ENGINEERING TOMORROW



Datasheets

Danfoss Reciprocating compressors MT / MTZ / NTZ





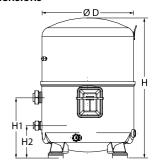


Datasheet, technical data

General Characteristics

Model number (on compressor nameplate)	MTZ144HV4AV		
Code number for Singlepack*	de number for Singlepack*		
Code number for Industrial pack**	MTZ144-4VN		
Drawing number		8504011e	
Suction and discharge connections		Rotolock	
Suction connection		1-3/4 " Rotolock	
Discharge connection		1-1/4 " Rotolock	
Suction connection with supplied sleeve		1-1/8 " ODF	
Discharge connection with supplied sleeve		3/4 " ODF	
Oil sight glass		Threaded	
Oil equalisation connection		3/8" flare SAE	
Oil drain connection		None	
LP gauge port		Schrader	
IPR valve			
Cylinders	4		
Swept volume	241,87 (cm3/rev	
Displacement @ Nominal speed	42.1 m3/h @ 2900 rpm -	- 50.8 m3/h @ 3500 rpm	
Net weight	67	kg	
Oil charge	3,9 litre, P0	DE - 160PZ	
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	10	kg	
Approved refrigerants	R404A, R507A, R134a, R407C, R407A, R407F		

Dimensions



D=352 mm H=540 mm H1=233 mm H2=125 mm H3=- mm

Terminal box

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°C	1.19 Ω
Maximum Continuous Current (MCC)	36 A
Locked Rotor Amps (LRA)	130 A
Motor protection	Internal overload protector

Recommended Installation torques

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

Parts shipped with compressor

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

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

- *Singlepack: Compressor in cardboard box
- **Industrial pack: 6 Unboxed compressors on pallet (order per multiples of 6)

IP54 (with cable gland)

- 1: Screw connectors 10-32 UNF x 9.5
- 2: Earth M4-12
- 3: Knock-out Ø 29 mm (1.14")
- 4: Knock-out Ø 25.5 mm (1.00")





Datasheet, accessories and spare parts

T block connector 52 x 57 mm

Service kit for terminal box 96 x 115 mm, including 1 cover, 1 clamp

Maneurop reciprocating compressor, MTZ144-4

Rotolock accessories, suction side	Code no.	
Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004	
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005	
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028	Gaskets, sleeves and nuts
Gasket, 1-3/4"	8156132	
Rotolock accessories, discharge side	Code no.	
Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008	
Angle adapter, C04 (1-1/4" Rotolock, 3/4" ODF)	8168006	
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029	
Gasket, 1-1/4"	8156131	1 2 3
Rotolock accessories, sets	Code no.	1: Gasket
Angle adapter set, C02 (1-3/4"~1-1/8"), C04 (1-1/4"~3/4")	7703014	2: Solder sleeve
Valve set, V02 (1-3/4"~1-1/8"), V04 (1-1/4"~3/4")	7703009	3: Rotolock nut
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009	
Oil / lubricants	Code no.	
POE lubricant, 160PZ, 1 litre can	7754019	
POE lubricant, 160PZ, 2.5 litre can	120Z0573	
Crankcase heaters	Code no.	Mounting kit
PTC heater 27W,CE mark, UL	120Z0459	
Belt type crankcase heater, 75 W, 230 V, CE mark, UL	7773108	1
Belt type crankcase heater, 75 W, 400 V, CE mark, UL	7773118	
Belt type crankcase heater, 75 W, 460 V, CE mark, UL	120Z0464	3
Miscellaneous accessories	Code no.	4
Electronic soft start kit, MCI 25 C	7705007	
Soft start kit with statoric resistors, prewired box, SCR03	7705001	
Acoustic hood for 4 cylinder compressor	120Z0473	6 \
Oil equalisation nut	8153127	
Spare parts	Code no.	1: Bolt (4x)
Mounting kit for 4 cylinder compressor & MS, including 4 grommets, 4 bolts	8156007	2: Lock washer (4x)
Oil sight glass with gaskets (black & white)	8156019	3: Flat washer (4x)
Gasket for oil sight glass (black chloroprene)	8156145	4: Sleeve (4x)
5 5 (1

8156135

8173230

5: Grommet (4x)

6: Nut (4x)





Maneurop reciprocating compressor. MTZ144-4

Performance data at 50 Hz, EN 12900 rating conditions

R407C

22 280 2 20 367 2 18 445 2 16 531 2 - 1 - 1 7 819 8 8 281 8 8 703 9 9 093 9 9 456 1 - 1 1 1 13.91 1 14.42	0 0 30 501 28 254 25 970 23 664 21 353 19 051 16 776 8 288 8 871 9 415 9 926 10 410 10 874 11 325 14.59 15.20	5 37 891 35 230 32 518 29 771 27 006 24 238 21 483 8 655 9 369 10 044 10 684 11 298 11 892 12 471	10 46 443 43 310 40 114 36 870 33 595 30 304 27 013 8 911 9 765 10 578 11 358 12 111 12 842 13 560	15 56 260 52 600 48 863 45 065 41 223 37 353 33 470 9 046 10 048 11 010 11 938 12 838 13 718 14 583	- - - - - - - - - -	
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13.91	14.59	1		14 300	_	
14.42		15.18				
14.42		15.18				
	15.20		15.65	15.97	-	-
		15.89	16.46	16.89	-	-
14.96	15.87	16.70	17.41	17.98	-	-
15.48	16.56	17.55	18.44	19.18	-	-
15.95	17.22	18.42	19.50	20.45	-	-
- '	17.82	19.24	20.56	21.74	-	-
-	18.29	19.97	21.56	23.01	-	-
	1			1		
	630	771	932	1 114	-	-
				+	-	-
				+	-	-
		-			-	-
+					-	-
-	524	654	803	971	-	-
-	499	626	771	936	-	-
3.09	3.68	4.38	5.21	6.22	-	-
	3.18	3.76	4.44	5.23	-	-
				4.44	_	-
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1.75						_
		2.01				
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Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	29 771	W
Power input	10 684	W
Current consumption	17.55	Α
Mass flow	707	kg/h
C.O.P.	2.79	

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	0.2	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

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

All performance data +/- 5%





Maneurop reciprocating compressor. MTZ144-4

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>		•		W.					l
Cooling capacity	/ in W					_			
35	15 349	20 199	25 951	32 714	40 596	49 706	60 153	-	-
40	13 981	18 592	24 047	30 457	37 930	46 577	56 505	-	-
45	12 611	16 969	22 115	28 159	35 211	43 381	52 778	-	-
50	-	15 348	20 171	25 837	32 455	40 136	48 989	-	-
55	-	-	18 233	23 508	29 679	36 859	45 159	-	-
60	-	-	-	21 190	26 904	33 572	41 306	-	-
65	-	-	-	18 905	24 150	30 297	37 458	-	-
Power input in V	v								
35	6 612	7 257	7 819	8 288	8 655	8 911	9 046	_	_
40	6 858	7 606	8 281	8 871	9 369	9 765	10 048	_	_
45	7 065	7 917	8 703	9 415	10 044	10 578	11 010	_	_
50	-	8 194	9 093	9 926	10 684	11 358	11 938	_	_
55	-	-	9 456	10 410	11 298	12 111	12 838	_	_
60	-	_	-	10 874	11 892	12 842	13 718	_	_
65	-	_	_	11 325	12 471	13 560	14 583	_	_
		I.	l	1		1		I	
Current consum	ption in A								
35	12.40	13.17	13.91	14.59	15.18	15.65	15.97	-	-
40	12.71	13.58	14.42	15.20	15.89	16.46	16.89	-	-
45	13.00	13.99	14.96	15.87	16.70	17.41	17.98	-	-
50	-	14.36	15.48	16.56	17.55	18.44	19.18	-	-
55	-	-	15.95	17.22	18.42	19.50	20.45	-	-
60	-	-	-	17.82	19.24	20.56	21.74	-	-
65	-	-	-	18.29	19.97	21.56	23.01	-	-
Mass flow in kg/	n 308	399	505	627	767	926	4.407	I	_
35 40	293	384	488	609	747	905	1 107 1 084	-	-
40	293	367	470	589	726	882	1 058	-	-
50	-	349	470	568	703	856	1 029	-	-
55	-	-	430	545	677	828	998	-	-
60	<u>-</u>	-	-	521	650	798	965	-	-
65	<u>-</u>	-	-	496	622	798	930	-	-
00			<u> </u>	730	022	7.00	550		
Coefficient of pe	rformance (C.C).P.)							
35	2.32	2.78	3.32	3.95	4.69	5.58	6.65	-	-
40	2.04	2.44	2.90	3.43	4.05	4.77	5.62	-	-
45	1.78	2.14	2.54	2.99	3.51	4.10	4.79	_	-
50	-	1.87	2.22	2.60	3.04	3.53	4.10	-	-
55	-	-	1.93	2.26	2.63	3.04	3.52	-	-
	_	_	-	1.95	2.26	2.61	3.01	_	_
60	-								

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

Cooling capacity	33 067	W
Power input	11 586	W
Current consumption	18.80	Α
Mass flow	744	kg/h
C.O.P.	2.85	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

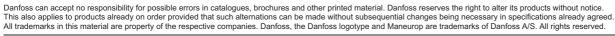
Pressure switch settings

Maximum HP switch setting	29.4	bar(g)	
Minimum LP switch setting	0.2	bar(g)	
LP pump down setting	1.3	bar(q)	

Sound power data

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

All performance data +/- 5%







Maneurop reciprocating compressor. MTZ144-4

Performance data at 50 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15	20	
Cooling capacity	ı in W								
35	9 668	12 795	16 565	21 056	26 348	32 519	39 649	47 819	_
40	8 755	11 733	15 318	19 590	24 626	30 506	37 309	45 115	_
45	7 877	10 684	14 064	18 094	22 853	28 420	34 874	42 293	
50	7 043	9 658	12 810	16 577	21 038	26 270	32 352	39 364	
55	6 260	8 662	11 566	15 050	19 190	24 066	29 755	36 336	-
60	-	7 705	10 340	13 519	17 319	21 816	27 090	33 219	
				†		1	ł	t t	-
65 70	-	-	-	11 995	15 432	19 531 17 218	24 367	30 020	-
70	-	-	-	-	-	17 210	21 595	26 750	-
ower input in V	1		1		1				
35	4 531	5 009	5 460	5 867	6 215	6 489	6 672	6 748	-
40	4 704	5 215	5 708	6 165	6 571	6 911	7 168	7 327	-
45	4 854	5 404	5 943	6 456	6 925	7 336	7 673	7 920	-
50	4 977	5 572	6 163	6 736	7 274	7 762	8 183	8 523	-
55	5 069	5 713	6 363	7 001	7 613	8 183	8 695	9 133	-
60	-	5 826	6 538	7 248	7 939	8 596	9 204	9 746	-
65	-	-	-	7 471	8 247	8 997	9 706	10 357	-
70	-	-	-	-	-	9 382	10 197	10 962	-
•		•					•		
urrent consum		1		T	1	T	1	1	
35	10.17	10.63	11.08	11.50	11.88	12.20	12.45	12.62	-
40	10.32	10.84	11.34	11.83	12.29	12.70	13.05	13.34	-
45	10.46	11.02	11.59	12.16	12.70	13.21	13.67	14.08	-
50	10.56	11.19	11.83	12.47	13.11	13.72	14.30	14.84	-
55	10.63	11.32	12.05	12.78	13.52	14.24	14.95	15.62	-
60	-	11.44	12.24	13.08	13.92	14.77	15.60	16.41	-
65	-	-	-	13.35	14.32	15.29	16.26	17.22	-
70	-	-	-	-	-	15.80	16.92	18.04	-
/lass flow in kg/l	h								
35	235	304	385	479	588	712	853	1 012	
40	223	292	373	467	575	699	839	997	
45	212	281	361	454	561	684	823	980	_
50	201	269	348	440	546	666	804	959	
55	191	257	335	425	528	647	782	934	
60	-	245	320	425	520	625	757	906	
65	<u> </u>	-	- 320	390	488	600	757	875	<u> </u>
70					400	573	698	839	
70	-	-	-	-	-	5/3	090	039	-
Coefficient of pe	rformance (C.C	D.P.)		•	1	•	1		
35	2.13	2.55	3.03	3.59	4.24	5.01	5.94	7.09	-
40	1.86	2.25	2.68	3.18	3.75	4.41	5.21	6.16	-
45	1.62	1.98	2.37	2.80	3.30	3.87	4.54	5.34	-
50	1.42	1.73	2.08	2.46	2.89	3.38	3.95	4.62	-
55	1.23	1.52	1.82	2.15	2.52	2.94	3.42	3.98	-
60	-	1.32	1.58	1.87	2.18	2.54	2.94	3.41	-
65	-	-	-	1.61	1.87	2.17	2.51	2.90	-
70	-	-	_	-	-	1.84	2.12	2.44	-

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

	•••		
Cooling capacity	21 038	W	
Power input	7 274	W	
Current consumption	13.11	Α	
Mass flow	546	kg/h	
C.O.P.	2.89		

to: Evaporating temperature at dew point

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

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

Pressure switch settings

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

Sound power data

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

All performance data +/- 5%





Maneurop reciprocating compressor. MTZ144-4

Performance data at 50 Hz, ARI rating conditions

R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15	20	
Cooling capacity	ı in W								
35	10 471	13 835	17 882	22 695	28 356	34 948	42 552	51 251	
40	9 534	12 753	16 620	21 217	26 628	32 934	40 218	48 561	
45	8 632	11 682	15 346	19 706	24 844	30 841	37 781	45 746	
50	7 773	10 633	14 071	18 170	23 011	28 677	35 251	42 813	
55	6 967	9 614	12 804	16 618	21 140	26 452	32 636	39 775	-
60	-	8 635	11 553	15 061	19 241	24 176	29 947	36 638	
65	-	-	-	13 507	17 322	21 857	27 193	33 414	
70		-	-	-	-	19 505	24 383	30 110	
70						10 000	24 303	30 110	
Power input in W	1								
35	4 531	5 009	5 460	5 867	6 215	6 489	6 672	6 748	-
40	4 704	5 215	5 708	6 165	6 571	6 911	7 168	7 327	-
45	4 854	5 404	5 943	6 456	6 925	7 336	7 673	7 920	-
50	4 977	5 572	6 163	6 736	7 274	7 762	8 183	8 523	-
55	5 069	5 713	6 363	7 001	7 613	8 183	8 695	9 133	-
60	-	5 826	6 538	7 248	7 939	8 596	9 204	9 746	-
65	-	-	-	7 471	8 247	8 997	9 706	10 357	-
70	-	-	-	-	-	9 382	10 197	10 962	-
current consum	ption in A	T	1	T	1	T	1	1	
35	10.17	10.63	11.08	11.50	11.88	12.20	12.45	12.62	-
40	10.32	10.84	11.34	11.83	12.29	12.70	13.05	13.34	-
45	10.46	11.02	11.59	12.16	12.70	13.21	13.67	14.08	-
50	10.56	11.19	11.83	12.47	13.11	13.72	14.30	14.84	-
55	10.63	11.32	12.05	12.78	13.52	14.24	14.95	15.62	-
60	-	11.44	12.24	13.08	13.92	14.77	15.60	16.41	-
65	-	-	-	13.35	14.32	15.29	16.26	17.22	-
70	-	-	-	-	-	15.80	16.92	18.04	-
Mass flow in kg/l	h								
35	234	302	383	477	584	708	848	1 006	_
40	222	291	371	465	572	695	834	992	_
45	211	279	359	452	558	680	818	974	_
50	200	268	346	438	543	663	799	953	-
55	190	256	333	422	526	643	778	929	_
60	-	244	319	406	506	622	753	901	_
65	-	-	-	388	485	597	725	870	-
70	-	-	-	-	-	570	694	835	-
Coefficient of pe	,	T '	2.00	2.07	4.50	F 20	6.20	7.50	
35	2.31	2.76	3.28	3.87	4.56	5.39	6.38	7.59	-
40	2.03	2.45	2.91	3.44	4.05	4.77	5.61	6.63	-
45	1.78	2.16	2.58	3.05	3.59	4.20	4.92	5.78	-
50	1.56	1.91	2.28	2.70	3.16	3.69	4.31	5.02	-
55	1.37	1.68	2.01	2.37	2.78	3.23	3.75	4.35	-
60	-	1.48	1.77	2.08	2.42	2.81	3.25	3.76	-
65	-	-	-	1.81	2.10	2.43	2.80	3.23	-
70	-	-	-	-	-	2.08	2.39	2.75	-

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

rtommar portormanoe at to	0, 10 04.4 0	
Cooling capacity	23 620 V	٧
Power input	7 826 V	٧
Current consumption	13.78 A	A
Mass flow	578 k	g/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	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

Sound power data

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

All performance data +/- 5%



tc: Condensing temperature at dew point



Maneurop reciprocating compressor. MTZ144-4

Performance data at 50 Hz, EN 12900 rating conditions

R404A

Cond. temp. in	Cond. temp. in Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
,									
Cooling capacit		1	1	ī	T		T	1	1
30	8 775	11 826	15 554	20 045	25 383	31 654	38 944	47 339	56 922
35	7 708	10 537	13 985	18 138	23 081	28 900	35 679	43 505	52 463
40	6 685	9 282	12 441	16 247	20 785	26 142	32 402	39 650	47 973
45	5 704	8 060	10 920	14 370	18 494	23 380	29 110	35 773	43 451
50	4 764	6 870	9 422	12 506	16 208	20 612	25 805	31 871	38 896
55	-	5 710	7 945	10 654	13 924	17 838	22 483	27 944	34 306
60	-	4 580	6 489	8 814	11 641	15 056	19 144	23 991	29 681
Power input in V	N								
30	5 941	6 670	7 347	7 965	8 516	8 992	9 385	9 688	9 892
35	6 031	6 840	7 606	8 322	8 979	9 570	10 086	10 521	10 865
40	6 077	6 967	7 822	8 635	9 398	10 104	10 744	11 310	11 795
45	6 084	7 054	7 998	8 909	9 778	10 598	11 362	12 060	12 686
50	6 054	7 105	8 138	9 146	10 122	11 057	11 944	12 774	13 540
55	-	7 123	8 246	9 352	10 433	11 483	12 493	13 456	14 362
60	-	7 114	8 325	9 529	10 717	11 881	13 015	14 109	15 156
Current consum	nption in A								
30	11.52	12.38	13.25	14.07	14.82	15.47	15.97	16.29	16.39
35	11.60	12.54	13.49	14.42	15.29	16.06	16.71	17.19	17.47
40	11.67	12.69	13.74	14.79	15.79	16.71	17.51	18.16	18.63
45	11.69	12.81	13.98	15.15	16.29	17.37	18.34	19.18	19.85
50	11.63	12.86	14.15	15.47	16.76	18.01	19.17	20.21	21.09
55	-	12.82	14.25	15.71	17.18	18.60	19.96	21.21	22.32
60	-	12.64	14.22	15.85	17.49	19.12	20.68	22.16	23.50
Mass flow in kg/	'h								
30	276	364	467	586	724	882	1 062	1 265	1 495
35	261	348	449	567	702	858	1 035	1 236	1 463
40	246	331	431	546	680	833	1 007	1 205	1 428
45	230	313	411	525	655	806	977	1 171	1 390
50	214	295	391	502	630	777	945	1 136	1 351
55	-	277	370	478	603	747	911	1 098	1 309
60	-	258	348	454	575	716	876	1 059	1 265
Coefficient of pe	erformance (C.O	(P)							
30	1.48	1.77	2.12	2.52	2.98	3.52	4.15	4.89	5.75
35	1.28	1.54	1.84	2.18	2.57	3.02	3.54	4.14	4.83
40	1.10	1.33	1.59	1.88	2.21	2.59	3.02	3.51	4.07
45	0.94	1.14	1.37	1.61	1.89	2.21	2.56	2.97	3.43
50	0.79	0.97	1.16	1.37	1.60	1.86	2.16	2.49	2.87
55	-	0.80	0.96	1.14	1.33	1.55	1.80	2.08	2.39
60	_	0.64	0.78	0.92	1.09	1.27	1.47	1.70	1.96

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

Cooling capacity	18 494	W
Power input	9 778	W
Current consumption	16.29	Α
Mass flow	655	kg/h
C.O.P.	1.89	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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



Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

Sound power data

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

All performance data +/- 5%





Maneurop reciprocating compressor. MTZ144-4

Performance data at 50 Hz, ARI rating conditions

R404A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
					•				
Cooling capacity		T	T	T	T	T		T	
30	9 768	13 128	17 223	22 141	27 974	34 809	42 737	51 847	62 226
35	8 673	11 818	15 638	20 225	25 668	32 058	39 485	48 039	57 807
40	7 621	10 541	14 079	18 324	23 370	29 307	36 225	44 214	53 365
45	6 611	9 299	12 544	16 441	21 081	26 557	32 959	40 378	48 905
50	5 643	8 090	11 037	14 577	18 805	23 813	29 694	36 540	44 441
55	-	6 919	9 560	12 739	16 550	21 088	26 447	32 719	39 997
60	-	5 791	8 125	10 941	14 337	18 408	23 251	28 961	35 630
Power input in V	V								
30	5 941	6 670	7 347	7 965	8 516	8 992	9 385	9 688	9 892
35	6 031	6 840	7 606	8 322	8 979	9 570	10 086	10 521	10 865
40	6 077	6 967	7 822	8 635	9 398	10 104	10 744	11 310	11 795
45	6 084	7 054	7 998	8 909	9 778	10 598	11 362	12 060	12 686
50	6 054	7 105	8 138	9 146	10 122	11 057	11 944	12 774	13 540
55	=	7 123	8 246	9 352	10 433	11 483	12 493	13 456	14 362
60	-	7 114	8 325	9 529	10 717	11 881	13 015	14 109	15 156
Current consum	ption in A								
30	11.52	12.38	13.25	14.07	14.82	15.47	15.97	16.29	16.39
35	11.60	12.54	13.49	14.42	15.29	16.06	16.71	17.19	17.47
40	11.67	12.69	13.74	14.79	15.79	16.71	17.51	18.16	18.63
45	11.69	12.81	13.98	15.15	16.29	17.37	18.34	19.18	19.85
50	11.63	12.86	14.15	15.47	16.76	18.01	19.17	20.21	21.09
55	-	12.82	14.25	15.71	17.18	18.60	19.96	21.21	22.32
60	-	12.64	14.22	15.85	17.49	19.12	20.68	22.16	23.50
Mass flow in kg/	h								
30	274	362	464	583	719	876	1 055	1 257	1 485
35	260	346	447	563	698	853	1 029	1 228	1 453
40	244	329	428	543	676	828	1 001	1 197	1 418
45	228	312	409	522	652	801	971	1 164	1 381
50	212	294	389	499	626	772	939	1 128	1 342
55	-	275	368	475	600	742	906	1 091	1 300
60	-	257	346	451	572	711	871	1 052	1 257
Coefficient of	rformance (C.C	.							
30	1.64	1.97	2.34	2.78	3.28	3.87	4.55	5.35	6.29
35	1.44	1.73	2.06	2.78	2.86	3.35	3.91	4.57	5.32
40	1.44	1.73	1.80	2.43	2.49	2.90	3.37	3.91	4.52
45	1.25	1.32	1.80	1.85	2.49	2.90	2.90	3.35	3.86
		1			1		ł		
50	0.93	1.14 0.97	1.36 1.16	1.59 1.36	1.86 1.59	2.15 1.84	2.49	2.86 2.43	3.28 2.78
55		+		1	1	1	1		1
60	-	0.81	0.98	1.15	1.34	1.55	1.79	2.05	2.35

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

Cooling capacity	21 081	W
Power input	9 778	W
Current consumption	16.29	Α
Mass flow	652	kg/h
C.O.P.	2.16	-

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

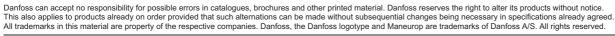
Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

Sound power data

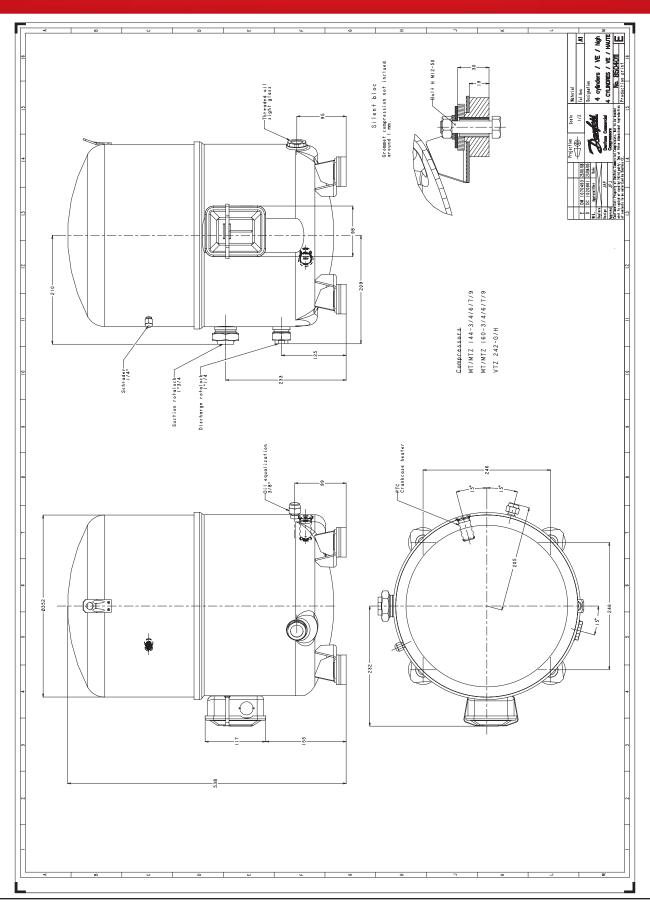
Sound power level	83	dB(A)
With accoustic hood	77	dB(A)

All performance data +/- 5%









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