ENGINEERING TOMORROW



Datasheets

Danfoss Reciprocating compressors MT / MTZ / NTZ





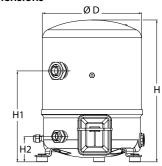


Datasheet, technical data

General Characteristics

Code number for Singlepack*MTZ50-4VICode number for Industrial pack**MTZ50-4VMDrawing number8502012gSuction and discharge connectionsRotolockSuction connection1-3/4 " RotolockDischarge connection1-1/4 " RotolockSuction connection with supplied sleeve7/8 " ODFDischarge connection with supplied sleeve3/4 " ODFOil sight glassThreadedOil equalisation connection3/8" flare SAEOil drain connectionNoneLP gauge portSchraderIPR valve30 bar / 8 barCylinders2Swept volume85.64 cm3/revDisplacement @ Nominal speed14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpmNet weight37 kgOil charge1.8 litre, POE - 175PZMaximum system test pressure Low Side / High side25 bar(g) / 30 bar(g)Maximum number of starts per hour12Refrigerant charge limit5 kgApproved refrigerantsR404A,R134a,R407A/C/F,R448A,R449A,R452A,R513A	Model number (on compressor nameplate)	MTZ50HK4CVE		
Drawing number Suction and discharge connections Suction connection Discharge connection Discharge connection Discharge connection Discharge connection with supplied sleeve Discharge connection Dis	Code number for Singlepack*		MTZ50-4VI	
Suction and discharge connections Suction connection Discharge connection 1-3/4 " Rotolock 1-3/4 " Rotolock 1-1/4 " Rotolock 5uction connection 1-1/4 " Rotolock 5uction connection with supplied sleeve 7/8 " ODF Discharge connection with supplied sleeve 3/4 " ODF Oil sight glass Threaded Oil equalisation connection Sight glass Oil drain connection None LP gauge port Schrader IPR valve 2 Swept volume Steps	Code number for Industrial pack**		MTZ50-4VM	
Suction connection Discharge connection Discharge connection Suction connection with supplied sleeve Tolk "ODF Discharge connection with supplied sleeve Threaded Oil equalisation connection Solid drain connection None LP gauge port Schrader IPR valve Tolk "ODF Threaded	Drawing number		8502012g	
Discharge connection Suction connection with supplied sleeve Discharge connection with supplied sleeve Oil sight glass Oil equalisation connection Oil drain connection LP gauge port LP gauge port LP gauge port Schrader IPR valve Swept volume Displacement @ Nominal speed Net weight Oil charge Maximum system test pressure Low Side / High side Maximum number of starts per hour Refrigerant charge limit 1-1/4 " Rotolock 7/8 " ODF 3/4 " ODF 3/4 " ODF 3/8 " Glare 3/8 " Gla	Suction and discharge connections		Rotolock	
Suction connection with supplied sleeve Discharge connection with supplied sleeve Oil sight glass Threaded Oil equalisation connection Sold drain connection LP gauge port LP gauge port LP gauge port Sochrader IPR valve Sowept volume Source Displacement @ Nominal speed 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm Net weight Oil charge Maximum system test pressure Low Side / High side Maximum number of starts per hour Refrigerant charge limit 7/8 " ODF 3/4 " ODF 3/4 " ODF 3/8 " ODF 3/8 " ODF 3/8 " ODF 3/8 " Flare SAE 4	Suction connection		1-3/4 " Rotolock	
Discharge connection with supplied sleeve Oil sight glass Oil equalisation connection Oil drain connection LP gauge port LP gauge port LPR valve Cylinders Swept volume Displacement @ Nominal speed 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm Net weight Oil charge Maximum system test pressure Low Side / High side Maximum number of starts per hour Refrigerant charge limit Threaded 3/4 "ODF Threaded 3/8" flare SAE None Schrader 18 bar 2 2 2 4 5 bar (3) bar / 8 bar 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm 18.0 itre, POE - 175PZ 4 5 bar (g) / 30 bar (g) 4 5 kg	Discharge connection		1-1/4 " Rotolock	
Oil sight glass Oil equalisation connection Oil drain connection LP gauge port LP gauge port IPR valve Cylinders Swept volume Displacement @ Nominal speed 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm Net weight Oil charge Maximum system test pressure Low Side / High side Maximum number of starts per hour Refrigerant charge limit Threaded 3/8" flare SAE None Schrader 18 bar 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm 18 litre, POE - 175PZ 18 bar(g) / 30 bar(g) 30 bar	Suction connection with supplied sleeve		7/8 " ODF	
Oil equalisation connection Oil equalisation connection LP gauge port LP gauge port IPR valve Cylinders Swept volume Displacement @ Nominal speed 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm Net weight Oil charge Maximum system test pressure Low Side / High side Maximum number of starts per hour Refrigerant charge limit 3/8" flare SAE None None 13/8" flare SAE 13/8" flare SAE 130 bar 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm 15.8 litre, POE - 175PZ 16.8 litre, POE - 175PZ 17.5 bar(g) / 30 bar(g) 18.8 litre, POE - 175PZ 19.8 litre, POE	Discharge connection with supplied sleeve		3/4 " ODF	
Oil drain connection LP gauge port IPR valve Cylinders Swept volume Displacement @ Nominal speed 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm Net weight Oil charge Maximum system test pressure Low Side / High side Maximum differential test pressure Maximum number of starts per hour Refrigerant charge limit Schrader Schrader 30 bar None Schrader 31 bar 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm 37 kg 18 litre, POE - 175PZ 30 bar(g) 30 bar 40 bar 41 bar 42 bar 43 bar 45 bar(g) / 30 bar(g) 46 bar 47 bar 48 bar 48 bar 49 bar 49 bar 40 bar 40 bar 40 bar 40 bar 41 bar 42 bar 43 bar 44 bar 45 bar(g) / 30 bar(g) 46 bar 46 bar 47 bar 48 bar 49 bar 40 bar 40 bar 40 bar 40 bar 40 bar 41	Oil sight glass		Threaded	
LP gauge port IPR valve Cylinders Swept volume Ssept volume B5.64 cm3/rev Displacement @ Nominal speed 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm Net weight Oil charge Maximum system test pressure Low Side / High side Maximum differential test pressure Maximum number of starts per hour Refrigerant charge limit Schrader 30 bar Schrader 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm 15.8 litre, POE - 175PZ 37 bar(g) 30 bar(g) 30 bar Maximum number of starts per hour 12 Refrigerant charge limit	Oil equalisation connection		3/8" flare SAE	
IPR valve 30 bar / 8 bar Cylinders 2 Swept volume 85.64 cm3/rev Displacement @ Nominal speed 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm Net weight 37 kg Oil charge 1.8 litre, POE - 175PZ Maximum system test pressure Low Side / High side 25 bar(g) / 30 bar(g) Maximum differential test pressure 30 bar Maximum number of starts per hour 12 Refrigerant charge limit 5 kg	Oil drain connection		None	
Cylinders Swept volume 85.64 cm3/rev Displacement @ Nominal speed 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm Net weight 37 kg Oil charge 1.8 litre, POE - 175PZ Maximum system test pressure Low Side / High side Maximum differential test pressure Maximum number of starts per hour Refrigerant charge limit 5 kg	LP gauge port		Schrader	
Swept volume Displacement @ Nominal speed 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm Net weight Oil charge 1.8 litre, POE - 175PZ Maximum system test pressure Low Side / High side Maximum differential test pressure Maximum number of starts per hour Refrigerant charge limit 5 kg	IPR valve		30 bar / 8 bar	
Displacement @ Nominal speed 14.9 m3/h @ 2900 rpm - 18.0 m3/h @ 3500 rpm Net weight Oil charge 1.8 litre, POE - 175PZ Maximum system test pressure Low Side / High side Maximum differential test pressure Maximum number of starts per hour 12 Refrigerant charge limit 5 kg	Cylinders	2	2	
Net weight 37 kg Oil charge 1.8 litre, POE - 175PZ Maximum system test pressure Low Side / High side 25 bar(g) / 30 bar(g) Maximum differential test pressure 30 bar Maximum number of starts per hour 12 Refrigerant charge limit 5 kg	Swept volume	85.64 c	m3/rev	
Oil charge 1.8 litre, POE - 175PZ Maximum system test pressure Low Side / High side 25 bar(g) / 30 bar(g) Maximum differential test pressure 30 bar Maximum number of starts per hour 12 Refrigerant charge limit 5 kg	Displacement @ Nominal speed	14.9 m3/h @ 2900 rpm -	- 18.0 m3/h @ 3500 rpm	
Maximum system test pressure Low Side / High side 25 bar(g) / 30 bar(g) Maximum differential test pressure 30 bar Maximum number of starts per hour 12 Refrigerant charge limit 5 kg	Net weight	37	kg	
Maximum differential test pressure30 barMaximum number of starts per hour12Refrigerant charge limit5 kg	Oil charge	1.8 litre, PC	DE - 175PZ	
Maximum number of starts per hour 12 Refrigerant charge limit 5 kg	Maximum system test pressure Low Side / High side	25 bar(g) /	′ 30 bar(g)	
Refrigerant charge limit 5 kg	Maximum differential test pressure	301	bar	
	Maximum number of starts per hour	1.	2	
Approved refrigerants R404A,R134a,R407A/C/F,R448A,R449A,R452A,R513A	Refrigerant charge limit	5	kg	
	Approved refrigerants	R404A,R134a,R407A/C/F,R	448A,R449A,R452A,R513A	

Dimensions



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

Electrical Characteristics

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-440 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance (between phases) +/- 7% at 25℃	3.35 Ω
Maximum Continuous Current (MCC)	12 A
Locked Rotor Amps (LRA)	48.5 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

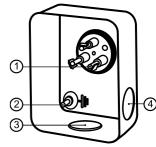
Mounting kit with grommets, bolts, nuts, sleeves and washers
Suction & Discharge solder sleeves, rotolock nuts and gaskets (shipped with rotolock version only)
Initial oil charge
Installation instructions

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

*Singlepack: Compressor in cardboard box

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

Terminal box



IP55 (with cable gland)

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





Datasheet, accessories and spare parts

Maneurop reciprocating compressor, MTZ050-4

Rotolock accessories, suction side	Code no.	
Solder sleeve, P07 (1-3/4" Rotolock, 7/8" ODF)	8153013	
Rotolock valve, V07 (1-3/4" Rotolock, 7/8" ODF)	8168032	
Gasket, 1-3/4"	8156132	Gaskets, sleeves and nuts
Rotolock accessories, discharge side	Code no.	
Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008	
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029	
Gasket, 1-1/4"	8156131	
Rotolock accessories, sets	Code no.	1 2 3
Valve set, V07 (1-3/4"~7/8"), V04 (1-1/4"~3/4")	7703006	
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009	1: Gasket
		2: Solder sleeve
Oil / lubricants	Code no.	3: Rotolock nut
POE lubricant, 175PZ, 1 litre can	120Z0638	
POE lubricant, 175PZ, 2.5 litre can	120Z0639	
Crankcase heaters	Code no.	
PTC heater 27W,CE mark, UL	120Z0459	
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	7772107	
	7773107	
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	7773107	Mounting kit
Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL		Mounting kit
Belt type crankcase heater, 65 W, 460 V, CE mark, UL	7773117 120Z0466	Mounting kit
	7773117	1 2
Belt type crankcase heater, 65 W, 460 V, CE mark, UL	7773117 120Z0466	Mounting kit
Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories	7773117 120Z0466 Code no.	1 2
Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C	7773117 120Z0466 Code no. 7705006	1 2
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	7773117 120Z0466 Code no. 7705006 120Z0472 8153127	1 2
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	7773117 120Z0466 Code no. 7705006 120Z0472 8153127 Code no.	1 2
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	7773117 120Z0466 Code no. 7705006 120Z0472 8153127	1 2
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)	7773117 120Z0466 Code no. 7705006 120Z0472 8153127 Code no.	1 2
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)	7773117 120Z0466 Code no. 7705006 120Z0472 8153127 Code no. 8156001 8156019 8156145	
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)	7773117 120Z0466 Code no. 7705006 120Z0472 8153127 Code no. 8156001 8156019	1: Bolt (3x)
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)	7773117 120Z0466 Code no. 7705006 120Z0472 8153127 Code no. 8156001 8156019 8156145	

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





Maneurop reciprocating compressor. MTZ050-4

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		
L				<u> </u>		1	<u> </u>	I.	I.
Cooling capacity	y in W								
35	4 843	6 491	8 474	10 833	13 612	16 855	20 605	-	-
40	4 348	5 896	7 749	9 951	12 545	15 573	19 079	-	-
45	3 848	5 298	7 025	9 071	11 480	14 296	17 561	-	-
50	-	4 699	6 300	8 193	10 420	13 025	16 051	-	-
55	-	-	5 577	7 318	9 365	11 761	14 550	-	-
60	-	-	-	6 448	8 316	10 505	13 058	-	-
65	-	-	-	5 583	7 275	9 259	11 578	-	-
Power input in V		_	1	T	_	1	T		T
35	2 241	2 484	2 684	2 849	2 985	3 098	3 194	-	-
40	2 307	2 601	2 844	3 045	3 208	3 342	3 451	-	-
45	2 344	2 699	2 997	3 244	3 447	3 612	3 746	-	-
50	-	2 765	3 128	3 433	3 687	3 895	4 065	-	-
55	-	-	3 225	3 599	3 915	4 178	4 394	-	-
60	-	-	-	3 728	4 116	4 445	4 720	-	-
65	-	-	-	3 804	4 278	4 684	5 029	-	-
Current consum	ntion in A								
35	4.71	4.98	5.23	5.46	5.67	5.87	6.05	_	I -
40	4.78	5.11	5.40	5.67	5.90	6.11	6.30	_	_
45	4.83	5.23	5.59	5.91	6.19	6.43	6.64	_	_
50	-	5.33	5.77	6.16	6.50	6.79	7.04	_	_
55	_	-	5.91	6.39	6.81	7.18	7.49	_	_
60		_	-	6.58	7.10	7.56	7.95	_	_
65	_	_	_	6.69	7.34	7.90	8.39	_	_
00			<u> </u>	0.00	1.01	1.00	0.00		<u> </u>
Mass flow in kg/	h								
35	105	139	178	224	277	338	408	-	-
40	99	132	171	216	268	327	396	-	-
45	93	125	163	207	258	316	382	-	-
50	-	118	155	198	247	304	369	-	-
55	-	-	146	188	236	291	354	-	-
60	-	-	-	177	224	278	339	-	-
65	-	-	-	166	212	264	324	-	-
Coefficient of pe	erformance (C.C).P.)							
35	2.16	2.61	3.16	3.80	4.56	5.44	6.45	-	-
40	1.88	2.27	2.72	3.27	3.91	4.66	5.53	-	-
45	1.64	1.96	2.34	2.80	3.33	3.96	4.69	-	-
50	-	1.70	2.01	2.39	2.83	3.34	3.95	-	-
55	_	-	1.73	2.03	2.39	2.82	3.31	-	-
60	-	-	-	1.73	2.02	2.36	2.77	-	-
65	-	-	-	1.47	1.70	1.98	2.30	-	-

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

Cooling capacity	10 420	W
Power input	3 687	W
Current consumption	6.50	Α
Mass flow	247	kg/h
C.O.P.	2.83	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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



Pressure switch settings

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

Sound power data

Sound power level	84	dB(A)
With accoustic hood	77	dB(A)

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ050-4

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		
<u> </u>		.1	l			1	.1		l
Cooling capacity	/ in W					_			
35	5 213	6 979	9 099	11 619	14 584	18 040	22 030	-	-
40	4 705	6 372	8 364	10 727	13 506	16 747	20 496	-	-
45	4 192	5 762	7 628	9 835	12 431	15 460	18 968	-	-
50	-	5 147	6 890	8 945	11 359	14 178	17 448	-	-
55	-	-	6 152	8 057	10 292	12 904	15 938	-	-
60	-	-	-	7 172	9 231	11 638	14 440	-	-
65	-	-	-	6 291	8 178	10 384	12 958	-	-
Power input in W	,								
35	2 241	2 484	2 684	2 849	2 985	3 098	3 194	_	_
40	2 307	2 601	2 844	3 045	3 208	3 342	3 451	_	_
45	2 344	2 699	2 997	3 244	3 447	3 612	3 746	_	_
50	-	2 765	3 128	3 433	3 687	3 895	4 065	_	_
55		-	3 225	3 599	3 915	4 178	4 394	_	_
60	-	_	-	3 728	4 116	4 445	4 720	_	_
65	_	_	_	3 804	4 278	4 684	5 029	_	_
00		1	l	0 001	1270	1001	0 020		
Current consum	ption in A								
35	4.71	4.98	5.23	5.46	5.67	5.87	6.05	-	-
40	4.78	5.11	5.40	5.67	5.90	6.11	6.30	-	-
45	4.83	5.23	5.59	5.91	6.19	6.43	6.64		-
50	-	5.33	5.77	6.16	6.50	6.79	7.04		-
55	-	-	5.91	6.39	6.81	7.18	7.49	-	-
60	-	-	-	6.58	7.10	7.56	7.95	-	-
65	-	-	-	6.69	7.34	7.90	8.39	-	-
Mass flow in kg/		120	177	222	275	226	406	I	l
35 40	105 99	138 132	177 170	223 214	275 266	336 325	406 393	-	-
40	99	125	162	206	256	314	380	-	-
50	- 92	117	154	197	246	302	366	-	-
55	-	-	145	187	235	290	352	-	-
60	<u>-</u>	-	-	176	223	276	337	-	-
65		-	-	165	211	263	322	-	-
00	-			100	211	200	ULL	_	_
Coefficient of pe	rformance (C.C).P.)							
35	2.33	2.81	3.39	4.08	4.89	5.82	6.90		-
40	2.04	2.45	2.94	3.52	4.21	5.01	5.94	-	-
45	1.79	2.13	2.55	3.03	3.61	4.28	5.06	-	-
50	-	1.86	2.20	2.61	3.08	3.64	4.29	-	-
55	-	-	1.91	2.24	2.63	3.09	3.63	-	-
	-	-	-	1.92	2.24	2.62	3.06	-	-
60									

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

Cooling capacity	11 531	W
Power input	4 007	W
Current consumption	6.94	Α
Mass flow	260	kg/h
C.O.P.	2.88	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

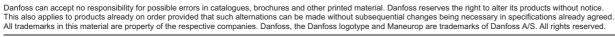
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

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







Maneurop reciprocating compressor. MTZ050-4

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
Cooling capacity		0.477	4.400	5.500	7,000	0.000	44.074	44.000	40.000
35	1 487	2 177	4 183	5 583	7 303	9 386	11 871	14 803	18 222
40	1 266	1 910	3 758	5 046	6 633	8 561	10 870	13 604	16 804
45	1 056	1 660	3 364	4 548	6 010	7 790	9 931	12 475	15 463
50	850	1 421	2 997	4 084	5 427	7 068	9 047	11 408	14 192
55	-	-	2 649	3 647	4 880	6 388	8 213	10 399	12 986
60	-	-	-	3 232	4 361	5 744	7 423	9 441	11 838
65	-	-	-	-	3 865	5 131	6 671	8 528	10 743
75	-	-	-	-	-	-	5 255	6 813	8 686
Power input in V	v								
35	1 096	1 333	1 712	1 857	1 973	2 062	2 125	2 163	2 176
40	1 058	1 324	1 760	1 931	2 072	2 185	2 271	2 329	2 363
45	1 001	1 302	1 801	2 002	2 173	2 313	2 425	2 509	2 566
50	923	1 261	1 832	2 067	2 270	2 442	2 583	2 696	2 780
55	-	-	1 848	2 120	2 360	2 566	2 742	2 887	3 002
60	-	-	-	2 158	2 437	2 683	2 895	3 077	3 227
65	-	-	-	-	2 498	2 786	3 040	3 261	3 451
75	-	-	-	-	-	-	3 285	3 597	3 875
Current consum	ption in A			T	•			T	T
35	3.17	3.53	4.08	4.28	4.44	4.56	4.65	4.72	4.77
40	3.27	3.66	4.24	4.46	4.62	4.75	4.85	4.91	4.95
45	3.25	3.67	4.32	4.56	4.75	4.90	5.01	5.09	5.14
50	3.12	3.59	4.33	4.61	4.84	5.02	5.16	5.27	5.34
55	-	-	4.30	4.63	4.91	5.14	5.32	5.46	5.57
60	-	-	-	4.63	4.97	5.26	5.50	5.69	5.85
65	-	-	-	-	5.04	5.40	5.71	5.97	6.20
75	-	-	-	-	-	-	6.33	6.76	7.15
Mass flow in kg/	h								
35	38	54	100	130	166	209	260	319	387
40	34	50	94	123	158	200	249	307	373
	30	46	89	117	151	192	239	295	359
45 50	26	40	84	111	145	184	239	284	347
55	-	-	79	106	138	176	230	274	335
60	<u>-</u>	-	-	100	132	169	213	265	324
65	-	-	-	-	126	162	205	256	314
75	<u> </u>	_	_	-	120	- 102	191	239	295
75	<u> </u>				-		191	239	293
Coefficient of pe	•	1							
35	1.36	1.63	2.44	3.01	3.70	4.55	5.59	6.84	8.37
40	1.20	1.44	2.14	2.61	3.20	3.92	4.79	5.84	7.11
45	1.05	1.28	1.87	2.27	2.77	3.37	4.10	4.97	6.03
50	0.92	1.13	1.64	1.98	2.39	2.89	3.50	4.23	5.10
55	-	-	1.43	1.72	2.07	2.49	3.00	3.60	4.33
60	-	-	-	1.50	1.79	2.14	2.56	3.07	3.67
65	-	-	-	-	1.55	1.84	2.19	2.61	3.11
75	-	-	-	-	-	-	1.60	1.89	2.24

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

-,			
Cooling capacity	7 068	W	
Power input	2 442	W	
Current consumption	5.02	Α	
Mass flow	184	kg/h	
C.O.P.	2.89		

to: Evaporating temperature at dew point

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

Pressure switch settings

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

Sound power data

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

Tolerance according EN12900



tc: Condensing temperature at dew point



Maneurop reciprocating compressor. MTZ050-4

Performance data at 50 Hz, ARI rating conditions

R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
				•					
Cooling capacity	/ in W								
35	1 616	2 362	4 523	6 027	7 872	10 101	12 758	15 887	19 530
40	1 385	2 084	4 084	5 475	7 184	9 257	11 736	14 665	18 088
45	1 162	1 823	3 678	4 963	6 545	8 468	10 777	13 515	16 725
50	-	1 573	3 299	4 486	5 949	7 730	9 876	12 430	15 436
55	-	-	2 941	4 038	5 388	7 037	9 028	11 406	14 214
60	-	-	-	3 611	4 858	6 382	8 226	10 436	13 056
65	-	-	-	-	-	5 759	7 466	9 517	11 957
75	-	-	-	-	-	-	6 047	7 808	9 918
Power input in V				T		1			
35	1 096	1 333	1 712	1 857	1 973	2 062	2 125	2 163	2 176
40	1 058	1 324	1 760	1 931	2 072	2 185	2 271	2 329	2 363
45	1 001	1 302	1 801	2 002	2 173	2 313	2 425	2 509	2 566
50	-	1 261	1 832	2 067	2 270	2 442	2 583	2 696	2 780
55	-	-	1 848	2 120	2 360	2 566	2 742	2 887	3 002
60	-	-	-	2 158	2 437	2 683	2 895	3 077	3 227
65	-	-	-	-	-	2 786	3 040	3 261	3 451
75	-	-	-	-	-	-	3 285	3 597	3 875
Current concur	ntion in A								
Current consum 35	3.17	3.53	4.08	4.28	4.44	4.56	4.65	4.72	4.77
40	3.17	3.66	4.00	4.46	4.62	4.75	4.85	4.72	4.77
45	3.25	3.67	4.24	4.40	4.02	4.73	5.01	5.09	5.14
50	-	3.59	4.33	4.61	4.73	5.02	5.16	5.09	5.14
55		-	4.30	4.63	4.91	5.14	5.32	5.46	5.57
60						5.14	5.50		5.85
	-	-	-	4.63	4.97	<u> </u>	5.71	5.69 5.97	6.20
65 75	<u>-</u>	-	-	-	_	5.40	6.33	6.76	7.15
73			1	<u> </u>	<u> </u>		0.55	0.70	7.13
Mass flow in kg/	h								
35	37	54	99	129	165	208	258	317	385
40	34	50	94	123	158	199	248	305	371
45	30	46	88	117	151	191	238	293	357
50	-	42	83	111	144	183	229	283	345
55	-	-	78	105	137	175	220	273	333
60	-	-	-	100	131	168	212	263	322
65	-	_	-	-	-	161	204	254	312
75	-	-	-	_	-	-	190	237	293
-			1		1	1		1	
Coefficient of pe	rformance (C.C	D.P.)							
35	1.47	1.77	2.64	3.25	3.99	4.90	6.00	7.35	8.97
40	1.31	1.57	2.32	2.84	3.47	4.24	5.17	6.30	7.66
45	1.16	1.40	2.04	2.48	3.01	3.66	4.44	5.39	6.52
50	-	1.25	1.80	2.17	2.62	3.17	3.82	4.61	5.55
55	-	-	1.59	1.90	2.28	2.74	3.29	3.95	4.73
60	-	-	-	1.67	1.99	2.38	2.84	3.39	4.05
65	-	-	-	-	-	2.07	2.46	2.92	3.46
75	-	_	-	-	-	-	1.84	2.17	2.56

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

recinitial perioritianee at to	0,	U-1		
Cooling capacity		7 957	W	
Power input		2 631	W	
Current consumption		5.20	Α	
Mass flow		195	kg/h	
C.O.P.		3.02		

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. MTZ050-4

Performance data at 50 Hz, EN 12900 rating conditions

R404A

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity		0.000	5.004	0.070	1 0000	14.000	44447	47,000	04.440
30	2 747	3 839	5 204	6 879	8 899	11 300	14 117	17 386	21 143
35	2 370	3 366	4 610	6 138	7 986	10 189	12 782	15 802	19 284
40 45	2 021 1 695	2 923 2 504	4 047	5 430	7 106	9 112	11 484	14 256	17 464
		1	3 510	4 749	6 256	8 067	10 218	12 744	15 680
50	1 390	2 108	2 997	4 093	5 432	7 050	8 981	11 262	13 929
55	-	1 730	2 503	3 459	4 631	6 057	7 770	9 808	12 206
60	-	1 367	2 027	2 842	3 850	5 085	6 582	8 378	10 508
Power input in V	v								
30	1 933	2 197	2 439	2 656	2 846	3 005	3 131	3 223	3 277
35	1 946	2 238	2 508	2 754	2 973	3 164	3 322	3 448	3 536
40	1 948	2 269	2 569	2 846	3 098	3 322	3 515	3 676	3 802
45	1 935	2 288	2 620	2 931	3 218	3 478	3 708	3 907	4 072
50	1 907	2 293	2 661	3 008	3 331	3 629	3 899	4 139	4 345
55	-	2 283	2 688	3 073	3 437	3 775	4 087	4 369	4 619
60	-	2 256	2 701	3 127	3 532	3 913	4 269	4 596	4 893
Current consum	ption in A								
30	4.36	4.68	4.98	5.26	5.51	5.73	5.90	6.02	6.08
35	4.39	4.73	5.05	5.36	5.65	5.90	6.11	6.27	6.38
40	4.41	4.77	5.13	5.47	5.79	6.09	6.35	6.56	6.73
45	4.40	4.80	5.19	5.58	5.95	6.29	6.60	6.87	7.10
50	4.37	4.81	5.25	5.68	6.10	6.49	6.87	7.20	7.50
55	-	4.79	5.27	5.76	6.24	6.70	7.13	7.54	7.91
60	-	4.73	5.27	5.82	6.36	6.88	7.39	7.87	8.32
Mass flow in kg/	h								
30	87	118	156	201	254	315	385	465	556
35	81	111	148	192	243	302	371	449	538
40	75	104	140	183	232	290	357	433	520
45	69	98	132	174	222	278	343	417	502
50	63	91	125	164	211	266	329	401	484
55	-	84	117	155	201	254	315	385	466
60	-	77	109	146	190	242	301	370	448
Coefficient of	orformance (C.)								
30	1.42	1.75	2.13	2.59	3.13	3.76	4.51	5.39	6.45
35	1.42	1.75	1.84	2.23	2.69	3.22	3.85	4.58	5.45
40	1.04	1.30	1.58	1.91	2.09	2.74	3.27	3.88	4.59
									3.85
1		+		1	1	+	+	+	3.00
		1		1	1	+	1	+	2.64
					1	+			2.04
45 50 55 60	0.88 0.73 - -	1.09 0.92 0.76 0.61	1.34 1.13 0.93 0.75	1.62 1.36 1.13 0.91	1.94 1.63 1.35 1.09	2.32 1.94 1.60 1.30	2.76 2.30 1.90 1.54	3.26 2.72 2.24 1.82	

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

Cooling capacity	6 256	W
Power input	3 218	W
Current consumption	5.95	Α
Mass flow	222	kg/h
C.O.P.	1.94	_

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

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

Sound power data

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

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ050-4

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		4.004	T = ===	T	0.000	10.400	15.400	40.040	00.110
30	3 058	4 261	5 762	7 599	9 808	12 426	15 492	19 042	23 113
35	2 667	3 775	5 155	6 845	8 881	11 303	14 146	17 449	21 248
40	2 304	3 319	4 580	6 124	7 990	10 216	12 839	15 897	19 427
45	1 965	2 889	4 032	5 433	7 131	9 163	11 569	14 384	17 648
50	1 647	2 482	3 511	4 771	6 303	8 145	10 335	12 912	15 914
55	-	2 096	3 012	4 135	5 505	7 160	9 140	11 484	14 230
60	-	1 728	2 538	3 528	4 741	6 217	7 994	10 114	12 614
Power input in V	ı								
30	1 933	2 197	2 439	2 656	2 846	3 005	3 131	3 223	3 277
35	1 946	2 238	2 508	2 754	2 973	3 164	3 322	3 448	3 536
40	1 948	2 269	2 569	2 846	3 098	3 322	3 515	3 676	3 802
45	1 935	2 288	2 620	2 931	3 218	3 478	3 708	3 907	4 072
50	1 907	2 293	2 661	3 008	3 331	3 629	3 899	4 139	4 345
55	-	2 283	2 688	3 073	3 437	3 775	4 087	4 369	4 619
60	-	2 256	2 701	3 127	3 532	3 913	4 269	4 596	4 893
Current consum	ption in A							<u> </u>	<u> </u>
30	4.36	4.68	4.98	5.26	5.51	5.73	5.90	6.02	6.08
35	4.39	4.73	5.05	5.36	5.65	5.90	6.11	6.27	6.38
40	4.41	4.77	5.13	5.47	5.79	6.09	6.35	6.56	6.73
45	4.40	4.80	5.19	5.58	5.95	6.29	6.60	6.87	7.10
50	4.37	4.81	5.25	5.68	6.10	6.49	6.87	7.20	7.50
55	-	4.79	5.27	5.76	6.24	6.70	7.13	7.54	7.91
60	-	4.73	5.27	5.82	6.36	6.88	7.39	7.87	8.32
Mass flow in kg/	h								
30	86	118	155	200	252	313	382	462	552
35	80	111	147	191	242	301	368	446	534
40	74	104	139	182	231	288	355	430	516
45	68	97	132	173	220	276	341	414	498
50	62	90	124	163	210	264	327	399	480
55	-	84	116	154	200	252	313	383	462
60	-	77	108	146	189	240	299	367	445
Coefficient of pe	rformance (C C) P)							
30	1.58	1.94	2.36	2.86	3.45	4.14	4.95	5.91	7.05
35	1.37	1.69	2.06	2.49	2.99	3.57	4.26	5.06	6.01
40	1.18	1.46	1.78	2.45	2.58	3.08	3.65	4.32	5.11
45	1.02	1.40	1.76	1.85	2.36	2.63	3.12	3.68	4.33
50	0.86	1.08	1.32	1.59	1.89	2.03	2.65	3.12	3.66
55	-	0.92	1.12	1.35	1.60	1.90	2.05	2.63	3.08
60	-	+	0.94		1.84	1.59	1.87	2.03	2.58
υσ	-	0.77	0.94	1.13	1.34	1.59	1.87	2.20	2.58

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

Cooling capacity	7 131	W
Power input	3 218	W
Current consumption	5.95	Α
Mass flow	220	kg/h
C.O.P.	2.22	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

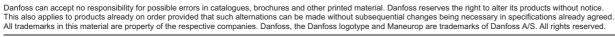
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

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

Sound power data

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







Maneurop reciprocating compressor. MTZ050-4

Performance data at 50 Hz, EN 12900 rating conditions

R407A

Cond. temp. in	Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	
Cooling capacity		T	Т	1		1		1	ı	
30	2 034	3 051	4 323	5 885	7 770	10 012	12 645	15 705	19 223	
35	1 724	2 673	3 859	5 316	7 078	9 179	11 653	14 535	17 858	
40	1 424	2 302	3 400	4 750	6 387	8 346	10 659	13 362	16 488	
45	1 138	1 944	2 951	4 193	5 704	7 518	9 668	12 190	15 117	
50	-	1 603	2 518	3 650	5 032	6 699	8 685	11 024	13 749	
55	-	-	2 105	3 125	4 377	5 895	7 714	9 868	12 390	
60	-	-	-	2 622	3 742	5 110	6 760	8 727	11 045	
Power input in W	v									
30	1 478	1 757	2 016	2 249	2 455	2 628	2 766	2 864	2 919	
35	1 454	1 761	2 049	2 314	2 554	2 764	2 940	3 079	3 177	
40	1 416	1 751	2 071	2 370	2 646	2 894	3 110	3 292	3 435	
45	1 362	1 729	2 082	2 417	2 730	3 018	3 278	3 504	3 694	
50	-	1 695	2 083	2 455	2 808	3 138	3 441	3 714	3 953	
55	-	-	2 072	2 484	2 879	3 252	3 602	3 923	4 212	
60	-	-	-	2 504	2 942	3 362	3 759	4 130	4 472	
			•			•			•	
Current consum	ption in A									
30	3.90	4.21	4.51	4.79	5.04	5.27	5.45	5.58	5.65	
35	3.92	4.23	4.54	4.85	5.13	5.39	5.62	5.80	5.93	
40	3.93	4.26	4.59	4.92	5.24	5.54	5.81	6.05	6.25	
45	3.92	4.27	4.62	4.99	5.35	5.70	6.03	6.33	6.60	
50	-	4.26	4.65	5.05	5.45	5.86	6.25	6.62	6.96	
55	-	-	4.64	5.09	5.55	6.01	6.47	6.91	7.34	
60	-	-	-	5.10	5.61	6.14	6.67	7.20	7.71	
Mass flow in kg/	h									
30	48	71	99	132	172	217	270	331	399	
35	43	66	93	126	164	209	261	321	389	
40	38	60	87	119	156	203	252	311	378	
45	32	54	80	111	148	191	242	299	365	
50	-	48	73	103	139	182	231	288	352	
55	_	-	66	95	130	172	220	275	339	
60	_	-	-	87	121	161	208	262	324	
		1	1	<u> </u>		1	1 -00			
Coefficient of pe	rformance (C.C).P.)								
30	1.38	1.74	2.14	2.62	3.17	3.81	4.57	5.48	6.59	
35	1.19	1.52	1.88	2.30	2.77	3.32	3.96	4.72	5.62	
40	1.01	1.31	1.64	2.00	2.41	2.88	3.43	4.06	4.80	
45	0.83	1.12	1.42	1.73	2.09	2.49	2.95	3.48	4.09	
50	-	0.95	1.21	1.49	1.79	2.13	2.52	2.97	3.48	
55	-	-	1.02	1.26	1.52	1.81	2.14	2.52	2.94	
	_	-	-	1.05	1.27	1.52	1.80	2.11	2.47	

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

Cooling capacity	5 704	W
Power input	2 730	W
Current consumption	5.35	Α
Mass flow	148	kg/h
C.O.P.	2.09	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

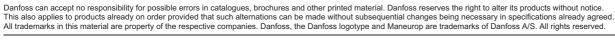
Rating conditions : Superheat = 10 K , Subcooling = 0 K

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(q)	

Sound power data

Sound power level	82	dB(A)
With accoustic hood	75	dB(A)







Maneurop reciprocating compressor. MTZ050-4

Performance data at 50 Hz, ARI rating conditions

R407A

Cond. temp. in		Т	T		ting temperature		Т	T	1
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	/ in W								
30	2 200	3 295	4 662	6 338	8 357	10 755	13 568	16 832	20 580
35	1 876	2 903	4 184	5 756	7 653	9 911	12 566	15 654	19 210
40	1 560	2 517	3 711	5 176	6 949	9 065	11 561	14 472	17 833
45	1 257	2 143	3 246	4 603	6 250	8 223	10 557	13 289	16 455
50	-	1 784	2 796	4 043	5 562	7 389	9 561	12 113	15 083
55	-	-	2 364	3 500	4 889	6 570	8 578	10 950	13 722
60	-	-	-	2 980	4 239	5 772	7 616	9 807	12 382
Power input in V	V								
30	1 478	1 757	2 016	2 249	2 455	2 628	2 766	2 864	2 919
35	1 454	1 761	2 049	2 314	2 554	2 764	2 940	3 079	3 177
40	1 416	1 751	2 071	2 370	2 646	2 894	3 110	3 292	3 435
45	1 362	1 729	2 082	2 417	2 730	3 018	3 278	3 504	3 694
50	-	1 695	2 083	2 455	2 808	3 138	3 441	3 714	3 953
55	-	-	2 072	2 484	2 879	3 252	3 602	3 923	4 212
60	-	-	-	2 504	2 942	3 362	3 759	4 130	4 472
Current consum	ption in A								
30	3.90	4.21	4.51	4.79	5.04	5.27	5.45	5.58	5.65
35	3.92	4.23	4.54	4.85	5.13	5.39	5.62	5.80	5.93
40	3.93	4.26	4.59	4.92	5.24	5.54	5.81	6.05	6.25
45	3.92	4.27	4.62	4.99	5.35	5.70	6.03	6.33	6.60
50	-	4.26	4.65	5.05	5.45	5.86	6.25	6.62	6.96
55	-	-	4.64	5.09	5.55	6.01	6.47	6.91	7.34
60	-	-	-	5.10	5.61	6.14	6.67	7.20	7.71
Mass flow in kg/	h								
30	48	71	99	132	171	216	269	329	397
35	43	65	93	125	163	208	260	319	387
40	38	60	86	118	156	200	250	309	375
45	32	54	80	111	147	190	240	298	363
50	-	47	73	103	139	181	230	286	350
55	-	-	65	95	130	171	218	274	337
60	-	-	-	86	120	160	207	261	322
Coefficient of pe	rformance (C.C	D.P.)							
30	1.49	1.87	2.31	2.82	3.40	4.09	4.91	5.88	7.05
35	1.29	1.65	2.04	2.49	3.00	3.59	4.27	5.08	6.05
40	1.10	1.44	1.79	2.18	2.63	3.13	3.72	4.40	5.19
45	0.92	1.24	1.56	1.90	2.29	2.72	3.22	3.79	4.45
50	-	1.05	1.34	1.65	1.98	2.35	2.78	3.26	3.82
	_	-	1.14	1.41	1.70	2.02	2.38	2.79	3.26
55	-								

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

Cooling capacity	6 250	W
Power input	2 730	W
Current consumption	5.35	Α
Mass flow	147	kg/h
C.O.P.	2.29	

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	82	dB(A)
With accoustic hood	75	dB(A)

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ050-4

Performance data at 50 Hz, EN 12900 rating conditions

R407F

Cond. temp. in		T	T		ting temperature		Т	T	1
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	in W								
30	-	3 314	4 741	6 497	8 621	11 156	14 141	17 618	21 627
35	-	2 826	4 113	5 698	7 622	9 926	12 650	15 835	19 523
40	-	2 423	3 592	5 029	6 774	8 869	11 354	14 271	17 659
45	-	2 087	3 160	4 471	6 060	7 969	10 238	12 908	16 019
50	-	-	2 799	4 006	5 462	7 207	9 282	11 728	14 585
55	-	-	-	3 618	4 963	6 566	8 470	10 714	13 339
60	-	-	-	-	-	-	-	-	-
Power input in W	,								
30	-	1 862	2 132	2 375	2 586	2 760	2 892	2 979	3 015
35	-	1 863	2 164	2 440	2 687	2 901	3 076	3 209	3 294
40	-	1 867	2 197	2 506	2 788	3 041	3 258	3 435	3 568
45	-	1 880	2 239	2 579	2 896	3 186	3 444	3 666	3 846
50	-	-	2 297	2 668	3 019	3 346	3 644	3 909	4 136
55	-	-	-	2 781	3 165	3 528	3 865	4 172	4 444
60	-	-	-	-	-	-	-	-	-
Current consum	otion in A	<u></u>							
30	-	4.21	4.53	4.84	5.12	5.35	5.53	5.63	5.64
35	-	4.29	4.62	4.95	5.26	5.53	5.75	5.92	6.01
40	-	4.33	4.68	5.03	5.38	5.70	5.98	6.21	6.38
45	-	4.35	4.72	5.11	5.50	5.87	6.22	6.52	6.77
50	-	-	4.76	5.19	5.63	6.06	6.48	6.87	7.21
55	-	-	-	5.30	5.79	6.29	6.79	7.26	7.70
60	-	-	-	-	-	-	-		-
Mass flow in kg/l	1								
30	-	68	97	130	170	217	272	335	407
35	-	61	88	120	158	202	254	314	383
40	-	55	81	111	147	190	239	297	363
45	-	50	75	104	139	180	227	282	346
50	-	-	70	99	132	172	218	271	332
55	-	-	-	95	128	167	211	263	322
60	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.0	D.P.)							
30	-	1.78	2.22	2.74	3.33	4.04	4.89	5.91	7.17
35	-	1.52	1.90	2.34	2.84	3.42	4.11	4.94	5.93
40	-	1.30	1.64	2.01	2.43	2.92	3.49	4.15	4.95
45	-	1.11	1.41	1.73	2.09	2.50	2.97	3.52	4.16
50	-	-	1.22	1.50	1.81	2.15	2.55	3.00	3.53
55	_	-	-	1.30	1.57	1.86	2.19	2.57	3.00
		+	1	+	+ <u>-</u> -	+	+	·	+

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

Cooling capacity	6 060	W
Power input	2 896	W
Current consumption	5.50	Α
Mass flow	139	kg/h
C.O.P.	2.09	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

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

Sound power data

Sound power level	82	dB(A)
With accoustic hood	75	dB(A)

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ050-4

Performance data at 50 Hz, ARI rating conditions

R407F

Cond. temp. in		_	ı		ting temperature				1
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
cooling capacity	ı in W								
30	-	3 551	5 076	6 949	9 213	11 910	15 083	18 776	23 029
35	-	3 043	4 424	6 122	8 180	10 641	13 548	16 944	20 872
40	-	2 623	3 884	5 431	7 307	9 555	12 220	15 342	18 967
45	-	2 273	3 438	4 857	6 575	8 635	11 080	13 954	17 299
50	-	-	3 068	4 385	5 969	7 865	10 115	12 764	15 854
55	-	-	-	3 997	5 473	7 229	9 310	11 759	14 620
60	-	-	-	-	-	-	-	-	-
Power input in V	ı								
30	-	1 862	2 132	2 375	2 586	2 760	2 892	2 979	3 015
35	-	1 863	2 164	2 440	2 687	2 901	3 076	3 209	3 294
40	-	1 867	2 197	2 506	2 788	3 041	3 258	3 435	3 568
45	-	1 880	2 239	2 579	2 896	3 186	3 444	3 666	3 846
50	-	-	2 297	2 668	3 019	3 346	3 644	3 909	4 136
55	-	-	-	2 781	3 165	3 528	3 865	4 172	4 444
60	-	-	-	-	-	-	-	-	-
Current consum	ption in A								
30	-	4.21	4.53	4.84	5.12	5.35	5.53	5.63	5.64
35	-	4.29	4.62	4.95	5.26	5.53	5.75	5.92	6.01
40	-	4.33	4.68	5.03	5.38	5.70	5.98	6.21	6.38
45	-	4.35	4.72	5.11	5.50	5.87	6.22	6.52	6.77
50	-	-	4.76	5.19	5.63	6.06	6.48	6.87	7.21
55	-	-	-	5.30	5.79	6.29	6.79	7.26	7.70
60	-	-	-	-	-	-	-	-	-
Mass flow in kg/	h								
30	-	68	96	130	169	216	270	333	404
35	-	61	87	119	157	201	253	312	381
40	-	55	80	110	146	189	238	295	360
45	-	50	74	103	138	179	226	281	343
50	-	-	70	98	132	171	217	269	330
55	-	-	-	95	127	166	210	261	320
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	rformance (C.	O.P.)				•			
30	-	1.91	2.38	2.93	3.56	4.32	5.21	6.30	7.64
35	-	1.63	2.04	2.51	3.04	3.67	4.40	5.28	6.34
40	-	1.41	1.77	2.17	2.62	3.14	3.75	4.47	5.32
45	-	1.21	1.54	1.88	2.27	2.71	3.22	3.81	4.50
	_	-	1.34	1.64	1.98	2.35	2.78	3.27	3.83
50				1		1	1	1	
50 55	_	_	-	1.44	1.73	2.05	2.41	2.82	3.29

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

Cooling capacity	6 575	W
Power input	2 896	W
Current consumption	5.50	Α
Mass flow	138	kg/h
C.O.P.	2.27	

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	82	dB(A)
With accoustic hood	75	dB(A)

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ050-4

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
Cooling capacity		0.477	4.400	5.500	7,000	0.000	44.074	44.000	40.000
35	1 487	2 177	4 183	5 583	7 303	9 386	11 871	14 803	18 222
40	1 266	1 910	3 758	5 046	6 633	8 561	10 870	13 604	16 804
45	1 056	1 660	3 364	4 548	6 010	7 790	9 931	12 475	15 463
50	850	1 421	2 997	4 084	5 427	7 068	9 047	11 408	14 192
55	-	-	2 649	3 647	4 880	6 388	8 213	10 399	12 986
60	-	-	-	3 232	4 361	5 744	7 423	9 441	11 838
65	-	-	-	-	3 865	5 131	6 671	8 528	10 743
75	-	-	-	-	-	-	5 255	6 813	8 686
Power input in V	v								
35	1 096	1 333	1 712	1 857	1 973	2 062	2 125	2 163	2 176
40	1 058	1 324	1 760	1 931	2 072	2 185	2 271	2 329	2 363
45	1 001	1 302	1 801	2 002	2 173	2 313	2 425	2 509	2 566
50	923	1 261	1 832	2 067	2 270	2 442	2 583	2 696	2 780
55	-	-	1 848	2 120	2 360	2 566	2 742	2 887	3 002
60	-	-	-	2 158	2 437	2 683	2 895	3 077	3 227
65	-	-	-	-	2 498	2 786	3 040	3 261	3 451
75	-	-	-	-	-	-	3 285	3 597	3 875
Current consum	ption in A			T	•			T	T
35	3.17	3.53	4.08	4.28	4.44	4.56	4.65	4.72	4.77
40	3.27	3.66	4.24	4.46	4.62	4.75	4.85	4.91	4.95
45	3.25	3.67	4.32	4.56	4.75	4.90	5.01	5.09	5.14
50	3.12	3.59	4.33	4.61	4.84	5.02	5.16	5.27	5.34
55	-	-	4.30	4.63	4.91	5.14	5.32	5.46	5.57
60	-	-	-	4.63	4.97	5.26	5.50	5.69	5.85
65	-	-	-	-	5.04	5.40	5.71	5.97	6.20
75	-	-	-	-	-	-	6.33	6.76	7.15
Mass flow in kg/	h								
35	38	54	100	130	166	209	260	319	387
40	34	50	94	123	158	200	249	307	373
	30	46	89	117	151	192	239	295	359
45 50	26	40	84	111	145	184	239	284	347
55	-	-	79	106	138	176	230	274	335
60	<u>-</u>	-	-	100	132	169	213	265	324
65	-	-	-	-	126	162	205	256	314
75	<u> </u>	_	_	-	120	- 102	191	239	295
75	<u> </u>				-		191	239	293
Coefficient of pe	•	1							
35	1.36	1.63	2.44	3.01	3.70	4.55	5.59	6.84	8.37
40	1.20	1.44	2.14	2.61	3.20	3.92	4.79	5.84	7.11
45	1.05	1.28	1.87	2.27	2.77	3.37	4.10	4.97	6.03
50	0.92	1.13	1.64	1.98	2.39	2.89	3.50	4.23	5.10
55	-	-	1.43	1.72	2.07	2.49	3.00	3.60	4.33
60	-	-	-	1.50	1.79	2.14	2.56	3.07	3.67
65	-	-	-	-	1.55	1.84	2.19	2.61	3.11
75	-	-	-	-	-	-	1.60	1.89	2.24

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

-,			
Cooling capacity	7 068	W	
Power input	2 442	W	
Current consumption	5.02	Α	
Mass flow	184	kg/h	
C.O.P.	2.89		

to: Evaporating temperature at dew point

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

Pressure switch settings

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

Sound power data

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

Tolerance according EN12900



tc: Condensing temperature at dew point



Maneurop reciprocating compressor. MTZ050-4

Performance data at 50 Hz, ARI rating conditions

R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
			•	•					
Cooling capacity	/ in W								
35	1 616	2 362	4 523	6 027	7 872	10 101	12 758	15 887	19 530
40	1 385	2 084	4 084	5 475	7 184	9 257	11 736	14 665	18 088
45	1 162	1 823	3 678	4 963	6 545	8 468	10 777	13 515	16 725
50	-	1 573	3 299	4 486	5 949	7 730	9 876	12 430	15 436
55	-	-	2 941	4 038	5 388	7 037	9 028	11 406	14 214
60	-	-	-	3 611	4 858	6 382	8 226	10 436	13 056
65	-	-	-	-	-	5 759	7 466	9 517	11 957
75	-	-	-	-	-	-	6 047	7 808	9 918
Power input in V			1	T		1			
35	1 096	1 333	1 712	1 857	1 973	2 062	2 125	2 163	2 176
40	1 058	1 324	1 760	1 931	2 072	2 185	2 271	2 329	2 363
45	1 001	1 302	1 801	2 002	2 173	2 313	2 425	2 509	2 566
50	-	1 261	1 832	2 067	2 270	2 442	2 583	2 696	2 780
55	-	-	1 848	2 120	2 360	2 566	2 742	2 887	3 002
60	-	-	-	2 158	2 437	2 683	2 895	3 077	3 227
65	-	-	-	-	-	2 786	3 040	3 261	3 451
75	-	-	-	-	-	-	3 285	3 597	3 875
Current concur	ntion in A								
Current consum 35	3.17	3.53	4.08	4.28	4.44	4.56	4.65	4.72	4.77
40	3.17	3.66	4.00	4.46	4.62	4.75	4.85	4.72	4.77
45	3.25	3.67	4.24	4.40	4.02	4.73	5.01	5.09	5.14
50	-	3.59	4.33	4.61	4.73	5.02	5.16	5.09	5.14
55		-	4.30	4.63	4.91	5.14	5.32	5.46	5.57
60						5.14	5.50		5.85
	-	-	-	4.63	4.97	<u> </u>	5.71	5.69 5.97	6.20
65 75	<u>-</u>	-	-	-	_	5.40	6.33	6.76	7.15
73			1	<u> </u>	<u> </u>		0.55	0.70	7.13
Mass flow in kg/	h								
35	37	54	99	129	165	208	258	317	385
40	34	50	94	123	158	199	248	305	371
45	30	46	88	117	151	191	238	293	357
50	-	42	83	111	144	183	229	283	345
55	-	-	78	105	137	175	220	273	333
60	-	-	-	100	131	168	212	263	322
65	-	_	-	-	-	161	204	254	312
75	-	-	-	_	-	-	190	237	293
-		•	1		1	1		1	
Coefficient of pe	rformance (C.C	D.P.)							
35	1.47	1.77	2.64	3.25	3.99	4.90	6.00	7.35	8.97
40	1.31	1.57	2.32	2.84	3.47	4.24	5.17	6.30	7.66
45	1.16	1.40	2.04	2.48	3.01	3.66	4.44	5.39	6.52
50	-	1.25	1.80	2.17	2.62	3.17	3.82	4.61	5.55
55	-	-	1.59	1.90	2.28	2.74	3.29	3.95	4.73
60	-	-	-	1.67	1.99	2.38	2.84	3.39	4.05
65	-	-	-	-	-	2.07	2.46	2.92	3.46
75	-	_	-	-	-	-	1.84	2.17	2.56

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

recinitial perioritianee at to	0,	U-1		
Cooling capacity		7 957	W	
Power input		2 631	W	
Current consumption		5.20	Α	
Mass flow		195	kg/h	
C.O.P.		3.02		

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. MTZ050-4

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		
L				<u> </u>		1	<u> </u>	I.	I.
Cooling capacity	y in W								
35	4 843	6 491	8 474	10 833	13 612	16 855	20 605	-	-
40	4 348	5 896	7 749	9 951	12 545	15 573	19 079	-	-
45	3 848	5 298	7 025	9 071	11 480	14 296	17 561	-	-
50	-	4 699	6 300	8 193	10 420	13 025	16 051	-	-
55	-	-	5 577	7 318	9 365	11 761	14 550	-	-
60	-	-	-	6 448	8 316	10 505	13 058	-	-
65	-	-	-	5 583	7 275	9 259	11 578	-	-
Power input in V		_	1	T	_	1	T		T
35	2 241	2 484	2 684	2 849	2 985	3 098	3 194	-	-
40	2 307	2 601	2 844	3 045	3 208	3 342	3 451	-	-
45	2 344	2 699	2 997	3 244	3 447	3 612	3 746	-	-
50	-	2 765	3 128	3 433	3 687	3 895	4 065	-	-
55	-	-	3 225	3 599	3 915	4 178	4 394	-	-
60	-	-	-	3 728	4 116	4 445	4 720	-	-
65	-	-	-	3 804	4 278	4 684	5 029	-	-
Current consum	ntion in A								
35	4.71	4.98	5.23	5.46	5.67	5.87	6.05	_	I -
40	4.78	5.11	5.40	5.67	5.90	6.11	6.30	_	_
45	4.83	5.23	5.59	5.91	6.19	6.43	6.64	_	_
50	-	5.33	5.77	6.16	6.50	6.79	7.04	_	_
55	_	-	5.91	6.39	6.81	7.18	7.49	_	_
60	-	_	-	6.58	7.10	7.56	7.95	_	_
65	_	_	_	6.69	7.34	7.90	8.39	_	_
00			<u> </u>	0.00	1.01	1.00	0.00		<u> </u>
Mass flow in kg/	h								
35	105	139	178	224	277	338	408	-	-
40	99	132	171	216	268	327	396	-	-
45	93	125	163	207	258	316	382	-	-
50	-	118	155	198	247	304	369	-	-
55	-	-	146	188	236	291	354	-	-
60	-	-	-	177	224	278	339	-	-
65	-	-	-	166	212	264	324	-	-
Coefficient of pe	erformance (C.C).P.)							
35	2.16	2.61	3.16	3.80	4.56	5.44	6.45	-	-
40	1.88	2.27	2.72	3.27	3.91	4.66	5.53	-	-
45	1.64	1.96	2.34	2.80	3.33	3.96	4.69	-	-
50	-	1.70	2.01	2.39	2.83	3.34	3.95	-	-
55	-	-	1.73	2.03	2.39	2.82	3.31	-	-
60	-	-	-	1.73	2.02	2.36	2.77	-	-
65	-	-	-	1.47	1.70	1.98	2.30	-	-

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

Cooling capacity	10 420	W
Power input	3 687	W
Current consumption	6.50	Α
Mass flow	247	kg/h
C.O.P.	2.83	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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



Pressure switch settings

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

Sound power data

Sound power level	84	dB(A)
With accoustic hood	77	dB(A)

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ050-4

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		
<u> </u>		.1	l			1	.1		l
Cooling capacity	/ in W					_			
35	5 213	6 979	9 099	11 619	14 584	18 040	22 030	-	-
40	4 705	6 372	8 364	10 727	13 506	16 747	20 496	-	-
45	4 192	5 762	7 628	9 835	12 431	15 460	18 968	-	-
50	-	5 147	6 890	8 945	11 359	14 178	17 448	-	-
55	-	-	6 152	8 057	10 292	12 904	15 938	-	-
60	-	-	-	7 172	9 231	11 638	14 440	-	-
65	-	-	-	6 291	8 178	10 384	12 958	-	-
Power input in W	,								
35	2 241	2 484	2 684	2 849	2 985	3 098	3 194	_	_
40	2 307	2 601	2 844	3 045	3 208	3 342	3 451	_	_
45	2 344	2 699	2 997	3 244	3 447	3 612	3 746	_	_
50	-	2 765	3 128	3 433	3 687	3 895	4 065	_	_
55	_	-	3 225	3 599	3 915	4 178	4 394	_	_
60	-	_	-	3 728	4 116	4 445	4 720	_	_
65	_	_	_	3 804	4 278	4 684	5 029	_	_
00		1	l	0 001	1270	1001	0 020		
Current consum	ption in A								
35	4.71	4.98	5.23	5.46	5.67	5.87	6.05	-	-
40	4.78	5.11	5.40	5.67	5.90	6.11	6.30	-	-
45	4.83	5.23	5.59	5.91	6.19	6.43	6.64		-
50	-	5.33	5.77	6.16	6.50	6.79	7.04		-
55	-	-	5.91	6.39	6.81	7.18	7.49	-	-
60	-	-	-	6.58	7.10	7.56	7.95	-	-
65	-	-	-	6.69	7.34	7.90	8.39	-	-
Mass flow in kg/		120	177	222	275	226	406	I	l
35 40	105 99	138 132	177 170	223 214	275 266	336 325	406 393	-	-
40	99	125	162	206	256	314	380	-	-
50	- 92	117	154	197	246	302	366	-	-
55	-	-	145	187	235	290	352	-	-
60	<u>-</u>	-	-	176	223	276	337	-	-
65		-	-	165	211	263	322	-	-
00	-			100	211	200	ULL	_	_
Coefficient of pe	rformance (C.C).P.)							
35	2.33	2.81	3.39	4.08	4.89	5.82	6.90		-
40	2.04	2.45	2.94	3.52	4.21	5.01	5.94	-	-
45	1.79	2.13	2.55	3.03	3.61	4.28	5.06	-	-
50	-	1.86	2.20	2.61	3.08	3.64	4.29	-	-
55	-	-	1.91	2.24	2.63	3.09	3.63	-	-
	-	-	-	1.92	2.24	2.62	3.06	-	-
60									

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

Cooling capacity	11 531	W
Power input	4 007	W
Current consumption	6.94	Α
Mass flow	260	kg/h
C.O.P.	2.88	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

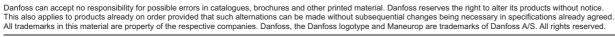
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings

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







Maneurop reciprocating compressor. MTZ050-4

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

R448A

Cond. temp. in		1	1	Evapora	ting temperature	in °C (to)		•	1
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
cooling capacity i	n W								
10	-	4 003	5 457	7 283	9 525	-	-	-	-
20	-	3 549	4 880	6 541	8 571	11 014	13 916	-	-
30	-	3 029	4 232	5 720	7 534	9 713	12 300	15 342	18 894
40	-	-	3 523	4 834	6 424	8 334	10 602	13 272	16 390
50	-	-	-	3 892	5 255	6 891	8 835	11 127	13 808
60	-	-	-	-	4 035	5 393	7 012	8 924	11 164
Power input in W									
10	-	1 400	1 500	1 549	1 538	-	-	-	-
20	-	1 603	1 785	1 927	2 019	2 051	2 014	-	-
30	-	1 742	2 004	2 235	2 428	2 570	2 654	2 668	2 604
40	-	-	2 143	2 461	2 750	3 000	3 201	3 344	3 419
50	-	-	-	2 590	2 973	3 327	3 643	3 911	4 121
60	-	-	-	-	3 083	3 538	3 966	4 356	4 698
Current consump				T	T		T	T	1
10	-	3.49	3.68	3.81	3.87	-	-	-	-
20	-	3.97	4.18	4.36	4.49	4.54	4.50	-	-
30	-	4.26	4.51	4.75	4.96	5.11	5.20	5.19	5.07
40	-	-	4.69	4.99	5.29	5.56	5.78	5.93	6.00
50	-	-	-	5.11	5.51	5.90	6.27	6.59	6.85
60	-	-	-	-	5.64	6.17	6.69	7.19	7.66
/lass flow in kg/h									
10	-	67	91	121	158	-	-	-	-
20	-	63	86	116	153	197	252	-	-
30	-	58	81	110	145	189	241	305	381
40	-	-	74	102	136	178	228	290	364
50	-	-	-	91	124	164	213	271	342
60	-	-	-	-	109	147	193	249	317
coefficient of perf	ormance (C.0	O.P.)	_		_	_			
10	-	2.86	3.64	4.70	6.19	-	-	-	-
20	-	2.21	2.73	3.39	4.24	5.37	6.91	-	-
30	-	1.74	2.11	2.56	3.10	3.78	4.63	5.75	7.26
40	-	-	1.64	1.96	2.34	2.78	3.31	3.97	4.79
50	-	-	-	1.50	1.77	2.07	2.43	2.85	3.35
	_	_	_	_	1.31	1.52	1.77	2.05	2.38

Nominal pe	rformance	at to =	-10 °C,	tc = 45 °	С

Cooling capacity	5 847	W
Power input	2 874	W
Current consumption	5.41	Α
Mass flow	130	kg/h
C.O.P.	2.03	

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





Maneurop reciprocating compressor. MTZ050-4

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

R448A

C(tc)	Cond. temp. in				Evapora	ating temperature	in °C (to)			
10	°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
10										
20	Cooling capacity	in W	•		•					
30	10	2 892	4 022	5 487	7 328	9 586	-	-	-	-
40	20	2 485	3 526	4 860	6 527	8 569	11 027	13 942	-	-
So	30	2 022	2 968	4 164	5 651	7 471	9 664	12 271	15 334	18 894
Power input in W 10	40	1 518	2 362	3 414	4 715	6 306	8 227	10 521	13 228	16 390
Power input in W 10	50	-	1 723	2 625	3 733	5 089	6 733	8 707	11 052	13 808
10	60	-	-	1 810	2 719	3 833	5 194	6 842	8 818	11 164
10	Power input in V	ı								
20	· 1		1 400	1 500	1 549	1 538	_	-	_	_
30								1	+	
40					1		+	1	2 668	2 604
Solution Continue of the Color C								+		-
Current consumption in A Current consumption in A 10 3.26 3.49 3.68 3.81 3.87			1					1		
Current consumption in A 10		-	1	•		•	+			1
10 3.26 3.49 3.68 3.81 3.87	.				•	1			-1	
20	Current consum	ption in A								
30	10	3.26	3.49	3.68	3.81	3.87	-	-	-	-
40 4.15 4.40 4.69 4.99 5.29 5.56 5.78 5.93 6.00 50 - 4.40 4.74 5.11 5.51 5.90 6.27 6.59 6.85 60 - - 4.68 5.14 5.64 6.17 6.69 7.19 7.66 Mass flow in kg/h 10 57 77 103 135 174 - - - - - 20 52 73 99 130 167 212 265 - - - 30 46 67 92 123 159 203 254 313 381 40 39 59 84 114 149 191 240 297 364 50 - 49 73 102 136 176 224 279 342 60 - - 59 87 120 <td>20</td> <td>3.74</td> <td>3.97</td> <td>4.18</td> <td>4.36</td> <td>4.49</td> <td>4.54</td> <td>4.50</td> <td>-</td> <td>-</td>	20	3.74	3.97	4.18	4.36	4.49	4.54	4.50	-	-
50 - 4.40 4.74 5.11 5.51 5.90 6.27 6.59 6.85 60 - - 4.68 5.14 5.64 6.17 6.69 7.19 7.66 Mass flow in kg/h 10 57 77 103 135 174 - - - - - 20 52 73 99 130 167 212 265 - - - 30 46 67 92 123 159 203 254 313 381 40 39 59 84 114 149 191 240 297 364 50 - 49 73 102 136 176 224 279 342 60 - - 59 87 120 158 204 256 317 Coefficient of performance (C.O.P.) 10 2.30	30	4.03	4.26	4.51	4.75	4.96	5.11	5.20	5.19	5.07
Mass flow in kg/h	40	4.15	4.40	4.69	4.99	5.29	5.56	5.78	5.93	6.00
Mass flow in kg/h 10	50	-	4.40	4.74	5.11	5.51	5.90	6.27	6.59	6.85
10 57 77 103 135 174 -	60	-	-	4.68	5.14	5.64	6.17	6.69	7.19	7.66
10 57 77 103 135 174 -	Maran Marin Indian									
20 52 73 99 130 167 212 265 - - 30 46 67 92 123 159 203 254 313 381 40 39 59 84 114 149 191 240 297 364 50 - 49 73 102 136 176 224 279 342 60 - - 59 87 120 158 204 256 317 Coefficient of performance (C.O.P.) 10 2.30 2.87 3.66 4.73 6.23 - - - - - - 20 1.79 2.20 2.72 3.39 4.24 5.38 6.92 - - - 30 1.38 1.70 2.08 2.53 3.08 3.76 4.62 5.75 7.26 40 1.04 1.31 1.59 <td>1</td> <td></td> <td>77</td> <td>102</td> <td>125</td> <td>174</td> <td></td> <td></td> <td></td> <td></td>	1		77	102	125	174				
30					1		+	+		
40 39 59 84 114 149 191 240 297 364 50 - 49 73 102 136 176 224 279 342 60 - - 59 87 120 158 204 256 317 Coefficient of performance (C.O.P.) 10 2.30 2.87 3.66 4.73 6.23 - <t< td=""><td>-</td><td></td><td>1</td><td></td><td>-</td><td></td><td>+</td><td></td><td></td><td></td></t<>	-		1		-		+			
50 - 49 73 102 136 176 224 279 342 60 - - 59 87 120 158 204 256 317 Coefficient of performance (C.O.P.) 10 2.30 2.87 3.66 4.73 6.23 -			1					1	+	
60 - - 59 87 120 158 204 256 317 Coefficient of performance (C.O.P.) 10 2.30 2.87 3.66 4.73 6.23 -					1			+	+	-
Coefficient of performance (C.O.P.) 10 2.30 2.87 3.66 4.73 6.23 - - - - - 20 1.79 2.20 2.72 3.39 4.24 5.38 6.92 - - 30 1.38 1.70 2.08 2.53 3.08 3.76 4.62 5.75 7.26 40 1.04 1.31 1.59 1.92 2.29 2.74 3.29 3.96 4.79 50 - 0.97 1.20 1.44 1.71 2.02 2.39 2.83 3.35					1				+	-
10 2.30 2.87 3.66 4.73 6.23 -	60	-	-	59	07	120	150	204	250	317
20 1.79 2.20 2.72 3.39 4.24 5.38 6.92 - - - 30 1.38 1.70 2.08 2.53 3.08 3.76 4.62 5.75 7.26 40 1.04 1.31 1.59 1.92 2.29 2.74 3.29 3.96 4.79 50 - 0.97 1.20 1.44 1.71 2.02 2.39 2.83 3.35	Coefficient of pe	rformance (C.C	D.P.)							
30 1.38 1.70 2.08 2.53 3.08 3.76 4.62 5.75 7.26 40 1.04 1.31 1.59 1.92 2.29 2.74 3.29 3.96 4.79 50 - 0.97 1.20 1.44 1.71 2.02 2.39 2.83 3.35	10	2.30	2.87	3.66	4.73	6.23	-	-		-
40 1.04 1.31 1.59 1.92 2.29 2.74 3.29 3.96 4.79 50 - 0.97 1.20 1.44 1.71 2.02 2.39 2.83 3.35	20	1.79	2.20	2.72	3.39	4.24	5.38	6.92	-	-
40 1.04 1.31 1.59 1.92 2.29 2.74 3.29 3.96 4.79 50 - 0.97 1.20 1.44 1.71 2.02 2.39 2.83 3.35	30	1.38	1.70	2.08	2.53	3.08	3.76	4.62	5.75	7.26
50 100 100 100 100 100 100	40	1.04	1.31	1.59		2.29	2.74	3.29	3.96	4.79
	50	-	0.97	1.20	1.44	1.71	2.02	2.39	2.83	3.35
		-								
				•	•	•	•	•		•
Nominal performance at to = -10 °C, tc = 45 °C Pressure switch settings	60	-	-				1.47	1.73		

C.O.F.			

Cooling capacity

Current consumption

Power input

Mass flow

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

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

5 703

2 874

5.41

143 1.98 W

W

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

Sound power data

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





Maneurop reciprocating compressor. MTZ050-4

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

R449A

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	
Cooling capacity	in W									
10	-	4 010	5 465	7 292	9 534	-	-	-	-	
20	-	3 557	4 889	6 550	8 581	11 023	13 923	-	-	
30	-	3 037	4 241	5 730	7 544	9 722	12 308	15 347	18 894	
40	-	-	3 532	4 844	6 435	8 344	10 610	13 277	16 390	
50	-	-	-	3 902	5 266	6 901	8 844	11 133	13 808	
60	-	-	-	-	4 046	5 403	7 020	8 929	11 164	
Power input in W										
10	-	1 400	1 500	1 549	1 538	-	-	-	-	
20	-	1 603	1 785	1 927	2 019	2 051	2 014	-	-	
30	-	1 742	2 004	2 235	2 428	2 570	2 654	2 668	2 604	
40	-	-	2 143	2 461	2 750	3 000	3 201	3 344	3 419	
50	-	-	-	2 590	2 973	3 327	3 643	3 911	4 121	
60	_	-	-	-	3 083	3 538	3 966	4 356	4 698	
Current consump	otion in A	3.49	3.68	3.81	3.87	-	_	1	_	
						+	+	-		
30	-	3.97 4.26	4.18	4.36	4.49 4.96	4.54	4.50 5.20	5.19	5.07	
40	-	4.20	4.51 4.69	4.75 4.99	5.29	5.11 5.56	5.20	5.19	6.00	
50	-	-	4.09	5.11	5.29	5.90	6.27	6.59	6.85	
60		-	_	5.11	5.64	6.17	6.69	7.19	7.66	
00				-	5.04	0.17	0.09	7.19	7.00	
Mass flow in kg/h	1	_				_				
10	-	68	93	124	163	-	-	-	-	
20	-	64	88	119	156	202	257	-	-	
30	-	59	83	112	148	193	246	310	388	
40	-	-	75	104	139	181	233	295	370	
50	-	-	-	93	127	168	217	277	349	
60	-	-	-	-	112	151	198	255	325	
Coefficient of per	formance (C.C	D.P.)								
10	-	2.86	3.64	4.71	6.20	-	-	-	-	
20	-	2.22	2.74	3.40	4.25	5.37	6.91	-	-	
30	-	1.74	2.12	2.56	3.11	3.78	4.64	5.75	7.26	
40	-	-	1.65	1.97	2.34	2.78	3.31	3.97	4.79	
40		1	1		4	0.07	2.43	2.85	2.25	
50	-	-	-	1.51	1.77	2.07	2.43	2.85	3.35	

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

Cooling capacity	5 857	W
Power input	2 874	W
Current consumption	5.41	Α
Mass flow	133	kg/h
C.O.P.	2.04	

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





Maneurop reciprocating compressor. MTZ050-4

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	2 892	4 022	5 487	7 328	9 586	-	-	-	-	
20	2 485	3 526	4 860	6 527	8 569	11 027	13 942	-	-	
30	2 022	2 968	4 164	5 651	7 471	9 664	12 271	15 334	18 894	
40	1 518	2 362	3 414	4 715	6 306	8 227	10 521	13 228	16 390	
50	-	1 723	2 625	3 733	5 089	6 733	8 707	11 052	13 808	
60	-	-	1 810	2 719	3 833	5 194	6 842	8 818	11 164	
Power input in V	v									
10	1 259	1 400	1 500	1 549	1 538	-	_	_	_	
20	1 390	1 603	1 785	1 927	2 019	2 051	2 014	-	-	
30	1 460	1 742	2 004	2 235	2 428	2 570	2 654	2 668	2 604	
40	1 458	1 805	2 143	2 461	2 750	3 000	3 201	3 344	3 419	
50	-	1 779	2 189	2 590	2 973	3 327	3 643	3 911	4 121	
60	-	-	2 129	2 610	3 083	3 538	3 966	4 356	4 698	
1					•	1	•	•		
Current consum	ption in A									
10	3.26	3.49	3.68	3.81	3.87	-	-	-	-	
20	3.74	3.97	4.18	4.36	4.49	4.54	4.50	-	-	
30	4.03	4.26	4.51	4.75	4.96	5.11	5.20	5.19	5.07	
40	4.15	4.40	4.69	4.99	5.29	5.56	5.78	5.93	6.00	
50	-	4.40	4.74	5.11	5.51	5.90	6.27	6.59	6.85	
60	-	-	4.68	5.14	5.64	6.17	6.69	7.19	7.66	
Maaa flaw in ka	h									
Mass flow in kg/ 10	57	79	106	139	179	_	_	T -	_	
20	52	74	101	133	171	217	270	_		
30	47	68	94	126	163	207	259	319	388	
40	40	61	86	116	152	195	245	303	370	
50	-	50	75	104	139	180	229	285	349	
60		-	61	89	122	162	208	262	325	
••		1	1 01	1 00	122	102	200	202	020	
Coefficient of pe	erformance (C.C	D.P.)								
10	2.30	2.87	3.66	4.73	6.23	-	-	-	-	
20	1.79	2.20	2.72	3.39	4.24	5.38	6.92	-	-	
30	1.38	1.70	2.08	2.53	3.08	3.76	4.62	5.75	7.26	
40	1.04	1.31	1.59	1.92	2.29	2.74	3.29	3.96	4.79	
50	-	0.97	1.20	1.44	1.71	2.02	2.39	2.83	3.35	
60	-	-	0.85	1.04	1.24	1.47	1.73	2.02	2.38	
	t	0 °C, tc = 45 °C				Pressure switch	eattinge			

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

5 703

2 874

5.41

146

1.98

W

W

kg/h

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

Sound power data

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





Maneurop reciprocating compressor. MTZ050-4

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	-	4 726	6 221	8 072	10 314	-	-	-	-	
20	-	4 260	5 664	7 381	9 442	11 879	14 729	-	-	
30	-	3 677	4 966	6 523	8 379	10 563	13 109	16 052	19 437	
40	-	3 000	4 150	5 523	7 148	9 055	11 272	13 832	16 769	
50	-	-	3 237	4 403	5 775	7 381	9 246	11 399	13 865	
60	-	-	-	3 184	4 282	5 566	7 060	8 783	10 755	
Power input in W										
10	-	1 911	2 110	2 291	2 455	-	-	-	-	
20	-	1 957	2 182	2 383	2 560	2 716	2 853	-	-	
30	-	2 032	2 308	2 552	2 767	2 954	3 115	3 253	3 369	
40	-	2 088	2 438	2 750	3 026	3 268	3 478	3 658	3 810	
50	-	-	2 521	2 925	3 287	3 608	3 891	4 137	4 348	
60	-	-	-	3 027	3 499	3 924	4 303	4 640	4 935	
Current consump	otion in A								1	
10	-	3.89	4.31	4.71	5.12	-	-	-	-	
20	-	4.21	4.54	4.84	5.14	5.44	5.76	-	-	
30	-	4.49	4.80	5.07	5.33	5.58	5.83	6.10	6.40	
40	-	4.65	5.00	5.31	5.60	5.86	6.12	6.39	6.67	
50	-	-	5.08	5.50	5.87	6.22	6.55	6.88	7.22	
60	-	-	-	5.54	6.08	6.58	7.05	7.51	7.97	
Mass flow in kg/h	1									
10	-	97	128	167	214	-	-	-	-	
20	-	95	126	165	212	268	336	-	-	
30	-	89	121	160	207	262	329	409	503	
40	-	81	113	151	197	251	317	394	487	
50	-	-	100	137	182	235	298	373	463	
60	-	-	-	118	161	212	273	345	432	
Coefficient of per	formance (C.0	D.P.)								
10	-	2.47	2.95	3.52	4.20	-	-	-	-	
20	-	2.18	2.60	3.10	3.69	4.37	5.16	-	-	
30	-	1.81	2.15	2.56	3.03	3.58	4.21	4.93	5.77	
40	-	1.44	1.70	2.01	2.36	2.77	3.24	3.78	4.40	
				1.51	1.76	2.05	2.38	2.76	3.19	
50	-	-	1.28	1.51						

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

Cooling capacity	6 478	W
Power input	3 160	W
Current consumption	5.74	Α
Mass flow	190	kg/h
C.O.P.	2.05	

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





Maneurop reciprocating compressor. MTZ050-4

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	3 440	4 600	6 091	7 947	10 205	-	-	-	-
20	2 977	4 077	5 466	7 179	9 251	11 719	14 616	-	-
30	2 432	3 445	4 706	6 249	8 110	10 324	12 926	15 953	19 437
40	1 832	2 733	3 839	5 186	6 809	8 744	11 025	13 689	16 769
50	1 208	1 970	2 895	4 019	5 378	7 007	8 941	11 215	13 865
60	-	1 185	1 903	2 778	3 847	5 144	6 704	8 563	10 755
Power input in V	v								
10	1 691	1 911	2 110	2 291	2 455	-	_	_	_
20	1 704	1 957	2 182	2 383	2 560	2 716	2 853	-	-
30	1 723	2 032	2 308	2 552	2 767	2 954	3 115	3 253	3 369
40	1 697	2 088	2 438	2 750	3 026	3 268	3 478	3 658	3 810
50	1 576	2 072	2 521	2 925	3 287	3 608	3 891	4 137	4 348
60	-	1 934	2 506	3 027	3 499	3 924	4 303	4 640	4 935
Current consum	ption in A								
10	3.46	3.89	4.31	4.71	5.12	-	-	-	-
20	3.86	4.21	4.54	4.84	5.14	5.44	5.76	-	-
30	4.15	4.49	4.80	5.07	5.33	5.58	5.83	6.10	6.40
40	4.25	4.65	5.00	5.31	5.60	5.86	6.12	6.39	6.67
50	4.09	4.62	5.08	5.50	5.87	6.22	6.55	6.88	7.22
60	-	4.30	4.95	5.54	6.08	6.58	7.05	7.51	7.97
Mass flow in kg	h								
10	86	113	147	187	235	_	_	_	_
20	82	110	144	185	233	289	354	_	_
30	75	104	139	179	227	283	347	420	503
40	65	94	129	169	216	271	334	405	487
50	51	80	114	154	200	253	314	384	463
60	-	62	95	133	177	229	288	355	432
					1				
Coefficient of pe	erformance (C.C).P.)	_	_	1			1	1
10	2.04	2.41	2.89	3.47	4.16	-	-	-	-
20	1.75	2.08	2.50	3.01	3.61	4.31	5.12	-	-
30	1.41	1.69	2.04	2.45	2.93	3.49	4.15	4.90	5.77
40	1.08	1.31	1.57	1.89	2.25	2.68	3.17	3.74	4.40
50	0.77	0.95	1.15	1.37	1.64	1.94	2.30	2.71	3.19
60	-	0.61	0.76	0.92	1.10	1.31	1.56	1.85	2.18
Nominal perforn	nance at to = -1	0 °C, tc = 45 °C			_	Pressure switch	settings		

Cooling capacity

Current consumption

Power input

Mass flow

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

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

6 108

3 160

5.74

209 1.93 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

Courie potro: data		
Sound power level	83	dB(A)
With accoustic hood	76	dB(A)





Maneurop reciprocating compressor. MTZ050-4

Performance data at 60 Hz, EN 12900 rating conditions

R407C

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
		•	•		•				l .
Cooling capacit	ty in W								
35	5 911	7 805	10 106	12 876	16 175	20 065	24 607	-	-
40	5 400	7 186	9 345	11 938	15 025	18 668	22 928	-	-
45	4 873	6 550	8 567	10 983	13 860	17 256	21 234	-	-
50	-	5 900	7 775	10 015	12 680	15 831	19 528	-	-
55	-	-	6 970	9 034	11 489	14 394	17 809	-	-
60	-	-	-	8 043	10 286	12 945	16 078	-	-
65	-	-	-	7 041	9 073	11 484	14 334	-	-
Power input in	w								
35	2 727	3 004	3 238	3 430	3 583	3 699	3 779	-	-
40	2 842	3 173	3 456	3 693	3 885	4 036	4 147	-	-
45	2 923	3 316	3 657	3 947	4 188	4 383	4 534	-	-
50	-	3 425	3 832	4 184	4 483	4 731	4 930	-	-
55	-	-	3 973	4 396	4 762	5 072	5 328	-	-
60	-	-	-	4 574	5 015	5 396	5 718	-	-
65	-	-	-	4 709	5 235	5 695	6 093	-	-
Current consur	nption in A								
35	4.51	4.82	5.12	5.39	5.61	5.78	5.89	-	-
40	4.64	5.00	5.33	5.64	5.89	6.09	6.22	-	-
45	4.75	5.17	5.56	5.92	6.23	6.47	6.63	-	-
50	-	5.31	5.78	6.21	6.58	6.88	7.10	-	-
55	-	-	5.97	6.48	6.93	7.31	7.61	-	-
60	-	-	-	6.71	7.26	7.73	8.12	-	-
65	-	-	-	6.87	7.54	8.12	8.61	-	-
Mass flow in kg	<u>ı/h</u>								
35	128	167	212	266	329	403	488	-	-
40	123	161	206	259	321	392	475	-	-
45	117	155	199	251	311	382	463	-	-
50	-	148	191	242	301	370	449	-	-
55	-	-	183	232	290	357	434	-	-
60	-	-	-	221	278	343	418	-	-
65	-	-	-	209	264	328	401	-	-
Coefficient of p	erformance (C.O	.P.)	•		•		,		1
35	2.17	2.60	3.12	3.75	4.51	5.42	6.51	-	-
40	1.90	2.26	2.70	3.23	3.87	4.63	5.53	-	-
45	1.67	1.98	2.34	2.78	3.31	3.94	4.68	-	-
50	-	1.72	2.03	2.39	2.83	3.35	3.96	-	-
55	-	-	1.75	2.05	2.41	2.84	3.34	-	-
60	-	-	-	1.76	2.05	2.40	2.81	-	-
65	_	_	_	1.50	1.73	2.02	2.35	_	_

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

Cooling capacity	12 680	W
Power input	4 483	W
Current consumption	6.58	Α
Mass flow	301	kg/h
C.O.P.	2.83	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

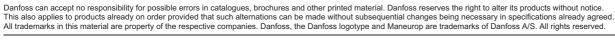
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

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

Sound power data

Sound power level	87	dB(A)
With accoustic hood	80	dB(A)







Maneurop reciprocating compressor. MTZ050-4

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	6 363	8 391	10 852	13 810	17 330	21 475	26 309	-	-
40	5 845	7 766	10 086	12 868	16 177	20 076	24 630	-	-
45	5 307	7 123	9 302	11 909	15 008	18 662	22 936	-	-
50	-	6 463	8 502	10 935	13 824	17 233	21 228	-	-
55	-	-	7 688	9 946	12 626	15 793	19 509	-	-
60	-	-	-	8 946	11 418	14 341	17 780	-	-
65	-	-	-	7 935	10 199	12 880	16 042	-	-
Power input in V		1	T	_	T	1		T	T
35	2 727	3 004	3 238	3 430	3 583	3 699	3 779	-	-
40	2 842	3 173	3 456	3 693	3 885	4 036	4 147	-	-
45	2 923	3 316	3 657	3 947	4 188	4 383	4 534	-	-
50	-	3 425	3 832	4 184	4 483	4 731	4 930	-	-
55	-	-	3 973	4 396	4 762	5 072	5 328	-	-
60	-	-	-	4 574	5 015	5 396	5 718	-	-
65	-	-	-	4 709	5 235	5 695	6 093	-	-
_									
Current consum								I	I
35	4.51	4.82	5.12	5.39	5.61	5.78	5.89	-	-
40	4.64	5.00	5.33	5.64	5.89	6.09	6.22	-	-
45	4.75	5.17	5.56	5.92	6.23	6.47	6.63	-	-
50	-	5.31	5.78	6.21	6.58	6.88	7.10	-	-
55	-	-	5.97	6.48	6.93	7.31	7.61	-	-
60	-	-	-	6.71	7.26	7.73	8.12	-	-
65	-	-	-	6.87	7.54	8.12	8.61	-	-
Mass flow in kg/		100	044	205	207	100	405	I	I
35	128	166	211	265	327	400	485	-	-
40	123	160	205	257	319	390	473	-	-
45	117	154	198	249	309	379	460	-	-
50	-	147	190	241	299	367	446	-	-
55	-	-	182	231	288	355	431	-	-
60	-	-	-	220	276	341	416	-	-
65	-	-	-	208	263	326	399	-	-
Coofficient of	rformana (C O	, D)							
Coefficient of pe		1	2.25	4.00	4.04	F 04	0.00	I	I
35	2.33	2.79	3.35	4.03	4.84	5.81	6.96	-	-
40	2.06	2.45	2.92	3.48	4.16	4.97	5.94	-	-
45	1.82	2.15	2.54	3.02	3.58	4.26	5.06	-	-
50	-	1.89	2.22	2.61	3.08	3.64	4.31	-	-
55	-	-	1.94	2.26	2.65	3.11	3.66	-	-
60	-	-	-	1.96	2.28	2.66	3.11	-	-
65	-	-	-	1.68	1.95	2.26	2.63	-	-

Nominal performance at to = 7.2 °C, tc = 54.	t °C
--	------

Cooling capacity	14 112	W
Power input	4 869	W
Current consumption	7.06	Α
Mass flow	318	kg/h
C.O.P.	2.90	

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

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ050-4

Performance data at 60 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
		•			•				•
Cooling capacity	y in W		·	·		1			1
35	1 784	2 612	5 020	6 700	8 764	11 263	14 246	17 764	21 866
40	1 520	2 292	4 509	6 055	7 960	10 273	13 044	16 325	20 165
45	1 267	1 992	4 037	5 458	7 212	9 348	11 917	14 970	18 555
50	1 020	1 706	3 596	4 901	6 513	8 481	10 857	13 690	17 030
55	-	-	3 179	4 377	5 856	7 665	9 856	12 479	15 583
60	-	-	-	3 879	5 233	6 893	8 908	11 329	14 205
65	-	-	-	-	4 638	6 157	8 005	10 233	12 891
75	-	-	-	-	-	-	6 306	8 175	10 423
Dower innut in \	A.								
Power input in \ 35	1 316	1 599	2 054	2 228	2 368	2 475	2 550	2 595	2 612
	1 269	1 589	2 112	2 317		2 622	2 725	2 795	2 835
40			+	1	2 487	+	ł	ł	
45	1 202	1 562	2 161	2 403	2 607	2 776	2 910	3 010	3 079
50 55	1 108	1 513	2 198	2 481	2 724	2 930	3 100	3 235	3 336
55	-	-	2 217	2 544	2 831	3 080	3 290	3 464	3 603
60	-	-	-	2 589	2 924	3 219	3 474	3 692	3 873
65 75	-	-	-	-	2 998	3 343	3 648	3 914	4 141
75	-	-	-	-	-	-	3 942	4 317	4 650
Current consum	nption in A								
35	3.31	3.68	4.26	4.47	4.63	4.76	4.85	4.92	4.97
40	3.41	3.81	4.42	4.64	4.82	4.95	5.05	5.12	5.16
45	3.38	3.82	4.50	4.75	4.95	5.11	5.22	5.30	5.36
50	3.24	3.74	4.51	4.80	5.04	5.23	5.38	5.49	5.56
55	-	_	4.47	4.82	5.11	5.35	5.54	5.69	5.80
60	-	_	-	4.82	5.17	5.47	5.72	5.93	6.09
65	-	_	-	-	5.25	5.62	5.94	6.22	6.45
75	-	-	-	-	-	-	6.58	7.03	7.43
			•	•			•	•	
Mass flow in kg	/h	•	T	T	•	•	•	•	1
35	45	65	120	156	199	251	312	383	465
40	41	60	113	148	190	240	299	368	447
45	36	55	107	141	182	230	287	354	431
50	31	50	101	134	173	221	276	341	416
55	-	-	95	127	166	212	266	329	402
60	-	-	-	120	158	203	256	317	389
65	-	-	-	-	151	195	246	307	376
75	-	-	-	-	-	-	229	286	353
Coefficient of pe	erformance (C.O).P.)							
35	1.36	1.63	2.44	3.01	3.70	4.55	5.59	6.84	8.37
40	1.20	1.44	2.14	2.61	3.20	3.92	4.79	5.84	7.11
45	1.05	1.28	1.87	2.27	2.77	3.37	4.10	4.97	6.03
50	0.92	1.13	1.64	1.98	2.39	2.89	3.50	4.23	5.10
55	-	-	1.43	1.72	2.07	2.49	3.00	3.60	4.33
60	-	-	-	1.50	1.79	2.14	2.56	3.07	3.67
65	-	-	-	-	1.55	1.84	2.19	2.61	3.11
75	-	-	-	-	-	-	1.60	1.89	2.24

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

tronnia porto manos at to c, to	•• •		
Cooling capacity	8 481	W	
Power input	2 930	W	
Current consumption	5.23	Α	
Mass flow	221	kg/h	
C.O.P.	2.89		

to: Evaporating temperature at dew point

Pressure switch settings

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

Sound power data

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

Tolerance according EN12900



tc: Condensing temperature at dew point

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



Maneurop reciprocating compressor. MTZ050-4

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
				•		•			
Cooling capacity	y in W		1	·		1		1	1
35	1 939	2 834	5 428	7 233	9 446	12 121	15 310	19 064	23 436
40	1 662	2 500	4 901	6 570	8 621	11 108	14 083	17 598	21 705
45	1 395	2 187	4 414	5 956	7 854	10 162	12 932	16 217	20 070
50	-	1 887	3 959	5 383	7 138	9 277	11 852	14 916	18 523
55	-	-	3 529	4 845	6 466	8 444	10 834	13 687	17 057
60	-	-	-	4 333	5 830	7 658	9 871	12 524	15 668
65	-	-	-	-	-	6 911	8 959	11 420	14 348
75	-	-	-	-	-	-	7 256	9 370	11 901
Power input in V	v								
35	1 316	1 599	2 054	2 228	2 368	2 475	2 550	2 595	2 612
40	1 269	1 589	2 112	2 317	2 487	2 622	2 725	2 795	2 835
45	1 202	1 562	2 161	2 403	2 607	2 776	2 725	3 010	3 079
50	1 202	1 502	2 198	2 403	2 724	2 930	3 100	3 235	3 336
55	<u> </u>	1 513	2 198	2 544	2 724	3 080	3 290	3 464	3 603
60	<u> </u>	-	-	2 544	2 924	3 219	3 474	3 692	3 873
65	-	-	-	2 509	- 2 924	3 343	3 648	3 914	4 141
75	<u> </u>	-		-	-	3 343	3 942	4 317	4 650
10	_	1		1	1 -	<u> </u>	J 37-2	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	T 4 000
Current consum	ption in A								
35	3.31	3.68	4.26	4.47	4.63	4.76	4.85	4.92	4.97
40	3.41	3.81	4.42	4.64	4.82	4.95	5.05	5.12	5.16
45	3.38	3.82	4.50	4.75	4.95	5.11	5.22	5.30	5.36
50	-	3.74	4.51	4.80	5.04	5.23	5.38	5.49	5.56
55	-	-	4.47	4.82	5.11	5.35	5.54	5.69	5.80
60	-	-	-	4.82	5.17	5.47	5.72	5.93	6.09
65	-	-	-	-	-	5.62	5.94	6.22	6.45
75	-	-	-	-	-	-	6.58	7.03	7.43
Mass flow in kg/	h	,	1		,	1	,	1	1
35	45	65	119	155	198	250	310	381	462
40	41	60	112	147	189	239	297	366	445
45	36	55	106	140	181	229	286	352	429
50	-	50	100	133	172	219	275	339	414
55	-	-	94	126	165	210	264	327	400
60	-	-	-	120	157	202	254	316	387
65	-	-	-	-	-	194	245	305	374
75	-] -	-	-	_	-	227	285	351
Coefficient of pe	erformance (C.C).P.)							
35	1.47	1.77	2.64	3.25	3.99	4.90	6.00	7.35	8.97
40	1.31	1.57	2.32	2.84	3.47	4.24	5.17	6.30	7.66
45	1.16	1.40	2.04	2.48	3.01	3.66	4.44	5.39	6.52
50	-	1.25	1.80	2.17	2.62	3.17	3.82	4.61	5.55
55	-	-	1.59	1.90	2.28	2.74	3.29	3.95	4.73
60	-	-	-	1.67	1.99	2.38	2.84	3.39	4.05
65	-	-	-	-	-	2.07	2.46	2.92	3.46
75	-	_	-	-	_	-	1.84	2.17	2.56

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

monimum portormando at to	0,	U-1		
Cooling capacity		9 548	W	
Power input		3 157	W	
Current consumption		5.42	Α	
Mass flow		234	kg/h	
C.O.P.		3.02		

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. MTZ050-4

Performance data at 60 Hz, EN 12900 rating conditions

R404A

Cond. temp. in	Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10		
									<u> </u>		
Cooling capacity		4 747	0.000	0.007	40.407	10.105	40.407	40.744	00.700		
30	3 431	4 747	6 336	8 237	10 487 9 646	13 125	16 187	19 711	23 736		
35 40	2 952 2 463	4 205 3 641	5 714 5 055	7 514 6 742	8 741	12 144 11 088	15 049 13 822	18 396 16 980	22 225 20 599		
45	1 975	3 064	4 370	5 931	7 785	9 967	12 517	15 471	18 869		
50	1 497	2 485	3 671	5 092	6 786	8 791	11 144	13 882	17 044		
55	-	1 913	2 966	4 235	5 757	7 571	9 714	12 223	15 135		
60		1 361	2 267	3 370	4 707	6 317	8 236	10 503	13 153		
00	-	1 301	2 201	3370	4 707	0317	6 230	10 303	13 133		
Power input in V	1										
30	2 427	2 761	3 050	3 297	3 501	3 664	3 788	3 874	3 922		
35	2 423	2 811	3 153	3 451	3 705	3 917	4 087	4 218	4 310		
40	2 379	2 828	3 228	3 583	3 893	4 158	4 382	4 564	4 705		
45	2 289	2 803	3 268	3 685	4 056	4 382	4 663	4 902	5 099		
50	2 144	2 729	3 264	3 750	4 188	4 579	4 924	5 225	5 483		
55	-	2 598	3 209	3 768	4 279	4 741	5 156	5 526	5 850		
60	-	2 402	3 094	3 733	4 322	4 861	5 351	5 795	6 192		
Current consum	ption in A										
30	4.19	4.54	4.88	5.19	5.47	5.71	5.93	6.10	6.23		
35	4.21	4.62	5.00	5.36	5.68	5.96	6.21	6.41	6.57		
40	4.18	4.66	5.10	5.52	5.89	6.23	6.52	6.76	6.95		
45	4.08	4.64	5.16	5.65	6.09	6.49	6.84	7.14	7.38		
50	3.90	4.55	5.17	5.74	6.26	6.73	7.16	7.52	7.83		
55	-	4.38	5.10	5.77	6.39	6.95	7.46	7.91	8.29		
60	-	4.11	4.94	5.72	6.45	7.12	7.73	8.27	8.75		
Mass flow in kg/	h										
30	108	146	190	241	299	366	441	527	623		
35	100	139	184	235	294	361	437	523	620		
40	91	130	175	227	286	353	430	516	613		
45	80	119	165	217	276	344	420	507	604		
50	67	107	153	205	264	332	408	495	593		
55	-	93	138	190	250	317	394	481	578		
60	-	77	122	174	233	300	377	463	561		
Coefficient of pe	rformanaa (C O	, D.)									
30	1.41	1.72	2.08	2.50	3.00	3.58	4.27	5.09	6.05		
35	1.22	1.50	1.81	2.18	2.60	3.10	3.68	4.36	5.16		
40	1.04	1.29	1.57	1.88	2.25	2.67	3.15	3.72	4.38		
45	0.86	1.09	1.34	1.61	1.92	2.27	2.68	3.16	3.70		
50	0.70	0.91	1.12	1.36	1.62	1.92	2.26	2.66	3.11		
00	-	0.74	0.92	1.12	1.35	1.60	1.88	2.21	2.59		
55											

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

Cooling capacity	7 785	W
Power input	4 056	W
Current consumption	6.09	Α
Mass flow	276	kg/h
C.O.P.	1.92	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

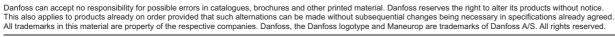
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

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

Sound power data

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







Maneurop reciprocating compressor. MTZ050-4

Performance data at 60 Hz, ARI rating conditions

R404A

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
•		•		•	•	1	•	1	•
cooling capacity			1	1		1	1	T	
30	3 820	5 269	7 016	9 099	11 558	14 433	17 763	21 588	25 947
35	3 322	4 717	6 389	8 379	10 727	13 472	16 654	20 313	24 489
40	2 808	4 135	5 721	7 605	9 828	12 431	15 453	18 934	22 914
45	2 289	3 535	5 021	6 787	8 873	11 322	14 172	17 463	21 237
50	1 773	2 926	4 300	5 935	7 874	10 157	12 824	15 916	19 474
55	-	2 319	3 569	5 063	6 843	8 951	11 426	14 311	17 646
60	-	1 721	2 838	4 183	5 797	7 723	10 003	12 678	15 789
Power input in W	V								
30	2 427	2 761	3 050	3 297	3 501	3 664	3 788	3 874	3 922
35	2 423	2 811	3 153	3 451	3 705	3 917	4 087	4 218	4 310
40	2 379	2 828	3 228	3 583	3 893	4 158	4 382	4 564	4 705
45	2 289	2 803	3 268	3 685	4 056	4 382	4 663	4 902	5 099
50	2 144	2 729	3 264	3 750	4 188	4 579	4 924	5 225	5 483
55	-	2 598	3 209	3 768	4 279	4 741	5 156	5 526	5 850
60	-	2 402	3 094	3 733	4 322	4 861	5 351	5 795	6 192
Current consum	ption in A								
30	4.19	4.54	4.88	5.19	5.47	5.71	5.93	6.10	6.23
35	4.21	4.62	5.00	5.36	5.68	5.96	6.21	6.41	6.57
40	4.18	4.66	5.10	5.52	5.89	6.23	6.52	6.76	6.95
45	4.08	4.64	5.16	5.65	6.09	6.49	6.84	7.14	7.38
50	3.90	4.55	5.17	5.74	6.26	6.73	7.16	7.52	7.83
55	-	4.38	5.10	5.77	6.39	6.95	7.46	7.91	8.29
60	-	4.11	4.94	5.72	6.45	7.12	7.73	8.27	8.75
Mass flow in kg/	h								
30	107	146	189	240	298	363	438	523	619
35	99	138	183	234	292	358	434	519	615
40	90	129	174	225	284	351	427	513	609
45	79	119	164	215	274	342	418	504	600
50	67	106	152	203	262	330	406	492	589
55	-	92	138	189	248	315	392	478	574
60	-	77	121	173	232	299	375	460	557
Coefficient of	ufarmana (C.C								
30	1.57	1.91	2.30	2.76	3.30	3.94	4.69	5.57	6.62
35	1.37	1.68	2.03	2.76	2.90	3.44	4.09	4.82	5.68
40	1.18	1.46	1.77	2.43	2.52	2.99	3.53	4.02	4.87
40	1.18	1.46	1.77	1.84	2.52	2.99	3.53	3.56	4.87
		1			ł	+			-
50	0.83	1.07 0.89	1.32	1.58 1.34	1.88	2.22 1.89	2.60	3.05 2.59	3.55 3.02
55	-	+	1.11		1.60	+	2.22		1
60	-	0.72	0.92	1.12	1.34	1.59	1.87	2.19	2.55

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

Cooling capacity	8 873	W
Power input	4 056	W
Current consumption	6.09	Α
Mass flow	274	kg/h
C.O.P.	2.19	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

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

Sound power data

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

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ050-4

Performance data at 60 Hz, EN 12900 rating conditions

R407A

Cond. temp. in		Г			ting temperature			_	
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	y in W								
30	2 441	3 661	5 188	7 062	9 324	12 014	15 175	18 845	23 068
35	2 069	3 207	4 630	6 379	8 493	11 015	13 984	17 442	21 430
40	1 708	2 763	4 080	5 700	7 665	10 015	12 791	16 034	19 785
45	1 365	2 333	3 542	5 032	6 845	9 021	11 602	14 628	18 140
50	-	1 924	3 022	4 380	6 039	8 039	10 422	13 228	16 499
55	-	-	2 526	3 750	5 252	7 074	9 257	11 841	14 868
60	-	-	-	3 147	4 490	6 132	8 112	10 473	13 254
Power input in V	v								
30	1 774	2 109	2 419	2 699	2 946	3 154	3 319	3 437	3 503
35	1 745	2 113	2 458	2 777	3 065	3 316	3 528	3 695	3 813
40	1 699	2 102	2 485	2 844	3 175	3 472	3 732	3 951	4 123
45	1 635	2 075	2 499	2 900	3 276	3 622	3 933	4 205	4 433
50	-	2 033	2 499	2 946	3 370	3 766	4 130	4 457	4 744
55	-	-	2 487	2 981	3 454	3 903	4 322	4 708	5 055
60	-	-	-	3 005	3 530	4 034	4 511	4 956	5 366
Current consum	ption in A								
30	4.07	4.39	4.70	4.99	5.26	5.49	5.68	5.82	5.89
35	4.09	4.41	4.74	5.06	5.35	5.62	5.86	6.05	6.18
40	4.10	4.44	4.78	5.13	5.46	5.78	6.06	6.31	6.52
45	4.09	4.45	4.82	5.20	5.58	5.94	6.29	6.60	6.88
50	-	4.44	4.85	5.27	5.69	6.11	6.52	6.91	7.26
55	-	-	4.84	5.31	5.79	6.27	6.75	7.21	7.66
60	-	-	-	5.32	5.86	6.41	6.96	7.51	8.05
Mass flow in kg/	'h								
30	58	86	119	159	206	261	324	397	479
35	52	79	112	151	197	251	314	385	467
40	45	72	104	142	188	241	302	373	453
45	39	65	96	133	178	230	290	359	438
50	-	57	87	124	167	218	277	345	423
55	-	-	79	114	156	206	264	330	406
60	-	-	-	104	145	193	249	315	389
Coefficient of pe	erformance (C.C	D.P.)							
30	1.38	1.74	2.14	2.62	3.17	3.81	4.57	5.48	6.59
35	1.19	1.52	1.88	2.30	2.77	3.32	3.96	4.72	5.62
40	1.01	1.31	1.64	2.00	2.41	2.88	3.43	4.06	4.80
45	0.83	1.12	1.42	1.73	2.09	2.49	2.95	3.48	4.09
50	-	0.95	1.21	1.49	1.79	2.13	2.52	2.97	3.48
		-	1.02	1.26	1.52	1.81	2.14	2.52	2.94
55	-	-	1.02	1.20		1.01		2.52	

Nominal performance at to = -10 °C, tc = 45 °C
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Cooling capacity	6 845	W
Power input	3 276	W
Current consumption	5.58	Α
Mass flow	178	kg/h
C.O.P.	2.09	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

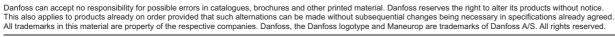
Rating conditions : Superheat = 10 K , Subcooling = 0 K

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(q)	

Sound power data

Sound power level	85	dB(A)
With accoustic hood	78	dB(A)







Maneurop reciprocating compressor. MTZ050-4

Performance data at 60 Hz, ARI rating conditions

R407A

Cond. temp. in		Г			ting temperature		ı	1	1
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	y in W								
30	2 640	3 954	5 595	7 605	10 028	12 906	16 282	20 198	24 696
35	2 251	3 484	5 021	6 907	9 183	11 893	15 079	18 785	23 052
40	1 871	3 021	4 453	6 211	8 338	10 878	13 873	17 366	21 400
45	1 508	2 571	3 895	5 524	7 500	9 867	12 669	15 947	19 746
50	-	2 141	3 355	4 851	6 674	8 867	11 473	14 536	18 099
55	-	-	2 837	4 200	5 867	7 884	10 294	13 140	16 466
60	-	-	-	3 576	5 087	6 927	9 139	11 769	14 859
Power input in V	v								
30	1 774	2 109	2 419	2 699	2 946	3 154	3 319	3 437	3 503
35	1 745	2 113	2 458	2 777	3 065	3 316	3 528	3 695	3 813
40	1 699	2 102	2 485	2 844	3 175	3 472	3 732	3 951	4 123
45	1 635	2 075	2 499	2 900	3 276	3 622	3 933	4 205	4 433
50	-	2 033	2 499	2 946	3 370	3 766	4 130	4 457	4 744
55	-	-	2 487	2 981	3 454	3 903	4 322	4 708	5 055
60	-	-	-	3 005	3 530	4 034	4 511	4 956	5 366
Current consum	ption in A								
30	4.07	4.39	4.70	4.99	5.26	5.49	5.68	5.82	5.89
35	4.09	4.41	4.74	5.06	5.35	5.62	5.86	6.05	6.18
40	4.10	4.44	4.78	5.13	5.46	5.78	6.06	6.31	6.52
45	4.09	4.45	4.82	5.20	5.58	5.94	6.29	6.60	6.88
50	-	4.44	4.85	5.27	5.69	6.11	6.52	6.91	7.26
55	-	-	4.84	5.31	5.79	6.27	6.75	7.21	7.66
60	-	-	-	5.32	5.86	6.41	6.96	7.51	8.05
Mass flow in kg/	'h								
30	58	85	118	158	205	259	322	394	476
35	51	78	111	150	196	250	312	383	464
40	45	72	103	142	187	239	300	371	450
45	39	64	95	133	177	228	288	357	436
50	-	57	87	123	166	217	276	343	420
55	-	-	78	114	155	205	262	328	404
60	-	-	-	103	144	192	248	313	387
Coefficient of pe	erformance (C.C	D.P.)							
30	1.49	1.87	2.31	2.82	3.40	4.09	4.91	5.88	7.05
35	1.29	1.65	2.04	2.49	3.00	3.59	4.27	5.08	6.05
40	1.10	1.44	1.79	2.18	2.63	3.13	3.72	4.40	5.19
45	0.92	1.24	1.56	1.90	2.29	2.72	3.22	3.79	4.45
50	-	1.05	1.34	1.65	1.98	2.35	2.78	3.26	3.82
+	-	-	1.14	1.41	1.70	2.02	2.38	2.79	3.26
55	-								

Nominal performance at to = -10 °C, tc = 45 °C	3
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Cooling capacity	7 500	W
Power input	3 276	W
Current consumption	5.58	Α
Mass flow	177	kg/h
C.O.P.	2.29	

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	85	dB(A)
With accoustic hood	78	dB(A)

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ050-4

Performance data at 60 Hz, EN 12900 rating conditions

R407F

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity		T	T = 222			1		T	I
30	-	3 976	5 689	7 796	10 346	13 387	16 969	21 141	25 953
35	-	3 392	4 936	6 838	9 147	11 911	15 180	19 002	23 427
40	-	2 908	4 311	6 035	8 129	10 643	13 625	17 125	21 191
45	-	2 504	3 792	5 365	7 272	9 563	12 285	15 489	19 223
50	-	-	3 359	4 808	6 555	8 649	11 138	14 073	17 502
55	-	-	-	4 342	5 955	7 880	10 164	12 857	16 007
60	-	-	-	-	-	-	-	-	-
Dannar immort im W									
Power input in W	_	2 234	2 559	2 850	3 103	3 312	3 471	3 575	3 618
35		2 236	2 597	2 928	3 225	3 481	3 692	3 850	3 952
40	-	2 240	2 636	3 007	3 346	3 649	3 909	4 122	4 282
45		2 256	2 686	3 007	3 476	3 824	4 133	4 399	4 616
50	-	- 2 250	2 756	3 202	3 623	4 015	4 373	4 691	4 963
55	-	-	-	3 337	3 798	4 233	4 638	5 006	5 333
60		-	-	-	-	4 233		-	
60		-	-	-	_	-	_		-
Current consump	tion in A								
30	-	4.39	4.73	5.05	5.34	5.58	5.76	5.87	5.89
35	_	4.47	4.82	5.16	5.48	5.77	6.00	6.17	6.27
40	-	4.52	4.88	5.25	5.61	5.94	6.24	6.48	6.65
45	-	4.54	4.93	5.33	5.74	6.13	6.49	6.81	7.07
50		-	4.97	5.42	5.88	6.33	6.76	7.17	7.52
55	_	_	-	5.53	6.05	6.57	7.08	7.58	8.03
60	-	_	-	-	-	-	-	-	-
00		1	I	l	I.		I.	l	
Mass flow in kg/h									
30	-	82	116	156	204	261	327	402	489
35	-	73	105	144	189	243	305	377	460
40	-	66	96	133	176	228	287	356	435
45	-	60	89	125	166	215	273	339	415
50	-	-	84	118	159	206	262	325	399
55	-	-	-	114	154	200	254	316	387
60	-	-	-	-	-	-	-	-	-
		•	•	•	•	•	•	•	
Coefficient of per	formance (C.0	D.P.)							
30	-	1.78	2.22	2.74	3.33	4.04	4.89	5.91	7.17
35	-	1.52	1.90	2.34	2.84	3.42	4.11	4.94	5.93
40	-	1.30	1.64	2.01	2.43	2.92	3.49	4.15	4.95
45	-	1.11	1.41	1.73	2.09	2.50	2.97	3.52	4.16
50	-	-	1.22	1.50	1.81	2.15	2.55	3.00	3.53
		İ		1.30	1.57	1.86	2.19	2.57	3.00
55	-	-	-	1.30	1.57	1.00	2.19	2.51	0.00

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

Cooling capacity	7 272	W
Power input	3 476	W
Current consumption	5.74	Α
Mass flow	166	kg/h
C.O.P.	2.09	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

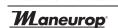
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

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

Sound power data

Sound power level	85	dB(A)
With accoustic hood	78	dB(A)





Maneurop reciprocating compressor. MTZ050-4

Performance data at 60 Hz, ARI rating conditions

R407F

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacit		1,000	0.004	0.000	44.055	14,000	40.400	00.504	07.005
30	-	4 262	6 091	8 339	11 055	14 292	18 100	22 531	27 635
35	-	3 652	5 309	7 346	9 816	12 770	16 258	20 333	25 046
40	-	3 148	4 661	6 517	8 768	11 466	14 664	18 411	22 760
45	-	2 728	4 126	5 829	7 890	10 362	13 296	16 745	20 759
50	-	-	3 682	5 262	7 163	9 438	12 138	15 316	19 025
55	-	-	-	4 797	6 567	8 675	11 172	14 111	17 544
60	-	-	-	-	-	-	-	-	-
Power input in V	N								
30	-	2 234	2 559	2 850	3 103	3 312	3 471	3 575	3 618
35	-	2 236	2 597	2 928	3 225	3 481	3 692	3 850	3 952
40	-	2 240	2 636	3 007	3 346	3 649	3 909	4 122	4 282
45	-	2 256	2 686	3 095	3 476	3 824	4 133	4 399	4 616
50	-	-	2 756	3 202	3 623	4 015	4 373	4 691	4 963
55	-	-	-	3 337	3 798	4 233	4 638	5 006	5 333
60	-	-	-	-	-	-	-	-	-
Current consum	nption in A								
30	-	4.39	4.73	5.05	5.34	5.58	5.76	5.87	5.89
35	-	4.47	4.82	5.16	5.48	5.77	6.00	6.17	6.27
40	-	4.52	4.88	5.25	5.61	5.94	6.24	6.48	6.65
45	-	4.54	4.93	5.33	5.74	6.13	6.49	6.81	7.07
50	-	-	4.97	5.42	5.88	6.33	6.76	7.17	7.52
55	-	-	-	5.53	6.05	6.57	7.08	7.58	8.03
60	-	-	-	-	-	-	-	-	-
lass flow in kg	/h								
30	-	81	115	155	203	259	325	400	485
35	-	73	105	143	188	241	303	375	457
40	-	66	96	132	175	226	285	354	432
45	-	60	89	124	165	214	271	337	412
50	-	-	84	118	158	205	260	323	396
55	-	-	-	113	153	199	252	314	384
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	erformance (C.)	O.P.)							
30	-	1.91	2.38	2.93	3.56	4.32	5.21	6.30	7.64
35	-	1.63	2.04	2.51	3.04	3.67	4.40	5.28	6.34
40	_	1.41	1.77	2.17	2.62	3.14	3.75	4.47	5.32
45		1.21	1.54	1.88	2.27	2.71	3.22	3.81	4.50
.0		-	1.34	1.64	1.98	2.35	2.78	3.27	3.83
50		_	1.07	1.04	1.50	2.00	2.70	U.L.I	3.00
50 55	_	_	_	1.44	1.73	2.05	2.41	2.82	3.29

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

Cooling capacity	7 890	W
Power input	3 476	W
Current consumption	5.74	Α
Mass flow	165	kg/h
C.O.P.	2.27	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

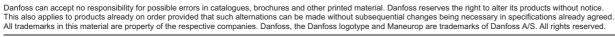
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

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	85	dB(A)
With accoustic hood	78	dB(A)







Maneurop reciprocating compressor. MTZ050-4

Performance data at 60 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-10	-5	0	5	10	15	20
		•			•				•
Cooling capacity	y in W		·	·		1			1
35	1 784	2 612	5 020	6 700	8 764	11 263	14 246	17 764	21 866
40	1 520	2 292	4 509	6 055	7 960	10 273	13 044	16 325	20 165
45	1 267	1 992	4 037	5 458	7 212	9 348	11 917	14 970	18 555
50	1 020	1 706	3 596	4 901	6 513	8 481	10 857	13 690	17 030
55	-	-	3 179	4 377	5 856	7 665	9 856	12 479	15 583
60	-	-	-	3 879	5 233	6 893	8 908	11 329	14 205
65	-	-	-	-	4 638	6 157	8 005	10 233	12 891
75	-	-	-	-	-	-	6 306	8 175	10 423
Dower innut in \	A.								
Power input in \ 35	1 316	1 599	2 054	2 228	2 368	2 475	2 550	2 595	2 612
	1 269	1 589	2 112	2 317		2 622	2 725	2 795	2 835
40			+	1	2 487	+	ł	ł	
45	1 202	1 562	2 161	2 403	2 607	2 776	2 910	3 010	3 079
50 55	1 108	1 513	2 198	2 481	2 724	2 930	3 100	3 235	3 336
55	-	-	2 217	2 544	2 831	3 080	3 290	3 464	3 603
60	-	-	-	2 589	2 924	3 219	3 474	3 692	3 873
65 75	-	-	-	-	2 998	3 343	3 648	3 914	4 141
75	-	-	-	-	-	-	3 942	4 317	4 650
Current consum	nption in A								
35	3.31	3.68	4.26	4.47	4.63	4.76	4.85	4.92	4.97
40	3.41	3.81	4.42	4.64	4.82	4.95	5.05	5.12	5.16
45	3.38	3.82	4.50	4.75	4.95	5.11	5.22	5.30	5.36
50	3.24	3.74	4.51	4.80	5.04	5.23	5.38	5.49	5.56
55	-	_	4.47	4.82	5.11	5.35	5.54	5.69	5.80
60	-	_	-	4.82	5.17	5.47	5.72	5.93	6.09
65	-	_	-	-	5.25	5.62	5.94	6.22	6.45
75	-	-	-	-	-	-	6.58	7.03	7.43
			•	•			•	•	
Mass flow in kg	/h	•	•	T	•	•	•	•	1
35	45	65	120	156	199	251	312	383	465
40	41	60	113	148	190	240	299	368	447
45	36	55	107	141	182	230	287	354	431
50	31	50	101	134	173	221	276	341	416
55	-	-	95	127	166	212	266	329	402
60	-	-	-	120	158	203	256	317	389
65	-	-	-	-	151	195	246	307	376
75	-	-	-	-	-	-	229	286	353
Coefficient of pe	erformance (C.O).P.)							
35	1.36	1.63	2.44	3.01	3.70	4.55	5.59	6.84	8.37
40	1.20	1.44	2.14	2.61	3.20	3.92	4.79	5.84	7.11
45	1.05	1.28	1.87	2.27	2.77	3.37	4.10	4.97	6.03
50	0.92	1.13	1.64	1.98	2.39	2.89	3.50	4.23	5.10
55	-	-	1.43	1.72	2.07	2.49	3.00	3.60	4.33
60	-	-	-	1.50	1.79	2.14	2.56	3.07	3.67
65	-	-	-	-	1.55	1.84	2.19	2.61	3.11
75	-	-	-	-	-	-	1.60	1.89	2.24

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

tronnia porto manos at to c, to	•• •		
Cooling capacity	8 481	W	
Power input	2 930	W	
Current consumption	5.23	Α	
Mass flow	221	kg/h	
C.O.P.	2.89		

to: Evaporating temperature at dew point

Pressure switch settings

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

Sound power data

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

Tolerance according EN12900



tc: Condensing temperature at dew point

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



Maneurop reciprocating compressor. MTZ050-4

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
				•		•			
Cooling capacity	y in W		1	·		1		1	1
35	1 939	2 834	5 428	7 233	9 446	12 121	15 310	19 064	23 436
40	1 662	2 500	4 901	6 570	8 621	11 108	14 083	17 598	21 705
45	1 395	2 187	4 414	5 956	7 854	10 162	12 932	16 217	20 070
50	-	1 887	3 959	5 383	7 138	9 277	11 852	14 916	18 523
55	-	-	3 529	4 845	6 466	8 444	10 834	13 687	17 057
60	-	-	-	4 333	5 830	7 658	9 871	12 524	15 668
65	-	-	-	-	-	6 911	8 959	11 420	14 348
75	-	-	-	-	-	-	7 256	9 370	11 901
Power input in V	v								
35	1 316	1 599	2 054	2 228	2 368	2 475	2 550	2 595	2 612
40	1 269	1 589	2 112	2 317	2 487	2 622	2 725	2 795	2 835
45	1 202	1 562	2 161	2 403	2 607	2 776	2 725	3 010	3 079
50	1 202	1 502	2 198	2 403	2 724	2 930	3 100	3 235	3 336
55	<u> </u>	1 513	2 198	2 544	2 724	3 080	3 290	3 464	3 603
60	<u> </u>	-	-	2 544	2 924	3 219	3 474	3 692	3 873
65	-	-	-	2 509	- 2 924	3 343	3 648	3 914	4 141
75	<u> </u>	-		-	-	3 343	3 942	4 317	4 650
10	_	1		1	1 -	<u> </u>	J 372	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	T 4 000
Current consum	ption in A								
35	3.31	3.68	4.26	4.47	4.63	4.76	4.85	4.92	4.97
40	3.41	3.81	4.42	4.64	4.82	4.95	5.05	5.12	5.16
45	3.38	3.82	4.50	4.75	4.95	5.11	5.22	5.30	5.36
50	-	3.74	4.51	4.80	5.04	5.23	5.38	5.49	5.56
55	-	-	4.47	4.82	5.11	5.35	5.54	5.69	5.80
60	-	-	-	4.82	5.17	5.47	5.72	5.93	6.09
65	-	-	-	-	-	5.62	5.94	6.22	6.45
75	-	-	-	-	-	-	6.58	7.03	7.43
Mass flow in kg/	h	,	1		,	1	,	1	1
35	45	65	119	155	198	250	310	381	462
40	41	60	112	147	189	239	297	366	445
45	36	55	106	140	181	229	286	352	429
50	-	50	100	133	172	219	275	339	414
55	-	-	94	126	165	210	264	327	400
60	-	-	-	120	157	202	254	316	387
65	-	-	-	-	-	194	245	305	374
75	-] -	-	-	_	-	227	285	351
Coefficient of pe	erformance (C.C).P.)							
35	1.47	1.77	2.64	3.25	3.99	4.90	6.00	7.35	8.97
40	1.31	1.57	2.32	2.84	3.47	4.24	5.17	6.30	7.66
45	1.16	1.40	2.04	2.48	3.01	3.66	4.44	5.39	6.52
50	-	1.25	1.80	2.17	2.62	3.17	3.82	4.61	5.55
55	-	-	1.59	1.90	2.28	2.74	3.29	3.95	4.73
60	-	-	-	1.67	1.99	2.38	2.84	3.39	4.05
65	-	-	-	-	-	2.07	2.46	2.92	3.46
75	-	_	-	-	_	-	1.84	2.17	2.56

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

monimum portormando at to	0,	U-1		
Cooling capacity		9 548	W	
Power input		3 157	W	
Current consumption		5.42	Α	
Mass flow		234	kg/h	
C.O.P.		3.02		

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. MTZ050-4

Performance data at 60 Hz, EN 12900 rating conditions

R407C

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
		•	•		•				l .
Cooling capacit	ty in W								
35	5 911	7 805	10 106	12 876	16 175	20 065	24 607	-	-
40	5 400	7 186	9 345	11 938	15 025	18 668	22 928	-	-
45	4 873	6 550	8 567	10 983	13 860	17 256	21 234	-	-
50	-	5 900	7 775	10 015	12 680	15 831	19 528	-	-
55	-	-	6 970	9 034	11 489	14 394	17 809	-	-
60	-	-	-	8 043	10 286	12 945	16 078	-	-
65	-	-	-	7 041	9 073	11 484	14 334	-	-
Power input in	w								
35	2 727	3 004	3 238	3 430	3 583	3 699	3 779	-	-
40	2 842	3 173	3 456	3 693	3 885	4 036	4 147	-	-
45	2 923	3 316	3 657	3 947	4 188	4 383	4 534	-	-
50	-	3 425	3 832	4 184	4 483	4 731	4 930	-	-
55	-	-	3 973	4 396	4 762	5 072	5 328	-	-
60	-	-	-	4 574	5 015	5 396	5 718	-	-
65	-	-	-	4 709	5 235	5 695	6 093	-	-
Current consur	nption in A								
35	4.51	4.82	5.12	5.39	5.61	5.78	5.89	-	-
40	4.64	5.00	5.33	5.64	5.89	6.09	6.22	-	-
45	4.75	5.17	5.56	5.92	6.23	6.47	6.63	-	-
50	-	5.31	5.78	6.21	6.58	6.88	7.10	-	-
55	-	-	5.97	6.48	6.93	7.31	7.61	-	-
60	-	-	-	6.71	7.26	7.73	8.12	-	-
65	-	-	-	6.87	7.54	8.12	8.61	-	-
Mass flow in kg	<u>ı/h</u>								
35	128	167	212	266	329	403	488	-	-
40	123	161	206	259	321	392	475	-	-
45	117	155	199	251	311	382	463	-	-
50	-	148	191	242	301	370	449	-	-
55	-	-	183	232	290	357	434	-	-
60	-	-	-	221	278	343	418	-	-
65	-	-	-	209	264	328	401	-	-
Coefficient of p	erformance (C.O	.P.)	•		•		,		1
35	2.17	2.60	3.12	3.75	4.51	5.42	6.51	-	-
40	1.90	2.26	2.70	3.23	3.87	4.63	5.53	-	-
45	1.67	1.98	2.34	2.78	3.31	3.94	4.68	-	-
50	-	1.72	2.03	2.39	2.83	3.35	3.96	-	-
55	-	-	1.75	2.05	2.41	2.84	3.34	-	-
60	-	-	-	1.76	2.05	2.40	2.81	-	-
65	_	_	_	1.50	1.73	2.02	2.35	_	_

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

Cooling capacity	12 680	W
Power input	4 483	W
Current consumption	6.58	Α
Mass flow	301	kg/h
C.O.P.	2.83	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

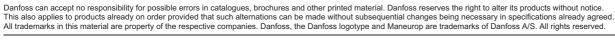
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Pressure switch settings

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

Sound power data

Sound power level	87	dB(A)
With accoustic hood	80	dB(A)







Maneurop reciprocating compressor. MTZ050-4

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	6 363	8 391	10 852	13 810	17 330	21 475	26 309	-	-
40	5 845	7 766	10 086	12 868	16 177	20 076	24 630	-	-
45	5 307	7 123	9 302	11 909	15 008	18 662	22 936	-	-
50	-	6 463	8 502	10 935	13 824	17 233	21 228	-	-
55	-	-	7 688	9 946	12 626	15 793	19 509	-	-
60	-	-	-	8 946	11 418	14 341	17 780	-	-
65	-	-	-	7 935	10 199	12 880	16 042	-	-
Power input in V		1	T	_	_	1		T	T
35	2 727	3 004	3 238	3 430	3 583	3 699	3 779	-	-
40	2 842	3 173	3 456	3 693	3 885	4 036	4 147	-	-
45	2 923	3 316	3 657	3 947	4 188	4 383	4 534	-	-
50	-	3 425	3 832	4 184	4 483	4 731	4 930	-	-
55	-	-	3 973	4 396	4 762	5 072	5 328	-	-
60	-	-	-	4 574	5 015	5 396	5 718	-	-
65	-	-	-	4 709	5 235	5 695	6 093	-	-
_									
Current consum								I	I
35	4.51	4.82	5.12	5.39	5.61	5.78	5.89	-	-
40	4.64	5.00	5.33	5.64	5.89	6.09	6.22	-	-
45	4.75	5.17	5.56	5.92	6.23	6.47	6.63	-	-
50	-	5.31	5.78	6.21	6.58	6.88	7.10	-	-
55	-	-	5.97	6.48	6.93	7.31	7.61	-	-
60	-	-	-	6.71	7.26	7.73	8.12	-	-
65	-	-	-	6.87	7.54	8.12	8.61	-	-
Mass flow in kg/		100	044	205	207	100	405	Ī	I
35	128	166	211	265	327	400	485	-	-
40	123	160	205	257	319	390	473	-	-
45	117	154	198	249	309	379	460	-	-
50	-	147	190	241	299	367	446	-	-
55	-	-	182	231	288	355	431	-	-
60	-	-	-	220	276	341	416	-	-
65	-	-	-	208	263	326	399	-	-
Coofficient of	rformana (C O	, D)							
Coefficient of pe		1	2.25	4.00	4.04	F 04	0.00	I	I
35	2.33	2.79	3.35	4.03	4.84	5.81	6.96	-	-
40	2.06	2.45	2.92	3.48	4.16	4.97	5.94	-	-
45	1.82	2.15	2.54	3.02	3.58	4.26	5.06	-	-
50	-	1.89	2.22	2.61	3.08	3.64	4.31	-	-
55	-	-	1.94	2.26	2.65	3.11	3.66	-	-
60	-	-	-	1.96	2.28	2.66	3.11	-	-
65	-	-	-	1.68	1.95	2.26	2.63	-	-

Nominal performance at to = 7.2 °C, tc = 54.	t °C
--	------

Cooling capacity	14 112	W
Power input	4 869	W
Current consumption	7.06	Α
Mass flow	318	kg/h
C.O.P.	2.90	

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

Tolerance according EN12900





Maneurop reciprocating compressor. MTZ050-4

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

R448A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	in W								
10	-	4 803	6 548	8 740	11 430	-	-	-	-
20	-	4 259	5 856	7 849	10 285	13 217	16 699		-
30	-	3 635	5 079	6 864	9 040	11 655	14 760	18 411	22 673
40	-	-	4 228	5 800	7 709	10 001	12 723	15 926	19 668
50	-	-	-	4 670	6 306	8 269	10 602	13 353	16 570
60	-	-	-	-	4 843	6 472	8 414	10 708	13 397
Power input in W									
10	-	1 680	1 800	1 859	1 845	-	-	-	-
20	-	1 923	2 142	2 313	2 423	2 462	2 417	-	-
30	-	2 091	2 404	2 683	2 913	3 084	3 185	3 202	3 125
40	-	-	2 571	2 953	3 300	3 600	3 841	4 013	4 102
50	-	-	-	3 108	3 567	3 992	4 371	4 693	4 945
60	-	-	-	-	3 700	4 246	4 759	5 227	5 638
Current consump		1 004	1 004	0.00	1 400	Γ		T	ı
10	-	3.64	3.84	3.98	4.03	-	-	-	-
20	-	4.14	4.36	4.55	4.68	4.74	4.69	-	-
30	-	4.45	4.70	4.95	5.17	5.33	5.42	5.41	5.28
40	-	-	4.89	5.20	5.51	5.80	6.03	6.19	6.25
50	-	-	-	5.33	5.75	6.15	6.54	6.88	7.15
60	-	-	-	-	5.89	6.43	6.98	7.50	7.98
Mass flow in kg/h	1								
10	-	80	109	145	190	-	-	-	-
20	-	75	104	139	183	237	302	-	-
30	-	69	97	132	174	226	290	366	458
40	-	-	88	122	163	213	274	348	436
50	-	-	-	109	149	197	255	326	411
60	-	-	-	-	131	177	232	299	381
Coefficient of per	formance (C.0	D.P.)							
10	-	2.86	3.64	4.70	6.19	-	-	-	-
20	-	2.21	2.73	3.39	4.24	5.37	6.91	-	-
30	-	1.74	2.11	2.56	3.10	3.78	4.63	5.75	7.26
	-	-	1.64	1.96	2.34	2.78	3.31	3.97	4.79
40			1						
40 50	-	-	-	1.50	1.77	2.07	2.43	2.85	3.35

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

Cooling capacity	7 016	W
Power input	3 449	W
Current consumption	5.64	Α
Mass flow	156	kg/h
C.O.P.	2.03	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

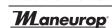
Rating conditions : Suction gas temp. = 20 $^{\circ}\text{C}$, Subcooling = 0 K

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





Maneurop reciprocating compressor. MTZ050-4

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

R448A

Cooling capacity in W	Cond. temp. in	Evaporating temperature in °C (to)								
10	°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
10										
20	Cooling capacity	in W								•
30	10	3 471	4 827	6 585	8 794	11 504	-	-	-	-
40	20	2 982	4 232	5 832	7 833	10 283	13 232	16 730	-	-
Formal F	30	2 427	3 562	4 997	6 782	8 965	11 596	14 725	18 401	22 673
Power Input In W	40	1 822	2 835	4 097	5 658	7 567	9 873	12 626	15 874	19 668
Power input in W 10	50	-	2 067	3 150	4 479	6 106	8 079	10 448	13 262	16 570
10	60	-	-	2 171	3 263	4 600	6 233	8 210	10 582	13 397
10	Power input in W	ı								
20			1 680	1 800	1 859	1 845	_	_	_	_
30								ł		-
40				+	1	1			3 202	3 125
50				+			1			4 102
Current consumption in A Current consumption in A 10				+		1		ł	ł	4 945
10 3.40 3.64 3.84 3.98 4.03		-	1						1	5 638
10 3.40 3.64 3.84 3.98 4.03	•		•	•	•	•	•	•	•	
20	Current consum	ption in A								
30	10	3.40	3.64	3.84	3.98	4.03	-	-	-	-
40 4.32 4.59 4.89 5.20 5.51 5.80 6.03 6.19 6.21 50 - 4.59 4.94 5.33 5.75 6.15 6.54 6.88 7.18 60 - - 4.89 5.36 5.89 6.43 6.98 7.50 7.99 Mass flow in kg/h 10 68 93 124 162 208 -	20	3.90	4.14	4.36	4.55	4.68	4.74	4.69	-	-
So	30	4.20	4.45	4.70	4.95	5.17	5.33	5.42	5.41	5.28
Mass flow in kg/h 10 68 93 124 162 208	40	4.32	4.59	4.89	5.20	5.51	5.80	6.03	6.19	6.25
Mass flow in kg/h 10 68 93 124 162 208 20 63 88 118 156 201 255 318 30 56 81 111 147 191 243 305 376 458 40 47 71 101 137 179 229 288 357 436 50 - 59 88 122 163 212 268 334 411 60 71 104 144 190 244 307 381 Coefficient of performance (C.O.P.) 10 2.30 2.87 3.66 4.73 6.23 20 1.79 2.20 2.72 3.39 4.24 5.38 6.92 30 1.38 1.70 2.08 2.53 3.08 3.76 4.62 5.75 7.24 40 1.04 1.31 1.59 1.92 2.29 2.74 3.29 3.96 4.75 50 - 0.97 1.20 1.44 1.71 2.02 2.39 2.83 3.35	50	-	4.59	4.94	5.33	5.75	6.15	6.54	6.88	7.15
10 68 93 124 162 208 -	60	-	-	4.89	5.36	5.89	6.43	6.98	7.50	7.98
10 68 93 124 162 208 -										
20 63 88 118 156 201 255 318 - - 30 56 81 111 147 191 243 305 376 456 40 47 71 101 137 179 229 288 357 436 50 - 59 88 122 163 212 268 334 411 60 - - 71 104 144 190 244 307 381 Coefficient of performance (C.O.P.) 10 2.30 2.87 3.66 4.73 6.23 -			1 00	101	100	1 000		1	1	
30 56 81 111 147 191 243 305 376 456 40 47 71 101 137 179 229 288 357 436 50 - 59 88 122 163 212 268 334 411 60 - 71 104 144 190 244 307 381 Coefficient of performance (C.O.P.) 10 2.30 2.87 3.66 4.73 6.23				†		1	+			
40 47 71 101 137 179 229 288 357 436 50 - 59 88 122 163 212 268 334 411 60 - - 71 104 144 190 244 307 381 Coefficient of performance (C.O.P.) 10 2.30 2.87 3.66 4.73 6.23 -				+				1		
50 - 59 88 122 163 212 268 334 411 60 - - 71 104 144 190 244 307 381 Coefficient of performance (C.O.P.) 10 2.30 2.87 3.66 4.73 6.23 -				1				ł		
60 - - 71 104 144 190 244 307 381 Coefficient of performance (C.O.P.) 10 2.30 2.87 3.66 4.73 6.23 -			1	+	1					1
Coefficient of performance (C.O.P.) 10 2.30 2.87 3.66 4.73 6.23 - <td></td> <td></td> <td></td> <td>+</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td>1</td>				+	1					1
10 2.30 2.87 3.66 4.73 6.23 - - - - 20 1.79 2.20 2.72 3.39 4.24 5.38 6.92 - - 30 1.38 1.70 2.08 2.53 3.08 3.76 4.62 5.75 7.20 40 1.04 1.31 1.59 1.92 2.29 2.74 3.29 3.96 4.79 50 - 0.97 1.20 1.44 1.71 2.02 2.39 2.83 3.39	60	-	-	/1	104	144	190	244	307	381
10 2.30 2.87 3.66 4.73 6.23 - - - - 20 1.79 2.20 2.72 3.39 4.24 5.38 6.92 - - 30 1.38 1.70 2.08 2.53 3.08 3.76 4.62 5.75 7.20 40 1.04 1.31 1.59 1.92 2.29 2.74 3.29 3.96 4.79 50 - 0.97 1.20 1.44 1.71 2.02 2.39 2.83 3.39	Coefficient of pe	rformance (C.0	O.P.)							
30 1.38 1.70 2.08 2.53 3.08 3.76 4.62 5.75 7.20 40 1.04 1.31 1.59 1.92 2.29 2.74 3.29 3.96 4.79 50 - 0.97 1.20 1.44 1.71 2.02 2.39 2.83 3.39		,	1	3.66	4.73	6.23	-	-	-	-
40 1.04 1.31 1.59 1.92 2.29 2.74 3.29 3.96 4.79 50 - 0.97 1.20 1.44 1.71 2.02 2.39 2.83 3.39	20		1	+	1		5.38	6.92	-	-
40 1.04 1.31 1.59 1.92 2.29 2.74 3.29 3.96 4.79 50 - 0.97 1.20 1.44 1.71 2.02 2.39 2.83 3.39	30	1.38	1.70	2.08	2.53	3.08	3.76	4.62	5.75	7.26
50 - 0.97 1.20 1.44 1.71 2.02 2.39 2.83 3.38										4.79
				+		1				3.35
		-								2.38
	L					1				
Nominal performance at to = -10 °C, tc = 45 °C Pressure switch settings						Г				

Cooling capacity

Current consumption

Power input

Mass flow

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

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

6 843

3 449

5.64

172

W

W

kg/h

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

Sound power data

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





Maneurop reciprocating compressor. MTZ050-4

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	-	4 812	6 558	8 751	11 441	-	-	-	-
20	-	4 268	5 867	7 860	10 297	13 228	16 708	-	-
30	-	3 645	5 089	6 876	9 052	11 666	14 769	18 417	22 673
40	-	-	4 239	5 813	7 722	10 013	12 732	15 932	19 668
50	-	-	-	4 682	6 319	8 281	10 612	13 359	16 570
60	-	-	-	-	4 855	6 484	8 424	10 714	13 397
Power input in W	,								
10	-	1 680	1 800	1 859	1 845	-	-	-	-
20	-	1 923	2 142	2 313	2 423	2 462	2 417	-	-
30	-	2 091	2 404	2 683	2 913	3 084	3 185	3 202	3 125
40	-	-	2 571	2 953	3 300	3 600	3 841	4 013	4 102
50	-	-	-	3 108	3 567	3 992	4 371	4 693	4 945
60	-	-	-	-	3 700	4 246	4 759	5 227	5 638
Current consump		2.04	2.04	1 200	1.02	T	_	1	1
10	-	3.64	3.84	3.98	4.03	- 474	+	-	-
20	-	4.14	4.36	4.55	4.68	4.74	4.69	-	-
30	-	4.45	4.70	4.95	5.17	5.33	5.42	5.41	5.28
40			4.89	5.20	5.51	5.80	6.03	6.19	6.25
50 60	-	-	-	5.33	5.75	6.15	6.54	6.88	7.15 7.98
60		-	-		5.89	6.43	6.98	7.50	7.90
Mass flow in kg/h	1	_		<u>.</u>		_			
10	-	80	111	149	195	-	-	-	-
20	-	76	105	142	187	242	308	-	-
30	-	70	99	135	178	231	295	372	465
40	-	-	90	125	167	218	280	354	444
50	-	-	-	112	152	201	261	333	419
60	-	-	-	-	134	181	238	307	390
Coefficient of per	rformance (C.	O.P.)							
10	-	2.86	3.64	4.71	6.20	-	-	-	-
20	-	2.22	2.74	3.40	4.25	5.37	6.91	-	-
30	-	1.74	2.12	2.56	3.11	3.78	4.64	5.75	7.26
40	-	-	1.65	1.97	2.34	2.78	3.31	3.97	4.79
40			i e		4 77	0.07	0.40	2.05	2.25
50	-	-	-	1.51	1.77	2.07	2.43	2.85	3.35

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

Cooling capacity	7 029	W
Power input	3 449	W
Current consumption	5.64	Α
Mass flow	160	kg/h
C.O.P.	2.04	

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





Maneurop reciprocating compressor. MTZ050-4

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

R449A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	ı in W								
10	3 471	4 827	6 585	8 794	11 504	-	-	-	-
20	2 982	4 232	5 832	7 833	10 283	13 232	16 730	-	-
30	2 427	3 562	4 997	6 782	8 965	11 596	14 725	18 401	22 673
40	1 822	2 835	4 097	5 658	7 567	9 873	12 626	15 874	19 668
50	-	2 067	3 150	4 479	6 106	8 079	10 448	13 262	16 570
60	-	-	2 171	3 263	4 600	6 233	8 210	10 582	13 397
Power input in W	ı								
10	1 510	1 680	1 800	1 859	1 845	_	-	_	-
20	1 668	1 923	2 142	2 313	2 423	2 462	2 417	-	-
30	1 753	2 091	2 404	2 683	2 913	3 084	3 185	3 202	3 125
40	1 750	2 166	2 571	2 953	3 300	3 600	3 841	4 013	4 102
50	-	2 134	2 627	3 108	3 567	3 992	4 371	4 693	4 945
60	-	-	2 555	3 132	3 700	4 246	4 759	5 227	5 638
Current consum	ntion in A		•						
10	3.40	3.64	3.84	3.98	4.03	_	_	_	_
20	3.90	4.14	4.36	4.55	4.68	4.74	4.69	_	_
30	4.20	4.45	4.70	4.95	5.17	5.33	5.42	5.41	5.28
40	4.32	4.59	4.89	5.20	5.51	5.80	6.03	6.19	6.25
50	-	4.59	4.94	5.33	5.75	6.15	6.54	6.88	7.15
60	-	-	4.89	5.36	5.89	6.43	6.98	7.50	7.98
Mass flow in kg/l	h								
10	65	93	126	167	214	-	-	-	-
20	61	88	120	159	206	260	324	-	-
30	55	81	113	151	196	249	311	382	465
40	47	73	103	140	183	234	294	364	444
50	-	61	90	125	167	216	274	342	419
60	-	-	73	107	147	194	250	315	390
Coefficient of pe	rformance (C.() P)							
10	2.30	2.87	3.66	4.73	6.23	_	_	_	_
20	1.79	2.20	2.72	3.39	4.24	5.38	6.92	-	_
30	1.79	1.70	2.08	2.53	3.08	3.76	4.62	5.75	7.26
40	1.04	1.70	1.59	1.92	2.29	2.74	3.29	3.75	4.79
50	-	0.97	1.20	1.44	1.71	2.02	2.39	2.83	3.35
60	-	-	0.85	1.44	1.71	1.47	1.73	2.02	2.38
Nominal perform	nance at to = -1	0 °C, tc = 45 °C		1		Pressure switch	settings	1	•
pooiii		,			Г				

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

6 843

3 449

5.64

175

1.98

W

W

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

Sound power data

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





Maneurop reciprocating compressor. MTZ050-4

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		T	1		1	1	1			
10	-	5 671	7 465	9 687	12 376	-	-	-	-		
20	-	5 112	6 797	8 857	11 330	14 255	17 675	-	-		
30	-	4 412	5 959	7 828	10 054	12 675	15 730	19 263	23 325		
40	-	3 600	4 980	6 627	8 578	10 866	13 527	16 598	20 123		
50	-	-	3 884	5 283	6 930	8 857	11 096	13 678	16 638		
60	-	-	-	3 821	5 139	6 680	8 472	10 540	12 906		
Power input in W											
10	-	2 293	2 532	2 749	2 947	-	-	-	-		
20	-	2 348	2 619	2 859	3 072	3 259	3 424	-	-		
30	-	2 439	2 770	3 063	3 320	3 545	3 739	3 904	4 043		
40	-	2 505	2 926	3 300	3 631	3 922	4 174	4 389	4 571		
50	-	-	3 025	3 510	3 944	4 330	4 669	4 964	5 218		
60	-	_	-	3 633	4 199	4 708	5 164	5 568	5 922		
					•						
Current consump	tion in A		1	1		1	1	1			
10	-	4.06	4.49	4.92	5.34	-	-	-	-		
20	-	4.39	4.73	5.05	5.36	5.68	6.01	-	-		
30	-	4.69	5.00	5.29	5.56	5.81	6.08	6.36	6.67		
40	-	4.85	5.22	5.54	5.84	6.11	6.38	6.66	6.95		
50	-	-	5.30	5.73	6.13	6.49	6.84	7.18	7.53		
60	-	-	-	5.78	6.34	6.86	7.35	7.83	8.31		
Mass flow in kg/h	•										
10	-	117	154	200	256	-	_	_	_		
20	_	113	152	198	254	322	403	_	_		
30	-	107	145	192	248	315	395	490	604		
40	_	97	135	181	236	302	380	473	584		
50	-	-	120	165	218	282	358	448	556		
60	-	_	-	142	193	255	328	415	518		
L			-L					1			
Coefficient of per		1	1	1		T	T	1	_		
10	-	2.47	2.95	3.52	4.20	-	-	-	-		
20	-	2.18	2.60	3.10	3.69	4.37	5.16	-	-		
30	-	1.81	2.15	2.56	3.03	3.58	4.21	4.93	5.77		
40	-	1.44	1.70	2.01	2.36	2.77	3.24	3.78	4.40		
50	-	-	1.28	1.51	1.76	2.05	2.38	2.76	3.19		
60	-	-	-	1.05	1.22	1.42	1.64	1.89	2.18		

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

Cooling capacity	7 774	W
Power input	3 791	W
Current consumption	5.99	Α
Mass flow	228	kg/h
C.O.P.	2.05	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

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

Sound power data

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





Maneurop reciprocating compressor. MTZ050-4

Performance data at 60 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	4 128	5 520	7 309	9 536	12 246	-	-	-	-
20	3 573	4 893	6 559	8 615	11 102	14 062	17 539	-	-
30	2 918	4 134	5 647	7 498	9 732	12 389	15 512	19 143	23 325
40	2 199	3 279	4 607	6 223	8 171	10 493	13 230	16 426	20 123
50	1 450	2 363	3 474	4 823	6 454	8 409	10 730	13 459	16 638
60	-	1 422	2 283	3 334	4 616	6 172	8 045	10 275	12 906
Power input in V	v								
10	2 029	2 293	2 532	2 749	2 947	-	-	-	-
20	2 045	2 348	2 619	2 859	3 072	3 259	3 424	-	-
30	2 068	2 439	2 770	3 063	3 320	3 545	3 739	3 904	4 043
40	2 037	2 505	2 926	3 300	3 631	3 922	4 174	4 389	4 571
50	1 891	2 486	3 025	3 510	3 944	4 330	4 669	4 964	5 218
60	-	2 321	3 008	3 633	4 199	4 708	5 164	5 568	5 922
- 1		•	•	•	•	•	•	•	
Current consum	ption in A								
10	3.61	4.06	4.49	4.92	5.34	-	-	-	-
20	4.02	4.39	4.73	5.05	5.36	5.68	6.01	-	-
30	4.33	4.69	5.00	5.29	5.56	5.81	6.08	6.36	6.67
40	4.44	4.85	5.22	5.54	5.84	6.11	6.38	6.66	6.95
50	4.27	4.82	5.30	5.73	6.13	6.49	6.84	7.18	7.53
60	-	4.49	5.16	5.78	6.34	6.86	7.35	7.83	8.31
Mass flavoir long	L								
Mass flow in kg/ 10	n 103	136	176	225	282	_	_	_	_
20	98	132	173	222	280	347	425	_	
30	90	125	166	215	273	339	416	504	604
		1	1		1		1		
40 50	78	113	155	203	260	325	400	486	584
50 60	- 62	97 74	137 114	185 160	240 213	304 274	377 345	461 426	556 518
60	-	74	114	160	213	2/4	345	420	310
Coefficient of pe	erformance (C.C	D.P.)							
10	2.04	2.41	2.89	3.47	4.16	-	-	-	-
20	1.75	2.08	2.50	3.01	3.61	4.31	5.12	-	-
30	1.41	1.69	2.04	2.45	2.93	3.49	4.15	4.90	5.77
40	1.08	1.31	1.57	1.89	2.25	2.68	3.17	3.74	4.40
50	0.77	0.95	1.15	1.37	1.64	1.94	2.30	2.71	3.19
60	-	0.61	0.76	0.92	1.10	1.31	1.56	1.85	2.18
			<u> </u>		<u> </u>	<u> </u>			
Nominal perform	nance at to = -10	0 °C, tc = 45 °C				Pressure switch	settings		

Cooling capacity

Current consumption

Power input

Mass flow

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

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

7 330

3 791

5.99

251 1.93 W

W

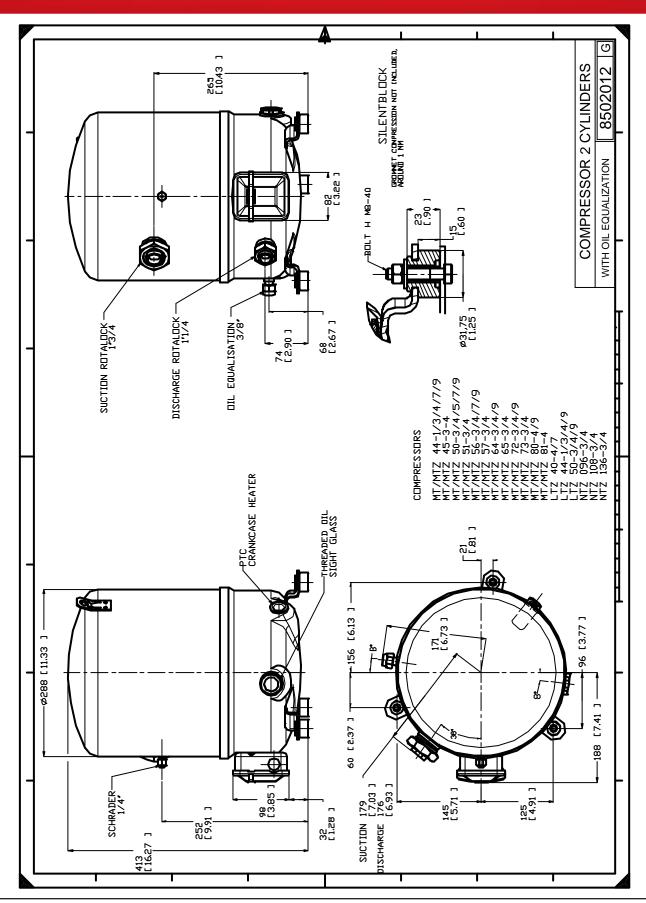
Max	kimum HP switch setting	27.7	bar(g)
Min	imum LP switch setting	1	bar(g)
LP	pump down setting	1.3	bar(g)

Sound power data

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







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