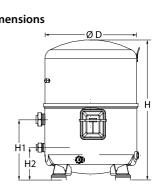
Dantoss

Datasheet, technical data

Maneurop reciprocating compressor, NTZ215-4B

General Characteristics

Model number (on compressor nameplate)		NTZ215A4LR1B		
Code number for Singlepack*		120F0240		
Code number for Industrial pack**		120F0241		
Drawing number		8504010f		
Suction and discharge connections		Rotolock		
Suction connection		1-3/4 " Rotolock		
Discharge connection		1-1/4 " Rotolock		
Suction connection with supplied sleeve		1-1/8 " ODF		
Discharge connection with supplied sleeve		3/4 " ODF		
Oil sight glass		Threaded		
Oil equalisation connection		3/8" flare SAE		
Oil drain connection		None		
LP gauge port		Schrader		
IPR valve		30 bar / 8 bar		
Cylinders	4	4		
Swept volume	215 cr	30 bar / 8 bar		
Displacement @ Nominal speed	37.4 m3/h @ 2900 rpm	- 45.1 m3/h @ 3500 rpm		
Net weight	62	kg		
Oil charge	3.9 litre, PC	OE - 175PZ		
Maximum system test pressure Low Side / High side	25 bar(g) ,	/ 30 bar(g)		
Maximum differential test pressure	30	bar		
Maximum number of starts per hour	1	2		
Refrigerant charge limit	10	kg		
Approved refrigerants	R404A,	, R452A		
	•			



52 mm 19 mm 233 mm 125 mm - mm

minal 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	2.23 Ω
Maximum Continuous Current (MCC)	22.3 A
Locked Rotor Amps (LRA)	74 A
Motor protection	Internal overload protector

1 (4)2 (3)

Recommended Installation torques

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

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, -, -

*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 Earth M4-12
- 2:
- 3: Knock-out Ø 29 mm (1.14") 4:
 - Knock-out Ø 25.5 mm (1.00")



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Datasheet, accessories and spare parts

Maneurop reciprocating compressor, NTZ215-4B

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	(())) (())opf ()))
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: Botolock nut
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009	
	1	
Oil / lubricants	Code no.	
POE lubricant, 175PZ, 1 litre can	120Z0638	
POE lubricant, 175PZ, 2.5 litre can	120Z0639	
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	2
Belt type crankcase heater, 75 W, 460 V, CE mark, UL	120Z0464	3
ber type characteristic in the termine of termine o	12020404	
Miscellaneous accessories	Code no.	4 4
Acoustic hood for 4 cylinder compressor	120Z0473	
Oil equalisation nut	8153127	
Spare parts	Code no.	
Mounting kit for 4 cylinder compressor & MS, including 4 grommets, 4 bolts	8156007	
Oil sight glass with gaskets (black & white)	8156019	1: Bolt (4x)
Gasket for oil sight glass (black chloroprene)	8156145	2: Lock washer (4x)
Service kit for terminal box 96 x 115 mm, including 1 cover, 1 clamp	8156135	3: Flat washer (4x)
T block connector 52 x 57 mm	8173230	4: Sleeve (4x)
		5: Grommet (4x) 6: Nut (4x)



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Maneurop reciprocating compressor. NTZ215-4

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

R452A

Cond. temp. in				Evapora	ating temperatur	re in °C (to)			
°C (tc)	-45	-40	-35	-30	-25	-20	-15	-10	
cooling capacity		Г							
30	-	-	5 961	8 014	10 501	13 470	16 969	21 044	-
35	-	-	5 375	7 293	9 613	12 383	15 649	19 460	-
40	-	-	4 776	6 555	8 703	11 268	14 296	17 836	-
45	-	-	-	5 806	7 776	10 131	12 916	16 180	-
50	-	-	-	-	6 838	8 977	11 513	14 496	-
55	-	-	-	-	-	7 812	10 094	12 790	-
60	-	-	-	-	-	-	-	-	-
ower input in W									
30	-	-	3 839	4 433	5 029	5 639	6 275	6 950	-
35	-	_	3 931	4 588	5 240	5 900	6 580	7 292	
40	-	-	3 979	4 709	5 429	6 149	6 883	7 642	-
45	-	-	-	4 786	5 583	6 374	7 173	7 991	-
50	-	-	-	-	5 692	6 565	7 439	8 326	-
55	-	-	-	-	-	6 711	7 671	8 638	-
60	-	-	-	-	-	-	-	-	-
urrent consump	otion in A								
30	-	-	7.11	7.85	8.62	9.42	10.24	11.06	-
35	-	_	7.25	8.07	8.93	9.82	10.73	11.64	-
40	-	_	7.30	8.21	9.16	10.15	11.15	12.17	-
45	-	-	-	8.29	9.34	10.43	11.54	12.66	_
50	-	-	_	-	9.47	10.40	11.88	13.12	_
55	-	-	-	-	-	10.87	12.21	13.56	-
60	-	-	-	-	-	-	-	-	-
00	_	-	-				-	- 1	-
/lass flow in kg/h	1								
30	-	-	144	193	254	328	416	520	-
35	-	-	136	185	245	318	404	506	-
40	-	_	128	176	235	306	391	491	-
45	-	-	-	166	223	293	376	475	-
50	-	-	-	-	210	278	359	456	-
55	-	_	-	-	-	262	341	436	-
60	-	-	-	_	_	-	-	-	-
			I						
coefficient of per	formance (C.O).P.)							
30	-	-	1.55	1.81	2.09	2.39	2.70	3.03	-
35	-	-	1.37	1.59	1.83	2.10	2.38	2.67	-
40	-	-	1.20	1.39	1.60	1.83	2.08	2.33	-
45	-	-	-	1.21	1.39	1.59	1.80	2.02	-
50	-	-	-	-	1.20	1.37	1.55	1.74	-
55	-	-	-	-	-	1.16	1.32	1.48	-
60	-	-	-	-	-	-	-	- 1	-
•									
lominal perform	ance at to = -3	,				Pressure switch			
Cooling capacity		4 776	W			Maximum HP swit		27.7	bar(g)
ower input		3 979	W			Minimum LP swite	•	0.1	bar(g)
Current consumpti	ion	7.30	A			LP pump down se	tting	0.1	bar(g)
lass flow		128	kg/h						
C.O.P.		1.20				Sound power dat			
: Evaporating ter						Sound power leve With accoustic ho			dB(A)
	uneraute at de	W DOIDI				www.accoustic.bo	11.1		dB(A)

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



Tolerance according EN12900

Maneurop reciprocating compressor. NTZ215-4

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

Cond. temp. in		Evaporating temperature in °C (to)									
°C (tc)	-45	-40	-35	-30	-25	-20	-15	-10			

Cooling capacity in W

30	-	3 884	5 455	7 421	9 838	12 764	16 255	20 369	-
35	-	3 380	4 835	6 653	8 890	11 604	14 853	18 696	-
40	-	2 878	4 212	5 877	7 928	10 423	13 424	16 989	-
45	-	-	3 594	5 098	6 957	9 229	11 975	15 256	-
50	-	-	-	4 325	5 986	8 027	10 511	13 501	-
55	-	-	-	3 562	5 019	6 824	9 039	11 729	-
60	-	-	-	-	-	-	-	-	-

Power input in W

30	-	3 234	3 839	4 433	5 029	5 639	6 275	6 950	-
35	-	3 257	3 931	4 588	5 240	5 900	6 580	7 292	-
40	-	3 224	3 979	4 709	5 429	6 149	6 883	7 642	-
45	-	-	3 971	4 786	5 583	6 374	7 173	7 991	-
50	-	-	-	4 806	5 692	6 565	7 439	8 326	-
55	-	-	-	4 760	5 745	6 711	7 671	8 638	-
60	-	-	-	-	-	-	-	-	-

Current consumption in A

30	-	6.43	7.11	7.85	8.62	9.42	10.24	11.06	-
35	-	6.49	7.25	8.07	8.93	9.82	10.73	11.64	-
40	-	6.46	7.30	8.21	9.16	10.15	11.15	12.17	-
45	-	-	7.29	8.29	9.34	10.43	11.54	12.66	-
50	-	-	-	8.31	9.47	10.66	11.88	13.12	-
55	-	-	-	8.29	9.56	10.87	12.21	13.56	-
60	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

30	-	127	174	230	296	375	467	572	-
35	-	118	165	220	286	363	454	557	-
40	-	109	155	209	274	350	439	541	-
45	-	-	143	197	260	335	422	522	-
50	-	-	-	183	245	318	403	502	-
55	-	-	-	169	229	300	383	479	-
60	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

		,							
30	-	1.20	1.42	1.67	1.96	2.26	2.59	2.93	-
35	-	1.04	1.23	1.45	1.70	1.97	2.26	2.56	-
40	-	0.89	1.06	1.25	1.46	1.70	1.95	2.22	-
45	-	-	0.91	1.07	1.25	1.45	1.67	1.91	-
50	-	-	-	0.90	1.05	1.22	1.41	1.62	-
55	-	-	-	0.75	0.87	1.02	1.18	1.36	-
60	-	-	-	-	-	-	-	-	-

Nominal performance at to = -35 °C, tc = 40 °C

Cooling capacity	4 212	W
Power input	3 979	W
Current consumption	7.30	А
Mass flow	155	kg/h
C.O.P.	1.06	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings		
Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.1	bar(g)

Sound power data

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

Tolerance according EN12900

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R452A

Danfoss

Maneurop reciprocating compressor. NTZ215-4

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

30 - 109 151 202 262 334 419 518 - 35 - - 144 195 256 329 414 513 - 40 - - 134 185 247 320 405 505 - 45 - - - 173 235 307 393 493 - 50 - - - - 219 292 377 477 - 55 - - - - 273 357 456 - 60 - - - - 250 334 432 - 260fficient of performance (C.O.P.) - 1.36 1.56 1.78 2.04 2.34 2.69 - 30 - 1.19 1.37 1.56 1.76 2.00 2.27 - 40 - - 1.19	Cond. temp. in				Evapor	ating temperatu	re in °C (to)			
30 . 4 519 6 254 9 35 10 797 11 875 17 003 20 817 . 35 . . 400 . . 4088 6 822 9 097 11 702 15 894 19 485 . 40 5 966 8 031 10 493 13 224 16 420 . 50 . <	°C (tc)	-45	-40	-35	-30	-25	-20	-15	-10	
30 . 4 519 6 254 9 35 10 797 11 875 17 003 20 817 . 35 . . 400 . . 4088 6 822 9 097 11 702 15 894 19 485 . 40 5 966 8 031 10 493 13 224 16 420 . 50 . <										
35 . . 5 599 7 523 9 907 12 702 15 904 19 495 . 40 . . 4 948 6 622 9 039 11 618 14 939 18 014 . . 45 . . . 5 966 8 039 11 618 14 939 18 044 .			4.540	0.054	0.005	40.707	10.075	17.000	00.047	
40 - - 4 946 6 828 9 039 11 118 14 596 18 014 - 45 - - 5 966 8 031 10 439 13 224 16 420 - 50 - - - 6 699 9 181 11 1797 14 720 - 56 - - - - - 7 862 10 214 12 429 - 60 - - - - - 6 487 8 612 10 65 70000 11 114 4 989 5 597 6 237 6 700 7 234 - 40 - - 4 149 4 989 5 697 7 033 7 228 5 10 60 - - - 5 5091 7 063 8 404 9 0384 - 55 - - - - 7 107 8 2800 9 384 - 60 - - 7 50 8 40 9 34 10 38 11 52 12 284 - 40 - - <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td></th<>									1	
46 - - 5966 8 031 10 439 13 224 16 420 - 80 - - - - - 6 6869 9 181 11 727 14 720 - 95 - - - - - - 7 882 10 214 12 282 - 90 - 3 428 4 096 4 730 5 307 5 800 6 188 6 447 - - - - - 6 487 8 612 11 065 - 30 - 3 428 4 096 5 5977 5 237 6 200 7 180 8 0447 - - 40 - - - 5 5977 6 237 6 780 7 224 8 518 - 50 - - - - 7 1078 8 043 9 006 8 - 60 - - - - 7 7083 8 370 9 584 - 300 - 6.66 7 43 6.23 9.11 10.12 11.29 12.86 - <td></td> <td></td> <td>-</td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td>-</td>			-			1				-
50 - - - 6 869 9 181 11 777 14 720 - 65 - - - - - 7 862 10 214 12 929 - 600 - - - - - 0 4 8 72 10 865 - 7000000000000000000000000000000000000									1	
55 .		-	-	-	5 966	-			1	-
60 6 497 8 612 11 065 . 30 . 3 426 4 096 4 730 5 307 5 800 6 168 6 447 . 40 . . 4 144 4 805 5 597 6 237 6 700 7 234 . 40 . . . 4 149 4 805 5 597 6 237 6 700 7 234 . 45 6 591 7 030 8 043 9 006 . 55 7 107 8 280 9 384 . 20 . 6.66 7.43 8.23 9.11 10.12 11.29 12.66 . 40 . . 7.52 8.45 9.59 1067 11.85 13.11 . 55 11.65 <td></td>										
Decision Decision		-	-	-	-	-			-	-
30 . 3 426 4 006 4 730 5 307 5 800 6 188 6 447 . 35 . . 4 154 4 895 5 597 6 237 6 700 7 234 . 40 . . 4 149 4 990 5 811 6 500 7 703 7 226 . 45 .	60	-	-	-	-	-	6 497	8 612	11 065	-
30 . 3 426 4 006 4 730 5 307 5 800 6 188 6 447 . 35 . . 4 154 4 895 5 597 6 237 6 700 7 234 . 40 . . 4 149 4 990 5 811 6 500 7 703 7 226 . 45 .	Power input in W									
35 . 4 4 4885 5 597 6 237 6 790 7 724 . 40 . 4 149 4990 5811 6 590 7 723 7226 . 50 . . . 500 . <		-	3 426	4 096	4 730	5 307	5 800	6 188	6 447	-
40 . 4 149 4 990 5 811 6 590 7 303 7 926 . 45 . <		-							1	-
45 . . . 5 009 5 944 6 856 7 722 8 518 . 50 .<									1	
\$0 . . 5 991 7 030 8 043 9 006 . 55 - - - - - 7 107 8 260 9 384 . 60 - - - - 7 107 8 260 9 384 . 30 - 6.66 7 43 8 23 9.11 10.12 11 29 12.66 . 40 - - 7.50 8.40 9.34 10.36 11.52 12.84 . 40 - - 7.50 8.66 9.59 10.67 11.85 13.15 . 55 - - - 11.00 12.23 13.56 . 56 - - - 11.155 13.01 14.48 . 60 - - - - 11.55 13.01 14.48 . 30 109 151 202 262 334 419									1	
55 - - - - 7 107 8 260 9 384 - 60 - - - - 7 083 8 370 9 648 - 2urrent consumption in A - - - - 7 083 8 370 9 648 - 30 - 6.66 7.43 8.23 9.11 10.12 11.29 12.66 - 40 - - 7.50 8.40 9.34 10.36 11.52 12.84 - 40 - - 7.52 8.55 9.59 10.67 11.85 13.15 - 45 - - - 8.66 9.82 11.00 12.23 13.66 - 50 - - - - 11.85 13.01 14.48 - 60 - - - - - 11.88 13.31 14.91 - 8as flow in kg/h - - - - - 213 307 393 493 - <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td>						1				
60 7 083 8 370 9 848 . Current consumption in A 30 . 6.66 7.43 8.23 9.11 10.12 11.29 12.66 . 35 . . . 7.50 8.40 9.34 10.36 11.52 12.84 . 40 . . 7.52 8.55 9.59 10.67 11.85 13.15 . 45 10.00 11.31 12.63 14.01 . 55 .									1	
Surrent consumption in A Surrent consumption in A 30 - 6.66 7.43 8.23 9.11 10.12 11.29 12.66 - 35 - - 7.50 8.40 9.34 10.36 11.52 12.84 - 40 - - 7.52 8.55 9.59 10.67 11.85 13.15 - 45 - - - 10.00 11.31 12.63 14.01 - 50 - - - - 11.55 13.01 14.48 - 60 - - - - 11.68 13.31 14.91 - 48s flow in kgh - 134 185 247 320 405 505 - 50 - - - 219 282 377 477 - 50 - - - 273 357 456 - 60 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td></t<>									1	
30 - 6.66 7.43 8.23 9.11 10.12 11.29 12.66 . 35 - - 7.50 8.40 9.34 10.36 11.52 12.84 . 40 - - 7.52 8.55 9.59 10.67 11.85 13.15 . 45 - - - 8.66 9.82 11.00 12.23 13.66 . 50 - - - 11.55 13.01 14.48 . 60 - - - 11.68 13.31 14.491 . 30 - 109 151 202 262 334 419 518 . 40 - - 1134 185 247 320 405 505 . 50 - - - 219 292 377 477 . 50 - - - 273 <td></td> <td>-</td> <td>1 -</td> <td>-</td> <td>-</td> <td>1 -</td> <td>7 000</td> <td>0010</td> <td>0.040</td> <td>-</td>		-	1 -	-	-	1 -	7 000	0010	0.040	-
35 . . 7.50 8.40 9.34 10.36 11.52 12.84 40 . . 7.52 8.55 9.59 10.67 11.85 13.15 45 . . 10.00 11.31 12.63 14.01 50 . 11.00 11.31 12.63 14.01 55 . 11.68 13.01 14.48 60 .	urrent consump	tion in A								
40 . . 7.52 8.55 9.59 10.67 11.85 13.15 . 45 .	30	-	6.66	7.43	8.23	9.11	10.12	11.29	12.66	-
45 - - 8.66 9.82 11.00 12.23 13.56 . 50 - - - - 10.00 11.31 12.63 14.01 . 55 - - - - 11.55 13.01 14.48 . 60 - - - - 11.68 13.31 14.91 . 7 - 11.68 13.31 14.91 .	35	-	-	7.50	8.40	9.34	10.36	11.52	12.84	-
50 - - - 10.00 11.31 12.63 14.01 55 - - - - 11.55 13.01 14.48 60 - - - - 11.68 13.31 14.91 30 - 109 151 202 262 334 419 518 35 - - 144 195 256 329 414 513 40 - - 134 185 247 320 405 505 45 - - - 173 235 307 393 493 50 - - - 219 292 377 477 60 - - - - 250 334 432 30 - 1.32 1.53 1.76 2.03 2.36 2.75 3.23 40 - - 1.19<	40	-	-	7.52	8.55	9.59	10.67	11.85	13.15	-
55 - - - 11.55 13.01 14.48 - 60 - - - - 11.68 13.31 14.91 - Aass flow in kg/h 30 - 109 151 202 262 334 419 518 - 35 - - 144 195 256 329 414 513 - 40 - - 134 185 247 320 405 505 - 45 - - 173 235 307 393 493 - 50 - - - 219 292 377 477 - 60 - - - - 250 334 432 - 55 - - - - 250 334 432 - 60 - - - - 203 2.36 2.75 3.23 - 35 - - 1.19 1.37 1.56 </td <td>45</td> <td>-</td> <td>-</td> <td>-</td> <td>8.66</td> <td>9.82</td> <td>11.00</td> <td>12.23</td> <td>13.56</td> <td>-</td>	45	-	-	-	8.66	9.82	11.00	12.23	13.56	-
60 - - - 11.68 13.31 14.91 - Aass flow in kg/h 30 - 109 151 202 262 334 419 518 - 35 - - 144 195 256 329 414 513 - 40 - - 134 185 247 320 405 505 - 45 - - - 173 236 307 393 493 - 50 - - - - 273 357 456 - 60 - - - - 273 357 456 - 30 - 1.32 1.53 1.76 2.03 2.36 2.75 3.23 - 35 - - 1.38 1.56 1.78 2.04 2.34 2.69 - 46 - - 1.19<	50	-	-	-	-	10.00	11.31	12.63	14.01	-
Aass flow in kg/h 30 - 109 151 202 262 334 419 518 - 35 - - 144 195 256 329 414 513 - 40 - - 134 185 247 320 405 505 - 45 - - - 173 235 307 393 493 - 50 - - - - 273 357 456 - 60 - - - - 250 334 432 - Sofficient of performance (C.O.P.) 30 - 1.32 1.53 1.76 2.03 2.36 2.75 3.23 - 35 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 40 - - 1.19 1.37 1.56 1.76	55	-	-	-	-	-	11.55	13.01	14.48	-
30 - 109 151 202 262 334 419 518 - 35 - - 144 195 256 329 414 513 - 40 - - 134 185 247 320 405 505 - 45 - - - 173 235 307 393 493 - 50 - - - - 219 292 377 477 - 55 - - - - 273 357 456 - 60 - - - - 250 334 432 - 260fficient of performance (C.O.P.) - 1.36 1.56 1.78 2.04 2.34 2.69 - 30 - 1.19 1.37 1.56 1.76 2.00 2.27 - 40 - - 1.19	60	-	-	-	-	-	11.68	13.31	14.91	-
30 - 109 151 202 262 334 419 518 - 35 - - 144 195 256 329 414 513 - 40 - - 134 185 247 320 405 505 - 45 - - - 173 235 307 393 493 - 50 - - - - 219 292 377 477 - 55 - - - - 273 357 456 - 60 - - - - 250 334 432 - 260fficient of performance (C.O.P.) - 1.36 1.56 1.78 2.04 2.34 2.69 - 30 - 1.19 1.37 1.56 1.76 2.00 2.27 - 40 - - 1.19										
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40 - - 134 185 247 320 405 505 - 45 - - 173 235 307 393 493 - 50 - - - - 219 292 377 477 - 55 - - - - - 273 357 456 - 60 - - - - - 250 334 432 - Coefficient of performance (C.O.P.) 30 - 1.32 1.53 1.76 2.03 2.36 2.75 3.23 - 35 - - 1.36 1.56 1.78 2.04 2.34 2.69 - 40 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - 1.19 1.37 1.52 1.71 1.93 - 50 - - - 1.16 1.31 1.46 1.63		-	109							-
45 . . . 173 235 307 393 493 . 50 219 292 377 477 . 55 219 292 377 477 . 60 273 357 456 . 60 273 357 456 . 60 250 334 432 . 30 . 1.32 1.53 1.76 2.03 2.36 2.75 3.23 . 35 . . 1.19 1.37 1.56 1.76 2.00 2.27 . 40 . . . 1.19 1.37 1.56 1.76 2.00 2.27 . 45 . . . <t< td=""><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>-</td></t<>		-	-						1	-
50 - - 219 292 377 477 - 55 - - - - 273 357 456 - 60 - - - - 273 357 456 - 60 - - - - 250 334 432 - Scofficient of performance (C.O.P.) 30 - 1.32 1.53 1.76 2.03 2.36 2.75 3.23 - 30 - 1.32 1.53 1.76 2.04 2.34 2.69 - 40 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - - 1.19 1.35 1.52 1.71 1.93 - 50 - - - - 1.16 1.31 1.46 1.63 - 55 - - - - 0.92 1.03 1.15 - 200ing capacity 4 948 W	40	-	-	134	185	247	320	405	505	-
55 - - - - 273 357 456 - 60 - - - - 250 334 432 - Scoefficient of performance (C.O.P.) - - - 250 334 432 - 30 - 1.32 1.53 1.76 2.03 2.36 2.75 3.23 - 35 - - 1.36 1.56 1.78 2.04 2.34 2.69 - 40 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - 1.19 1.35 1.52 1.71 1.93 - 50 - - - 1.16 1.31 1.46 1.63 - 60 - - - - 0.92 1.03 1.15 -<	45	-	-	-	173	235	307	393	493	-
60 - - - 250 334 432 - Specificient of performance (C.O.P.) 30 - 1.32 1.53 1.76 2.03 2.36 2.75 3.23 - 35 - - 1.36 1.56 1.78 2.04 2.34 2.69 - 40 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - - 1.19 1.35 1.52 1.71 1.93 - 50 - - - 1.16 1.31 1.46 1.63 - 55 - - - - - 0.92 1.03 1.15 - Cooling capacity 4 948 W W W Mass flow 1.19 Mass flow 0.1 bar(g <td>50</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>219</td> <td>292</td> <td>377</td> <td>477</td> <td>-</td>	50	-	-	-	-	219	292	377	477	-
Scoefficient of performance (C.O.P.) 30 - 1.32 1.53 1.76 2.03 2.36 2.75 3.23 - 35 - - 1.36 1.56 1.78 2.04 2.34 2.69 - 40 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - - 1.19 1.35 1.52 1.71 1.93 - 50 - - - - 1.16 1.31 1.46 1.63 - 55 - - - - - 0.92 1.03 1.15 - Nominal performance at to = -35 °C, tc = 40 °C Cooling capacity 4 948 W W W Maximum HP switch setting 27.7 bar(g Durrent consumption 7.52 A Ass flow 134 kg/h Maximum HP switch setting 0.1 <	55	-	-	-	-	-	273	357	456	-
30 - 1.32 1.53 1.76 2.03 2.36 2.75 3.23 - 35 - - 1.36 1.56 1.78 2.04 2.34 2.69 - 40 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - 1.19 1.35 1.52 1.71 1.93 - 50 - - - - 1.16 1.31 1.46 1.63 - 55 - - - - - 0.92 1.03 1.15 - Lominal performance at to = -35 °C, tc = 40 °C Cooling capacity 4 948 W W W Maximum HP switch setting 0.1 bar(g Lirent consumption 7.52 A Ass flow 1.34 kg/h 0.1 bar(g C.O.P. 1.19 .19 Sound power level <td>60</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>250</td> <td>334</td> <td>432</td> <td>-</td>	60	-	-	-	-	-	250	334	432	-
30 - 1.32 1.53 1.76 2.03 2.36 2.75 3.23 - 35 - - 1.36 1.56 1.78 2.04 2.34 2.69 - 40 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - 1.19 1.35 1.52 1.71 1.93 - 50 - - - - 1.16 1.31 1.46 1.63 - 55 - - - - - 0.92 1.03 1.15 - Lominal performance at to = -35 °C, tc = 40 °C Cooling capacity 4 948 W W W Maximum HP switch setting 0.1 bar(g Lirent consumption 7.52 A Ass flow 1.34 kg/h 0.1 bar(g C.O.P. 1.19 .19 Sound power level <td></td>										
35 - - 1.36 1.56 1.78 2.04 2.34 2.69 - 40 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - 1.19 1.35 1.52 1.71 1.93 - 50 - - - 1.16 1.31 1.46 1.63 - 55 - - - - 1.11 1.24 1.38 - 60 - - - - 0.92 1.03 1.15 - Image: second colspan="4">Pressure switch setting 27.7 bar(g Cooling capacity 4 948 W W Maximum HP switch setting 0.1 bar(g Correr consumption 7.52 A Ass flow 0.1 bar(g C.O.P. 1.19 .19 Assercom Sound power data Sound power level 84.2 dB(A </td <td></td> <td>-</td> <td></td> <td>1 53</td> <td>1 76</td> <td>2.03</td> <td>2.36</td> <td>2 75</td> <td>3 23</td> <td>_</td>		-		1 53	1 76	2.03	2.36	2 75	3 23	_
40 - - 1.19 1.37 1.56 1.76 2.00 2.27 - 45 - - 1.19 1.35 1.52 1.71 1.93 - 50 - - - 1.16 1.31 1.46 1.63 - 55 - - - - 1.11 1.24 1.38 - 60 - - - - 0.92 1.03 1.15 - Iominal performance at to = -35 °C, tc = 40 °C Cooling capacity 4 948 W W Power input 4 149 W Cooling capacity 4 948 W Power input 0.1 bar(g Current consumption 7.52 A Ass flow 0.1 bar(g C.O.P. 1.19 - - Assertifiete Sound power data Sound power level 84.2 dB(A		-								-
45 - - 1.19 1.35 1.52 1.71 1.93 - 50 - - - 1.16 1.31 1.46 1.63 - 55 - - - - 1.11 1.24 1.38 - 60 - - - - 0.92 1.03 1.15 - Iominal performance at to = -35 °C, tc = 40 °C Cooling capacity 4 948 W - - 0.92 1.03 1.15 - Nower input 4 149 W W - - - Maximum HP switch setting 27.7 bar(g Cooling capacity 4 948 Kg/h - <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td></t<>									1	
50 - - 1.16 1.31 1.46 1.63 - 55 - - - 1.11 1.24 1.38 - 60 - - - 0.92 1.03 1.15 - Iominal performance at to = -35 °C, tc = 40 °C Cooling capacity 4 948 W ?ower input 4 149 W Current consumption 7.52 A Asss flow 134 kg/h C.O.P. 1.19 - AssERCOM Sound power level 84.2										
55 - - - 1.11 1.24 1.38 - 60 - - - 0.92 1.03 1.15 - Iominal performance at to = -35 °C, tc = 40 °C Cooling capacity 4 948 W ower input 4 149 W Current consumption 7.52 A Aass flow 134 kg/h C.O.P. 1.19 Image: Certified product Sound power data Sound power level 84.2 dB(A									1	
60 - - 0.92 1.03 1.15 - Iominal performance at to = -35 °C, tc = 40 °C Pressure switch settings Pressure switch setting 27.7 bar(g) Cooling capacity 4 948 W W Maximum HP switch setting 0.1 bar(g) Yower input 4 149 W Current consumption 7.52 A Assenduct Sound power data Co.P. 1.19 Assence Sound power level 84.2 dB(A									1	
Iominal performance at to = -35 °C, tc = 40 °C Cooling capacity 4 948 W Power input 4 149 W Current consumption 7.52 A Alass flow 134 kg/h C.O.P. 1.19 Sound power level 84.2 dB(A						1				
Cooling capacity 4 948 W Power input 4 149 W Current consumption 7.52 A Aass flow 134 kg/h C.O.P. 1.19 Assercom Sound power data Sound power level 84.2 dB(A	00	-		-	-		0.32	1.00	1.15	-
Power input 4 149 W Current consumption 7.52 A Aass flow 134 kg/h C.O.P. 1.19 Assercom Minimum LP switch setting 0.1 bar(g) Derive to setting 0.1 bar(g) Auss flow 1.19 Assercom Sound power data Sound power level 84.2		nce at to = -3	35 °C, tc = 40 °C				Pressure switch	settings		
Current consumption 7.52 A Alass flow 134 kg/h C.O.P. 1.19 Construction Sound power data Sound power level 84.2 dB(A)	Cooling capacity					·/ ¬		•		bar(g)
Aass flow 134 kg/h C.O.P. 1.19 Sound power data ASERCOM Sound power level 84.2 dB(A	Power input					/		-		bar(g)
C.O.P. 1.19 Sound power data ASERCOM Sound power level 84.2 dB(A		on					LP pump down se	tting	0.1	bar(g)
ASERCOM Sound power level 84.2 dB(A				kg/h	/c	I ERTIFIED	Course to a second	_		
ASERCOM	J.O.P.		1.19							10(1)
			ow point		´ ASE	RCOM				dB(A) dB(A)



Maneurop reciprocating compressor. NTZ215-4

<u>Danfoss</u>

R404A

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

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-45	-40	-35	-30	-25	-20	-15	-10	
Cooling capacity	r in W								
30	2 714	4 019	5 641	7 623	10 008	12 842	16 169	20 033	-
35	2 217	3 454	4 985	6 853	9 101	11 776	14 925	18 592	-
40	1 701	2 854	4 277	6 014	8 110	10 610	13 563	17 016	-
45	1 186	2 238	3 538	5 128	7 054	9 363	12 103	15 325	-
50	-	1 627	2 787	4 215	5 954	8 054	10 564	13 537	-
55	-	-	2 047	3 295	4 831	6 703	8 964	11 669	-
60	-	-	1 342	2 391	3 704	5 330	7 322	9 737	-
60	-	-	1 342	2 391	3 704	5 330	7 322	9 737	
Power input in W	I								
30	2 744	3 426	4 096	4 730	5 307	5 800	6 188	6 447	-

35	2 651	3 398	4 154	4 895	5 597	6 237	6 790	7 234	-
40	2 506	3 314	4 149	4 990	5 811	6 590	7 303	7 926	-
45	2 306	3 167	4 076	5 009	5 944	6 856	7 722	8 518	-
50	-	2 954	3 929	4 950	5 991	7 030	8 043	9 006	-
55	-	-	3 705	4 806	5 948	7 107	8 260	9 384	-
60	-	-	3 398	4 574	5 810	7 083	8 370	9 648	-

Current consumption in A

30	5.89	6.66	7.43	8.23	9.11	10.12	11.29	12.66	-
35	5.66	6.60	7.50	8.40	9.34	10.36	11.52	12.84	-
40	5.30	6.45	7.52	8.55	9.59	10.67	11.85	13.15	-
45	4.78	6.18	7.45	8.66	9.82	11.00	12.23	13.56	-
50	-	5.73	7.25	8.66	10.00	11.31	12.63	14.01	-
55	-	-	6.87	8.52	10.07	11.55	13.01	14.48	-
60	-	-	6.27	8.20	9,99	11.68	13.31	14.91	-

Mass flow in kg/h

30	93	135	183	240	307	384	472	572	-
35	82	125	174	232	300	377	466	567	-
40	69	112	162	221	289	367	456	557	-
45	53	97	147	206	274	353	443	544	-
50	-	79	129	188	256	335	425	526	-
55	-	-	108	167	235	313	403	504	-
60	-	-	84	142	209	287	376	477	-

Coefficient of performance (C.O.P.)

30	0.99	1.17	1.38	1.61	1.89	2.21	2.61	3.11	-
35	0.84	1.02	1.20	1.40	1.63	1.89	2.20	2.57	-
40	0.68	0.86	1.03	1.21	1.40	1.61	1.86	2.15	-
45	0.51	0.71	0.87	1.02	1.19	1.37	1.57	1.80	-
50	-	0.55	0.71	0.85	0.99	1.15	1.31	1.50	-
55	-	-	0.55	0.69	0.81	0.94	1.09	1.24	-
60	-	-	0.39	0.52	0.64	0.75	0.87	1.01	-

Nominal performance at to = -35 °C, tc = 40 °C

Cooling capacity	4 277	W
Power input	4 149	W
Current consumption	7.52	A
Mass flow	162	kg/h
C.O.P.	1.03	

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	0.1	bar(g)
LP pump down setting	0.1	bar(g)

Sound power data

Sound power level	84.2	dB(A)	
With accoustic hood	78.2	dB(A)	

Tolerance according EN12900



Danfoss

Maneurop reciprocating compressor. NTZ215-4

nd. temp. in				Evanor	ating temperatu	re in °C (to)			
°C (tc)	-45	-40	-35	-30	-25	-20	-15	-10	
				•		·			
oling capacity									
30	-	5 332	7 379	9 835	12 741	16 137	20 064	24 564	-
35	-	-	6 650	8 995	11 761	14 989	18 719	22 993	-
40	-	-	5 839	8 057	10 667	13 709	17 226	21 257	-
45	-	-	-	7 040	9 477	12 318	15 604	19 376	-
50	-	-	-	-	8 211	10 834	13 873	17 369	-
55	-	-	-	-	-	9 277	12 052	15 256	-
60	-	-	-	-	-	7 667	10 162	13 056	-
ver input in W									
30	-	4 042	4 833	5 582	6 262	6 845	7 302	7 607	-
35	-	-	4 902	5 776	6 604	7 359	8 012	8 537	-
40	-	-	4 896	5 888	6 857	7 776	8 617	9 353	-
45	-	-	-	5 911	7 014	8 090	9 112	10 052	-
50	-	-	-	-	7 070	8 295	9 490	10 627	-
55	-	-	-	-	-	8 387	9 747	11 073	-
60	-	-	-	-	-	8 358	9 877	11 385	-
00						0.000	0.011	11000	
rent consump	tion in A		1			r		, , ,	
30	-	6.66	7.43	8.23	9.11	10.12	11.29	12.66	-
35	-	-	7.50	8.40	9.34	10.36	11.52	12.84	-
40	-	-	7.52	8.55	9.59	10.67	11.85	13.15	-
45	-	-	-	8.66	9.82	11.00	12.23	13.56	-
50	-	-	-	-	10.00	11.31	12.63	14.01	-
55	-	-	-	-	-	11.55	13.01	14.48	-
s flow in kg/h								••	
30	-	129	178	238	310	395	495	611	-
35	-	-	170	230	302	388	488	606	-
40	-	-	158	219	291	377	478	596	-
45	-	-	-	204	277	363	464	581	-
50	-	-	-	-	259	344	445	562	-
55	-	-	-	-	-	322	422	538	-
60	-	-	-	-	-	295	394	510	-
ficient of some									
fficient of per 30	-	1.32	1.53	1.76	2.03	2.36	2.75	3.23	-
35	-	-	1.36	1.56	1.78	2.04	2.73	2.69	-
40	_	-	1.19	1.37	1.76	1.76	2.04	2.03	-
40	-	-	-	1.19	1.35	1.52	1.71	1.93	
50	-	-	-	-	1.35	1.31	1.46	1.63	-
55	-	-	-	-	-	1.11	1.46	1.83	-
60	-	-	-	-	-	0.92	1.24	1.15	-
						ł		1 1	
ninal performation	ance at to = -3	5 °C, tc = 40 °C	W			Pressure switch Maximum HP swit	-	27.7	he=(=)
ver input		5 839 4 896	W			Minimum LP switc	•	0.1	bar(g) bar(g)
rent consumpti	on	7.52	A			LP pump down se		0.1	bar(g)
s flow		158	kg/h				0	2	(9)
.P.		1.19	<u> </u>			Sound power dat	a		
						Sound power leve	I	87.9	dB(A)
Evaporating ten						With accoustic ho	bd	81	dB(A)
Condensing ten						Televine "			
ng conditions :	Suction gas te	emp. = 20 °C , Sub	cooling = 0 K			Tolerance accordi	ng EN12900		



Maneurop reciprocating compressor. NTZ215-4

<u>Danfoss</u>

R404A

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

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)									
	-45	-40	-35	-30	-25	-20	-15	-10		
Cooling capacity	in W									
cooling capacity										
30	3 202	4 743	6 657	8 995	11 809	15 153	19 079	23 639	-	

35	2 616	4 076	5 883	8 086	10 739	13 896	17 611	21 938	-
40	2 007	3 367	5 047	7 097	9 570	12 520	16 004	20 079	-
45	1 399	2 640	4 174	6 051	8 324	11 048	14 282	18 084	-
50	-	1 920	3 289	4 973	7 026	9 504	12 466	15 973	-
55	-	-	2 416	3 888	5 700	7 910	10 578	13 769	-
60	-	-	1 583	2 822	4 371	6 290	8 640	11 490	-

Power input in W

30	3 238	4 042	4 833	5 582	6 262	6 845	7 302	7 607	-
35	3 128	4 010	4 902	5 776	6 604	7 359	8 012	8 537	-
40	2 958	3 910	4 896	5 888	6 857	7 776	8 617	9 353	-
45	2 722	3 737	4 810	5 911	7 014	8 090	9 112	10 052	-
50	-	3 485	4 637	5 841	7 070	8 295	9 490	10 627	-
55	-	-	4 372	5 671	7 019	8 387	9 747	11 073	-
60	-	-	4 010	5 397	6 855	8 358	9 877	11 385	-

Current consumption in A

30	5.89	6.66	7.43	8.23	9.11	10.12	11.29	12.66	-
35	5.66	6.60	7.50	8.40	9.34	10.36	11.52	12.84	-
40	5.30	6.45	7.52	8.55	9.59	10.67	11.85	13.15	-
45	4.78	6.18	7.45	8.66	9.82	11.00	12.23	13.56	-
50	-	5.73	7.25	8.66	10.00	11.31	12.63	14.01	-
55	-	-	6.87	8.52	10.07	11.55	13.01	14.48	-
60	-	-	6 27	8 20	9 99	11.68	13.31	14 91	-

Mass flow in kg/h

30	110	159	216	284	362	453	557	675	-
35	97	147	206	274	353	445	550	669	-
40	81	132	192	261	341	433	538	658	-
45	63	114	174	243	324	416	522	642	-
50	-	93	153	222	302	395	501	621	-
55	-	-	128	197	277	369	475	594	-
60	-	-	99	167	247	339	444	563	-

Coefficient of performance (C.O.P.)

30	0.99	1.17	1.38	1.61	1.89	2.21	2.61	3.11	-
35	0.84	1.02	1.20	1.40	1.63	1.89	2.20	2.57	-
40	0.68	0.86	1.03	1.21	1.40	1.61	1.86	2.15	-
45	0.51	0.71	0.87	1.02	1.19	1.37	1.57	1.80	-
50	-	0.55	0.71	0.85	0.99	1.15	1.31	1.50	-
55	-	-	0.55	0.69	0.81	0.94	1.09	1.24	-
60	-	-	0.39	0.52	0.64	0.75	0.87	1.01	-

Nominal performance at to = -35 °C, tc = 40 °C

Cooling capacity	5 047	W
Power input	4 896	W
Current consumption	7.52	Α
Mass flow	192	kg/h
C.O.P.	1.03	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.1	bar(g)

Sound power data

Sound power level	87.9	dB(A)	
With accoustic hood	81	dB(A)	

Tolerance according EN12900

