	2.69	3.17	3.73	4.42	5.26
55	-	-	1.69	2.01	2.36	2.76	3.24	3.80	4.48
60	-	-	-	1.75	2.06	2.40	2.79	3.26	3.81
65	-	-	-	-	-	2.07	2.40	2.79	3.24
75	_	-	-	-	-	-	1.72	1.99	2.30

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

Nominal performance at to 7.2 0, to	U-1T U	
Cooling capacity	18 943	W
Power input	6 289	W
Current consumption	10.80	Α
Mass flow	465	kg/h
C.O.P.	3.01	

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. MTZ125-4

# Performance data at 50 Hz, EN 12900 rating conditions

**R404A** 

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Caaling assasis									
Cooling capacit	7 283	9 943	13 245	17 267	22 089	27 791	34 451	42 148	50 963
35	6 328	8 755	11 770	15 453	19 884	25 142	31 306	38 455	46 669
40	5 457	7 649	10 377	13 721	17 760	22 574	28 242	34 842	42 455
45	4 660	6 616	9 057	12 061	15 708	20 078	25 248	31 300	38 311
50	3 927	5 648	7 800	10 464	13 719	17 643	22 316	27 818	34 227
55	-	4 734	6 598	8 921	11 782	15 261	19 436	24 387	30 194
60		3 865	5 440	7 422	9 889	12 922	16 599	20 999	26 202
00		3 003	3 440	7 422	9 009	12 922	10 399	20 999	20 202
Power input in \	N				•				
30	5 064	5 716	6 320	6 867	7 350	7 764	8 100	8 351	8 510
35	5 125	5 849	6 533	7 168	7 748	8 266	8 714	9 086	9 374
40	5 154	5 949	6 711	7 433	8 108	8 729	9 289	9 780	10 195
45	5 159	6 023	6 863	7 671	8 439	9 162	9 831	10 440	10 981
50	5 147	6 079	6 995	7 887	8 747	9 570	10 348	11 073	11 740
55	-	6 124	7 114	8 088	9 040	9 962	10 847	11 687	12 477
60	-	6 164	7 228	8 284	9 325	10 344	11 335	12 289	13 201
Current consum	nption in A								
30	9.46	10.24	11.02	11.76	12.43	13.00	13.45	13.75	13.87
35	9.55	10.40	11.26	12.10	12.88	13.59	14.19	14.65	14.94
40	9.61	10.54	11.49	12.44	13.34	14.19	14.93	15.56	16.03
45	9.63	10.65	11.70	12.76	13.79	14.78	15.68	16.48	17.14
50	9.61	10.72	11.87	13.05	14.22	15.35	16.42	17.40	18.25
55	-	10.73	11.99	13.30	14.61	15.90	17.14	18.30	19.36
60	-	10.67	12.05	13.49	14.95	16.40	17.82	19.18	20.44
Mass flow in kg/	/h								
30	229	306	398	505	630	774	939	1 126	1 338
35	214	289	378	483	605	746	908	1 093	1 301
40	201	273	359	461	581	719	878	1 059	1 263
45	188	258	341	440	557	692	847	1 025	1 226
50	176	243	324	420	533	665	817	991	1 189
55	-	230	308	401	511	639	788	958	1 152
60	-	218	292	382	489	614	759	926	1 116
Coefficient of pe	erformance (C.O	).P.)							
30	1.44	1.74	2.10	2.51	3.01	3.58	4.25	5.05	5.99
35	1.23	1.50	1.80	2.16	2.57	3.04	3.59	4.23	4.98
40	1.06	1.29	1.55	1.85	2.19	2.59	3.04	3.56	4.16
45	0.90	1.10	1.32	1.57	1.86	2.19	2.57	3.00	3.49
50	0.76	0.93	1.12	1.33	1.57	1.84	2.16	2.51	2.92
									0.40
55	-	0.77	0.93	1.10	1.30	1.53	1.79	2.09	2.42

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

Cooling capacity	15 708	W
Power input	8 439	W
Current consumption	13.79	Α
Mass flow	557	kg/h
C.O.P.	1.86	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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



Pressure switch settings

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

Sound power data

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

Tolerance according EN12900





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 50 Hz, ARI rating conditions

**R404A** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacit						T			
30	8 108	11 039	14 666	19 073	24 344	30 560	37 806	46 162	55 712
35	7 121	9 819	13 161	17 231	22 113	27 890	34 646	42 462	51 423
40	6 221	8 686	11 743	15 476	19 969	25 307	31 574	38 853	47 226
45	5 401	7 633	10 404	13 800	17 906	22 806	28 586	35 329	43 119
50	4 652	6 651	9 138	12 197	15 917	20 383	25 680	31 893	39 106
55	-	5 736	7 939	10 666	14 005	18 041	22 863	28 554	35 202
60	-	4 886	6 812	9 213	12 179	15 798	20 159	25 349	31 453
Power input in \	N								
30	5 064	5 716	6 320	6 867	7 350	7 764	8 100	8 351	8 510
35	5 125	5 849	6 533	7 168	7 748	8 266	8 714	9 086	9 374
40	5 154	5 949	6 711	7 433	8 108	8 729	9 289	9 780	10 195
45	5 159	6 023	6 863	7 671	8 439	9 162	9 831	10 440	10 981
50	5 147	6 079	6 995	7 887	8 747	9 570	10 348	11 073	11 740
55	-	6 124	7 114	8 088	9 040	9 962	10 847	11 687	12 477
60	-	6 164	7 228	8 284	9 325	10 344	11 335	12 289	13 201
Current consum	nption in A			1	1				
30	9.46	10.24	11.02	11.76	12.43	13.00	13.45	13.75	13.87
35	9.55	10.40	11.26	12.10	12.88	13.59	14.19	14.65	14.94
40	9.61	10.54	11.49	12.44	13.34	14.19	14.93	15.56	16.03
45	9.63	10.65	11.70	12.76	13.79	14.78	15.68	16.48	17.14
50	9.61	10.72	11.87	13.05	14.22	15.35	16.42	17.40	18.25
55	-	10.73	11.99	13.30	14.61	15.90	17.14	18.30	19.36
60	-	10.67	12.05	13.49	14.95	16.40	17.82	19.18	20.44
Mass flow in kg	/h								
30	228	304	395	502	626	769	933	1 119	1 329
35	213	288	376	480	602	742	903	1 085	1 292
40	200	271	357	459	577	715	872	1 052	1 255
45	187	256	339	438	553	688	842	1 018	1 218
50	175	242	322	418	530	661	812	985	1 181
55	-	229	306	398	508	635	783	952	1 144
60	-	217	291	380	486	610	754	920	1 108
Coefficient of pe	erformance (C.C	).P.)							
30	1.60	1.93	2.32	2.78	3.31	3.94	4.67	5.53	6.55
35	1.39	1.68	2.01	2.40	2.85	3.37	3.98	4.67	5.49
40	1.21	1.46	1.75	2.08	2.46	2.90	3.40	3.97	4.63
45	1.05	1.27	1.52	1.80	2.12	2.49	2.91	3.38	3.93
50	0.90	1.09	1.31	1.55	1.82	2.13	2.48	2.88	3.33
55	-	0.94	1.12	1.32	1.55	1.81	2.11	2.44	2.82

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

Cooling capacity	17 906	W
Power input	8 439	W
Current consumption	13.79	Α
Mass flow	553	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

27.7	bar(g)
1	bar(g)
1.3	bar(g)
	1

Sound power data

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

Tolerance according EN12900





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 50 Hz, EN 12900 rating conditions

**R407A** 

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	
					<u> </u>					
Cooling capacity 30	7 <b>in W</b> 5 389	7 889	10 980	14 742	19 253	24 591	30 834	38 061	46 350	
	4 604	6 944	1	1	1	+	1	1	1	
35 40		6 021	9 839	13 367 11 999	17 605 15 959	22 633 20 671	28 529 26 212	35 370	43 236 40 097	
45	3 845 3 126	5 129	8 712 7 611	10 651	14 326	18 714	23 894	32 661 29 945	36 944	
50	3 120	4 281					1			
55	<u>-</u>	- 4 281	6 547	9 332	12 715	16 774	21 587	27 233	33 789 30 642	
60		-	5 531	8 056	11 140	14 863 12 991	19 302 17 050	24 536 21 865	<del> </del>	
60	-	-	-	6 831	9 611	12 991	17 050	21 000	27 516	
Power input in V	٧					_				
30	3 833	4 527	5 183	5 788	6 332	6 801	7 184	7 468	7 642	
35	3 810	4 573	5 308	6 002	6 643	7 220	7 720	8 130	8 440	
40	3 749	4 583	5 397	6 181	6 921	7 606	8 223	8 760	9 207	
45	3 654	4 559	5 455	6 328	7 168	7 962	8 697	9 363	9 946	
50	-	4 507	5 484	6 449	7 389	8 293	9 148	9 942	10 663	
55	-	-	5 490	6 547	7 588	8 602	9 578	10 501	11 362	
60	-	-	-	6 626	7 770	8 895	9 991	11 046	12 046	
Current consum	ption in A	T	1	1	1	<b>T</b>	1	1	1	
30	8.46	9.21	9.97	10.70	11.37	11.96	12.43	12.75	12.89	
35	8.52	9.31	10.12	10.93	11.71	12.42	13.04	13.53	13.87	
40	8.57	9.40	10.28	11.17	12.06	12.90	13.67	14.34	14.88	
45	8.58	9.46	10.41	11.40	12.40	13.38	14.31	15.17	15.91	
50	-	9.48	10.50	11.59	12.71	13.84	14.94	15.98	16.94	
55	-	-	10.53	11.73	12.98	14.26	15.53	16.77	17.95	
60	-	-	-	11.80	13.18	14.62	16.07	17.52	18.92	
Mass flow in kg/	h									
30	128	185	252	332	425	534	659	801	963	
35	116	171	238	316	409	516	640	781	942	
40	102	157	222	300	391	497	619	759	918	
45	89	142	206	283	372	477	598	736	893	
50	-	127	190	264	352	455	574	711	866	
55	-	-	173	246	332	433	550	685	838	
60	-	-	-	226	311	410	525	657	808	
Coefficient of pe	rformance (C.Ω	).P.)								
30	1.41	1.74	2.12	2.55	3.04	3.62	4.29	5.10	6.06	
35	1.21	1.52	1.85	2.23	2.65	3.13	3.70	4.35	5.12	
40	1.03	1.31	1.61	1.94	2.31	2.72	3.19	3.73	4.36	
45	0.86	1.12	1.40	1.68	2.00	2.35	2.75	3.20	3.71	
50	-	0.95	1.19	1.45	1.72	2.02	2.36	2.74	3.17	
		-	1.01	1.23	1.47	1.73	2.02	2.34	2.70	
55	-	-								

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

Cooling capacity	14 326	W
Power input	7 168	W
Current consumption	12.40	Α
Mass flow	372	kg/h
C.O.P.	2.00	

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	83	dB(A)
With accoustic hood	77	dB(A)

Tolerance according EN12900





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 50 Hz, ARI rating conditions

**R407A** 

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	
Cooling capacity		0.540	44.044	45.077	20.700	20.447	22.004	40.700	40.000	
30	5 829	8 519	11 841	15 877	20 708	26 417	33 084	40 792	49 622	
35	5 009	7 542	10 670	14 474	19 036	24 439	30 764	38 093	46 508	
40	4 213	6 583	9 509	13 075	17 361	22 452	28 428	35 373	43 368	
45	3 453	5 653	8 371	11 691	15 696	20 468	26 091	32 646	40 216	
50	-	4 764	7 268	10 337	14 053	18 502	23 765	29 925	37 066	
55	-	-	6 211	9 023	12 446	16 565	21 465	27 227	33 936	
60	-	-	-	7 763	10 888	14 675	19 208	24 571	30 848	
Power input in W	ı									
30	3 833	4 527	5 183	5 788	6 332	6 801	7 184	7 468	7 642	
35	3 810	4 573	5 308	6 002	6 643	7 220	7 720	8 130	8 440	
40	3 749	4 583	5 397	6 181	6 921	7 606	8 223	8 760	9 207	
45	3 654	4 559	5 455	6 328	7 168	7 962	8 697	9 363	9 946	
50	-	4 507	5 484	6 449	7 389	8 293	9 148	9 942	10 663	
55	-	-	5 490	6 547	7 588	8 602	9 578	10 501	11 362	
60	-	-	-	6 626	7 770	8 895	9 991	11 046	12 046	
Current consum	ption in A	_	1	T	T		1	1	1	
30	8.46	9.21	9.97	10.70	11.37	11.96	12.43	12.75	12.89	
35	8.52	9.31	10.12	10.93	11.71	12.42	13.04	13.53	13.87	
40	8.57	9.40	10.28	11.17	12.06	12.90	13.67	14.34	14.88	
45	8.58	9.46	10.41	11.40	12.40	13.38	14.31	15.17	15.91	
50	-	9.48	10.50	11.59	12.71	13.84	14.94	15.98	16.94	
55	-	-	10.53	11.73	12.98	14.26	15.53	16.77	17.95	
60	-	-	-	11.80	13.18	14.62	16.07	17.52	18.92	
Mass flow in kg/l	h									
30	127	184	251	330	423	531	655	797	957	
35	115	170	236	315	407	513	636	777	936	
40	102	156	221	298	389	494	616	755	913	
45	89	142	205	281	370	474	594	732	888	
50	-	127	189	263	351	453	571	707	861	
55	-	-	172	244	330	430	547	681	833	
60	-	-	-	225	309	407	522	653	803	
Coefficient of no	rformance (C.C	\ D \								
30	1.52	1.88	2.28	2.74	3.27	3.88	4.61	5.46	6.49	
35	1.31	1.65	2.26	2.74	2.87	3.38	3.99	4.69	5.51	
40	1.12	1.44	1.76	2.41	2.51	2.95	3.46	4.09	4.71	
45	0.94	1.44	1.76	1.85	2.51	2.95	3.46	3.49	4.71	
50	- 0.94	1.06	1.33	1.60	1.90	2.23	2.60	3.49	3.48	
+	-	1.06	1	1.60	1.64	+	2.60	2.59	2.99	
55	-		1.13			1.93	1		1	
60	-	-	-	1.17	1.40	1.65	1.92	2.22	2.56	

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

Cooling capacity	15 696	W
Power input	7 168	W
Current consumption	12.40	Α
Mass flow	370	kg/h
C.O.P.	2.19	

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	83	dB(A)
With accoustic hood	77	dB(A)

Tolerance according EN12900





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 50 Hz, EN 12900 rating conditions

**R407F** 

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity		1	T	T	T		T	T	
30	-	8 577	12 060	16 303	21 402	27 448	34 536	42 760	52 213
35	-	7 354	10 501	14 344	18 977	24 493	30 987	38 551	47 280
40	-	6 350	9 213	12 709	16 929	21 968	27 919	34 877	42 934
45	-	5 522	8 155	11 355	15 216	19 830	25 292	31 696	39 135
50	-	-	7 285	10 242	13 795	18 038	23 064	28 966	35 839
55	-	-	-	9 327	12 626	16 549	21 191	26 645	33 004
60	-	-	-	-	-	-	-	-	-
Power input in W		4.040	F 40F	C 115	0.070	7.420	7.404	7.004	7.570
30	-	4 819	5 485	6 115	6 678 7 007	7 138	7 464	7 621	7 576
35	-	4 889	5 617	6 334		7 602	8 087	8 428	8 592
40	-	4 964	5 740	6 530	7 299	8 016	8 647	9 158	9 517
45	-	5 069	5 879	6 728	7 581	8 406	9 169	9 837	10 376
50	-	-	6 060	6 954	7 877	8 796	9 677	10 488	11 196
55	-	-	-	7 233	8 212	9 211	10 198	11 138	12 000
60	-	-	-	-	-	-	-	-	-
Current consump	tion in A								
30		9.22	10.03	10.82	11.54	12.15	12.61	12.87	12.88
35	_	9.44	10.30	11.16	11.99	12.74	13.37	13.82	14.06
40	_	9.57	10.49	11.44	12.39	13.28	14.08	14.73	15.20
45		9.65	10.63	11.68	12.75	13.80	14.78	15.65	16.36
50	_	-	10.78	11.93	13.13	14.34	15.51	16.60	17.55
55	_	_	-	12.23	13.57	14.94	16.31	17.62	18.84
60	-	_	-	-	-	-	-	-	-
00		1	I	l	l	I	I	I	1
Mass flow in kg/h									
30	-	177	246	327	423	535	665	814	983
35	-	160	224	302	393	500	623	766	928
40	-	145	207	281	368	470	589	726	882
45	-	134	193	264	349	447	562	694	845
50	-	-	184	253	335	431	542	670	817
55	_	-	-	246	327	421	530	655	798
60	-	-	-	-	-	-	-	-	-
<u>'</u>		•	•	•	•	•	•		•
Coefficient of per	ormance (C.C	D.P.)							
30	-	1.78	2.20	2.67	3.20	3.85	4.63	5.61	6.89
35	-	1.50	1.87	2.26	2.71	3.22	3.83	4.57	5.50
40	-	1.28	1.61	1.95	2.32	2.74	3.23	3.81	4.51
45	-	1.09	1.39	1.69	2.01	2.36	2.76	3.22	3.77
50	-	-	1.20	1.47	1.75	2.05	2.38	2.76	3.20
		_	-	1.29	1.54	1.80	2.08	2.39	2.75
55	-	_	_	1.20					

Nominal performance at to = -10 °C, tc = 45 °C	3
------------------------------------------------	---

Cooling capacity	15 216	W
Power input	7 581	W
Current consumption	12.75	Α
Mass flow	349	kg/h
C.O.P.	2.01	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

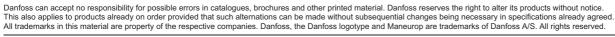
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

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

Sound power data

Sound power level	83	dB(A)
With accoustic hood	77	dB(A)







# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 50 Hz, ARI rating conditions

**R407F** 

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
			•		•				
Cooling capacity	in W	•	•		•		•	1	1
30	-	9 192	12 912	17 438	22 869	29 303	36 837	45 570	55 598
35	-	7 919	11 294	15 410	20 366	26 259	33 188	41 252	50 546
40	-	6 874	9 962	13 724	18 259	23 668	30 047	37 496	46 113
45	-	6 017	8 873	12 337	16 509	21 488	27 374	34 265	42 261
50	-	-	7 986	11 210	15 076	19 684	25 134	31 525	38 956
55	-	-	-	10 304	13 924	18 220	23 293	29 244	36 173
60	-	-	-	-	-	-	-	-	-
Power input in W	,								
30	-	4 819	5 485	6 115	6 678	7 138	7 464	7 621	7 576
35	-	4 889	5 617	6 334	7 007	7 602	8 087	8 428	8 592
40	-	4 964	5 740	6 530	7 299	8 016	8 647	9 158	9 517
45	-	5 069	5 879	6 728	7 581	8 406	9 169	9 837	10 376
50	-	-	6 060	6 954	7 877	8 796	9 677	10 488	11 196
55	-	-	-	7 233	8 212	9 211	10 198	11 138	12 000
60	-	-	-	-	-	-	-	_	-
•		-	•	1	•	1	•		•
Current consump		T	1		1		1	T	1
30	-	9.22	10.03	10.82	11.54	12.15	12.61	12.87	12.88
35	-	9.44	10.30	11.16	11.99	12.74	13.37	13.82	14.06
40	-	9.57	10.49	11.44	12.39	13.28	14.08	14.73	15.20
45	-	9.65	10.63	11.68	12.75	13.80	14.78	15.65	16.36
50	-	-	10.78	11.93	13.13	14.34	15.51	16.60	17.55
55	-	-	-	12.23	13.57	14.94	16.31	17.62	18.84
60	-	-	-	-	-	-	-	-	-
Mass flow in kg/h	ı								
30	-	176	244	325	421	532	661	809	976
35	-	159	223	300	391	497	620	761	922
40	-	144	206	279	366	467	585	721	876
45	-	133	192	263	347	445	559	690	840
50	-	-	183	252	333	428	539	666	812
55	-	-	-	245	325	418	526	651	793
60	-	-	-	-	-	-	-	-	-
0									
Coefficient of per	тоrmance (С.	0. <b>P.)</b> 1.91	2.35	2.85	3.42	4.11	4.94	5.98	7.34
35	-	1.62	2.35	2.85	2.91	3.45	4.94	4.89	5.88
40	-	+		+	1		1	4.89	4.85
	-	1.38	1.74	2.10	2.50	2.95	3.47		
45	-	1.19	1.51	1.83	2.18	2.56	2.99	3.48	4.07
50	-	-	1.32	1.61	1.91	2.24	2.60	3.01	3.48
55	-	-	-	1.42	1.70	1.98	2.28	2.63	3.01
60	-	-	-	-	-	-	-	-	-

Nominal performance at to = -10 °C, tc = 45 °C	3
------------------------------------------------	---

Cooling capacity	16 509	W
Power input	7 581	W
Current consumption	12.75	Α
Mass flow	347	kg/h
C.O.P.	2.18	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

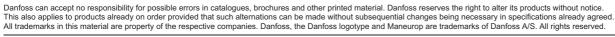
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

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	83	dB(A)
With accoustic hood	77	dB(A)







# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 50 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
Onellan "	. i \ \								
Cooling capacity		5.407	10 120	12 220	17 150	21.716	27.065	22 277	40.404
35	3 731	5 407	10 130	13 320	17 158	21 716	27 065	33 277	40 424
40	3 197	4 782	9 224	12 224	15 839	20 141	25 200	31 090	37 880
45	2 666	4 156	8 306	11 110	14 496	18 535	23 299	28 860	35 289
50	2 150	3 537	7 384	9 987	13 138	16 909	21 372	26 598	32 659
55	-	-	6 469	8 865	11 775	15 272	19 428	24 314	30 002
60	-	-	-	7 753	10 418	13 635	17 478	22 018	27 327
65 75	-	-	-	-	9 076	12 008	15 532	19 720	24 644
75	-	-	-	-	-	-	11 692	15 159	19 295
Power input in V	v								
35	2 510	3 006	3 954	4 366	4 712	4 970	5 121	5 146	5 023
40	2 547	3 063	4 082	4 545	4 950	5 278	5 509	5 622	5 599
45	2 528	3 071	4 174	4 693	5 164	5 568	5 885	6 094	6 177
50	2 452	3 028	4 227	4 809	5 353	5 840	6 249	6 560	6 754
55	-	-	4 240	4 891	5 515	6 090	6 598	7 017	7 330
60	-	-	-	4 938	5 647	6 317	6 930	7 465	7 902
65	-	-	-	-	5 747	6 520	7 244	7 900	8 468
75	-	-	-	-	-	-	7 809	8 727	9 576
Current consum	•	T	T	1	_	1		1	1
35	6.68	7.17	8.13	8.55	8.91	9.20	9.39	9.47	9.41
40	6.69	7.21	8.25	8.74	9.18	9.55	9.84	10.03	10.10
45	6.65	7.20	8.35	8.91	9.43	9.90	10.30	10.61	10.82
50	6.54	7.14	8.41	9.05	9.66	10.24	10.75	11.19	11.54
55	-	-	8.43	9.15	9.87	10.55	11.20	11.77	12.27
60	-	-	-	9.22	10.04	10.85	11.62	12.35	13.00
65	-	-	-	-	10.18	11.12	12.03	12.91	13.73
75	-	-	-	-	-	-	12.76	13.97	15.14
Mass flow in kg/	h								
35	95	135	241	310	390	484	592	716	857
40	86	126	231	299	378	471	578	701	840
45	76	115	219	286	365	456	562	683	820
50	66	104	207	272	350	440	544	663	799
55	-	-	193	257	333	422	524	641	775
60	_	_	-	240	315	401	502	617	748
65	-	-	-	-	295	380	478	591	720
75	-	-	-	-	-	-	424	532	655
L				1		1			
Coefficient of pe	•	1		1 0		1 ,		0 :-	T
35	1.49	1.80	2.56	3.05	3.64	4.37	5.28	6.47	8.05
40	1.26	1.56	2.26	2.69	3.20	3.82	4.57	5.53	6.77
45	1.05	1.35	1.99	2.37	2.81	3.33	3.96	4.74	5.71
50	0.88	1.17	1.75	2.08	2.45	2.90	3.42	4.05	4.84
55	-	-	1.53	1.81	2.14	2.51	2.94	3.46	4.09
60	-	-	-	1.57	1.84	2.16	2.52	2.95	3.46
65	-	-	-	-	1.58	1.84	2.14	2.50	2.91
75	-	-	-	-	-	-	1.50	1.74	2.01

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

	•• •	
Cooling capacity	16 909	W
Power input	5 840	W
Current consumption	10.24	Α
Mass flow	440	kg/h
C.O.P.	2.90	

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	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





# Maneurop reciprocating compressor. MTZ125-4

# 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
35	y in W 4 056	5 867	10 953	14 379	18 493	23 371	29 086	35 713	43 326
		1	10 953	†		1			
40	3 495	5 218		13 263	17 156	21 779	27 206	33 514	40 775
45	2 935	4 564	9 082	12 124	15 788	20 150	25 284	31 266	38 170
50	-	3 914	8 130	10 970	14 400	18 495	23 330	28 981	35 522
55	-	-	7 180	9 813	13 002	16 825	21 355	26 669	32 841
60	-	-	-	8 662	11 605	15 149	19 369	24 341	30 140
65 75	<u>-</u>	-	-	-	-	13 478	17 382 13 454	22 007 17 373	27 429 22 031
75		_	_	-	-		13 434	17 373	22 031
ower input in V	V			1	1	ı		1	1
35	2 510	3 006	3 954	4 366	4 712	4 970	5 121	5 146	5 023
40	2 547	3 063	4 082	4 545	4 950	5 278	5 509	5 622	5 599
45	2 528	3 071	4 174	4 693	5 164	5 568	5 885	6 094	6 177
50	-	3 028	4 227	4 809	5 353	5 840	6 249	6 560	6 754
55	-	-	4 240	4 891	5 515	6 090	6 598	7 017	7 330
60	-	-	-	4 938	5 647	6 317	6 930	7 465	7 902
65	-	-	-	-	-	6 520	7 244	7 900	8 468
75	-	-	-	-	-	-	7 809	8 727	9 576
Current consum	ention in A								
35	6.68	7.17	8.13	8.55	8.91	9.20	9.39	9.47	9.41
40	6.69	7.21	8.25	8.74	9.18	9.55	9.84	10.03	10.10
45	6.65	7.20	8.35	8.91	9.43	9.90	10.30	10.61	10.82
50	-	7.14	8.41	9.05	9.66	10.24	10.75	11.19	11.54
55	-	-	8.43	9.15	9.87	10.55	11.20	11.77	12.27
60	_	_	-	9.22	10.04	10.85	11.62	12.35	13.00
65	-	_	_	-	-	11.12	12.03	12.91	13.73
75	_	_	_	_	_	-	12.76	13.97	15.14
-					l.	1			
lass flow in kg/	/h			1	1	·	1		1
35	94	134	240	308	388	482	589	712	852
40	85	125	230	297	377	469	575	697	835
45	76	115	218	285	363	454	559	679	816
50	-	104	206	271	348	438	541	659	794
55	-	-	192	256	331	419	521	638	770
60	-	-	-	239	313	399	499	614	744
65	-	-	-	-	-	378	475	587	715
75	-	-	-	-	-	-	421	529	651
Coefficient of pe	erformance (C.C	).P.)							
35	1.62	1.95	2.77	3.29	3.92	4.70	5.68	6.94	8.62
40	1.37	1.70	2.46	2.92	3.47	4.13	4.94	5.96	7.28
45	1.16	1.49	2.18	2.58	3.06	3.62	4.30	5.13	6.18
50	-	1.29	1.92	2.28	2.69	3.17	3.73	4.42	5.26
55	-	-	1.69	2.01	2.36	2.76	3.24	3.80	4.48
60	-	-	-	1.75	2.06	2.40	2.79	3.26	3.81
65	-	-	-	-	-	2.07	2.40	2.79	3.24
75	_	-	-	-	-	-	1.72	1.99	2.30

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

Nominal performance at to 7.2 0, to	U-1T U	
Cooling capacity	18 943	W
Power input	6 289	W
Current consumption	10.80	Α
Mass flow	465	kg/h
C.O.P.	3.01	

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. MTZ125-4

# Performance data at 50 Hz, EN 12900 rating conditions

**R407C** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
		•	•			1			•
Cooling capacit	ty in W								
35	13 025	17 106	21 947	27 643	34 289	41 980	50 812	-	-
40	11 788	15 658	20 230	25 599	31 861	39 112	47 445	-	-
45	10 525	14 178	18 476	23 514	29 388	36 192	44 022	-	-
50	-	12 676	16 695	21 396	26 876	33 229	40 551	-	-
55	-	-	14 893	19 254	24 335	30 232	37 040	-	-
60	-	-	-	17 094	21 771	27 208	33 498	-	-
65	-	-	-	14 925	19 194	24 164	29 931	-	-
Power input in	w	ı	•	1	•	_	1	T	•
35	5 760	6 328	6 807	7 209	7 548	7 834	8 081	-	-
40	5 986	6 676	7 265	7 766	8 191	8 552	8 861	-	-
45	6 132	6 965	7 686	8 307	8 840	9 297	9 691	-	-
50	-	7 175	8 050	8 813	9 476	10 051	10 550	-	-
55	-	-	8 336	9 262	10 077	10 791	11 418	-	-
60	-	-	-	9 635	10 622	11 498	12 274	-	-
65	-	-	-	9 911	11 093	12 152	13 099	-	-
Current consur		Т		1	1	_	1	ı	,
35	10.20	10.99	11.67	12.29	12.91	13.58	14.34	-	-
40	10.49	11.43	12.23	12.93	13.58	14.24	14.94	-	-
45	10.62	11.79	12.76	13.60	14.34	15.03	15.74	-	-
50	-	12.01	13.22	14.25	15.14	15.94	16.70	-	-
55	-	-	13.58	14.85	15.95	16.91	17.79	-	-
60	-	-	-	15.37	16.73	17.91	18.97	-	-
65	-	-	-	15.75	17.44	18.90	20.20	-	-
Mass flow in kg								T	
35	283	365	461	571	698	843	1 007	-	-
40	269	351	446	555	680	822	984	-	-
45	254	335	429	537	660	800	959	-	-
50	-	318	410	517	638	776	932	-	-
55	-	-	390	495	614	749	903	-	-
60	-	-	-	470	588	721	871	-	-
65	-	-	-	444	559	689	837	-	-
		).P.)							
Coefficient of p	erformance (C.C			1			6.29	_	-
35	2.26	2.70	3.22	3.83	4.54	5.36	0.29		
	,		3.22 2.78	3.83 3.30	4.54 3.89	5.36 4.57	5.35	-	-
35	2.26	2.70				1	1	-	-
35 40	2.26 1.97	2.70 2.35	2.78	3.30	3.89	4.57	5.35		
35 40 45 50	2.26 1.97 1.72	2.70 2.35 2.04	2.78 2.40 2.07	3.30 2.83 2.43	3.89 3.32 2.84	4.57 3.89 3.31	5.35 4.54 3.84	-	-
35 40 45	2.26 1.97 1.72	2.70 2.35 2.04 1.77	2.78 2.40	3.30 2.83	3.89 3.32	4.57 3.89	5.35 4.54	-	-

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

Cooling capacity	26 876	W
Power input	9 476	W
Current consumption	15.14	Α
Mass flow	638	kg/h
C.O.P.	2.84	

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)	ı
Minimum LP switch setting	1.4	bar(g)	ı
LP pump down setting	1.7	bar(g)	

Sound power data

Soun	d power level	86	dB(A)
With	accoustic hood	80	dB(A)

Tolerance according EN12900





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 50 Hz, ARI rating conditions

**R407C** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
•		•	•	•	•	•	•	•	•
Cooling capacit	y in W								
35	14 020	18 390	23 566	29 648	36 737	44 930	54 328	-	-
40	12 758	16 922	21 834	27 595	34 304	42 062	50 967	-	-
45	11 464	15 418	20 062	25 496	31 822	39 139	47 549	-	-
50	1	13 885	18 257	23 361	29 299	36 172	44 082	-	-
55	1	-	16 427	21 197	26 744	33 170	40 576	-	-
60	1	-	-	19 013	24 166	30 142	37 043	-	-
65	-	-	-	16 819	21 577	27 102	33 497	-	-
Power input in \	N								
35	5 760	6 328	6 807	7 209	7 548	7 834	8 081	-	-
40	5 986	6 676	7 265	7 766	8 191	8 552	8 861	-	-
45	6 132	6 965	7 686	8 307	8 840	9 297	9 691	-	-
50	-	7 175	8 050	8 813	9 476	10 051	10 550	-	-
55	-	-	8 336	9 262	10 077	10 791	11 418	-	-
60	-	-	-	9 635	10 622	11 498	12 274	-	-
65	-	-	-	9 911	11 093	12 152	13 099	-	-
Current consun	nption in A								
35	10.20	10.99	11.67	12.29	12.91	13.58	14.34	-	-
40	10.49	11.43	12.23	12.93	13.58	14.24	14.94	-	-
45	10.62	11.79	12.76	13.60	14.34	15.03	15.74	-	-
50	-	12.01	13.22	14.25	15.14	15.94	16.70	-	-
55	-	-	13.58	14.85	15.95	16.91	17.79	-	-
60	-	-	-	15.37	16.73	17.91	18.97	-	-
65	-	-	-	15.75	17.44	18.90	20.20	-	-
Mass flow in kg	/h								
35	281	363	458	568	694	838	1 000	-	-
40	268	349	443	552	676	817	978	-	-
45	252	333	427	534	656	795	953	-	-
50	-	316	408	514	634	771	926	-	-
55	-	-	388	492	610	745	897	-	-
60	-	-	-	468	584	716	866	-	-
65	-	-	-	442	556	685	832	-	-
Coefficient of p	erformance (C.O	).P.)							
35	2.43	2.91	3.46	4.11	4.87	5.73	6.72	-	-
40	2.13	2.53	3.01	3.55	4.19	4.92	5.75	-	-
45	1.87	2.21	2.61	3.07	3.60	4.21	4.91	-	-
50	-	1.94	2.27	2.65	3.09	3.60	4.18	-	-
55	-	-	1.97	2.29	2.65	3.07	3.55	-	-
			_	1.97	2.27	2.62	3.02	_	_
60	•	-	-	1.97	2.21	2.02	3.02		

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

Cooling capacity	29 788	W
Power input	10 325	W
Current consumption	16.28	Α
Mass flow	671	kg/h
C.O.P.	2.89	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

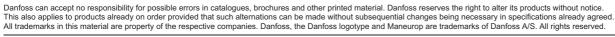
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)	٦
Minimum LP switch setting	1.4	bar(g)	
LP pump down setting	1.7	bar(q)	١

Sound power data

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







# Maneurop reciprocating compressor. MTZ125-4

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

**R448A** 

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	
N IV										
Cooling capacity	in vv	40.057	40.540	04.050	07.054	1		Ι		
10	-	12 357	16 518	21 650	27 854	-	-	-	-	
20	-	10 398	14 099	18 666	24 193	30 784	38 548	-	-	
30	-	8 554	11 798	15 802	20 659	26 464	33 320	41 338	50 650	
40	-	-	9 618	13 064	17 254	22 280	28 235	35 219	43 349	
50	-	-	-	10 453	13 983	18 235	23 297	29 258	36 215	
60	-	-	-	-	10 847	14 334	18 511	23 458	29 253	
Power input in W	,									
10	-	4 020	4 258	4 361	4 299	-	-	-	-	
20	-	4 508	4 946	5 281	5 488	5 540	5 408	-	-	
30	-	4 808	5 421	5 967	6 420	6 752	6 935	6 944	6 751	
40	-	-	5 735	6 469	7 144	7 734	8 210	8 546	8 716	
50	-	-	-	6 837	7 712	8 536	9 282	9 923	10 432	
60	-	-	-	-	8 173	9 209	10 202	11 125	11 950	
10	otion in A	11.75	12.35	12.80	13.04	-	-	-	-	
20	<u>-</u>	10.93	11.55	12.07	12.45	12.64	12.61	-	_	
30	_	10.69	11.35	11.97	12.51	12.92	13.16	13.19	12.97	
40	_	-	11.49	12.24	12.96	13.61	14.15	14.54	14.73	
50	_	-	-	12.61	13.53	14.45	15.32	16.09	16.73	
60	_	-	_	-	13.98	15.19	16.41	17.59	18.69	
			I	1	13.55	10110	19111	11.100		
lass flow in kg/h	1	T	T	T	T	T	T	T		
10	-	203	271	356	460	-	-	-	-	
20	-	183	249	331	430	551	696	-	-	
30	-	163	226	303	399	514	654	821	1 021	
40	-	-	201	275	365	475	609	769	961	
50	-	-	-	245	330	434	561	714	898	
60	-	-	-	-	293	391	511	656	831	
Coefficient of per	formance (C.0	D.P.)								
10	-	3.07	3.88	4.96	6.48	-	-	-	-	
20	-	2.31	2.85	3.53	4.41	5.56	7.13	_	-	
30	-	1.78	2.18	2.65	3.22	3.92	4.80	5.95	7.50	
		-	1.68	2.02	2.42	2.88	3.44	4.12	4.97	
1	-						<b>U</b>	1		
40 50	-	_	_	1.53	1.81	2.14	2.51	2.95	3.47	

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

Cooling capacity	15 602	W
Power input	7 445	W
Current consumption	13.24	Α
Mass flow	348	kg/h
C.O.P.	2.10	

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

Ma	aximum HP switch setting	27.7	bar(g)
Mi	nimum LP switch setting	1	bar(g)
LF	pump down setting	1.3	bar(g)

Sound power data

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





# Maneurop reciprocating compressor. MTZ125-4

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

**R448A** 

Cond. temp. in	Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10		
Cooling capacity	/ in W										
10	9 105	12 417	16 611	21 784	28 033	-	-	-	-		
20	7 402	10 331	14 040	18 627	24 187	30 819	38 619	-	-		
30	5 831	8 381	11 609	15 612	20 486	26 331	33 241	41 315	50 650		
40	4 398	6 572	9 321	12 743	16 936	21 995	28 019	35 105	43 349		
50	-	4 908	7 182	10 027	13 540	17 818	22 958	29 058	36 215		
60	-	-	5 197	7 467	10 304	13 803	18 063	23 181	29 253		
Power input in V	v										
10	3 672	4 020	4 258	4 361	4 299	_	_	_	-		
20	3 997	4 508	4 946	5 281	5 488	5 540	5 408	-	-		
30	4 156	4 808	5 421	5 967	6 420	6 752	6 935	6 944	6 751		
40	4 199	4 969	5 735	6 469	7 144	7 734	8 210	8 546	8 716		
50	-	5 042	5 938	6 837	7 712	8 536	9 282	9 923	10 432		
60	-	-	6 079	7 121	8 173	9 209	10 202	11 125	11 950		
•						- 1	•	•			
Current consum	ption in A										
10	11.04	11.75	12.35	12.80	13.04	-	-	-	-		
20	10.26	10.93	11.55	12.07	12.45	12.64	12.61	-	-		
30	10.04	10.69	11.35	11.97	12.51	12.92	13.16	13.19	12.97		
40	10.11	10.77	11.49	12.24	12.96	13.61	14.15	14.54	14.73		
50	-	10.90	11.71	12.61	13.53	14.45	15.32	16.09	16.73		
60	-	-	11.75	12.82	13.98	15.19	16.41	17.59	18.69		
Mass flow in kg/		T	1	1	Т	Т	T	T			
10	174	235	310	399	505	-	-	-	-		
20	154	213	284	370	472	592	732	-	-		
30	134	189	258	340	438	553	687	843	1 021		
40	113	165	230	307	401	511	640	790	961		
50	-	140	200	274	362	467	590	733	898		
60	-	-	170	238	321	420	537	673	831		
Coefficient of pe	erformance (C.0	D.P.)									
10	2.48	3.09	3.90	5.00	6.52	-	-	-	-		
20	1.85	2.29	2.84	3.53	4.41	5.56	7.14	-	-		
30	1.40	1.74	2.14	2.62	3.19	3.90	4.79	5.95	7.50		
40	1.05	1.32	1.63	1.97	2.37	2.84	3.41	4.11	4.97		
50	-	0.97	1.21	1.47	1.76	2.09	2.47	2.93	3.47		
60	-	-	0.85	1.05	1.26	1.50	1.77	2.08	2.45		
		1				1	1				
Nominal perform	nance at to = -1	0 °C, tc = 45 °C				Pressure switch	settings				
					Г						

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

15 218

7 445

13.24

382

W

W

kg/h

Ma	aximum HP switch setting	27.7	bar(g)
Mi	nimum LP switch setting	1	bar(g)
LF	pump down setting	1.3	bar(g)

Sound power data

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





# Maneurop reciprocating compressor. MTZ125-4

# 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	-	12 380	16 544	21 677	27 880	-	-	-	-	
20	-	10 421	14 125	18 692	24 220	30 809	38 568	-	-	
30	-	8 576	11 824	15 830	20 686	26 490	33 341	41 351	50 650	
40	-	-	9 643	13 091	17 283	22 306	28 256	35 233	43 349	
50	-	-	-	10 480	14 011	18 262	23 319	29 271	36 215	
60	-	-	-	-	10 874	14 360	18 533	23 471	29 253	
Power input in W										
10	-	4 020	4 258	4 361	4 299	-	-	-	-	
20	-	4 508	4 946	5 281	5 488	5 540	5 408	-	-	
30	-	4 808	5 421	5 967	6 420	6 752	6 935	6 944	6 751	
40	-	-	5 735	6 469	7 144	7 734	8 210	8 546	8 716	
50	-	-	-	6 837	7 712	8 536	9 282	9 923	10 432	
60	-	-	-	-	8 173	9 209	10 202	11 125	11 950	
Current consump	otion in A		_	_		_	_			
10	-	11.75	12.35	12.80	13.04	-	-	-	-	
20	-	10.93	11.55	12.07	12.45	12.64	12.61	-	-	
30	-	10.69	11.35	11.97	12.51	12.92	13.16	13.19	12.97	
40	-	-	11.49	12.24	12.96	13.61	14.15	14.54	14.73	
50	-	-	-	12.61	13.53	14.45	15.32	16.09	16.73	
60	-	-	-	-	13.98	15.19	16.41	17.59	18.69	
Mass flow in kg/h	1									
10	-	201	275	365	472	-	-	-	-	
20	-	183	253	338	440	564	711	-	-	
30	-	164	230	310	407	525	667	836	1 038	
40	-	-	205	281	373	485	621	784	979	
50	-	-	-	250	337	444	573	729	917	
60	-	-	-	-	299	400	523	672	852	
Coefficient of per	formance (C.0	O.P.)								
10	-	3.08	3.88	4.97	6.48	-	-	-	-	
20	-	2.31	2.86	3.54	4.41	5.56	7.13	-	-	
30	-	1.78	2.18	2.65	3.22	3.92	4.81	5.95	7.50	
40	-	-	1.68	2.02	2.42	2.88	3.44	4.12	4.97	
50	-	-	-	1.53	1.82	2.14	2.51	2.95	3.47	
60	-	_	_	_	1.33	1.56	1.82	2.11	2.45	

Cooling capacity	15 630	W
Power input	7 445	W
Current consumption	13.24	Α
Mass flow	355	kg/h
C.O.P.	2.10	

to: Evaporating temperature at dew point

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

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 setti	ng	1.3	bar(g)

Sound power data

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





# Maneurop reciprocating compressor. MTZ125-4

# 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	9 105	12 417	16 611	21 784	28 033	-	-	-	-	
20	7 402	10 331	14 040	18 627	24 187	30 819	38 619	-	-	
30	5 831	8 381	11 609	15 612	20 486	26 331	33 241	41 315	50 650	
40	4 398	6 572	9 321	12 743	16 936	21 995	28 019	35 105	43 349	
50	-	4 908	7 182	10 027	13 540	17 818	22 958	29 058	36 215	
60	-	-	5 197	7 467	10 304	13 803	18 063	23 181	29 253	
Power input in V	V	1	•	1	•	•	•	•		
10	3 672	4 020	4 258	4 361	4 299	-	-	-	-	
20	3 997	4 508	4 946	5 281	5 488	5 540	5 408	-	-	
30	4 156	4 808	5 421	5 967	6 420	6 752	6 935	6 944	6 751	
40	4 199	4 969	5 735	6 469	7 144	7 734	8 210	8 546	8 716	
50	-	5 042	5 938	6 837	7 712	8 536	9 282	9 923	10 432	
60	-	-	6 079	7 121	8 173	9 209	10 202	11 125	11 950	
Current consum	ption in A	•		_						
10	11.04	11.75	12.35	12.80	13.04	-	-	-	-	
20	10.26	10.93	11.55	12.07	12.45	12.64	12.61	-	-	
30	10.04	10.69	11.35	11.97	12.51	12.92	13.16	13.19	12.97	
40	10.11	10.77	11.49	12.24	12.96	13.61	14.15	14.54	14.73	
50	-	10.90	11.71	12.61	13.53	14.45	15.32	16.09	16.73	
60	-	-	11.75	12.82	13.98	15.19	16.41	17.59	18.69	
Mass flow in kg/	h									
10	167	234	314	408	518	-	-	-	-	
20	150	213	288	378	483	606	748	-	-	
30	132	191	262	347	447	565	701	859	1 038	
40	114	168	234	314	410	522	653	805	979	
50	-	144	205	280	370	477	603	749	917	
60	-	-	175	244	329	430	550	690	852	
Coefficient of pe	rformance (C.C	D.P.)								
10	2.48	3.09	3.90	5.00	6.52	-	-	-	-	
20	1.85	2.29	2.84	3.53	4.41	5.56	7.14	-	-	
30	1.40	1.74	2.14	2.62	3.19	3.90	4.79	5.95	7.50	
40	1.05	1.32	1.63	1.97	2.37	2.84	3.41	4.11	4.97	
50	-	0.97	1.21	1.47	1.76	2.09	2.47	2.93	3.47	
60	-	-	0.85	1.05	1.26	1.50	1.77	2.08	2.45	
•		-	•	•	•		•	•		
Nominal perform	nance at to = -1	0 °C, tc = 45 °C				Pressure switch	settings			
•		•			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

15 218

7 445

13.24

390

W

W

kg/h

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

Sound power data

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





# Maneurop reciprocating compressor. MTZ125-4

# 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									
10	-	14 057	18 139	23 133	29 122	-	-	-	-	
20	-	12 188	15 921	20 448	25 851	32 211	39 620	-	-	
30	-	10 261	13 616	17 648	22 434	28 052	34 584	42 123	50 780	
40	-	8 276	11 226	14 734	18 875	23 722	29 350	35 838	43 279	
50	-	-	8 745	11 704	15 174	19 225	23 924	29 337	35 538	
60	-	-	-	8 557	11 337	14 572	18 320	22 634	27 565	
Power input in W	,									
10	-	4 162	4 394	4 549	4 630	-	-	-	-	
20	-	4 833	5 218	5 523	5 749	5 896	5 964	-	-	
30	-	5 370	5 939	6 425	6 827	7 145	7 382	7 536	7 609	
40	-	5 695	6 479	7 175	7 784	8 305	8 739	9 088	9 351	
50	-	-	6 758	7 695	8 541	9 295	9 958	10 531	11 014	
60	_	-	-	7 905	9 017	10 035	10 957	11 785	12 519	
Current consump		T		T	T=		1	T	T	
10	-	11.05	11.35	11.60	11.77	-	-		-	
20	-	10.57	10.95	11.28	11.55	11.74	11.84	-	-	
30	-	10.60	11.12	11.59	12.00	12.34	12.60	12.76	12.81	
40	-	10.79	11.51	12.19	12.80	13.35	13.82	14.20	14.47	
50	-	-	11.79	12.73	13.62	14.44	15.18	15.83	16.38	
60	-	-	-	12.90	14.11	15.25	16.33	17.32	18.21	
Mass flow in kg/h	1									
10	-	287	373	479	606	-	-		-	
20	-	270	354	457	581	730	907	-	-	
30	-	249	332	433	553	697	869	1 073	1 316	
40	-	224	305	402	519	658	824	1 021	1 256	
50	-	-	270	365	478	612	771	961	1 187	
60	-	-	-	318	427	556	709	890	1 107	
Coefficient of per	formance (C.0	O.P.)								
10	-	3.38	4.13	5.08	6.29	-	-	_	-	
20	-	2.52	3.05	3.70	4.50	5.46	6.64	-	-	
30	-	1.91	2.29	2.75	3.29	3.93	4.69	5.59	6.67	
40	-	1.45	1.73	2.05	2.42	2.86	3.36	3.94	4.63	
		+	+		1.78	2.07	2.40	2.79	3.23	
50	_	_	1.29	1.52	1./0	2.07				

Nominal p	performance	at to = -1	0 °C, to	= 45 °C

Cooling capacity	17 042	W
Power input	8 192	W
Current consumption	13.23	Α
Mass flow	499	kg/h
C.O.P.	2.08	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Ma	aximum HP switch setting	27.7	bar(g)
Mi	nimum LP switch setting	1	bar(g)
LF	pump down setting	1.3	bar(g)

Sound power data

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





# Maneurop reciprocating compressor. MTZ125-4

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

**R452A** 

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	/ in W								
10	10 456	13 684	17 760	22 774	28 814	-	-	-	-
20	8 704	11 665	15 364	19 889	25 329	31 775	39 314	-	-
30	6 952	9 614	12 902	16 906	21 715	27 417	34 103	41 861	50 780
40	5 209	7 539	10 384	13 835	17 979	22 907	28 706	35 468	43 279
50	3 485	5 450	7 821	10 685	14 133	18 253	23 134	28 866	35 538
60	-	3 358	5 221	7 467	10 185	13 465	17 396	22 066	27 565
Power input in V	v								
10	3 855	4 162	4 394	4 549	4 630	_	_	_	_
20	4 367	4 833	5 218	5 523	5 749	5 896	5 964	-	-
30	4 716	5 370	5 939	6 425	6 827	7 145	7 382	7 536	7 609
40	4 822	5 695	6 479	7 175	7 784	8 305	8 739	9 088	9 351
50	4 606	5 728	6 758	7 695	8 541	9 295	9 958	10 531	11 014
60	-	5 390	6 696	7 905	9 017	10 035	10 957	11 785	12 519
<u>'</u>		•			•		•	•	
Current consum	ption in A								
10	10.71	11.05	11.35	11.60	11.77	-	-	-	-
20	10.15	10.57	10.95	11.28	11.55	11.74	11.84	-	-
30	10.04	10.60	11.12	11.59	12.00	12.34	12.60	12.76	12.81
40	10.03	10.79	11.51	12.19	12.80	13.35	13.82	14.20	14.47
50	9.79	10.81	11.79	12.73	13.62	14.44	15.18	15.83	16.38
60	-	10.33	11.63	12.90	14.11	15.25	16.33	17.32	18.21
Mass flow in kg/		T	Т	1	T	Т	T	T	
10	258	335	427	537	667	-	-	-	-
20	238	314	406	513	640	786	956	-	-
30	214	290	380	486	609	751	915	1 103	1 316
40	185	260	349	452	571	710	868	1 050	1 256
50	148	223	309	409	526	659	813	988	1 187
60	-	175	259	357	469	599	747	915	1 107
Coefficient of pe	rformance (C.C	) P )							
10	2.71	3.29	4.04	5.01	6.22	_	_	-	_
20	1.99	2.41	2.94	3.60	4.41	5.39	6.59	_	-
30	1.47	1.79	2.17	2.63	3.18	3.84	4.62	5.55	6.67
40	1.08	1.32	1.60	1.93	2.31	2.76	3.28	3.90	4.63
50	0.76	0.95	1.16	1.39	1.65	1.96	2.32	2.74	3.23
60	-	0.62	0.78	0.94	1.13	1.34	1.59	1.87	2.20
		0.02	0.70	0.01	1.10	1.01	1.00	1.07	2.23
Nominal perforn	nance at to = -10	0 °C, tc = 45 °C				Pressure switch	settings		
0 " "					ī				

Mass flow	
C.O.P.	

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

16 069

8 192

13.23

550 1.96 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	84	dB(A)
With accoustic hood	78	dB(A)





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 Hz, EN 12900 rating conditions

**R407C** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
		•	•	1	1		•		
Cooling capacit	y in W								
35	16 447	21 287	27 031	33 789	41 672	50 792	61 260	-	-
40	14 952	19 495	24 853	31 136	38 454	46 919	56 640		-
45	13 454	17 723	22 719	28 551	35 329	43 162	52 163	-	-
50	-	15 952	20 609	26 014	32 275	39 503	47 806	-	-
55	-	-	18 505	23 505	29 274	35 918	43 548	-	-
60	-	-	-	21 006	26 303	32 387	39 365	-	-
65	-	-	-	18 494	23 339	28 883	35 230	-	-
Power input in \	N								
35	7 288	8 023	8 677	9 264	9 794	10 278	10 729	-	-
40	7 560	8 406	9 166	9 852	10 475	11 047	11 580	-	-
45	7 785	8 752	9 628	10 425	11 153	11 824	12 450	-	-
50	-	9 067	10 070	10 988	11 832	12 614	13 344	-	-
55	1	-	10 496	11 547	12 518	13 421	14 267		-
60	-	-	-	12 107	13 216	14 252	15 225	-	-
65	-	-	-	12 673	13 932	15 111	16 222		-
Current consum	nption in A								
35	10.67	11.60	12.44	13.17	13.79	14.28	14.63	-	-
40	11.03	12.10	13.05	13.89	14.59	15.14	15.54	-	-
45	11.27	12.55	13.70	14.70	15.56	16.25	16.76	-	-
50	-	12.88	14.29	15.53	16.61	17.51	18.21		-
55	-	-	14.74	16.30	17.67	18.84	19.80	-	-
60	1	-	-	16.91	18.64	20.16	21.45	-	-
65	1	-	-	17.29	19.45	21.39	23.08		-
Mass flow in kg	/h								
35	357	454	568	698	848	1 020	1 214	-	-
40	341	437	548	675	821	987	1 175	-	-
45	325	419	528	652	794	954	1 136	-	-
50	-	400	507	628	766	923	1 099	-	-
55	-	-	485	604	739	891	1 062	-	-
60	-	-	-	578	710	858	1 024	-	-
65	-	-	-	551	680	825	986	-	-
					<u> </u>				
Coefficient of pe	erformance (C.O	o.P.)							
35	2.26	2.65	3.12	3.65	4.25	4.94	5.71	-	-
40	1.98	2.32	2.71	3.16	3.67	4.25	4.89	-	
45	1.73	2.02	2.36	2.74	3.17	3.65	4.19	-	-
50	-	1.76	2.05	2.37	2.73	3.13	3.58	-	-
55	-	-	1.76	2.04	2.34	2.68	3.05	-	-
	-	_	_	1.73	1.99	2.27	2.59	_	_
60	-	_							

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

Cooling capacity	32 275	W
Power input	11 832	W
Current consumption	16.61	Α
Mass flow	766	kg/h
C.O.P.	2.73	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

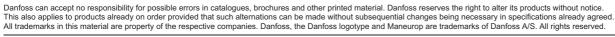
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)	٦
Minimum LP switch setting	1.4	bar(g)	
LP pump down setting	1.7	bar(q)	١

Sound power data

Sound power level	89	dB(A)
With accoustic hood	83	dB(A)







# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 Hz, ARI rating conditions

**R407C** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
•		1	•	1	1				l .
Cooling capacity	y in W								
35	17 703	22 885	29 025	36 240	44 647	54 361	65 498	-	-
40	16 182	21 070	26 825	33 564	41 402	50 458	60 845	-	-
45	14 653	19 273	24 669	30 957	38 255	46 678	56 342	-	-
50	-	17 474	22 537	28 402	35 185	43 002	51 969	-	-
55	-	-	20 410	25 877	32 172	39 409	47 705	-	-
60	-	-	-	23 364	29 196	35 880	43 532	-	-
65	-	-	-	20 841	26 237	32 394	39 428	-	-
Power input in V			,			1	Ţ	T	ı
35	7 288	8 023	8 677	9 264	9 794	10 278	10 729	-	-
40	7 560	8 406	9 166	9 852	10 475	11 047	11 580	-	-
45	7 785	8 752	9 628	10 425	11 153	11 824	12 450	-	-
50	-	9 067	10 070	10 988	11 832	12 614	13 344	-	-
55	-	-	10 496	11 547	12 518	13 421	14 267	-	-
60	-	-	-	12 107	13 216	14 252	15 225	-	-
65	-	-	-	12 673	13 932	15 111	16 222	-	-
Current consum			Т			Т	T	Γ	ı
35	10.67	11.60	12.44	13.17	13.79	14.28	14.63	-	-
40	11.03	12.10	13.05	13.89	14.59	15.14	15.54	-	-
45	11.27	12.55	13.70	14.70	15.56	16.25	16.76	-	-
50	-	12.88	14.29	15.53	16.61	17.51	18.21	-	-
55	-	-	14.74	16.30	17.67	18.84	19.80	-	-
60	-	-	-	16.91	18.64	20.16	21.45	-	-
65	-	-	-	17.29	19.45	21.39	23.08	-	-
	_								
Mass flow in kg/		150	T ===		0.40	1 4044	1 4 007		1
35	355	452	564	694	843	1 014	1 207	-	-
40	340	435	545	671	816	981	1 167	-	-
45	323	417	525	648	789	949	1 129	-	-
50	-	398	504	625	762	917	1 092	-	-
55	-	-	482	601	734	885	1 055	-	-
60	-	-	-	575	706	853	1 018	-	-
65	-	-	-	548	676	820	980	-	-
0 651 - 1 4 - 5									
Coefficient of pe		_	2.24	2.04	4.50	5.00	0.40		I
35	2.43	2.85	3.34	3.91	4.56	5.29	6.10	-	-
40	2.14	2.51	2.93	3.41	3.95	4.57	5.25	-	-
45	1.88	2.20	2.56	2.97	3.43	3.95	4.53	-	-
50	-	1.93	2.24	2.58	2.97	3.41	3.89	-	-
55	-	-	1.94	2.24	2.57	2.94	3.34	-	-
60	-	-	-	1.93	2.21	2.52	2.86	-	-
65	-	-	-	1.64	1.88	2.14	2.43	-	-

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

Cooling capacity	35 621	W
Power input	12 834	W
Current consumption	18.07	Α
Mass flow	802	kg/h
C.O.P.	2.78	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

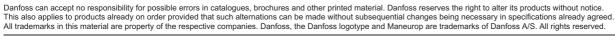
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

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(q)	

Sound power data

Sound power level	89	dB(A)
With accoustic hood	83	dB(A)







# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
		•	•		•		•	•	l .
Cooling capacit	y in W				1				
35	4 478	6 489	12 156	15 984	20 589	26 059	32 478	39 932	48 509
40	3 836	5 739	11 069	14 669	19 007	24 169	30 240	37 308	45 457
45	3 200	4 987	9 967	13 332	17 395	22 242	27 959	34 632	42 347
50	2 580	4 245	8 861	11 984	15 765	20 291	25 646	31 918	39 191
55	-	-	7 763	10 637	14 130	18 327	23 314	29 177	36 002
60	-	-	-	9 304	12 501	16 362	20 974	26 422	32 792
65	-	-	-	-	10 891	14 409	18 639	23 664	29 572
75	-	-	-	-	-	-	14 030	18 191	23 154
Power input in \	A/								
Power input in \ 35	3 012	3 607	4 744	5 240	5 654	5 964	6 146	6 175	6 028
40	3 057	3 676	4 898	5 454	5 940	6 333	6 610	6 747	6 719
45	3 034	3 686	5 008	5 631	6 197	6 682	7 062	7 313	7 412
50	2 942	3 634	5 008	5 771	6 424	7 008	7 498	7 872	8 105
55	2 942	3 634	5 072	5 771	6 618	7 008	7 498 7 917	7 872 8 421	8 105 8 796
60	-		5 000	+	1	+			9 482
		-		5 925	6 776	7 581	8 316	8 958	
65 75	-	-	-	-	6 897	7 824	8 693	9 480	10 162
75	-						9 371	10 472	11 492
Current consum	nption in A								
35	6.97	7.48	8.47	8.92	9.29	9.59	9.79	9.87	9.82
40	6.98	7.52	8.61	9.11	9.57	9.96	10.26	10.46	10.54
45	6.93	7.51	8.71	9.29	9.83	10.32	10.74	11.07	11.28
50	6.82	7.44	8.77	9.43	10.07	10.67	11.21	11.67	12.03
55	-	-	8.79	9.54	10.29	11.01	11.68	12.28	12.80
60	-	-	-	9.61	10.47	11.32	12.12	12.88	13.56
65	-	-	-	-	10.62	11.59	12.55	13.46	14.32
75	-	-	-	-	-	-	13.31	14.57	15.79
		•	•						
Mass flow in kg	/h	1	1		,	1	,	,	ı
35	113	162	289	372	469	581	711	859	1 028
40	103	151	277	359	454	565	694	841	1 008
45	91	138	263	344	438	548	674	819	984
50	78	125	248	327	420	528	653	796	958
55	-	-	231	309	400	506	629	769	929
60	-	-	-	289	378	482	602	740	898
65	-	-	-	-	354	455	573	709	863
75	-	-	-	-	-	-	508	638	786
Coefficient of n	erformance (C.C	).P.)							
35	1.49	1.80	2.56	3.05	3.64	4.37	5.28	6.47	8.05
40	1.26	1.56	2.26	2.69	3.20	3.82	4.57	5.53	6.77
45	1.05	1.35	1.99	2.37	2.81	3.33	3.96	4.74	5.71
50	0.88	1.17	1.75	2.08	2.45	2.90	3.42	4.05	4.84
55	-	-	1.53	1.81	2.14	2.51	2.94	3.46	4.09
60	-	-	-	1.57	1.84	2.16	2.52	2.95	3.46
65	-	-	-	-	1.58	1.84	2.14	2.50	2.91
75	-	-	-	-	-	-	1.50	1.74	2.01

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

Cooling capacity	20 291	W	
Power input	7 008	W	
Current consumption	10.67	Α	
Mass flow	528	kg/h	
C.O.P.	2.90		

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	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





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 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 capacity			1	T		1		Г	ı
35	4 867	7 040	13 143	17 255	22 192	28 045	34 903	42 856	51 991
40	4 195	6 262	12 032	15 916	20 587	26 134	32 648	40 216	48 929
45	3 522	5 476	10 898	14 548	18 945	24 180	30 341	37 519	45 803
50	-	4 697	9 756	13 164	17 280	22 194	27 996	34 777	42 626
55	-	-	8 616	11 775	15 603	20 189	25 626	32 003	39 409
60	-	-	-	10 395	13 926	18 179	23 242	29 209	36 168
65	-	-	-	-	-	16 174	20 859	26 409	32 915
75	-	-	-	-	-	-	16 145	20 848	26 437
Power input in V		T	1	Т	T	1	T	Т	1
35	3 012	3 607	4 744	5 240	5 654	5 964	6 146	6 175	6 028
40	3 057	3 676	4 898	5 454	5 940	6 333	6 610	6 747	6 719
45	3 034	3 686	5 008	5 631	6 197	6 682	7 062	7 313	7 412
50	-	3 634	5 072	5 771	6 424	7 008	7 498	7 872	8 105
55	-	-	5 088	5 870	6 618	7 308	7 917	8 421	8 796
60	-	-	-	5 925	6 776	7 581	8 316	8 958	9 482
65	-	-	-	-	-	7 824	8 693	9 480	10 162
75	-	-	-	-	-	-	9 371	10 472	11 492
Current consum	•		1	I		1		ı	ı
35	6.97	7.48	8.47	8.92	9.29	9.59	9.79	9.87	9.82
40	6.98	7.52	8.61	9.11	9.57	9.96	10.26	10.46	10.54
45	6.93	7.51	8.71	9.29	9.83	10.32	10.74	11.07	11.28
50	-	7.44	8.77	9.43	10.07	10.67	11.21	11.67	12.03
55	-	-	8.79	9.54	10.29	11.01	11.68	12.28	12.80
60	-	-	-	9.61	10.47	11.32	12.12	12.88	13.56
65	-	-	-	-	-	11.59	12.55	13.46	14.32
75	-	-	-	-	-	-	13.31	14.57	15.79
Mass flow in kg/		101	1 000	070	100	570		055	1
35	113	161	288	370	466	578	707	855	1 022
40	102	150	276	357	452	562	690	836	1 002
45	91	138	262	342	436	545	671	815	979
50	-	125	247	325	418	525	649	791	953
55	-	-	230	307	398	503	625	765	924
60	-	-	-	287	376	479	599	736	893
65	-	-	-	-	-	453	570	705	858
75	-	-	-	-	_	-	506	634	782
Coefficient of	wformor== 10 0	\ <b>D</b> \							
Coefficient of pe	•	1	0.77	2.00	2.00	4.70	F.00	0.04	0.00
35	1.62	1.95	2.77	3.29	3.92	4.70	5.68	6.94	8.62
40	1.37	1.70	2.46	2.92	3.47	4.13	4.94	5.96	7.28
45	1.16	1.49	2.18	2.58	3.06	3.62	4.30	5.13	6.18
50	-	1.29	1.92	2.28	2.69	3.17	3.73	4.42	5.26
55	-	-	1.69	2.01	2.36	2.76	3.24	3.80	4.48
60	-	-	-	1.75	2.06	2.40	2.79	3.26	3.81
65	-	-	-	-	-	2.07	2.40	2.79	3.24
75	-	-	-	-	_	-	1.72	1.99	2.30

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

reciminal portermance at to 7:2 0, to	U-1T U	
Cooling capacity	22 731	W
Power input	7 547	W
Current consumption	11.26	Α
Mass flow	558	kg/h
C.O.P.	3.01	

to: Evaporating temperature at dew point

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

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



# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 Hz, EN 12900 rating conditions

# **R404A**

Cond. temp. in	nd. temp. in Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity		1		1	1		T	1	
30	9 352	12 402	16 062	20 414	25 540	31 522	38 440	46 378	55 417
35	8 170	11 045	14 481	18 562	23 368	28 982	35 484	42 956	51 482
40	6 991	9 672	12 867	16 658	21 126	26 353	32 421	39 410	47 404
45	5 824	8 293	11 229	14 712	18 825	23 647	29 262	35 751	43 195
50	4 680	6 919	9 577	12 735	16 473	20 874	26 018	31 987	38 863
55	-	5 560	7 923	10 736	14 082	18 042	22 698	28 129	34 419
60	-	4 227	6 275	8 727	11 662	15 164	19 311	24 187	29 872
Power input in \	N								
30	6 438	7 204	7 897	8 507	9 023	9 437	9 738	9 915	9 960
35	6 472	7 347	8 158	8 894	9 546	10 102	10 555	10 892	11 106
40	6 455	7 442	8 373	9 237	10 026	10 728	11 334	11 835	12 218
45	6 369	7 470	8 523	9 518	10 446	11 296	12 059	12 724	13 281
50	6 197	7 414	8 591	9 720	10 790	11 790	12 711	13 543	14 276
55	-	7 256	8 560	9 825	11 038	12 191	13 273	14 274	15 185
60	-	6 978	8 412	9 814	11 174	12 481	13 726	14 899	15 990
Current consum	ption in A	•	•	T	•	•	T	T	•
30	9.64	10.51	11.28	11.97	12.62	13.26	13.92	14.62	15.42
35	9.70	10.73	11.65	12.47	13.25	14.00	14.76	15.57	16.45
40	9.65	10.85	11.92	12.90	13.81	14.69	15.58	16.49	17.48
45	9.48	10.86	12.10	13.24	14.31	15.33	16.35	17.40	18.49
50	9.19	10.76	12.19	13.50	14.74	15.92	17.09	18.27	19.50
55	-	10.54	12.16	13.67	15.08	16.44	17.77	19.10	20.48
60	-	10.18	12.03	13.74	15.35	16.89	18.39	19.90	21.43
Mass flow in kg	/la								
30	294	382	482	597	728	878	1 048	1 240	1 456
35	276	364	465	580	711	860	1 029	1 220	1 435
40	257	345	445	560	691	839	1 007	1 197	1 410
45	234	322	423	537	667	815	982	1 170	1 382
50	209	297	397	511	640	787	953	1 140	1 350
55	-	269	369	482	610	755	920	1 105	1 313
60	-	238	337	449	576	720	883	1 067	1 273
Coefficient of pe	erformance (C.O	.P.)							
30	1.45	1.72	2.03	2.40	2.83	3.34	3.95	4.68	5.56
35	1.26	1.50	1.78	2.09	2.45	2.87	3.36	3.94	4.64
40	1.08	1.30	1.54	1.80	2.11	2.46	2.86	3.33	3.88
45	0.91	1.11	1.32	1.55	1.80	2.09	2.43	2.81	3.25
50	0.76	0.93	1.11	1.31	1.53	1.77	2.05	2.36	2.72
55	-	0.77	0.93	1.09	1.28	1.48	1.71	1.97	2.27
60		0.61	0.75	0.89	1.04	1.21	1.41	1.62	1.87

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

Cooling capacity	18 825	W
Power input	10 446	W
Current consumption	14.31	Α
Mass flow	667	kg/h
C.O.P.	1.80	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

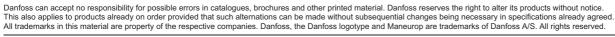
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

Maximum HP switch 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	86	dB(A)
With accoustic hood	80	dB(A)







# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 Hz, ARI rating conditions

# **R404A**

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
*						•			
cooling capacity		10.700	47.705			1 04 000	10.101	50.704	00.504
30	10 411	13 768	17 785	22 550	28 147	34 663	42 184	50 794	60 581
35	9 193	12 387	16 193	20 698	25 988	32 149	39 269	47 432	56 726
40	7 970	10 984	14 561	18 789	23 754	29 544	36 246	43 947	52 732
45	6 750	9 568	12 899	16 833	21 458	26 861	33 130	40 353	48 616
50	5 544	8 149	11 219	14 844	19 113	24 116	29 939	36 672	44 403
55	-	6 738	9 533	12 837	16 739	21 330	26 699	32 936	40 128
60	-	5 344	7 858	10 833	14 363	18 539	23 454	29 197	35 859
Power input in W	ı								
30	6 438	7 204	7 897	8 507	9 023	9 437	9 738	9 915	9 960
35	6 472	7 347	8 158	8 894	9 546	10 102	10 555	10 892	11 106
40	6 455	7 442	8 373	9 237	10 026	10 728	11 334	11 835	12 218
45	6 369	7 470	8 523	9 518	10 446	11 296	12 059	12 724	13 281
50	6 197	7 414	8 591	9 720	10 790	11 790	12 711	13 543	14 276
55	-	7 256	8 560	9 825	11 038	12 191	13 273	14 274	15 185
60	-	6 978	8 412	9 814	11 174	12 481	13 726	14 899	15 990
Current consum	ption in A								
30	9.64	10.51	11.28	11.97	12.62	13.26	13.92	14.62	15.42
35	9.70	10.73	11.65	12.47	13.25	14.00	14.76	15.57	16.45
40	9.65	10.85	11.92	12.90	13.81	14.69	15.58	16.49	17.48
45	9.48	10.86	12.10	13.24	14.31	15.33	16.35	17.40	18.49
50	9.19	10.76	12.19	13.50	14.74	15.92	17.09	18.27	19.50
55	-	10.54	12.16	13.67	15.08	16.44	17.77	19.10	20.48
60	-	10.18	12.03	13.74	15.35	16.89	18.39	19.90	21.43
Mass flow in kg/l	h								
30	292	379	479	594	724	873	1 042	1 232	1 446
35	275	362	462	576	707	855	1 023	1 212	1 425
40	255	343	443	557	686	834	1 001	1 189	1 401
45	233	321	420	534	663	810	976	1 163	1 373
50	208	296	395	508	636	782	947	1 132	1 341
55	-	268	367	479	606	751	914	1 098	1 305
60	-	237	335	446	573	716	878	1 060	1 264
2									
30	1.62	1.91	2.25	2.65	3.12	3.67	4.33	5.12	6.08
35	1.62	1.69	1.98	2.05	2.72	3.07	3.72	4.35	5.11
		+		1	1	1	1	+	+
40	1.23	1.48	1.74	2.03	2.37	2.75	3.20	3.71	4.32
45	1.06	1.28	1.51	1.77	2.05	2.38	2.75	3.17	3.66
50	0.89	1.10	1.31	1.53	1.77	2.05	2.36	2.71	3.11
55	-	0.93	1.11	1.31	1.52	1.75	2.01	2.31	2.64
60	-	0.77	0.93	1.10	1.29	1.49	1.71	1.96	2.24

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

Cooling capacity	21 458	W
Power input	10 446	W
Current consumption	14.31	Α
Mass flow	663	kg/h
C.O.P.	2.05	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

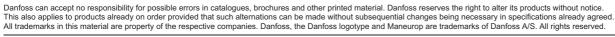
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

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

Sound power data

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







# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 Hz, EN 12900 rating conditions

**R407A** 

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	
Cooling capacity		0.400	40.470	47.000	22.402	20.500	27.004	45.072	FF C40	
30	6 467	9 466	13 176	17 690 16 040	23 103	29 509	37 001	45 673 42 444	55 619	
35 40	5 524 4 614	8 333 7 225	11 807	14 399	21 127	27 160 24 805	34 235 31 454	39 194	51 883	
45	3 751	6 155	10 455 9 134	12 781	19 151 17 191	22 457	28 673	35 934	48 116 44 333	
50	-	5 137					1	1	40 547	
	-	5 137	7 856	11 199 9 667	15 259 13 368	20 129	25 905	32 679	1	
55 60		-	6 637			17 836 15 590	23 163	29 443	36 771 33 019	
60	-	-	-	8 198	11 533	15 590	20 460	26 238	33 0 19	
Power input in W	ı									
30	4 600	5 432	6 219	6 946	7 598	8 161	8 621	8 962	9 171	
35	4 572	5 488	6 370	7 202	7 972	8 664	9 264	9 756	10 128	
40	4 498	5 499	6 477	7 417	8 305	9 127	9 867	10 513	11 048	
45	4 385	5 471	6 546	7 594	8 602	9 554	10 437	11 236	11 936	
50	-	5 409	6 581	7 739	8 867	9 951	10 977	11 930	12 796	
55	-	-	6 589	7 856	9 106	10 323	11 493	12 602	13 634	
60	-	-	-	7 951	9 324	10 674	11 990	13 255	14 455	
Current consum	ption in A				1				1	
30	8.82	9.61	10.40	11.16	11.86	12.47	12.96	13.30	13.45	
35	8.89	9.71	10.56	11.41	12.22	12.96	13.60	14.12	14.47	
40	8.94	9.81	10.72	11.66	12.58	13.46	14.27	14.97	15.53	
45	8.96	9.87	10.86	11.90	12.94	13.96	14.94	15.83	16.60	
50	-	9.89	10.96	12.10	13.27	14.44	15.59	16.68	17.68	
55	-	-	11.00	12.24	13.55	14.88	16.21	17.51	18.74	
60	-	-	-	12.32	13.76	15.26	16.78	18.29	19.75	
Mass flow in kg/l	h									
30	154	221	302	398	510	641	790	962	1 156	
35	138	205	285	380	490	619	768	937	1 130	
40	123	188	267	360	469	596	743	911	1 102	
45	107	171	247	339	446	572	717	883	1 072	
50	-	152	228	317	423	546	689	853	1 040	
55	-	-	207	294	398	519	660	821	1 006	
60	-	-	-	271	372	491	629	788	970	
Coefficient of pe	rformance (C.C	).P.)								
30	1.41	1.74	2.12	2.55	3.04	3.62	4.29	5.10	6.06	
35	1.21	1.52	1.85	2.23	2.65	3.13	3.70	4.35	5.12	
40	1.03	1.31	1.61	1.94	2.31	2.72	3.19	3.73	4.36	
45	0.86	1.12	1.40	1.68	2.00	2.35	2.75	3.20	3.71	
50	-	0.95	1.19	1.45	1.72	2.02	2.36	2.74	3.17	
	_	-	1.01	1.23	1.47	1.73	2.02	2.34	2.70	
55										

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

Cooling capacity	17 191	W
Power input	8 602	W
Current consumption	12.94	Α
Mass flow	446	kg/h
C.O.P.	2.00	

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	86	dB(A)
With accoustic hood	80	dB(A)

Tolerance according EN12900





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 Hz, ARI rating conditions

**R407A** 

Cond. temp. in		T		1	ating temperature		T		1
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	y in W								
30	6 995	10 223	14 209	19 052	24 850	31 700	39 701	48 951	59 546
35	6 010	9 051	12 804	17 368	22 843	29 326	36 917	45 712	55 810
40	5 055	7 900	11 411	15 689	20 833	26 942	34 114	42 448	52 042
45	4 143	6 784	10 046	14 030	18 835	24 562	31 309	39 175	48 259
50	-	5 717	8 722	12 404	16 864	22 202	28 518	35 910	44 479
55	-	-	7 454	10 827	14 935	19 879	25 758	32 673	40 723
60	-	-	-	9 316	13 066	17 610	23 050	29 486	37 018
Power input in V	N								
30	4 600	5 432	6 219	6 946	7 598	8 161	8 621	8 962	9 171
35	4 572	5 488	6 370	7 202	7 972	8 664	9 264	9 756	10 128
40	4 498	5 499	6 477	7 417	8 305	9 127	9 867	10 513	11 048
45	4 385	5 471	6 546	7 594	8 602	9 554	10 437	11 236	11 936
50	-	5 409	6 581	7 739	8 867	9 951	10 977	11 930	12 796
55	-	-	6 589	7 856	9 106	10 323	11 493	12 602	13 634
60	-	-	-	7 951	9 324	10 674	11 990	13 255	14 455
Current consum	nption in A								
30	8.82	9.61	10.40	11.16	11.86	12.47	12.96	13.30	13.45
35	8.89	9.71	10.56	11.41	12.22	12.96	13.60	14.12	14.47
40	8.94	9.81	10.72	11.66	12.58	13.46	14.27	14.97	15.53
45	8.96	9.87	10.86	11.90	12.94	13.96	14.94	15.83	16.60
50	-	9.89	10.96	12.10	13.27	14.44	15.59	16.68	17.68
55	-	-	11.00	12.24	13.55	14.88	16.21	17.51	18.74
60	-	-	-	12.32	13.76	15.26	16.78	18.29	19.75
Mass flow in kg/	'h								
30	153	220	301	396	508	637	786	956	1 149
35	138	204	284	378	488	616	763	932	1 123
40	122	187	265	358	467	593	739	906	1 095
45	106	170	246	337	444	569	713	878	1 065
50	-	152	226	315	420	543	685	848	1 033
55	-	-	206	293	396	516	656	817	999
60	-	-	-	270	370	489	626	784	964
Coefficient of pe	erformance (C.C	).P.)							
30	1.52	1.88	2.28	2.74	3.27	3.88	4.61	5.46	6.49
35	1.31	1.65	2.01	2.41	2.87	3.38	3.99	4.69	5.51
40	1.12	1.44	1.76	2.12	2.51	2.95	3.46	4.04	4.71
45	0.94	1.24	1.53	1.85	2.19	2.57	3.00	3.49	4.04
50	-	1.06	1.33	1.60	1.90	2.23	2.60	3.01	3.48
	-	-	1.13	1.38	1.64	1.93	2.24	2.59	2.99
55	-								

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

Cooling capacity	18 835	W
Power input	8 602	W
Current consumption	12.94	Α
Mass flow	444	kg/h
C.O.P.	2.19	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

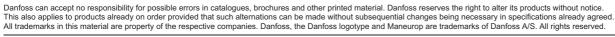
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

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	86	dB(A)
With accoustic hood	80	dB(A)







# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 Hz, EN 12900 rating conditions

**R407F** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
30		10 292	14 471	19 564	25 682	32 938	41 444	51 312	62 656
	-		1	1	1	29 392	+		56 736
35	-	8 825	12 601	17 213	22 772		37 184	46 261	
40 45	-	7 620 6 627	11 056 9 787	15 250 13 627	20 315 18 259	26 361	33 503 30 351	41 852 38 035	51 521 46 962
-		-	1	1	1	23 796	+	1	1
50	-	1	8 742	12 291	16 555	21 646	27 676	34 759	43 006
55	-	-	-	11 192	15 151	19 859	25 429	31 974	39 605
60	-	-	-	-	-	-	-	-	-
Power input in W									
30	-	5 782	6 582	7 339	8 013	8 566	8 956	9 145	9 091
35		5 867	6 740	7 601	8 408	9 123	9 705	10 114	10 310
40	-	5 957	6 888	7 835	8 759	9 620	10 376	10 990	11 420
45	-	6 083	7 055	8 073	9 097	10 087	11 002	11 804	12 452
50	-	-	7 272	8 345	9 452	10 555	11 613	12 586	13 435
55	-	-	-	8 680	9 854	11 054	12 238	13 366	14 400
60	-	-	-	-	-	-	-	-	-
Current consump	otion in A	T	T	T	T	T	T	T	1
30	-	9.62	10.46	11.29	12.04	12.68	13.15	13.42	13.44
35	-	9.84	10.74	11.64	12.51	13.29	13.94	14.41	14.66
40	-	9.98	10.94	11.93	12.92	13.85	14.68	15.37	15.86
45	-	10.07	11.09	12.18	13.30	14.39	15.41	16.32	17.06
50	-	-	11.25	12.45	13.70	14.96	16.17	17.31	18.31
55	-	-	-	12.75	14.15	15.58	17.01	18.38	19.64
60	-	-	-	-	-	-	-	-	-
Mass flow in kg/h	1								
30	-	213	295	393	508	642	798	976	1 179
35	-	192	269	362	471	599	748	918	1 113
40	-	174	248	337	442	564	707	871	1 058
45	-	161	232	317	418	537	674	832	1 014
50	-	-	221	304	402	517	650	804	980
55	-	-	-	296	392	505	635	785	957
60	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.)	O.P.)							
30	-	1.78	2.20	2.67	3.20	3.85	4.63	5.61	6.89
35	-	1.50	1.87	2.26	2.71	3.22	3.83	4.57	5.50
40		1.28	1.61	1.95	2.32	2.74	3.23	3.81	4.51
45		1.09	1.39	1.69	2.01	2.36	2.76	3.22	3.77
				+		1	+		3.20
-				1	1			1	2.75
									-
50 55 60			1.20	1.47 1.29	1.75 1.54	2.05 1.80	2.38 2.08	2.76 2.39	

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

Cooling capacity	18 259	W
Power input	9 097	W
Current consumption	13.30	Α
Mass flow	418	kg/h
C.O.P.	2.01	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

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

Sound power data

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

Tolerance according EN12900





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 Hz, ARI rating conditions

**R407F** 

Cond. temp. in				Evapora	ating temperature	in °C (to)	<del></del>		
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
•					•				
Cooling capacity	in W		T	T	1	1			
30	-	11 031	15 494	20 926	27 443	35 163	44 205	54 684	66 718
35	-	9 502	13 553	18 492	24 439	31 511	39 826	49 502	60 656
40	-	8 249	11 954	16 469	21 911	28 401	36 056	44 995	55 335
45	-	7 220	10 648	14 805	19 811	25 786	32 849	41 118	50 713
50	-	-	9 583	13 452	18 091	23 621	30 160	37 830	46 747
55	-	-	-	12 365	16 708	21 864	27 952	35 093	43 407
60	-	-	-	-	-	-	-	-	-
Power input in W									
30	-	5 782	6 582	7 339	8 013	8 566	8 956	9 145	9 091
35	-	5 867	6 740	7 601	8 408	9 123	9 705	10 114	10 310
40	-	5 957	6 888	7 835	8 759	9 620	10 376	10 990	11 420
45	-	6 083	7 055	8 073	9 097	10 087	11 002	11 804	12 452
50	-	-	7 272	8 345	9 452	10 555	11 613	12 586	13 435
55	-	-	-	8 680	9 854	11 054	12 238	13 366	14 400
60	-	-	-	-	-	-	_	-	-
Current consump	otion in A	1	T	_		Ţ	1	_	1
30	-	9.62	10.46	11.29	12.04	12.68	13.15	13.42	13.44
35	-	9.84	10.74	11.64	12.51	13.29	13.94	14.41	14.66
40	-	9.98	10.94	11.93	12.92	13.85	14.68	15.37	15.86
45	-	10.07	11.09	12.18	13.30	14.39	15.41	16.32	17.06
50	-	-	11.25	12.45	13.70	14.96	16.17	17.31	18.31
55	-	-	-	12.75	14.15	15.58	17.01	18.38	19.64
60	-	-	-	-	-	-	-	-	-
Mass flow in kg/h	1								
30	-	212	293	390	505	639	793	970	1 171
35	-	191	268	360	469	596	743	913	1 106
40	-	173	247	335	439	561	702	865	1 051
45	-	160	231	316	416	533	670	827	1 007
50	-	-	219	302	400	514	646	799	973
55	-	-	-	294	390	502	631	780	951
60	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C. (	) P )							
30	-	1.91	2.35	2.85	3.42	4.11	4.94	5.98	7.34
35		1.62	2.01	2.43	2.91	3.45	4.10	4.89	5.88
40		1.38	1.74	2.10	2.50	2.95	3.47	4.09	4.85
45		1.19	1.51	1.83	2.18	2.56	2.99	3.48	4.07
50	-	-	1.32	1.61	1.91	2.30	2.60	3.46	3.48
55	<u> </u>	-	1.32	1.61	1.70	1.98	2.00	2.63	3.48
60	-		-	-	1.70	1.98	- 2.28	-	3.01
00	-	_		_		_	-		

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

Cooling capacity	19 811	W
Power input	9 097	W
Current consumption	13.30	Α
Mass flow	416	kg/h
C.O.P.	2.18	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

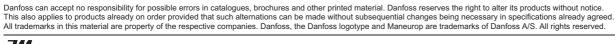
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

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	86	dB(A)
With accoustic hood	80	dB(A)







# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
		•	•		•		•	•	l .
Cooling capacit	y in W				1				
35	4 478	6 489	12 156	15 984	20 589	26 059	32 478	39 932	48 509
40	3 836	5 739	11 069	14 669	19 007	24 169	30 240	37 308	45 457
45	3 200	4 987	9 967	13 332	17 395	22 242	27 959	34 632	42 347
50	2 580	4 245	8 861	11 984	15 765	20 291	25 646	31 918	39 191
55	-	-	7 763	10 637	14 130	18 327	23 314	29 177	36 002
60	-	-	-	9 304	12 501	16 362	20 974	26 422	32 792
65	-	-	-	-	10 891	14 409	18 639	23 664	29 572
75	-	-	-	-	-	-	14 030	18 191	23 154
Power input in \	A/								
Power input in \ 35	3 012	3 607	4 744	5 240	5 654	5 964	6 146	6 175	6 028
40	3 057	3 676	4 898	5 454	5 940	6 333	6 610	6 747	6 719
45	3 034	3 686	5 008	5 631	6 197	6 682	7 062	7 313	7 412
50	2 942	3 634	5 008	5 771	6 424	7 008	7 498	7 872	8 105
55	2 942	3 634	5 072	5 771	6 618	7 008	7 498 7 917	7 872 8 421	8 105 8 796
60	-		5 000	+	1	+			9 482
		-		5 925	6 776	7 581	8 316	8 958	
65 75	-	-	-	-	6 897	7 824	8 693	9 480	10 162
75	-					-	9 371	10 472	11 492
Current consum	nption in A								
35	6.97	7.48	8.47	8.92	9.29	9.59	9.79	9.87	9.82
40	6.98	7.52	8.61	9.11	9.57	9.96	10.26	10.46	10.54
45	6.93	7.51	8.71	9.29	9.83	10.32	10.74	11.07	11.28
50	6.82	7.44	8.77	9.43	10.07	10.67	11.21	11.67	12.03
55	-	-	8.79	9.54	10.29	11.01	11.68	12.28	12.80
60	-	-	-	9.61	10.47	11.32	12.12	12.88	13.56
65	-	-	-	-	10.62	11.59	12.55	13.46	14.32
75	-	-	-	-	-	-	13.31	14.57	15.79
		•	•						
Mass flow in kg	/h	1	1		,	1	,	,	ı
35	113	162	289	372	469	581	711	859	1 028
40	103	151	277	359	454	565	694	841	1 008
45	91	138	263	344	438	548	674	819	984
50	78	125	248	327	420	528	653	796	958
55	-	-	231	309	400	506	629	769	929
60	-	-	-	289	378	482	602	740	898
65	-	-	-	-	354	455	573	709	863
75	-	-	-	-	-	-	508	638	786
Coefficient of n	erformance (C.C	).P.)							
35	1.49	1.80	2.56	3.05	3.64	4.37	5.28	6.47	8.05
40	1.26	1.56	2.26	2.69	3.20	3.82	4.57	5.53	6.77
45	1.05	1.35	1.99	2.37	2.81	3.33	3.96	4.74	5.71
50	0.88	1.17	1.75	2.08	2.45	2.90	3.42	4.05	4.84
55	-	-	1.53	1.81	2.14	2.51	2.94	3.46	4.09
60	-	-	-	1.57	1.84	2.16	2.52	2.95	3.46
65	-	-	-	-	1.58	1.84	2.14	2.50	2.91
75	-	-	-	-	-	-	1.50	1.74	2.01

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

Cooling capacity	20 291	W	
Power input	7 008	W	
Current consumption	10.67	Α	
Mass flow	528	kg/h	
C.O.P.	2.90		

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	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





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 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 capacity			1	T		1		Г	ı
35	4 867	7 040	13 143	17 255	22 192	28 045	34 903	42 856	51 991
40	4 195	6 262	12 032	15 916	20 587	26 134	32 648	40 216	48 929
45	3 522	5 476	10 898	14 548	18 945	24 180	30 341	37 519	45 803
50	-	4 697	9 756	13 164	17 280	22 194	27 996	34 777	42 626
55	-	-	8 616	11 775	15 603	20 189	25 626	32 003	39 409
60	-	-	-	10 395	13 926	18 179	23 242	29 209	36 168
65	-	-	-	-	-	16 174	20 859	26 409	32 915
75	-	-	-	-	-	-	16 145	20 848	26 437
Power input in V		T	1	Т	T	1	T	Т	1
35	3 012	3 607	4 744	5 240	5 654	5 964	6 146	6 175	6 028
40	3 057	3 676	4 898	5 454	5 940	6 333	6 610	6 747	6 719
45	3 034	3 686	5 008	5 631	6 197	6 682	7 062	7 313	7 412
50	-	3 634	5 072	5 771	6 424	7 008	7 498	7 872	8 105
55	-	-	5 088	5 870	6 618	7 308	7 917	8 421	8 796
60	-	-	-	5 925	6 776	7 581	8 316	8 958	9 482
65	-	-	-	-	-	7 824	8 693	9 480	10 162
75	-	-	-	-	-	-	9 371	10 472	11 492
Current consum	•		1	I		1		ı	ı
35	6.97	7.48	8.47	8.92	9.29	9.59	9.79	9.87	9.82
40	6.98	7.52	8.61	9.11	9.57	9.96	10.26	10.46	10.54
45	6.93	7.51	8.71	9.29	9.83	10.32	10.74	11.07	11.28
50	-	7.44	8.77	9.43	10.07	10.67	11.21	11.67	12.03
55	-	-	8.79	9.54	10.29	11.01	11.68	12.28	12.80
60	-	-	-	9.61	10.47	11.32	12.12	12.88	13.56
65	-	-	-	-	-	11.59	12.55	13.46	14.32
75	-	-	-	-	-	-	13.31	14.57	15.79
Mass flow in kg/		101	1 000	070	100	570		055	1
35	113	161	288	370	466	578	707	855	1 022
40	102	150	276	357	452	562	690	836	1 002
45	91	138	262	342	436	545	671	815	979
50	-	125	247	325	418	525	649	791	953
55	-	-	230	307	398	503	625	765	924
60	-	-	-	287	376	479	599	736	893
65	-	-	-	-	-	453	570	705	858
75	-	-	-	-	_	-	506	634	782
Coefficient of	ufoumor 10 0	\ <b>D</b> \							
Coefficient of pe	•	1	0.77	2.00	2.00	4.70	F.00	0.04	0.00
35	1.62	1.95	2.77	3.29	3.92	4.70	5.68	6.94	8.62
40	1.37	1.70	2.46	2.92	3.47	4.13	4.94	5.96	7.28
45	1.16	1.49	2.18	2.58	3.06	3.62	4.30	5.13	6.18
50	-	1.29	1.92	2.28	2.69	3.17	3.73	4.42	5.26
55	-	-	1.69	2.01	2.36	2.76	3.24	3.80	4.48
60	-	-	-	1.75	2.06	2.40	2.79	3.26	3.81
65	-	-	-	-	-	2.07	2.40	2.79	3.24
75	-	-	-	-	_	-	1.72	1.99	2.30

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

reciminal portermance at to 7:2 0, to	U-1T U	
Cooling capacity	22 731	W
Power input	7 547	W
Current consumption	11.26	Α
Mass flow	558	kg/h
C.O.P.	3.01	

to: Evaporating temperature at dew point

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

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



# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 Hz, EN 12900 rating conditions

**R407C** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
		•	•	1	1		•		
Cooling capacit	y in W								
35	16 447	21 287	27 031	33 789	41 672	50 792	61 260	-	-
40	14 952	19 495	24 853	31 136	38 454	46 919	56 640		-
45	13 454	17 723	22 719	28 551	35 329	43 162	52 163	-	-
50	-	15 952	20 609	26 014	32 275	39 503	47 806	-	-
55	-	-	18 505	23 505	29 274	35 918	43 548	-	-
60	-	-	-	21 006	26 303	32 387	39 365	-	-
65	-	-	-	18 494	23 339	28 883	35 230	-	-
Power input in \	N								
35	7 288	8 023	8 677	9 264	9 794	10 278	10 729	-	-
40	7 560	8 406	9 166	9 852	10 475	11 047	11 580	-	-
45	7 785	8 752	9 628	10 425	11 153	11 824	12 450	-	-
50	-	9 067	10 070	10 988	11 832	12 614	13 344	-	-
55	1	-	10 496	11 547	12 518	13 421	14 267		-
60	-	-	-	12 107	13 216	14 252	15 225	-	-
65	-	-	-	12 673	13 932	15 111	16 222		-
Current consum	nption in A								
35	10.67	11.60	12.44	13.17	13.79	14.28	14.63	-	-
40	11.03	12.10	13.05	13.89	14.59	15.14	15.54	-	-
45	11.27	12.55	13.70	14.70	15.56	16.25	16.76	-	-
50	-	12.88	14.29	15.53	16.61	17.51	18.21		-
55	-	-	14.74	16.30	17.67	18.84	19.80	-	-
60	1	-	-	16.91	18.64	20.16	21.45	-	-
65	1	-	-	17.29	19.45	21.39	23.08		-
Mass flow in kg	/h								
35	357	454	568	698	848	1 020	1 214	-	-
40	341	437	548	675	821	987	1 175	-	-
45	325	419	528	652	794	954	1 136	-	-
50	-	400	507	628	766	923	1 099	-	-
55	-	-	485	604	739	891	1 062	-	-
60	-	-	-	578	710	858	1 024	-	-
65	-	-	-	551	680	825	986	-	-
					<u> </u>				
Coefficient of pe	erformance (C.O	o.P.)							
35	2.26	2.65	3.12	3.65	4.25	4.94	5.71	-	-
40	1.98	2.32	2.71	3.16	3.67	4.25	4.89	-	
45	1.73	2.02	2.36	2.74	3.17	3.65	4.19	-	-
50	-	1.76	2.05	2.37	2.73	3.13	3.58	-	-
55	-	-	1.76	2.04	2.34	2.68	3.05	-	-
	-	_	_	1.73	1.99	2.27	2.59	_	_
60	-	_							

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

Cooling capacity	32 275	W
Power input	11 832	W
Current consumption	16.61	Α
Mass flow	766	kg/h
C.O.P.	2.73	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

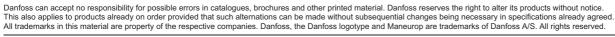
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)	٦
Minimum LP switch setting	1.4	bar(g)	
LP pump down setting	1.7	bar(q)	١

Sound power data

Sound power level	89	dB(A)
With accoustic hood	83	dB(A)







# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 Hz, ARI rating conditions

**R407C** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
•		1	•	1	1				l .
Cooling capacity	y in W								
35	17 703	22 885	29 025	36 240	44 647	54 361	65 498	-	-
40	16 182	21 070	26 825	33 564	41 402	50 458	60 845	-	-
45	14 653	19 273	24 669	30 957	38 255	46 678	56 342	-	-
50	-	17 474	22 537	28 402	35 185	43 002	51 969	-	-
55	-	-	20 410	25 877	32 172	39 409	47 705	-	-
60	-	-	-	23 364	29 196	35 880	43 532	-	-
65	-	-	-	20 841	26 237	32 394	39 428	-	-
Power input in V			,			1	Ţ	T	ı
35	7 288	8 023	8 677	9 264	9 794	10 278	10 729	-	-
40	7 560	8 406	9 166	9 852	10 475	11 047	11 580	-	-
45	7 785	8 752	9 628	10 425	11 153	11 824	12 450	-	-
50	-	9 067	10 070	10 988	11 832	12 614	13 344	-	-
55	-	-	10 496	11 547	12 518	13 421	14 267	-	-
60	-	-	-	12 107	13 216	14 252	15 225	-	-
65	-	-	-	12 673	13 932	15 111	16 222	-	-
Current consum			Т			Т	T	Γ	ı
35	10.67	11.60	12.44	13.17	13.79	14.28	14.63	-	-
40	11.03	12.10	13.05	13.89	14.59	15.14	15.54	-	-
45	11.27	12.55	13.70	14.70	15.56	16.25	16.76	-	-
50	-	12.88	14.29	15.53	16.61	17.51	18.21	-	-
55	-	-	14.74	16.30	17.67	18.84	19.80	-	-
60	-	-	-	16.91	18.64	20.16	21.45	-	-
65	-	-	-	17.29	19.45	21.39	23.08	-	-
	_								
Mass flow in kg/		150	T ===		0.40	1 4044	1 4 007		1
35	355	452	564	694	843	1 014	1 207	-	-
40	340	435	545	671	816	981	1 167	-	-
45	323	417	525	648	789	949	1 129	-	-
50	-	398	504	625	762	917	1 092	-	-
55	-	-	482	601	734	885	1 055	-	-
60	-	-	-	575	706	853	1 018	-	-
65	-	-	-	548	676	820	980	-	-
0 651 - 1 4 - 5									
Coefficient of pe		_	2.24	2.04	4.50	5.00	0.40		I
35	2.43	2.85	3.34	3.91	4.56	5.29	6.10	-	-
40	2.14	2.51	2.93	3.41	3.95	4.57	5.25	-	-
45	1.88	2.20	2.56	2.97	3.43	3.95	4.53	-	-
50	-	1.93	2.24	2.58	2.97	3.41	3.89	-	-
55	-	-	1.94	2.24	2.57	2.94	3.34	-	-
60	-	-	-	1.93	2.21	2.52	2.86	-	-
65	-	-	-	1.64	1.88	2.14	2.43	-	-

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

Cooling capacity	35 621	W
Power input	12 834	W
Current consumption	18.07	Α
Mass flow	802	kg/h
C.O.P.	2.78	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

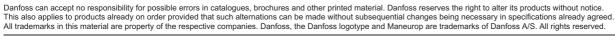
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

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(q)	

Sound power data

Sound power level	89	dB(A)
With accoustic hood	83	dB(A)







# Maneurop reciprocating compressor. MTZ125-4

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

**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	-	14 887	19 869	26 007	33 419	-	-	-	-
20	-	12 520	16 956	22 423	29 038	36 919	46 199	-	-
30	-	10 289	14 179	18 979	24 797	31 749	39 956	49 550	60 688
40	-	-	11 548	15 681	20 707	26 733	33 872	42 242	51 981
50	-	-	-	12 539	16 775	21 880	27 957	35 111	43 460
60	-	-	-	-	13 009	17 200	22 222	28 170	35 136
Power input in W									
10	-	4 566	4 908	5 079	5 047	-	-	-	-
20	-	5 174	5 767	6 226	6 517	6 608	6 468	-	-
30	-	5 566	6 381	7 097	7 681	8 102	8 327	8 324	8 062
40	-	-	6 802	7 744	8 591	9 311	9 871	10 240	10 385
50	-	-	-	8 222	9 301	10 289	11 154	11 863	12 385
60	-	-	-	-	9 863	11 089	12 228	13 248	14 116
Current consump		T			T	T		T	1
10	-	12.26	12.89	13.35	13.61	-	-	-	-
20	-	11.40	12.05	12.59	12.99	13.19	13.15	-	- 40.50
30	-	11.15	11.84	12.48	13.04	13.47	13.73	13.76	13.52
40	-	-	11.99	12.76	13.51	14.19	14.76	15.17	15.37
50	-	-	-	13.15	14.11	15.07	15.98	16.79	17.45
60	-	-	-	-	14.58	15.84	17.11	18.34	19.50
Mass flow in kg/h	1								
10	-	244	326	428	551	-	-	-	-
20	-	221	300	397	516	660	834	-	-
30	-	196	271	364	479	617	784	984	1 223
40	-	-	242	330	438	570	730	922	1 153
50	-	-	-	293	396	521	673	857	1 078
60	-	-	-	-	351	469	613	787	998
Coefficient of per	formance (C.0	O.P.)							
10	-	3.26	4.05	5.12	6.62	-	-	-	-
20	-	2.42	2.94	3.60	4.46	5.59	7.14	-	-
30	-	1.85	2.22	2.67	3.23	3.92	4.80	5.95	7.53
40	-	-	1.70	2.02	2.41	2.87	3.43	4.13	5.01
+0		1				2.13	2.51	2.96	3.51
50	-	-	-	1.53	1.80	2.13	2.01	2.90	3.51

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

Cooling capacity	18 721	W
Power input	8 968	W
Current consumption	13.81	Α
Mass flow	417	kg/h
C.O.P.	2.09	

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 setti	ng	1.3	bar(g)

Sound power data

Sound power level	87	dB(A)	_
With accoustic hood	81	dB(A)	





# Maneurop reciprocating compressor. MTZ125-4

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

**R448A** 

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	y in W	_							
10	10 990	14 960	19 981	26 167	33 635	-	-	-	-
20	8 925	12 440	16 885	22 377	29 031	36 962	46 285	-	-
30	7 022	10 081	13 952	18 750	24 591	31 589	39 862	49 523	60 688
40	5 290	7 895	11 191	15 296	20 325	26 392	33 613	42 104	51 981
50	-	5 892	8 615	12 027	16 243	21 379	27 550	34 872	43 460
60	-	-	6 233	8 953	12 358	16 563	21 684	27 837	35 136
Power input in V	v								
10	4 084	4 566	4 908	5 079	5 047	_	_	_	_
20	4 476	5 174	5 767	6 226	6 517	6 608	6 468	_	-
30	4 684	5 566	6 381	7 097	7 681	8 102	8 327	8 324	8 062
40	4 760	5 797	6 802	7 744	8 591	9 311	9 871	10 240	10 385
50	-	5 918	7 083	8 222	9 301	10 289	11 154	11 863	12 385
60	_	-	7 277	8 582	9 863	11 089	12 228	13 248	14 116
		1	1						
Current consum	ption in A								
10	11.51	12.26	12.89	13.35	13.61	-	-	-	-
20	10.70	11.40	12.05	12.59	12.99	13.19	13.15	-	-
30	10.47	11.15	11.84	12.48	13.04	13.47	13.73	13.76	13.52
40	10.55	11.23	11.99	12.76	13.51	14.19	14.76	15.17	15.37
50	-	11.37	12.22	13.15	14.11	15.07	15.98	16.79	17.45
60	-	-	12.26	13.37	14.58	15.84	17.11	18.34	19.50
Mass flow in kg/	n 210	284	272	470	605		_	_	_
20		256	372 342	479	1		1	<u> </u>	
30	186 161	228	310	445 408	567 525	710 663	877 824	1 010	1 223
		1		+			1	1	
40 50	136	198 168	276 240	369 328	481 434	613 560	768 708	947 880	1 153 1 078
60		-	204	286	385	504	645	809	998
00	<u> </u>		204	200	365	304	043	809	990
Coefficient of pe	erformance (C.C	D.P.)							
10	2.69	3.28	4.07	5.15	6.66	-	-	-	-
20	1.99	2.40	2.93	3.59	4.45	5.59	7.16	-	-
30	1.50	1.81	2.19	2.64	3.20	3.90	4.79	5.95	7.53
40	1.11	1.36	1.65	1.98	2.37	2.83	3.41	4.11	5.01
50	-	1.00	1.22	1.46	1.75	2.08	2.47	2.94	3.51
60	-	-	0.86	1.04	1.25	1.49	1.77	2.10	2.49
Nominal perforn	nance at to = -1	0 °C, tc = 45 °C			_	Pressure switch	settings		

C.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

18 260

8 968

13.81

458 2.04 W

W

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

Sound power data

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





# Maneurop reciprocating compressor. MTZ125-4

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

**R449A** 

Cond. temp. in Evapora					rating temperature in °C (to)				
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	in W								
10	-	14 915	19 900	26 038	33 450	-	-	-	-
20	-	12 548	16 987	22 456	29 070	36 949	46 224	-	-
30	-	10 315	14 210	19 012	24 831	31 780	39 981	49 565	60 688
40	-	-	11 578	15 714	20 741	26 765	33 898	42 258	51 981
50	-	-	-	12 571	16 809	21 912	27 983	35 128	43 460
60	-	-	-	-	13 042	17 231	22 249	28 186	35 136
Power input in W	,								
10	-	4 566	4 908	5 079	5 047	-	-	-	-
20	-	5 174	5 767	6 226	6 517	6 608	6 468	-	-
30	-	5 566	6 381	7 097	7 681	8 102	8 327	8 324	8 062
40	-	-	6 802	7 744	8 591	9 311	9 871	10 240	10 385
50	-	-	-	8 222	9 301	10 289	11 154	11 863	12 385
60	-	-	-	-	9 863	11 089	12 228	13 248	14 116
Current consump		1 40.00	1 40.00	10.05	1 40.04		T	T	T
10	-	12.26	12.89	13.35	13.61	-	-	-	-
20	-	11.40	12.05	12.59	12.99	13.19	13.15	-	- 40.50
30	-	11.15	11.84	12.48	13.04	13.47	13.73	13.76	13.52
40	-	-	11.99	12.76	13.51	14.19	14.76	15.17	15.37
50	-	-	-	13.15	14.11	15.07	15.98	16.79	17.45
60	-	-	-	-	14.58	15.84	17.11	18.34	19.50
Mass flow in kg/h	1								
10	-	244	332	438	566	-	-	-	-
20	-	221	304	406	528	676	852	-	-
30	-	198	276	372	489	630	800	1 002	1 244
40	-	-	247	337	448	582	745	940	1 174
50	-	-	-	300	405	532	688	875	1 100
60	-	-	-	-	359	480	627	806	1 023
Coefficient of per	rformance (C.0	O.P.)							
10	-	3.27	4.05	5.13	6.63	-	-	-	-
20	-	2.43	2.95	3.61	4.46	5.59	7.15	-	-
30	-	1.85	2.23	2.68	3.23	3.92	4.80	5.95	7.53
40	-	-	1.70	2.03	2.41	2.87	3.43	4.13	5.01
<del>-1</del> 0			t						
50	-	-	-	1.53	1.81	2.13	2.51	2.96	3.51

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

Cooling capacity	18 755	W
Power input	8 968	W
Current consumption	13.81	Α
Mass flow	426	kg/h
C.O.P.	2.09	

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	87	dB(A)
With accoustic hood	81	dB(A)





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 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 capacit	y in W								
10	10 990	14 960	19 981	26 167	33 635	-	-	-	-
20	8 925	12 440	16 885	22 377	29 031	36 962	46 285	-	-
30	7 022	10 081	13 952	18 750	24 591	31 589	39 862	49 523	60 688
40	5 290	7 895	11 191	15 296	20 325	26 392	33 613	42 104	51 981
50	-	5 892	8 615	12 027	16 243	21 379	27 550	34 872	43 460
60	-	-	6 233	8 953	12 358	16 563	21 684	27 837	35 136
Power input in V	v								
10	4 084	4 566	4 908	5 079	5 047	-	_	_	-
20	4 476	5 174	5 767	6 226	6 517	6 608	6 468	-	-
30	4 684	5 566	6 381	7 097	7 681	8 102	8 327	8 324	8 062
40	4 760	5 797	6 802	7 744	8 591	9 311	9 871	10 240	10 385
50	-	5 918	7 083	8 222	9 301	10 289	11 154	11 863	12 385
60	-	-	7 277	8 582	9 863	11 089	12 228	13 248	14 116
C		1	1	1	1		•	•	•
Current consum	•	40.00	12.00	42.25	42.04			T	
10	11.51	12.26	12.89	13.35	13.61	- 10.10	-	-	-
20	10.70	11.40	12.05	12.59	12.99	13.19	13.15	- 40.70	- 40.50
30	10.47	11.15	11.84	12.48	13.04	13.47	13.73	13.76	13.52
40	10.55	11.23	11.99	12.76	13.51	14.19	14.76	15.17	15.37
50 60		11.37	12.22 12.26	13.15 13.37	14.11 14.58	15.07 15.84	15.98 17.11	16.79 18.34	17.45 19.50
60	-	-	12.20	13.31	14.50	15.04	17.11	10.34	19.50
Mass flow in kg	'h								
10	203	283	378	490	621	-	-	-	-
20	182	257	347	454	580	727	896	-	-
30	160	230	315	416	537	678	841	1 029	1 244
40	138	202	281	377	491	626	784	965	1 174
50	-	173	246	336	444	572	723	898	1 100
60	-	-	209	293	394	516	660	828	1 023
Coefficient of pe	orformance (C.C	) P )							
10	2.69	3.28	4.07	5.15	6.66	_	_	_	
20	1.99	2.40	2.93	3.59	4.45	5.59	7.16	-	_
30	1.50	1.81	2.93	2.64	3.20	3.90	4.79	5.95	7.53
40	1.11	1.36	1.65	1.98	2.37	2.83	3.41	4.11	5.01
50	-	1.00	1.05	1.96	1.75	2.03	2.47	2.94	3.51
60	<u>-</u>	1.00	0.86	1.46	1.75	1.49	1.77	2.94	2.49
- 00			0.00	1.04	1.20	1.70	1.77	2.10	2.73
Nominal perforn	nance at to = -1	0 °C, tc = 45 °C			_	Pressure switch	settings		

Cooling capacity	18 260	W
Power input	8 968	W
Current consumption	13.81	Α
Mass flow	468	kg/h
C.O.P.	2.04	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

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

Sound power data

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





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 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 i	in W								
10	-	16 868	21 767	27 759	34 946	-	-	-	-
20	-	14 625	19 105	24 538	31 021	38 653	47 544	-	-
30	-	12 313	16 339	21 178	26 921	33 662	41 501	50 548	60 936
40	-	9 932	13 471	17 681	22 650	28 467	35 220	43 006	51 935
50	-	-	10 494	14 044	18 209	23 070	28 709	35 205	42 645
60	-	-	-	10 269	13 605	17 486	21 984	27 161	33 079
Power input in W									
10	-	4 995	5 272	5 459	5 556	-	-	-	-
20	-	5 799	6 261	6 627	6 898	7 075	7 157	-	-
30	-	6 444	7 127	7 710	8 192	8 574	8 858	9 043	9 131
40	-	6 834	7 775	8 610	9 340	9 966	10 487	10 905	11 221
50	-	-	8 109	9 234	10 249	11 153	11 949	12 637	13 216
60	-	-	-	9 485	10 821	12 042	13 149	14 142	15 023
Current consump	tion in A	11.53	11.84	12.09	12.28	-	_	-	_
20		11.03	11.43	11.77	12.26	12.24	12.35	-	_
30		11.05	11.43	12.09	12.04	12.24	13.14	13.31	13.37
40	<u>-</u>	11.25	12.00	12.09	13.35	13.93	14.42	14.81	15.09
50		-	12.30	13.28	14.20	15.06	15.83	16.51	17.09
60	<u>-</u>	-	-	13.45	14.71	15.91	17.03	18.06	18.99
00				15.45	14.71	13.91	17.03	10.00	10.55
Mass flow in kg/h		_	T		1			T	
10	-	344	448	574	727	-	-	-	-
20	-	324	425	549	698	876	1 089	-	-
30	-	299	399	519	664	836	1 042	1 288	1 580
40	-	268	366	483	623	790	989	1 226	1 507
50	-	-	324	438	573	734	926	1 153	1 424
60	-	-	-	382	512	667	850	1 069	1 328
Coefficient of perf	formance (C.	O.P.)		_					
10	-	3.38	4.13	5.08	6.29	-	-	-	-
20	-	2.52	3.05	3.70	4.50	5.46	6.64	-	-
30	-	1.91	2.29	2.75	3.29	3.93	4.69	5.59	6.67
40	-	1.45	1.73	2.05	2.42	2.86	3.36	3.94	4.63
50	-	-	1.29	1.52	1.78	2.07	2.40	2.79	3.23
			_	1.08	1.26	1.45	1.67	1.92	2.20

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

Cooling capacity	20 451	W
Power input	9 831	W
Current consumption	13.80	Α
Mass flow	599	kg/h
C.O.P.	2.08	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Max	kimum HP switch setting	27.7	bar(g)
Min	imum LP switch setting	1	bar(g)
LP	pump down setting	1.3	bar(g)

Sound power data

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





# Maneurop reciprocating compressor. MTZ125-4

# Performance data at 60 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 capacit	y in W								
10	12 547	16 421	21 312	27 329	34 577	-	-	-	-
20	10 445	13 998	18 437	23 867	30 395	38 130	47 177	-	-
30	8 343	11 537	15 482	20 287	26 057	32 901	40 924	50 233	60 936
40	6 251	9 047	12 461	16 602	21 575	27 488	34 448	42 561	51 935
50	4 182	6 540	9 385	12 822	16 959	21 903	27 761	34 639	42 645
60	-	4 030	6 265	8 960	12 222	16 158	20 875	26 479	33 079
Power input in V		4.005	5.070	F 450	5.550		1	1	
10	4 626	4 995	5 272	5 459	5 556	7.075	7 157	-	-
20	5 241	5 799	6 261	6 627	6 898	7 075	7 157		
30 40	5 659	6 444	7 127	7 710 8 610	8 192 9 340	8 574 9 966	8 858	9 043	9 131
	5 786	6 834	7 775	1			10 487	10 905	11 221
50	5 527	6 874	8 109	9 234	10 249	11 153	11 949	12 637	13 216
60	-	6 468	8 035	9 485	10 821	12 042	13 149	14 142	15 023
Current consum	nption in A								
10	11.17	11.53	11.84	12.09	12.28	-	-	-	-
20	10.59	11.03	11.43	11.77	12.04	12.24	12.35	-	-
30	10.47	11.05	11.60	12.09	12.52	12.87	13.14	13.31	13.37
40	10.46	11.25	12.00	12.71	13.35	13.93	14.42	14.81	15.09
50	10.21	11.27	12.30	13.28	14.20	15.06	15.83	16.51	17.09
60	-	10.77	12.13	13.45	14.71	15.91	17.03	18.06	18.99
			•		-	•			•
Mass flow in kg/	/h								
10	309	402	513	645	800	-	-	-	-
20	285	377	487	616	768	944	1 147	-	-
30	257	348	456	583	730	901	1 098	1 324	1 580
40	222	313	418	542	685	851	1 042	1 260	1 507
50	178	267	371	491	631	791	975	1 186	1 424
60	-	210	311	428	563	718	896	1 099	1 328
Coefficient of pe	erformance (C.C	1	1	T			1	1	
10	2.71	3.29	4.04	5.01	6.22	-	-	-	-
20	1.99	2.41	2.94	3.60	4.41	5.39	6.59	-	-
30	1.47	1.79	2.17	2.63	3.18	3.84	4.62	5.55	6.67
40	1.08	1.32	1.60	1.93	2.31	2.76	3.28	3.90	4.63
50	0.76	0.95	1.16	1.39	1.65	1.96	2.32	2.74	3.23
60	-	0.62	0.78	0.94	1.13	1.34	1.59	1.87	2.20
Nominal perforn	nance at to = -10	0 °C, tc = 45 °C			_	Pressure switch	settings		

Cooling capacity

Current consumption

Power input

Mass flow

C.O.P.

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

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

19 283

9 831

13.80

659

1.96

W

W

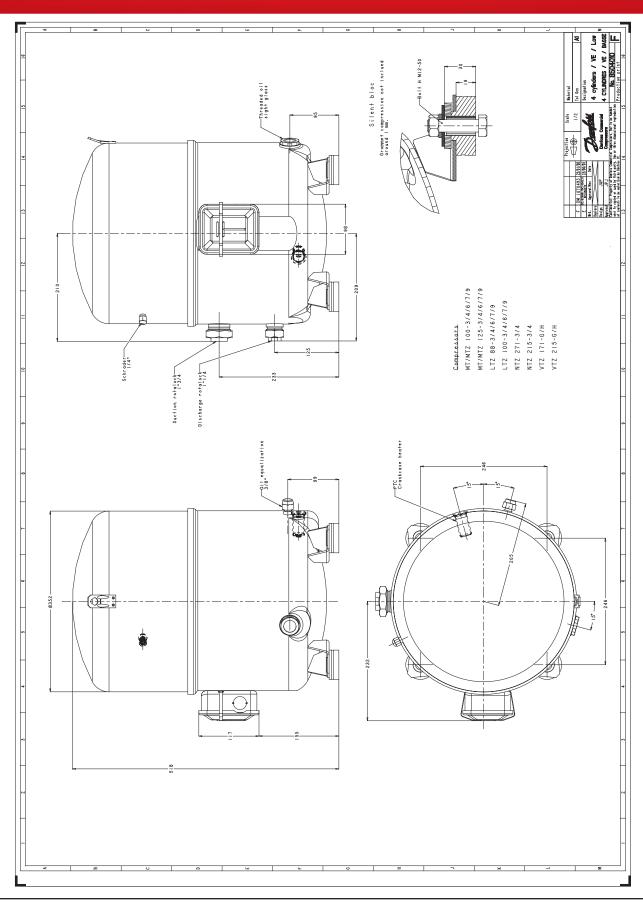
Max	kimum HP switch setting	27.7	bar(g)
Min	imum LP switch setting	1	bar(g)
LP	pump down setting	1.3	bar(g)

Sound power data

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







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