ENGINEERING TOMORROW



Datasheets

# Danfoss Reciprocating compressors MT / MTZ / NTZ





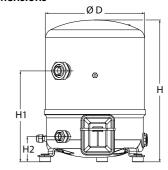


#### Datasheet, technical data

## **General Characteristics**

Model number (on compressor nameplate)		MTZ56HL4BVE
Code number for Singlepack*		MTZ56-4VI
Code number for Industrial pack**		MTZ56-4VM
Drawing number		8502012g
Suction and discharge connections		Rotolock
Suction connection		1-3/4 " Rotolock
Discharge connection		1-1/4 " Rotolock
Suction connection with supplied sleeve		7/8 " ODF
Discharge connection with supplied sleeve		3/4 " ODF
Oil sight glass		Threaded
Oil equalisation connection		3/8" flare SAE
Oil drain connection		None
LP gauge port		Schrader
IPR valve		30 bar / 8 bar
Cylinders	2	2
Swept volume	96.13 c	m3/rev
Displacement @ Nominal speed	16.7 m3/h @ 2900 rpm -	- 20.2 m3/h @ 3500 rpm
Net weight	39	kg
Oil charge	1.8 litre, PC	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	51	кg
Approved refrigerants R404A,R134a,R407A/C/F,R448A,R407A/C/F		448A,R449A,R452A,R513A

#### **Dimensions**



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

#### **Electrical Characteristics**

380-400V/3/50Hz - 460V/3/60Hz
340-440 V @ 50Hz - 414-506 V @ 60Hz
2.39 Ω
12 A
64 A
Internal overload protector

**Recommended Installation torques** 

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

#### Parts shipped with compressor

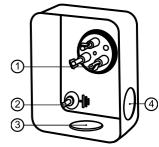
Mounting kit with grommets, bolts, nuts, sleeves and washers
Suction & Discharge solder sleeves, rotolock nuts and gaskets (shipped with rotolock version only)
Initial oil charge
Installation instructions

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

\*Singlepack: Compressor in cardboard box

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

Terminal box



IP55 (with cable gland)

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





#### Datasheet, accessories and spare parts

Gasket for oil sight glass (black chloroprene)

Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp

## Maneurop reciprocating compressor, MTZ056-4

Rotolock accessories, suction side	Code no.	
Solder sleeve, P07 (1-3/4" Rotolock, 7/8" ODF)	8153013	
Rotolock valve, V07 (1-3/4" Rotolock, 7/8" ODF)	8168032	
Gasket, 1-3/4"	8156132	Gaskets, sleeves and nuts
Rotolock accessories, discharge side	Code no.	
Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008	
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029	
Gasket, 1-1/4"	8156131	
Rotolock accessories, sets	Code no.	1 2 3
Valve set, V07 (1-3/4"~7/8"), V04 (1-1/4"~3/4")	7703006	
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009	1: Gasket
	•	2: Solder sleeve
Oil / lubricants	Code no.	3: Rotolock nut
POE lubricant, 175PZ, 1 litre can	120Z0638	
POE lubricant, 175PZ, 2.5 litre can	120Z0639	
Crankcase heaters	Code no.	
PTC heater 27W,CE mark, UL	120Z0459	
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	7773107	
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	7773117	Mounting kit
Belt type crankcase heater, 65 W, 460 V, CE mark, UL	120Z0466	
Miscellaneous accessories	Code no.	1 2
Electronic soft start kit, MCI 15 C	7705006	3
Acoustic hood for 2 cylinder compressor	120Z0472	
Oil equalisation nut	8153127	4
Spare parts	Code no.	
Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts	8156001	6 \
Oil sight glass with gaskets (black & white)	8156019	

1: Bolt (3x)
2: Lock washer (3x)

3: Flat washer (3x)

4: Sleeve (3x)

5: Grommet (3x) 6: Nut (3x)

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8156145

8156134





## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 50 Hz, EN 12900 rating conditions

**R407C** 

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacity	y in W	•	•	T	•	1	1	1	•
35	5 227	7 074	9 303	11 962	15 099	18 762	23 001	-	-
40	4 691	6 432	8 527	11 023	13 968	17 412	21 402	-	-
45	4 153	5 787	7 745	10 076	12 828	16 050	19 789	-	-
50	-	5 141	6 961	9 125	11 682	14 680	18 167	-	-
55	-	-	6 179	8 174	10 534	13 306	16 539	-	-
60	-	-	-	7 226	9 387	11 931	14 908	-	-
65	-	-	-	6 285	8 245	10 560	13 278	-	-
Power input in V			T	I		T	T	1	1
35	2 398	2 677	2 912	3 111	3 281	3 430	3 564	-	-
40	2 469	2 803	3 086	3 324	3 525	3 697	3 846	-	-
45	2 502	2 902	3 243	3 531	3 775	3 981	4 157	-	-
50	-	2 965	3 375	3 725	4 022	4 273	4 487	-	-
55	-	-	3 472	3 894	4 256	4 565	4 827	-	-
60	-	-	-	4 032	4 469	4 846	5 168	-	-
65	-	-	-	4 127	4 652	5 107	5 500	-	-
Current consum	ption in A								
35	5.54	5.83	6.11	6.37	6.61	6.81	6.96	-	-
40	5.63	5.96	6.28	6.58	6.86	7.09	7.26	-	-
45	5.68	6.08	6.46	6.82	7.14	7.42	7.64	-	-
50	-	6.17	6.63	7.06	7.45	7.79	8.07	-	-
55	-	-	6.76	7.28	7.76	8.18	8.53	-	-
60	-	-	-	7.47	8.05	8.57	9.02	-	-
65	-	-	-	7.61	8.31	8.94	9.50	-	-
Mass flow in kg/	/h								
35	113	151	195	247	307	377	456	_	_
40	107	144	188	239	298	366	444	_	_
45	100	137	180	230	288	355	431	_	_
50	-	129	171	220	277	343	418	_	-
55	-	-	162	210	266	330	403	-	-
60	-	-	-	199	253	316	388	-	-
65	-	-	-	187	240	301	371	-	-
		•	•	1	•				•
Coefficient of pe	erformance (C.O	P.P.)							
35	2.18	2.64	3.19	3.84	4.60	5.47	6.45	-	-
40	1.90	2.29	2.76	3.32	3.96	4.71	5.56	-	-
45	1.66	1.99	2.39	2.85	3.40	4.03	4.76	-	-
50	-	1.73	2.06	2.45	2.90	3.44	4.05	-	-
55	-	-	1.78	2.10	2.47	2.92	3.43	-	-
60	-	-	-	1.79	2.10	2.46	2.88	-	-
65	-	-	-	1.52	1.77	2.07	2.41	-	-

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

Cooling capacity	11 682	W
Power input	4 022	W
Current consumption	7.45	Α
Mass flow	277	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	29.4	bar(g)	
Minimum LP switch setting	1.4	bar(g)	
LP pump down setting	1.7	bar(g)	

Sound power data

Sound power level	83	dB(A)
With accoustic hood	76	dB(A)

Tolerance according EN12900





## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 50 Hz, ARI rating conditions

**R407C** 

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
1		1	•				•		
Cooling capacity	y in W								
35	5 626	7 605	9 990	12 830	16 177	20 081	24 592	-	-
40	5 076	6 952	9 203	11 882	15 039	18 725	22 990	-	-
45	4 523	6 293	8 410	10 925	13 891	17 357	21 375	-	-
50	-	5 631	7 612	9 963	12 735	15 980	19 749	ı	-
55	-	-	6 815	8 999	11 577	14 599	18 118	1	-
60	-	-	-	8 038	10 419	13 218	16 486	ı	-
65	-	-	-	7 083	9 268	11 843	14 861	-	-
Power input in V			,			1	,		ı
35	2 398	2 677	2 912	3 111	3 281	3 430	3 564	-	-
40	2 469	2 803	3 086	3 324	3 525	3 697	3 846	-	-
45	2 502	2 902	3 243	3 531	3 775	3 981	4 157	-	-
50	-	2 965	3 375	3 725	4 022	4 273	4 487	-	-
55	-	-	3 472	3 894	4 256	4 565	4 827	-	-
60	-	-	-	4 032	4 469	4 846	5 168	-	-
65	-	-	-	4 127	4 652	5 107	5 500	-	-
Current consum	-	T		1	1	1	<u> </u>		1
35	5.54	5.83	6.11	6.37	6.61	6.81	6.96	-	-
40	5.63	5.96	6.28	6.58	6.86	7.09	7.26	-	-
45	5.68	6.08	6.46	6.82	7.14	7.42	7.64	-	-
50	-	6.17	6.63	7.06	7.45	7.79	8.07	-	-
55	-	-	6.76	7.28	7.76	8.18	8.53	-	-
60	-	-	-	7.47	8.05	8.57	9.02	-	-
65	-	-	-	7.61	8.31	8.94	9.50	-	-
Mass flow in kg/				1	1				Ι
35	113	150	194	246	306	374	453	-	-
40	106	143	187	238	296	364	441	-	-
45	100	136	179	229	286	353	428	-	-
50	-	128	170	219	276	341	415	-	-
55	-	-	161	209	264	328	401	-	-
60	-	-	-	198	252	314	385	-	-
65	-	-	-	186	239	300	369	-	-
-	erformance (C.C		T -	1 .	1 .	T -			1
35	2.35	2.84	3.43	4.12	4.93	5.85	6.90	-	-
40	2.06	2.48	2.98	3.57	4.27	5.07	5.98	-	-
45	1.81	2.17	2.59	3.09	3.68	4.36	5.14	-	-
50	-	1.90	2.26	2.67	3.17	3.74	4.40	-	-
55	-	-	1.96	2.31	2.72	3.20	3.75	-	-
60	-	-	-	1.99	2.33	2.73	3.19	-	-
65	_	_	_	1.72	1.99	2.32	2.70	_	_

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

Cooling capacity	12 999	W
Power input	4 367	W
Current consumption	7.91	Α
Mass flow	293	kg/h
C.O.P.	2.98	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

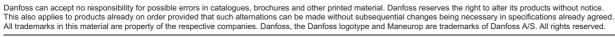
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

			_
Maximum HP switch setting	29.4	bar(g)	1
Minimum LP switch setting	1.4	bar(g)	
LP pump down setting	1.7	bar(g)	

Sound power data

Sound power level	83	dB(A)
With accoustic hood	76	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 50 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
"		1	1	•	•		1		
Cooling capacity	/ in W								
35	1 645	2 349	4 415	5 878	7 694	9 914	12 588	15 766	19 498
40	1 392	2 043	3 958	5 322	7 025	9 115	11 645	14 663	18 220
45	1 163	1 761	3 526	4 792	6 381	8 343	10 728	13 587	16 969
50	957	1 504	3 119	4 287	5 763	7 597	9 838	12 538	15 746
55	-	-	2 738	3 809	5 172	6 878	8 976	11 517	14 552
60	-	-	-	3 358	4 609	6 187	8 142	10 526	13 386
65	-	-	-	-	4 073	5 524	7 338	9 563	12 251
75	-	-	-	-	-	-	5 818	7 729	10 073
Power input in V						1			
35	1 191	1 419	1 828	2 002	2 152	2 276	2 370	2 432	2 458
40	1 148	1 396	1 848	2 046	2 222	2 372	2 494	2 585	2 642
45	1 109	1 380	1 882	2 107	2 311	2 491	2 645	2 768	2 859
50	1 064	1 361	1 919	2 175	2 411	2 624	2 812	2 972	3 100
55	-	-	1 950	2 240	2 511	2 760	2 986	3 185	3 354
60	-	-	-	2 292	2 601	2 890	3 157	3 398	3 611
65	-	-	-	-	2 672	3 005	3 316	3 602	3 862
75	-	-	-	-	-	-	3 555	3 943	4 306
Current concum	ntion in A								
35	5.20	5.16	5.25	5.36	5.48	5.61	5.73	5.83	5.89
40	5.18	5.16	5.27	5.39	5.53	5.68	5.82	5.93	6.01
45	5.15	5.13	5.31	5.45	5.62	5.79	5.95	6.09	6.20
50	5.10	5.14	5.35	5.53	5.73	5.79	6.13	6.30	6.44
55	-	-	5.39	5.60	5.73	6.09	6.32	6.54	6.73
60						6.09	6.53		7.03
	-	-	-	5.66	5.94	+	6.73	6.80	7.05
65 75	<u> </u>	-	-	_	6.03	6.38	7.05	7.06 7.52	7.35
75	<del>-</del>	_					7.05	7.52	7.90
Mass flow in kg	'h								
35	41	59	105	137	175	221	275	339	414
40	37	54	99	130	168	213	267	330	404
45	33	49	93	123	160	205	258	321	395
50	29	44	87	117	153	197	250	312	385
55	-	-	81	110	146	190	242	304	376
60	-	-	-	104	139	182	234	295	367
65	-	-	_	-	133	175	226	287	358
75	-	_	_	_	-	-	211	271	341
I				1		1			
Coefficient of pe	rformance (C.O	.P.)							
35	1.38	1.66	2.42	2.94	3.57	4.36	5.31	6.48	7.93
40	1.21	1.46	2.14	2.60	3.16	3.84	4.67	5.67	6.90
45	1.05	1.28	1.87	2.27	2.76	3.35	4.06	4.91	5.93
50	0.90	1.11	1.63	1.97	2.39	2.89	3.50	4.22	5.08
55	-	-	1.40	1.70	2.06	2.49	3.01	3.62	4.34
60	-	-	-	1.47	1.77	2.14	2.58	3.10	3.71
65	-	-	-	-	1.52	1.84	2.21	2.65	3.17
75	_	_	-	-	-	-	1.64	1.96	2.34

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

-, -, -,		
Cooling capacity	7 597	W
Power input	2 624	W
Current consumption	5.93	Α
Mass flow	197	kg/h
C.O.P.	2.89	

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 = 10 K , Subcooling = 0 K



## Maneurop reciprocating compressor. MTZ056-4

## 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
	-						<u> </u>		
Cooling capacity	y in W								
35	1 788	2 548	4 774	6 345	8 293	10 670	13 528	16 920	20 898
40	1 522	2 229	4 302	5 775	7 608	9 857	12 572	15 806	19 612
45	1 280	1 934	3 855	5 229	6 949	9 069	11 642	14 719	18 354
50	-	1 664	3 434	4 709	6 317	8 309	10 740	13 661	17 126
55	-	-	3 039	4 216	5 711	7 577	9 866	12 633	15 929
60	-	-	-	3 751	5 134	6 874	9 023	11 636	14 764
65	-	-	-	-	-	6 201	8 212	10 672	13 636
75	-	-	-	-	-	-	6 694	8 859	11 502
Power input in V	v	•	1	1		<b>T</b>	1	1	•
35	1 191	1 419	1 828	2 002	2 152	2 276	2 370	2 432	2 458
40	1 148	1 396	1 848	2 046	2 222	2 372	2 494	2 585	2 642
45	1 109	1 380	1 882	2 107	2 311	2 491	2 645	2 768	2 859
50	-	1 361	1 919	2 175	2 411	2 624	2 812	2 972	3 100
55	-	-	1 950	2 240	2 511	2 760	2 986	3 185	3 354
60	-	-	-	2 292	2 601	2 890	3 157	3 398	3 611
65	-	-	-	-	-	3 005	3 316	3 602	3 862
75	-	-	-	-	-	-	3 555	3 943	4 306
Current consum	ption in A	ľ	1	1	T	1	1	1	1
35	5.20	5.16	5.25	5.36	5.48	5.61	5.73	5.83	5.89
40	5.18	5.15	5.27	5.39	5.53	5.68	5.82	5.93	6.01
45	5.15	5.14	5.31	5.45	5.62	5.79	5.95	6.09	6.20
50	-	5.13	5.35	5.53	5.73	5.93	6.13	6.30	6.44
55	-	-	5.39	5.60	5.84	6.09	6.32	6.54	6.73
60	-	-	-	5.66	5.94	6.24	6.53	6.80	7.03
65	-	-	-	-	-	6.38	6.73	7.06	7.35
75	-	-	-	-	-	-	7.05	7.52	7.96
Mass flow in kg/	/h	T	1	1	1	1	1	1	1
35	41	58	105	136	174	220	274	337	411
40	37	53	99	129	167	212	265	328	402
45	33	49	93	123	160	204	257	320	393
50	-	44	87	116	152	196	249	311	383
55	-	-	81	110	145	189	241	302	374
60	-	-	-	104	139	181	232	293	365
65	-	-	-	-	-	174	225	285	356
75	-	-	-	-	-	-	210	269	339
	erformance (C.C	1	1 -	1 -	T -	T .	1 _	1 -	1
35	1.50	1.80	2.61	3.17	3.85	4.69	5.71	6.96	8.50
40	1.33	1.60	2.33	2.82	3.42	4.16	5.04	6.11	7.42
45	1.15	1.40	2.05	2.48	3.01	3.64	4.40	5.32	6.42
50	-	1.22	1.79	2.17	2.62	3.17	3.82	4.60	5.52
55	-	-	1.56	1.88	2.27	2.74	3.30	3.97	4.75
60	-	-	-	1.64	1.97	2.38	2.86	3.42	4.09
65	-	-	-	-	-	2.06	2.48	2.96	3.53
75	-	-	-	-	-	-	1.88	2.25	2.67

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

monimum portormanos at to	0,	U-1		
Cooling capacity		8 622	W	
Power input		2 845	W	
Current consumption		6.17	Α	
Mass flow		211	kg/h	
C.O.P.		3.03		

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



## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 50 Hz, EN 12900 rating conditions

# **R404A**

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacit		1.004	5.400	7,000	0.440	40.054	45.445	40.000	00.704
30	2 833	4 001	5 466	7 268	9 449	12 051	15 115	18 682	22 794
35	2 439	3 509	4 849	6 498	8 499	10 893	13 722	17 026	20 847
40	2 074	3 049	4 266	5 765	7 588	9 776	12 371	15 415	18 948
45	1 734	2 616	3 712	5 062	6 709	8 694	11 058	13 843	17 090
50	1 414	2 205	3 182	4 386	5 859	7 643	9 778	12 306	15 268
55	-	1 810	2 670	3 730	5 032	6 616	8 524	10 798	13 478
60	-	1 426	2 172	3 090	4 222	5 609	7 293	9 314	11 714
Power input in \	N			1			1		
30	2 050	2 351	2 635	2 896	3 130	3 334	3 503	3 632	3 718
35	2 058	2 386	2 697	2 988	3 254	3 491	3 694	3 860	3 983
40	2 055	2 413	2 757	3 082	3 383	3 657	3 898	4 104	4 269
45	2 038	2 431	2 810	3 173	3 513	3 827	4 112	4 361	4 572
50	2 002	2 433	2 853	3 256	3 640	3 999	4 329	4 626	4 886
55	-	2 417	2 880	3 329	3 759	4 167	4 547	4 896	5 209
60	-	2 377	2 888	3 386	3 867	4 327	4 761	5 165	5 535
Current consum	nption in A								
30	5.23	5.51	5.81	6.11	6.40	6.66	6.87	7.02	7.09
35	5.23	5.54	5.87	6.21	6.53	6.83	7.09	7.29	7.42
40	5.23	5.57	5.93	6.31	6.68	7.03	7.34	7.60	7.79
45	5.21	5.58	5.99	6.41	6.83	7.23	7.61	7.93	8.19
50	5.17	5.59	6.04	6.51	6.99	7.45	7.89	8.28	8.62
55	-	5.57	6.08	6.61	7.14	7.68	8.18	8.65	9.07
60	-	5.53	6.09	6.69	7.30	7.90	8.49	9.04	9.54
Mass flow in kg	/h								
30	89	123	164	212	269	336	412	500	600
35	83	116	156	203	258	323	398	484	582
40	76	109	148	194	248	311	384	468	564
45	70	102	140	185	238	300	371	453	547
50	63	95	132	176	228	288	358	438	530
55	-	88	124	167	218	277	346	424	514
60	-	81	117	159	209	266	334	411	499
Coefficient of ne	erformance (C.O	.P.)							
30	1.38	1.70	2.07	2.51	3.02	3.61	4.32	5.14	6.13
35	1.19	1.47	1.80	2.17	2.61	3.12	3.71	4.41	5.23
40	1.01	1.26	1.55	1.87	2.24	2.67	3.17	3.76	4.44
45	0.85	1.08	1.32	1.60	1.91	2.27	2.69	3.17	3.74
50	0.71	0.91	1.12	1.35	1.61	1.91	2.26	2.66	3.12
55	-	0.75	0.93	1.12	1.34	1.59	1.87	2.21	2.59
	-	0.60	0.75	0.91	1.09	1.30	1.53	1.80	2.12

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

Cooling capacity	6 709	W
Power input	3 513	W
Current consumption	6.83	Α
Mass flow	238	kg/h
C.O.P.	1.91	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

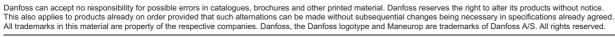
Rating conditions : Superheat = 10 K , Subcooling = 0 K

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	81	dB(A)
With accoustic hood	74	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 50 Hz, ARI rating conditions

# **R404A**

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacit		T		T	Т	T	1	T	ı
30	3 154	4 442	6 052	8 028	10 413	13 252	16 587	20 461	24 918
35	2 744	3 936	5 422	7 246	9 452	12 084	15 185	18 800	22 971
40	2 364	3 463	4 827	6 502	8 531	10 960	13 831	17 189	21 077
45	2 010	3 018	4 264	5 792	7 648	9 876	12 520	15 625	19 235
50	1 675	2 597	3 727	5 113	6 798	8 830	11 252	14 109	17 445
55	-	2 193	3 213	4 460	5 981	7 822	10 027	12 643	15 714
60	-	1 803	2 720	3 836	5 200	6 858	8 857	11 243	14 062
Power input in \	N								
30	2 050	2 351	2 635	2 896	3 130	3 334	3 503	3 632	3 718
35	2 058	2 386	2 697	2 988	3 254	3 491	3 694	3 860	3 983
40	2 055	2 413	2 757	3 082	3 383	3 657	3 898	4 104	4 269
45	2 038	2 431	2 810	3 173	3 513	3 827	4 112	4 361	4 572
50	2 002	2 433	2 853	3 256	3 640	3 999	4 329	4 626	4 886
55	-	2 417	2 880	3 329	3 759	4 167	4 547	4 896	5 209
60	-	2 377	2 888	3 386	3 867	4 327	4 761	5 165	5 535
Current consum	-	I	1	I	I	1	1	I	T
30	5.23	5.51	5.81	6.11	6.40	6.66	6.87	7.02	7.09
35	5.23	5.54	5.87	6.21	6.53	6.83	7.09	7.29	7.42
40	5.23	5.57	5.93	6.31	6.68	7.03	7.34	7.60	7.79
45	5.21	5.58	5.99	6.41	6.83	7.23	7.61	7.93	8.19
50	5.17	5.59	6.04	6.51	6.99	7.45	7.89	8.28	8.62
55	-	5.57	6.08	6.61	7.14	7.68	8.18	8.65	9.07
60	-	5.53	6.09	6.69	7.30	7.90	8.49	9.04	9.54
Mass flow in kg	/h								
30	89	122	163	211	268	334	410	497	596
35	82	115	155	202	257	321	395	481	578
40	76	108	147	193	246	309	382	465	560
45	69	101	139	184	236	298	369	450	543
50	63	94	131	175	227	286	356	436	527
55	-	87	124	166	217	276	344	422	511
60	-	80	116	158	207	265	331	408	495
Coefficient of n	erformance (C.C	).P.)							
30	1.54	1.89	2.30	2.77	3.33	3.97	4.74	5.63	6.70
35	1.33	1.65	2.01	2.42	2.90	3.46	4.11	4.87	5.77
40	1.15	1.43	1.75	2.11	2.52	3.00	3.55	4.19	4.94
45	0.99	1.24	1.52	1.83	2.18	2.58	3.05	3.58	4.21
50	0.84	1.07	1.31	1.57	1.87	2.21	2.60	3.05	3.57
55	-	0.91	1.12	1.34	1.59	1.88	2.21	2.58	3.02

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

Cooling capacity	7 648	W
Power input	3 513	W
Current consumption	6.83	Α
Mass flow	236	kg/h
C.O.P.	2.18	· ·

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

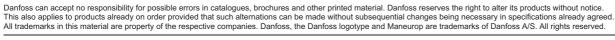
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch 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	81	dB(A)
With accoustic hood	74	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 50 Hz, EN 12900 rating conditions

**R407A** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity 30	2 094	3 177	4 537	6 214	8 247	10 676	13 541	16 882	20 738
35	1 772	2 785	4 055	5 623	7 528	9 810	12 509	15 663	19 314
40	1 461	2 403	3 583	5 041	6 817	8 951	12 509	14 449	17 893
45	1 164	2 034	3 123	4 471	6 117	8 101	10 463	13 242	16 479
50	-	1 683	2 680	3 915	5 430	7 264	9 456	12 047	15 075
55	-	- 1 083				6 443			13 684
60	<u> </u>	-	2 255	3 378 2 863	4 761	5 642	8 465 7 492	10 865 9 701	12 309
60	-	-	-	2 803	4 113	5 042	7 492	9 /01	12 309
Power input in W	ı				_		_		T
30	1 569	1 880	2 174	2 447	2 692	2 905	3 082	3 216	3 304
35	1 540	1 880	2 205	2 511	2 793	3 046	3 264	3 444	3 579
40	1 495	1 866	2 225	2 568	2 890	3 184	3 448	3 675	3 862
45	1 433	1 839	2 235	2 617	2 981	3 321	3 633	3 911	4 150
50	-	1 798	2 234	2 659	3 068	3 456	3 818	4 150	4 446
55	-	-	2 223	2 693	3 150	3 589	4 005	4 393	4 748
60	-	-	-	2 720	3 228	3 720	4 193	4 640	5 057
Current consum		_	1	Γ	T	T	•	_	1
30	4.67	4.95	5.25	5.56	5.86	6.12	6.35	6.51	6.59
35	4.67	4.96	5.28	5.61	5.94	6.25	6.52	6.74	6.89
40	4.66	4.97	5.31	5.67	6.04	6.39	6.72	7.01	7.23
45	4.64	4.96	5.33	5.73	6.14	6.55	6.95	7.30	7.61
50	-	4.94	5.35	5.79	6.25	6.72	7.18	7.62	8.01
55	-	-	5.34	5.83	6.35	6.89	7.42	7.94	8.42
60	-	-	-	5.86	6.44	7.05	7.66	8.27	8.85
Mass flow in kg/l	h								
30	50	74	104	140	182	232	289	355	431
35	45	69	98	133	175	224	280	346	421
40	39	63	91	126	167	215	271	336	410
45	33	56	85	119	159	206	262	325	398
50	-	50	78	111	150	197	252	314	386
55	-	-	70	103	142	188	241	303	374
60	-	-	-	95	133	178	230	291	361
Coefficient of pe	rformance (C.C	).P.)							
30	1.34	1.69	2.09	2.54	3.06	3.67	4.39	5.25	6.28
35	1.15	1.48	1.84	2.24	2.70	3.22	3.83	4.55	5.40
40	0.98	1.29	1.61	1.96	2.36	2.81	3.33	3.93	4.63
45	0.81	1.11	1.40	1.71	2.05	2.44	2.88	3.39	3.97
50	-	0.94	1.20	1.47	1.77	2.10	2.48	2.90	3.39
		-	1.01	1.25	1.51	1.80	2.11	2.47	2.88
55	-								

Nominal performance at to = -10 °C, tc = 45 °C	3
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Cooling capacity	6 117	W
Power input	2 981	W
Current consumption	6.14	Α
Mass flow	159	kg/h
C.O.P.	2.05	· ·

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

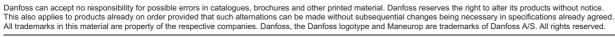
Rating conditions : Superheat = 10 K , Subcooling = 0 K

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	80	dB(A)
With accoustic hood	73	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 50 Hz, ARI rating conditions

**R407A** 

			Evapora	iting temperature	in °C (to)			
-30	-25	-20	-15	-10	-5	0	5	10
	0.404	4.000	0.000	0.070	11 100	44.500	40.004	00.000
		+		ł	1		1	22 202
								20 776
			1		+			19 353
			1		+		1	17 938
				1				16 537
			1	1	1	1	1	15 155
-	-	-	3 253	4 659	63/4	8 440	10 902	13 800
N			1	1	T		1	•
1 569	1 880	2 174	2 447	2 692	2 905	3 082	3 216	3 304
1 540	1 880	2 205	2 511	2 793	3 046	3 264	3 444	3 579
1 495	1 866	2 225	2 568	2 890	3 184	3 448	3 675	3 862
1 433	1 839	2 235	2 617	2 981	3 321	3 633	3 911	4 150
-	1 798	2 234	2 659	3 068	3 456	3 818	4 150	4 446
-	-	2 223	2 693	3 150	3 589	4 005	4 393	4 748
-	-	-	2 720	3 228	3 720	4 193	4 640	5 057
nption in A								
4.67	4.95	5.25	5.56	5.86	6.12	6.35	6.51	6.59
4.67	4.96	5.28	5.61	5.94	6.25	6.52	6.74	6.89
4.66	4.97	5.31	5.67	6.04	6.39	6.72	7.01	7.23
4.64	4.96	5.33	5.73	6.14	6.55	6.95	7.30	7.61
-	4.94	5.35	5.79	6.25	6.72	7.18	7.62	8.01
-	-	5.34	5.83	6.35	6.89	7.42	7.94	8.42
-	-	-	5.86	6.44	7.05	7.66	8.27	8.85
/h								
50	74	104	139	181	230	288	353	428
44	68	97	132	174	222	279	344	418
39	62	91	125	166	214	270	334	407
33	56	84	118	158	205	260	323	396
-	50	77	110	150	196	250	313	384
-	-	70	102	141	187	240	301	372
-	-	-	94	132	177	229	290	359
erformance (C.C	).P.)							
1.44	1.82	2.25	2.74	3.30	3.95	4.72	5.63	6.72
1.25	1.61	1.99	2.42	2.91	3.48	4.13	4.90	5.80
1.07	1.41	1.76	2.14	2.57	3.05	3.61	4.26	5.01
	1.22	1.54	1.88	2.25	2.67	3.14	3.69	4.32
0.90			1	1	+			1
-	1.04	1.33	1.63	1.96	2.32	2.73	3,19	3.72
	1.04	1.33 1.14	1.63 1.41	1.96 1.69	2.32	2.73 2.35	3.19 2.74	3.72 3.19
,	y in W  2 265 1 928 1 600 1 286 N  1 569 1 540 1 495 1 433	y in W  2 265	y in W  2 265	30	30   -25   -20   -15   -10	yin W  2 265	yin W  2 265	14   15   15   16   16   17   18   18   18   18   18   18   18

Nominal performance at to = -10 °C, tc = 45 °C	3
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Cooling capacity	6 702	W
Power input	2 981	W
Current consumption	6.14	Α
Mass flow	158	kg/h
C.O.P.	2.25	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

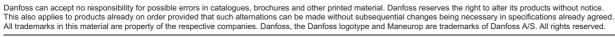
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	25.8	bar(g)	٦
Minimum LP switch setting	0.9	bar(g)	
LP pump down setting	1.2	bar(g)	

Sound power data

Sound power level	80	dB(A)
With accoustic hood	73	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

## 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		1	I	1			T
30	-	3 454	4 981	6 867	9 159	11 904	15 149	18 942	23 329
35	-	2 946	4 326	6 032	8 112	10 613	13 581	17 064	21 110
40	-	2 528	3 786	5 339	7 233	9 515	12 232	15 432	19 161
45	-	2 179	3 342	4 767	6 500	8 588	11 080	14 022	17 461
50	-	-	2 971	4 293	5 892	7 813	10 105	12 814	15 988
55	-	-	-	3 898	5 387	7 167	9 284	11 787	14 721
60	-	-	-	-	-	-	-	-	-
Power input in W									
30	_	1 982	2 290	2 579	2 836	3 044	3 189	3 256	3 231
35	_	1 988	2 321	2 645	2 947	3 211	3 421	3 564	3 623
40	_	2 001	2 354	2 708	3 050	3 363	3 633	3 845	3 985
45	_	2 035	2 401	2 780	3 156	3 513	3 837	4 113	4 326
50	_	-	2 476	2 873	3 277	3 672	4 045	4 379	4 661
55	_	-	-	2 999	3 425	3 854	4 269	4 656	5 000
60	_	_	_	-	-	-	-	-	-
				1	I	l		l	<u>l</u>
Current consump	tion in A								
30	-	4.96	5.29	5.62	5.94	6.22	6.44	6.57	6.59
35	-	5.03	5.37	5.73	6.08	6.41	6.68	6.88	6.99
40	-	5.05	5.41	5.80	6.20	6.58	6.92	7.20	7.39
45	-	5.06	5.44	5.87	6.31	6.75	7.17	7.53	7.81
50	-	-	5.48	5.95	6.45	6.96	7.45	7.90	8.29
55	-	-	-	6.07	6.64	7.22	7.79	8.34	8.83
60	-	-	-	-	-	-	-	-	-
Mass flow in kg/h		1		1	1	1			ı
30	-	71	101	138	181	232	292	360	439
35	-	64	92	127	168	216	273	339	414
40	-	58	85	118	157	203	258	321	393
45	-	53	79	111	149	193	246	307	377
50	-	-	75	106	143	186	237	296	364
55	-	-	-	103	139	182	232	289	355
60	-	-	-	-	-	-	-	-	-
	_								
Coefficient of per	•	1	0.40	1 000	0.00	1 004			T = 05
30	-	1.74	2.18	2.66	3.23	3.91	4.75	5.82	7.22
35	-	1.48	1.86	2.28	2.75	3.31	3.97	4.79	5.83
40	-	1.26	1.61	1.97	2.37	2.83	3.37	4.01	4.81
45	-	1.07	1.39	1.71	2.06	2.44	2.89	3.41	4.04
50	-	-	1.20	1.49	1.80	2.13	2.50	2.93	3.43
55	-	-	-	1.30	1.57	1.86	2.17	2.53	2.94
60	-	-	-	-	-	-	-	-	-

Nominal performance at to = -10 °C, tc = 45 °C	
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Cooling capacity	6 500	W
Power input	3 156	W
Current consumption	6.31	Α
Mass flow	149	kg/h
C.O.P.	2.06	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

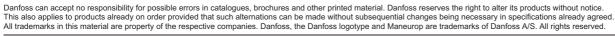
Rating conditions : Superheat = 10 K , Subcooling = 0 K

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	80	dB(A)
With accoustic hood	73	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 50 Hz, ARI rating conditions

**R407F** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	r in W	2.702	F 222	7.245	0.700	40.700	40.450	20.400	24.042
30 35	<u> </u>	3 702 3 172	5 333 4 652	7 345 6 480	9 786 8 706	12 708	16 158 14 546	20 186	24 842 22 569
40	<u> </u>	2 736	4 094			11 378		18 260 16 590	
-			1	5 765	7 801	10 251	13 164		20 580
45		2 374	3 636	5 179	7 052	9 307	11 992	15 158	18 855
50	-	-	3 257	4 699	6 438	8 526	11 012	13 946	17 379
55	-	-	-	4 307	5 941	7 890	10 205	12 937	16 135
60	-	-	-	-	-	-	-	-	-
Power input in W	ı		1				1		
30	-	1 982	2 290	2 579	2 836	3 044	3 189	3 256	3 231
35	-	1 988	2 321	2 645	2 947	3 211	3 421	3 564	3 623
40	-	2 001	2 354	2 708	3 050	3 363	3 633	3 845	3 985
45	-	2 035	2 401	2 780	3 156	3 513	3 837	4 113	4 326
50	-	-	2 476	2 873	3 277	3 672	4 045	4 379	4 661
55	-	-	-	2 999	3 425	3 854	4 269	4 656	5 000
60	-	-	-	-	-	-	-	-	-
Current consum	ption in A			<u> </u>				<u> </u>	_
30	-	4.96	5.29	5.62	5.94	6.22	6.44	6.57	6.59
35	-	5.03	5.37	5.73	6.08	6.41	6.68	6.88	6.99
40	-	5.05	5.41	5.80	6.20	6.58	6.92	7.20	7.39
45	-	5.06	5.44	5.87	6.31	6.75	7.17	7.53	7.81
50	-	-	5.48	5.95	6.45	6.96	7.45	7.90	8.29
55	-	-	-	6.07	6.64	7.22	7.79	8.34	8.83
60	-	-	-	-	-	-	-	-	-
/lass flow in kg/l	h								
30	-	71	101	137	180	231	290	358	436
35	-	63	92	126	167	215	271	337	411
40	-	57	84	117	156	202	256	319	391
45	-	52	79	110	148	192	244	305	374
50	-	-	74	105	142	185	236	294	362
55	-	-	-	102	138	181	230	287	353
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	rformance (C )	O.B.)							
30	-	1.87	2.33	2.85	3.45	4.18	5.07	6.20	7.69
35	_	1.60	2.00	2.45	2.95	3.54	4.25	5.12	6.23
40	_	1.37	1.74	2.13	2.56	3.05	3.62	4.31	5.16
45		1.17	1.74	1.86	2.33	2.65	3.13	3.69	4.36
50	-	-	1.32	1.64	1.96	2.32	2.72	3.18	3.73
55	<u> </u>	-	1.32	1.04					3.73
60	-	-	-	1.44	1.73	2.05	2.39	2.78	3.23
δU	-			_	_	_		_	

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

Cooling capacity	7 052	W
Power input	3 156	W
Current consumption	6.31	Α
Mass flow	148	kg/h
C.O.P.	2.23	

to: Evaporating 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	80	dB(A)
With accoustic hood	73	dB(A)

Tolerance according EN12900



tc: Condensing temperature at dew point



## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 50 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
"		1	1	•	•		1		
Cooling capacity	/ in W								
35	1 645	2 349	4 415	5 878	7 694	9 914	12 588	15 766	19 498
40	1 392	2 043	3 958	5 322	7 025	9 115	11 645	14 663	18 220
45	1 163	1 761	3 526	4 792	6 381	8 343	10 728	13 587	16 969
50	957	1 504	3 119	4 287	5 763	7 597	9 838	12 538	15 746
55	-	-	2 738	3 809	5 172	6 878	8 976	11 517	14 552
60	-	-	-	3 358	4 609	6 187	8 142	10 526	13 386
65	-	-	-	-	4 073	5 524	7 338	9 563	12 251
75	-	-	-	-	-	-	5 818	7 729	10 073
Power input in V						1			
35	1 191	1 419	1 828	2 002	2 152	2 276	2 370	2 432	2 458
40	1 148	1 396	1 848	2 046	2 222	2 372	2 494	2 585	2 642
45	1 109	1 380	1 882	2 107	2 311	2 491	2 645	2 768	2 859
50	1 064	1 361	1 919	2 175	2 411	2 624	2 812	2 972	3 100
55	-	-	1 950	2 240	2 511	2 760	2 986	3 185	3 354
60	-	-	-	2 292	2 601	2 890	3 157	3 398	3 611
65	-	-	-	-	2 672	3 005	3 316	3 602	3 862
75	-	-	-	-	-	-	3 555	3 943	4 306
Current concum	ntion in A								
35	5.20	5.16	5.25	5.36	5.48	5.61	5.73	5.83	5.89
40	5.18	5.16	5.27	5.39	5.53	5.68	5.82	5.93	6.01
45	5.15	5.13	5.31	5.45	5.62	5.79	5.95	6.09	6.20
50	5.10	5.14	5.35	5.53	5.73	5.79	6.13	6.30	6.44
55	-	-	5.39	5.60	5.73	6.09	6.32	6.54	6.73
60						6.09	6.53		7.03
	-	-	-	5.66	5.94	+	6.73	6.80	7.05
65 75	<u> </u>	-	-	_	6.03	6.38	7.05	7.06 7.52	7.35
75	<del>-</del>						7.05	7.52	7.90
Mass flow in kg	'h								
35	41	59	105	137	175	221	275	339	414
40	37	54	99	130	168	213	267	330	404
45	33	49	93	123	160	205	258	321	395
50	29	44	87	117	153	197	250	312	385
55	-	-	81	110	146	190	242	304	376
60	-	-	-	104	139	182	234	295	367
65	-	-	_	-	133	175	226	287	358
75	-	_	_	_	-	-	211	271	341
I				1		1			
Coefficient of pe	rformance (C.O	.P.)							
35	1.38	1.66	2.42	2.94	3.57	4.36	5.31	6.48	7.93
40	1.21	1.46	2.14	2.60	3.16	3.84	4.67	5.67	6.90
45	1.05	1.28	1.87	2.27	2.76	3.35	4.06	4.91	5.93
50	0.90	1.11	1.63	1.97	2.39	2.89	3.50	4.22	5.08
55	-	-	1.40	1.70	2.06	2.49	3.01	3.62	4.34
60	-	-	-	1.47	1.77	2.14	2.58	3.10	3.71
65	-	-	-	-	1.52	1.84	2.21	2.65	3.17
75	_	_	-	-	-	-	1.64	1.96	2.34

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

-, -, -,		
Cooling capacity	7 597	W
Power input	2 624	W
Current consumption	5.93	Α
Mass flow	197	kg/h
C.O.P.	2.89	

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 = 10 K , Subcooling = 0 K



## Maneurop reciprocating compressor. MTZ056-4

## 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
	-						<u> </u>		
Cooling capacity	y in W								
35	1 788	2 548	4 774	6 345	8 293	10 670	13 528	16 920	20 898
40	1 522	2 229	4 302	5 775	7 608	9 857	12 572	15 806	19 612
45	1 280	1 934	3 855	5 229	6 949	9 069	11 642	14 719	18 354
50	-	1 664	3 434	4 709	6 317	8 309	10 740	13 661	17 126
55	-	-	3 039	4 216	5 711	7 577	9 866	12 633	15 929
60	-	-	-	3 751	5 134	6 874	9 023	11 636	14 764
65	-	-	-	-	-	6 201	8 212	10 672	13 636
75	-	-	-	-	-	-	6 694	8 859	11 502
Power input in V	v	•	1	1		<b>T</b>	1	1	•
35	1 191	1 419	1 828	2 002	2 152	2 276	2 370	2 432	2 458
40	1 148	1 396	1 848	2 046	2 222	2 372	2 494	2 585	2 642
45	1 109	1 380	1 882	2 107	2 311	2 491	2 645	2 768	2 859
50	-	1 361	1 919	2 175	2 411	2 624	2 812	2 972	3 100
55	-	-	1 950	2 240	2 511	2 760	2 986	3 185	3 354
60	-	-	-	2 292	2 601	2 890	3 157	3 398	3 611
65	-	-	-	-	-	3 005	3 316	3 602	3 862
75	-	-	-	-	-	-	3 555	3 943	4 306
Current consum	ption in A	ľ	1	1	T	1	1	1	1
35	5.20	5.16	5.25	5.36	5.48	5.61	5.73	5.83	5.89
40	5.18	5.15	5.27	5.39	5.53	5.68	5.82	5.93	6.01
45	5.15	5.14	5.31	5.45	5.62	5.79	5.95	6.09	6.20
50	-	5.13	5.35	5.53	5.73	5.93	6.13	6.30	6.44
55	-	-	5.39	5.60	5.84	6.09	6.32	6.54	6.73
60	-	-	-	5.66	5.94	6.24	6.53	6.80	7.03
65	-	-	-	-	-	6.38	6.73	7.06	7.35
75	-	-	-	-	-	-	7.05	7.52	7.96
Mass flow in kg/	/h	T	1	1	1	1	1	1	1
35	41	58	105	136	174	220	274	337	411
40	37	53	99	129	167	212	265	328	402
45	33	49	93	123	160	204	257	320	393
50	-	44	87	116	152	196	249	311	383
55	-	-	81	110	145	189	241	302	374
60	-	-	-	104	139	181	232	293	365
65	-	-	-	-	-	174	225	285	356
75	-	-	-	-	-	-	210	269	339
	erformance (C.C	1	1 -	1 -	T -	T .	1 _	1 -	1
35	1.50	1.80	2.61	3.17	3.85	4.69	5.71	6.96	8.50
40	1.33	1.60	2.33	2.82	3.42	4.16	5.04	6.11	7.42
45	1.15	1.40	2.05	2.48	3.01	3.64	4.40	5.32	6.42
50	-	1.22	1.79	2.17	2.62	3.17	3.82	4.60	5.52
55	-	-	1.56	1.88	2.27	2.74	3.30	3.97	4.75
60	-	-	-	1.64	1.97	2.38	2.86	3.42	4.09
65	-	-	-	-	-	2.06	2.48	2.96	3.53
75	-	-	-	-	-	-	1.88	2.25	2.67

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

monimum portormanos at to	0,	U-1		
Cooling capacity		8 622	W	
Power input		2 845	W	
Current consumption		6.17	Α	
Mass flow		211	kg/h	
C.O.P.		3.03		

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



## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 50 Hz, EN 12900 rating conditions

**R407C** 

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacity	y in W	•	•	T	•	1	1	1	•
35	5 227	7 074	9 303	11 962	15 099	18 762	23 001	-	-
40	4 691	6 432	8 527	11 023	13 968	17 412	21 402	-	-
45	4 153	5 787	7 745	10 076	12 828	16 050	19 789	-	-
50	-	5 141	6 961	9 125	11 682	14 680	18 167	-	-
55	-	-	6 179	8 174	10 534	13 306	16 539	-	-
60	-	-	-	7 226	9 387	11 931	14 908	-	-
65	-	-	-	6 285	8 245	10 560	13 278	-	-
Power input in V			T	I		T	T	1	1
35	2 398	2 677	2 912	3 111	3 281	3 430	3 564	-	-
40	2 469	2 803	3 086	3 324	3 525	3 697	3 846	-	-
45	2 502	2 902	3 243	3 531	3 775	3 981	4 157	-	-
50	-	2 965	3 375	3 725	4 022	4 273	4 487	-	-
55	-	-	3 472	3 894	4 256	4 565	4 827	-	-
60	-	-	-	4 032	4 469	4 846	5 168	-	-
65	-	-	-	4 127	4 652	5 107	5 500	-	-
Current consum	ption in A								
35	5.54	5.83	6.11	6.37	6.61	6.81	6.96	-	-
40	5.63	5.96	6.28	6.58	6.86	7.09	7.26	-	-
45	5.68	6.08	6.46	6.82	7.14	7.42	7.64	-	-
50	-	6.17	6.63	7.06	7.45	7.79	8.07	-	-
55	-	-	6.76	7.28	7.76	8.18	8.53	-	-
60	-	-	-	7.47	8.05	8.57	9.02	-	-
65	-	-	-	7.61	8.31	8.94	9.50	-	-
Mass flow in kg/	/h								
35	113	151	195	247	307	377	456	_	_
40	107	144	188	239	298	366	444	_	_
45	100	137	180	230	288	355	431	_	_
50	-	129	171	220	277	343	418	_	-
55	-	-	162	210	266	330	403	-	-
60	-	-	-	199	253	316	388	-	-
65	-	-	-	187	240	301	371	-	-
		•	•	1	•				•
Coefficient of pe	erformance (C.O	P.P.)							
35	2.18	2.64	3.19	3.84	4.60	5.47	6.45	-	-
40	1.90	2.29	2.76	3.32	3.96	4.71	5.56	-	-
45	1.66	1.99	2.39	2.85	3.40	4.03	4.76	-	-
50	-	1.73	2.06	2.45	2.90	3.44	4.05	-	-
55	-	-	1.78	2.10	2.47	2.92	3.43	-	-
60	-	-	-	1.79	2.10	2.46	2.88	-	-
65	-	-	-	1.52	1.77	2.07	2.41	-	-

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

Cooling capacity	11 682	W
Power input	4 022	W
Current consumption	7.45	Α
Mass flow	277	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	29.4	bar(g)	
Minimum LP switch setting	1.4	bar(g)	
LP pump down setting	1.7	bar(g)	

Sound power data

Sound power level	83	dB(A)
With accoustic hood	76	dB(A)

Tolerance according EN12900





## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 50 Hz, ARI rating conditions

**R407C** 

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
1		1					•		
Cooling capacity	y in W								
35	5 626	7 605	9 990	12 830	16 177	20 081	24 592	-	-
40	5 076	6 952	9 203	11 882	15 039	18 725	22 990	-	-
45	4 523	6 293	8 410	10 925	13 891	17 357	21 375	-	-
50	-	5 631	7 612	9 963	12 735	15 980	19 749	ı	-
55	-	-	6 815	8 999	11 577	14 599	18 118	1	-
60	-	-	-	8 038	10 419	13 218	16 486	ı	-
65	-	-	-	7 083	9 268	11 843	14 861	-	-
Power input in V			,			1	,		ı
35	2 398	2 677	2 912	3 111	3 281	3 430	3 564	-	-
40	2 469	2 803	3 086	3 324	3 525	3 697	3 846	-	-
45	2 502	2 902	3 243	3 531	3 775	3 981	4 157	-	-
50	-	2 965	3 375	3 725	4 022	4 273	4 487	-	-
55	-	-	3 472	3 894	4 256	4 565	4 827	-	-
60	-	-	-	4 032	4 469	4 846	5 168	-	-
65	-	-	-	4 127	4 652	5 107	5 500	-	-
Current consum	-	T		1	1	1	<u> </u>		1
35	5.54	5.83	6.11	6.37	6.61	6.81	6.96	-	-
40	5.63	5.96	6.28	6.58	6.86	7.09	7.26	-	-
45	5.68	6.08	6.46	6.82	7.14	7.42	7.64	-	-
50	-	6.17	6.63	7.06	7.45	7.79	8.07	-	-
55	-	-	6.76	7.28	7.76	8.18	8.53	-	-
60	-	-	-	7.47	8.05	8.57	9.02	-	-
65	-	-	-	7.61	8.31	8.94	9.50	-	-
Mass flow in kg/				1	1				Ι
35	113	150	194	246	306	374	453	-	-
40	106	143	187	238	296	364	441	-	-
45	100	136	179	229	286	353	428	-	-
50	-	128	170	219	276	341	415	-	-
55	-	-	161	209	264	328	401	-	-
60	-	-	-	198	252	314	385	-	-
65	-	-	-	186	239	300	369	-	-
-	erformance (C.C		T -	1 .	1 .	T -			1
35	2.35	2.84	3.43	4.12	4.93	5.85	6.90	-	-
40	2.06	2.48	2.98	3.57	4.27	5.07	5.98	-	-
45	1.81	2.17	2.59	3.09	3.68	4.36	5.14	-	-
50	-	1.90	2.26	2.67	3.17	3.74	4.40	-	-
55	-	-	1.96	2.31	2.72	3.20	3.75	-	-
60	-	-	-	1.99	2.33	2.73	3.19	-	-
65	_	_	_	1.72	1.99	2.32	2.70	_	_

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

Cooling capacity	12 999	W
Power input	4 367	W
Current consumption	7.91	Α
Mass flow	293	kg/h
C.O.P.	2.98	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

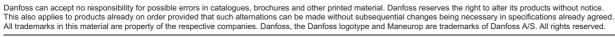
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

			_
Maximum HP switch setting	29.4	bar(g)	1
Minimum LP switch setting	1.4	bar(g)	
LP pump down setting	1.7	bar(g)	

Sound power data

Sound power level	83	dB(A)
With accoustic hood	76	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

## 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
Cooling capacity	in W								
10	-	4 445	6 071	8 118	10 636	-	-	-	-
20	-	3 939	5 421	7 274	9 544	12 280	15 534	-	-
30	-	3 365	4 701	6 357	8 376	10 807	13 697	17 101	21 079
40	-	-	3 918	5 374	7 141	9 264	11 789	14 764	18 244
50	-	-	-	4 331	5 844	7 659	9 817	12 364	15 345
60	-	-	-	-	4 491	5 997	7 790	9 907	12 391
Power input in W									
10	-	1 540	1 647	1 698	1 681	-	-	-	-
20	-	1 768	1 966	2 120	2 219	2 250	2 204	-	-
30	-	1 921	2 208	2 461	2 671	2 826	2 915	2 927	2 852
40	-	-	2 359	2 708	3 025	3 300	3 521	3 677	3 757
50	-	-	-	2 849	3 270	3 660	4 009	4 304	4 536
60	-	-	-	-	3 392	3 894	4 366	4 798	5 177
Current consump		T	T	1.50	1			T	T
10	-	4.20	4.43	4.59	4.65	-	-	-	-
20	-	4.78	5.04	5.26	5.42	5.48	5.42	-	-
30	-	5.15	5.44	5.73	5.98	6.17	6.27	6.26	6.12
40	-	-	5.66	6.02	6.38	6.71	6.98	7.16	7.24
50	-	-	-	6.17	6.65	7.12	7.57	7.96	8.27
60	-	-	-	-	6.82	7.45	8.08	8.68	9.24
Mass flow in kg/h	1								
10	-	74	101	135	177	-	-	-	-
20	-	70	96	129	170	220	281	-	-
30	-	64	90	122	161	210	269	340	426
40	-	-	82	113	151	198	254	322	405
50	-	-	-	101	138	182	236	302	380
60	-	-	-	-	121	164	215	277	352
Coefficient of per	formance (C.0	D.P.)							
10	-	2.89	3.68	4.78	6.33	-	-	-	-
20	-	2.23	2.76	3.43	4.30	5.46	7.05	-	-
30	-	1.75	2.13	2.58	3.14	3.82	4.70	5.84	7.39
40	-	-	1.66	1.98	2.36	2.81	3.35	4.02	4.86
		İ	-	1.52	1.79	2.09	2.45	2.87	3.38
50	-	-	-	1.02					

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

Cooling capacity	6 500	W
Power input	3 162	W
Current consumption	6.53	Α
Mass flow	145	kg/h
C.O.P.	2.06	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20  $^{\circ}\text{C}$  , 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	81	dB(A)
With accoustic hood	74	dB(A)





## Maneurop reciprocating compressor. MTZ056-4

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

**R448A** 

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	/ in W								
10	3 207	4 467	6 105	8 168	10 704	-	-	-	-
20	2 757	3 914	5 399	7 259	9 542	12 294	15 563	-	-
30	2 247	3 297	4 626	6 280	8 307	10 753	13 665	17 092	21 079
40	1 687	2 628	3 797	5 242	7 009	9 146	11 699	14 716	18 244
50	-	1 915	2 922	4 154	5 659	7 483	9 675	12 279	15 345
60	-	-	2 010	3 027	4 266	5 775	7 601	9 790	12 391
Power input in V	v								
10	1 387	1 540	1 647	1 698	1 681	-	_	_	_
20	1 535	1 768	1 966	2 120	2 219	2 250	2 204	_	-
30	1 614	1 921	2 208	2 461	2 671	2 826	2 915	2 927	2 852
40	1 610	1 989	2 359	2 708	3 025	3 300	3 521	3 677	3 757
50	-	1 960	2 409	2 849	3 270	3 660	4 009	4 304	4 536
60	_	-	2 344	2 872	3 392	3 894	4 366	4 798	5 177
		1							
Current consum	ption in A								
10	3.92	4.20	4.43	4.59	4.65	-	-	-	-
20	4.51	4.78	5.04	5.26	5.42	5.48	5.42	-	-
30	4.86	5.15	5.44	5.73	5.98	6.17	6.27	6.26	6.12
40	5.00	5.31	5.66	6.02	6.38	6.71	6.98	7.16	7.24
50	-	5.31	5.72	6.17	6.65	7.12	7.57	7.96	8.27
60	-	-	5.65	6.21	6.82	7.45	8.08	8.68	9.24
Mass flow in kg/	n 63	86	115	151	194	1 -	_	_	I -
10 20	58	81	115	151 144	187	1		<u> </u>	
30	52	75	110 103	137	177	237	296 283	349	426
-		1	1		1	1	1	<u> </u>	
40 50	43	66	94	127	166	212	267	331	405
50 60		55	82 66	113 97	151 133	196 176	249 226	310 284	380 352
60	-		00	91	133	170	220	204	302
Coefficient of pe	rformance (C.C	D.P.)							
10	2.31	2.90	3.71	4.81	6.37	-	-	-	-
20	1.80	2.21	2.75	3.42	4.30	5.46	7.06	-	-
30	1.39	1.72	2.10	2.55	3.11	3.80	4.69	5.84	7.39
40	1.05	1.32	1.61	1.94	2.32	2.77	3.32	4.00	4.86
50	-	0.98	1.21	1.46	1.73	2.04	2.41	2.85	3.38
60	-	-	0.86	1.05	1.26	1.48	1.74	2.04	2.39
Nominal perform	nance at to = -1	0 °C, tc = 45 °C			=	Pressure switch	settings		
				1					

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

6 340

3 162

6.53

159

2.00

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

Couria porror data			
Sound power level	81	dB(A)	
With accoustic hood	74	dB(A)	





## Maneurop reciprocating compressor. MTZ056-4

## 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	-	4 453	6 080	8 128	10 646	-	-	-	-
20	-	3 948	5 431	7 284	9 554	12 290	15 542	-	-
30	-	3 374	4 712	6 368	8 388	10 818	13 706	17 106	21 079
40	-	-	3 928	5 385	7 153	9 275	11 798	14 770	18 244
50	-	-	-	4 342	5 856	7 670	9 827	12 369	15 345
60	-	-	-	-	4 503	6 008	7 799	9 913	12 391
Power input in W									
10	-	1 540	1 647	1 698	1 681	-	-	-	-
20	-	1 768	1 966	2 120	2 219	2 250	2 204	-	-
30	-	1 921	2 208	2 461	2 671	2 826	2 915	2 927	2 852
40	-	-	2 359	2 708	3 025	3 300	3 521	3 677	3 757
50	-	-	-	2 849	3 270	3 660	4 009	4 304	4 536
60	-	-	-	-	3 392	3 894	4 366	4 798	5 177
Current consump	tion in A	4.20	4.43	4.59	4.65	_	1 .	-	_
20		4.78	5.04	5.26	5.42	5.48	5.42	-	_
30		5.15	5.44	5.73	5.98	6.17	6.27	6.26	6.12
40		-	5.66	6.02	6.38	6.71	6.98	7.16	7.24
50	-	-	-	6.17	6.65	7.12	7.57	7.16	8.27
60		_	_	-	6.82	7.45	8.08	8.68	9.24
Mass flow in kg/h		1	1	1	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,		
10	_	76	104	139	183	-	_	-	_
20	-	71	98	132	174	225	287	-	_
30	-	65	92	125	165	214	274	346	433
40	-	-	84	116	154	202	259	328	412
50	-	-	-	104	141	186	241	308	388
60	-	-	-	-	124	168	220	284	360
Coefficient of per	formance (C.0	D.P.)		1	1	-			
10	-	2.89	3.69	4.79	6.33	-	-	-	-
20	-	2.23	2.76	3.44	4.31	5.46	7.05	-	-
30	-	1.76	2.13	2.59	3.14	3.83	4.70	5.84	7.39
40	-	-	1.67	1.99	2.36	2.81	3.35	4.02	4.86
50	-	-	-	1.52	1.79	2.10	2.45	2.87	3.38
		1	1	1	1.33	1	1		2.39

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

Cooling capacity	6 512	W
Power input	3 162	W
Current consumption	6.53	Α
Mass flow	148	kg/h
C.O.P.	2.06	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20  $^{\circ}\text{C}$  , 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	80	dB(A)
With accoustic hood	73	dB(A)





## Maneurop reciprocating compressor. MTZ056-4

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

**R449A** 

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	3 207	4 467	6 105	8 168	10 704	-	-	-	-
20	2 757	3 914	5 399	7 259	9 542	12 294	15 563	-	-
30	2 247	3 297	4 626	6 280	8 307	10 753	13 665	17 092	21 079
40	1 687	2 628	3 797	5 242	7 009	9 146	11 699	14 716	18 244
50	-	1 915	2 922	4 154	5 659	7 483	9 675	12 279	15 345
60	-	-	2 010	3 027	4 266	5 775	7 601	9 790	12 391
Power input in V	v								
10	1 387	1 540	1 647	1 698	1 681	-	_	_	_
20	1 535	1 768	1 966	2 120	2 219	2 250	2 204	_	_
30	1 614	1 921	2 208	2 461	2 671	2 826	2 915	2 927	2 852
40	1 610	1 989	2 359	2 708	3 025	3 300	3 521	3 677	3 757
50	-	1 960	2 409	2 849	3 270	3 660	4 009	4 304	4 536
60	_	-	2 344	2 872	3 392	3 894	4 366	4 798	5 177
		I.							
Current consum	ption in A								
10	3.92	4.20	4.43	4.59	4.65	-	-	-	-
20	4.51	4.78	5.04	5.26	5.42	5.48	5.42	-	-
30	4.86	5.15	5.44	5.73	5.98	6.17	6.27	6.26	6.12
40	5.00	5.31	5.66	6.02	6.38	6.71	6.98	7.16	7.24
50	-	5.31	5.72	6.17	6.65	7.12	7.57	7.96	8.27
60	-	-	5.65	6.21	6.82	7.45	8.08	8.68	9.24
Mass flow in kg/	h								
10	64	88	119	156	200	_	_	_	_
20	58	82	112	148	191	242	302	_	_
30	52	76	105	139	181	230	288	355	433
40	44	67	96	129	169	217	273	337	412
50	-	56	84	116	155	201	254	316	388
60	-	-	67	99	136	180	231	291	360
		I	<u> </u>	1 00					
Coefficient of pe	erformance (C.C	D.P.)	_				_	_	_
10	2.31	2.90	3.71	4.81	6.37	-	-	-	-
20	1.80	2.21	2.75	3.42	4.30	5.46	7.06	-	-
30	1.39	1.72	2.10	2.55	3.11	3.80	4.69	5.84	7.39
40	1.05	1.32	1.61	1.94	2.32	2.77	3.32	4.00	4.86
50	-	0.98	1.21	1.46	1.73	2.04	2.41	2.85	3.38
60	-	-	0.86	1.05	1.26	1.48	1.74	2.04	2.39
Nominal perforn	nance at to = -1	0 °C, tc = 45 °C				Pressure switch	settings		

to: Evaporating	tamparatura	at daw	noir

Cooling capacity

Current consumption

Power input

Mass flow

C.O.P.

tc: Condensing temperature at dew point

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

6 340

3 162

6.53

163

2.00

W

W

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	80	dB(A)				
With accoustic hood	73	dB(A)				





## Maneurop reciprocating compressor. MTZ056-4

## 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	-	5 236	6 908	8 983	11 497	-	-	-	-
20	-	4 723	6 288	8 204	10 508	13 236	16 428	-	-
30	-	4 082	5 516	7 249	9 317	11 754	14 596	17 885	21 669
40	-	3 336	4 614	6 140	7 948	10 069	12 537	15 388	18 662
50	-	-	3 603	4 898	6 422	8 205	10 277	12 667	15 408
60	-	-	-	3 544	4 764	6 188	7 843	9 751	11 936
Power input in W									
10	-	2 095	2 309	2 498	2 663	-	-	-	-
20	-	2 149	2 395	2 613	2 802	2 963	3 096	-	-
30	-	2 235	2 537	2 805	3 041	3 245	3 416	3 554	3 661
40	-	2 301	2 681	3 023	3 329	3 597	3 829	4 024	4 183
50	-	-	2 777	3 216	3 614	3 970	4 285	4 560	4 793
60	-	-	-	3 331	3 843	4 310	4 732	5 108	5 440
Current consump	otion in A	4.67	5.17	5.66	6.15	_	_	_	<u> </u>
20	-	5.08	5.17	5.84	6.19	6.56	6.94	-	-
30		5.42	5.47	6.12	6.43	6.73	7.03	7.36	7.72
40		5.62	6.04	6.42	6.76	7.08	7.03	7.71	8.05
50	-	-	6.14	6.64	7.09	7.51	7.91	8.31	8.71
60			-	6.69	7.34	7.94	8.51	9.07	9.62
00		<u> </u>	1	0.09	7.54	7.94	0.51	9.07	9.02
Mass flow in kg/h	1					_			
10	-	108	143	186	239	-	-	-	-
20	-	105	140	183	236	299	375	-	-
30	-	99	135	178	230	292	366	455	562
40	-	90	125	168	219	279	352	439	542
50	-	-	111	153	202	261	331	415	515
60	-	-	-	132	179	236	303	384	479
Coefficient of per	formance (C.	O.P.)							
10	-	2.50	2.99	3.60	4.32	-	-	-	-
20	-	2.20	2.63	3.14	3.75	4.47	5.31	-	-
30	-	1.83	2.17	2.58	3.06	3.62	4.27	5.03	5.92
40	-	1.45	1.72	2.03	2.39	2.80	3.27	3.82	4.46
			1.30	1.52	1.78	2.07	2.40	2.78	3.21
50	-	-	1.30	1.02					

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

Cooling capacity	7 203	W
Power input	3 475	W
Current consumption	6.93	Α
Mass flow	211	kg/h
C.O.P.	2.07	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20  $^{\circ}\text{C}$  , 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	79	dB(A)
With accoustic hood	72	dB(A)





## Maneurop reciprocating compressor. MTZ056-4

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

**R452A** 

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	
Cooling capacit	y in W		•							
10	3 803	5 097	6 764	8 844	11 376	-	-	-	-	
20	3 297	4 520	6 068	7 980	10 296	13 057	16 301	-	-	
30	2 699	3 825	5 226	6 944	9 018	11 488	14 393	17 773	21 669	
40	2 037	3 039	4 268	5 765	7 570	9 723	12 262	15 229	18 662	
50	1 340	2 191	3 222	4 472	5 981	7 790	9 937	12 464	15 408	
60	-	1 311	2 116	3 092	4 280	5 718	7 447	9 506	11 936	
Power input in V	v									
10	1 857	2 095	2 309	2 498	2 663	_	_	_	_	
20	1 874	2 149	2 395	2 613	2 802	2 963	3 096	_	-	
30	1 901	2 235	2 537	2 805	3 041	3 245	3 416	3 554	3 661	
40	1 885	2 301	2 681	3 023	3 329	3 597	3 829	4 024	4 183	
50	1 774	2 296	2 777	3 216	3 614	3 970	4 285	4 560	4 793	
60	-	2 168	2 772	3 331	3 843	4 310	4 732	5 108	5 440	
			1							
Current consum	ption in A									
10	4.14	4.67	5.17	5.66	6.15	-	-	-	-	
20	4.65	5.08	5.47	5.84	6.19	6.56	6.94	-	-	
30	5.01	5.42	5.79	6.12	6.43	6.73	7.03	7.36	7.72	
40	5.13	5.62	6.04	6.42	6.76	7.08	7.39	7.71	8.05	
50	4.94	5.57	6.14	6.64	7.09	7.51	7.91	8.31	8.71	
60	-	5.19	5.98	6.69	7.34	7.94	8.51	9.07	9.62	
Mass flow in kg	h									
10	95	126	163	209	263	_	_	_	_	
20	90	122	160	206	260	323	395	_	_	
30	83	116	154	199	253	315	386	468	562	
40	72	105	143	188	241	301	371	451	542	
50	57	90	127	171	222	281	349	427	515	
60	-	68	105	148	197	254	320	394	479	
			1	1	1 121					
Coefficient of pe	erformance (C.C	D.P.)			,					
10	2.05	2.43	2.93	3.54	4.27	-	-	-	-	
20	1.76	2.10	2.53	3.05	3.67	4.41	5.27	-	-	
30	1.42	1.71	2.06	2.48	2.97	3.54	4.21	5.00	5.92	
40	1.08	1.32	1.59	1.91	2.27	2.70	3.20	3.78	4.46	
50	0.76	0.95	1.16	1.39	1.66	1.96	2.32	2.73	3.21	
60	-	0.60	0.76	0.93	1.11	1.33	1.57	1.86	2.19	
<u> </u>										
Nominal perforn	nance at to = -1	0 °C, tc = 45 °C			_	Pressure switch	settings			

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

6 792

3 475

6.93

232

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	79	dB(A)
With accoustic hood	72	dB(A)





## Maneurop reciprocating compressor. MTZ056-4

## 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	•		•				
cooling capacity	in W					_			
35	6 847	9 024	11 655	14 801	18 524	22 886	27 950	-	-
40	6 200	8 245	10 713	13 663	17 158	21 260	26 031	-	-
45	5 557	7 470	9 772	12 525	15 791	19 631	24 106	-	-
50	-	6 700	8 836	11 390	14 425	18 001	22 179	-	-
55	-	-	7 908	10 262	13 064	16 373	20 252	-	-
60	-	-	-	9 143	11 709	14 750	18 327	-	-
65	-	-	-	8 035	10 363	13 132	16 403	-	-
Power input in W	ı								
35	3 072	3 388	3 655	3 886	4 093	4 291	4 492	-	_
40	3 174	3 551	3 871	4 147	4 393	4 622	4 846	-	_
45	3 239	3 685	4 068	4 399	4 692	4 961	5 218	-	_
50	-	3 786	4 240	4 635	4 984	5 302	5 600	-	_
55		-	4 382	4 849	5 264	5 639	5 988	-	_
60	-	_	-	5 037	5 526	5 968	6 376	-	_
65	_	_	_	5 192	5 764	6 281	6 758	_	_
00		I	1	0.102	0701	0 201	0.700		
Current consum	ption in A								
35	5.37	5.69	5.96	6.21	6.43	6.63	6.81	-	-
40	5.48	5.86	6.21	6.52	6.80	7.06	7.30	-	-
45	5.55	6.02	6.44	6.82	7.17	7.49	7.79	-	-
50	-	6.14	6.64	7.10	7.52	7.92	8.29	-	-
55	-	-	6.81	7.35	7.86	8.33	8.77	-	-
60	-	-	-	7.57	8.16	8.72	9.24	-	-
65	-	-	-	7.75	8.44	9.08	9.69	-	-
According to the	<b>.</b>								
Mass flow in kg/l	n 149	193	245	306	377	459	554	-	_
40	149	185	236	296	366	459	540	-	_
45	134	177	230	286	355	434	525	-	-
50	-	168	217	275	342	434	525	-	-
55	-	-	207	264	329	406	494	-	-
60	-	-	-	252	316	391	494	-	-
65		-	_	239	302	375	459	-	-
				1 200	502	070	100	<u> </u>	
Coefficient of pe	rformance (C.O	).P.)							
35	2.23	2.66	3.19	3.81	4.53	5.33	6.22	-	-
40	1.95	2.32	2.77	3.29	3.91	4.60	5.37	-	-
45	1.72	2.03	2.40	2.85	3.37	3.96	4.62	-	-
50	-	1.77	2.08	2.46	2.89	3.40	3.96	-	-
55	-	-	1.80	2.12	2.48	2.90	3.38	-	-
				1.82	2.12	2.47	2.87	_	
60	-	-	-	1.82	2.12	2.47	2.87	-	-

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

Cooling capacity	14 425	W
Power input	4 984	W
Current consumption	7.52	Α
Mass flow	342	kg/h
C.O.P.	2.89	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

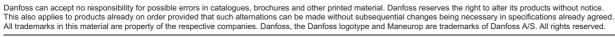
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

	Maximum HP switch setting	29.4	bar(g)
	Minimum LP switch setting	1.4	bar(g)
L	LP pump down setting	1.7	bar(g)

Sound power data

Sound power level	86	dB(A)
With accoustic hood	79	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

## 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	-	I.	
Cooling capacity	y in W								
35	7 370	9 701	12 515	15 875	19 846	24 494	29 884	-	-
40	6 710	8 911	11 562	14 728	18 474	22 864	27 963	-	-
45	6 053	8 123	10 611	13 581	17 099	21 230	26 037	-	-
50	-	7 340	9 663	12 436	15 725	19 595	24 110	-	-
55	-	-	8 722	11 298	14 357	17 965	22 186	-	-
60	-	-	-	10 169	12 997	16 341	20 267	-	-
65	-	-	-	9 054	11 649	14 729	18 358	-	-
Power input in V		_		1	Т	T	T		ı
35	3 072	3 388	3 655	3 886	4 093	4 291	4 492	-	-
40	3 174	3 551	3 871	4 147	4 393	4 622	4 846	-	-
45	3 239	3 685	4 068	4 399	4 692	4 961	5 218	-	-
50	-	3 786	4 240	4 635	4 984	5 302	5 600	-	-
55	-	-	4 382	4 849	5 264	5 639	5 988	-	-
60	-	-	-	5 037	5 526	5 968	6 376	-	-
65	-	-	-	5 192	5 764	6 281	6 758	-	-
Current consum	ption in A								
35	5.37	5.69	5.96	6.21	6.43	6.63	6.81	-	-
40	5.48	5.86	6.21	6.52	6.80	7.06	7.30	-	-
45	5.55	6.02	6.44	6.82	7.17	7.49	7.79	-	-
50	-	6.14	6.64	7.10	7.52	7.92	8.29	-	-
55	-	-	6.81	7.35	7.86	8.33	8.77	-	-
60	-	-	-	7.57	8.16	8.72	9.24	-	-
65	-	-	-	7.75	8.44	9.08	9.69	-	-
	_								
Mass flow in kg/		400	242	204	275	457	550	_	_
35 40	148 141	192 184	243 235	304 294	375 364	457 444	550 536	-	-
45	133	176	235	284	352	431	522	_	-
50		1	216	273	340	418	522		-
50 55	-	167	216	262	340	418	491	-	-
60	<u> </u>	-	-	250	314	388	491	-	-
65		-	-	238	300	373	474	-	-
03	<del>-</del>	<u> </u>		230	300	373	430	<u> </u>	
Coefficient of pe	erformance (C.C	).P.)							
35	2.40	2.86	3.42	4.09	4.85	5.71	6.65	-	-
40	2.11	2.51	2.99	3.55	4.20	4.95	5.77	-	-
45	1.87	2.20	2.61	3.09	3.64	4.28	4.99	-	-
50	-	1.94	2.28	2.68	3.16	3.70	4.31	-	-
55	-	-	1.99	2.33	2.73	3.19	3.71	-	-
60	-	-	-	2.02	2.35	2.74	3.18	-	-
65	-	_	-	1.74	2.02	2.34	2.72	_	_

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

Cooling capacity	16 050	W
Power input	5 397	W
Current consumption	8.03	Α
Mass flow	361	kg/h
C.O.P.	2.97	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

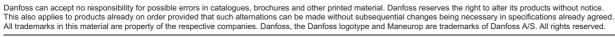
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

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	86	dB(A)
With accoustic hood	79	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

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

R134a

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-25	-20	-10	-5	0	5	10	15	20	
Cooling canacity	in W									
Cooling capacity 35	1 974	2 818	5 298	7 054	9 233	11 897	15 106	18 919	23 398	
40	1 670	2 452	4 750	6 387	8 430	10 939	13 974	17 595	21 864	
45	1 395	2 114	4 231	5 750	7 657	10 011	12 873	16 304	20 363	
50	1 149	1 805	3 743	5 144	6 916	9 116	11 806	15 045	18 895	
55	-	-	3 285	4 571	6 206	8 253	10 771	13 821	17 462	
60		-	-	4 029	5 530	7 424	9 771	12 631	16 064	
65	_	_	_	-	4 888	6 629	8 805	11 476	14 702	
75	-	-	_	_	-	-	6 981	9 275	12 088	
					l	1	1 222			
Power input in W		T		T	1	1	1	1	1	
35	1 429	1 703	2 193	2 402	2 583	2 731	2 844	2 918	2 949	
40	1 377	1 675	2 217	2 455	2 666	2 847	2 993	3 102	3 170	
45	1 330	1 655	2 258	2 528	2 773	2 990	3 174	3 322	3 431	
50	1 276	1 633	2 303	2 610	2 893	3 149	3 374	3 566	3 720	
55	-	-	2 340	2 687	3 013	3 312	3 583	3 822	4 025	
60	-	-	-	2 750	3 121	3 469	3 789	4 078	4 334	
65	-	-	-	-	3 207	3 605	3 979	4 323	4 635	
75	-	-	-	-	-	-	4 266	4 731	5 167	
Current consum	ption in A									
35	5.42	5.38	5.48	5.59	5.72	5.85	5.98	6.08	6.14	
40	5.40	5.37	5.50	5.62	5.77	5.92	6.06	6.18	6.26	
45	5.37	5.36	5.54	5.69	5.86	6.03	6.20	6.35	6.46	
50	5.32	5.34	5.58	5.76	5.97	6.18	6.38	6.57	6.71	
55	-	-	5.61	5.84	6.08	6.34	6.59	6.81	7.00	
60	-	-	-	5.89	6.19	6.50	6.80	7.08	7.32	
65	-	-	-	-	6.27	6.64	7.00	7.35	7.65	
75	-	-	-	-	-	-	7.33	7.82	8.28	
Mass flow in kg/l		70	400	464	240	205	220	407	400	
35 40	50 45	70 65	126	164	210	265	330	407	496	
		1	119	156	201	256	320	396	485	
45 50	40 35	59 53	112 105	148 140	193 184	246 237	310 300	386 375	474 463	
55	-	-	98	132	175	228	290	365	451	
	<u>-</u>		- 98			+				
60 65	<u>-</u>	-	-	125	167 159	219 210	281 271	354 344	440 430	
75	<u>-</u>	-	-	-	108	210	254	325	409	
75	-	-	-	-	-	-	204	323	409	
Coefficient of pe	•	1			T	T	T	T	1	
35	1.38	1.66	2.42	2.94	3.57	4.36	5.31	6.48	7.93	
40	1.21	1.46	2.14	2.60	3.16	3.84	4.67	5.67	6.90	
45	1.05	1.28	1.87	2.27	2.76	3.35	4.06	4.91	5.93	
50	0.90	1.11	1.63	1.97	2.39	2.89	3.50	4.22	5.08	
55	-	-	1.40	1.70	2.06	2.49	3.01	3.62	4.34	
60	-	-	-	1.47	1.77	2.14	2.58	3.10	3.71	
65	-	-	-	-	1.52	1.84	2.21	2.65	3.17	
75	-	-	-	-	-	-	1.64	1.96	2.34	

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

Cooling capacity	9 116	W	
Power input	3 149	W	
Current consumption	6.18	Α	
Mass flow	237	kg/h	
C.O.P.	2.89		

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 = 10 K , Subcooling = 0 K



## Maneurop reciprocating compressor. MTZ056-4

## 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
L		1			l .				u e
Cooling capacity	y in W								
35	2 146	3 058	5 729	7 614	9 952	12 804	16 234	20 304	25 078
40	1 827	2 675	5 162	6 929	9 130	11 828	15 086	18 967	23 534
45	1 536	2 321	4 626	6 275	8 339	10 883	13 970	17 663	22 025
50	-	1 997	4 121	5 651	7 580	9 971	12 887	16 393	20 551
55	-	-	3 647	5 060	6 853	9 092	11 839	15 159	19 114
60	-	-	-	4 501	6 161	8 248	10 828	13 963	17 717
65	-	-	-	-	-	7 441	9 854	12 807	16 363
75	-	-	-	-	-	-	8 033	10 630	13 802
	.,								
Power input in V		4.700	0.400	0.400	0.500	0.704	0.044	0.040	0.040
35	1 429	1 703	2 193	2 402	2 583	2 731	2 844	2 918	2 949
40	1 377	1 675	2 217	2 455	2 666	2 847	2 993	3 102	3 170
45	1 330	1 655	2 258	2 528	2 773	2 990	3 174	3 322	3 431
50	-	1 633	2 303	2 610	2 893	3 149	3 374	3 566	3 720
55	-	-	2 340	2 687	3 013	3 312	3 583	3 822	4 025
60	-	-	-	2 750	3 121	3 469	3 789	4 078	4 334
65	-	-	-	-	-	3 605	3 979	4 323	4 635
75	-	-	-	-	-	-	4 266	4 731	5 167
Current consum	ntion in A								
35	5.42	5.38	5.48	5.59	5.72	5.85	5.98	6.08	6.14
40	5.40	5.37	5.50	5.62	5.77	5.92	6.06	6.18	6.26
45	5.37	5.36	5.54	5.69	5.86	6.03	6.20	6.35	6.46
50	-	5.34	5.58	5.76	5.97	6.18	6.38	6.57	6.71
55	<u>-</u>	-	5.61	5.84	6.08	6.34	6.59	6.81	7.00
60		-	-	5.89	6.19	6.50	6.80	7.08	7.32
65	<u>-</u>		_	-	-	6.64	7.00	7.35	7.65
75	<u>-</u>	_	-	-	-	-	7.33	7.82	8.28
75			_	_		_	7.00	7.02	0.20
Mass flow in kg/	'h								
35	49	70	126	163	209	264	329	405	494
40	44	64	119	155	200	254	319	394	482
45	40	58	111	147	192	245	309	384	471
50	-	53	104	140	183	236	299	373	460
55	-	-	97	132	175	226	289	362	449
60	-	-	-	124	166	218	279	352	438
65	-	-	-	-	-	209	270	342	427
75	-	-	-	-	-	-	252	323	407
S 601 - 1 - 1 - 1									
Coefficient of pe	•	, <i>'</i>	2.04	2 47	2.05	4.00	E 74	6.00	0.50
35	1.50	1.80	2.61	3.17	3.85	4.69	5.71	6.96	8.50
40	1.33	1.60	2.33	2.82	3.42	4.16	5.04	6.11	7.42
45	1.15	1.40	2.05	2.48	3.01	3.64	4.40	5.32	6.42
50	-	1.22	1.79	2.17	2.62	3.17	3.82	4.60	5.52
55	-	-	1.56	1.88	2.27	2.74	3.30	3.97	4.75
60	-	-	-	1.64	1.97	2.38	2.86	3.42	4.09
65	-	-	-	-	-	2.06	2.48	2.96	3.53
75	-	-	-	-	-	-	1.88	2.25	2.67

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

Nominal performance at to 7.2 0, to	04.4 0	
Cooling capacity	10 347	W
Power input	3 413	W
Current consumption	6.43	Α
Mass flow	254	kg/h
C.O.P.	3.03	

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



## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 60 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
Cooling capacity		F 472	7.202	0.045	40.000	45.004	40.000	22.000	07.044
30	3 911	5 473	7 362	9 615	12 269	15 361	18 928	23 009	27 641
35	3 327	4 799	6 572	8 683	11 170	14 070	17 419	21 257	25 619
40 45	2 742 2 164	4 115 3 429	5 763 4 944	7 725	10 036 8 874	12 735	15 858	19 443	23 528
+		+	ł	6 747		11 363	14 252	17 577	21 375
50	1 601	2 749	4 123	5 758	7 693	9 964	12 609	15 665	19 168
55	-	2 083	3 306	4 766	6 500	8 544	10 937	13 715	16 915
60	-	1 439	2 503	3 779	5 303	7 112	9 243	11 735	14 623
Power input in W	ı								
30	2 670	3 093	3 459	3 783	4 078	4 356	4 632	4 919	5 230
35	2 638	3 129	3 554	3 926	4 259	4 566	4 861	5 157	5 467
40	2 554	3 124	3 618	4 049	4 431	4 778	5 102	5 417	5 737
45	2 409	3 068	3 641	4 142	4 584	4 981	5 345	5 690	6 030
50	2 191	2 950	3 614	4 195	4 707	5 164	5 579	5 965	6 336
55	-	2 760	3 524	4 196	4 790	5 317	5 793	6 231	6 643
60	-	2 487	3 363	4 136	4 821	5 431	5 979	6 478	6 942
Current consum	ption in A								
30	4.92	5.37	5.80	6.20	6.55	6.84	7.06	7.18	7.20
35	4.91	5.40	5.87	6.31	6.70	7.04	7.31	7.48	7.56
40	4.87	5.40	5.93	6.42	6.88	7.27	7.60	7.84	7.98
45	4.76	5.36	5.96	6.52	7.05	7.52	7.92	8.24	8.46
50	4.58	5.26	5.93	6.58	7.19	7.75	8.24	8.65	8.96
55	-	5.07	5.83	6.58	7.29	7.95	8.54	9.05	9.47
60	-	4.76	5.64	6.49	7.31	8.09	8.80	9.43	9.97
Mass flow in kg/l	h								
30	123	168	221	281	350	428	517	616	727
35	113	158	211	271	340	418	505	604	714
40	101	147	199	260	328	405	493	590	700
45	87	134	186	246	314	391	478	575	684
50	72	118	171	231	299	376	462	558	666
55	-	101	154	214	282	358	443	539	646
60	-	81	134	194	262	338	423	518	623
Coefficient of per	rformance (C.C	ıP)							
30	1.46	1.77	2.13	2.54	3.01	3.53	4.09	4.68	5.29
35	1.26	1.53	1.85	2.21	2.62	3.08	3.58	4.12	4.69
40	1.07	1.32	1.59	1.91	2.26	2.67	3.11	3.59	4.10
45	0.90	1.12	1.36	1.63	1.94	2.28	2.67	3.09	3.54
50	0.73	0.93	1.14	1.37	1.63	1.93	2.26	2.63	3.03
	0.10	+	ł	1.14	1.36	+	1.89	2.03	2.55
55	_	0.75	0.94	1 14	1 36	1.61	1 XU		

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

Cooling capacity	8 874	W
Power input	4 584	W
Current consumption	7.05	Α
Mass flow	314	kg/h
C.O.P.	1.94	

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(q)	

Sound power data

Sound power level	81	dB(A)
With accoustic hood	74	dB(A)

Tolerance according EN12900





## Maneurop reciprocating compressor. MTZ056-4

## 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	y in W						1		_
30	4 353	6 076	8 152	10 621	13 521	16 892	20 772	25 200	30 216
35	3 743	5 382	7 349	9 682	12 422	15 607	19 277	23 471	28 229
40	3 126	4 673	6 522	8 712	11 284	14 276	17 729	21 681	26 172
45	2 508	3 956	5 680	7 720	10 116	12 908	16 136	19 839	24 058
50	1 896	3 238	4 829	6 712	8 926	11 512	14 510	17 959	21 901
55	-	2 524	3 979	5 699	7 726	10 101	12 865	16 058	19 721
60	-	1 819	3 134	4 691	6 530	8 695	11 226	14 165	17 553
Power input in V	N								
30	2 670	3 093	3 459	3 783	4 078	4 356	4 632	4 919	5 230
35	2 638	3 129	3 554	3 926	4 259	4 566	4 861	5 157	5 467
40	2 554	3 124	3 618	4 049	4 431	4 778	5 102	5 417	5 737
45	2 409	3 068	3 641	4 142	4 584	4 981	5 345	5 690	6 030
50	2 191	2 950	3 614	4 195	4 707	5 164	5 579	5 965	6 336
55	-	2 760	3 524	4 196	4 790	5 317	5 793	6 231	6 643
60	-	2 487	3 363	4 136	4 821	5 431	5 979	6 478	6 942
Current consum	•			I					
30	4.92	5.37	5.80	6.20	6.55	6.84	7.06	7.18	7.20
35	4.91	5.40	5.87	6.31	6.70	7.04	7.31	7.48	7.56
40	4.87	5.40	5.93	6.42	6.88	7.27	7.60	7.84	7.98
45	4.76	5.36	5.96	6.52	7.05	7.52	7.92	8.24	8.46
50	4.58	5.26	5.93	6.58	7.19	7.75	8.24	8.65	8.96
55	-	5.07	5.83	6.58	7.29	7.95	8.54	9.05	9.47
60	-	4.76	5.64	6.49	7.31	8.09	8.80	9.43	9.97
Mass flow in kg/	/h								
30	122	168	220	280	348	426	513	612	722
35	112	158	210	270	338	415	502	600	709
40	100	146	198	258	326	403	489	587	695
45	87	133	185	245	313	389	475	572	679
50	71	118	170	230	297	373	459	555	661
55	-	100	153	213	280	356	441	536	641
60	-	81	134	193	260	336	420	514	619
Coefficient of ne	erformance (C.C	) P )							
30	1.63	1.96	2.36	2.81	3.32	3.88	4.48	5.12	5.78
	1.42	1.72	2.07	2.47	2.92	3.42	3.97	4.55	5.16
35			4.00	2.15	2.55	2.99	3.47	4.00	4.56
35 40	1.22	1.50	1.80	2.10					
-	1.22	1.50 1.29	1.80	1.86	2.21	2.59	3.02	3.49	3.99
40						2.59 2.23	3.02 2.60	3.49 3.01	3.99 3.46
40 45	1.04	1.29	1.56	1.86	2.21	+			1

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

Cooling capacity	10 116	W
Power input	4 584	W
Current consumption	7.05	Α
Mass flow	313	kg/h
C.O.P.	2.21	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

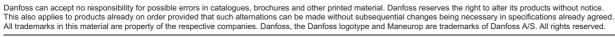
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

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	81	dB(A)
With accoustic hood	74	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

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

**R407A** 

Cond. temp. in		Т	T		ting temperature		Т	_	
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	y in W								
30	2 513	3 813	5 445	7 456	9 896	12 811	16 250	20 258	24 886
35	2 126	3 342	4 866	6 748	9 034	11 772	15 010	18 796	23 177
40	1 753	2 883	4 300	6 049	8 181	10 741	13 778	17 339	21 472
45	1 397	2 441	3 748	5 365	7 340	9 721	12 555	15 891	19 775
50	-	2 020	3 215	4 699	6 516	8 717	11 347	14 456	18 090
55	-	-	2 706	4 054	5 713	7 732	10 158	13 038	16 420
60	-	-	-	3 435	4 935	6 771	8 990	11 641	14 771
Power input in V	v								
30	1 883	2 256	2 609	2 936	3 230	3 486	3 698	3 859	3 965
35	1 848	2 256	2 646	3 013	3 352	3 655	3 917	4 133	4 295
40	1 794	2 239	2 670	3 082	3 467	3 821	4 138	4 411	4 634
45	1 720	2 206	2 682	3 141	3 577	3 986	4 359	4 693	4 980
50	-	2 158	2 681	3 191	3 682	4 147	4 582	4 980	5 335
55	-	-	2 667	3 232	3 780	4 307	4 806	5 272	5 698
60	-	-	-	3 263	3 873	4 465	5 032	5 568	6 069
Current consum	ption in A								
30	4.87	5.16	5.48	5.80	6.11	6.38	6.62	6.79	6.87
35	4.87	5.17	5.50	5.85	6.19	6.51	6.80	7.03	7.19
40	4.86	5.18	5.53	5.91	6.29	6.66	7.01	7.31	7.54
45	4.83	5.17	5.56	5.97	6.40	6.83	7.24	7.61	7.93
50	-	5.15	5.57	6.03	6.51	7.00	7.48	7.94	8.34
55	-	-	5.56	6.07	6.62	7.18	7.73	8.27	8.77
60	-	-	-	6.10	6.71	7.34	7.98	8.61	9.21
Mass flow in kg/	/h								
30	60	89	125	168	218	278	347	426	517
35	53	82	117	160	210	268	336	415	505
40	47	75	110	151	200	258	325	403	492
45	40	68	101	142	191	248	314	390	478
50	-	60	93	133	180	236	302	377	464
55	-	-	84	123	170	225	289	364	449
60	-	-	-	114	159	213	276	350	434
Coefficient of pe	erformance (C.C	).P.)							
30	1.34	1.69	2.09	2.54	3.06	3.67	4.39	5.25	6.28
35	1.15	1.48	1.84	2.24	2.70	3.22	3.83	4.55	5.40
40	0.98	1.29	1.61	1.96	2.36	2.81	3.33	3.93	4.63
45	0.81	1.11	1.40	1.71	2.05	2.44	2.88	3.39	3.97
50	-	0.94	1.20	1.47	1.77	2.10	2.48	2.90	3.39
		1	1		1.51	1.80	2.11	2.47	2.88
55	-	-	1.01	1.25	1.51	1.00	2.11	2.47	2.00

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

Cooling capacity	7 340	W
Power input	3 577	W
Current consumption	6.40	Α
Mass flow	191	kg/h
C.O.P.	2.05	· ·

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	76	dB(A)

Tolerance according EN12900





## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 60 Hz, ARI rating conditions

**R407A** 

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
ooling capacity						1			
30	2 718	4 118	5 872	8 030	10 644	13 763	17 435	21 712	26 643
35	2 313	3 630	5 277	7 307	9 768	12 711	16 186	20 243	24 931
40	1 920	3 153	4 693	6 592	8 899	11 666	14 943	18 778	23 224
45	1 543	2 691	4 122	5 889	8 042	10 632	13 710	17 324	21 526
50	-	2 247	3 570	5 204	7 202	9 614	12 492	15 885	19 844
55	-	-	3 039	4 541	6 383	8 618	11 296	14 468	18 185
60	-	-	-	3 904	5 591	7 649	10 128	13 082	16 560
Power input in W	ı								
30	1 883	2 256	2 609	2 936	3 230	3 486	3 698	3 859	3 965
35	1 848	2 256	2 646	3 013	3 352	3 655	3 917	4 133	4 295
40	1 794	2 239	2 670	3 082	3 467	3 821	4 138	4 411	4 634
45	1 720	2 206	2 682	3 141	3 577	3 986	4 359	4 693	4 980
50	-	2 158	2 681	3 191	3 682	4 147	4 582	4 980	5 335
55	-	-	2 667	3 232	3 780	4 307	4 806	5 272	5 698
60	-	-	-	3 263	3 873	4 465	5 032	5 568	6 069
Current consum	ption in A								
30	4.87	5.16	5.48	5.80	6.11	6.38	6.62	6.79	6.87
35	4.87	5.17	5.50	5.85	6.19	6.51	6.80	7.03	7.19
40	4.86	5.18	5.53	5.91	6.29	6.66	7.01	7.31	7.54
45	4.83	5.17	5.56	5.97	6.40	6.83	7.24	7.61	7.93
50	-	5.15	5.57	6.03	6.51	7.00	7.48	7.94	8.34
55	-	-	5.56	6.07	6.62	7.18	7.73	8.27	8.77
60	-	-	-	6.10	6.71	7.34	7.98	8.61	9.21
Mass flow in kg/	h								
30	59	89	124	167	217	276	345	424	514
35	53	82	117	159	208	267	335	413	502
40	46	75	109	150	199	257	324	401	489
45	39	67	101	141	190	246	312	388	475
50	-	60	93	132	179	235	300	375	461
55	-	-	84	123	169	224	288	361	446
60	-	-	-	113	158	212	275	347	431
Coefficient of	uformones (C.C	\D\							
30	1.44	1.82	2.25	2.74	3.30	3.95	4.72	5.63	6.72
35	1.44	1.61	1.99	2.74	2.91	3.48	4.13	4.90	5.80
40	1.25	1.41	1.76	2.42	2.57	3.46	3.61	4.90	5.00
45	0.90	1.41	1.76	1.88	2.57	2.67	3.01	3.69	4.32
50		1.04		1.63	ł	2.32	2.73		3.72
	-	1	1.33		1.96 1.69	2.32	1	3.19 2.74	3.72
55		-	1.14	1.41	1		2.35		1
60	-	-	-	1.20	1.44	1.71	2.01	2.35	2.73

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

Cooling capacity	8 042	W
Power input	3 577	W
Current consumption	6.40	Α
Mass flow	190	kg/h
C.O.P.	2.25	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

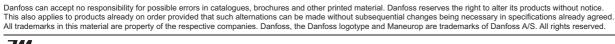
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

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	76	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

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

**R407F** 

Cond. temp. in		1	Т		ting temperature		T	T	1
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	in W								
30	-	4 145	5 977	8 240	10 990	14 284	18 179	22 730	27 995
35	-	3 535	5 191	7 238	9 734	12 735	16 297	20 477	25 332
40	-	3 033	4 544	6 407	8 679	11 417	14 678	18 518	22 993
45	-	2 615	4 010	5 720	7 800	10 306	13 296	16 826	20 953
50	-	-	3 565	5 152	7 070	9 376	12 126	15 377	19 185
55	-	-	-	4 678	6 465	8 600	11 141	14 144	17 666
60	-	-	-	-	-	-	_	_	-
Power input in W	,								
30	-	2 379	2 748	3 095	3 403	3 652	3 827	3 907	3 877
35	-	2 385	2 785	3 175	3 537	3 853	4 106	4 277	4 348
40	-	2 401	2 825	3 250	3 660	4 036	4 360	4 615	4 782
45	-	2 442	2 882	3 336	3 787	4 215	4 605	4 936	5 192
50	-	-	2 971	3 447	3 932	4 407	4 854	5 255	5 593
55	-	-	-	3 599	4 110	4 624	5 123	5 587	6 000
60	-	-	-	-	-	-	-	-	-
Current consum	otion in A								
30	-	5.17	5.52	5.87	6.20	6.49	6.72	6.85	6.88
35	-	5.24	5.60	5.97	6.34	6.68	6.97	7.18	7.29
40	-	5.27	5.64	6.05	6.46	6.86	7.21	7.50	7.70
45	-	5.27	5.67	6.12	6.58	7.04	7.47	7.85	8.15
50	-	-	5.72	6.21	6.73	7.25	7.77	8.24	8.64
55	-	-	-	6.33	6.92	7.52	8.12	8.69	9.21
60	-	-	-	-	-	-	-	-	-
Mass flow in kg/l	1								
30	-	86	122	165	217	278	350	432	527
35	-	77	111	152	201	260	328	406	497
40	-	69	102	141	189	244	309	385	472
45	-	63	95	133	179	232	295	368	452
50	-	-	90	127	171	224	285	356	437
55	-	-	-	123	167	218	278	347	427
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	rformance (C.	O.P.)							
30	-	1.74	2.18	2.66	3.23	3.91	4.75	5.82	7.22
35	-	1.48	1.86	2.28	2.75	3.31	3.97	4.79	5.83
40	-	1.26	1.61	1.97	2.37	2.83	3.37	4.01	4.81
45	-	1.07	1.39	1.71	2.06	2.44	2.89	3.41	4.04
50	-	-	1.20	1.49	1.80	2.13	2.50	2.93	3.43
55	-	-	-	1.30	1.57	1.86	2.17	2.53	2.94

Nominal performance at to = -10 °C, tc = 45 °C	С
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Cooling capacity	7 800	W
Power input	3 787	W
Current consumption	6.58	Α
Mass flow	179	kg/h
C.O.P.	2.06	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

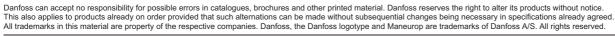
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

Maximum HP swite	ch setting	24	bar(g)
Minimum LP switc	h setting	1	bar(g)
LP pump down se	tting	1.26	bar(q)

Sound power data

Sound power level	83	dB(A)
With accoustic hood	76	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 60 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 capacit						T			
30	-	4 443	6 400	8 814	11 744	15 249	19 390	24 224	29 810
35	-	3 806	5 583	7 776	10 447	13 653	17 455	21 912	27 082
40	-	3 284	4 913	6 918	9 361	12 301	15 797	19 909	24 695
45	-	2 849	4 363	6 214	8 463	11 168	14 391	18 190	22 626
50	-	-	3 909	5 639	7 726	10 231	13 214	16 735	20 854
55	-	-	-	5 168	7 129	9 468	12 246	15 524	19 362
60	-	-	-	-	-	-	-	-	-
Power input in V	v								
30	-	2 379	2 748	3 095	3 403	3 652	3 827	3 907	3 877
35	-	2 385	2 785	3 175	3 537	3 853	4 106	4 277	4 348
40	-	2 401	2 825	3 250	3 660	4 036	4 360	4 615	4 782
45	-	2 442	2 882	3 336	3 787	4 215	4 605	4 936	5 192
50	-	-	2 971	3 447	3 932	4 407	4 854	5 255	5 593
55	-	-	-	3 599	4 110	4 624	5 123	5 587	6 000
60	-	-	-	-	-	-	-	-	-
Current consum		5.47	5.50	T 5.07	0.00	T 0.40	0.70	1 0.05	0.00
30	-	5.17	5.52	5.87	6.20	6.49	6.72	6.85	6.88
35	-	5.24	5.60	5.97	6.34	6.68	6.97	7.18	7.29
40	-	5.27	5.64	6.05	6.46	6.86	7.21	7.50	7.70
45	-	5.27	5.67	6.12	6.58	7.04	7.47	7.85	8.15
50		+	5.72	6.21	6.73	7.25	7.77	8.24	8.64
55	-	-	-	6.33	6.92	7.52	8.12	8.69	9.21
60	-	-	-	-	-	-	-	-	-
lass flow in kg	/h								
30	-	85	121	164	216	277	348	430	524
35	-	76	110	151	200	258	326	404	494
40	-	69	101	141	187	243	308	383	469
45	-	63	94	132	178	231	293	366	449
50	-	-	89	126	170	222	283	353	434
55	-	-	-	123	166	217	276	345	424
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	erformance (C.	O.P.)							
30	-	1.87	2.33	2.85	3.45	4.18	5.07	6.20	7.69
35	-	1.60	2.00	2.45	2.95	3.54	4.25	5.12	6.23
40	-	1.37	1.74	2.13	2.56	3.05	3.62	4.31	5.16
45	-	1.17	1.51	1.86	2.23	2.65	3.13	3.69	4.36
50	-	-	1.32	1.64	1.96	2.32	2.72	3.18	3.73
55	-	-	-	1.44	1.73	2.05	2.39	2.78	3.23

Nominal performance at to = -10 °C, tc = 45 °C	3
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Cooling capacity	8 463	W
Power input	3 787	W
Current consumption	6.58	Α
Mass flow	178	kg/h
C.O.P.	2.23	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

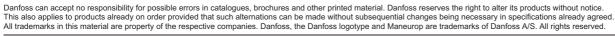
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

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	76	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

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

R134a

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
Cooling canacity	in W								
Cooling capacity 35	1 974	2 818	5 298	7 054	9 233	11 897	15 106	18 919	23 398
40	1 670	2 452	4 750	6 387	8 430	10 939	13 974	17 595	21 864
45	1 395	2 114	4 231	5 750	7 657	10 011	12 873	16 304	20 363
50	1 149	1 805	3 743	5 144	6 916	9 116	11 806	15 045	18 895
55	-	-	3 285	4 571	6 206	8 253	10 771	13 821	17 462
60		-	-	4 029	5 530	7 424	9 771	12 631	16 064
65	_	_	_	-	4 888	6 629	8 805	11 476	14 702
75	-	-	_	_	-	-	6 981	9 275	12 088
					l		1 222		
Power input in W		T		T	1	1	1	1	1
35	1 429	1 703	2 193	2 402	2 583	2 731	2 844	2 918	2 949
40	1 377	1 675	2 217	2 455	2 666	2 847	2 993	3 102	3 170
45	1 330	1 655	2 258	2 528	2 773	2 990	3 174	3 322	3 431
50	1 276	1 633	2 303	2 610	2 893	3 149	3 374	3 566	3 720
55	-	-	2 340	2 687	3 013	3 312	3 583	3 822	4 025
60	-	-	-	2 750	3 121	3 469	3 789	4 078	4 334
65	-	-	-	-	3 207	3 605	3 979	4 323	4 635
75	-	-	-	-	-	-	4 266	4 731	5 167
Current consum	ption in A								
35	5.42	5.38	5.48	5.59	5.72	5.85	5.98	6.08	6.14
40	5.40	5.37	5.50	5.62	5.77	5.92	6.06	6.18	6.26
45	5.37	5.36	5.54	5.69	5.86	6.03	6.20	6.35	6.46
50	5.32	5.34	5.58	5.76	5.97	6.18	6.38	6.57	6.71
55	-	-	5.61	5.84	6.08	6.34	6.59	6.81	7.00
60	-	-	-	5.89	6.19	6.50	6.80	7.08	7.32
65	-	-	-	-	6.27	6.64	7.00	7.35	7.65
75	-	-	-	-	-	-	7.33	7.82	8.28
Mass flow in kg/l		70	400	464	240	205	220	407	400
35 40	50 45	70 65	126	164	210	265	330	407	496
		1	119	156	201	256	320	396	485
45 50	40 35	59 53	112 105	148 140	193 184	246 237	310 300	386 375	474 463
55	-	-	98	132	175	228	290	365	451
	<u>-</u>		- 98			+			
60 65	<u>-</u>	-	-	125	167 159	219 210	281 271	354 344	440 430
75	<u>-</u>	-	-	-	108	210	254	325	409
75	-	-	-	-	-	-	204	323	409
Coefficient of pe	•	1			T	T	T	T	1
35	1.38	1.66	2.42	2.94	3.57	4.36	5.31	6.48	7.93
40	1.21	1.46	2.14	2.60	3.16	3.84	4.67	5.67	6.90
45	1.05	1.28	1.87	2.27	2.76	3.35	4.06	4.91	5.93
50	0.90	1.11	1.63	1.97	2.39	2.89	3.50	4.22	5.08
55	-	-	1.40	1.70	2.06	2.49	3.01	3.62	4.34
60	-	-	-	1.47	1.77	2.14	2.58	3.10	3.71
65	-	-	-	-	1.52	1.84	2.21	2.65	3.17
75	-	-	-	-	-	-	1.64	1.96	2.34

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

Cooling capacity	9 116	W	
Power input	3 149	W	
Current consumption	6.18	Α	
Mass flow	237	kg/h	
C.O.P.	2.89		

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 = 10 K , Subcooling = 0 K



## Maneurop reciprocating compressor. MTZ056-4

## 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
L		1			l .				u e
Cooling capacity	y in W								
35	2 146	3 058	5 729	7 614	9 952	12 804	16 234	20 304	25 078
40	1 827	2 675	5 162	6 929	9 130	11 828	15 086	18 967	23 534
45	1 536	2 321	4 626	6 275	8 339	10 883	13 970	17 663	22 025
50	-	1 997	4 121	5 651	7 580	9 971	12 887	16 393	20 551
55	-	-	3 647	5 060	6 853	9 092	11 839	15 159	19 114
60	-	-	-	4 501	6 161	8 248	10 828	13 963	17 717
65	-	-	-	-	-	7 441	9 854	12 807	16 363
75	-	-	-	-	-	-	8 033	10 630	13 802
	.,								
Power input in V		4.700	0.400	0.400	0.500	0.704	0.044	0.040	0.040
35	1 429	1 703	2 193	2 402	2 583	2 731	2 844	2 918	2 949
40	1 377	1 675	2 217	2 455	2 666	2 847	2 993	3 102	3 170
45	1 330	1 655	2 258	2 528	2 773	2 990	3 174	3 322	3 431
50	-	1 633	2 303	2 610	2 893	3 149	3 374	3 566	3 720
55	-	-	2 340	2 687	3 013	3 312	3 583	3 822	4 025
60	-	-	-	2 750	3 121	3 469	3 789	4 078	4 334
65	-	-	-	-	-	3 605	3 979	4 323	4 635
75	-	-	-	-	-	-	4 266	4 731	5 167
Current consum	ntion in A								
35	5.42	5.38	5.48	5.59	5.72	5.85	5.98	6.08	6.14
40	5.40	5.37	5.50	5.62	5.77	5.92	6.06	6.18	6.26
45	5.37	5.36	5.54	5.69	5.86	6.03	6.20	6.35	6.46
50	-	5.34	5.58	5.76	5.97	6.18	6.38	6.57	6.71
55	<u>-</u>	-	5.61	5.84	6.08	6.34	6.59	6.81	7.00
60		-	-	5.89	6.19	6.50	6.80	7.08	7.32
65	<u>-</u>		_	-	-	6.64	7.00	7.35	7.65
75	<u>-</u>	_	-	-	-	-	7.33	7.82	8.28
75			_	_		_	7.00	7.02	0.20
Mass flow in kg/	'h								
35	49	70	126	163	209	264	329	405	494
40	44	64	119	155	200	254	319	394	482
45	40	58	111	147	192	245	309	384	471
50	-	53	104	140	183	236	299	373	460
55	-	-	97	132	175	226	289	362	449
60	-	-	-	124	166	218	279	352	438
65	-	-	-	-	-	209	270	342	427
75	-	-	-	-	-	-	252	323	407
S 601 - 1 - 1 - 1									
Coefficient of pe	•	, <i>'</i>	2.04	2 47	2.05	4.00	E 74	6.00	0.50
35	1.50	1.80	2.61	3.17	3.85	4.69	5.71	6.96	8.50
40	1.33	1.60	2.33	2.82	3.42	4.16	5.04	6.11	7.42
45	1.15	1.40	2.05	2.48	3.01	3.64	4.40	5.32	6.42
50	-	1.22	1.79	2.17	2.62	3.17	3.82	4.60	5.52
55	-	-	1.56	1.88	2.27	2.74	3.30	3.97	4.75
60	-	-	-	1.64	1.97	2.38	2.86	3.42	4.09
65	-	-	-	-	-	2.06	2.48	2.96	3.53
75	-	-	-	-	-	-	1.88	2.25	2.67

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

Nominal performance at to 7.2 0, to	04.4 0	
Cooling capacity	10 347	W
Power input	3 413	W
Current consumption	6.43	Α
Mass flow	254	kg/h
C.O.P.	3.03	

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



## Maneurop reciprocating compressor. MTZ056-4

## 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	•		•				
cooling capacity	in W					_			
35	6 847	9 024	11 655	14 801	18 524	22 886	27 950	-	-
40	6 200	8 245	10 713	13 663	17 158	21 260	26 031	-	-
45	5 557	7 470	9 772	12 525	15 791	19 631	24 106	-	-
50	-	6 700	8 836	11 390	14 425	18 001	22 179	-	-
55	-	-	7 908	10 262	13 064	16 373	20 252	-	-
60	-	-	-	9 143	11 709	14 750	18 327	-	-
65	-	-	-	8 035	10 363	13 132	16 403	-	-
Power input in W	ı								
35	3 072	3 388	3 655	3 886	4 093	4 291	4 492	-	_
40	3 174	3 551	3 871	4 147	4 393	4 622	4 846	-	_
45	3 239	3 685	4 068	4 399	4 692	4 961	5 218	-	_
50	-	3 786	4 240	4 635	4 984	5 302	5 600	-	_
55		-	4 382	4 849	5 264	5 639	5 988	-	_
60	-	_	-	5 037	5 526	5 968	6 376	-	_
65	_	_	_	5 192	5 764	6 281	6 758	_	_
00		I	1	0.102	0701	0 201	0.700		
Current consum	ption in A								
35	5.37	5.69	5.96	6.21	6.43	6.63	6.81	-	-
40	5.48	5.86	6.21	6.52	6.80	7.06	7.30	-	-
45	5.55	6.02	6.44	6.82	7.17	7.49	7.79	-	-
50	-	6.14	6.64	7.10	7.52	7.92	8.29	-	-
55	-	-	6.81	7.35	7.86	8.33	8.77	-	-
60	-	-	-	7.57	8.16	8.72	9.24	-	-
65	-	-	-	7.75	8.44	9.08	9.69	-	-
According to the	<b>.</b>								
Mass flow in kg/l	n 149	193	245	306	377	459	554	-	_
40	149	185	236	296	366	459	540	-	_
45	134	177	230	286	355	434	525	-	-
50	-	168	217	275	342	434	525	-	-
55	-	-	207	264	329	406	494	-	-
60	-	-	-	252	316	391	494	-	-
65		-	_	239	302	375	459	-	-
					502	070	100	<u> </u>	
Coefficient of pe	rformance (C.O	).P.)							
35	2.23	2.66	3.19	3.81	4.53	5.33	6.22	-	-
40	1.95	2.32	2.77	3.29	3.91	4.60	5.37	-	-
45	1.72	2.03	2.40	2.85	3.37	3.96	4.62	-	-
50	-	1.77	2.08	2.46	2.89	3.40	3.96	-	-
55	-	-	1.80	2.12	2.48	2.90	3.38	-	-
				1.82	2.12	2.47	2.87	_	
60	-	-	-	1.82	2.12	2.47	2.87	-	-

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

Cooling capacity	14 425	W
Power input	4 984	W
Current consumption	7.52	Α
Mass flow	342	kg/h
C.O.P.	2.89	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

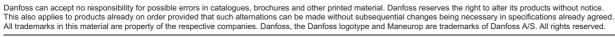
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

	Maximum HP switch setting	29.4	bar(g)
	Minimum LP switch setting	1.4	bar(g)
L	LP pump down setting	1.7	bar(g)

Sound power data

Sound power level	86	dB(A)
With accoustic hood	79	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

## 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	-	I.	
Cooling capacity	y in W								
35	7 370	9 701	12 515	15 875	19 846	24 494	29 884	-	-
40	6 710	8 911	11 562	14 728	18 474	22 864	27 963	-	-
45	6 053	8 123	10 611	13 581	17 099	21 230	26 037	-	-
50	-	7 340	9 663	12 436	15 725	19 595	24 110	-	-
55	-	-	8 722	11 298	14 357	17 965	22 186	-	-
60	-	-	-	10 169	12 997	16 341	20 267	-	-
65	-	-	-	9 054	11 649	14 729	18 358	-	-
Power input in V		_		1	Т	T	T		ı
35	3 072	3 388	3 655	3 886	4 093	4 291	4 492	-	-
40	3 174	3 551	3 871	4 147	4 393	4 622	4 846	-	-
45	3 239	3 685	4 068	4 399	4 692	4 961	5 218	-	-
50	-	3 786	4 240	4 635	4 984	5 302	5 600	-	-
55	-	-	4 382	4 849	5 264	5 639	5 988	-	-
60	-	-	-	5 037	5 526	5 968	6 376	-	-
65	-	-	-	5 192	5 764	6 281	6 758	-	-
Current consum	ption in A								
35	5.37	5.69	5.96	6.21	6.43	6.63	6.81	-	-
40	5.48	5.86	6.21	6.52	6.80	7.06	7.30	-	-
45	5.55	6.02	6.44	6.82	7.17	7.49	7.79	-	-
50	-	6.14	6.64	7.10	7.52	7.92	8.29	-	-
55	-	-	6.81	7.35	7.86	8.33	8.77	-	-
60	-	-	-	7.57	8.16	8.72	9.24	-	-
65	-	-	-	7.75	8.44	9.08	9.69	-	-
	_								
Mass flow in kg/		400	242	204	275	457	550	_	_
35 40	148 141	192 184	243 235	304 294	375 364	457 444	550 536	-	-
45	133	176	235	284	352	431	522	_	-
50		1	216	273	340	418	522		-
50 55	-	167	216	262	340	418	491	-	-
60	<u> </u>	-	-	250	314	388	491	-	-
65		-	-	238	300	373	474	-	-
03	<del>-</del>	<u> </u>		230	300	373	430	<u> </u>	
Coefficient of pe	erformance (C.C	).P.)							
35	2.40	2.86	3.42	4.09	4.85	5.71	6.65	-	-
40	2.11	2.51	2.99	3.55	4.20	4.95	5.77	-	-
45	1.87	2.20	2.61	3.09	3.64	4.28	4.99	-	-
50	-	1.94	2.28	2.68	3.16	3.70	4.31	-	-
55	-	-	1.99	2.33	2.73	3.19	3.71	-	-
60	-	-	-	2.02	2.35	2.74	3.18	-	-
65	-	_	-	1.74	2.02	2.34	2.72	_	_

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

Cooling capacity	16 050	W
Power input	5 397	W
Current consumption	8.03	Α
Mass flow	361	kg/h
C.O.P.	2.97	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

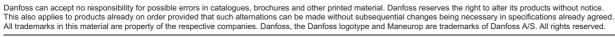
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

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	86	dB(A)
With accoustic hood	79	dB(A)







## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 60 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	
Cooling capacity	in W									
10	-	5 334	7 285	9 742	12 763	-	-	-	-	
20	-	4 727	6 505	8 729	11 453	14 736	18 641	-	-	
30	-	4 038	5 642	7 628	10 052	12 968	16 437	20 521	25 294	
40	-	-	4 702	6 448	8 569	11 117	14 147	17 717	21 893	
50	-	-	-	5 197	7 013	9 191	11 781	14 836	18 414	
60	-	-	-	-	5 390	7 197	9 348	11 889	14 869	
Power input in W		•		•	·					
10	-	1 848	1 977	2 038	2 017	_	_	_	-	
20	-	2 121	2 360	2 545	2 662	2 700	2 644	-	-	
30	-	2 306	2 649	2 953	3 205	3 391	3 498	3 513	3 422	
40	-	-	2 831	3 250	3 631	3 960	4 225	4 412	4 508	
50	-	-	-	3 419	3 924	4 392	4 810	5 165	5 443	
60	-	-	-	-	4 071	4 673	5 240	5 757	6 212	
Current consump			1	1		1		1	T	
10	-	4.38	4.62	4.78	4.85			-	-	
20	-	4.99	5.26	5.49	5.65	5.71	5.66	-	-	
30	-	5.37	5.68	5.98	6.24	6.44	6.54	6.53	6.38	
40	-	-	5.90	6.28	6.66	7.00	7.28	7.47	7.55	
50	-	-	-	6.44	6.94	7.43	7.89	8.30	8.63	
60	-	-	-	-	7.11	7.77	8.43	9.06	9.64	
Mass flow in kg/h										
10	-	89	121	162	213	-	-	-	-	
20	-	84	115	155	204	264	338	-	-	
30	-	77	108	146	194	252	322	408	511	
40	-	-	98	136	181	237	305	387	486	
50	-	-	-	122	165	219	284	362	456	
60	-	-	-	-	146	196	258	332	422	
Coefficient of per	formance (C.	O.P.)	·			<del>,</del>	<del>,</del>			
10	-	2.89	3.68	4.78	6.33	-	-	-	-	
20	-	2.23	2.76	3.43	4.30	5.46	7.05	-	-	
30	-	1.75	2.13	2.58	3.14	3.82	4.70	5.84	7.39	
40	-	-	1.66	1.98	2.36	2.81	3.35	4.02	4.86	
50	-	-	-	1.52	1.79	2.09	2.45	2.87	3.38	
60	-	-	-	-	1.32	1.54	1.78	2.07	2.39	

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

Cooling capacity	7 800	W
Power input	3 795	W
Current consumption	6.81	Α
Mass flow	174	kg/h
C.O.P.	2.06	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Couria porror data			
Sound power level	81	dB(A)	
With accoustic hood	74	dB(A)	





## Maneurop reciprocating compressor. MTZ056-4

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

**R448A** 

40     2 024     3 153     4 557     6 290     8 411     10 975     14 039     17 660     21 893       50     -     2 298     3 506     4 985     6 791     8 980     11 609     14 735     18 414	Cond. temp. in	Evaporating temperature in °C (to)								
10	°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
10										
20	Cooling capacity	/ in W								•
30	10	3 848	5 360	7 326	9 802	12 845	-	-	-	-
40	20	3 308	4 696	6 478	8 711	11 450	14 753	18 675	-	-
So	30	2 696	3 957	5 551	7 536	9 968	12 903	16 398	20 510	25 294
60         -         -         2 412         3 632         6 120         6 930         9 121         11 749         14 866           Power input in W           10         1 665         1 848         1 977         2 038         2 017         -	40	2 024	3 153	4 557	6 290	8 411	10 975	14 039	17 660	21 893
Power input in W  10	50	-	2 298	3 506	4 985	6 791	8 980	11 609	14 735	18 414
10	60	-	-	2 412	3 632	5 120	6 930	9 121	11 749	14 869
10	Power input in V	v								
20			1 848	1 977	2 038	2 017	-	_	_	_
30								1		
40	-		1	1	1	1	1		3 513	3 422
50         -         2 351         2 890         3 419         3 924         4 392         4 810         5 165         5 443           60         -         -         2 813         3 446         4 071         4 673         5 240         5 757         6 212           Current consumption in A           10         4.09         4.38         4.62         4.78         4.85         -         -         -         -         -           20         4.70         4.99         5.26         5.49         5.65         5.71         5.66         -         -         -           30         5.07         5.37         5.68         5.98         6.24         6.44         6.54         6.53         6.38           40         5.22         5.54         5.90         6.28         6.66         7.00         7.28         7.47         7.55           50         -         5.54         5.90         6.28         6.66         7.00         7.28         7.47         7.55           50         -         5.54         5.90         6.48         7.11         7.77         8.43         9.06         9.64           Mass flow in kg/h							+			
Current consumption in A    10	-		1	1		1		1	ł	
Current consumption in A  10		-	1							1
10	•				•	· L	•	•	•	
20         4.70         4.99         5.26         5.49         5.65         5.71         5.66         -         -           30         5.07         5.37         5.68         5.98         6.24         6.44         6.54         6.53         6.38           40         5.22         5.54         5.90         6.28         6.66         7.00         7.28         7.47         7.55           50         -         5.54         5.96         6.44         6.94         7.43         7.89         8.30         8.63           60         -         -         5.90         6.48         7.11         7.77         8.43         9.06         9.64           Mass flow in kg/h           10         75         103         138         181         233         -         -         -         -         -           20         69         97         131         173         224         284         355         -         -         -           30         62         90         123         164         213         271         339         419         511           40         52         79         112         1	Current consum	ption in A								
30	10	4.09	4.38	4.62	4.78	4.85	-	-	-	-
40         5.22         5.54         5.90         6.28         6.66         7.00         7.28         7.47         7.55           50         -         5.54         5.96         6.44         6.94         7.43         7.89         8.30         8.63           60         -         -         5.90         6.48         7.11         7.77         8.43         9.06         9.64           Mass flow in kg/h           10         75         103         138         181         233         -	20	4.70	4.99	5.26	5.49	5.65	5.71	5.66	-	-
50         -         5.54         5.96         6.44         6.94         7.43         7.89         8.30         8.63           60         -         -         5.90         6.48         7.11         7.77         8.43         9.06         9.64           Mass flow in kg/h           10         75         103         138         181         233         -	30	5.07	5.37	5.68	5.98	6.24	6.44	6.54	6.53	6.38
Mass flow in kg/h         A.5         — <t< td=""><td>40</td><td>5.22</td><td>5.54</td><td>5.90</td><td>6.28</td><td>6.66</td><td>7.00</td><td>7.28</td><td>7.47</td><td>7.55</td></t<>	40	5.22	5.54	5.90	6.28	6.66	7.00	7.28	7.47	7.55
Mass flow in kg/h  10	50	-	5.54	5.96	6.44	6.94	7.43	7.89	8.30	8.63
10         75         103         138         181         233         - <td< td=""><td>60</td><td>-</td><td>-</td><td>5.90</td><td>6.48</td><td>7.11</td><td>7.77</td><td>8.43</td><td>9.06</td><td>9.64</td></td<>	60	-	-	5.90	6.48	7.11	7.77	8.43	9.06	9.64
10         75         103         138         181         233         - <td< td=""><td>Mara - 61 ! ! ! !</td><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Mara - 61 ! ! ! !	_								
20         69         97         131         173         224         284         355         -         -         -           30         62         90         123         164         213         271         339         419         511           40         52         79         112         152         199         255         321         397         486           50         -         66         98         136         182         235         298         372         456           60         -         -         79         116         160         211         271         341         422           Coefficient of performance (C.O.P.)           10         2.31         2.90         3.71         4.81         6.37         -         -         -         -         -           20         1.80         2.21         2.75         3.42         4.30         5.46         7.06         -         -           30         1.39         1.72         2.10         2.55         3.11         3.80         4.69         5.84         7.39           40         1.05         1.32         1.61         1			102	120	101	222	1		1	
30         62         90         123         164         213         271         339         419         511           40         52         79         112         152         199         255         321         397         486           50         -         66         98         136         182         235         298         372         456           60         -         -         79         116         160         211         271         341         422           Coefficient of performance (C.O.P.)           10         2.31         2.90         3.71         4.81         6.37         -         -         -         -         -           20         1.80         2.21         2.75         3.42         4.30         5.46         7.06         -         -         -           30         1.39         1.72         2.10         2.55         3.11         3.80         4.69         5.84         7.39           40         1.05         1.32         1.61         1.94         2.32         2.77         3.32         4.00         4.86           50         -         0.98         1.21			1	1	1	+	1			
40         52         79         112         152         199         255         321         397         486           50         -         66         98         136         182         235         298         372         456           60         -         -         79         116         160         211         271         341         422           Coefficient of performance (C.O.P.)           10         2.31         2.90         3.71         4.81         6.37         -					1	1				
50         -         66         98         136         182         235         298         372         456           60         -         -         79         116         160         211         271         341         422           Coefficient of performance (C.O.P.)           10         2.31         2.90         3.71         4.81         6.37         -	-		1	1		1	1	1		
60         -         -         79         116         160         211         271         341         422           Coefficient of performance (C.O.P.)           10         2.31         2.90         3.71         4.81         6.37         -				1	1	+				1
Coefficient of performance (C.O.P.)           10         2.31         2.90         3.71         4.81         6.37         - <td></td> <td></td> <td></td> <td>1</td> <td>1</td> <td>+</td> <td></td> <td>+</td> <td></td> <td>1</td>				1	1	+		+		1
10     2.31     2.90     3.71     4.81     6.37     -     -     -     -       20     1.80     2.21     2.75     3.42     4.30     5.46     7.06     -     -       30     1.39     1.72     2.10     2.55     3.11     3.80     4.69     5.84     7.39       40     1.05     1.32     1.61     1.94     2.32     2.77     3.32     4.00     4.86       50     -     0.98     1.21     1.46     1.73     2.04     2.41     2.85     3.38	60	-	-	79	110	160	211	2/1	341	422
20     1.80     2.21     2.75     3.42     4.30     5.46     7.06     -     -       30     1.39     1.72     2.10     2.55     3.11     3.80     4.69     5.84     7.39       40     1.05     1.32     1.61     1.94     2.32     2.77     3.32     4.00     4.86       50     -     0.98     1.21     1.46     1.73     2.04     2.41     2.85     3.38	Coefficient of pe	rformance (C.0	D.P.)							
30     1.39     1.72     2.10     2.55     3.11     3.80     4.69     5.84     7.39       40     1.05     1.32     1.61     1.94     2.32     2.77     3.32     4.00     4.86       50     -     0.98     1.21     1.46     1.73     2.04     2.41     2.85     3.38	10	2.31	2.90	3.71	4.81	6.37	-	-	-	-
40     1.05     1.32     1.61     1.94     2.32     2.77     3.32     4.00     4.86       50     -     0.98     1.21     1.46     1.73     2.04     2.41     2.85     3.38	20	1.80	2.21	2.75	3.42	4.30	5.46	7.06	-	-
40     1.05     1.32     1.61     1.94     2.32     2.77     3.32     4.00     4.86       50     -     0.98     1.21     1.46     1.73     2.04     2.41     2.85     3.38	30	1.39	1.72	2.10	2.55	3.11	3.80	4.69	5.84	7.39
00 0.00 1.21 1.10 1.10 2.01 2.11 2.00 0.00	40	1.05	1.32	1.61		2.32	2.77	3.32	4.00	4.86
	50	-	0.98	1.21	1.46	1.73	2.04	2.41	2.85	3.38
		-	1							
			-	•	•	•	•	•	•	•
						Г				

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

7 608

3 795

6.81

191

2.00

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	81	dB(A)
With accoustic hood	74	dB(A)





## Maneurop reciprocating compressor. MTZ056-4

## Performance data at 60 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	-	5 344	7 296	9 754	12 775	-	-	-	-
20	-	4 737	6 517	8 741	11 465	14 748	18 650	-	-
30	-	4 049	5 654	7 641	10 065	12 981	16 447	20 527	25 294
40	-	-	4 714	6 462	8 583	11 130	14 158	17 724	21 893
50	-	-	-	5 211	7 027	9 204	11 792	14 843	18 414
60	-	-	-	-	5 403	7 210	9 359	11 896	14 869
Power input in W	,								
10	-	1 848	1 977	2 038	2 017	-	-	-	-
20	-	2 121	2 360	2 545	2 662	2 700	2 644	-	-
30	-	2 306	2 649	2 953	3 205	3 391	3 498	3 513	3 422
40	-	-	2 831	3 250	3 631	3 960	4 225	4 412	4 508
50	-	-	-	3 419	3 924	4 392	4 810	5 165	5 443
60	-	-	-	-	4 071	4 673	5 240	5 757	6 212
Current consump	otion in A	1 4 20	4.62	1 4 70	1 4.05	_	-	1	ı
10		4.38		4.78	4.85		_	-	-
30	-	4.99	5.26	5.49	5.65	5.71	5.66	-	- 0.00
-	-	5.37	5.68	5.98 6.28	6.24	6.44	6.54	6.53	6.38
40 50	-	-	5.90	6.44	6.66 6.94	7.00 7.43	7.28 7.89	7.47 8.30	7.55 8.63
60		-	-	- 0.44	7.11	7.43	8.43	9.06	9.64
60		-	-		7.11	1.11	0.43	9.06	9.04
Mass flow in kg/h	1								
10	-	89	124	166	218	-	-	-	-
20	-	84	117	158	209	270	344	-	-
30	-	78	110	150	198	257	329	415	519
40	-	-	100	139	185	242	311	394	494
50	-	-	-	124	169	224	290	370	466
60	-	-	-	-	149	201	264	340	433
Coefficient of per	rformance (C.0	O.P.)							
10	-	2.89	3.69	4.79	6.33	-	-	-	-
20	-	2.23	2.76	3.44	4.31	5.46	7.05	-	-
30	-	1.76	2.13	2.59	3.14	3.83	4.70	5.84	7.39
30		-	1.67	1.99	2.36	2.81	3.35	4.02	4.86
40	-	-			1	1			
	-	-	-	1.52	1.79	2.10	2.45	2.87	3.38

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

Cooling capacity	7 814	W
Power input	3 795	W
Current consumption	6.81	Α
Mass flow	178	kg/h
C.O.P.	2.06	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Couria porror data			
Sound power level	81	dB(A)	
With accoustic hood	74	dB(A)	





## Maneurop reciprocating compressor. MTZ056-4

## 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 capacity			1	1	1	1	1	F	
10	3 848	5 360	7 326	9 802	12 845	-	-	-	-
20	3 308	4 696	6 478	8 711	11 450	14 753	18 675	-	-
30	2 696	3 957	5 551	7 536	9 968	12 903	16 398	20 510	25 294
40	2 024	3 153	4 557	6 290	8 411	10 975	14 039	17 660	21 893
50	-	2 298	3 506	4 985	6 791	8 980	11 609	14 735	18 414
60	-	-	2 412	3 632	5 120	6 930	9 121	11 749	14 869
Power input in W	ı								
10	1 665	1 848	1 977	2 038	2 017	-	-	-	-
20	1 843	2 121	2 360	2 545	2 662	2 700	2 644	-	-
30	1 937	2 306	2 649	2 953	3 205	3 391	3 498	3 513	3 422
40	1 933	2 387	2 831	3 250	3 631	3 960	4 225	4 412	4 508
50	-	2 351	2 890	3 419	3 924	4 392	4 810	5 165	5 443
60	-	-	2 813	3 446	4 071	4 673	5 240	5 757	6 212
		•	•	•		•			
Current consum	ption in A		_	_				_	_
10	4.09	4.38	4.62	4.78	4.85	-	-	-	-
20	4.70	4.99	5.26	5.49	5.65	5.71	5.66	-	-
30	5.07	5.37	5.68	5.98	6.24	6.44	6.54	6.53	6.38
40	5.22	5.54	5.90	6.28	6.66	7.00	7.28	7.47	7.55
50	-	5.54	5.96	6.44	6.94	7.43	7.89	8.30	8.63
60	-	-	5.90	6.48	7.11	7.77	8.43	9.06	9.64
Mass flow in kg/l		_	1	1	1	T	T		1
10	73	104	141	186	240	-	-	-	-
20	68	98	134	177	229	290	362	-	-
30	61	90	125	167	217	277	346	426	519
40	52	81	115	155	203	260	327	405	494
50	-	68	100	139	186	241	305	380	466
60	-	-	81	119	163	216	278	350	433
0									
Coefficient of pe	,	1	2.74	4.04	0.07	1	1		
10	2.31	2.90	3.71	4.81	6.37		-	-	-
20	1.80	2.21	2.75	3.42	4.30	5.46	7.06	-	-
30	1.39	1.72	2.10	2.55	3.11	3.80	4.69	5.84	7.39
40	1.05	1.32	1.61	1.94	2.32	2.77	3.32	4.00	4.86
50	-	0.98	1.21	1.46	1.73	2.04	2.41	2.85	3.38
60	-	-	0.86	1.05	1.26	1.48	1.74	2.04	2.39
Nominal perform	ance at to = -1	0 °C tc = 45 °C				Pressure switch	settings		
	unce at to = -1	0 0,10-40 0		_	Г	i ressure switch	Jettings		

to: Evaporating	tamparatura	at	dow	noin

Cooling capacity Power input

C.O.P.

Current consumption Mass flow

tc: Condensing temperature at dew point

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

7 608

3 795

6.81

195

2.00

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	81	dB(A)
With accoustic hood	74	dB(A)





## Maneurop reciprocating compressor. MTZ056-4

## 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	n W								
10	-	6 283	8 290	10 780	13 797	-	-	-	-
20	-	5 667	7 545	9 845	12 610	15 883	19 713	-	_
30	-	4 899	6 619	8 699	11 180	14 104	17 515	21 462	26 003
40	-	4 003	5 537	7 368	9 537	12 083	15 044	18 466	22 395
50	-	-	4 323	5 878	7 706	9 846	12 332	15 201	18 490
60	-	-	-	4 253	5 717	7 426	9 411	11 701	14 323
Power input in W			•						
10	-	2 514	2 770	2 998	3 196	-	-	-	-
20	-	2 579	2 874	3 135	3 363	3 556	3 715	-	-
30	-	2 682	3 044	3 366	3 649	3 893	4 099	4 265	4 393
40	-	2 762	3 217	3 628	3 995	4 317	4 595	4 829	5 019
50	-	-	3 332	3 859	4 336	4 764	5 142	5 472	5 752
60	-	-	-	3 997	4 612	5 172	5 678	6 130	6 527
Current consump		1 407	5.00	T 500	1 044	1	1	T	Ι
10	-	4.87	5.39	5.90	6.41	-	-	-	-
20	-	5.29	5.70	6.09	6.46	6.84	7.24	-	-
30	-	5.66	6.04	6.38	6.70	7.02	7.34	7.68	8.05
40	-	5.86	6.30	6.69	7.05	7.38	7.71	8.04	8.40
50	-	-	6.40	6.92	7.40	7.83	8.25	8.67	9.09
60	-	-	-	6.97	7.65	8.28	8.88	9.46	10.03
Mass flow in kg/h									
10	-	130	171	223	286	-	-	-	-
20	-	126	168	220	283	359	450	-	-
30	-	119	162	213	276	350	440	546	674
40	-	108	150	201	262	335	423	526	650
50	-	-	134	183	243	313	398	498	618
60	-	-	-	158	215	283	364	460	575
Coefficient of per	ormance (C.0	O.P.)		<u> </u>	1	1			
10	-	2.50	2.99	3.60	4.32	-	-		-
20	-	2.20	2.63	3.14	3.75	4.47	5.31	-	-
30	-	1.83	2.17	2.58	3.06	3.62	4.27	5.03	5.92
40	-	1.45	1.72	2.03	2.39	2.80	3.27	3.82	4.46
50	-	-	1.30	1.52	1.78	2.07	2.40	2.78	3.21
	-	_	-	1.06	1.24	1.44	1.66	1.91	2.19

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

Cooling capacity	8 643	W
Power input	4 170	W
Current consumption	7.23	Α
Mass flow	253	kg/h
C.O.P.	2.07	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20  $^{\circ}\text{C}$  , 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	81	dB(A)
With accoustic hood	74	dB(A)





## Maneurop reciprocating compressor. MTZ056-4

## 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 capacity	y in W			•					
10	4 564	6 116	8 117	10 613	13 651	-	-	-	-
20	3 957	5 424	7 281	9 576	12 355	15 668	19 561	-	-
30	3 239	4 589	6 272	8 333	10 822	13 785	17 271	21 328	26 003
40	2 445	3 646	5 122	6 918	9 084	11 667	14 715	18 275	22 395
50	1 609	2 629	3 866	5 366	7 177	9 348	11 925	14 956	18 490
60	-	1 573	2 539	3 711	5 136	6 862	8 936	11 408	14 323
Power input in V	v								
10	2 229	2 514	2 770	2 998	3 196	-	_	-	_
20	2 249	2 579	2 874	3 135	3 363	3 556	3 715	-	-
30	2 281	2 682	3 044	3 366	3 649	3 893	4 099	4 265	4 393
40	2 261	2 762	3 217	3 628	3 995	4 317	4 595	4 829	5 019
50	2 129	2 756	3 332	3 859	4 336	4 764	5 142	5 472	5 752
60	-	2 601	3 326	3 997	4 612	5 172	5 678	6 130	6 527
Į.		•	•			•	•	•	
Current consum	ption in A								
10	4.32	4.87	5.39	5.90	6.41	-	-	-	-
20	4.85	5.29	5.70	6.09	6.46	6.84	7.24	-	-
30	5.22	5.66	6.04	6.38	6.70	7.02	7.34	7.68	8.05
40	5.35	5.86	6.30	6.69	7.05	7.38	7.71	8.04	8.40
50	5.15	5.81	6.40	6.92	7.40	7.83	8.25	8.67	9.09
60	-	5.42	6.23	6.97	7.65	8.28	8.88	9.46	10.03
Mara Standard Land	п.								
Mass flow in kg/ 10	n 114	151	196	251	315	_	_	_	_
20	109	147	193	247	312	387	475		
30	109	139	185	239	303	378	463	562	674
40	87	126	172	239	289	361	445	562	650
50	68	107	153	206	267	338	419	512	618
60	-	82	126	178	237	305	384	473	575
00		02	120	170	231	303	304	413	373
Coefficient of pe	erformance (C.O	).P.)							
10	2.05	2.43	2.93	3.54	4.27	-	-	-	-
20	1.76	2.10	2.53	3.05	3.67	4.41	5.27	-	-
30	1.42	1.71	2.06	2.48	2.97	3.54	4.21	5.00	5.92
40	1.08	1.32	1.59	1.91	2.27	2.70	3.20	3.78	4.46
50	0.76	0.95	1.16	1.39	1.66	1.96	2.32	2.73	3.21
60	-	0.60	0.76	0.93	1.11	1.33	1.57	1.86	2.19
Nominal perforn	nance at to = -10	0 °C, tc = 45 °C				Pressure switch	settings		

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

8 150

4 170

7.23

279

W

W

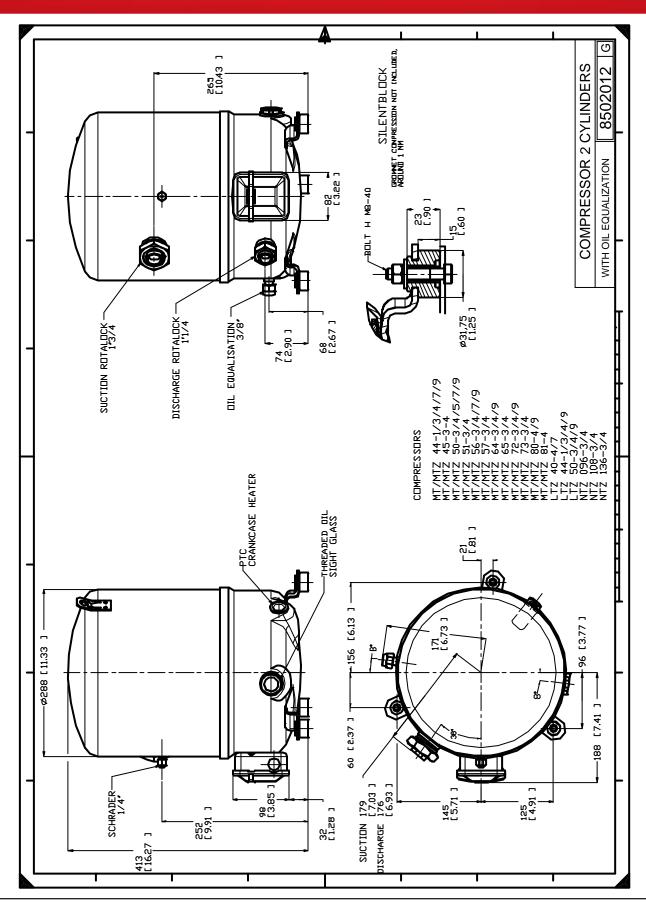
Max	kimum HP switch setting	27.7	bar(g)
Min	imum LP switch setting	1	bar(g)
LP	pump down setting	1.3	bar(g)

Sound power data

Sound power level	81	dB(A)
With accoustic hood	74	dB(A)







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FRCC.PD.8502012g