ENGINEERING TOMORROW



Datasheets

Danfoss Reciprocating compressors MT / MTZ / NTZ





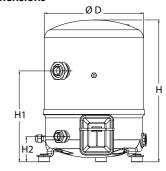


Datasheet, technical data

General Characteristics

Model number (on compressor nameplate)		MTZ80HP4AVE		
Code number for Singlepack*		MTZ80-4VI		
Code number for Industrial pack**		MTZ80-4VM		
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		1-1/8 " ODF		
Discharge connection with supplied sleeve		3/4 " ODF		
Oil sight glass		Threaded		
Oil equalisation connection		3/8" flare SAE		
Oil drain connection		None		
LP gauge port		Schrader		
IPR valve		30 bar / 8 bar		
Cylinders	2	2		
Swept volume	135.78 (cm3/rev		
Displacement @ Nominal speed	23.6 m3/h @ 2900 rpm	- 28.5 m3/h @ 3500 rpm		
Net weight	40	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	30 bar		
Maximum number of starts per hour	1	2		
Refrigerant charge limit	5 kg			
Approved refrigerants	R404A,R134a,R407A/C/F,R	R404A,R134a,R407A/C/F,R448A,R449A,R452A,R513A		

Dimensions



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

Flectrical Characteristics

Electrical Characteristics			
Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz		
Voltage range	340-440 V @ 50Hz - 414-506 V @ 60Hz		
Winding resistance (between phases) +/- 7% at 25℃	1.9 Ω		
Maximum Continuous Current (MCC)	18 A		
Locked Rotor Amps (LRA)	80 A		
Motor protection	Internal overload protector		

Recommended Installation torques

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

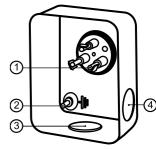
Parts shipped with compressor

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

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

- *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

Maneurop reciprocating compressor, MTZ080-4

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

Rotolock accessories, suction side	Code no.	
Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004	
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028	
Gasket, 1-3/4"	8156132	Gaskets, sleeves and nuts
Rotolock accessories, discharge side	Code no.	
Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008	
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029	
Gasket, 1-1/4"	8156131	
Rotolock accessories, sets	Code no.	1 2 3
Valve set, V02 (1-3/4"~1-1/8"), V04 (1-1/4"~3/4")	7703009	
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009	1: Gasket
		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	
PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL		
PTC heater 27W,CE mark, UL	120Z0459	Mounting kit
PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0459 7773107	Mounting kit
PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL	120Z0459 7773107 7773117 120Z0466	Mounting kit
PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories	120Z0459 7773107 7773117	Mounting kit
PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C	120Z0459 7773107 7773117 120Z0466 Code no. 7705006	Mounting kit
PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C Acoustic hood for 2 cylinder compressor	120Z0459 7773107 7773117 120Z0466 Code no.	Mounting kit
PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C	120Z0459 7773107 7773117 120Z0466 Code no. 7705006	Mounting kit
PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C Acoustic hood for 2 cylinder compressor Oil equalisation nut	120Z0459 7773107 7773117 120Z0466 Code no. 7705006 120Z0472 8153127	Mounting kit
PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C Acoustic hood for 2 cylinder compressor Oil equalisation nut Spare parts	120Z0459 7773107 7773117 120Z0466 Code no. 7705006 120Z0472 8153127	Mounting kit
PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C Acoustic hood for 2 cylinder compressor Oil equalisation nut Spare parts Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts	120Z0459 7773107 7773117 120Z0466 Code no. 7705006 120Z0472 8153127 Code no. 8156001	Mounting kit
PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C Acoustic hood for 2 cylinder compressor Oil equalisation nut Spare parts Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts Oil sight glass with gaskets (black & white)	120Z0459 7773107 7773117 120Z0466 Code no. 7705006 120Z0472 8153127 Code no. 8156001 8156019	Mounting kit
PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C Acoustic hood for 2 cylinder compressor Oil equalisation nut Spare parts Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts Oil sight glass with gaskets (black & white) Gasket for oil sight glass (black chloroprene)	120Z0459 7773107 7773117 120Z0466 Code no. 7705006 120Z0472 8153127 Code no. 8156001 8156019 8156145	
PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C Acoustic hood for 2 cylinder compressor Oil equalisation nut Spare parts Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts Oil sight glass with gaskets (black & white)	120Z0459 7773107 7773117 120Z0466 Code no. 7705006 120Z0472 8153127 Code no. 8156001 8156019	1: Bolt (3x)
PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C Acoustic hood for 2 cylinder compressor Oil equalisation nut Spare parts Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts Oil sight glass with gaskets (black & white) Gasket for oil sight glass (black chloroprene)	120Z0459 7773107 7773117 120Z0466 Code no. 7705006 120Z0472 8153127 Code no. 8156001 8156019 8156145	





Maneurop reciprocating compressor. MTZ080-4

Performance data at 50 Hz, EN 12900 rating conditions

R407C

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
		•	•	•	•	•	•	•	•
Cooling capacity	in W								
35	8 130	10 768	13 905	17 601	21 917	26 914	32 652	-	-
40	7 407	9 912	12 880	16 369	20 442	25 158	30 578	-	-
45	6 669	9 036	11 827	15 104	18 926	23 354	28 449	-	-
50	-	8 147	10 755	13 811	17 376	21 510	26 273	-	-
55	-	-	9 671	12 500	15 800	19 633	24 058	-	-
60	-	-	-	11 177	14 206	17 731	21 810	-	-
65	-	-	-	9 850	12 602	15 811	19 539	-	-
Power input in V		1	T	_	T	1	T	Т	T
35	3 837	4 234	4 566	4 839	5 061	5 239	5 378	-	-
40	3 980	4 453	4 856	5 196	5 481	5 717	5 910	-	-
45	4 080	4 637	5 119	5 535	5 891	6 193	6 448	-	-
50	-	4 782	5 353	5 852	6 286	6 663	6 989	-	-
55	-	-	5 552	6 143	6 665	7 125	7 529	-	-
60	-	-	-	6 405	7 022	7 573	8 065	-	-
65	-	-	-	6 634	7 355	8 006	8 592	-	-
Current consum		T	1			1		Γ	T
35	8.21	8.67	9.06	9.39	9.67	9.90	10.11	-	-
40	8.38	8.94	9.43	9.84	10.20	10.51	10.78	-	-
45	8.50	9.18	9.77	10.29	10.75	11.15	11.52	-	-
50	-	9.37	10.09	10.73	11.31	11.83	12.30	-	-
55	-	-	10.36	11.15	11.86	12.51	13.10	-	-
60	-	-	-	11.51	12.38	13.18	13.92	-	-
65	-	-	-	11.81	12.85	13.82	14.72	-	-
	_								
Mass flow in kg/		1 000	1 000		110	T 540	0.17		I
35	176	230	292	364	446	540	647	-	-
40	169	222	284	355	436	529	634	-	-
45	161	214	275	345	425	516	620	-	-
50	-	204	264	333	412	502	604	-	-
55	-	-	253	321	399	487	586	-	-
60	-	-	-	308	383	470	567	-	-
65	-	-	-	293	367	451	547	-	-
O		ъ.							
Coefficient of pe			2.05	2.04	4.22	F 44	0.07		I
35	2.12	2.54	3.05	3.64	4.33	5.14	6.07	-	-
40	1.86	2.23	2.65	3.15	3.73	4.40	5.17	-	-
45	1.63	1.95	2.31	2.73	3.21	3.77	4.41	-	-
50	-	1.70	2.01	2.36	2.76	3.23	3.76	-	-
55	-	-	1.74	2.03	2.37	2.76	3.20	-	-
60	-	-	-	1.75	2.02	2.34	2.70	-	-
65	-	-	-	1.48	1.71	1.98	2.27	-	-

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

Cooling capacity	17 376	W
Power input	6 286	W
Current consumption	11.31	Α
Mass flow	412	kg/h
C.O.P.	2.76	

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

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ080-4

Performance data at 50 Hz, ARI rating conditions

R407C

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
•		1	•		1				l .
Cooling capacity	y in W								
35	8 751	11 576	14 930	18 878	23 481	28 805	34 911	-	-
40	8 016	10 713	13 901	17 646	22 009	27 055	32 848	-	-
45	7 264	9 826	12 843	16 377	20 493	25 256	30 729	-	-
50	-	8 924	11 761	15 079	18 942	23 415	28 561	-	-
55	-	-	10 666	13 761	17 364	21 541	26 354	-	-
60	-	-	-	12 432	15 769	19 643	24 119	-	-
65	-	-	-	11 100	14 166	17 733	21 867	-	-
Power input in V			,	1		1	,	1	1
35	3 837	4 234	4 566	4 839	5 061	5 239	5 378	-	-
40	3 980	4 453	4 856	5 196	5 481	5 717	5 910	-	-
45	4 080	4 637	5 119	5 535	5 891	6 193	6 448	-	-
50	-	4 782	5 353	5 852	6 286	6 663	6 989	-	-
55	-	-	5 552	6 143	6 665	7 125	7 529	-	-
60	-	-	-	6 405	7 022	7 573	8 065	-	-
65	-	-	-	6 634	7 355	8 006	8 592	-	-
Current consum			T	T		1	T	T	T
35	8.21	8.67	9.06	9.39	9.67	9.90	10.11	-	-
40	8.38	8.94	9.43	9.84	10.20	10.51	10.78	-	-
45	8.50	9.18	9.77	10.29	10.75	11.15	11.52	-	-
50	-	9.37	10.09	10.73	11.31	11.83	12.30	-	-
55	-	-	10.36	11.15	11.86	12.51	13.10	-	-
60	-	-	-	11.51	12.38	13.18	13.92	-	-
65	-	-	-	11.81	12.85	13.82	14.72	-	-
	_								
Mass flow in kg/			1 000			T 507	1 040	I	I
35	175	229	290	362	444	537	643	-	-
40	168	221	282	353	434	526	630	-	-
45	160	213	273	343	423	513	616	-	-
50	-	203	263	332	410	499	600	-	-
55	-	-	252	319	396	484	583	-	-
60	-	-	-	306	381	467	564	-	-
65	-	-	-	291	365	449	543	-	-
C#:-!	····•	.							
Coefficient of pe			2.27	2.00	4.04	5.50	0.40	I	I
35	2.28	2.73	3.27	3.90	4.64	5.50	6.49	-	-
40	2.01	2.41	2.86	3.40	4.02	4.73	5.56	-	-
45	1.78	2.12	2.51	2.96	3.48	4.08	4.77	-	-
50	-	1.87	2.20	2.58	3.01	3.51	4.09	-	-
55	-	-	1.92	2.24	2.61	3.02	3.50	-	-
60	-	-	-	1.94	2.25	2.59	2.99	-	-
65	-	-	-	1.67	1.93	2.22	2.55	-	-

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

Cooling capacity	19 333	W
Power input	6 825	W
Current consumption	12.08	Α
Mass flow	435	kg/h
C.O.P.	2.83	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

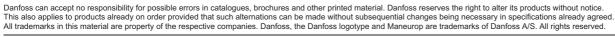
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

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







Maneurop reciprocating compressor. MTZ080-4

Performance data at 50 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
Saalina aanaaitu	in W								
Cooling capacity 35	2 806	3 908	6 978	9 070	11 618	14 684	18 330	22 619	27 613
40	2 454	3 511	6 420	8 398	10 807	13 710	17 171	21 250	26 011
45	2 101	3 112	5 857	7 717	9 985	12 724	15 996	19 864	24 389
50	1 752	2 714	5 290	7 031	9 156	11 728	14 810	18 463	22 752
55	-		4 723	6 342	8 322	10 725	13 614	17 052	21 101
60		-	-	5 654	7 486	9 718	12 413	15 633	19 441
65	_	_	-	-	6 652	8 711	11 209	14 209	17 773
75	_	_	_	_	-	-	8 806	11 358	14 428
			1		ı	1	1 2 2 2 2 2 2	1	
ower input in W						1	,	1	
35	1 905	2 215	2 763	3 002	3 219	3 414	3 588	3 740	3 873
40	1 875	2 222	2 842	3 117	3 368	3 598	3 806	3 992	4 157
45	1 839	2 227	2 929	3 244	3 535	3 804	4 050	4 275	4 478
50	1 784	2 218	3 011	3 370	3 706	4 019	4 309	4 576	4 822
55	-	-	3 075	3 484	3 869	4 230	4 568	4 883	5 176
60	-	-	-	3 571	4 010	4 424	4 815	5 182	5 527
65	-	-	-	-	4 116	4 589	5 037	5 461	5 863
75	-	-	-	-	-	-	5 353	5 906	6 435
urrent consum	ntion in A								
35	6.27	6.48	6.98	7.25	7.52	7.76	7.96	8.10	8.17
40	6.34	6.56	7.11	7.41	7.70	7.97	8.21	8.39	8.51
45	6.37	6.61	7.22	7.56	7.89	8.21	8.49	8.73	8.90
50	6.33	6.62	7.31	7.69	8.08	8.45	8.79	9.09	9.32
55	-	-	7.37	7.81	8.25	8.69	9.10	9.47	9.78
60		_	-	7.88	8.40	8.91	9.40	9.85	10.25
65		_	_	-	8.52	9.11	9.69	10.23	10.73
75	_	_	_	_	-	-	10.18	10.94	11.66
		1	1	1	1	I	10.10	10.01	
lass flow in kg/l	h				1	T			_
35	71	97	166	211	264	327	401	487	586
40	66	92	161	205	258	321	394	479	577
45	60	87	155	199	251	313	386	470	567
50	54	80	148	192	244	305	377	460	557
55	-	-	141	184	235	296	367	450	545
60	-	-	-	175	226	286	356	438	533
65	-	-	-	-	216	276	345	426	519
75	-	-	-	-	-	-	319	398	489
Coefficient of per	rformance (C.O	J.P.)							
35	1.47	1.76	2.53	3.02	3.61	4.30	5.11	6.05	7.13
40	1.31	1.58	2.26	2.69	3.21	3.81	4.51	5.32	6.26
45	1.14	1.40	2.00	2.38	2.82	3.35	3.95	4.65	5.45
50	0.98	1.22	1.76	2.09	2.47	2.92	3.44	4.03	4.72
55	-	-	1.54	1.82	2.15	2.54	2.98	3.49	4.08
60	-	-	-	1.58	1.87	2.20	2.58	3.02	3.52
65	-	-	-	-	1.62	1.90	2.23	2.60	3.03
75	-	-	-	-	-	-	1.64	1.92	2.24

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

Cooling capacity	11 728	W
Power input	4 019	W
Current consumption	8.45	Α
Mass flow	305	kg/h
C.O.P.	2.92	

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. MTZ080-4

Performance data at 50 Hz, ARI rating conditions

R134a

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
		•	•		•		•	•	
Cooling capacit	y in W					_			
35	3 050	4 240	7 545	9 791	12 523	15 803	19 699	24 275	29 595
40	2 683	3 831	6 979	9 111	11 705	14 825	18 537	22 907	27 998
45	2 313	3 417	6 404	8 421	10 875	13 832	17 359	21 520	26 380
50	-	3 002	5 824	7 723	10 035	12 828	16 167	20 118	24 746
55	-	-	5 242	7 020	9 189	11 815	14 964	18 704	23 098
60	-	-	-	6 316	8 340	10 797	13 756	17 282	21 442
65	-	-	-	-	-	9 778	12 545	15 857	19 782
75	-	-	-	-	-	-	10 132	13 018	16 475
Dannan immust im 1	.,								
Power input in \		2.245	2.762	2,002	2 210	2 414	2 500	2.740	2 072
35	1 905 1 875	2 215 2 222	2 763 2 842	3 002 3 117	3 219	3 414	3 588 3 806	3 740 3 992	3 873 4 157
40		1	1	1	3 368	3 598	ł	ł	
45 50	1 839	2 227	2 929	3 244	3 535	3 804	4 050	4 275	4 478
50 55	-	2 218	3 011	3 370	3 706	4 019	4 309	4 576	4 822 5 176
55	-	-	3 075	3 484	3 869	4 230	4 568	4 883	5 176
60	-	-	-	3 571	4 010	4 424	4 815	5 182	5 527
65 75	-	-	-	-	-	4 589	5 037	5 461	5 863
75	-	-	-	-	-	-	5 353	5 906	6 435
Current consum	nption in A								
35	6.27	6.48	6.98	7.25	7.52	7.76	7.96	8.10	8.17
40	6.34	6.56	7.11	7.41	7.70	7.97	8.21	8.39	8.51
45	6.37	6.61	7.22	7.56	7.89	8.21	8.49	8.73	8.90
50	-	6.62	7.31	7.69	8.08	8.45	8.79	9.09	9.32
55	-	-	7.37	7.81	8.25	8.69	9.10	9.47	9.78
60	-	-	-	7.88	8.40	8.91	9.40	9.85	10.25
65	-	-	-	-	-	9.11	9.69	10.23	10.73
75	-	-	-	-	-	-	10.18	10.94	11.66
		•	•	•	•	•	•	•	•
Mass flow in kg	/h								
35	71	97	165	210	263	326	399	484	583
40	65	92	160	204	257	319	392	476	574
45	60	86	154	198	250	312	384	467	564
50	-	80	147	191	243	303	375	458	553
55	-	-	140	183	234	294	365	447	542
60	-	-	-	175	225	285	355	436	530
65	-	-	-	-	-	274	343	423	516
75	-	-	-	-	-	-	318	396	487
Coofficient of m	erformance (C.C) P)							
35	1.60	1.91	2.73	3.26	3.89	4.63	5.49	6.49	7.64
40	1.43	1.72	2.46	2.92	3.47	4.12	4.87	5.74	6.73
45	1.26	1.53	2.19	2.60	3.08	3.64	4.29	5.03	5.89
50	-	1.35	1.93	2.29	2.71	3.19	3.75	4.40	5.13
55	-	-	1.70	2.02	2.38	2.79	3.28	3.83	4.46
60	-	_	-	1.77	2.08	2.44	2.86	3.33	3.88
00	-	-	-	-	-	2.44	2.49	2.90	3.37
65								£.5U	

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

romma portormanos acto 7:2 0,		
Cooling capacity	13 264	W
Power input	4 354	W
Current consumption	8.84	Α
Mass flow	325	kg/h
C.O.P.	3.05	

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. MTZ080-4

Performance data at 50 Hz, EN 12900 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		0.000	1 0.750	14.000	11.005	17.007			20.050
30	4 896	6 633	8 753	11 303	14 335	17 897	22 039	26 809	32 258
35	4 294	5 905	7 863	10 219	13 021	16 318	20 161	24 597	29 678
40	3 722	5 206	7 003	9 162	11 733	14 765	18 307	22 410	27 121
45	3 175	4 531	6 165	8 127	10 466	13 232	16 473	20 240	24 581
50	2 646	3 873	5 344	7 108	9 215	11 713	14 653	18 083	22 053
55	-	3 227	4 534	6 099	7 972	10 202	12 839	15 932	19 530
60	-	2 587	3 728	5 094	6 732	8 693	11 027	13 782	17 007
Power input in V	1								
30	3 159	3 667	4 129	4 552	4 941	5 301	5 637	5 953	6 257
35	3 181	3 745	4 261	4 733	5 167	5 568	5 941	6 291	6 624
40	3 179	3 806	4 380	4 906	5 391	5 838	6 254	6 643	7 010
45	3 151	3 845	4 483	5 069	5 609	6 108	6 572	7 005	7 413
50	3 093	3 859	4 566	5 217	5 819	6 375	6 892	7 375	7 828
55	-	3 846	4 627	5 348	6 016	6 635	7 211	7 748	8 252
60	-	3 800	4 661	5 458	6 198	6 885	7 524	8 121	8 681
Current consum	ntion in A								
30	7.26	7.76	8.29	8.82	9.33	9.80	10.23	10.60	10.88
35	7.24	7.82	8.42	9.02	9.59	10.14	10.64	11.06	11.41
40	7.23	7.89	8.56	9.23	9.89	10.51	11.08	11.58	12.00
45	7.20	7.95	8.70	9.46	10.19	10.89	11.54	12.12	12.61
50	7.15	7.98	8.83	9.67	10.49	11.28	12.01	12.68	13.25
55	-	7.98	8.92	9.86	10.77	11.65	12.48	13.23	13.90
60	-	7.91	8.96	10.00	11.01	11.99	12.91	13.77	14.53
Mass flow in kg/	n 154	204	262	330	409	499	601	717	849
35	145	195	252	319	396	499	585	699	849 828
40	137	186	242	308	384	470	569	ł	807
			1		+	470		681	
45 50	128 118	176 166	232 222	297 285	371 358	456	553 537	662 644	786 766
55	-	156	211	285	345	442	537	626	766
60	-	146	200	262	332	413	521	608	745 725
00		140	200	202	332	413	303	000	125
Coefficient of pe	rformance (C.O	.P.)							
30	1.55	1.81	2.12	2.48	2.90	3.38	3.91	4.50	5.16
35	1.35	1.58	1.85	2.16	2.52	2.93	3.39	3.91	4.48
40	1.17	1.37	1.60	1.87	2.18	2.53	2.93	3.37	3.87
45	1.01	1.18	1.38	1.60	1.87	2.17	2.51	2.89	3.32
50	0.86	1.00	1.17	1.36	1.58	1.84	2.13	2.45	2.82
55	-	0.84	0.98	1.14	1.33	1.54	1.78	2.06	2.37
60	-	0.68	0.80	0.93	1.09	1.26	1.47	1.70	1.96

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

Cooling capacity	10 466	W
Power input	5 609	W
Current consumption	10.19	Α
Mass flow	371	kg/h
C.O.P.	1.87	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

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

Sound power data

Sound power level	79	dB(A)
With accoustic hood	73	dB(A)

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ080-4

Performance data at 50 Hz, ARI rating conditions

R404A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
*					•				
Cooling capacity			T	1	T		T		
30	5 450	7 364	9 692	12 486	15 798	19 681	24 185	29 363	35 265
35	4 831	6 623	8 793	11 395	14 480	18 102	22 311	27 160	32 701
40	4 243	5 912	7 925	10 334	13 192	16 553	20 468	24 989	30 169
45	3 680	5 227	7 082	9 299	11 931	15 030	18 651	22 846	27 667
50	3 134	4 562	6 260	8 285	10 692	13 532	16 861	20 732	25 197
55	-	3 911	5 456	7 292	9 476	12 061	15 103	18 654	22 770
60	-	3 271	4 669	6 323	8 291	10 629	13 392	16 636	20 416
Power input in W	ı								
30	3 159	3 667	4 129	4 552	4 941	5 301	5 637	5 953	6 257
35	3 181	3 745	4 261	4 733	5 167	5 568	5 941	6 291	6 624
40	3 179	3 806	4 380	4 906	5 391	5 838	6 254	6 643	7 010
45	3 151	3 845	4 483	5 069	5 609	6 108	6 572	7 005	7 413
50	3 093	3 859	4 566	5 217	5 819	6 375	6 892	7 375	7 828
55	-	3 846	4 627	5 348	6 016	6 635	7 211	7 748	8 252
60	-	3 800	4 661	5 458	6 198	6 885	7 524	8 121	8 681
Current consum	ption in A	1				1		1	
30	7.26	7.76	8.29	8.82	9.33	9.80	10.23	10.60	10.88
35	7.24	7.82	8.42	9.02	9.59	10.14	10.64	11.06	11.41
40	7.23	7.89	8.56	9.23	9.89	10.51	11.08	11.58	12.00
45	7.20	7.95	8.70	9.46	10.19	10.89	11.54	12.12	12.61
50	7.15	7.98	8.83	9.67	10.49	11.28	12.01	12.68	13.25
55	-	7.98	8.92	9.86	10.77	11.65	12.48	13.23	13.90
60	-	7.91	8.96	10.00	11.01	11.99	12.91	13.77	14.53
Mass flow in kg/l	h								
30	153	203	261	328	406	496	597	713	843
35	144	194	251	317	394	481	581	694	822
40	136	185	241	306	381	467	565	676	801
45	127	175	231	295	369	453	549	658	781
50	118	165	220	284	356	439	533	640	760
55	-	155	210	272	343	425	517	622	740
60	-	145	199	260	330	410	501	604	720
Coefficient of pe	•	1	0.05	0.74	1 000	0.74	1 400	4.00	
30	1.73	2.01	2.35	2.74	3.20	3.71	4.29	4.93	5.64
35	1.52	1.77	2.06	2.41	2.80	3.25	3.76	4.32	4.94
40	1.33	1.55	1.81	2.11	2.45	2.84	3.27	3.76	4.30
45	1.17	1.36	1.58	1.83	2.13	2.46	2.84	3.26	3.73
50	1.01	1.18	1.37	1.59	1.84	2.12	2.45	2.81	3.22
55	-	1.02	1.18	1.36	1.58	1.82	2.09	2.41	2.76
60	-	0.86	1.00	1.16	1.34	1.54	1.78	2.05	2.35

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

Cooling capacity	11 931	W
Power input	5 609	W
Current consumption	10.19	Α
Mass flow	369	kg/h
C.O.P.	2.13	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

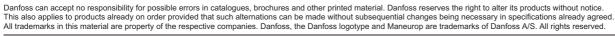
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch 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	79	dB(A)
With accoustic hood	73	dB(A)







Maneurop reciprocating compressor. MTZ080-4

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		5.004	7.050	0.045	10.400	45.007	10.715	04.000	00.000
30	3 620	5 261	7 253	9 645	12 486	15 827	19 715	24 202	29 336
35	3 121	4 685	6 573	8 836	11 522	14 682	18 365	22 620	27 497
40	2 623	4 103	5 883	8 012	10 539	13 514	16 986	21 005	25 620
45	2 131	3 524	5 191	7 181	9 544	12 329	15 586	19 364	23 712
50	-	2 954	4 503	6 350	8 544	11 135	14 171	17 703	21 781
55	-	-	3 827	5 525	7 546	9 937	12 749	16 031	19 832
60	-	-	-	4 715	6 557	8 744	11 327	14 354	17 874
Power input in W	ı								
30	2 392	2 905	3 386	3 836	4 254	4 641	4 995	5 318	5 608
35	2 361	2 927	3 461	3 962	4 429	4 863	5 264	5 631	5 964
40	2 306	2 931	3 521	4 077	4 598	5 085	5 536	5 953	6 333
45	2 225	2 913	3 565	4 181	4 761	5 305	5 812	6 282	6 716
50	-	2 874	3 592	4 273	4 917	5 522	6 090	6 619	7 110
55	-	-	3 600	4 351	5 063	5 735	6 368	6 961	7 514
60	-	-	-	4 414	5 199	5 942	6 645	7 306	7 926
S									
30	6.50	6.99	7.50	8.02	8.54	9.02	9.45	9.82	10.11
35	6.47	7.01	7.57	8.15	8.72	9.27	9.78	10.23	10.60
40	6.46	7.04	7.66	8.30	8.94	9.56	10.15	10.68	11.14
45	6.43	7.07	7.75	8.46	9.17	9.87	10.13	11.16	11.72
50	-	7.07	7.73	8.60	9.39	10.18	10.94	11.65	12.31
55		-	7.85	8.71	9.59	10.46	11.32	12.14	12.90
60		-	-	8.77	9.74	10.71	11.66	12.59	13.47
		l	l	-					
Mass flow in kg/l		Γ	1	1		1		Γ	1
30	86	123	166	217	276	343	421	510	610
35	78	115	159	209	267	335	412	499	599
40	70	107	150	200	258	325	401	488	586
45	61	98	141	190	248	314	390	476	573
50	-	88	130	180	237	302	377	462	558
55	-	-	119	168	224	289	363	447	542
60	-	-	-	156	212	275	348	431	525
Coefficient of pe	rformance (C.C).P.)							
30	1.51	1.81	2.14	2.51	2.93	3.41	3.95	4.55	5.23
35	1.32	1.60	1.90	2.23	2.60	3.02	3.49	4.02	4.61
40	1.14	1.40	1.67	1.97	2.29	2.66	3.07	3.53	4.05
45	0.96	1.21	1.46	1.72	2.00	2.32	2.68	3.08	3.53
		1.03	1.25	1.49	1.74	2.02	2.33	2.67	3.06
	-				1	~-			0.00
50	-	-	1.06	1.27	1.49	1.73	2.00	2.30	2.64

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

Cooling capacity	9 544	W
Power input	4 761	W
Current consumption	9.17	Α
Mass flow	248	kg/h
C.O.P.	2.00	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

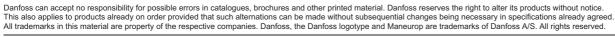
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

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

Sound power data

Sound power level	78	dB(A)
With accoustic hood	72	dB(A)







Maneurop reciprocating compressor. MTZ080-4

Performance data at 50 Hz, ARI rating conditions

R407A

-30	-25	-20	-15	-10	-5	0	5	10
		•	•	•	•	•	•	•
	1	Т	Т	T		T	T	
		ł	1					31 407
								29 578
		1	1	1		1	1	27 710
		1	1			1		25 812
-		1	1				1	23 893
-	-	4 298	1	1	1	1	1	21 964
-	-	-	5 358	7 428	9 878	12 761	16 130	20 039
V								
2 392	2 905	3 386	3 836	4 254	4 641	4 995	5 318	5 608
2 361	2 927	3 461	3 962	4 429	4 863	5 264	5 631	5 964
2 306	2 931	3 521	4 077	4 598	5 085	5 536	5 953	6 333
2 225	2 913	3 565	4 181	4 761	5 305	5 812	6 282	6 716
-	2 874	3 592	4 273	4 917	5 522	6 090	6 619	7 110
-	-	3 600	4 351	5 063	5 735	6 368	6 961	7 514
-	-	-	4 414	5 199	5 942	6 645	7 306	7 926
ption in A					1			
6.50	6.99	7.50	8.02	8.54	9.02	9.45	9.82	10.11
6.47	7.01	7.57	8.15	8.72	9.27	9.78	10.23	10.60
6.46	7.04	7.66	8.30	8.94	9.56	10.15	10.68	11.14
6.43	7.07	7.75	8.46	9.17	9.87	10.54	11.16	11.72
-	7.07	7.82	8.60	9.39	10.18	10.94	11.65	12.31
-	-	7.85	8.71	9.59		11.32	12.14	12.90
-	-	-	8.77	9.74	10.71	11.66	12.59	13.47
'h								
86	122	166	216	274	342	419	507	606
78	115	158	208	266	333	409	497	595
69	106	149	199	257	323	399	485	583
60	97	140	189	246	312	387	473	569
-	87	130	179	235	300	375	459	555
-	-	119	167	223	288	361	444	539
-	-	-	155	210	274	346	429	522
orformance (C.O.								
		2.31	2.71	3.16	3.66	4.23	4.88	5.60
		1				1		4.96
				1	1	1	1	4.38
								3.84
		1	1	1	1	1	1	3.36
	-	1.19	1.42	1.67	1.93	2.23	2.56	2.92
		1.10	1.74	1.07	1.00	2.20	2.00	2.02
	- NV 2 392 2 361 2 306 2 225	3 915 5 682 3 396 5 088 2 873 4 487 2 354 3 884 - 3 287 N 2 392 2 905 2 361 2 927 2 306 2 931 2 225 2 913 - 2 874 nption in A 6.50 6.99 6.47 7.01 6.46 7.04 6.43 7.07 /h 86 122 78 115 69 106 60 97 - 87 erformance (C.O.P.) 1.64 1.96 1.44 1.74 1.25 1.53 1.06 1.33 - 1.14	3 915	3 915	3 915	3 915	3 915	3 915

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

Cooling capacity	10 457	W
Power input	4 761	W
Current consumption	9.17	Α
Mass flow	246	kg/h
C.O.P.	2.20	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

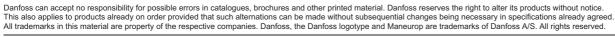
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

Maximum HP switch setting	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	78	dB(A)
With accoustic hood	72	dB(A)







Maneurop reciprocating compressor. MTZ080-4

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		T				T			1	
30	-	5 722	7 968	10 676	13 901	17 703	22 138	27 265	33 141	
35	-	4 962	7 014	9 482	12 425	15 900	19 964	24 677	30 095	
40	-	4 327	6 220	8 485	11 180	14 365	18 095	22 429	27 425	
45	-	3 786	5 555	7 653	10 138	13 067	16 499	20 491	25 101	
50	-	-	4 990	6 957	9 267	11 977	15 147	18 832	23 092	
55	-	-	-	6 365	8 536	11 064	14 007	17 423	21 369	
60	-	-	-	-	-	-	-	-	-	
Daa. i i W										
Power input in W	_	3 093	3 587	4 054	4 481	4 855	5 163	5 392	5 527	
35		3 128	3 666	4 186	4 676	5 120	5 508	5 824	6 056	
40	-	3 168	3 744	4 311	4 856	5 365	5 825	6 222	6 544	
45		3 229	3 837	4 444	5 038	5 605	6 131	6 603	7 009	
50	-	3 229	3 961	4 602	5 239	5 856	6 442	6 983	7 465	
55		-	-	4 801	5 473	6 136	6 774	7 377	7 930	
60		-	-	-	-		-	-	-	
00		<u> </u>								
Current consump	tion in A									
30	-	6.99	7.55	8.11	8.66	9.16	9.59	9.92	10.11	
35		7.10	7.70	8.32	8.93	9.51	10.02	10.44	10.74	
40	-	7.16	7.81	8.49	9.18	9.84	10.44	10.96	11.37	
45	_	7.20	7.91	8.66	9.42	10.17	10.87	11.50	12.03	
50	-	-	8.02	8.85	9.69	10.54	11.34	12.09	12.74	
55	_	_	-	9.07	10.01	10.95	11.87	12.74	13.53	
60	-	_	_	-	-	-	-	-	-	
00		1	I.	<u> </u>	I.	I	I.	1		
Mass flow in kg/h	l									
30	-	118	162	214	275	345	426	519	624	
35	-	108	150	199	257	324	402	490	591	
40	-	99	139	187	243	307	382	467	563	
45	-	91	131	178	232	295	367	449	542	
50	-	-	126	172	225	286	356	436	526	
55	-	-	-	168	221	281	350	428	517	
60	-	-	-	-	-	-	-	-	-	
		•	•	•	•	•	•	•	•	
Coefficient of per	formance (C.0	D.P.)								
30	-	1.85	2.22	2.63	3.10	3.65	4.29	5.06	6.00	
35	-	1.59	1.91	2.27	2.66	3.11	3.62	4.24	4.97	
40	-	1.37	1.66	1.97	2.30	2.68	3.11	3.60	4.19	
45	-	1.17	1.45	1.72	2.01	2.33	2.69	3.10	3.58	
	-	-	1.26	1.51	1.77	2.05	2.35	2.70	3.09	
50						+	1	1		
	-	-	-	1.33	1.56	1.80	2.07	2.36	2.69	

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

Cooling capacity	10 138	W
Power input	5 038	W
Current consumption	9.42	Α
Mass flow	232	kg/h
C.O.P.	2.01	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	24	bar(g)	ı
Minimum LP switch setting	1	bar(g)	١
LP pump down setting	1.26	bar(g)	

Sound power data

Sound power level	78	dB(A)
With accoustic hood	72	dB(A)





Maneurop reciprocating compressor. MTZ080-4

Performance data at 50 Hz, ARI rating conditions

R407F

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacit		0.400	0.500	14.440	44.054	40.000	00.040	00.050	05.000
30	-	6 132	8 532	11 419	14 854	18 899	23 613	29 056	35 290
35	-	5 344	7 544	10 187	13 334	17 046	21 383	26 406	32 174
40	-	4 685	6 725	9 162	12 059	15 476	19 474	24 113	29 455
45	-	4 125	6 044	8 315	11 000	14 160	17 857	22 152	27 106
50	-	-	5 470	7 614	10 127	13 070	16 506	20 496	25 101
55	-	-	-	7 032	9 414	12 181	15 397	19 123	23 420
60	-	-	-	-	-	-	-	-	-
Power input in V	N		1	T	1	1		1	1
30	-	3 093	3 587	4 054	4 481	4 855	5 163	5 392	5 527
35	-	3 128	3 666	4 186	4 676	5 120	5 508	5 824	6 056
40	-	3 168	3 744	4 311	4 856	5 365	5 825	6 222	6 544
45	-	3 229	3 837	4 444	5 038	5 605	6 131	6 603	7 009
50	-	-	3 961	4 602	5 239	5 856	6 442	6 983	7 465
55	-	-	-	4 801	5 473	6 136	6 774	7 377	7 930
60	-	-	-	-	-	-	-	-	-
Current consum	nption in A								
30	-	6.99	7.55	8.11	8.66	9.16	9.59	9.92	10.11
35	-	7.10	7.70	8.32	8.93	9.51	10.02	10.44	10.74
40	-	7.16	7.81	8.49	9.18	9.84	10.44	10.96	11.37
45	-	7.20	7.91	8.66	9.42	10.17	10.87	11.50	12.03
50	-	-	8.02	8.85	9.69	10.54	11.34	12.09	12.74
55	-	-	-	9.07	10.01	10.95	11.87	12.74	13.53
60	-	-	-	-	-	-	-	-	-
Mass flow in kg/	/h								
30	-	117	161	213	273	343	424	516	620
35	-	107	149	198	256	322	399	487	587
40	-	98	139	186	242	306	379	464	560
45	-	91	131	177	231	293	364	446	538
50	-	-	125	171	224	284	354	433	523
55	-	-	-	167	219	279	348	426	513
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	erformance (C.)	O P)							
30	-	1.98	2.38	2.82	3.31	3.89	4.57	5.39	6.38
35	-	1.71	2.06	2.43	2.85	3.33	3.88	4.53	5.31
40	-	1.48	1.80	2.13	2.48	2.88	3.34	3.88	4.50
45	-	1.28	1.58	1.87	2.18	2.53	2.91	3.35	3.87
50	_	-	1.38	1.65	1.93	2.23	2.56	2.94	3.36
		-	-	1.46	1.72	1.99	2.27	2.59	2.95
55									

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

Cooling capacity	11 000	W
Power input	5 038	W
Current consumption	9.42	Α
Mass flow	231	kg/h
C.O.P.	2.18	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

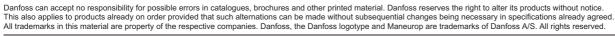
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

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

Sound power data

Sound power level	78	dB(A)
With accoustic hood	72	dB(A)







Maneurop reciprocating compressor. MTZ080-4

Performance data at 50 Hz, EN 12900 rating conditions

R134a

Cond. temp. in	in Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
Saalina aanaaitu	in W								
Cooling capacity 35	2 806	3 908	6 978	9 070	11 618	14 684	18 330	22 619	27 613
40	2 454	3 511	6 420	8 398	10 807	13 710	17 171	21 250	26 011
45	2 101	3 112	5 857	7 717	9 985	12 724	15 996	19 864	24 389
50	1 752	2 714	5 290	7 031	9 156	11 728	14 810	18 463	22 752
55	-		4 723	6 342	8 322	10 725	13 614	17 052	21 101
60		-	-	5 654	7 486	9 718	12 413	15 633	19 441
65	_	_	-	-	6 652	8 711	11 209	14 209	17 773
75	_	_	_	_	-	-	8 806	11 358	14 428
			1		ı	1	1 2 2 2 2 2 2	1	
ower input in W						1	,	1	
35	1 905	2 215	2 763	3 002	3 219	3 414	3 588	3 740	3 873
40	1 875	2 222	2 842	3 117	3 368	3 598	3 806	3 992	4 157
45	1 839	2 227	2 929	3 244	3 535	3 804	4 050	4 275	4 478
50	1 784	2 218	3 011	3 370	3 706	4 019	4 309	4 576	4 822
55	-	-	3 075	3 484	3 869	4 230	4 568	4 883	5 176
60	-	-	-	3 571	4 010	4 424	4 815	5 182	5 527
65	-	-	-	-	4 116	4 589	5 037	5 461	5 863
75	-	-	-	-	-	-	5 353	5 906	6 435
urrent consum	ntion in A								
35	6.27	6.48	6.98	7.25	7.52	7.76	7.96	8.10	8.17
40	6.34	6.56	7.11	7.41	7.70	7.97	8.21	8.39	8.51
45	6.37	6.61	7.22	7.56	7.89	8.21	8.49	8.73	8.90
50	6.33	6.62	7.31	7.69	8.08	8.45	8.79	9.09	9.32
55	-	-	7.37	7.81	8.25	8.69	9.10	9.47	9.78
60	_	_	-	7.88	8.40	8.91	9.40	9.85	10.25
65	_	_	_	-	8.52	9.11	9.69	10.23	10.73
75	_	_	_	_	-	-	10.18	10.94	11.66
		1	1	1	1	I	10.10	10.01	
lass flow in kg/l	h				1	T			_
35	71	97	166	211	264	327	401	487	586
40	66	92	161	205	258	321	394	479	577
45	60	87	155	199	251	313	386	470	567
50	54	80	148	192	244	305	377	460	557
55	-	-	141	184	235	296	367	450	545
60	-	-	-	175	226	286	356	438	533
65	-	-	-	-	216	276	345	426	519
75	-	-	-	-	-	-	319	398	489
Coefficient of per	rformance (C.O	J.P.)							
35	1.47	1.76	2.53	3.02	3.61	4.30	5.11	6.05	7.13
40	1.31	1.58	2.26	2.69	3.21	3.81	4.51	5.32	6.26
45	1.14	1.40	2.00	2.38	2.82	3.35	3.95	4.65	5.45
50	0.98	1.22	1.76	2.09	2.47	2.92	3.44	4.03	4.72
55	-	-	1.54	1.82	2.15	2.54	2.98	3.49	4.08
60	-	-	-	1.58	1.87	2.20	2.58	3.02	3.52
65	-	-	-	-	1.62	1.90	2.23	2.60	3.03
75	-	-	-	-	-	-	1.64	1.92	2.24

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

Cooling capacity	11 728	W
Power input	4 019	W
Current consumption	8.45	Α
Mass flow	305	kg/h
C.O.P.	2.92	

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. MTZ080-4

Performance data at 50 Hz, ARI rating conditions

R134a

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
		•	•		•		•	•	
Cooling capacit	y in W					_			
35	3 050	4 240	7 545	9 791	12 523	15 803	19 699	24 275	29 595
40	2 683	3 831	6 979	9 111	11 705	14 825	18 537	22 907	27 998
45	2 313	3 417	6 404	8 421	10 875	13 832	17 359	21 520	26 380
50	-	3 002	5 824	7 723	10 035	12 828	16 167	20 118	24 746
55	-	-	5 242	7 020	9 189	11 815	14 964	18 704	23 098
60	-	-	-	6 316	8 340	10 797	13 756	17 282	21 442
65	-	-	-	-	-	9 778	12 545	15 857	19 782
75	-	-	-	-	-	-	10 132	13 018	16 475
Dannan immust im 1	.,								
Power input in \		2.245	2.762	2,002	2 210	2 414	2 500	2.740	2 072
35	1 905 1 875	2 215 2 222	2 763 2 842	3 002 3 117	3 219	3 414	3 588 3 806	3 740 3 992	3 873 4 157
40		1	1	1	3 368	3 598	ł	ł	
45 50	1 839	2 227	2 929	3 244	3 535	3 804	4 050	4 275	4 478
50 55	-	2 218	3 011	3 370	3 706	4 019	4 309	4 576	4 822 5 176
55	-	-	3 075	3 484	3 869	4 230	4 568	4 883	5 176
60	-	-	-	3 571	4 010	4 424	4 815	5 182	5 527
65 75	-	-	-	-	-	4 589	5 037	5 461	5 863
75	-	-	-	-	-	-	5 353	5 906	6 435
Current consum	nption in A								
35	6.27	6.48	6.98	7.25	7.52	7.76	7.96	8.10	8.17
40	6.34	6.56	7.11	7.41	7.70	7.97	8.21	8.39	8.51
45	6.37	6.61	7.22	7.56	7.89	8.21	8.49	8.73	8.90
50	-	6.62	7.31	7.69	8.08	8.45	8.79	9.09	9.32
55	-	-	7.37	7.81	8.25	8.69	9.10	9.47	9.78
60	-	-	-	7.88	8.40	8.91	9.40	9.85	10.25
65	-	-	-	-	-	9.11	9.69	10.23	10.73
75	-	-	-	-	-	-	10.18	10.94	11.66
		•	•	•	•	•	•	•	•
Mass flow in kg	/h								
35	71	97	165	210	263	326	399	484	583
40	65	92	160	204	257	319	392	476	574
45	60	86	154	198	250	312	384	467	564
50	-	80	147	191	243	303	375	458	553
55	-	-	140	183	234	294	365	447	542
60	-	-	-	175	225	285	355	436	530
65	-	-	-	-	-	274	343	423	516
75	-	-	-	-	-	-	318	396	487
Coofficient of m	erformance (C.C) P)							
35	1.60	1.91	2.73	3.26	3.89	4.63	5.49	6.49	7.64
40	1.43	1.72	2.46	2.92	3.47	4.12	4.87	5.74	6.73
45	1.26	1.53	2.19	2.60	3.08	3.64	4.29	5.03	5.89
50	-	1.35	1.93	2.29	2.71	3.19	3.75	4.40	5.13
55	-	-	1.70	2.02	2.38	2.79	3.28	3.83	4.46
60	-	_	-	1.77	2.08	2.44	2.86	3.33	3.88
00	-	-	-	-	-	2.44	2.49	2.90	3.37
65								£.5U	

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

romma portormanos acto 7:2 0,		
Cooling capacity	13 264	W
Power input	4 354	W
Current consumption	8.84	Α
Mass flow	325	kg/h
C.O.P.	3.05	

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. MTZ080-4

Performance data at 50 Hz, EN 12900 rating conditions

R407C

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
		•	•	•	•	•	•	•	•
Cooling capacity	in W								
35	8 130	10 768	13 905	17 601	21 917	26 914	32 652	-	-
40	7 407	9 912	12 880	16 369	20 442	25 158	30 578	-	-
45	6 669	9 036	11 827	15 104	18 926	23 354	28 449	-	-
50	-	8 147	10 755	13 811	17 376	21 510	26 273	-	-
55	-	-	9 671	12 500	15 800	19 633	24 058	-	-
60	-	-	-	11 177	14 206	17 731	21 810	-	-
65	-	-	-	9 850	12 602	15 811	19 539	-	-
Power input in V		1	T	_	T	1	T	Т	T
35	3 837	4 234	4 566	4 839	5 061	5 239	5 378	-	-
40	3 980	4 453	4 856	5 196	5 481	5 717	5 910	-	-
45	4 080	4 637	5 119	5 535	5 891	6 193	6 448	-	-
50	-	4 782	5 353	5 852	6 286	6 663	6 989	-	-
55	-	-	5 552	6 143	6 665	7 125	7 529	-	-
60	-	-	-	6 405	7 022	7 573	8 065	-	-
65	-	-	-	6 634	7 355	8 006	8 592	-	-
Current consum		T	1			1		Γ	T
35	8.21	8.67	9.06	9.39	9.67	9.90	10.11	-	-
40	8.38	8.94	9.43	9.84	10.20	10.51	10.78	-	-
45	8.50	9.18	9.77	10.29	10.75	11.15	11.52	-	-
50	-	9.37	10.09	10.73	11.31	11.83	12.30	-	-
55	-	-	10.36	11.15	11.86	12.51	13.10	-	-
60	-	-	-	11.51	12.38	13.18	13.92	-	-
65	-	-	-	11.81	12.85	13.82	14.72	-	-
	_								
Mass flow in kg/		1 000	1 000		110	T 540	0.17		I
35	176	230	292	364	446	540	647	-	-
40	169	222	284	355	436	529	634	-	-
45	161	214	275	345	425	516	620	-	-
50	-	204	264	333	412	502	604	-	-
55	-	-	253	321	399	487	586	-	-
60	-	-	-	308	383	470	567	-	-
65	-	-	-	293	367	451	547	-	-
O		ъ.							
Coefficient of pe			2.05	2.04	4.22	F 44	0.07		I
35	2.12	2.54	3.05	3.64	4.33	5.14	6.07	-	-
40	1.86	2.23	2.65	3.15	3.73	4.40	5.17	-	-
45	1.63	1.95	2.31	2.73	3.21	3.77	4.41	-	-
50	-	1.70	2.01	2.36	2.76	3.23	3.76	-	-
55	-	-	1.74	2.03	2.37	2.76	3.20	-	-
60	-	-	-	1.75	2.02	2.34	2.70	-	-
65	-	-	-	1.48	1.71	1.98	2.27	-	-

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

Cooling capacity	17 376	W
Power input	6 286	W
Current consumption	11.31	Α
Mass flow	412	kg/h
C.O.P.	2.76	

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

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ080-4

Performance data at 50 Hz, ARI rating conditions

R407C

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
•		1	•		1				l .
Cooling capacity	y in W								
35	8 751	11 576	14 930	18 878	23 481	28 805	34 911	-	-
40	8 016	10 713	13 901	17 646	22 009	27 055	32 848	-	-
45	7 264	9 826	12 843	16 377	20 493	25 256	30 729	-	-
50	-	8 924	11 761	15 079	18 942	23 415	28 561	-	-
55	-	-	10 666	13 761	17 364	21 541	26 354	-	-
60	-	-	-	12 432	15 769	19 643	24 119	-	-
65	-	-	-	11 100	14 166	17 733	21 867	-	-
Power input in V			,	ı		1	,	1	1
35	3 837	4 234	4 566	4 839	5 061	5 239	5 378	-	-
40	3 980	4 453	4 856	5 196	5 481	5 717	5 910	-	-
45	4 080	4 637	5 119	5 535	5 891	6 193	6 448	-	-
50	-	4 782	5 353	5 852	6 286	6 663	6 989	-	-
55	-	-	5 552	6 143	6 665	7 125	7 529	-	-
60	-	-	-	6 405	7 022	7 573	8 065	-	-
65	-	-	-	6 634	7 355	8 006	8 592	-	-
Current consum			T	T		1	T	T	T
35	8.21	8.67	9.06	9.39	9.67	9.90	10.11	-	-
40	8.38	8.94	9.43	9.84	10.20	10.51	10.78	-	-
45	8.50	9.18	9.77	10.29	10.75	11.15	11.52	-	-
50	-	9.37	10.09	10.73	11.31	11.83	12.30	-	-
55	-	-	10.36	11.15	11.86	12.51	13.10	-	-
60	-	-	-	11.51	12.38	13.18	13.92	-	-
65	-	-	-	11.81	12.85	13.82	14.72	-	-
	_								
Mass flow in kg/			1 000			T 507	1 040	I	I
35	175	229	290	362	444	537	643	-	-
40	168	221	282	353	434	526	630	-	-
45	160	213	273	343	423	513	616	-	-
50	-	203	263	332	410	499	600	-	-
55	-	-	252	319	396	484	583	-	-
60	-	-	-	306	381	467	564	-	-
65	-	-	-	291	365	449	543	-	-
C#:-!	····•	.							
Coefficient of pe			2.27	2.00	4.04	5.50	0.40	I	I
35	2.28	2.73	3.27	3.90	4.64	5.50	6.49	-	-
40	2.01	2.41	2.86	3.40	4.02	4.73	5.56	-	-
45	1.78	2.12	2.51	2.96	3.48	4.08	4.77	-	-
50	-	1.87	2.20	2.58	3.01	3.51	4.09	-	-
55	-	-	1.92	2.24	2.61	3.02	3.50	-	-
60	-	-	-	1.94	2.25	2.59	2.99	-	-
65	-	-	-	1.67	1.93	2.22	2.55	-	-

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

Cooling capacity	19 333	W
Power input	6 825	W
Current consumption	12.08	Α
Mass flow	435	kg/h
C.O.P.	2.83	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

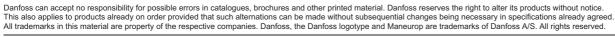
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

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







Maneurop reciprocating compressor. MTZ080-4

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	-	7 689	10 032	12 895	16 330	-	-	-	-
20	-	6 794	8 958	11 589	14 738	18 457	22 806	-	-
30	-	5 837	7 800	10 178	13 019	16 373	20 293	24 840	30 084
40	-	-	6 585	8 688	11 199	14 166	17 638	21 669	26 318
50	-	-	-	7 145	9 307	11 866	14 869	18 363	22 398
60	-	-	-	-	7 367	9 500	12 015	14 952	18 353
Power input in W									
10	-	2 496	2 651	2 733	2 730	-	-	-	-
20	-	2 891	3 170	3 396	3 554	3 634	3 620	-	-
30	-	3 158	3 552	3 910	4 220	4 469	4 644	4 732	4 721
40	-	-	3 816	4 297	4 747	5 155	5 508	5 793	5 996
50	-	-	-	4 575	5 156	5 713	6 232	6 703	7 110
60	-	-	-	-	5 465	6 160	6 837	7 482	8 084
Current consump		1 000	7.40	7.05	7.00			1	
10	-	6.92	7.18	7.35	7.39	- 0.04	- 0.40	-	-
20	-	7.24	7.60	7.91	8.14	8.24	8.18	-	-
30	-	7.48	7.95	8.40	8.80	9.12	9.32	9.37	9.23
40			8.21	8.81	9.39	9.93	10.39	10.73	10.93
50	-	-	-	9.14	9.90	10.66	11.38	12.02	12.55
60	-	-	-		10.34	11.32	12.29	13.23	14.09
Mass flow in kg/h	1								
10	-	126	165	212	270	-	-	-	-
20	-	120	158	206	262	330	411	-	-
30	-	111	149	196	251	318	398	493	606
40	-	-	138	183	237	302	380	473	584
50	-	-	-	167	219	282	358	448	555
60	-	-	-	-	199	259	331	418	522
Coefficient of per	formance (C.	O.P.)							
10	-	3.08	3.78	4.72	5.98	-	-	-	-
20	-	2.35	2.83	3.41	4.15	5.08	6.30	-	-
30	-	1.85	2.20	2.60	3.08	3.66	4.37	5.25	6.37
40	-	-	1.73	2.02	2.36	2.75	3.20	3.74	4.39
		1	1	1.56	1.81	2.08	2.39	2.74	3.15
50	-	-	-	1.50	1.01	2.00	2.00		0.10

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

Cooling capacity	10 260	W
Power input	4 965	W
Current consumption	9.66	Α
Mass flow	229	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

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

Count power data						
Sound power level	80	dB(A)				
With accoustic hood	74	dB(A)				





Maneurop reciprocating compressor. MTZ080-4

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	5 839	7 727	10 089	12 975	16 435	-	-	-	-
20	5 004	6 750	8 920	11 565	14 734	18 479	22 848	-	-
30	4 137	5 719	7 675	10 055	12 910	16 290	20 246	24 827	30 084
40	3 269	4 663	6 381	8 475	10 992	13 985	17 504	21 598	26 318
50	-	3 613	5 071	6 854	9 012	11 595	14 653	18 238	22 398
60	-	-	3 774	5 223	6 998	9 148	11 724	14 775	18 353
Power input in V	ı								
10	2 281	2 496	2 651	2 733	2 730	-	_	_	-
20	2 570	2 891	3 170	3 396	3 554	3 634	3 620	-	-
30	2 742	3 158	3 552	3 910	4 220	4 469	4 644	4 732	4 721
40	2 817	3 319	3 816	4 297	4 747	5 155	5 508	5 793	5 996
50	-	3 392	3 983	4 575	5 156	5 713	6 232	6 703	7 110
60	-	-	4 071	4 764	5 465	6 160	6 837	7 482	8 084
<u>'</u>					1	1	•	•	
Current consum	ption in A								
10	6.61	6.92	7.18	7.35	7.39	-	-	-	-
20	6.87	7.24	7.60	7.91	8.14	8.24	8.18	-	-
30	7.04	7.48	7.95	8.40	8.80	9.12	9.32	9.37	9.23
40	7.13	7.64	8.21	8.81	9.39	9.93	10.39	10.73	10.93
50	-	7.72	8.40	9.14	9.90	10.66	11.38	12.02	12.55
60	-	-	8.50	9.39	10.34	11.32	12.29	13.23	14.09
Mass flow in kg/								T	
10	112	147	188	238	296	-	-	-	-
20	105	139	181	230	288	355	433	-	-
30	95	129	170	219	276	342	419	506	606
40	84	117	157	204	260	325	400	486	584
50	-	103	141	187	241	304	377	460	555
60	-	-	124	167	218	278	349	429	522
Coefficient of pe	rformance (C.C	D.P.)							
10	2.56	3.10	3.81	4.75	6.02	-	-	-	-
20	1.95	2.34	2.81	3.41	4.15	5.09	6.31	-	-
30	1.51	1.81	2.16	2.57	3.06	3.65	4.36	5.25	6.37
40	1.16	1.41	1.67	1.97	2.32	2.71	3.18	3.73	4.39
50	-	1.07	1.27	1.50	1.75	2.03	2.35	2.72	3.15
60	-	-	0.93	1.10	1.28	1.49	1.71	1.97	2.27
•		•	•	•	-	•	•	•	•
Nominal perform	nance at to = -1	0 °C, tc = 45 °C				Pressure switch	settings		

Cooling capacity

Current consumption

Power input

Mass flow

C.O.P.

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

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

10 008

4 965

9.66

251

2.02

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

Couria porror data			
Sound power level	80	dB(A)	_
With accoustic hood	74	dB(A)	





Maneurop reciprocating compressor. MTZ080-4

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 i	in W										
10	-	7 703	10 047	12 911	16 345	-	-	-	-		
20	-	6 809	8 974	11 606	14 754	18 472	22 818	-	-		
30	-	5 852	7 817	10 195	13 036	16 389	20 306	24 848	30 084		
40	-	-	6 602	8 706	11 218	14 183	17 652	21 677	26 318		
50	-	-	-	7 164	9 325	11 884	14 883	18 371	22 398		
60	-	-	-	-	7 386	9 517	12 029	14 961	18 353		
Power input in W											
10	-	2 496	2 651	2 733	2 730	-	-	-	-		
20	-	2 891	3 170	3 396	3 554	3 634	3 620	-	-		
30	-	3 158	3 552	3 910	4 220	4 469	4 644	4 732	4 721		
40	-	-	3 816	4 297	4 747	5 155	5 508	5 793	5 996		
50	-	-	-	4 575	5 156	5 713	6 232	6 703	7 110		
60	-	-	-	-	5 465	6 160	6 837	7 482	8 084		
Current consumpt	tion in A	6.92	7.18	7.35	7.39	_	T -	_	_		
20	_	7.24	7.60	7.91	8.14	8.24	8.18	_	_		
30	_	7.48	7.95	8.40	8.80	9.12	9.32	9.37	9.23		
40	_	-	8.21	8.81	9.39	9.93	10.39	10.73	10.93		
50	-	-	-	9.14	9.90	10.66	11.38	12.02	12.55		
60	-	-	-	-	10.34	11.32	12.29	13.23	14.09		
Mass flow in kg/h				1					•		
10	-	129	168	216	274	-	-	-	-		
20	-	122	162	209	267	336	418	-	-		
30	-	114	152	199	256	324	405	502	616		
40	-	-	141	187	242	309	388	482	595		
50	-	-	-	171	224	289	366	458	567		
60	-	-	-	-	204	265	339	428	533		
Coefficient of perf	formance (C.0	D.P.)				_	_				
10	-	3.09	3.79	4.72	5.99	-	-	-	-		
20	-	2.36	2.83	3.42	4.15	5.08	6.30	-	-		
30	-	1.85	2.20	2.61	3.09	3.67	4.37	5.25	6.37		
40	-	-	1.73	2.03	2.36	2.75	3.20	3.74	4.39		
50	-	-	-	1.57	1.81	2.08	2.39	2.74	3.15		
		-	-	-	1.35	1.54	1.76	2.00	2.27		

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

Cooling capacity	10 279	W
Power input	4 965	W
Current consumption	9.66	Α
Mass flow	234	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	imum HP switch setting	27.7	bar(g)
Mini	mum LP switch setting	1	bar(g)
LPp	oump down setting	1.3	bar(g)

Sound power data

Sound power level	79	dB(A)
With accoustic hood	73	dB(A)





Maneurop reciprocating compressor. MTZ080-4

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

R449A

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	
Cooling capacity	y in W									
10	5 839	7 727	10 089	12 975	16 435	-	-	-	-	
20	5 004	6 750	8 920	11 565	14 734	18 479	22 848	-	-	
30	4 137	5 719	7 675	10 055	12 910	16 290	20 246	24 827	30 084	
40	3 269	4 663	6 381	8 475	10 992	13 985	17 504	21 598	26 318	
50	-	3 613	5 071	6 854	9 012	11 595	14 653	18 238	22 398	
60	-	-	3 774	5 223	6 998	9 148	11 724	14 775	18 353	
Power input in V	v									
10	2 281	2 496	2 651	2 733	2 730	-	-	-	-	
20	2 570	2 891	3 170	3 396	3 554	3 634	3 620	-	-	
30	2 742	3 158	3 552	3 910	4 220	4 469	4 644	4 732	4 721	
40	2 817	3 319	3 816	4 297	4 747	5 155	5 508	5 793	5 996	
50	-	3 392	3 983	4 575	5 156	5 713	6 232	6 703	7 110	
60	-	-	4 071	4 764	5 465	6 160	6 837	7 482	8 084	
Current consum	-				T	T-	T-	1	I	
10	6.61	6.92	7.18	7.35	7.39	-	-	-	-	
20	6.87	7.24	7.60	7.91	8.14	8.24	8.18	-	-	
30	7.04	7.48	7.95	8.40	8.80	9.12	9.32	9.37	9.23	
40	7.13	7.64	8.21	8.81	9.39	9.93	10.39	10.73	10.93	
50	-	7.72	8.40	9.14	9.90	10.66	11.38	12.02	12.55	
60	-	-	8.50	9.39	10.34	11.32	12.29	13.23	14.09	
Mass flow in kg/	/h									
10	115	150	192	242	301	-	-	-	-	
20	107	142	184	234	293	361	440	-	-	
30	97	132	174	223	281	349	426	515	616	
40	86	120	161	209	266	332	408	495	595	
50	-	106	145	191	246	311	385	470	567	
60	-	-	127	171	224	285	357	439	533	
Coefficient of pe	erformance (C.O	J.P.)								
10	2.56	3.10	3.81	4.75	6.02	-	-	-	-	
20	1.95	2.34	2.81	3.41	4.15	5.09	6.31	-	-	
30	1.51	1.81	2.16	2.57	3.06	3.65	4.36	5.25	6.37	
40	1.16	1.41	1.67	1.97	2.32	2.71	3.18	3.73	4.39	
50	-	1.07	1.27	1.50	1.75	2.03	2.35	2.72	3.15	
		1	1	1.10	i	•	1	1	2.27	

Nominal performance	at to = -10 °C, tc = 45 °C
Cooling capacity	10 00

Cooling capacity	10 008	W
Power input	4 965	W
Current consumption	9.66	Α
Mass flow	256	kg/h
C.O.P.	2.02	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

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

Sound power data

Sound power level	79	dB(A)
With accoustic hood	73	dB(A)





Maneurop reciprocating compressor. MTZ080-4

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	-	8 263	10 404	13 005	16 109	-	-	-	-		
20	-	7 386	9 398	11 815	14 678	18 028	21 913		-		
30	-	6 422	8 271	10 468	13 053	16 065	19 547	23 546	28 120		
40	-	5 377	7 027	8 969	11 241	13 880	16 923	20 412	24 394		
50	-	-	5 672	7 324	9 249	11 480	14 051	16 996	20 352		
60	-	-	-	5 542	7 088	8 879	10 946	13 313	16 006		
Power input in W											
10	-	3 279	3 586	3 887	4 190	-	-	-	-		
20	-	3 392	3 718	4 025	4 322	4 617	4 920	-	-		
30	-	3 554	3 936	4 288	4 617	4 933	5 243	5 556	5 882		
40	-	3 712	4 191	4 626	5 026	5 400	5 756	6 103	6 450		
50	-	-	4 431	4 988	5 498	5 968	6 409	6 829	7 235		
60	-	-	-	5 323	5 981	6 588	7 152	7 682	8 187		
Current consump		T	T	T	T		1	T	T		
10	-	7.57	8.21	8.84	9.51	-	-	-	-		
20	-	7.55	8.10	8.62	9.14	9.68	10.27	-	-		
30	-	7.73	8.29	8.80	9.28	9.76	10.26	10.81	11.43		
40	-	7.92	8.60	9.20	9.75	10.27	10.79	11.33	11.91		
50	-	-	8.83	9.63	10.35	11.02	11.66	12.30	12.96		
60	-	-	-	9.91	10.91	11.83	12.70	13.54	14.37		
Mass flow in kg/h	1										
10	-	167	212	267	332	-	-	-	-		
20	-	163	209	264	329	407	500	-	-		
30	-	156	202	257	322	399	491	599	728		
40	-	145	191	245	309	385	475	582	708		
50	-	-	175	228	291	365	453	557	680		
60	-	-	-	206	267	338	423	524	643		
Coefficient of per	formance (C.0	O.P.)									
10	-	2.52	2.90	3.35	3.84	-	-	-	-		
20	-	2.18	2.53	2.94	3.40	3.90	4.45	-	-		
30	-	1.81	2.10	2.44	2.83	3.26	3.73	4.24	4.78		
40	-	1.45	1.68	1.94	2.24	2.57	2.94	3.34	3.78		
			1.28	1.47	1.68	1.92	2.19	2.49	2.81		
50	-	-	1.20								

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

Cooling capacity	10 267	W
Power input	5 257	W
Current consumption	10.04	Α
Mass flow	301	kg/h
C.O.P.	1.95	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

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

Sound power data

Sound power level	80	dB(A)	_
With accoustic hood	74	dB(A)	





Maneurop reciprocating compressor. MTZ080-4

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

R452A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacit	y in W								,
10	6 330	8 044	10 186	12 803	15 939	-	-	-	-
20	5 447	7 070	9 070	11 492	14 382	17 784	21 744	-	-
30	4 523	6 017	7 837	10 027	12 634	15 701	19 275	23 399	28 120
40	3 570	4 898	6 500	8 421	10 707	13 402	16 552	20 201	24 394
50	2 601	3 725	5 072	6 687	8 614	10 899	13 587	16 723	20 352
60	-	2 512	3 566	4 836	6 367	8 205	10 394	12 979	16 006
Power input in V	v								
10	2 957	3 279	3 586	3 887	4 190	-	_	_	-
20	3 040	3 392	3 718	4 025	4 322	4 617	4 920	-	-
30	3 131	3 554	3 936	4 288	4 617	4 933	5 243	5 556	5 882
40	3 182	3 712	4 191	4 626	5 026	5 400	5 756	6 103	6 450
50	3 141	3 818	4 431	4 988	5 498	5 968	6 409	6 829	7 235
60	-	3 820	4 606	5 323	5 981	6 588	7 152	7 682	8 187
		•					•	•	
Current consum	ption in A								
10	6.91	7.57	8.21	8.84	9.51	-	-	-	-
20	6.96	7.55	8.10	8.62	9.14	9.68	10.27	-	-
30	7.10	7.73	8.29	8.80	9.28	9.76	10.26	10.81	11.43
40	7.15	7.92	8.60	9.20	9.75	10.27	10.79	11.33	11.91
50	6.91	7.94	8.83	9.63	10.35	11.02	11.66	12.30	12.96
60	-	7.59	8.81	9.91	10.91	11.83	12.70	13.54	14.37
Maran (1 a.u.) (a. 1 a.u.	п.								
Mass flow in kg/ 10	n 154	195	243	299	365	_	_	_	_
20	148	190	239	299	362	439	526		
30	139	182	239	288	354	439	517	616	728
40	127	169	218	275	340	415	501	598	708
50	110	152	200	256	320	394	477	573	680
60	-	130	177	231	294	365	446	539	643
00	<u>-</u>	130	177	231	294	303	440	559	043
Coefficient of pe	erformance (C.O).P.)							
10	2.14	2.45	2.84	3.29	3.80	-	-	-	-
20	1.79	2.08	2.44	2.86	3.33	3.85	4.42	-	-
30	1.44	1.69	1.99	2.34	2.74	3.18	3.68	4.21	4.78
40	1.12	1.32	1.55	1.82	2.13	2.48	2.88	3.31	3.78
50	0.83	0.98	1.14	1.34	1.57	1.83	2.12	2.45	2.81
60	-	0.66	0.77	0.91	1.06	1.25	1.45	1.69	1.95
) °C, tc = 45 °C				Pressure switch	cottings		

to: Evaporating	tamparatura	at	dow	noin

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

9 681

5 257

10.04

331

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

Couna porror data			
Sound power level	80	dB(A)	
With accoustic hood	74	dB(A)	





Maneurop reciprocating compressor. MTZ080-4

Performance data at 60 Hz, EN 12900 rating conditions

R407C

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
•		1		1	1		1		II.
cooling capacity	in W								
35	9 314	12 344	16 014	20 433	25 715	31 972	39 316	-	-
40	8 588	11 475	14 916	19 021	23 902	29 669	36 436	-	-
45	7 783	10 564	13 814	17 641	22 158	27 474	33 701	-	-
50	-	9 571	12 665	16 252	20 442	25 345	31 071	-	-
55	-	-	11 432	14 814	18 713	23 239	28 500	-	-
60	-	-	-	13 287	16 929	21 113	25 946	-	-
65	-	-	-	11 632	15 050	18 925	23 362	-	-
Power input in W	4 498	4 996	5 456	E 901	6 212	6 734	7 165	_	_
35	4 498	5 252		5 891 6 261	6 313	7 162	1	-	_
40 45	4 803	5 252	5 776 6 081	6 635	6 719 7 149	7 162	7 602 8 104	-	-
50	4 803	5 474	6 353	6 996	7 149	8 135	8 104	-	-
							9 232		
55	-	-	6 574	7 328	8 014	8 645		-	-
60	-	-	-	7 611	8 413	9 146	9 823	-	-
65	-	-	-	7 828	8 766	9 622	10 408	-	-
Current consum	otion in A								
35	7.60	8.14	8.67	9.17	9.60	9.96	10.22	-	-
40	7.79	8.41	9.02	9.60	10.13	10.59	10.95	-	-
45	7.95	8.65	9.35	10.03	10.66	11.22	11.70	-	-
50	-	8.86	9.66	10.44	11.19	11.87	12.46	-	-
55	-	-	9.94	10.83	11.70	12.50	13.23	-	-
60	-	-	-	11.19	12.18	13.12	14.00	-	-
65	-	-	-	11.50	12.63	13.72	14.74	-	-
lass flow in kg/l		000	000	400	500	0.40	700		1
35	202	263	336	422	523	642	780	-	-
40	196	257	329	412	510	623	755	-	-
45	187	250	321	403	497	607	733	-	-
50	-	240	311	392	485	591	713	-	-
55	-	-	299	380	472	576	694	-	-
60	-	-	-	365	457	559	675	-	-
65	-	-	-	346	438	540	653	-	-
Coefficient of per	rformance (C.O).P.)							
35	2.07	2.47	2.93	3.47	4.07	4.75	5.49	-	-
40	1.84	2.18	2.58	3.04	3.56	4.14	4.79	-	-
45	1.62	1.93	2.27	2.66	3.10	3.60	4.16	-	_
50	-	1.70	1.99	2.32	2.69	3.12	3.59	-	_
55		-	1.74	2.02	2.34	2.69	3.09	_	_
60		_	-	1.75	2.01	2.31	2.64	-	_
		1			+				
65	-	-	-	1.49	1.72	1.97	2.24	-	-

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

Cooling capacity	20 442	W
Power input	7 587	W
Current consumption	11.19	Α
Mass flow	485	kg/h
C.O.P.	2.69	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

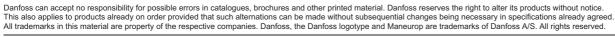
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

Ma	ximum HP switch setting	29.4	bar(g)
Mir	nimum LP switch setting	1.4	bar(g)
LP	pump down setting	1.7	bar(g)

Sound power data

Sound power level	85	dB(A)
With accoustic hood	79	dB(A)







Maneurop reciprocating compressor. MTZ080-4

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		
		•		•		-	•		
cooling capacity	in W					•			
35	10 025	13 271	17 195	21 916	27 551	34 219	42 037	-	-
40	9 294	12 402	16 100	20 504	25 734	31 907	39 140	-	-
45	8 476	11 488	14 999	19 128	23 993	29 712	36 402	-	-
50	-	10 485	13 851	17 745	22 285	27 590	33 776	-	-
55	-	-	12 609	16 309	20 566	25 497	31 221	-	-
60	-	-	-	14 778	18 791	23 390	28 692	-	-
65	-	-	-	13 108	16 919	21 225	26 145	-	-
Power input in W	,								
35	4 498	4 996	5 456	5 891	6 313	6 734	7 165	_	_
40	4 678	5 252	5 776	6 261	6 719	7 162	7 602	-	_
45	4 803	5 474	6 081	6 635	7 149	7 635	8 104	-	_
50	-	5 643	6 353	6 996	7 587	8 135	8 653	-	_
55		-	6 574	7 328	8 014	8 645	9 232	_	_
60	<u> </u>	_	-	7 611	8 413	9 146	9 823	-	-
65		_	_	7 828	8 766	9 622	10 408	_	_
03				7 020	0 700	9 022	10 400	<u> </u>	_
Current consum	ption in A								
35	7.60	8.14	8.67	9.17	9.60	9.96	10.22	-	-
40	7.79	8.41	9.02	9.60	10.13	10.59	10.95	-	-
45	7.95	8.65	9.35	10.03	10.66	11.22	11.70	-	-
50	-	8.86	9.66	10.44	11.19	11.87	12.46		-
55	-	-	9.94	10.83	11.70	12.50	13.23	-	-
60	-	-	-	11.19	12.18	13.12	14.00	-	-
65	-	-	-	11.50	12.63	13.72	14.74	-	-
• • • • • • • • • • • • • • • • • •									
Mass flow in kg/l	n 201	262	334	420	520	638	775	-	_
40	195	256	327	410	507	620	751	-	_
45	186	248	319	400	495	603	729	-	-
50	-	238	319	390	495	588	709	-	-
55	-	-	297	378	469	573	690	-	_
60	<u>-</u>	_	-	363	454	556	670	-	_
65		-	-	344	435	537	649	-	-
				1 777	100	557	1 010	<u> </u>	I
Coefficient of pe	rformance (C.C	D.P.)							
35	2.23	2.66	3.15	3.72	4.36	5.08	5.87	-	-
40	1.99	2.36	2.79	3.28	3.83	4.46	5.15	-	-
45	1.76	2.10	2.47	2.88	3.36	3.89	4.49	-	-
50	-	1.86	2.18	2.54	2.94	3.39	3.90	-	-
55	-	-	1.92	2.23	2.57	2.95	3.38	-	-
		+	_	1.94	2.23	2.56	2.92	_	_
60	-	-	-	1.54	2.23	2.50	2.52	-	-

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

Cooling capacity	22 871	W
Power input	8 242	W
Current consumption	11.99	Α
Mass flow	515	kg/h
C.O.P.	2.77	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

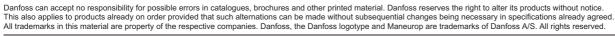
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

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

Sound power data

Sound power level	85	dB(A)
With accoustic hood	79	dB(A)







Maneurop reciprocating compressor. MTZ080-4

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
'aalina aanaait	v in W								
35	3 367	4 689	8 373	10 884	13 942	17 621	21 996	27 143	33 136
40	2 944	4 213	7 705	10 004	12 968		20 605		
						16 453	1	25 500	31 213
45 50	2 522	3 734 3 256	7 028	9 260 8 437	11 982	15 269	19 195 17 772	23 836 22 156	29 267
	2 103	-	6 348 5 668	7 610	10 987 9 986	14 073	16 337	20 463	27 302
55 60	-		-	6 784	8 983	12 870 11 662		18 760	25 322 23 329
65		-			7 982		14 896		
75	-	-	-	-	7 902	10 453	13 451 10 567	17 051 13 630	21 327 17 314
75		_	-	-	_		10 307	13 030	17 314
ower input in V	N								
35	2 286	2 658	3 316	3 603	3 863	4 097	4 305	4 488	4 647
40	2 250	2 666	3 410	3 740	4 042	4 317	4 567	4 790	4 989
45	2 207	2 672	3 515	3 892	4 242	4 565	4 860	5 130	5 374
50	2 141	2 662	3 613	4 044	4 447	4 822	5 170	5 491	5 787
55	-	-	3 690	4 181	4 642	5 076	5 481	5 860	6 211
60	-	-	-	4 286	4 812	5 309	5 778	6 219	6 633
65	-	-	-	-	4 940	5 506	6 044	6 554	7 035
75	-	-	-	-	-	-	6 424	7 087	7 721
urrent consum		6.75	7.28	7.56	7.94	8.00	9.20	0.45	8.52
35	6.54	6.75	+	7.56	7.84	8.09	8.30	8.45	
40	6.61	6.84	7.41	7.72	8.03	8.31	8.56	8.75	8.87
45	6.63	6.89	7.52	7.87	8.22	8.55	8.85	9.09	9.27
50	6.60	6.89	7.62	8.01	8.42	8.80	9.16	9.47	9.72
55		-	7.67	8.13	8.59	9.05	9.48	9.86	10.19
60	-	-	-	8.21	8.75	9.28	9.79	10.26	10.67
65	-	-	-	-	8.86	9.48	10.09	10.65	11.17
75	-	-	-	-	-	-	10.59	11.38	12.13
lass flow in kg/	/h								
35	85	117	200	253	317	393	481	584	703
40	79	111	193	246	310	385	472	575	692
45	72	104	186	239	302	376	463	564	681
50	64	96	178	230	292	366	452	552	668
55	-	-	169	221	282	355	440	540	654
60	-	-	-	210	271	343	428	526	639
65	-	-	-	-	260	331	414	511	623
75	-	-	-	-	-	-	383	478	587
coefficient of no	erformance (C.O	(P)							
35	1.47	1.76	2.53	3.02	3.61	4.30	5.11	6.05	7.13
40	1.31	1.58	2.26	2.69	3.21	3.81	4.51	5.32	6.26
45	1.14	1.40	2.00	2.38	2.82	3.35	3.95	4.65	5.45
50	0.98	1.22	1.76	2.09	2.47	2.92	3.44	4.03	4.72
55	-	-	1.54	1.82	2.15	2.54	2.98	3.49	4.08
60	_	-	-	1.58	1.87	2.20	2.58	3.02	3.52
65		-	-	-	1.62	1.90	2.23	2.60	3.03
		 	+	1			-:		2.24

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

rionina poriorinarios arto o o, to		
Cooling capacity	14 073	W
Power input	4 822	W
Current consumption	8.80	Α
Mass flow	366	kg/h
C.O.P.	2.92	

to: Evaporating temperature at dew point

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

Pressure switch settings

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

Sound power data

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

Tolerance according EN12900



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



Maneurop reciprocating compressor. MTZ080-4

Performance data at 60 Hz, ARI rating conditions

R134a

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
1		•	•	•	•				
Cooling capacit	y in W								
35	3 660	5 088	9 053	11 750	15 027	18 964	23 639	29 130	35 514
40	3 219	4 597	8 374	10 934	14 046	17 790	22 245	27 488	33 598
45	2 776	4 101	7 685	10 105	13 050	16 599	20 830	25 824	31 656
50	-	3 603	6 989	9 267	12 042	15 393	19 400	24 141	29 695
55	-	-	6 291	8 424	11 027	14 178	17 957	22 444	27 718
60	-	-	-	7 580	10 007	12 956	16 507	20 738	25 730
65	-	-	-	-	-	11 733	15 053	19 028	23 738
75	-	-	-	-	-	-	12 159	15 621	19 769
Power input in V		T		Ţ	,	1	,	ı	
35	2 286	2 658	3 316	3 603	3 863	4 097	4 305	4 488	4 647
40	2 250	2 666	3 410	3 740	4 042	4 317	4 567	4 790	4 989
45	2 207	2 672	3 515	3 892	4 242	4 565	4 860	5 130	5 374
50	-	2 662	3 613	4 044	4 447	4 822	5 170	5 491	5 787
55	-	-	3 690	4 181	4 642	5 076	5 481	5 860	6 211
60	-	-	-	4 286	4 812	5 309	5 778	6 219	6 633
65	-	-	-	-	-	5 506	6 044	6 554	7 035
75	-	-	-	-	-	-	6 424	7 087	7 721
Current consum	ption in A	T				1		ı	
35	6.54	6.75	7.28	7.56	7.84	8.09	8.30	8.45	8.52
40	6.61	6.84	7.41	7.72	8.03	8.31	8.56	8.75	8.87
45	6.63	6.89	7.52	7.87	8.22	8.55	8.85	9.09	9.27
50	-	6.89	7.62	8.01	8.42	8.80	9.16	9.47	9.72
55	-	-	7.67	8.13	8.59	9.05	9.48	9.86	10.19
60	-	-	-	8.21	8.75	9.28	9.79	10.26	10.67
65	-	-	-	-	-	9.48	10.09	10.65	11.17
75	-	-	-	-	-	-	10.59	11.38	12.13
Mass flow in kg/		140	100	1 050	1 040	1 004	170	F04	200
35	85	116	199	252	316	391	479	581	699
40	78	110	192	245	308	383	470	571	688
45	71	103	185	238	300	374	460	561	677
50	-	96	177	229	291	364	450	549	664
55	-	-	168	220	281	353	438	537	650
60	-	-	-	209	270	342	425	523	635
65	-	-	-	-	-	329	412	508	619
75	-	-	-	-	-	-	381	475	584
Daaffialent of		.							
Coefficient of pe	•	Τ΄.	0.70	2.00	2.00	4.00	F 40	0.40	7.04
35	1.60	1.91	2.73	3.26	3.89	4.63	5.49	6.49	7.64
40	1.43	1.72	2.46	2.92	3.47	4.12	4.87	5.74	6.73
45	1.26	1.53	2.19	2.60	3.08	3.64	4.29	5.03	5.89
50	-	1.35	1.93	2.29	2.71	3.19	3.75	4.40	5.13
55	-	-	1.70	2.02	2.38	2.79	3.28	3.83	4.46
60	-	-	-	1.77	2.08	2.44	2.86	3.33	3.88
65	-	-	-	-	-	2.13	2.49	2.90	3.37
75	-	-	-	-	-	-	1.89	2.20	2.56

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

reciminal portormance at to 7:2	0, 10 04.4 0	
Cooling capacity	15 917 V	V
Power input	5 225 V	V
Current consumption	9.21 A	١
Mass flow	390 k	g/h
C.O.P.	3.05	

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. MTZ080-4

Performance data at 60 Hz, EN 12900 rating conditions

R404A

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacit		0.004	10.500	10.570	17.100	04.007		04.740	00.000
30	6 046	8 094	10 586	13 578	17 129	21 297	26 141	31 719	38 089
35	5 342	7 267	9 600	12 399	15 722	19 627	24 172	29 415	35 416
40	4 640	6 428	8 589	11 181	14 262	17 890	22 122	27 019	32 636
45	3 945	5 583	7 559	9 930	12 756	16 093	20 000	24 535	29 756
50	3 263	4 737	6 514	8 652	11 209	14 242	17 810	21 971	26 782
55	-	3 898	5 463	7 354	9 628	12 344	15 559	19 331	23 719
60	-	3 071	4 410	6 040	8 019	10 403	13 252	16 623	20 573
Power input in \	W								
30	3 992	4 621	5 193	5 718	6 203	6 658	7 090	7 508	7 920
35	4 056	4 764	5 411	6 003	6 550	7 061	7 542	8 004	8 453
40	4 068	4 863	5 589	6 256	6 871	7 444	7 981	8 492	8 986
45	4 018	4 905	5 719	6 466	7 156	7 796	8 396	8 964	9 507
50	3 895	4 882	5 788	6 623	7 393	8 109	8 777	9 407	10 007
55	-	4 783	5 788	6 716	7 574	8 370	9 114	9 813	10 475
60	1	4 597	5 708	6 736	7 687	8 571	9 396	10 170	10 901
Current consum	nption in A								
30	6.89	7.74	8.48	9.14	9.75	10.36	10.99	11.68	12.47
35	6.98	7.87	8.65	9.35	10.01	10.65	11.33	12.07	12.90
40	7.02	7.97	8.81	9.57	10.29	11.00	11.74	12.53	13.43
45	6.99	8.02	8.94	9.78	10.58	11.37	12.18	13.06	14.03
50	6.86	7.99	9.01	9.94	10.84	11.73	12.64	13.61	14.68
55	-	7.85	8.99	10.04	11.05	12.05	13.08	14.17	15.36
60	-	7.59	8.85	10.04	11.19	12.32	13.48	14.71	16.03
Mass flow in kg	/h								
30	190	249	318	397	488	593	712	847	1 000
35	181	240	308	387	478	583	701	836	987
40	170	229	297	376	466	570	688	821	971
45	159	217	284	362	452	554	671	803	952
50	146	204	270	347	435	537	652	783	930
55	-	189	254	330	417	517	630	759	905
60	-	173	237	311	396	494	606	733	876
Coefficient of ne	erformance (C.O).P.)							
30	1.51	1.75	2.04	2.37	2.76	3.20	3.69	4.22	4.81
35	1.32	1.53	1.77	2.07	2.40	2.78	3.20	3.68	4.19
40	1.14	1.32	1.54	1.79	2.08	2.40	2.77	3.18	3.63
45	0.98	1.14	1.32	1.54	1.78	2.06	2.38	2.74	3.13
50	0.84	0.97	1.13	1.31	1.52	1.76	2.03	2.34	2.68
55	-	0.82	0.94	1.09	1.27	1.47	1.71	1.97	2.26

Nominal performance at to = -10 °C, tc = 45 °C	3
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Cooling capacity	12 756	W
Power input	7 156	W
Current consumption	10.58	Α
Mass flow	452	kg/h
C.O.P.	1.78	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

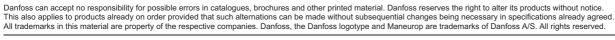
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

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

Sound power data

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







Maneurop reciprocating compressor. MTZ080-4

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 capacit		0.000	44.704	14,000	40.077	00.400	00.007	04.700	44.000
30	6 730	8 986	11 721	14 998	18 877	23 420	28 687	34 739	41 638
35	6 011	8 151	10 735	13 826	17 484	21 772	26 750	32 480	39 023
40	5 290	7 300	9 720	12 611	16 036	20 056	24 733	30 128	36 304
45	4 572	6 441	8 683	11 362	14 540	18 280	22 644	27 694	33 491
50	3 866	5 579	7 631	10 086	13 006	16 454	20 495	25 189	30 600
55	-	4 723	6 574	8 792	11 444	14 593	18 302	22 634	27 653
60	-	3 882	5 522	7 498	9 875	12 719	16 095	20 066	24 696
Power input in \	N								
30	3 992	4 621	5 193	5 718	6 203	6 658	7 090	7 508	7 920
35	4 056	4 764	5 411	6 003	6 550	7 061	7 542	8 004	8 453
40	4 068	4 863	5 589	6 256	6 871	7 444	7 981	8 492	8 986
45	4 018	4 905	5 719	6 466	7 156	7 796	8 396	8 964	9 507
50	3 895	4 882	5 788	6 623	7 393	8 109	8 777	9 407	10 007
55	-	4 783	5 788	6 716	7 574	8 370	9 114	9 813	10 475
60	-	4 597	5 708	6 736	7 687	8 571	9 396	10 170	10 901
Current consum	nption in A								
30	6.89	7.74	8.48	9.14	9.75	10.36	10.99	11.68	12.47
35	6.98	7.87	8.65	9.35	10.01	10.65	11.33	12.07	12.90
40	7.02	7.97	8.81	9.57	10.29	11.00	11.74	12.53	13.43
45	6.99	8.02	8.94	9.78	10.58	11.37	12.18	13.06	14.03
50	6.86	7.99	9.01	9.94	10.84	11.73	12.64	13.61	14.68
55	-	7.85	8.99	10.04	11.05	12.05	13.08	14.17	15.36
60	-	7.59	8.85	10.04	11.19	12.32	13.48	14.71	16.03
Mass flow in kg	/h								
30	189	248	316	395	486	590	708	842	993
35	180	238	306	385	476	579	697	830	980
40	169	228	295	374	463	566	683	816	965
45	158	216	283	360	449	551	667	798	946
50	145	202	269	345	433	533	648	778	924
55	-	188	253	328	414	513	626	754	899
60	-	172	235	309	394	491	602	728	870
Coefficient of p	erformance (C.C).P.)							
30	1.69	1.94	2.26	2.62	3.04	3.52	4.05	4.63	5.26
35	1.48	1.71	1.98	2.30	2.67	3.08	3.55	4.06	4.62
40	1.30	1.50	1.74	2.02	2.33	2.69	3.10	3.55	4.04
45	1.14	1.31	1.52	1.76	2.03	2.34	2.70	3.09	3.52
50	0.99	1.14	1.32	1.52	1.76	2.03	2.34	2.68	3.06
			1.14	1.31	1.51	1.74	2.01	2.31	2.64
55	-	0.99	1.17	1.01	1.01	1.77	2.01		

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

Cooling capacity	14 540	W
Power input	7 156	W
Current consumption	10.58	Α
Mass flow	449	kg/h
C.O.P.	2.03	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

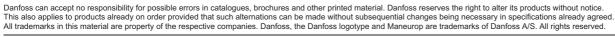
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

			_
Maximum HP switch setting	27.7	bar(g)	٦
Minimum LP switch setting	1	bar(g)	
LP pump down setting	1.3	bar(g)	

Sound power data

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







Maneurop reciprocating compressor. MTZ080-4

Performance data at 60 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		0.040	0.704	44.574	44.004	40.000	00.050	00.040	05.000
30	4 344	6 313	8 704	11 574	14 984	18 992	23 658	29 042	35 203
35	3 746	5 622	7 888	10 603	13 827	17 619	22 038	27 144	32 996
40	3 147	4 924	7 060	9 614	12 647	16 217	20 384	25 206	30 744
45	2 557	4 229	6 229	8 617	11 453	14 795	18 703	23 237	28 455
50	-	3 545	5 403	7 620	10 253	13 361	17 005	21 244	26 137
55	-	-	4 592	6 630	9 055	11 925	15 299	19 237	23 799
60	-	-	-	5 658	7 868	10 493	13 592	17 224	21 449
Power input in W	ı								
30	2 870	3 486	4 063	4 603	5 105	5 569	5 995	6 381	6 730
35	2 833	3 513	4 153	4 754	5 315	5 836	6 316	6 757	7 156
40	2 767	3 517	4 225	4 893	5 518	6 102	6 644	7 143	7 600
45	2 670	3 496	4 278	5 018	5 714	6 366	6 974	7 539	8 059
50	-	3 448	4 311	5 128	5 900	6 627	7 307	7 943	8 532
55	-	-	4 321	5 221	6 075	6 882	7 641	8 353	9 016
60	-	-	-	5 297	6 239	7 131	7 974	8 768	9 512
2									
30	6.77	7.29	7.82	8.37	8.90	9.41	9.86	10.25	10.54
35	6.75	7.31	7.90	8.50	9.10	9.67	10.20	10.67	11.05
40	6.73	7.35	7.99	8.66	9.33	9.98	10.59	11.14	11.62
45	6.71	7.38	8.09	8.82	9.57	10.30	11.00	11.64	12.22
50	-	7.38	8.16	8.97	9.80	10.62	11.41	12.16	12.84
55	-	_	8.19	9.09	10.00	10.92	11.81	12.66	13.46
60	-	-	-	9.15	10.16	11.17	12.17	13.14	14.05
Mass flow in kg/l	n 103	148	200	260	331	412	505	611	732
35	94	138	190	251	321	402	494	599	718
40	84	128	180	240	310	390	481	586	710
45	73	117	169	228	297	377	467	571	687
50	-	105	156	216	284	362	452	554	670
55		-	143	202	269	347	436	536	651
60	-	-	-	187	254	330	418	517	630
00				101	204	330	410	317	000
Coefficient of pe	rformance (C.C).P.)							
30	1.51	1.81	2.14	2.51	2.93	3.41	3.95	4.55	5.23
35	1.32	1.60	1.90	2.23	2.60	3.02	3.49	4.02	4.61
40	1.14	1.40	1.67	1.97	2.29	2.66	3.07	3.53	4.05
45	0.96	1.21	1.46	1.72	2.00	2.32	2.68	3.08	3.53
50	-	1.03	1.25	1.49	1.74	2.02	2.33	2.67	3.06
55	-	-	1.06	1.27	1.49	1.73	2.00	2.30	2.64
60	-	_	_	1.07	1.26	1.47	1.70	1.96	2.26

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

Cooling capacity	11 453	W
Power input	5 714	W
Current consumption	9.57	Α
Mass flow	297	kg/h
C.O.P.	2.00	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

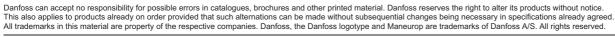
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

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

Sound power data

Sound power level	81	dB(A)
With accoustic hood	75	dB(A)







Maneurop reciprocating compressor. MTZ080-4

Performance data at 60 Hz, ARI rating conditions

R407A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
						•			
ooling capacity		0.040	1	10.405	10.110	00.400	05.005	04.400	07.000
30	4 698	6 818	9 386	12 465	16 116	20 402	25 385	31 126	37 688
35	4 075	6 106	8 554	11 481	14 950	19 024	23 764	29 234	35 494
40	3 448	5 384	7 706	10 476	13 758	17 614	22 107	27 299	33 252
45	2 824	4 661	6 851	9 459	12 549	16 182	20 422	25 332	30 975
50	-	3 944	5 999	8 440	11 331	14 737	18 721	23 344	28 672
55	-	-	5 157	7 426	10 116	13 291	17 013	21 347	26 357
60	-	-	-	6 429	8 914	11 854	15 313	19 356	24 047
Power input in W	ı								
30	2 870	3 486	4 063	4 603	5 105	5 569	5 995	6 381	6 730
35	2 833	3 513	4 153	4 754	5 315	5 836	6 316	6 757	7 156
40	2 767	3 517	4 225	4 893	5 518	6 102	6 644	7 143	7 600
45	2 670	3 496	4 278	5 018	5 714	6 366	6 974	7 539	8 059
50	-	3 448	4 311	5 128	5 900	6 627	7 307	7 943	8 532
55	-	-	4 321	5 221	6 075	6 882	7 641	8 353	9 016
60	-	-	-	5 297	6 239	7 131	7 974	8 768	9 512
Current consum	ption in A								
30	6.77	7.29	7.82	8.37	8.90	9.41	9.86	10.25	10.54
35	6.75	7.31	7.90	8.50	9.10	9.67	10.20	10.67	11.05
40	6.73	7.35	7.99	8.66	9.33	9.98	10.59	11.14	11.62
45	6.71	7.38	8.09	8.82	9.57	10.30	11.00	11.64	12.22
50	-	7.38	8.16	8.97	9.80	10.62	11.41	12.16	12.84
55	-	-	8.19	9.09	10.00	10.92	11.81	12.66	13.46
60	-	-	-	9.15	10.16	11.17	12.17	13.14	14.05
Mass flow in kg/l	h								
30	103	147	199	259	329	410	502	608	727
35	93	138	189	250	319	399	491	596	714
40	83	128	179	239	308	388	479	582	699
45	72	116	168	227	296	375	465	567	683
50	-	105	155	214	282	360	450	551	666
55	-	-	142	201	268	345	433	533	647
60	-	-	-	186	252	328	415	514	626
				<u> </u>					
30	1.64	1.96	2.31	2.71	3.16	3.66	4.23	4.88	5.60
35	1.04	1.74	2.31	2.71	2.81	3.00	3.76	4.88	4.96
		1	1	1	1	1	1	1	
40	1.25	1.53	1.82	2.14	2.49	2.89	3.33	3.82	4.38
45	1.06	1.33	1.60	1.89	2.20	2.54	2.93	3.36	3.84
50	-	1.14	1.39	1.65	1.92	2.22	2.56	2.94	3.36
55	-	-	1.19	1.42	1.67	1.93	2.23	2.56	2.92
60	-	-	-	1.21	1.43	1.66	1.92	2.21	2.53

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

Cooling capacity	12 549	W
Power input	5 714	W
Current consumption	9.57	Α
Mass flow	296	kg/h
C.O.P.	2.20	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	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	81	dB(A)
With accoustic hood	75	dB(A)

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ080-4

Performance data at 60 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		T		T					
30	-	6 866	9 562	12 811	16 681	21 243	26 566	32 718	39 770
35	-	5 955	8 417	11 379	14 910	19 079	23 957	29 612	36 114
40	-	5 193	7 464	10 182	13 417	17 237	21 714	26 915	32 910
45	-	4 543	6 666	9 184	12 165	15 681	19 799	24 589	30 121
50	-	-	5 987	8 348	11 120	14 373	18 176	22 599	27 711
55	-	-	-	7 638	10 243	13 277	16 809	20 907	25 642
60	-	-	-	-	-	-	-	-	-
Danna : : : : : : : : : : : : : : : : : :									
Power input in W	_	3 712	4 304	4 864	5 377	5 826	6 196	6 470	6 632
35		3 753	4 399	5 024	5 611	6 145	6 609	6 989	7 267
40	-	3 801	4 493	5 173	5 827	6 438	6 990	7 467	7 853
45		3 875	4 604	5 333	6 046	6 726	7 357	7 924	8 410
50		-	4 753	5 523	6 286	7 027	7 730	8 379	8 958
55	-	-	-	5 762	6 568	7 363	8 129	8 852	9 516
60		-	-	-	-	-	0 129	-	-
00			_	_	_	_	_	_	
Current consump	tion in A								
30	-	7.30	7.87	8.46	9.04	9.56	10.01	10.35	10.55
35	-	7.41	8.03	8.68	9.32	9.92	10.46	10.89	11.21
40	-	7.48	8.15	8.86	9.58	10.26	10.89	11.44	11.87
45	_	7.52	8.26	9.04	9.84	10.61	11.35	12.01	12.56
50	-	-	8.38	9.23	10.12	11.00	11.84	12.62	13.30
55	_	_	_	9.47	10.45	11.43	12.39	13.30	14.12
60	_	-	-	-	-	_	-	-	_
•			•	•	•	•	•	•	l.
Mass flow in kg/h									
30	-	142	195	257	330	414	512	623	749
35	-	129	180	239	309	389	482	588	709
40	-	119	168	225	292	369	458	560	676
45	-	110	158	214	279	354	440	538	650
50	-	-	151	206	270	343	427	523	632
55	-	-	-	202	265	338	420	514	620
60	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.C	D.P.)		•	•		•	•	T
30	-	1.85	2.22	2.63	3.10	3.65	4.29	5.06	6.00
35	-	1.59	1.91	2.27	2.66	3.11	3.62	4.24	4.97
40	-	1.37	1.66	1.97	2.30	2.68	3.11	3.60	4.19
45	-	1.17	1.45	1.72	2.01	2.33	2.69	3.10	3.58
50	-	-	1.26	1.51	1.77	2.05	2.35	2.70	3.09
55	-	-	-	1.33	1.56	1.80	2.07	2.36	2.69
	_	_	_	-	_	_	_	_	-

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

Cooling capacity	12 165	W
Power input	6 046	W
Current consumption	9.84	Α
Mass flow	279	kg/h
C.O.P.	2.01	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

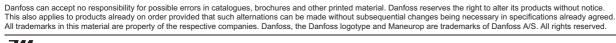
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

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

Sound power data

Sound power level	81	dB(A)
With accoustic hood	75	dB(A)







Maneurop reciprocating compressor. MTZ080-4

Performance data at 60 Hz, ARI rating conditions

R407F

Cond. temp. in			Г		ating temperature		Г		
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
cooling capacity	ı in W								
30	-	7 359	10 238	13 702	17 825	22 679	28 335	34 868	42 348
35	-	6 412	9 053	12 225	16 001	20 455	25 659	31 687	38 609
40	-	5 622	8 070	10 995	14 471	18 571	23 369	28 936	35 347
45	-	4 950	7 253	9 978	13 200	16 992	21 429	26 583	32 527
50	-	-	6 564	9 137	12 152	15 684	19 807	24 595	30 121
55	-	-	-	8 438	11 297	14 618	18 476	22 947	28 104
60	-	-	-	-	-	-	-	-	-
Power input in V	ı								
30	-	3 712	4 304	4 864	5 377	5 826	6 196	6 470	6 632
35	-	3 753	4 399	5 024	5 611	6 145	6 609	6 989	7 267
40	-	3 801	4 493	5 173	5 827	6 438	6 990	7 467	7 853
45	-	3 875	4 604	5 333	6 046	6 726	7 357	7 924	8 410
50	-	-	4 753	5 523	6 286	7 027	7 730	8 379	8 958
55	-	-	-	5 762	6 568	7 363	8 129	8 852	9 516
60	-	-	-	-	-	-	-	-	-
Current consum	ption in A								
30	-	7.30	7.87	8.46	9.04	9.56	10.01	10.35	10.55
35	-	7.41	8.03	8.68	9.32	9.92	10.46	10.89	11.21
40	-	7.48	8.15	8.86	9.58	10.26	10.89	11.44	11.87
45	-	7.52	8.26	9.04	9.84	10.61	11.35	12.01	12.56
50	-	-	8.38	9.23	10.12	11.00	11.84	12.62	13.30
55	-	-	-	9.47	10.45	11.43	12.39	13.30	14.12
60	-	-	-	-	-	-	-	-	-
Mass flow in kg/	h								
30	-	141	194	256	328	412	508	619	744
35	-	129	179	238	307	387	479	584	704
40	-	118	167	224	290	367	455	557	672
45	-	109	157	213	277	352	437	535	646
50	-	-	150	205	268	341	425	520	628
55	-	-	-	201	264	336	418	511	616
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	rformance (C	O.P.)							
30	-	1.98	2.38	2.82	3.31	3.89	4.57	5.39	6.38
35		1.71	2.06	2.43	2.85	3.33	3.88	4.53	5.31
40		1.48	1.80	2.43	2.48	2.88	3.34	3.88	4.50
45		1.28	1.58	1.87	2.18	2.53	2.91	3.35	3.87
50		-	1.38	1.65	1.93	2.23	2.56	2.94	3.36
50		-	-	1.46	1.72	1.99	2.30	2.59	2.95
55	_								

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

Cooling capacity	13 200	W
Power input	6 046	W
Current consumption	9.84	Α
Mass flow	277	kg/h
C.O.P.	2.18	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

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

Sound power data

Sound power level	81	dB(A)
With accoustic hood	75	dB(A)

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ080-4

Performance data at 60 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
'aalina aanaait	v in W								
35	3 367	4 689	8 373	10 884	13 942	17 621	21 996	27 143	33 136
40	2 944	4 213	7 705	10 004	12 968		20 605		
						16 453	1	25 500	31 213
45 50	2 522	3 734 3 256	7 028	9 260 8 437	11 982	15 269	19 195 17 772	23 836 22 156	29 267
	2 103	-	6 348 5 668	7 610	10 987 9 986	14 073	16 337	20 463	27 302
55 60	-		-	6 784	8 983	12 870 11 662		18 760	25 322 23 329
65		-			7 982		14 896		
75	-	-	-	-	7 902	10 453	13 451 10 567	17 051 13 630	21 327 17 314
75		_	-	-	_		10 307	13 030	17 314
ower input in V	N								
35	2 286	2 658	3 316	3 603	3 863	4 097	4 305	4 488	4 647
40	2 250	2 666	3 410	3 740	4 042	4 317	4 567	4 790	4 989
45	2 207	2 672	3 515	3 892	4 242	4 565	4 860	5 130	5 374
50	2 141	2 662	3 613	4 044	4 447	4 822	5 170	5 491	5 787
55	-	-	3 690	4 181	4 642	5 076	5 481	5 860	6 211
60	-	-	-	4 286	4 812	5 309	5 778	6 219	6 633
65	-	-	-	-	4 940	5 506	6 044	6 554	7 035
75	-	-	-	-	-	-	6 424	7 087	7 721
urrent consum		6.75	7.28	7.56	7.94	8.00	9.20	0.45	8.52
35	6.54	6.75	+	7.56	7.84	8.09	8.30	8.45	
40	6.61	6.84	7.41	7.72	8.03	8.31	8.56	8.75	8.87
45	6.63	6.89	7.52	7.87	8.22	8.55	8.85	9.09	9.27
50	6.60	6.89	7.62	8.01	8.42	8.80	9.16	9.47	9.72
55		-	7.67	8.13	8.59	9.05	9.48	9.86	10.19
60	-	-	-	8.21	8.75	9.28	9.79	10.26	10.67
65	-	-	-	-	8.86	9.48	10.09	10.65	11.17
75	-	-	-	-	-	-	10.59	11.38	12.13
lass flow in kg/	/h								
35	85	117	200	253	317	393	481	584	703
40	79	111	193	246	310	385	472	575	692
45	72	104	186	239	302	376	463	564	681
50	64	96	178	230	292	366	452	552	668
55	-	-	169	221	282	355	440	540	654
60	-	-	-	210	271	343	428	526	639
65	-	-	-	-	260	331	414	511	623
75	-	-	-	-	-	-	383	478	587
coefficient of no	erformance (C.O	(P)							
35	1.47	1.76	2.53	3.02	3.61	4.30	5.11	6.05	7.13
40	1.31	1.58	2.26	2.69	3.21	3.81	4.51	5.32	6.26
45	1.14	1.40	2.00	2.38	2.82	3.35	3.95	4.65	5.45
50	0.98	1.22	1.76	2.09	2.47	2.92	3.44	4.03	4.72
55	-	-	1.54	1.82	2.15	2.54	2.98	3.49	4.08
60	_	-	-	1.58	1.87	2.20	2.58	3.02	3.52
65		-	-	-	1.62	1.90	2.23	2.60	3.03
		 	+	1			-:		2.24

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

rionina poriorinarios arto o o, to		
Cooling capacity	14 073	W
Power input	4 822	W
Current consumption	8.80	Α
Mass flow	366	kg/h
C.O.P.	2.92	

to: Evaporating temperature at dew point

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

Pressure switch settings

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

Sound power data

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

Tolerance according EN12900



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



Maneurop reciprocating compressor. MTZ080-4

Performance data at 60 Hz, ARI rating conditions

R134a

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
1		•	•	•	•				
Cooling capacit	y in W								
35	3 660	5 088	9 053	11 750	15 027	18 964	23 639	29 130	35 514
40	3 219	4 597	8 374	10 934	14 046	17 790	22 245	27 488	33 598
45	2 776	4 101	7 685	10 105	13 050	16 599	20 830	25 824	31 656
50	-	3 603	6 989	9 267	12 042	15 393	19 400	24 141	29 695
55	-	-	6 291	8 424	11 027	14 178	17 957	22 444	27 718
60	-	-	-	7 580	10 007	12 956	16 507	20 738	25 730
65	-	-	-	-	-	11 733	15 053	19 028	23 738
75	-	-	-	-	-	-	12 159	15 621	19 769
Power input in V		T		Ţ	,	1	,	ı	
35	2 286	2 658	3 316	3 603	3 863	4 097	4 305	4 488	4 647
40	2 250	2 666	3 410	3 740	4 042	4 317	4 567	4 790	4 989
45	2 207	2 672	3 515	3 892	4 242	4 565	4 860	5 130	5 374
50	-	2 662	3 613	4 044	4 447	4 822	5 170	5 491	5 787
55	-	-	3 690	4 181	4 642	5 076	5 481	5 860	6 211
60	-	-	-	4 286	4 812	5 309	5 778	6 219	6 633
65	-	-	-	-	-	5 506	6 044	6 554	7 035
75	-	-	-	-	-	-	6 424	7 087	7 721
Current consum	ption in A	T				1		ı	
35	6.54	6.75	7.28	7.56	7.84	8.09	8.30	8.45	8.52
40	6.61	6.84	7.41	7.72	8.03	8.31	8.56	8.75	8.87
45	6.63	6.89	7.52	7.87	8.22	8.55	8.85	9.09	9.27
50	-	6.89	7.62	8.01	8.42	8.80	9.16	9.47	9.72
55	-	-	7.67	8.13	8.59	9.05	9.48	9.86	10.19
60	-	-	-	8.21	8.75	9.28	9.79	10.26	10.67
65	-	-	-	-	-	9.48	10.09	10.65	11.17
75	-	-	-	-	-	-	10.59	11.38	12.13
Mass flow in kg/		140	100	1 050	1 040	1 004	170	F04	200
35	85	116	199	252	316	391	479	581	699
40	78	110	192	245	308	383	470	571	688
45	71	103	185	238	300	374	460	561	677
50	-	96	177	229	291	364	450	549	664
55	-	-	168	220	281	353	438	537	650
60	-	-	-	209	270	342	425	523	635
65	-	-	-	-	-	329	412	508	619
75	-	-	-	-	-	-	381	475	584
Daaffialent of		.							
Coefficient of pe	•	Τ΄.	0.70	2.00	2.00	4.00	F 40	0.40	7.04
35	1.60	1.91	2.73	3.26	3.89	4.63	5.49	6.49	7.64
40	1.43	1.72	2.46	2.92	3.47	4.12	4.87	5.74	6.73
45	1.26	1.53	2.19	2.60	3.08	3.64	4.29	5.03	5.89
50	-	1.35	1.93	2.29	2.71	3.19	3.75	4.40	5.13
55	-	-	1.70	2.02	2.38	2.79	3.28	3.83	4.46
60	-	-	-	1.77	2.08	2.44	2.86	3.33	3.88
65	-	-	-	-	-	2.13	2.49	2.90	3.37
75	-	-	-	-	-	-	1.89	2.20	2.56

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

reciminal portormance at to 7:2	0, 10 04.4 0	
Cooling capacity	15 917 V	V
Power input	5 225 V	V
Current consumption	9.21 A	١
Mass flow	390 k	g/h
C.O.P.	3.05	

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. MTZ080-4

Performance data at 60 Hz, EN 12900 rating conditions

R407C

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
•		1		1	1		1		II.
cooling capacity	in W								
35	9 314	12 344	16 014	20 433	25 715	31 972	39 316	-	-
40	8 588	11 475	14 916	19 021	23 902	29 669	36 436	-	-
45	7 783	10 564	13 814	17 641	22 158	27 474	33 701	-	-
50	-	9 571	12 665	16 252	20 442	25 345	31 071	-	-
55	-	-	11 432	14 814	18 713	23 239	28 500	-	-
60	-	-	-	13 287	16 929	21 113	25 946	-	-
65	-	-	-	11 632	15 050	18 925	23 362	-	-
Power input in W	4 498	4 996	5 456	E 901	6 212	6 734	7 165	_	_
35	4 498	5 252		5 891 6 261	6 313	7 162	1	-	_
40 45	4 803	5 252	5 776 6 081	6 635	6 719 7 149	7 162	7 602 8 104	-	-
50	4 803	5 474	6 353	6 996	7 149	8 135	8 104	-	-
							9 232		
55	-	-	6 574	7 328	8 014	8 645		-	-
60	-	-	-	7 611	8 413	9 146	9 823	-	-
65	-	-	-	7 828	8 766	9 622	10 408	-	-
Current consum	otion in A								
35	7.60	8.14	8.67	9.17	9.60	9.96	10.22	-	-
40	7.79	8.41	9.02	9.60	10.13	10.59	10.95	-	-
45	7.95	8.65	9.35	10.03	10.66	11.22	11.70	-	-
50	-	8.86	9.66	10.44	11.19	11.87	12.46	-	-
55	-	-	9.94	10.83	11.70	12.50	13.23	-	-
60	-	-	-	11.19	12.18	13.12	14.00	-	-
65	-	-	-	11.50	12.63	13.72	14.74	-	-
lass flow in kg/l		000	000	400	500	0.40	700		1
35	202	263	336	422	523	642	780	-	-
40	196	257	329	412	510	623	755	-	-
45	187	250	321	403	497	607	733	-	-
50	-	240	311	392	485	591	713	-	-
55	-	-	299	380	472	576	694	-	-
60	-	-	-	365	457	559	675	-	-
65	-	-	-	346	438	540	653	-	-
Coefficient of per	rformance (C.O).P.)							
35	2.07	2.47	2.93	3.47	4.07	4.75	5.49	-	-
40	1.84	2.18	2.58	3.04	3.56	4.14	4.79	-	-
45	1.62	1.93	2.27	2.66	3.10	3.60	4.16	-	_
50	-	1.70	1.99	2.32	2.69	3.12	3.59	-	_
55		-	1.74	2.02	2.34	2.69	3.09	_	_
60		_	-	1.75	2.01	2.31	2.64	-	_
		1			+				
65	-	-	-	1.49	1.72	1.97	2.24	-	-

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

Cooling capacity	20 442	W
Power input	7 587	W
Current consumption	11.19	Α
Mass flow	485	kg/h
C.O.P.	2.69	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

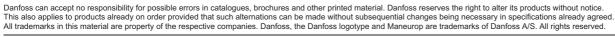
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

Ma	ximum HP switch setting	29.4	bar(g)
Mir	nimum LP switch setting	1.4	bar(g)
LP	pump down setting	1.7	bar(g)

Sound power data

Sound power level	85	dB(A)
With accoustic hood	79	dB(A)







Maneurop reciprocating compressor. MTZ080-4

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		
		•		•		-	•		
cooling capacity	in W					•			
35	10 025	13 271	17 195	21 916	27 551	34 219	42 037	-	-
40	9 294	12 402	16 100	20 504	25 734	31 907	39 140	-	-
45	8 476	11 488	14 999	19 128	23 993	29 712	36 402	-	-
50	-	10 485	13 851	17 745	22 285	27 590	33 776	-	-
55	-	-	12 609	16 309	20 566	25 497	31 221	-	-
60	-	-	-	14 778	18 791	23 390	28 692	-	-
65	-	-	-	13 108	16 919	21 225	26 145	-	-
Power input in W	,								
35	4 498	4 996	5 456	5 891	6 313	6 734	7 165	_	_
40	4 678	5 252	5 776	6 261	6 719	7 162	7 602	-	_
45	4 803	5 474	6 081	6 635	7 149	7 635	8 104	-	_
50	-	5 643	6 353	6 996	7 587	8 135	8 653	-	_
55		-	6 574	7 328	8 014	8 645	9 232	_	_
60	<u> </u>	_	-	7 611	8 413	9 146	9 823	-	-
65		_	_	7 828	8 766	9 622	10 408	_	_
03				7 020	0 700	9 022	10 400	<u> </u>	_
Current consum	ption in A								
35	7.60	8.14	8.67	9.17	9.60	9.96	10.22	-	-
40	7.79	8.41	9.02	9.60	10.13	10.59	10.95	-	-
45	7.95	8.65	9.35	10.03	10.66	11.22	11.70	-	-
50	-	8.86	9.66	10.44	11.19	11.87	12.46		-
55	-	-	9.94	10.83	11.70	12.50	13.23	-	-
60	-	-	-	11.19	12.18	13.12	14.00	-	-
65	-	-	-	11.50	12.63	13.72	14.74	-	-
• • • • • • • • • • • • • • • • • •									
Mass flow in kg/l	n 201	262	334	420	520	638	775	-	_
40	195	256	327	410	507	620	751	-	_
45	186	248	319	400	495	603	729	-	-
50	-	238	319	390	495	588	709	-	-
55	-	-	297	378	469	573	690	-	_
60	<u>-</u>	-	-	363	454	556	670	-	_
65		-	-	344	435	537	649	-	-
				1 777	100	557	1 010	<u> </u>	I
Coefficient of pe	rformance (C.C	D.P.)							
35	2.23	2.66	3.15	3.72	4.36	5.08	5.87	-	-
40	1.99	2.36	2.79	3.28	3.83	4.46	5.15	-	-
45	1.76	2.10	2.47	2.88	3.36	3.89	4.49	-	-
50	-	1.86	2.18	2.54	2.94	3.39	3.90	-	-
55	-	-	1.92	2.23	2.57	2.95	3.38	-	-
		+	_	1.94	2.23	2.56	2.92	_	_
60	-	-	-	1.54	2.23	2.50	2.52	-	-

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

Cooling capacity	22 871	W
Power input	8 242	W
Current consumption	11.99	Α
Mass flow	515	kg/h
C.O.P.	2.77	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

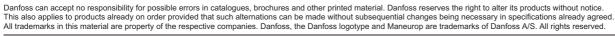
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

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

Sound power data

Sound power level	85	dB(A)
With accoustic hood	79	dB(A)







Maneurop reciprocating compressor. MTZ080-4

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	_	1	T	T	1	Т	1		
10	-	9 226	12 037	15 471	19 591	-	-	-	-	
20	-	8 152	10 749	13 905	17 683	22 145	27 361	-	-	
30	-	7 003	9 359	12 213	15 621	19 645	24 348	29 803	36 093	
40	-	-	7 901	10 425	13 438	16 998	21 164	25 999	31 577	
50	-	-	-	8 574	11 167	14 238	17 842	22 033	26 874	
60	-	-	-	-	8 839	11 398	14 416	17 940	22 021	
ower input in W										
10	-	2 987	3 173	3 273	3 272	-	-	_	-	
20	-	3 465	3 799	4 070	4 261	4 359	4 349	-	-	
30	-	3 789	4 260	4 689	5 060	5 359	5 573	5 685	5 682	
40	-	-	4 579	5 154	5 693	6 183	6 607	6 952	7 203	
50	-	-	-	5 489	6 185	6 852	7 475	8 041	8 534	
60	_	-	-	-	6 559	7 391	8 202	8 977	9 701	
							•	•	•	
urrent consump	tion in A									
10	-	7.29	7.55	7.72	7.77	-	-	-	-	
20	-	7.56	7.93	8.25	8.49	8.61	8.56	-	-	
30	-	7.79	8.27	8.74	9.17	9.51	9.73	9.78	9.64	
40	-	-	8.54	9.17	9.79	10.36	10.84	11.20	11.40	
50	-	-	-	9.52	10.33	11.13	11.88	12.54	13.08	
60	-	-	-	-	10.79	11.81	12.83	13.80	14.68	
lass flow in kg/h			1	1	1	1	T	1		
10	-	152	198	255	323	-	-	-	-	
20	-	144	190	247	315	396	493	-	-	
30	-	133	179	235	302	382	478	591	727	
40	-	-	165	219	284	363	456	568	700	
50	-	-	-	201	263	339	430	538	666	
60	-	-	-	-	239	311	398	502	626	
661 - 1										
Coefficient of per	formance (C.C	3.09	3.79	4 72	5.00	1				
10	-	+	1	4.73	5.99		-	-	-	
20		2.35	2.83	3.42	4.15	5.08	6.29	-	- 0.05	
30	-	1.85	2.20	2.60	3.09	3.67	4.37	5.24	6.35	
40	-	-	1.73	2.02	2.36	2.75	3.20	3.74	4.38	
50	-	-	-	1.56	1.81	2.08	2.39	2.74	3.15	
60	-	-	-	-	1.35	1.54	1.76	2.00	2.27	

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

Cooling capacity	12 312	W
Power input	5 956	W
Current consumption	10.07	Α
Mass flow	274	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	imum HP switch setting	27.7	bar(g)
Mini	mum LP switch setting	1	bar(g)
LPp	oump down setting	1.3	bar(g)

Sound power data

Sound power level	81	dB(A)
With accoustic hood	75	dB(A)





Maneurop reciprocating compressor. MTZ080-4

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

R448A

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	
Cooling capacity	in W									
10	7 006	9 271	12 104	15 566	19 717	-	-	-	-	
20	6 004	8 100	10 704	13 877	17 679	22 170	27 411	-	-	
30	4 964	6 862	9 209	12 065	15 491	19 546	24 291	29 787	36 093	
40	3 922	5 595	7 657	10 169	13 190	16 781	21 003	25 914	31 577	
50	-	4 335	6 085	8 224	10 813	13 913	17 582	21 883	26 874	
60	-	-	4 528	6 267	8 397	10 976	14 067	17 728	22 021	
Power input in W	ı									
10	2 731	2 987	3 173	3 273	3 272	-	-	-	-	
20	3 081	3 465	3 799	4 070	4 261	4 359	4 349	-	-	
30	3 290	3 789	4 260	4 689	5 060	5 359	5 573	5 685	5 682	
40	3 380	3 983	4 579	5 154	5 693	6 183	6 607	6 952	7 203	
50	-	4 070	4 779	5 489	6 185	6 852	7 475	8 041	8 534	
60	-	-	4 885	5 718	6 559	7 391	8 202	8 977	9 701	
1				1.0				1.0		
Current consum	ption in A									
10	6.99	7.29	7.55	7.72	7.77	-	-	-	-	
20	7.19	7.56	7.93	8.25	8.49	8.61	8.56	-	-	
30	7.34	7.79	8.27	8.74	9.17	9.51	9.73	9.78	9.64	
40	7.43	7.95	8.54	9.17	9.79	10.36	10.84	11.20	11.40	
50	-	8.04	8.75	9.52	10.33	11.13	11.88	12.54	13.08	
60	-	-	8.86	9.79	10.79	11.81	12.83	13.80	14.68	
Mass flow in kg/l	n	1	T	Т	T	_	1	Т		
10	135	176	226	285	355	-	-	-	-	
20	125	167	217	276	345	426	519	-	-	
30	114	155	204	263	331	411	502	607	727	
40	101	141	189	245	312	390	480	583	700	
50	-	124	170	224	289	364	452	552	666	
60	-	-	148	200	262	334	418	515	626	
Coefficient of pe		1	2.00	4.70	0.00	1 -	_	_	_	
10	2.57	3.10	3.82	4.76	6.03					
20	1.95	2.34	2.82	3.41	4.15	5.09	6.30	-	-	
30	1.51	1.81	2.16	2.57	3.06	3.65	4.36	5.24	6.35	
40	1.16	1.40	1.67	1.97	2.32	2.71	3.18	3.73	4.38	
50	-	1.07	1.27	1.50	1.75	2.03	2.35	2.72	3.15	
60	-	-	0.93	1.10	1.28	1.49	1.71	1.97	2.27	
Nominal perform	ance at to = -1	0°C tc = 45°C				Pressure switch	eattinge			
tominal periorii	unce at to = -1	0 0,10 - 40 0		_	г	i 1633uit SWILLII	Jetanya			

Mass now		
C O D		

Cooling capacity

Current consumption

Power input

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

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

12 009

5 956

10.07 301 2.02

W

W

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

Sound power data

Sound power level	81	dB(A)
With accoustic hood	75	dB(A)





Maneurop reciprocating compressor. MTZ080-4

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	-	9 243	12 055	15 490	19 609	-	_	_	_
20	-	8 170	10 768	13 925	17 703	22 163	27 375	_	_
30	_	7 022	9 379	12 234	15 642	19 664	24 364	29 812	36 093
40	-		7 922	10 447	13 460	17 019	21 180	26 009	31 577
50	-	_	_	8 596	11 190	14 259	17 859	22 043	26 874
60	-	-	-	-	8 862	11 419	14 433	17 951	22 021
Power input in W		•							
10	-	2 987	3 173	3 273	3 272	-	-	-	-
20	-	3 465	3 799	4 070	4 261	4 359	4 349	-	-
30	-	3 789	4 260	4 689	5 060	5 359	5 573	5 685	5 682
40	-	-	4 579	5 154	5 693	6 183	6 607	6 952	7 203
50	-	-	-	5 489	6 185	6 852	7 475	8 041	8 534
60	-	-	-	-	6 559	7 391	8 202	8 977	9 701
Current consump		7.00	7.55	7.70	T 7.77			1	1
10 20	-	7.29	7.55	7.72	7.77	- 0.04		-	-
30	-	7.56 7.79	7.93 8.27	8.25 8.74	8.49 9.17	8.61 9.51	8.56 9.73	9.78	9.64
40	<u>-</u>	-	8.54	9.17	9.79	10.36	10.84	11.20	11.40
50		-	-	9.17	10.33	11.13	11.88	12.54	13.08
60		_	_	-	10.79	11.81	12.83	13.80	14.68
Mass flow in kg/h	1				10.70	11.01	12.00	10.00	11.00
10	-	152	201	261	332	-	-	-	-
20	-	144	193	252	322	405	504	-	-
30	-	135	182	239	308	390	487	603	740
40	-	-	169	224	291	370	466	579	713
50	-	-	-	205	269	346	439	549	680
60	-	-	-	-	244	318	407	514	641
Coefficient of per	formance (C.	O.P.)							
10	-	3.09	3.80	4.73	5.99	-	-	-	-
20	-	2.36	2.83	3.42	4.15	5.08	6.29	-	-
30	-	1.85	2.20	2.61	3.09	3.67	4.37	5.24	6.35
40	-	-	1.73	2.03	2.36	2.75	3.21	3.74	4.38
50	-	-	-	1.57	1.81	2.08	2.39	2.74	3.15
60	-	-	-	-	1.35	1.54	1.76	2.00	2.27

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

Cooling capacity	12 334	W
Power input	5 956	W
Current consumption	10.07	Α
Mass flow	280	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

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

Sound power data

Sound power level	80	dB(A)	
With accoustic hood	74	dB(A)	





Maneurop reciprocating compressor. MTZ080-4

Performance data at 60 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	y in W								
10	7 006	9 271	12 104	15 566	19 717	-	-	-	-
20	6 004	8 100	10 704	13 877	17 679	22 170	27 411	-	-
30	4 964	6 862	9 209	12 065	15 491	19 546	24 291	29 787	36 093
40	3 922	5 595	7 657	10 169	13 190	16 781	21 003	25 914	31 577
50	-	4 335	6 085	8 224	10 813	13 913	17 582	21 883	26 874
60	-	-	4 528	6 267	8 397	10 976	14 067	17 728	22 021
Power input in V	v								
10	2 731	2 987	3 173	3 273	3 272	-	_	_	-
20	3 081	3 465	3 799	4 070	4 261	4 359	4 349	-	-
30	3 290	3 789	4 260	4 689	5 060	5 359	5 573	5 685	5 682
40	3 380	3 983	4 579	5 154	5 693	6 183	6 607	6 952	7 203
50	-	4 070	4 779	5 489	6 185	6 852	7 475	8 041	8 534
60	-	-	4 885	5 718	6 559	7 391	8 202	8 977	9 701
		•	•		-	•			•
Current consum	ption in A								
10	6.99	7.29	7.55	7.72	7.77	-	-	-	-
20	7.19	7.56	7.93	8.25	8.49	8.61	8.56	_	-
30	7.34	7.79	8.27	8.74	9.17	9.51	9.73	9.78	9.64
40	7.43	7.95	8.54	9.17	9.79	10.36	10.84	11.20	11.40
50	-	8.04	8.75	9.52	10.33	11.13	11.88	12.54	13.08
60	-	-	8.86	9.79	10.79	11.81	12.83	13.80	14.68
Mara Standard Land									
Mass flow in kg/ 10	n 131	176	230	292	364	_	_	_	_
20	124	168	220	282	353	436	530		
30	114	157	208	268	338	419	513	619	740
40	103	144	193	251	319	398	490	594	740
50	-	127	174	230	296	373	490	564	680
60		-	152	205	268	342	428	527	641
00	-	1	132	203	200	342	420	321	041
Coefficient of pe	erformance (C.C	D.P.)							
10	2.57	3.10	3.82	4.76	6.03	-	-	-	-
20	1.95	2.34	2.82	3.41	4.15	5.09	6.30	-	-
30	1.51	1.81	2.16	2.57	3.06	3.65	4.36	5.24	6.35
40	1.16	1.40	1.67	1.97	2.32	2.71	3.18	3.73	4.38
50	-	1.07	1.27	1.50	1.75	2.03	2.35	2.72	3.15
60	-	-	0.93	1.10	1.28	1.49	1.71	1.97	2.27
Nominal perforn	nance at to = -1	0 °C, tc = 45 °C				Pressure switch	settings		

G.O.F.		

Cooling capacity

Current consumption

Power input

Mass flow

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

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

12 009

5 956

10.07

308 2.02 W

W

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

Sound power data

	3(A)
With accoustic hood 74 dE	3(A)





Maneurop reciprocating compressor. MTZ080-4

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	in W								
10	-	9 915	12 484	15 606	19 331	-	-	-	-
20	-	8 863	11 278	14 179	17 613	21 634	26 296	-	-
30	-	7 707	9 925	12 561	15 663	19 278	23 456	28 255	33 744
40	-	6 453	8 432	10 763	13 489	16 655	20 307	24 494	29 273
50	-	-	6 806	8 789	11 099	13 776	16 861	20 395	24 422
60	-	-	-	6 651	8 505	10 655	13 135	15 976	19 207
Power input in W	,								
10	-	3 935	4 303	4 664	5 028	-	-	-	-
20	-	4 071	4 461	4 830	5 186	5 541	5 904	-	-
30	-	4 265	4 724	5 146	5 541	5 919	6 291	6 668	7 058
40	-	4 455	5 029	5 551	6 031	6 480	6 907	7 324	7 740
50	-	-	5 317	5 985	6 597	7 162	7 691	8 195	8 682
60	-	-	-	6 388	7 177	7 905	8 582	9 219	9 825
Current consump		T 7.00	0.50		I	Г	T	T	I
10	-	7.89	8.56	9.22	9.91	-	-	-	-
20	-	7.88	8.45	8.99	9.53	10.09	10.71	-	-
30	-	8.07	8.65	9.18	9.68	10.18	10.70	11.27	11.92
40	-	8.26	8.97	9.59	10.17	10.71	11.25	11.81	12.43
50	-	-	9.21	10.05	10.80	11.50	12.16	12.83	13.52
60	-	-	-	10.34	11.38	12.34	13.25	14.12	14.99
/lass flow in kg/h	1								
10	-	201	255	320	398	-	-	-	-
20	-	196	251	317	395	489	599	-	-
30	-	187	242	308	386	479	589	719	873
40	-	174	229	294	371	463	571	698	850
50	-	-	210	274	349	438	544	668	816
60	-	-	-	247	320	406	508	629	772
Coefficient of per	rformance (C.0	O.P.)							
10	-	2.52	2.90	3.35	3.84	-	-	-	-
20	-	2.18	2.53	2.94	3.40	3.90	4.45	-	-
30	-	1.81	2.10	2.44	2.83	3.26	3.73	4.24	4.78
40	-	1.45	1.68	1.94	2.24	2.57	2.94	3.34	3.78
			1.28	1.47	1.68	1.92	2.19	2.49	2.81
50	-	-	1.20	1.77					

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

Cooling capacity	12 320	W
Power input	6 309	W
Current consumption	10.48	Α
Mass flow	361	kg/h
C.O.P.	1.95	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

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

Sound power data

Sound power level	82	dB(A)
With accoustic hood	76	dB(A)





Maneurop reciprocating compressor. MTZ080-4

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	7 596	9 652	12 224	15 364	19 126	-	-	-	-
20	6 536	8 484	10 884	13 791	17 258	21 341	26 093	-	-
30	5 428	7 220	9 404	12 033	15 161	18 842	23 130	28 079	33 744
40	4 284	5 878	7 800	10 106	12 849	16 083	19 862	24 241	29 273
50	3 122	4 471	6 087	8 024	10 337	13 079	16 305	20 068	24 422
60	-	3 014	4 279	5 803	7 641	9 846	12 473	15 575	19 207
Power input in V	v								
10	3 548	3 935	4 303	4 664	5 028	-	-	-	-
20	3 647	4 071	4 461	4 830	5 186	5 541	5 904	-	-
30	3 758	4 265	4 724	5 146	5 541	5 919	6 291	6 668	7 058
40	3 818	4 455	5 029	5 551	6 031	6 480	6 907	7 324	7 740
50	3 769	4 582	5 317	5 985	6 597	7 162	7 691	8 195	8 682
60	-	4 584	5 527	6 388	7 177	7 905	8 582	9 219	9 825
Current consum	ption in A				_				1
10	7.20	7.89	8.56	9.22	9.91	-	-	-	-
20	7.26	7.88	8.45	8.99	9.53	10.09	10.71	-	-
30	7.41	8.07	8.65	9.18	9.68	10.18	10.70	11.27	11.92
40	7.46	8.26	8.97	9.59	10.17	10.71	11.25	11.81	12.43
50	7.21	8.28	9.21	10.05	10.80	11.50	12.16	12.83	13.52
60	-	7.91	9.19	10.34	11.38	12.34	13.25	14.12	14.99
Mass flow in kg/	h								
10	185	234	291	359	438	-	-	-	-
20	178	228	287	355	435	527	632	-	-
30	167	218	277	346	425	516	621	739	873
40	152	203	262	330	408	498	601	718	850
50	133	183	241	307	384	472	573	687	816
60	-	157	213	278	352	438	535	646	772
Coefficient of pe	erformance (C.C).P.)							
10	2.14	2.45	2.84	3.29	3.80	-	-	-	-
20	1.79	2.08	2.44	2.86	3.33	3.85	4.42	-	-
30	1.44	1.69	1.99	2.34	2.74	3.18	3.68	4.21	4.78
40	1.12	1.32	1.55	1.82	2.13	2.48	2.88	3.31	3.78
50	0.83	0.98	1.14	1.34	1.57	1.83	2.12	2.45	2.81
60	_	0.66	0.77	0.91	1.06	1.25	1.45	1.69	1.95

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

Cooling capacity	11 617	W
Power input	6 309	W
Current consumption	10.48	Α
Mass flow	397	kg/h
C.O.P.	1.84	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

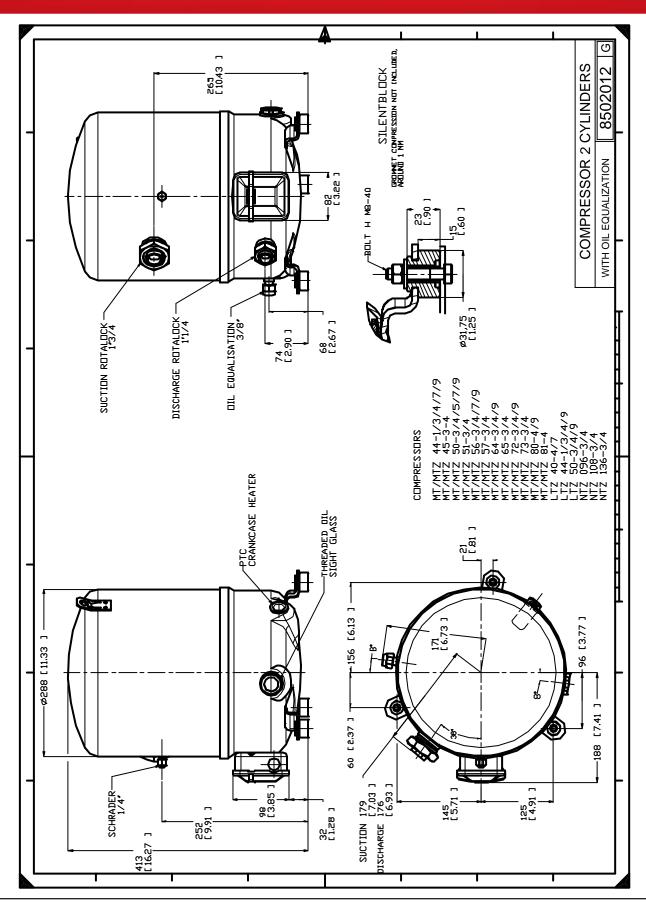
Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	82	dB(A)
With accoustic hood	76	dB(A)







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