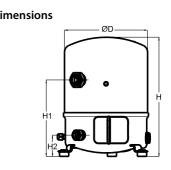
Datasheet, technical data

Inverter reciprocating compressors VTZ121-G

General Characteristics

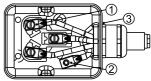
Model number (on compressor nameplate)	VTZ121AGNR1B
Code number for Singlepack*	120B0004
Drawing number	8502016a
Suction and discharge connections	Rotolock
Suction connection	1-3/4 " Rotolock
Discharge connection	1-1/4 " Rotolock
Suction connection with supplied sleeve	1-1/8 " ODF
Discharge connection with supplied sleeve	3/4 " ODF
Oil sight glass	Threaded
Oil equalisation connection	3/8" flare SAE
Oil drain connection	None
LP gauge port	Schrader
IPR valve	30 bar / 8 bar
Cylinders	2
Swept volume	120.94 cm3/rev
Net weight	40 kg
Oil charge	1.8 litre, POE - 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	5 kg
Approved refrigerants	R404A, R507A, R134a, R407C



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D=288 mm H=413 mm H1=165 mm H2=74 mm H3=- mm

Terminal box



IP54 (with cable gland)

- Power connection, 3 x 4.8 mm (3/16")
- 2: Earth M4

1:

3.

Hole Ø 33 mm (1.30'')

Recommended Installation torques

Winding resistance (between phases) +/- 7% at 25°C

Electrical Characteristics

Maximum Must Trip current (MMT)

Nominal voltage

Voltage range

Rated Load Amps (RLA)

Locked Rotor Amps (LRA)

Motor protection

Oil sight glass	50 Nm
Power connections / Earth connection	3 Nm / 2 Nm
Mounting bolts	15 Nm

Frequency converter CD302 required with supply voltage 380-480V/3/50-60Hz

342-528 V supply to frequency converter

0.59 Ω

23.2 A

29 A

139 A

Motor protection by frequency converter

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 when connected to frequency converter, -*Singlepack: Compressor in cardboard box

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Datasheet, accessories and spare parts

Inverter reciprocating compressors VTZ121-G

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	5. Notolock hut
	0150005	
Oil / lubricants	Code no.	
POE lubricant, 160PZ, 1 litre can	7754019	
POE lubricant, 160PZ, 2.5 litre can	120Z0573	
	120Z0573 Code no.	Mounting kit
POE lubricant, 160PZ, 2.5 litre can		Mounting kit
POE lubricant, 160PZ, 2.5 litre can Crankcase heaters	Code no.	Mounting kit
POE lubricant, 160PZ, 2.5 litre can Crankcase heaters PTC heater 27W,CE mark, UL	Code no. 120Z0459	Mounting kit
POE lubricant, 160PZ, 2.5 litre can Crankcase heaters PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL	Code no. 120Z0459 7773107	Mounting kit
POE lubricant, 160PZ, 2.5 litre can Crankcase heaters PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL	Code no. 120Z0459 7773107 7773117	Mounting kit
POE lubricant, 160PZ, 2.5 litre can Crankcase heaters PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL	Code no. 120Z0459 7773107 7773117	Mounting kit
POE lubricant, 160PZ, 2.5 litre can Crankcase heaters PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL	Code no. 120Z0459 7773107 7773117 120Z0466	Mounting kit
POE lubricant, 160PZ, 2.5 litre can Crankcase heaters PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories	Code no. 120Z0459 7773107 7773117 120Z0466 Code no.	Mounting kit
POE lubricant, 160PZ, 2.5 litre can Crankcase heaters PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Acoustic hood for 2 cylinder compressor	Code no. 120Z0459 7773107 7773117 120Z0466 Code no. 120Z0472	Mounting kit
POE lubricant, 160PZ, 2.5 litre can Crankcase heaters PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL	Code no. 120Z0459 7773107 7773117 120Z0466 Code no. 120Z0472 7755202	Mounting kit
POE lubricant, 160PZ, 2.5 litre can Crankcase heaters PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Oli equalisation nut	Code no. 120Z0459 7773107 7773117 120Z0466 Code no. 120Z0472 7755202 8153127	Mounting kit
POE lubricant, 160PZ, 2.5 litre can Crankcase heaters PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt	Code no. 12020459 7773107 7773117 12020466 Code no. 120Z0472 7755202 8153127 Code no.	
POE lubricant, 160PZ, 2.5 litre can Crankcase heaters PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt	Code no. 120Z0459 7773107 7773117 120Z0466 Code no. 120Z0472 7755202 8153127 Code no. 8156001	1 1 1 1 1 1 1 1 1 1 1 1 1 1
POE lubricant, 160PZ, 2.5 litre can Crankcase heaters PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Output Miscellaneous accessories Acoustic hood for 2 cylinder compressor Acoustic hood for 2 cyl (UL Approved) 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)	Code no. 120Z0459 7773107 7773117 120Z0466 Code no. 120Z0472 7755202 8153127 Code no. 8156001 8156019	1: Bolt (3x) 2: Lock washer (3x)
POE lubricant, 160PZ, 2.5 litre can Crankcase heaters PTC heater 27W,CE mark, UL Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Acoustic hood for 2 cylinder compressor Acoustic hood for 2 cyl (UL Approved) 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)	Code no. 120Z0459 7773107 7773117 120Z0466 Code no. 120Z0472 7755202 8153127 Code no. 8156001 8156019 8156145	1: Bolt (3x) 2: Lock washer (3x) 3: Flat washer (3x)

Inverter reciprocating compressors VTZ121-G

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R134a

Performance data at 30 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacity	in W						-		
35	2 621	3 356	4 251	5 329	6 615	8 130	9 898	-	-
40	2 434	3 135	3 990	5 021	6 250	7 703	9 400	-	-
45	2 235	2 899	3 708	4 686	5 855	7 240	8 862	-	-
50	2 031	2 652	3 411	4 330	5 434	6 745	8 287	-	-
55	1 827	2 399	3 102	3 959	4 992	6 225	7 682	-	-
60	-	-	2 788	3 576	4 534	5 684	7 050	-	-
65	-	-	-	3 188	4 065	5 127	6 397	-	-
70	-	-	-	-	-	4 559	5 728	-	-

Power input in W

35	1 326	1 461	1 591	1 713	1 826	1 928	2 018	-	-
40	1 389	1 539	1 685	1 825	1 957	2 079	2 189	-	-
45	1 445	1 612	1 775	1 933	2 085	2 227	2 359	-	-
50	1 492	1 676	1 858	2 036	2 207	2 371	2 526	-	-
55	1 528	1 730	1 932	2 130	2 323	2 510	2 687	-	-
60	-	-	1 994	2 214	2 430	2 640	2 842	-	-
65	-	-	-	2 286	2 525	2 760	2 988	-	-
70	-	-	-	-	-	2 868	3 122	-	-

Current consumption in A

35	3.26	3.59	3.92	4.26	4.62	5.03	5.50	-	-
40	3.41	3.76	4.09	4.42	4.75	5.10	5.50	-	-
45	3.54	3.93	4.28	4.60	4.92	5.24	5.58	-	-
50	3.62	4.07	4.46	4.81	5.12	5.43	5.73	-	-
55	3.63	4.17	4.62	5.01	5.35	5.65	5.94	-	-
60	-	-	4.74	5.18	5.57	5.90	6.19	-	-
65	-	-	-	5.33	5.77	6.14	6.46	-	-
70	-	-	-	-	-	6.37	6.73	-	-

Mass flow in kg/h

35	64	80	99	122	148	178	213	-	-
40	62	78	98	120	146	177	212	-	-
45	60	77	96	118	144	175	210	-	-
50	58	74	93	115	142	172	207	-	-
55	56	72	90	112	138	168	203	-	-
60	-	-	87	108	134	163	198	-	-
65	-	-	-	104	128	158	192	-	-
70	-	-	-	-	-	151	185	-	-

Coefficient of performance (C.O.P.)

35	1.98	2.30	2.67	3.11	3.62	4.22	4.91	-	-
40	1.75	2.04	2.37	2.75	3.19	3.71	4.29	-	-
45	1.55	1.80	2.09	2.42	2.81	3.25	3.76	-	-
50	1.36	1.58	1.84	2.13	2.46	2.84	3.28	-	-
55	1.20	1.39	1.61	1.86	2.15	2.48	2.86	-	-
60	-	-	1.40	1.62	1.87	2.15	2.48	-	-
65	-	-	-	1.39	1.61	1.86	2.14	-	-
70	-	-	-	-	-	1.59	1.83	-	-

Nominal performance at to = 5 °C, tc	= 50 °C	
Cooling capacity	5 434	W
Power input	2 207	W
Current consumption	5.12	Α
Mass flow	142	kg/h
C.O.P.	2.46	

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 data Sound power level	0	dB(A)

Pressure switch settings

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Danfoss

R134a

Performance data at 30 Hz, ARI rating conditions

Cond. temp. in									
°C (tc)	-15	-10	-5	0	5	10	15		

Cooling capacity in W

35	2 839	3 628	4 589	5 744	7 119	8 737	10 622	-	-
40	2 650	3 408	4 329	5 438	6 759	8 316	10 133	-	-
45	2 449	3 170	4 046	5 103	6 365	7 856	9 601	-	-
50	2 242	2 920	3 746	4 746	5 944	7 364	9 030	-	-
55	2 033	2 663	3 434	4 371	5 499	6 843	8 425	-	-
60	-	-	3 115	3 984	5 037	6 299	7 793	-	-
65	-	-	-	3 590	4 563	5 738	7 139	-	-
70	-	-	-	-	-	5 165	6 468	-	-

Power input in W

35	1 326	1 461	1 591	1 713	1 826	1 928	2 018	-	-
40	1 389	1 539	1 685	1 825	1 957	2 079	2 189	-	-
45	1 445	1 612	1 775	1 933	2 085	2 227	2 359	-	-
50	1 492	1 676	1 858	2 036	2 207	2 371	2 526	-	-
55	1 528	1 730	1 932	2 130	2 323	2 510	2 687	-	-
60	-	-	1 994	2 214	2 430	2 640	2 842	-	-
65	-	-	-	2 286	2 525	2 760	2 988	-	-
70	-	-	-	-	-	2 868	3 122	-	-

Current consumption in A

35	3.26	3.59	3.92	4.26	4.62	5.03	5.50	-	-
40	3.41	3.76	4.09	4.42	4.75	5.10	5.50	-	-
45	3.54	3.93	4.28	4.60	4.92	5.24	5.58	-	-
50	3.62	4.07	4.46	4.81	5.12	5.43	5.73	-	-
55	3.63	4.17	4.62	5.01	5.35	5.65	5.94	-	-
60	-	-	4.74	5.18	5.57	5.90	6.19	-	-
65	-	-	-	5.33	5.77	6.14	6.46	-	-
70	-	-	-	-	-	6.37	6.73	-	-

Mass flow in kg/h

35	63	79	99	121	147	177	212	-	-
40	62	78	97	120	146	176	211	-	-
45	60	76	95	118	144	174	209	-	-
50	58	74	93	115	141	171	206	-	-
55	56	71	90	111	137	167	201	-	-
60	-	-	86	108	133	162	196	-	-
65	-	-	-	103	128	157	190	-	-
70	-	-	-	-	-	151	184	-	-

Coefficient of performance (C.O.P.)

35	2.14	2.48	2.89	3.35	3.90	4.53	5.26	-	-
40	1.91	2.21	2.57	2.98	3.45	4.00	4.63	-	-
45	1.70	1.97	2.28	2.64	3.05	3.53	4.07	-	-
50	1.50	1.74	2.02	2.33	2.69	3.11	3.58	-	-
55	1.33	1.54	1.78	2.05	2.37	2.73	3.14	-	-
60	-	-	1.56	1.80	2.07	2.39	2.74	-	-
65	-	-	-	1.57	1.81	2.08	2.39	-	-
70	-	-	-	-	-	1.80	2.07	-	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C							
Cooling capacity	6 121	W					
Power input	2 391	W					
Current consumption	5.46	Α					
Mass flow	150	kg/h					
C.O.P.	2.56						

Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)
Sound power data		
Sound power data Sound power level	0	dB(A)

22.6

bar(g)

Pressure switch settings Maximum HP switch setting

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

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Performanc	e data at 35	5 Hz, EN 129	00 rating co	nditions					R134a
Cond. temp. in				Evapora	ating temperature i	n °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacity	/ in W								
35	3 107	3 977	5 038	6 317	7 841	9 636	11 732	-	-
40	2 885	3 716	4 729	5 951	7 409	9 131	11 143	-	-
45	2 650	3 436	4 395	5 555	6 941	8 582	10 505	-	-
50	2 408	3 144	4 043	5 133	6 442	7 996	9 824	-	-
55	2 166	2 844	3 677	4 693	5 918	7 379	9 106	-	-
60	-	-	3 305	4 240	5 375	6 738	8 357	-	-
65	-	-	-	3 779	4 819	6 078	7 583	-	-
70	-	-	-	-	-	5 404	6 790	-	-
Power input in V		1 7 4 2	1 005	2.044	0.470	2 200	0.440	Γ	
35	1 581	1 742	1 895	2 041	2 176	2 300	2 412	-	-
40	1 657	1 836	2 009	2 175	2 331	2 477	2 611	-	-
45	1 723	1 923	2 117	2 305	2 484	2 653	2 811	-	-
50	1 778	2 000	2 217	2 428	2 631	2 825	3 009	-	-
55	1 818	2 063	2 305	2 541	2 770	2 991	3 202	-	-
60	-	-	2 379	2 641	2 898	3 147	3 387	-	-
65 70	-	-	-	2 726	3 012	3 291 3 419	3 561 3 721	-	-
urrent consum	ption in A								
35	4.07	4.48	4.89	5.32	5.78	6.30	6.89	-	-
40	4.26	4.70	5.11	5.52	5.93	6.38	6.88	-	-
45	4.42	4.91	5.35	5.75	6.15	6.55	6.98	-	-
50	4.52	5.08	5.57	6.01	6.40	6.78	7.17	-	-
55	4.54	5.21	5.77	6.26	6.68	7.06	7.43	-	-
60	-	-	5.92	6.48	6.96	7.37	7.74	-	-
65	-	-	-	6.66	7.21	7.68	8.07	-	-
70	-	-	-	-	-	7.97	8.41	-	-
lass flow in kg/	h								
35	75	95	117	144	175	211	253	-	-
40	74	93	116	142	174	210	251	-	-
45	72	91	113	140	171	207	249	-	-
50	69	88	110	137	168	204	245	-	-
55	66	85	107	133	163	199	240	-	-
60	-	-	103	128	158	193	234	-	-
65	-	-	-	123	152	187	227	-	-
70	-	-	-	-	-	179	219	-	-
Coefficient of pe	rformance (C C) P)							
35	1.96	2.28	2.66	3.10	3.60	4.19	4.86	-	-
40	1.90	2.28	2.35	2.74	3.18	3.69	4.80	-	-
40	1.74	1.79	2.08	2.41	2.79	3.23	3.74	-	+ -

		-							
40	1.74	2.02	2.35	2.74	3.18	3.69	4.27	-	-
45	1.54	1.79	2.08	2.41	2.79	3.23	3.74	-	-
50	1.35	1.57	1.82	2.11	2.45	2.83	3.27	-	-
55	1.19	1.38	1.60	1.85	2.14	2.47	2.84	-	-
60	-	-	1.39	1.60	1.85	2.14	2.47	-	-
65	-	-	-	1.39	1.60	1.85	2.13	-	-
70	-	-	-	-	-	1.58	1.82	-	-

Nominal performance at to = 5 °C	Nominal performance at to = 5 °C, tc = 50 °C							
Cooling capacity	6 442	W						
Power input	2 631	W						
Current consumption	6.40	А						
Mass flow	168	kg/h						
C.O.P.	2.45							

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)

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

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

Inverter reciprocating compressors VTZ121-G

Danfoss

R134a

Performance data at 35 Hz, ARI rating conditions

°C (tc) -15 -10 -5 0 5 10 15	
Cooling capacity in W	

35	3 365	4 301	5 439	6 809	8 438	10 356	12 591	-	-
40	3 141	4 039	5 131	6 446	8 012	9 857	12 012	-	-
45	2 903	3 757	4 796	6 049	7 545	9 313	11 381	-	-
50	2 658	3 461	4 441	5 626	7 046	8 729	10 704	-	-
55	2 410	3 157	4 071	5 182	6 519	8 111	9 987	-	-
60	-	-	3 692	4 723	5 971	7 467	9 238	-	-
65	-	-	-	4 256	5 409	6 801	8 462	-	-
70	-	-	-	-	-	6 122	7 666	-	-

Power input in W

35	1 581	1 742	1 895	2 041	2 176	2 300	2 412	-	-
40	1 657	1 836	2 009	2 175	2 331	2 477	2 611	-	-
45	1 723	1 923	2 117	2 305	2 484	2 653	2 811	-	-
50	1 778	2 000	2 217	2 428	2 631	2 825	3 009	-	-
55	1 818	2 063	2 305	2 541	2 770	2 991	3 202	-	-
60	-	-	2 379	2 641	2 898	3 147	3 387	-	-
65	-	-	-	2 726	3 012	3 291	3 561	-	-
70	-	-	-	-	-	3 419	3 721	-	-

Current consumption in A

35	4.07	4.48	4.89	5.32	5.78	6.30	6.89	-	-
40	4.26	4.70	5.11	5.52	5.93	6.38	6.88	-	-
45	4.42	4.91	5.35	5.75	6.15	6.55	6.98	-	-
50	4.52	5.08	5.57	6.01	6.40	6.78	7.17	-	-
55	4.54	5.21	5.77	6.26	6.68	7.06	7.43	-	-
60	-	-	5.92	6.48	6.96	7.37	7.74	-	-
65	-	-	-	6.66	7.21	7.68	8.07	-	-
70	-	-	-	-	-	7.97	8.41	-	-

Mass flow in kg/h

35	75	94	117	143	174	210	251	-	-
40	73	93	115	142	173	209	250	-	-
45	71	90	113	139	170	206	247	-	-
50	69	88	110	136	167	203	244	-	-
55	66	84	106	132	163	198	239	-	-
60	-	-	102	128	157	192	233	-	-
65	-	-	-	122	152	186	226	-	-
70	-	-	-	-	-	178	218	-	-

Coefficient of performance (C.O.P.)

35	2.13	2.47	2.87	3.34	3.88	4.50	5.22	-	-
40	1.90	2.20	2.55	2.96	3.44	3.98	4.60	-	-
45	1.68	1.95	2.27	2.62	3.04	3.51	4.05	-	-
50	1.49	1.73	2.00	2.32	2.68	3.09	3.56	-	-
55	1.33	1.53	1.77	2.04	2.35	2.71	3.12	-	-
60	-	-	1.55	1.79	2.06	2.37	2.73	-	-
65	-	-	-	1.56	1.80	2.07	2.38	-	-
70	-	-	-	-	-	1.79	2.06	-	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C								
Cooling capacity	7 256	W						
Power input	2 851	W						
Current consumption	6.82	Α						
Mass flow	178	ka/h						

2.55

to: E	Evaporating	temperature	at dew	point

tc: Condensing temperature at dew point

C.O.P.

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

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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)

22.6

0

bar(g)

dB(A)

Pressure switch settings Maximum HP switch setting

With accoustic hood

Inverter reciprocating compressors VTZ121-G

Danfoss

R134a

Performance data at 40 Hz, EN 12900 rating conditions

Cond. temp. in		Evaporating temperature in °C (to)										
°C (tc)	-15	-10	-5	0	5	10	15					
Cooling capacity	in W											
35	3 590	4 596	5 823	7 300	9 061	11 137	13 559	-	-			
40	3 333	4 295	5 466	6 878	8 563	10 552	12 878	-	-			
45	3 062	3 971	5 080	6 419	8 022	9 918	12 140	-	-			
50	2 783	3 633	4 672	5 932	7 445	9 241	11 353	-	-			
55	2 503	3 287	4 250	5 423	6 839	8 529	10 523	-	-			
60	-	-	3 820	4 900	6 212	7 787	9 658	-	-			
65	-	-	-	4 368	5 569	7 024	8 763	-	-			
70	-	-	-	-	-	6 245	7 846	-	-			

35	1 831	2 017	2 195	2 363	2 520	2 665	2 796	-	-
40	1 919	2 127	2 327	2 518	2 699	2 868	3 025	-	-
45	1 997	2 228	2 453	2 669	2 876	3 072	3 255	-	-
50	2 059	2 317	2 569	2 813	3 047	3 272	3 484	-	-
55	2 104	2 390	2 671	2 944	3 209	3 464	3 707	-	-
60	-	-	2 755	3 060	3 357	3 645	3 922	-	-
65	-	-	-	3 158	3 489	3 812	4 124	-	-
70	-	-	-	-	-	3 960	4 310	-	-

Current consumption in A

35	4.74	5.22	5.70	6.19	6.73	7.34	8.04	-	-
40	4.97	5.48	5.95	6.42	6.91	7.43	8.02	-	-
45	5.15	5.72	6.23	6.70	7.16	7.63	8.13	-	-
50	5.26	5.92	6.49	7.00	7.46	7.90	8.35	-	-
55	5.28	6.06	6.72	7.29	7.78	8.23	8.65	-	-
60	-	-	6.89	7.55	8.10	8.58	9.01	-	-
65	-	-	-	7.75	8.40	8.94	9.40	-	-
70	-	-	-	-	-	9.28	9.80	-	-

Mass flow in kg/h

35	87	109	136	166	202	244	292	-	-
40	85	107	134	165	201	242	290	-	-
45	83	105	131	162	198	240	287	-	-
50	80	102	128	158	194	235	283	-	-
55	77	98	123	154	189	230	278	-	-
60	-	-	119	148	183	224	271	-	-
65	-	-	-	142	176	216	262	-	-
70	-	-	-	-	-	207	253	-	-

Coefficient of performance (C.O.P.)

35	1.96	2.28	2.65	3.09	3.60	4.18	4.85	-	-
40	1.74	2.02	2.35	2.73	3.17	3.68	4.26	-	-
45	1.53	1.78	2.07	2.40	2.79	3.23	3.73	-	-
50	1.35	1.57	1.82	2.11	2.44	2.82	3.26	-	-
55	1.19	1.38	1.59	1.84	2.13	2.46	2.84	-	-
60	-	-	1.39	1.60	1.85	2.14	2.46	-	-
65	-	-	-	1.38	1.60	1.84	2.12	-	-
70	-	-	-	-	-	1.58	1.82	-	-

Nominal performance at to = 5 °C, tc = 50 °C								
Cooling capacity	7 445	W						
Power input	3 047	W						
Current consumption	7.46	А						
Mass flow	194	kg/h						
C.O.P.	2.44							

Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)
Sound power data		
Sound power data Sound power level	0	dB(A)

Pressure switch settings
Maximum HP switch setting

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

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22.6

bar(g)

Inverter reciprocating compressors VTZ121-G

Danfoss

R134a

Performance data at 40 Hz, ARI rating conditions

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-15	-10	-5	0	5	10	15		

Cooling capacity in W

35	3 888	4 970	6 286	7 869	9 752	11 969	14 551	-	-
40	3 630	4 668	5 930	7 449	9 259	11 392	13 882	-	-
45	3 355	4 342	5 543	6 991	8 720	10 763	13 153	-	-
50	3 071	4 000	5 132	6 502	8 143	10 088	12 370	-	-
55	2 786	3 648	4 705	5 989	7 534	9 374	11 542	-	-
60	-	-	4 267	5 458	6 901	8 629	10 676	-	-
65	-	-	-	4 918	6 251	7 860	9 779	-	-
70	-	-	-	-	-	7 075	8 859	-	-

Power input in W

35	1 831	2 017	2 195	2 363	2 520	2 665	2 796	-	-
40	1 919	2 127	2 327	2 518	2 699	2 868	3 025	-	-
45	1 997	2 228	2 453	2 669	2 876	3 072	3 255	-	-
50	2 059	2 317	2 569	2 813	3 047	3 272	3 484	-	-
55	2 104	2 390	2 671	2 944	3 209	3 464	3 707	-	-
60	-	-	2 755	3 060	3 357	3 645	3 922	-	-
65	-	-	-	3 158	3 489	3 812	4 124	-	-
70	-	-	-	-	-	3 960	4 310	-	-

Current consumption in A

35	4.74	5.22	5.70	6.19	6.73	7.34	8.04	-	-
40	4.97	5.48	5.95	6.42	6.91	7.43	8.02	-	-
45	5.15	5.72	6.23	6.70	7.16	7.63	8.13	-	-
50	5.26	5.92	6.49	7.00	7.46	7.90	8.35	-	-
55	5.28	6.06	6.72	7.29	7.78	8.23	8.65	-	-
60	-	-	6.89	7.55	8.10	8.58	9.01	-	-
65	-	-	-	7.75	8.40	8.94	9.40	-	-
70	-	-	-	-	-	9.28	9.80	-	-

Mass flow in kg/h

35	87	109	135	166	201	243	290	-	-
40	85	107	133	164	200	241	289	-	-
45	82	104	130	161	197	238	286	-	-
50	80	101	127	157	193	234	282	-	-
55	76	98	123	153	188	229	276	-	-
60	-	-	118	147	182	222	269	-	-
65	-	-	-	141	175	215	261	-	-
70	-	-	-	-	-	206	251	-	-

Coefficient of performance (C.O.P.)

35	2.12	2.46	2.86	3.33	3.87	4.49	5.20	-	-
40	1.89	2.19	2.55	2.96	3.43	3.97	4.59	-	-
45	1.68	1.95	2.26	2.62	3.03	3.50	4.04	-	-
50	1.49	1.73	2.00	2.31	2.67	3.08	3.55	-	-
55	1.32	1.53	1.76	2.03	2.35	2.71	3.11	-	-
60	-	-	1.55	1.78	2.06	2.37	2.72	-	-
65	-	-	-	1.56	1.79	2.06	2.37	-	-
70	-	-	-	-	-	1.79	2.06	-	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C								
Cooling capacity	8 386	W						
Power input	3 302	W						
Current consumption	7.94	Α						
Mass flow	206	kg/h						
C.O.P.	2.54							

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 data Sound power level	0	dB(A)

Pressure switch settings

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Performanc	ce data at 4	5 Hz, EN 129	00 rating co	nditions					R134a
Cond. temp. in				Evapora	ating temperature i	n °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacit	w in W								
35	4 071	5 213	6 603	8 279	10 277	12 631	15 377	-	_
40	3 781	4 871	6 199	7 800	9 711	11 968	14 605		_
45	3 473	4 504	5 761	7 280	9 098	11 249	13 769	_	
50	3 156	4 120	5 299	6 728	8 443	10 481	12 876	_	
55	2 839	3 728	4 820	6 151	7 757	9 673	11 935		_
60	-	-	4 332	5 557	7 045	8 832	10 953	-	_
65	_	-	-	4 954	6 316	7 966	9 938	-	_
70	-	-	-		-	7 083	8 899	-	-
10		_	_	_	_	7 000	0 000	_	_
ower input in V	N	-	1	1	-		-	•	
35	2 077	2 287	2 489	2 679	2 858	3 022	3 171	-	-
40	2 177	2 412	2 639	2 856	3 061	3 253	3 430	-	-
45	2 264	2 527	2 782	3 027	3 262	3 484	3 692	-	-
50	2 335	2 628	2 913	3 190	3 456	3 710	3 951	-	-
55	2 386	2 711	3 029	3 339	3 639	3 928	4 204	-	-
60	-	-	3 125	3 471	3 807	4 134	4 448	-	-
65	-	-	-	3 581	3 957	4 322	4 677	-	-
70	-	-	-	-	-	4 491	4 887	-	-
Current consum	antion in A								
35	5.27	5.80	6.33	6.88	7.48	8.16	8.93	-	-
40	5.52	6.09	6.62	7.14	7.68	8.26	8.91	-	-
45	5.72	6.35	6.92	7.44	7.95	8.48	9.03	-	-
50	5.85	6.58	7.21	7.77	8.29	8.78	9.28	-	-
55	5.87	6.74	7.47	8.10	8.65	9.14	9.61	-	-
60	-	-	7.66	8.39	9.00	9.54	10.01	-	-
65	-	_	-	8.62	9.33	9.93	10.45	_	_
70	-	-	-	-	-	10.31	10.89	-	-
				1					
lass flow in kg		1	T		T	I	I	1	
35	99	124	154	189	230	277	331	-	-
40	97	122	152	187	228	275	329	-	-
45	94	119	149	184	224	272	326	-	-
50	91	115	145	179	220	267	321	-	-
55	87	111	140	174	214	261	315	-	-
60	-	-	135	168	207	254	307	-	-
65	-	-	-	161	200	245	298	-	-
70	-	-	-	-	-	235	287	-	-
	erformance (C C) P)							
Coefficient of no									
· · · ·		,	2.65	3,09	3.60	4,18	4,85	-	-
35 40	1.96 1.74	2.28 2.02	2.65 2.35	3.09 2.73	3.60 3.17	4.18 3.68	4.85 4.26	-	-

40	1.74	2.02	2.35	2.73	3.17	3.68	4.26	-	-
45	1.53	1.78	2.07	2.41	2.79	3.23	3.73	-	-
50	1.35	1.57	1.82	2.11	2.44	2.83	3.26	-	-
55	1.19	1.38	1.59	1.84	2.13	2.46	2.84	-	-
60	-	-	1.39	1.60	1.85	2.14	2.46	-	-
65	-	-	-	1.38	1.60	1.84	2.13	-	-
70	-	-	-	-	-	1.58	1.82	-	-

Nominal performance at to = 5 °C, tc = 50 °C								
Cooling capacity	8 443	W						
Power input	3 456	W						
Current consumption	8.29	A						
Mass flow	220	kg/h						
C.O.P.	2.44							

Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)
Sound power data		
Sound power data Sound power level	0	dB(A)

22.6

bar(g)

Pressure switch settings Maximum HP switch setting

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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



Inverter reciprocating compressors VTZ121-G

Danfoss

R134a

Performance data at 45 Hz, ARI rating conditions

	Evaporating temperature in °C (to)									
°C (tc) -15 -10 -5 0 5 10 15										

Cooling capacity in W

oconing capaci									
35	4 410	5 636	7 128	8 924	11 060	13 574	16 503	-	-
40	4 117	5 294	6 725	8 448	10 501	12 920	15 744	-	-
45	3 805	4 925	6 287	7 929	9 890	12 207	14 917	-	-
50	3 483	4 536	5 821	7 374	9 235	11 441	14 030	-	-
55	3 160	4 138	5 336	6 792	8 545	10 632	13 091	-	-
60	-	-	4 840	6 190	7 827	9 787	12 108	-	-
65	-	-	-	5 578	7 089	8 914	11 091	-	-
70	-	-	-	-	-	8 024	10 047	-	-

Power input in W

35	2 077	2 287	2 489	2 679	2 858	3 022	3 171	-	-
40	2 177	2 412	2 639	2 856	3 061	3 253	3 430	-	-
45	2 264	2 527	2 782	3 027	3 262	3 484	3 692	-	-
50	2 335	2 628	2 913	3 190	3 456	3 710	3 951	-	-
55	2 386	2 711	3 029	3 339	3 639	3 928	4 204	-	-
60	-	-	3 125	3 471	3 807	4 134	4 448	-	-
65	-	-	-	3 581	3 957	4 322	4 677	-	-
70	-	-	-	-	-	4 491	4 887	-	-

Current consumption in A

35	5.27	5.80	6.33	6.88	7.48	8.16	8.93	-	-
40	5.52	6.09	6.62	7.14	7.68	8.26	8.91	-	-
45	5.72	6.35	6.92	7.44	7.95	8.48	9.03	-	-
50	5.85	6.58	7.21	7.77	8.29	8.78	9.28	-	-
55	5.87	6.74	7.47	8.10	8.65	9.14	9.61	-	-
60	-	-	7.66	8.39	9.00	9.54	10.01	-	-
65	-	-	-	8.62	9.33	9.93	10.45	-	-
70	-	-	-	-	-	10.31	10.89	-	-

Mass flow in kg/h

35	98	123	153	188	228	275	329	-	-
40	96	121	151	186	226	273	328	-	-
45	93	118	148	183	223	270	324	-	-
50	90	115	144	178	219	266	319	-	-
55	87	111	139	173	213	260	313	-	-
60	-	-	134	167	206	252	305	-	-
65	-	-	-	160	199	244	296	-	-
70	-	-	-	-	-	234	285	-	-

Coefficient of performance (C.O.P.)

35	2.12	2.46	2.86	3.33	3.87	4.49	5.20	-	-
40	1.89	2.19	2.55	2.96	3.43	3.97	4.59	-	-
45	1.68	1.95	2.26	2.62	3.03	3.50	4.04	-	-
50	1.49	1.73	2.00	2.31	2.67	3.08	3.55	-	-
55	1.32	1.53	1.76	2.03	2.35	2.71	3.11	-	-
60	-	-	1.55	1.78	2.06	2.37	2.72	-	-
65	-	-	-	1.56	1.79	2.06	2.37	-	-
70	-	-	-	-	-	1.79	2.06	-	-

Nominal performance at to = 7.2 °C,	tc = 54.4 °C	
Cooling capacity	9 510	W
Power input	3 745	W
Current consumption	8.82	Α
Mass flow	233	kg/h
C.O.P.	2.54	

Minimum LP switch setting	0.2	bar(g)				
LP pump down setting	0.5 bar(g)					
Sound power data						
Sound power data Sound power level	0	dB(A)				

22.6

bar(g)

Pressure switch settings
Maximum HP switch setting

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Danfoss

R134a

Performance data at 50 Hz, EN 12900 rating conditions

Cond. temp. in				Evapor	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacity	in W				_				
35	4 551	5 826	7 381	9 254	11 487	14 118	17 188	-	-
40	4 226	5 444	6 928	8 719	10 855	13 377	16 325	-	-
45	3 882	5 034	6 439	8 138	10 169	12 573	15 390	-	-
50	3 528	4 605	5 923	7 520	9 438	11 715	14 392	-	-
55	3 173	4 167	5 387	6 875	8 670	10 812	13 340	-	-
60	-	-	4 842	6 211	7 874	9 872	12 243	-	-
65	-	-	-	5 537	7 060	8 904	11 109	-	-
70	-	-	-	-	-	7 917	9 946	-	-
						•			
Power input in W	1								
35	2 318	2 553	2 778	2 990	3 189	3 372	3 537	-	-
40	2 429	2 692	2 945	3 187	3 416	3 630	3 828	-	-
45	2 526	2 819	3 104	3 378	3 640	3 888	4 120	-	-

45	2 526	2 819	3 104	3 378	3 640	3 888	4 120	-	-
50	2 606	2 932	3 250	3 559	3 856	4 141	4 410	-	-
55	2 663	3 025	3 379	3 725	4 061	4 384	4 693	-	-
60	-	-	3 487	3 873	4 248	4 613	4 964	-	-
65	-	-	-	3 996	4 415	4 823	5 219	-	-
70	-	-	-	-	-	5 011	5 454	-	-

Current consumption in A

35	5.65	6.23	6.79	7.38	8.03	8.75	9.58	-	-
40	5.92	6.53	7.10	7.66	8.24	8.86	9.56	-	-
45	6.14	6.82	7.43	7.99	8.54	9.09	9.69	-	-
50	6.27	7.06	7.74	8.34	8.89	9.42	9.95	-	-
55	6.30	7.23	8.01	8.69	9.28	9.81	10.31	-	-
60	-	-	8.22	9.00	9.66	10.23	10.74	-	-
65	-	-	-	9.25	10.02	10.66	11.21	-	-
70	-	-	-	-	-	11.06	11.69	-	-

Mass flow in kg/h

35	111	139	172	211	257	309	370	-	-
40	108	136	170	209	254	307	368	-	-
45	105	133	166	205	251	304	364	-	-
50	101	129	162	200	246	298	359	-	-
55	97	124	156	195	239	292	352	-	-
60	-	-	150	188	232	283	343	-	-
65	-	-	-	180	223	274	333	-	-
70	-	-	-	-	-	263	320	-	-

Coefficient of performance (C.O.P.)

35	1.96	2.28	2.66	3.10	3.60	4.19	4.86	-	-
40	1.74	2.02	2.35	2.74	3.18	3.68	4.26	-	-
45	1.54	1.79	2.07	2.41	2.79	3.23	3.74	-	-
50	1.35	1.57	1.82	2.11	2.45	2.83	3.26	-	-
55	1.19	1.38	1.59	1.85	2.14	2.47	2.84	-	-
60	-	-	1.39	1.60	1.85	2.14	2.47	-	-
65	-	-	-	1.39	1.60	1.85	2.13	-	-
70	-	-	-	-	-	1.58	1.82	-	-

Nominal performance at to = 5 °C, tc = 50 °C									
Cooling capacity	9 438	W							
Power input	3 856	W							
Current consumption	8.89	А							
Mass flow	246	kg/h							
C.O.P.	2.45								

LP pump down setting 0.5 bar(g) Sound power data 0 10(A)	Minimum LP switch setting	0.2	bar(g)
	LP pump down setting	0.5	bar(g)
•			
	Cound nouse data		
	Sound power data Sound power level	0	dB(A)

Pressure switch settings
Maximum HP switch setting

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

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22.6

bar(g)

Inverter reciprocating compressors VTZ121-G

Danfoss

R134a

Performance data at 50 Hz, ARI rating conditions

(Cond. temp. in				Evapora	ting temperature i	n °C (to)		
	°C (tc)	-15	-10	-5	0	5	10	15	
	0 (10)	-15	-10	-5	0	5	10	15	

Cooling capacity in W

35	4 929	6 300	7 968	9 975	12 362	15 172	18 446	-	-
40	4 602	5 917	7 517	9 443	11 737	14 442	17 598	-	-
45	4 253	5 505	7 027	8 863	11 055	13 644	16 673	-	-
50	3 894	5 071	6 506	8 243	10 323	12 789	15 682	-	-
55	3 532	4 625	5 964	7 592	9 551	11 884	14 632	-	-
60	-	-	5 410	6 919	8 748	10 939	13 534	-	-
65	-	-	-	6 235	7 924	9 964	12 397	-	-
70	-	-	-	-	-	8 968	11 231	-	-

Power input in W

35	2 318	2 553	2 778	2 990	3 189	3 372	3 537	-	-
40	2 429	2 692	2 945	3 187	3 416	3 630	3 828	-	-
45	2 526	2 819	3 104	3 378	3 640	3 888	4 120	-	-
50	2 606	2 932	3 250	3 559	3 856	4 141	4 410	-	-
55	2 663	3 025	3 379	3 725	4 061	4 384	4 693	-	-
60	-	-	3 487	3 873	4 248	4 613	4 964	-	-
65	-	-	-	3 996	4 415	4 823	5 219	-	-
70	-	-	-	-	-	5 011	5 454	-	-

Current consumption in A

35	5.65	6.23	6.79	7.38	8.03	8.75	9.58	-	-
40	5.92	6.53	7.10	7.66	8.24	8.86	9.56	-	-
45	6.14	6.82	7.43	7.99	8.54	9.09	9.69	-	-
50	6.27	7.06	7.74	8.34	8.89	9.42	9.95	-	-
55	6.30	7.23	8.01	8.69	9.28	9.81	10.31	-	-
60	-	-	8.22	9.00	9.66	10.23	10.74	-	-
65	-	-	-	9.25	10.02	10.66	11.21	-	-
70	-	-	-	-	-	11.06	11.69	-	-

Mass flow in kg/h

35	110	138	171	210	255	308	368	-	-
40	107	136	169	208	253	306	366	-	-
45	104	132	165	204	249	302	362	-	-
50	101	128	161	199	244	297	357	-	-
55	97	124	156	194	238	290	350	-	-
60	-	-	150	187	231	282	341	-	-
65	-	-	-	179	222	272	331	-	-
70	-	-	-	-	-	261	319	-	-

Coefficient of performance (C.O.P.)

35	2.13	2.47	2.87	3.34	3.88	4.50	5.21	-	-
40	1.89	2.20	2.55	2.96	3.44	3.98	4.60	-	-
45	1.68	1.95	2.26	2.62	3.04	3.51	4.05	-	-
50	1.49	1.73	2.00	2.32	2.68	3.09	3.56	-	-
55	1.33	1.53	1.76	2.04	2.35	2.71	3.12	-	-
60	-	-	1.55	1.79	2.06	2.37	2.73	-	-
65	-	-	-	1.56	1.79	2.07	2.38	-	-
70	-	-	-	-	-	1.79	2.06	-	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C									
Cooling capacity	10 630	W							
Power input	4 179	W							
Current consumption	9.47	A							
Mass flow	261	kg/h							
C.O.P.	2.54								

tc: Condensing temperature at dew point

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

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Pressure switch settings22.6bar(g)Maximum HP switch setting0.2bar(g)Minimum LP switch setting0.2bar(g)LP pump down setting0.5bar(g)

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

Inverter reciprocating compressors VTZ121-G

Performance data at 55 Hz, EN 12900 rating conditions

Fenomance		5 HZ, LIN 125		nultions					
Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacity	in W								
35	5 028	6 438	8 155	10 225	12 691	15 598	18 991	-	-
40	4 669	6 015	7 655	9 633	11 993	14 780	18 037	-	-
45	4 289	5 562	7 115	8 991	11 235	13 892	17 004	-	-
50	3 898	5 089	6 544	8 309	10 427	12 944	15 902	-	-
55	3 506	4 604	5 953	7 596	9 579	11 946	14 740	-	-
60	-	-	5 350	6 863	8 700	10 907	13 527	-	-
65	-	-	-	6 118	7 800	9 837	12 274	-	-
70	-	-	-	-	-	8 747	10 990	-	-
Power input in W	2 555	2 813	3 061	3 295	3 513	3 714	3 894		-
40	2 676	2 966	3 245	3 512	3 765	4 001	4 217		
45	2 783	3 106	3 420	3 722	4 012	4 285	4 541	-	-
50	2 871	3 230	3 580	3 921	4 249	4 564	4 861	-	-
55	2 936	3 333	3 723	4 104	4 474	4 831	5 172	-	-
60	-	-	3 842	4 266	4 680	5 082	5 470	-	-
65	-	-	-	4 403	4 864	5 314	5 751	-	-
70	-	-	-	-	-	5 521	6 010	-	-
		1	1				1 1		
Current consum	ption in A								
35	5.89	6.49	7.09	7.70	8.37	9.12	9.98	-	-
40	6 17	6.91	7.40	7.00	9 50	0.24	0.06		

35	5.89	6.49	7.09	7.70	8.37	9.12	9.98	-	
40	6.17	6.81	7.40	7.99	8.59	9.24	9.96	-	
45	6.40	7.11	7.74	8.33	8.90	9.48	10.10	-	
50	6.54	7.36	8.07	8.70	9.27	9.82	10.38	-	
55	6.57	7.54	8.36	9.06	9.67	10.23	10.75	-	
60	-	-	8.57	9.38	10.07	10.67	11.20	-	
65	-	-	-	9.64	10.44	11.12	11.69	-	
70	-	-	-	-	-	11.54	12.19	-	

Mass flow in kg/h

35	122	153	190	233	284	342	409	-	-
40	119	150	187	231	281	340	407	-	-
45	116	147	184	227	277	335	403	-	-
50	112	142	179	221	272	330	397	-	-
55	108	137	173	215	265	322	389	-	-
60	-	-	166	207	256	313	379	-	-
65	-	-	-	199	247	302	367	-	-
70	-	-	-	-	-	290	354	-	-

Coefficient of performance (C.O.P.)

35	1.97	2.29	2.66	3.10	3.61	4.20	4.88	-	-
40	1.74	2.03	2.36	2.74	3.19	3.69	4.28	-	-
45	1.54	1.79	2.08	2.42	2.80	3.24	3.74	-	-
50	1.36	1.58	1.83	2.12	2.45	2.84	3.27	-	-
55	1.19	1.38	1.60	1.85	2.14	2.47	2.85	-	-
60	-	-	1.39	1.61	1.86	2.15	2.47	-	-
65	-	-	-	1.39	1.60	1.85	2.13	-	-
70	-	-	-	-	-	1.58	1.83	-	-

Nominal performance at to = 5 °C, to	c = 50 °C	
Cooling capacity	10 427	W
Power input	4 249	W
Current consumption	9.27	Α
Mass flow	272	kg/h
C.O.P.	2.45	

Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)
Cound mouses data		
Sound power data		
Sound power data Sound power level	0	dB(A)

22.6

bar(g)

Pressure switch settings
Maximum HP switch setting

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

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R134a

Danfoss

Inverter reciprocating compressors VTZ121-G

Danfoss

R134a

Performance data at 55 Hz, ARI rating conditions

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-15	-15 -10 -5 0 5 10 15								
- ()	-15	-15 -10 -5 0 5 10 15								

Cooling capacity in W

ecomig capaci	.								
35	5 446	6 961	8 804	11 021	13 659	16 763	20 381	-	-
40	5 084	6 538	8 306	10 434	12 968	15 956	19 443	-	-
45	4 700	6 082	7 764	9 792	12 214	15 075	18 422	-	-
50	4 302	5 602	7 188	9 107	11 405	14 130	17 326	-	-
55	3 902	5 110	6 589	8 388	10 553	13 130	16 167	-	-
60	-	-	5 977	7 645	9 666	12 086	14 954	-	-
65	-	-	-	6 889	8 755	11 009	13 697	-	-
70	-	-	-	-	-	9 909	12 408	-	-

Power input in W

35	2 555	2 813	3 061	3 295	3 513	3 714	3 894	-	-
40	2 676	2 966	3 245	3 512	3 765	4 001	4 217	-	-
45	2 783	3 106	3 420	3 722	4 012	4 285	4 541	-	-
50	2 871	3 230	3 580	3 921	4 249	4 564	4 861	-	-
55	2 936	3 333	3 723	4 104	4 474	4 831	5 172	-	-
60	-	-	3 842	4 266	4 680	5 082	5 470	-	-
65	-	-	-	4 403	4 864	5 314	5 751	-	-
70	-	-	-	-	-	5 521	6 010	-	-

Current consumption in A

35	5.89	6.49	7.09	7.70	8.37	9.12	9.98	-	-
40	6.17	6.81	7.40	7.99	8.59	9.24	9.96	-	-
45	6.40	7.11	7.74	8.33	8.90	9.48	10.10	-	-
50	6.54	7.36	8.07	8.70	9.27	9.82	10.38	-	-
55	6.57	7.54	8.36	9.06	9.67	10.23	10.75	-	-
60	-	-	8.57	9.38	10.07	10.67	11.20	-	-
65	-	-	-	9.64	10.44	11.12	11.69	-	-
70	-	-	-	-	-	11.54	12.19	-	-

Mass flow in kg/h

35	121	152	189	232	282	340	407	-	-
40	119	150	186	229	280	338	404	-	-
45	115	146	183	225	276	334	400	-	-
50	111	142	178	220	270	328	394	-	-
55	107	137	172	214	263	321	387	-	-
60	-	-	165	206	255	311	377	-	-
65	-	-	-	198	245	301	365	-	-
70	-	-	-	-	-	289	352	-	-

Coefficient of performance (C.O.P.)

35	2.13	2.47	2.88	3.34	3.89	4.51	5.23	-	-
40	1.90	2.20	2.56	2.97	3.44	3.99	4.61	-	-
45	1.69	1.96	2.27	2.63	3.04	3.52	4.06	-	-
50	1.50	1.73	2.01	2.32	2.68	3.10	3.56	-	-
55	1.33	1.53	1.77	2.04	2.36	2.72	3.13	-	-
60	-	-	1.56	1.79	2.07	2.38	2.73	-	-
65	-	-	-	1.56	1.80	2.07	2.38	-	-
70	-	-	-	-	-	1.79	2.06	-	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C Cooling capacity 11 745 W Power input 4 604 W Current consumption 9.87 A

Current consumption	9.87	A
Mass flow	288	kg/h
C.O.P.	2.55	

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

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

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Minimum LP switch setting0.2LP pump down setting0.5

Pressure switch settings

Maximum HP switch setting

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

22.6

bar(g)

bar(g)

bar(g)

Inverter reciprocating compressors VTZ121-G

Performanc	e data at 6	0 Hz, EN 1290	00 rating co	nditions					R134a
Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
		•					•		•
Cooling capacit	y in W				-		-		
35	5 503	7 046	8 926	11 191	13 891	17 073	20 785	-	-
40	5 110	6 584	8 379	10 543	13 127	16 177	19 742	-	-
45	4 694	6 088	7 787	9 841	12 297	15 204	18 611	-	-
50	4 266	5 569	7 163	9 094	11 413	14 167	17 405	-	-
55	3 837	5 039	6 515	8 314	10 484	13 074	16 132	-	-
60	-	-	5 855	7 511	9 522	11 938	14 805	-	-
65	-	-	-	6 696	8 537	10 767	13 434	-	-
70	-	-	-	-	-	9 574	12 028	-	-
Power input in V	v								
35	2 786	3 069	3 339	3 594	3 832	4 048	4 241	-	-
40	2 918	3 234	3 539	3 831	4 107	4 364	4 599	-	-
45	3 034	3 386	3 729	4 060	4 376	4 675	4 955	-	-
50	3 131	3 521	3 903	4 275	4 635	4 979	5 304	-	-
55	3 205	3 634	4 058	4 474	4 878	5 269	5 643	-	-
60	-	-	4 189	4 651	5 103	5 542	5 967	-	-
65	-	-	-	4 802	5 304	5 795	6 273	-	-
70	-	-	-	-	-	6 021	6 555	-	-
		·			•				
Current consum	•								
35	5.99	6.60	7.21	7.83	8.51	9.26	10.12	-	-
40	6.27	6.92	7.53	8.13	8.74	9.39	10.11	-	-
45	6.51	7.23	7.87	8.47	9.05	9.64	10.27	-	-
50	6.65	7.48	8.21	8.84	9.43	9.99	10.55	-	-
55	6.69	7.66	8.50	9.21	9.84	10.40	10.93	-	-
60	-	-	8.71	9.54	10.24	10.85	11.39	-	-
65	-	-	-	9.80	10.62	11.30	11.89	-	-
70	-	-	-	-	-	11.73	12.39	-	-
Mass flow in kg/	′h								
35	134	168	208	255	310	374	447	-	-
40	131	165	205	252	308	372	445	-	-
45	127	161	201	248	303	367	441	-	-
50	123	156	196	242	297	361	434	-	-
55	118	150	189	235	290	353	426	-	-
60	-	-	182	227	280	343	415	_	

Coefficient of performance (C.O.P.)

65

70

35	1.98	2.30	2.67	3.11	3.63	4.22	4.90	-	-
40	1.75	2.04	2.37	2.75	3.20	3.71	4.29	-	-
45	1.55	1.80	2.09	2.42	2.81	3.25	3.76	-	-
50	1.36	1.58	1.84	2.13	2.46	2.85	3.28	-	-
55	1.20	1.39	1.61	1.86	2.15	2.48	2.86	-	-
60	-	-	1.40	1.62	1.87	2.15	2.48	-	-
65	-	-	-	1.39	1.61	1.86	2.14	-	-
70	-	-	-	-	-	1.59	1.84	-	-

270

331

318

Pressure switch settings Maximum HP switch setting

402

388

218

Nominal performance at to = 5 °C, tc = 50 °C Cooling capacity 11 413 W Power input 4 635 W Current consumption 9.43 A Mass flow 297 kg/h				
Cooling capacity	11 413	W		
Power input	4 635	W		
Current consumption	9.43	Α		
Mass flow	297	kg/h		
C.O.P.	2.46			

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)
		(g)
· · · · ·		4 din (3)
Sound power data Sound power level	0	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

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Inverter reciprocating compressors VTZ121-G

Danfoss

R134a

Performance data at 60 Hz, ARI rating conditions

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-15	-10	-5	0	5	10	15			

Cooling capacity in W

ecomig capaci	. <u>j</u>								
35	5 961	7 619	9 636	12 062	14 950	18 348	22 307	-	-
40	5 565	7 156	9 091	11 420	14 194	17 464	21 281	-	-
45	5 144	6 657	8 498	10 718	13 368	16 500	20 163	-	-
50	4 709	6 132	7 868	9 968	12 483	15 465	18 964	-	-
55	4 271	5 593	7 212	9 181	11 550	14 371	17 695	-	-
60	-	-	6 542	8 367	10 579	13 229	16 367	-	-
65	-	-	-	7 540	9 583	12 050	14 992	-	-
70	-	-	-	-	-	10 846	13 581	-	-

Power input in W

35	2 786	3 069	3 339	3 594	3 832	4 048	4 241	-	-
40	2 918	3 234	3 539	3 831	4 107	4 364	4 599	-	-
45	3 034	3 386	3 729	4 060	4 376	4 675	4 955	-	-
50	3 131	3 521	3 903	4 275	4 635	4 979	5 304	-	-
55	3 205	3 634	4 058	4 474	4 878	5 269	5 643	-	-
60	-	-	4 189	4 651	5 103	5 542	5 967	-	-
65	-	-	-	4 802	5 304	5 795	6 273	-	-
70	-	-	-	-	-	6 021	6 555	-	-

Current consumption in A

35	5.99	6.60	7.21	7.83	8.51	9.26	10.12	-	-
40	6.27	6.92	7.53	8.13	8.74	9.39	10.11	-	-
45	6.51	7.23	7.87	8.47	9.05	9.64	10.27	-	-
50	6.65	7.48	8.21	8.84	9.43	9.99	10.55	-	-
55	6.69	7.66	8.50	9.21	9.84	10.40	10.93	-	-
60	-	-	8.71	9.54	10.24	10.85	11.39	-	-
65	-	-	-	9.80	10.62	11.30	11.89	-	-
70	-	-	-	-	-	11.73	12.39	-	-

Mass flow in kg/h

35	133	167	207	254	309	372	445	-	-
40	130	164	204	251	306	370	443	-	-
45	126	160	200	247	302	365	438	-	-
50	122	155	195	241	296	359	432	-	-
55	117	150	188	234	288	351	423	-	-
60	-	-	181	226	279	341	413	-	-
65	-	-	-	216	268	329	400	-	-
70	-	-	-	-	-	316	385	-	-

Coefficient of performance (C.O.P.)

35	2.14	2.48	2.89	3.36	3.90	4.53	5.26	-	-
40	1.91	2.21	2.57	2.98	3.46	4.00	4.63	-	-
45	1.70	1.97	2.28	2.64	3.05	3.53	4.07	-	-
50	1.50	1.74	2.02	2.33	2.69	3.11	3.58	-	-
55	1.33	1.54	1.78	2.05	2.37	2.73	3.14	-	-
60	-	-	1.56	1.80	2.07	2.39	2.74	-	-
65	-	-	-	1.57	1.81	2.08	2.39	-	-
70	-	-	-	-	-	1.80	2.07	-	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C							
Cooling capacity	12 855	W					
Power input	5 021	W					
Current consumption	10.04	А					
Mass flow	316	kg/h					
C.O.P.	2.56						

Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)
On and a survey dista		
Sound power data		
Sound power data Sound power level	0	dB(A)

22.6

bar(g)

Pressure switch settings
Maximum HP switch setting

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Performance data at 65 Hz, EN 12900 rating conditions

15 22 572 - 21 439 - 20 211 - 18 901
21 439 - - 20 211 - - 18 901 - -
21 439 - - 20 211 - - 18 901 - -
20 211 18 901
17 519
16 078
14 588
13 063
16 078 - 14 588 -

40	3 154	3 497	3 828	4 144	4 443	4 720	4 972	-	-
45	3 280	3 660	4 031	4 390	4 734	5 058	5 360	-	-
50	3 386	3 805	4 218	4 622	5 012	5 386	5 739	-	-
55	3 469	3 929	4 386	4 835	5 274	5 699	6 105	-	-
60	-	-	4 530	5 027	5 516	5 993	6 455	-	-
65	-	-	-	5 193	5 734	6 265	6 784	-	-
70	-	-	-	-	-	6 511	7 088	-	-

Current consumption in A

35	5.94	6.55	7.15	7.78	8.44	9.18	10.02	-	-
40	6.23	6.87	7.48	8.07	8.67	9.32	10.02	-	-
45	6.46	7.17	7.82	8.41	8.99	9.57	10.18	-	-
50	6.61	7.43	8.14	8.78	9.36	9.92	10.47	-	-
55	6.64	7.61	8.43	9.14	9.76	10.32	10.85	-	-
60	-	-	8.65	9.47	10.16	10.77	11.31	-	-
65	-	-	-	9.73	10.54	11.22	11.80	-	-
70	-	-	-	-	-	11.64	12.30	-	-

Mass flow in kg/h

35	145	182	226	277	337	406	486	-	-
40	142	179	223	274	334	404	483	-	-
45	138	175	218	269	329	399	479	-	-
50	133	169	212	263	323	392	471	-	-
55	128	163	205	256	314	383	462	-	-
60	-	-	197	247	305	372	450	-	-
65	-	-	-	236	293	360	437	-	-
70	-	-	-	-	-	345	421	-	-

Coefficient of performance (C.O.P.)

35	1.98	2.31	2.68	3.13	3.64	4.24	4.93	-	-
40	1.76	2.04	2.38	2.76	3.21	3.72	4.31	-	-
45	1.55	1.81	2.10	2.43	2.82	3.26	3.77	-	-
50	1.37	1.59	1.84	2.14	2.47	2.86	3.29	-	-
55	1.20	1.39	1.61	1.87	2.16	2.49	2.87	-	-
60	-	-	1.40	1.62	1.87	2.16	2.49	-	-
65	-	-	-	1.40	1.62	1.87	2.15	-	-
70	-	-	-	-	-	1.60	1.84	-	-

Nominal performance at to = 5 °C, tc = 50 °C							
Cooling capacity	12 394	W					
Power input	5 012	W					
Current consumption	9.36	A					
Mass flow	323	kg/h					
C.O.P.	2.47						

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 data Sound power level	0	dB(A)

Pressure switch settings

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

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R134a

Inverter reciprocating compressors VTZ121-G

Danfoss

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Performance data at 65 Hz, ARI rating conditions

Cond. temp. in				Evapora	ting temperature i	n °C (to)		
°C (tc)	-15	-10	-5	0	5	10	15	
- ()	-15	-10	-0	Ū	3	10	10	

Cooling capacity in W

oconing capaci									
35	6 473	8 274	10 464	13 099	16 235	19 925	24 224	-	-
40	6 043	7 771	9 872	12 401	15 414	18 965	23 110	-	-
45	5 586	7 229	9 228	11 639	14 517	17 918	21 896	-	-
50	5 113	6 659	8 544	10 825	13 556	16 794	20 594	-	-
55	4 638	6 073	7 832	9 970	12 543	15 606	19 215	-	-
60	-	-	7 104	9 087	11 489	14 366	17 774	-	-
65	-	-	-	8 188	10 407	13 085	16 280	-	-
70	-	-	-	-	-	11 778	14 749	-	-

Power input in W

35	3 014	3 320	3 612	3 888	4 144	4 375	4 579	-	-
40	3 154	3 497	3 828	4 144	4 443	4 720	4 972	-	-
45	3 280	3 660	4 031	4 390	4 734	5 058	5 360	-	-
50	3 386	3 805	4 218	4 622	5 012	5 386	5 739	-	-
55	3 469	3 929	4 386	4 835	5 274	5 699	6 105	-	-
60	-	-	4 530	5 027	5 516	5 993	6 455	-	-
65	-	-	-	5 193	5 734	6 265	6 784	-	-
70	-	-	-	-	-	6 511	7 088	-	-

Current consumption in A

35	5.94	6.55	7.15	7.78	8.44	9.18	10.02	-	-
40	6.23	6.87	7.48	8.07	8.67	9.32	10.02	-	-
45	6.46	7.17	7.82	8.41	8.99	9.57	10.18	-	-
50	6.61	7.43	8.14	8.78	9.36	9.92	10.47	-	-
55	6.64	7.61	8.43	9.14	9.76	10.32	10.85	-	-
60	-	-	8.65	9.47	10.16	10.77	11.31	-	-
65	-	-	-	9.73	10.54	11.22	11.80	-	-
70	-	-	-	-	-	11.64	12.30	-	-

Mass flow in kg/h

35	144	181	225	276	335	404	483	-	-
40	141	178	221	273	332	401	481	-	-
45	137	174	217	268	328	397	476	-	-
50	133	169	211	262	321	390	469	-	-
55	127	162	204	254	313	381	460	-	-
60	-	-	196	245	303	370	448	-	-
65	-	-	-	235	291	358	434	-	-
70	-	-	-	-	-	343	419	-	-

Coefficient of performance (C.O.P.)

35	2.15	2.49	2.90	3.37	3.92	4.55	5.29	-	-
40	1.92	2.22	2.58	2.99	3.47	4.02	4.65	-	-
45	1.70	1.98	2.29	2.65	3.07	3.54	4.08	-	-
50	1.51	1.75	2.03	2.34	2.70	3.12	3.59	-	-
55	1.34	1.55	1.79	2.06	2.38	2.74	3.15	-	-
60	-	-	1.57	1.81	2.08	2.40	2.75	-	-
65	-	-	-	1.58	1.81	2.09	2.40	-	-
70	-	-	-	-	-	1.81	2.08	-	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C								
Cooling capacity	13 960	W						
Power input	5 430	W						
Current consumption	9.97	A						
Mass flow	343	kg/h						
C.O.P.	2.57							

Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)
Sound power data		
Sound power data Sound power level	0	dB(A)

22.6

bar(g)

Pressure switch settings
Maximum HP switch setting

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Performance data at 70 Hz, EN 12900 rating conditions

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacity	r in W								
35	6 448	8 255	10 457	13 111	16 274	20 001	24 351	-	-
40	5 987	7 713	9 816	12 352	15 378	18 951	23 128	-	-
45	5 500	7 132	9 123	11 529	14 406	17 812	21 803	-	-
50	4 998	6 525	8 391	10 654	13 370	16 597	20 390	-	-
55	4 495	5 903	7 632	9 740	12 283	15 317	18 899	-	-
60	-	-	6 860	8 799	11 156	13 985	17 345	-	-
65	-	-	-	7 845	10 002	12 614	15 738	-	-
70	-	-	-	-	-	11 216	14 092	-	-
Power input in W	I	_		_				_	_
35	3 236	3 565	3 880	4 176	4 449	4 694	4 907	-	-
40	3 386	3 753	4 110	4 451	4 773	5 069	5 337	-	-
45	3 520	3 927	4 327	4 714	5 084	5 434	5 758	-	-
50	3 636	4 083	4 526	4 961	5 382	5 785	6 166	-	-
55	3 720	4 218	4 706	5 189	5 662	6 120	6 559		_

5 662 6 120 6 559 55 3 729 4 218 4 706 5 189 4 863 5 395 6 4 3 4 6 933 60 5 920 5 575 6 726 7 285 65 6 155 _ -70 6 991 7 612 ---_ -

Current consumption in A

35	5.75	6.35	6.93	7.53	8.18	8.88	9.67	-	-
40	6.03	6.66	7.24	7.82	8.40	9.02	9.69	-	-
45	6.25	6.95	7.57	8.15	8.71	9.27	9.85	-	-
50	6.40	7.19	7.89	8.50	9.07	9.60	10.13	-	-
55	6.44	7.37	8.16	8.85	9.46	10.00	10.51	-	-
60	-	-	8.37	9.17	9.84	10.43	10.95	-	-
65	-	-	-	9.42	10.20	10.87	11.43	-	-
70	-	-	-	-	-	11.28	11.92	-	-

Mass flow in kg/h

35	157	196	244	299	364	438	524	-	-
40	153	193	240	296	360	435	522	-	-
45	149	188	235	291	355	430	516	-	-
50	144	183	229	284	348	423	509	-	-
55	138	176	222	276	339	413	498	-	-
60	-	-	213	266	329	402	486	-	-
65	-	-	-	255	316	388	471	-	-
70	-	-	-	-	-	372	454	-	-

Coefficient of performance (C.O.P.)

35	1.99	2.32	2.70	3.14	3.66	4.26	4.96	-	-
40	1.77	2.05	2.39	2.77	3.22	3.74	4.33	-	-
45	1.56	1.82	2.11	2.45	2.83	3.28	3.79	-	-
50	1.37	1.60	1.85	2.15	2.48	2.87	3.31	-	-
55	1.21	1.40	1.62	1.88	2.17	2.50	2.88	-	-
60	-	-	1.41	1.63	1.88	2.17	2.50	-	-
65	-	-	-	1.41	1.63	1.88	2.16	-	-
70	-	-	-	-	-	1.60	1.85	-	-

Nominal performance at to = 5 °C, tc = 50 °C								
Cooling capacity	13 370	W						
Power input	5 382	W						
Current consumption	9.07	А						
Mass flow	240	ka/h						

Current consumption	9.07	A	
Mass flow	348	kg/h	
C.O.P.	2.48		

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

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

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Pressure switch settings Maximum HP switch setting

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

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

Danfoss

R134a

Inverter reciprocating compressors VTZ121-G

Danfoss

R134a

Performance data at 70 Hz, ARI rating conditions

Cond. temp. in				Evapora	ting temperature i	n °C (to)		
°C (tc)	-15	-10	-5	0	5	10	15	

Cooling capacity in W

35	6 984	8 926	11 289	14 132	17 514	21 495	26 133	-	-
40	6 520	8 384	10 650	13 379	16 629	20 460	24 931	-	-
45	6 026	7 799	9 955	12 556	15 661	19 330	23 621	-	-
50	5 516	7 184	9 217	11 677	14 624	18 117	22 216	-	-
55	5 003	6 552	8 449	10 755	13 531	16 836	20 730	-	-
60	-	-	7 664	9 803	12 394	15 498	19 174	-	-
65	-	-	-	8 833	11 227	14 117	17 563	-	-
70	-	-	-	-	-	12 707	15 912	-	-

Power input in W

35	3 236	3 565	3 880	4 176	4 449	4 694	4 907	-	-
40	3 386	3 753	4 110	4 451	4 773	5 069	5 337	-	-
45	3 520	3 927	4 327	4 714	5 084	5 434	5 758	-	-
50	3 636	4 083	4 526	4 961	5 382	5 785	6 166	-	-
55	3 729	4 218	4 706	5 189	5 662	6 120	6 559	-	-
60	-	-	4 863	5 395	5 920	6 434	6 933	-	-
65	-	-	-	5 575	6 155	6 726	7 285	-	-
70	-	-	-	-	-	6 991	7 612	-	-

Current consumption in A

35	5.75	6.35	6.93	7.53	8.18	8.88	9.67	-	-
40	6.03	6.66	7.24	7.82	8.40	9.02	9.69	-	-
45	6.25	6.95	7.57	8.15	8.71	9.27	9.85	-	-
50	6.40	7.19	7.89	8.50	9.07	9.60	10.13	-	-
55	6.44	7.37	8.16	8.85	9.46	10.00	10.51	-	-
60	-	-	8.37	9.17	9.84	10.43	10.95	-	-
65	-	-	-	9.42	10.20	10.87	11.43	-	-
70	-	-	-	-	-	11.28	11.92	-	-

Mass flow in kg/h

35	156	196	242	297	362	436	521	-	-
40	152	192	239	294	358	433	519	-	-
45	148	187	234	289	353	428	513	-	-
50	143	182	228	282	346	420	506	-	-
55	137	175	221	274	337	411	496	-	-
60	-	-	212	265	327	399	483	-	-
65	-	-	-	254	314	386	469	-	-
70	-	-	-	-	-	370	452	-	-

Coefficient of performance (C.O.P.)

35	2.16	2.50	2.91	3.38	3.94	4.58	5.33	-	-
40	1.93	2.23	2.59	3.01	3.48	4.04	4.67	-	-
45	1.71	1.99	2.30	2.66	3.08	3.56	4.10	-	-
50	1.52	1.76	2.04	2.35	2.72	3.13	3.60	-	-
55	1.34	1.55	1.80	2.07	2.39	2.75	3.16	-	-
60	-	-	1.58	1.82	2.09	2.41	2.77	-	-
65	-	-	-	1.58	1.82	2.10	2.41	-	-
70	-	-	-	-	-	1.82	2.09	-	-

Nominal performance at to = 7.2 °C, tc =	54.4 °C	
Cooling capacity	15 060	W
Power input	5 830	W
Current consumption	9.65	Α
Mass flow	370	kg/h
C.O.P.	2.58	

Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)
Cound nowar data		
Sound power data Sound power level	0	dB(A)

22.6

bar(g)

Pressure switch settings
Maximum HP switch setting

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Danfoss

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Performance data at 75 Hz, EN 12900 rating conditions

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacity	r in W								
35	6 917	8 856	11 218	14 065	17 457	21 456	26 122	-	-
40	6 422	8 274	10 530	13 250	16 496	20 329	24 810	-	-
45	5 899	7 651	9 786	12 367	15 454	19 107	23 389	-	-
50	5 361	6 999	9 001	11 429	14 342	17 803	21 872	-	-
55	4 822	6 332	8 187	10 448	13 175	16 430	20 273	-	-
60	-	-	7 358	9 439	11 967	15 002	18 606	-	-
65	-	-	-	8 415	10 729	13 532	16 883	-	-
70	-	-	-	-	-	12 032	15 118	-	-

Power input in W

35	3 454	3 806	4 142	4 459	4 748	5 006	5 226	-	-
40	3 612	4 005	4 387	4 752	5 096	5 412	5 694	-	-
45	3 755	4 188	4 616	5 031	5 428	5 803	6 148	-	-
50	3 880	4 354	4 827	5 292	5 744	6 177	6 585	-	-
55	3 984	4 500	5 019	5 534	6 040	6 532	7 004	-	-
60	-	-	5 188	5 754	6 315	6 866	7 402	-	-
65	-	-	-	5 950	6 566	7 176	7 776	-	-
70	-	-	-	-	-	7 461	8 124	-	-

Current consumption in A

35	5.42	5.98	6.54	7.11	7.71	8.35	9.07	-	-
40	5.68	6.27	6.83	7.38	7.92	8.49	9.11	-	-
45	5.89	6.55	7.14	7.69	8.21	8.74	9.27	-	-
50	6.04	6.78	7.43	8.02	8.55	9.06	9.55	-	-
55	6.08	6.95	7.69	8.34	8.92	9.43	9.91	-	-
60	-	-	7.89	8.64	9.28	9.83	10.32	-	-
65	-	-	-	8.88	9.62	10.24	10.78	-	-
70	-	-	-	-	-	10.63	11.24	-	-

Mass flow in kg/h

35	168	211	261	321	390	470	562	-	-
40	164	207	258	317	387	467	559	-	-
45	160	202	252	312	381	461	554	-	-
50	154	196	246	305	373	453	546	-	-
55	148	189	238	296	364	443	535	-	-
60	-	-	229	285	352	431	521	-	-
65	-	-	-	273	339	416	505	-	-
70	-	-	-	-	-	399	487	-	-

Coefficient of performance (C.O.P.)

35	2.00	2.33	2.71	3.15	3.68	4.29	5.00	-	-
40	1.78	2.07	2.40	2.79	3.24	3.76	4.36	-	-
45	1.57	1.83	2.12	2.46	2.85	3.29	3.80	-	-
50	1.38	1.61	1.86	2.16	2.50	2.88	3.32	-	-
55	1.21	1.41	1.63	1.89	2.18	2.52	2.89	-	-
60	-	-	1.42	1.64	1.89	2.18	2.51	-	-
65	-	-	-	1.41	1.63	1.89	2.17	-	-
70	-	-	-	-	-	1.61	1.86	-	-

Nominal performance at to = 5 °C, tc = 5	0 °C	
Cooling capacity	14 342	W
Power input	5 744	W
Current consumption	8.55	Α
Mass flow	373	kg/h

2.50

Minimum LP switch setting	0.2	bar(g)	
LP pump down setting	0.5	bar(g)	
.			
Sound power data			
Sound power data Sound power level With accoustic hood	0	dB(A)	

22.6

bar(g)

Pressure switch settings
Maximum HP switch setting

to: Evaporating temperature at dew point

C.O.P.

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Danfoss

R134a

Performance data at 75 Hz, ARI rating conditions

Cond. temp. in		Evaporating temperature in °C (to)										
°C (tc)	-15	-10	-5	0	5	10	15					

Cooling capacity in W

35	7 492	9 575	12 110	15 160	18 788	23 058	28 034	-	-
40	6 994	8 994	11 425	14 351	17 838	21 947	26 744	-	-
45	6 464	8 366	10 679	13 469	16 800	20 735	25 338	-	-
50	5 917	7 706	9 887	12 526	15 687	19 435	23 832	-	-
55	5 366	7 028	9 063	11 537	14 514	18 060	22 237	-	-
60	-	-	8 221	10 515	13 295	16 624	20 568	-	-
65	-	-	-	9 475	12 043	15 143	18 841	-	-
70	-	-	-	-	-	13 631	17 069	-	-

Power input in W

35	3 454	3 806	4 142	4 459	4 748	5 006	5 226	-	-
40	3 612	4 005	4 387	4 752	5 096	5 412	5 694	-	-
45	3 755	4 188	4 616	5 031	5 428	5 803	6 148	-	-
50	3 880	4 354	4 827	5 292	5 744	6 177	6 585	-	-
55	3 984	4 500	5 019	5 534	6 040	6 532	7 004	-	-
60	-	-	5 188	5 754	6 315	6 866	7 402	-	-
65	-	-	-	5 950	6 566	7 176	7 776	-	-
70	-	-	-	-	-	7 461	8 124	-	-

Current consumption in A

35	5.42	5.98	6.54	7.11	7.71	8.35	9.07	-	-
40	5.68	6.27	6.83	7.38	7.92	8.49	9.11	-	-
45	5.89	6.55	7.14	7.69	8.21	8.74	9.27	-	-
50	6.04	6.78	7.43	8.02	8.55	9.06	9.55	-	-
55	6.08	6.95	7.69	8.34	8.92	9.43	9.91	-	-
60	-	-	7.89	8.64	9.28	9.83	10.32	-	-
65	-	-	-	8.88	9.62	10.24	10.78	-	-
70	-	-	-	-	-	10.63	11.24	-	-

Mass flow in kg/h

35	167	210	260	319	388	468	559	-	-
40	163	206	256	316	385	464	556	-	-
45	159	201	251	310	379	459	551	-	-
50	153	195	245	303	372	451	543	-	-
55	147	188	237	294	362	441	532	-	-
60	-	-	227	284	351	428	518	-	-
65	-	-	-	272	337	414	503	-	-
70	-	-	-	-	-	397	484	-	-

Coefficient of performance (C.O.P.)

35	2.17	2.52	2.92	3.40	3.96	4.61	5.36	-	-
40	1.94	2.25	2.60	3.02	3.50	4.06	4.70	-	-
45	1.72	2.00	2.31	2.68	3.09	3.57	4.12	-	-
50	1.53	1.77	2.05	2.37	2.73	3.15	3.62	-	-
55	1.35	1.56	1.81	2.08	2.40	2.76	3.17	-	-
60	-	-	1.58	1.83	2.11	2.42	2.78	-	-
65	-	-	-	1.59	1.83	2.11	2.42	-	-
70	-	-	-	-	-	1.83	2.10	-	-

Nominal performance at to = 7.2 °C, t	Nominal performance at to = 7.2 °C, tc = 54.4 °C								
Cooling capacity	16 155	W							
Power input	6 221	W							
Current consumption	9.10	А							
Mass flow	397	kg/h							

Mass flow	397	kg/h
C.O.P.	2.60	

to: Evaporating temperature at dew point

(

tc: Condensing temperature at dew point

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

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

Pressure switch settings

0	dB(A)
0	dB(A)
	0 0

Inverter reciprocating compressors VTZ121-G

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Performance data at 80 Hz, EN 12900 rating conditions

Cond. temp. in °C (tc)		Evaporating temperature in °C (to)										
	-15	-10	-5	0	5	10	15					
ooling capacity	in W											
35	7 384	9 454	11 975	15 014	18 635	22 904	27 885	-	-			
40	6 856	8 833	11 241	14 144	17 609	21 701	26 484	-	-			
45	6 298	8 167	10 447	13 201	16 496	20 396	24 967	-	-			
50	5 723	7 471	9 608	12 200	15 310	19 004	23 348	-	-			
55	5 147	6 759	8 740	11 153	14 064	17 539	21 641	-	-			
60	-	-	7 855	10 076	12 774	16 014	19 861	-	-			
65	-	-	-	8 983	11 453	14 445	18 022	-	-			
70	-	-	-	-	-	12 845	16 138	-	-			

40	3 034	4 230	4 037	5 047	5412	5747	0 040	-	-
45	3 985	4 443	4 898	5 341	5 765	6 164	6 530	-	-
50	4 119	4 619	5 120	5 616	6 098	6 561	6 996	-	-
55	4 235	4 776	5 324	5 871	6 411	6 936	7 440	-	-
60	-	-	5 506	6 104	6 701	7 289	7 860	-	-
65	-	-	-	6 316	6 968	7 617	8 256	-	-
70	-	-	-	-	-	7 920	8 625	-	-

Current consumption in A

35	4.94	5.46	5.97	6.49	7.03	7.60	8.23	-	-
40	5.18	5.73	6.24	6.74	7.24	7.75	8.28	-	-
45	5.38	5.98	6.52	7.02	7.50	7.97	8.45	-	-
50	5.51	6.19	6.78	7.32	7.81	8.27	8.71	-	-
55	5.57	6.34	7.02	7.61	8.14	8.61	9.04	-	-
60	-	-	7.20	7.88	8.47	8.98	9.42	-	-
65	-	-	-	8.10	8.78	9.35	9.84	-	-
70	-	-	-	-	-	9.71	10.27	-	-

Mass flow in kg/h

35	179	225	279	342	416	502	600	-	-
40	175	221	275	339	413	499	597	-	-
45	170	216	269	333	407	493	591	-	-
50	165	209	262	325	399	484	582	-	-
55	158	202	254	316	388	473	571	-	-
60	-	-	244	305	376	460	556	-	-
65	-	-	-	292	362	444	540	-	-
70	-	-	-	-	-	426	520	-	-

Coefficient of performance (C.O.P.)

35	2.01	2.34	2.72	3.17	3.70	4.31	5.04	-	-
40	1.79	2.08	2.41	2.80	3.25	3.78	4.38	-	-
45	1.58	1.84	2.13	2.47	2.86	3.31	3.82	-	-
50	1.39	1.62	1.88	2.17	2.51	2.90	3.34	-	-
55	1.22	1.42	1.64	1.90	2.19	2.53	2.91	-	-
60	-	-	1.43	1.65	1.91	2.20	2.53	-	-
65	-	-	-	1.42	1.64	1.90	2.18	-	-
70	-	-	-	-	-	1.62	1.87	-	-

Nominal performance at to = 5 °C, tc = 50	Nominal performance at to = 5 °C, tc = 50 °C								
Cooling capacity	15 310	W							
Power input	6 098	W							
Current consumption	7.81	А							
Mass flow	399	kg/h							

2.51

Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)
Sound nower data		
Sound power data Sound power level	0	dB(A)

22.6

bar(g)

Pressure switch settings
Maximum HP switch setting

to: Evaporating temperature at dew point

C.O.P.

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Danfoss

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Performance data at 80 Hz, ARI rating conditions

Cond. temp. in				Evapora	ting temperature in	n °C (to)		
°C (tc)	-15	-10	-5	0	5	10	15	
. ,	10	10	Ū	ů	Ŭ	10	10	L

Cooling capacity in W

oconing capaci									
35	7 998	10 222	12 928	16 183	20 056	24 614	29 926	-	-
40	7 466	9 601	12 196	15 320	19 041	23 428	28 549	-	-
45	6 901	8 930	11 400	14 378	17 933	22 134	27 048	-	-
50	6 316	8 226	10 555	13 372	16 746	20 746	25 439	-	-
55	5 728	7 502	9 675	12 316	15 494	19 278	23 737	-	-
60	-	-	8 776	11 225	14 192	17 746	21 956	-	-
65	-	-	-	10 115	12 856	16 165	20 112	-	-
70	-	-	-	-	-	14 551	18 222	-	-

Power input in W

35	3 667	4 041	4 400	4 735	5 041	5 310	5 536	-	-
40	3 834	4 250	4 657	5 047	5 412	5 747	6 043	-	-
45	3 985	4 443	4 898	5 341	5 765	6 164	6 530	-	-
50	4 119	4 619	5 120	5 616	6 098	6 561	6 996	-	-
55	4 235	4 776	5 324	5 871	6 411	6 936	7 440	-	-
60	-	-	5 506	6 104	6 701	7 289	7 860	-	-
65	-	-	-	6 316	6 968	7 617	8 256	-	-
70	-	-	-	-	-	7 920	8 625	-	-

Current consumption in A

35	4.94	5.46	5.97	6.49	7.03	7.60	8.23	-	-
40	5.18	5.73	6.24	6.74	7.24	7.75	8.28	-	-
45	5.38	5.98	6.52	7.02	7.50	7.97	8.45	-	-
50	5.51	6.19	6.78	7.32	7.81	8.27	8.71	-	-
55	5.57	6.34	7.02	7.61	8.14	8.61	9.04	-	-
60	-	-	7.20	7.88	8.47	8.98	9.42	-	-
65	-	-	-	8.10	8.78	9.35	9.84	-	-
70	-	-	-	-	-	9.71	10.27	-	-

Mass flow in kg/h

35	178	224	278	341	414	499	597	-	-
40	174	220	274	337	411	496	594	-	-
45	169	215	268	331	405	490	588	-	-
50	164	208	261	323	397	481	579	-	-
55	157	201	253	314	386	471	568	-	-
60	-	-	243	303	374	457	553	-	-
65	-	-	-	290	360	442	537	-	-
70	-	-	-	-	-	424	517	-	-

Coefficient of performance (C.O.P.)

35	2.18	2.53	2.94	3.42	3.98	4.64	5.41	-	-
40	1.95	2.26	2.62	3.04	3.52	4.08	4.72	-	-
45	1.73	2.01	2.33	2.69	3.11	3.59	4.14	-	-
50	1.53	1.78	2.06	2.38	2.75	3.16	3.64	-	-
55	1.35	1.57	1.82	2.10	2.42	2.78	3.19	-	-
60	-	-	1.59	1.84	2.12	2.43	2.79	-	-
65	-	-	-	1.60	1.85	2.12	2.44	-	-
70	-	-	-	-	-	1.84	2.11	-	-

Nominal performance at to = 7.2 °C,	Nominal performance at to = 7.2 °C, tc = 54.4 °C							
Cooling capacity	17 245	W						
Power input	6 604	W						
Current consumption	8.31	А						
Mass flow	122	ka/h						

Current consumption	8.31	А
Mass flow	423	kg/h
C.O.P.	2.61	

to:	Evaporating	temperature	at c	dew p	point
-----	-------------	-------------	------	-------	-------

tc: Condensing temperature at dew point

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

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LP pump down setting 0.5

Pressure switch settings Maximum HP switch setting

Minimum LP switch setting

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

22.6

0.2

bar(g)

bar(g)

bar(g)

_

Inverter reciprocating compressors VTZ121-G

Danfoss

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Performance data at 85 Hz, EN 12900 rating conditions

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8 349

-

Cond. temp. in		Evaporating temperature in °C (to)										
°C (tc)	-15	-10	-5	0	5	10	15					
Cooling capacit	y in W											
35	7 850	10 049	12 729	15 959	19 808	24 345	29 639	-	-			
40	7 288	9 389	11 948	15 035	18 718	23 066	28 150	-	-			
45	6 694	8 681	11 104	14 032	17 534	21 680	26 538	-	-			
50	6 083	7 941	10 213	12 967	16 273	20 200	24 817	-	-			
55	5 470	7 185	9 290	11 855	14 949	18 642	23 003	-	-			

13 578

12 174

_

17 022

15 354

13 654

21 111

19 157

17 154

10 710

9 548

Power input in W

60

65

70

35	3 876	4 272	4 651	5 006	5 328	5 607	5 837	-	-
40	4 050	4 491	4 922	5 335	5 723	6 075	6 384	-	-
45	4 209	4 692	5 174	5 644	6 095	6 518	6 905	-	-
50	4 353	4 877	5 407	5 932	6 445	6 937	7 400	-	-
55	4 482	5 046	5 621	6 199	6 772	7 331	7 868	-	-
60	-	-	5 817	6 447	7 078	7 701	8 310	-	-
65	-	-	-	6 673	7 360	8 047	8 726	-	-
70	-	-	-	-	-	8 369	9 116	-	-

Current consumption in A

35	4.32	4.78	5.24	5.69	6.15	6.63	7.13	-	-
40	4.53	5.02	5.47	5.91	6.34	6.77	7.21	-	-
45	4.71	5.23	5.71	6.16	6.58	6.98	7.37	-	-
50	4.83	5.42	5.94	6.41	6.85	7.24	7.62	-	-
55	4.89	5.55	6.14	6.67	7.13	7.54	7.91	-	-
60	-	-	6.31	6.90	7.41	7.86	8.25	-	-
65	-	-	-	7.09	7.68	8.19	8.62	-	-
70	-	-	-	-	-	8.50	9.00	-	-

Mass flow in kg/h

35	191	239	297	364	443	533	638	-	-
40	186	235	292	360	439	530	635	-	-
45	181	229	286	354	432	524	628	-	-
50	175	222	279	346	424	515	619	-	-
55	168	214	270	336	413	503	607	-	-
60	-	-	259	324	400	489	592	-	-
65	-	-	-	310	385	472	573	-	-
70	-	-	-	-	-	453	553	-	-

Coefficient of performance (C.O.P.)

35	2.03	2.35	2.74	3.19	3.72	4.34	5.08	-	-
40	1.80	2.09	2.43	2.82	3.27	3.80	4.41	-	-
45	1.59	1.85	2.15	2.49	2.88	3.33	3.84	-	-
50	1.40	1.63	1.89	2.19	2.52	2.91	3.35	-	-
55	1.22	1.42	1.65	1.91	2.21	2.54	2.92	-	-
60	-	-	1.44	1.66	1.92	2.21	2.54	-	-
65	-	-	-	1.43	1.65	1.91	2.20	-	-
70	-	-	-	-	-	1.63	1.88	-	-

Nominal performance at to = 5 °C, tc = 50 °C								
Cooling capacity	16 273	W						
Power input	6 445	W						
Current consumption	6.85	Α						
Marca (1	101	1						

Current consumption	6.85	A
Mass flow	424	kg/h
C.O.P.	2.52	

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)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Danfoss

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Performance data at 85 Hz, ARI rating conditions

ſ	Cond. temp. in				Evaporating temperature in °C (to)					
	°C (tc)	-15	-10	-5	0	5	10	15		
L	- (/	-15	-10	-0	Ū	5	10	15		

Cooling capacity in W

e e e e mig e apaes									
35	8 502	10 866	13 741	17 201	21 318	26 163	31 809	-	-
40	7 936	10 205	12 963	16 284	20 239	24 902	30 345	-	-
45	7 335	9 492	12 117	15 282	19 061	23 526	28 750	-	-
50	6 714	8 743	11 219	14 213	17 799	22 051	27 040	-	-
55	6 089	7 974	10 284	13 090	16 469	20 491	25 231	-	-
60	-	-	9 328	11 931	15 085	18 863	23 338	-	-
65	-	-	-	10 751	13 665	17 183	21 378	-	-
70	-	-	-	-	-	15 467	19 369	-	-

Power input in W

35	3 876	4 272	4 651	5 006	5 328	5 607	5 837	-	-
40	4 050	4 491	4 922	5 335	5 723	6 075	6 384	-	-
45	4 209	4 692	5 174	5 644	6 095	6 518	6 905	-	-
50	4 353	4 877	5 407	5 932	6 445	6 937	7 400	-	-
55	4 482	5 046	5 621	6 199	6 772	7 331	7 868	-	-
60	-	-	5 817	6 447	7 078	7 701	8 310	-	-
65	-	-	-	6 673	7 360	8 047	8 726	-	-
70	-	-	-	-	-	8 369	9 116	-	-

Current consumption in A

35	4.32	4.78	5.24	5.69	6.15	6.63	7.13	-	-
40	4.53	5.02	5.47	5.91	6.34	6.77	7.21	-	-
45	4.71	5.23	5.71	6.16	6.58	6.98	7.37	-	-
50	4.83	5.42	5.94	6.41	6.85	7.24	7.62	-	-
55	4.89	5.55	6.14	6.67	7.13	7.54	7.91	-	-
60	-	-	6.31	6.90	7.41	7.86	8.25	-	-
65	-	-	-	7.09	7.68	8.19	8.62	-	-
70	-	-	-	-	-	8.50	9.00	-	-

Mass flow in kg/h

35	190	238	295	362	440	531	634	-	-
40	185	234	291	358	436	527	631	-	-
45	180	228	285	352	430	521	625	-	-
50	174	221	277	344	422	512	616	-	-
55	167	213	268	334	411	500	603	-	-
60	-	-	258	322	398	486	588	-	-
65	-	-	-	309	383	470	570	-	-
70	-	-	-	-	-	451	550	-	-

Coefficient of performance (C.O.P.)

35	2.19	2.54	2.95	3.44	4.00	4.67	5.45	-	-
40	1.96	2.27	2.63	3.05	3.54	4.10	4.75	-	-
45	1.74	2.02	2.34	2.71	3.13	3.61	4.16	-	-
50	1.54	1.79	2.07	2.40	2.76	3.18	3.65	-	-
55	1.36	1.58	1.83	2.11	2.43	2.79	3.21	-	-
60	-	-	1.60	1.85	2.13	2.45	2.81	-	-
65	-	-	-	1.61	1.86	2.14	2.45	-	-
70	-	-	-	-	-	1.85	2.12	-	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C									
Cooling capacity	18 330	W							
Power input	6 979	W							
Current consumption	7.28	A							
Mass flow	450	kg/h							
C.O.P.	2.63								

Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)
Sound power data		
Sound power data Sound power level	0	dB(A)

22.6

bar(g)

Pressure switch settings
Maximum HP switch setting

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

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Performance data at 30 Hz, EN 12900 rating conditions, Superheat = 10 K

	Evaporating temperature in °C (to)									
°C (tc) -30 -25 -20 -15 -10 -5) 5									

Cooling capacity in W

20	2 747	3 660	4 809	6 225	7 939	9 982	-	-	-
30	2 285	3 109	4 132	5 386	6 901	8 709	10 840	13 325	-
35	2 032	2 803	3 756	4 921	6 330	8 012	10 000	12 323	-
40	1 769	2 483	3 361	4 432	5 728	7 280	9 119	11 275	-
45	1 501	2 152	2 949	3 921	5 100	6 517	8 202	10 186	-
50	1 230	1 814	2 525	3 393	4 449	5 725	7 251	9 059	-
55	-	1 472	2 092	2 850	3 780	4 910	6 272	7 897	-
60	-	-	1 654	2 298	3 095	4 074	5 267	6 705	-

Power input in W

20	1 894	2 054	2 190	2 302	2 392	2 461	-	-	-
30	2 031	2 246	2 435	2 598	2 738	2 853	2 946	3 018	-
35	2 075	2 322	2 542	2 736	2 904	3 048	3 168	3 265	-
40	2 100	2 382	2 636	2 863	3 063	3 238	3 389	3 515	-
45	2 102	2 422	2 713	2 976	3 212	3 421	3 605	3 763	-
50	2 078	2 440	2 772	3 074	3 348	3 595	3 815	4 009	-
55	-	2 434	2 809	3 154	3 469	3 756	4 015	4 247	-
60	-	-	2 822	3 212	3 572	3 902	4 204	4 478	-

Current consumption in A

20	3.68	4.00	4.17	4.22	4.19	4.10	-	-	-
30	3.56	4.08	4.44	4.68	4.82	4.89	4.93	4.97	-
35	3.51	4.12	4.57	4.88	5.10	5.25	5.35	5.45	-
40	3.45	4.15	4.68	5.07	5.36	5.57	5.74	5.90	-
45	3.40	4.18	4.78	5.25	5.60	5.87	6.10	6.31	-
50	3.33	4.19	4.87	5.40	5.81	6.14	6.42	6.67	-
55	-	4.19	4.93	5.52	5.99	6.37	6.69	6.99	-
60	-	-	4.98	5.62	6.14	6.57	6.93	7.26	-

Mass flow in kg/h

20	76	100	128	162	201	248	-	-	-
30	72	96	124	157	197	242	295	356	-
35	69	93	121	154	193	238	290	350	-
40	65	89	116	149	187	232	284	343	-
45	61	84	111	143	181	225	275	334	-
50	55	78	105	136	173	216	266	323	-
55	-	71	97	128	164	206	254	310	-
60	-	-	89	118	153	194	241	296	-

Coefficient of performance (C.O.P.)

20	1.45	1.78	2.20	2.70	3.32	4.06	-	-	-
30	1.12	1.38	1.70	2.07	2.52	3.05	3.68	4.42	-
35	0.98	1.21	1.48	1.80	2.18	2.63	3.16	3.77	-
40	0.84	1.04	1.27	1.55	1.87	2.25	2.69	3.21	-
45	0.71	0.89	1.09	1.32	1.59	1.90	2.28	2.71	-
50	0.59	0.74	0.91	1.10	1.33	1.59	1.90	2.26	-
55	-	0.60	0.74	0.90	1.09	1.31	1.56	1.86	-
60	-	-	0.59	0.72	0.87	1.04	1.25	1.50	-

Nominal performance at to = -10 °C, tc = 45 °C								
Cooling capacity	5 100	W						
Power input	3 212	W						
Current consumption	5.60	Α						
Mass flow	181	kg/h						
C.O.P.	1.59							

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	0	dB(A)
With accoustic hood		dB(A)

Pressure switch settings

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Performance data at 30 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R40	4A
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cond. temp. in		1			ting temperature		1	1 1	
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
ooling capacit	-		1						
20	3 008	3 999	5 245	6 776	8 626	10 827	-	-	-
30	2 543	3 451	4 575	5 949	7 606	9 577	11 895	14 594	-
35	2 286	3 144	4 200	5 488	7 039	8 888	11 066	13 607	-
40	2 017	2 820	3 803	4 999	6 441	8 162	10 195	12 573	-
45	1 740	2 483	3 387	4 486	5 814	7 402	9 286	11 497	-
50	-	2 137	2 957	3 955	5 162	6 615	8 345	10 386	-
55	-	-	2 517	3 408	4 492	5 804	7 378	9 246	-
60	-	-	-	2 853	3 811	4 981	6 397	8 093	-
ower input in \			L				1	г – г	
20	1 894	2 054	2 190	2 302	2 392	2 461	-	-	-
30	2 031	2 246	2 435	2 598	2 738	2 853	2 946	3 018	-
35	2 075	2 322	2 542	2 736	2 904	3 048	3 168	3 265	-
40	2 100	2 382	2 636	2 863	3 063	3 238	3 389	3 515	-
45	2 102	2 422	2 713	2 976	3 212	3 421	3 605	3 763	-
50	-	2 440	2 772	3 074	3 348	3 595	3 815	4 009	-
55	-	-	2 809	3 154	3 469	3 756	4 015	4 247	-
60	-	-	-	3 212	3 572	3 902	4 204	4 478	-
urrent consum								<u>г</u>	
20	3.68	4.00	4.17	4.22	4.19	4.10	-	-	-
30	3.56	4.08	4.44	4.68	4.82	4.89	4.93	4.97	-
35	3.51	4.12	4.57	4.88	5.10	5.25	5.35	5.45	-
40	3.45	4.15	4.68	5.07	5.36	5.57	5.74	5.90	-
45	3.40	4.18	4.78	5.25	5.60	5.87	6.10	6.31	-
50	-	4.19	4.87	5.40	5.81	6.14	6.42	6.67	-
55	-	-	4.93	5.52	5.99	6.37	6.69	6.99	-
60	-	-	-	5.62	6.14	6.57	6.93	7.26	-
lass flow in kg			T	1				1 1	
20	76	99	127	161	200	246	-	-	-
30	71	95	123	156	195	241	294	354	-
35	68	92	120	153	191	236	288	348	-
40	65	88	116	148	186	231	282	341	-
45	60	83	110	142	180	223	274	332	-
50	-	78	104	135	172	215	264	321	-
55	-	-	97	127	163	204	253	308	-
60	-	-	-	118	152	193	240	294	-
-	erformance (C.C		Т	T	1		1	г – г	
20	1.59	1.95	2.40	2.94	3.61	4.40	-	-	-
30	1.25	1.54	1.88	2.29	2.78	3.36	4.04	4.84	-
35	1.10	1.35	1.65	2.01	2.42	2.92	3.49	4.17	-
40	0.96	1.18	1.44	1.75	2.10	2.52	3.01	3.58	-
45	0.83	1.03	1.25	1.51	1.81	2.16	2.58	3.06	-
50	-	0.88	1.07	1.29	1.54	1.84	2.19	2.59	-
55	-	-	0.90	1.08	1.29	1.55	1.84	2.18	-
60	-	-	-	0.89	1.07	1.28	1.52	1.81	-
						_			
	nance at to = -1					Pressure switch	-	~	h ()
ooling capacity		5 814	W			Maximum HP swite	•	27.7	bar(g)
ower input Current consum	ation	3 212 5.60	W A			Minimum LP swite LP pump down se	•	0.2 0.9	bar(g) bar(g)
lass flow		180	kg/h				ung	0.9	bai(y)
0.0.P.		1.81				Sound power dat	a		
						Sound power leve		0	dB(A)
to: Evaporating temperature at dew point						With accoustic ho	od	0	dB(A)
	emperature at de								

Inverter reciprocating compressors VTZ121-G

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Performance data at 35 Hz, EN 12900 rating conditions, Superheat = 10 K

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	

Cooling	capacity	in	w
ooomig	capacity		••

cooling capaci									
20	3 192	4 284	5 653	7 333	9 357	11 758	-	-	-
30	2 650	3 632	4 854	6 348	8 148	10 288	12 800	15 718	-
35	2 365	3 281	4 418	5 808	7 486	9 484	11 835	14 574	-
40	2 074	2 918	3 963	5 242	6 790	8 639	10 823	13 375	-
45	1 783	2 547	3 493	4 654	6 065	7 758	9 768	12 126	-
50	1 496	2 172	3 011	4 048	5 314	6 845	8 672	10 829	-
55	-	1 797	2 523	3 427	4 542	5 902	7 540	9 489	-
60	-	-	2 031	2 796	3 753	4 935	6 377	8 110	-

Power input in W

20	2 166	2 362	2 537	2 694	2 835	2 963	-	-	-
30	2 320	2 573	2 800	3 004	3 188	3 354	3 505	3 644	-
35	2 372	2 660	2 920	3 154	3 366	3 557	3 731	3 890	-
40	2 404	2 732	3 028	3 297	3 540	3 761	3 962	4 146	-
45	2 413	2 784	3 121	3 429	3 708	3 962	4 195	4 408	-
50	2 395	2 814	3 197	3 547	3 867	4 159	4 427	4 673	-
55	-	2 819	3 252	3 649	4 014	4 348	4 656	4 940	-
60	-	-	3 283	3 731	4 145	4 526	4 878	5 203	-

Current consumption in A

20	4.13	4.46	4.70	4.85	4.92	4.91	-	-	-
30	4.03	4.52	4.92	5.24	5.48	5.63	5.71	5.70	-
35	4.01	4.57	5.05	5.44	5.75	5.99	6.14	6.22	-
40	3.99	4.62	5.17	5.63	6.02	6.32	6.55	6.70	-
45	3.98	4.67	5.28	5.81	6.26	6.63	6.93	7.15	-
50	3.96	4.71	5.38	5.97	6.48	6.91	7.27	7.56	-
55	-	4.73	5.45	6.10	6.66	7.16	7.57	7.92	-
60	-	-	5.49	6.19	6.81	7.35	7.82	8.22	-

Mass flow in kg/h

20	88	117	151	190	237	292	-	-	-
30	83	112	146	186	232	286	349	420	-
35	80	108	142	181	228	282	344	414	-
40	76	104	137	176	222	275	337	407	-
45	72	99	131	170	215	267	328	397	-
50	67	93	125	162	206	258	318	386	-
55	-	87	117	154	197	247	306	373	-
60	-	-	109	144	186	235	292	357	-

Coefficient of performance (C.O.P.)

20	1.47	1.81	2.23	2.72	3.30	3.97	-	-	-
30	1.14	1.41	1.73	2.11	2.56	3.07	3.65	4.31	-
35	1.00	1.23	1.51	1.84	2.22	2.67	3.17	3.75	-
40	0.86	1.07	1.31	1.59	1.92	2.30	2.73	3.23	-
45	0.74	0.91	1.12	1.36	1.64	1.96	2.33	2.75	-
50	0.62	0.77	0.94	1.14	1.37	1.65	1.96	2.32	-
55	-	0.64	0.78	0.94	1.13	1.36	1.62	1.92	-
60	-	-	0.62	0.75	0.91	1.09	1.31	1.56	-

Nominal performance at to = -10 °C, tc = 45 °C								
Cooling capacity	6 065	W						
Power input	3 708	W						
Current consumption	6.26	Α						
Mass flow	215	ka/h						

1.64

Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)
Sound power data		
Sound power data Sound power level	0	dB(A)

27.7

bar(g)

Pressure switch settings
Maximum HP switch setting

to: Evaporating temperature at dew point

C.O.P.

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Performance data at 35 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

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ond. temp. in			1	Evapora	ating temperatu	re in °C (to)	1		
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
ooling capacit	y in W								
20	3 496	4 681	6 166	7 982	10 167	12 754	-	-	-
30	2 950	4 033	5 375	7 012	8 980	11 313	14 046	17 214	-
35	2 661	3 680	4 940	6 477	8 325	10 521	13 098	16 093	-
40	2 365	3 314	4 484	5 913	7 635	9 686	12 101	14 915	-
45	2 067	2 938	4 012	5 325	6 914	8 813	11 059	13 687	-
50	-	2 558	3 527	4 718	6 166	7 908	9 979	12 415	-
55	_	-	3 036	4 097	5 399	6 978	8 870	11 111	_
60	-	-	3 030	3 471	4 622	6 034	7 744	9 790	
60	-	-	-	3471	4 022	0 034	7 744	9790	-
	.,								
ower input in \		0.000	0.507	0.001	0.005	0.000			
20	2 166	2 362	2 537	2 694	2 835	2 963	-	-	-
30	2 320	2 573	2 800	3 004	3 188	3 354	3 505	3 644	-
35	2 372	2 660	2 920	3 154	3 366	3 557	3 731	3 890	-
40	2 404	2 732	3 028	3 297	3 540	3 761	3 962	4 146	-
45	2 413	2 784	3 121	3 429	3 708	3 962	4 195	4 408	-
50	-	2 814	3 197	3 547	3 867	4 159	4 427	4 673	-
55	-	-	3 252	3 649	4 014	4 348	4 656	4 940	-
60	-	-	-	3 731	4 145	4 526	4 878	5 203	-
urrent consum	ption in A								
20	4.13	4.46	4.70	4.85	4.92	4.91	-	-	-
30	4.03	4.52	4.92	5.24	5.48	5.63	5.71	5.70	-
35	4.01	4.57	5.05	5.44	5.75	5.99	6.14	6.22	-
40	3.99	4.62	5.17	5.63	6.02	6.32	6.55	6.70	_
45		4.67	5.28		6.26		6.93	7.15	-
	3.98			5.81		6.63			-
50	-	4.71	5.38	5.97	6.48	6.91	7.27	7.56	-
55	-	-	5.45	6.10	6.66	7.16	7.57	7.92	-
60	-	-	-	6.19	6.81	7.35	7.82	8.22	-
lass flow in kg	′h		1		1		1	1 1	
20	88	116	150	189	236	290	-	-	-
30	83	111	145	185	231	285	347	417	-
35	80	108	141	180	226	280	341	412	-
40	76	103	136	175	221	274	335	404	-
45	72	98	131	169	214	266	326	395	-
50	-	93	124	161	205	256	316	383	-
55	-	-	117	153	196	246	304	370	-
60	-	-	-	143	185	233	290	355	-
		1		110	100	200	200	000	
oefficient of p	erformance (C.O) P)							
20	1.61	1.98	2.43	2.96	3.59	4.30	_	-	_
							-		
30	1.27	1.57	1.92	2.33	2.82	3.37	4.01	4.72	-
35	1.12	1.38	1.69	2.05	2.47	2.96	3.51	4.14	-
40	0.98	1.21	1.48	1.79	2.16	2.58	3.05	3.60	-
45	0.86	1.06	1.29	1.55	1.86	2.22	2.64	3.11	-
50	-	0.91	1.10	1.33	1.59	1.90	2.25	2.66	-
55	-	-	0.93	1.12	1.35	1.60	1.90	2.25	-
60	-	-	-	0.93	1.11	1.33	1.59	1.88	-
ominal perform	nance at to = -1	-				Pressure switch			
ooling capacity		6 914	W			Maximum HP swi	•	27.7	bar(g)
ower input		3 708	W			Minimum LP swite	•	0.2	bar(g)
urrent consump	otion	6.26	A			LP pump down se	etting	0.9	bar(g)
lass flow		214	kg/h			0			
.O.P.		1.86				Sound power da		^	JD (A)
· Evanorating t	emperature at de	w point				Sound power leve		0 0	dB(A)
 ∟vaporating to 						With accoustic ho		U	dB(A)
: Condensing te	mnerature at de								

Inverter reciprocating compressors VTZ121-G

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Performance data at 40 Hz, EN 12900 rating conditions, Superheat = 10 K

Cond. temp. in		Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5			
								_			

Cooling	capacity	in	w
cooming	capacity		•••

econing capac									
20	3 645	4 913	6 499	8 440	10 772	13 533	-	-	-
30	3 018	4 154	5 569	7 299	9 379	11 848	14 740	18 093	-
35	2 696	3 754	5 070	6 681	8 622	10 931	13 644	16 798	-
40	2 375	3 345	4 553	6 036	7 830	9 971	12 496	15 441	-
45	2 058	2 931	4 023	5 369	7 006	8 970	11 298	14 026	-
50	1 749	2 517	3 483	4 684	6 155	7 934	10 056	12 558	-
55	-	2 106	2 938	3 985	5 282	6 866	8 773	11 041	-
60	-	-	2 392	3 275	4 389	5 770	7 454	9 478	-

Power input in W

20	2 449	2 683	2 898	3 098	3 288	3 471	-	-	-
30	2 616	2 910	3 178	3 426	3 656	3 872	4 080	4 283	-
35	2 675	3 006	3 309	3 587	3 844	4 086	4 315	4 535	-
40	2 712	3 086	3 428	3 742	4 033	4 303	4 558	4 802	-
45	2 726	3 148	3 534	3 889	4 217	4 522	4 808	5 079	-
50	2 712	3 187	3 623	4 024	4 395	4 739	5 061	5 365	-
55	-	3 201	3 691	4 144	4 562	4 951	5 315	5 656	-
60	-	-	3 737	4 245	4 717	5 155	5 565	5 950	-

Current consumption in A

20	4.59	4.93	5.23	5.48	5.65	5.71	-	-	-
30	4.50	4.97	5.42	5.82	6.15	6.39	6.52	6.50	-
35	4.50	5.03	5.54	6.01	6.42	6.74	6.96	7.03	-
40	4.52	5.10	5.67	6.21	6.69	7.09	7.38	7.55	-
45	4.54	5.17	5.79	6.39	6.94	7.41	7.78	8.03	-
50	4.56	5.22	5.90	6.55	7.16	7.70	8.15	8.48	-
55	-	5.26	5.98	6.68	7.35	7.95	8.47	8.87	-
60	-	-	6.02	6.77	7.49	8.15	8.73	9.21	-

Mass flow in kg/h

20	101	134	173	219	273	335	-	-	-
30	95	128	167	213	267	330	402	483	-
35	91	124	163	209	262	325	396	478	-
40	87	119	157	203	256	318	389	470	-
45	83	114	151	196	248	309	379	460	-
50	79	108	144	188	239	299	368	448	-
55	-	102	137	179	229	287	355	434	-
60	-	-	129	169	217	274	341	418	-

Coefficient of performance (C.O.P.)

20	1.49	1.83	2.24	2.72	3.28	3.90	-	-	-
30	1.15	1.43	1.75	2.13	2.57	3.06	3.61	4.22	-
35	1.01	1.25	1.53	1.86	2.24	2.68	3.16	3.70	-
40	0.88	1.08	1.33	1.61	1.94	2.32	2.74	3.22	-
45	0.75	0.93	1.14	1.38	1.66	1.98	2.35	2.76	-
50	0.64	0.79	0.96	1.16	1.40	1.67	1.99	2.34	-
55	-	0.66	0.80	0.96	1.16	1.39	1.65	1.95	-
60	-	-	0.64	0.77	0.93	1.12	1.34	1.59	-

Nominal performance at to = -10 °C, tc = 45 °C							
Cooling capacity	7 006	W					
Power input	4 217	W					
Current consumption	6.94	А					
Mass flow	248	kg/h					
C.O.P.	1.66						

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	0	dB(A)	
With accoustic hood	0	dB(A)	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Performance data at 40 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R404A

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Cond. temp. in				Evapor	ating temperature	e in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
.		•	•	•	•				
Cooling capacit		1	1	1	1		1		
20	3 991	5 368	7 088	9 187	11 705	14 679	-	-	-
30	3 359	4 612	6 167	8 062	10 337	13 028	16 175	19 816	-
35	3 034	4 210	5 669	7 449	9 589	12 126	15 100	18 548	-
40	2 707	3 799	5 153	6 808	8 804	11 178	13 970	17 218	-
45	2 385	3 382	4 622	6 143	7 986	10 189	12 792	15 832	-
50	-	2 964	4 081	5 460	7 142	9 166	11 572	14 398	-
55	-	-	3 536	4 764	6 278	8 117	10 320	12 927	-
60	-	-	-	4 065	5 405	7 054	9 053	11 441	-
Power input in V	N								
20	2 449	2 683	2 898	3 098	3 288	3 471	-	-	-
30	2 616	2 910	3 178	3 426	3 656	3 872	4 080	4 283	-
35	2 675	3 006	3 309	3 587	3 844	4 086	4 315	4 535	-
40	2 712	3 086	3 428	3 742	4 033	4 303	4 558	4 802	-
45	2 726	3 148	3 534	3 889	4 217	4 522	4 808	5 079	-
43 50	-	3 140	3 623	4 024	4 395	4 739	5 061	5 365	-
55	-	-	3 691	4 144	4 562	4 951	5 315	5 656	-
55 60	-	-		4 144	4 562	5 155	5 565	5 950	-
00		_	-	4 243	4717	3 135	5 505	3 950	
urrent consum	nption in A		1		•			· · · · · · · · · · · · · · · · · · ·	
20	4.59	4.93	5.23	5.48	5.65	5.71	-	-	-
30	4.50	4.97	5.42	5.82	6.15	6.39	6.52	6.50	-
35	4.50	5.03	5.54	6.01	6.42	6.74	6.96	7.03	-
40	4.52	5.10	5.67	6.21	6.69	7.09	7.38	7.55	-
45	4.54	5.17	5.79	6.39	6.94	7.41	7.78	8.03	-
50	-	5.22	5.90	6.55	7.16	7.70	8.15	8.48	-
55	-	-	5.98	6.68	7.35	7.95	8.47	8.87	-
60	-	-	-	6.77	7.49	8.15	8.73	9.21	-
lass flow in kg	/h		I	I			I	1	
20	100	133	172	218	271	333	-	-	-
30	94	127	166	212	266	328	399	480	-
35	91	123	162	207	261	323	394	475	-
40	87	119	157	202	254	316	386	467	-
45	83	113	150	195	247	307	377	457	-
50	-	108	144	187	238	297	366	445	-
55	-	-	136	178	227	286	353	431	-
60	-	-	-	168	216	273	339	415	-
officient of p	erformance (C.C	יםי							
20	1.63	2.00	2.45	2.97	3.56	4.23	-	-	_
30	1.03	1.58	1.94	2.35	2.83	3.36	3.96	4.63	
30 35	1.28	1.58	1.94	2.35	2.83	2.97	3.96	4.63	-
								1	
40	1.00	1.23	1.50	1.82	2.18	2.60	3.06	3.59	-
45	0.87	1.07	1.31	1.58	1.89	2.25	2.66	3.12	-
50	-	0.93	1.13	1.36	1.63	1.93	2.29	2.68	-
55 60	-	-	0.96	1.15 0.96	1.38	1.64	1.94 1.63	2.29 1.92	-
00	-		-	0.90	1.10	1.37	1.03	1.32	-
	mance at to = -1	-				Pressure switch	-		
		7 986	W			Maximum HP swit	•	27.7	bar(g)
• • •		4 217	w		Minimum LP switch setting		0.2	bar(g)	
Power input		6.94	A ka/b			LP pump down se	աոց	0.9	bar(g)
Cooling capacity Power input Current consump	Duon	0.17		1					
Power input Current consump Aass flow	buon	247	kg/h			Sound names dat	· •		
ower input current consump lass flow	Stion	247 1.89	kg/li			Sound power lave		٥	dB(A)
Power input Current consump Mass flow C.O.P.	emperature at de	1.89	kg/li			Sound power dat Sound power leve With accoustic hoo	I	0 0	dB(A) dB(A)

Inverter reciprocating compressors VTZ121-G

Danfoss

R404A

Performance data at 45 Hz, EN 12900 rating conditions, Superheat = 10 K

Co	ond. temp. in		Evaporating temperature in °C (to)										
	°C (tc)	-30	-25	-20	-15	-10	-5	0	5				
	0 (10)	-30	-20	-20	-15	-10	-5	0	5				

	. <u>,</u>								
20	4 106	5 546	7 346	9 545	12 185	15 306	-	-	-
30	3 387	4 674	6 278	8 238	10 595	13 389	16 660	20 450	-
35	3 026	4 222	5 713	7 538	9 738	12 354	15 426	18 993	-
40	2 671	3 765	5 132	6 813	8 847	11 274	14 136	17 471	-
45	2 323	3 306	4 540	6 066	7 923	10 152	12 794	15 888	-
50	1 989	2 850	3 941	5 301	6 972	8 993	11 404	14 247	-
55	-	2 400	3 338	4 523	5 997	7 800	9 971	12 552	-
60	-	-	2 735	3 736	5 003	6 577	8 498	10 807	-

Power input in W

20	2 743	3 016	3 272	3 516	3 752	3 985	-	-	-
30	2 920	3 257	3 569	3 862	4 140	4 409	4 671	4 934	-
35	2 983	3 359	3 708	4 034	4 341	4 635	4 919	5 200	-
40	3 025	3 446	3 836	4 200	4 542	4 866	5 178	5 483	-
45	3 042	3 514	3 951	4 358	4 740	5 101	5 445	5 779	-
50	3 032	3 560	4 049	4 505	4 932	5 334	5 717	6 085	-
55	-	3 581	4 128	4 638	5 115	5 565	5 991	6 398	-
60	-	-	4 184	4 753	5 287	5 789	6 263	6 716	-

Current consumption in A

20	5.05	5.40	5.77	6.11	6.38	6.53	-	-	-
30	4.98	5.43	5.93	6.41	6.84	7.17	7.36	7.35	-
35	5.00	5.50	6.05	6.60	7.10	7.52	7.80	7.90	-
40	5.05	5.59	6.18	6.79	7.37	7.87	8.24	8.44	-
45	5.10	5.67	6.31	6.98	7.62	8.20	8.66	8.96	-
50	5.14	5.74	6.43	7.15	7.85	8.50	9.04	9.44	-
55	-	5.79	6.51	7.28	8.05	8.76	9.38	9.86	-
60	-	-	6.55	7.36	8.18	8.96	9.66	10.23	-

Mass flow in kg/h

20	114	151	196	248	309	379	-	-	-
30	107	144	188	241	302	373	454	546	-
35	103	139	183	235	296	367	448	540	-
40	98	134	177	229	289	359	440	532	-
45	94	129	171	221	281	350	430	521	-
50	89	123	163	213	271	339	418	508	-
55	-	116	155	203	260	327	404	493	-
60	-	-	147	193	248	313	389	476	-

Coefficient of performance (C.O.P.)

20	1.50	1.84	2.25	2.72	3.25	3.84	-	-	-
30	1.16	1.44	1.76	2.13	2.56	3.04	3.57	4.14	-
35	1.01	1.26	1.54	1.87	2.24	2.67	3.14	3.65	-
40	0.88	1.09	1.34	1.62	1.95	2.32	2.73	3.19	-
45	0.76	0.94	1.15	1.39	1.67	1.99	2.35	2.75	-
50	0.66	0.80	0.97	1.18	1.41	1.69	1.99	2.34	-
55	-	0.67	0.81	0.98	1.17	1.40	1.66	1.96	-
60	-	-	0.65	0.79	0.95	1.14	1.36	1.61	-

Nominal performance at to = -10 °C,	tc = 45 °C	
Cooling capacity	7 923	W
Power input	4 740	W
Current consumption	7.62	Α
Mass flow	281	kg/h
C.O.P.	1.67	

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)
0		
Sound power data		
Sound power data Sound power level	0	dB(A)

Pressure switch settings

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Performance data at 45 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

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Cond. temp. in		r	r		ating temperatur		r	,	
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
ooling capacity	y in W	I	1				I	11	
20	4 496	6 060	8 011	10 390	13 240	16 603	-	-	-
30	3 770	5 189	6 951	9 100	11 676	14 723	18 283	22 397	-
35	3 405	4 736	6 388	8 405	10 830	13 705	17 071	20 972	-
40	3 045	4 276	5 808	7 684	9 947	12 639	15 803	19 482	-
45	2 693	3 815	5 216	6 940	9 031	11 532	14 485	17 933	-
50	-	3 357	4 616	6 179	8 089	10 390	13 123	16 334	-
55	-	-	4 016	5 408	7 129	9 221	11 729	14 697	-
60	-	-	-	4 637	6 161	8 041	10 321	13 046	-
•		•	•	•	•		•	• •	
ower input in V	v								
20	2 743	3 016	3 272	3 516	3 752	3 985	-	-	-
30	2 920	3 257	3 569	3 862	4 140	4 409	4 671	4 934	-
35	2 983	3 359	3 708	4 034	4 341	4 635	4 919	5 200	-
40	3 025	3 446	3 836	4 200	4 542	4 866	5 178	5 483	-
45	3 042	3 514	3 951	4 358	4 740	5 101	5 445	5 779	-
50	-	3 560	4 049	4 505	4 932	5 334	5 717	6 085	-
55	_	-	4 128	4 638	5 115	5 565	5 991	6 398	_
60	-	-	-	4 753	5 287	5 789	6 263	6 716	-
00	_	-	-	4755	5 207	5705	0 203	0710	
urrent consum	ntion in A								
20	5.05	5.40	5.77	6.11	6.38	6.53	_	_	
30	4.98	5.43					7.36	7.25	-
			5.93	6.41	6.84	7.17		7.35	-
35	5.00	5.50	6.05	6.60	7.10	7.52	7.80	7.90	
40	5.05	5.59	6.18	6.79	7.37	7.87	8.24	8.44	-
45	5.10	5.67	6.31	6.98	7.62	8.20	8.66	8.96	-
50	-	5.74	6.43	7.15	7.85	8.50	9.04	9.44	-
55	-	-	6.51	7.28	8.05	8.76	9.38	9.86	-
60	-	-	-	7.36	8.18	8.96	9.66	10.23	-
/lass flow in kg/		r	r	T	T		1	т т	
20	113	150	195	247	307	377	-	-	-
30	106	143	187	239	300	371	451	543	-
35	102	138	182	234	295	365	445	537	-
40	98	133	176	228	287	357	437	528	-
45	93	128	170	220	279	348	427	518	-
50	-	122	162	211	269	337	415	505	-
55	-	-	155	202	258	325	401	490	-
60	-	-	-	192	246	311	386	473	-
Coefficient of pe	erformance (C.C).P.)							
20	1.64	2.01	2.45	2.96	3.53	4.17	-	-	-
30	1.29	1.59	1.95	2.36	2.82	3.34	3.91	4.54	-
35	1.14	1.41	1.72	2.08	2.49	2.96	3.47	4.03	-
40	1.01	1.24	1.51	1.83	2.19	2.60	3.05	3.55	-
45	0.89	1.09	1.32	1.59	1.91	2.26	2.66	3.10	-
50	-	0.94	1.14	1.37	1.64	1.95	2.30	2.68	-
55	-	-	0.97	1.17	1.39	1.66	1.96	2.30	-
60	-	-	-	0.98	1.17	1.39	1.65	1.94	-
-•		1	I	0.00					
ominal perforn	nance at to = -1) °C, tc = 45 °C				Pressure switch	settings		
cooling capacity		9 031	W			Maximum HP swit	-	27.7	bar(g)
Power input		4 740	W			Minimum LP swite	•	0.2	bar(g)
Current consump	tion	7.62	А			LP pump down se	tting	0.9	bar(g)
lass flow		279	kg/h			_			
C.O.P.		1.91				Sound power dat		~	
						Sound power leve		0	dB(A)
· Evaporatina to	emperature at de	w point				With accoustic ho	od	0	dB(A)

Inverter reciprocating compressors VTZ121-G

Danfoss

R404A

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

Cond. temp. in		Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5				

Cooling capacity in W

20	4 573	6 183	8 193	10 649	13 596	17 078	-	-	-
30	3 758	5 192	6 980	9 166	11 794	14 911	18 561	22 788	-
35	3 355	4 686	6 346	8 381	10 835	13 753	17 180	21 161	-
40	2 962	4 178	5 700	7 573	9 841	12 549	15 743	19 467	-
45	2 581	3 672	5 045	6 745	8 816	11 304	14 254	17 711	-
50	2 216	3 171	4 384	5 900	7 764	10 022	12 717	15 894	-
55	-	2 679	3 721	5 043	6 689	8 705	11 134	14 022	-
60	-	-	3 061	4 178	5 595	7 358	9 511	12 099	-

Power input in W

20	3 047	3 361	3 659	3 946	4 226	4 505	-	-	-
30	3 232	3 613	3 972	4 314	4 642	4 963	5 279	5 596	-
35	3 297	3 720	4 118	4 494	4 855	5 204	5 546	5 885	-
40	3 341	3 811	4 252	4 669	5 067	5 450	5 822	6 189	-
45	3 360	3 882	4 373	4 836	5 276	5 698	6 106	6 505	-
50	3 352	3 932	4 477	4 991	5 479	5 945	6 395	6 832	-
55	-	3 957	4 562	5 132	5 673	6 189	6 685	7 165	-
60	-	-	4 624	5 256	5 855	6 426	6 974	7 503	-

Current consumption in A

20	5.50	5.87	6.31	6.74	7.11	7.34	-	-	-
30	5.46	5.91	6.45	7.02	7.54	7.96	8.22	8.25	-
35	5.50	5.99	6.58	7.20	7.80	8.31	8.67	8.82	-
40	5.57	6.08	6.71	7.40	8.07	8.66	9.12	9.38	-
45	5.64	6.18	6.85	7.59	8.33	9.00	9.56	9.92	-
50	5.70	6.26	6.97	7.76	8.56	9.32	9.96	10.43	-
55	-	6.31	7.06	7.89	8.76	9.58	10.32	10.88	-
60	-	-	7.09	7.97	8.89	9.79	10.61	11.28	-

Mass flow in kg/h

20	127	168	218	277	345	423	-	-	-
30	118	160	209	268	336	415	506	609	-
35	114	155	204	262	330	409	499	602	-
40	109	149	197	254	322	400	490	592	-
45	104	143	190	246	312	390	479	581	-
50	99	136	182	237	302	378	466	567	-
55	-	130	173	226	290	364	451	551	-
60	-	-	165	216	277	350	435	533	-

Coefficient of performance (C.O.P.)

20	1.50	1.84	2.24	2.70	3.22	3.79	-	-	-
30	1.16	1.44	1.76	2.12	2.54	3.00	3.52	4.07	-
35	1.02	1.26	1.54	1.86	2.23	2.64	3.10	3.60	-
40	0.89	1.10	1.34	1.62	1.94	2.30	2.70	3.15	-
45	0.77	0.95	1.15	1.39	1.67	1.98	2.33	2.72	-
50	0.66	0.81	0.98	1.18	1.42	1.69	1.99	2.33	-
55	-	0.68	0.82	0.98	1.18	1.41	1.67	1.96	-
60	-	-	0.66	0.79	0.96	1.14	1.36	1.61	-

Nominal performance at to = -10 °C, tc = 45 °C									
Cooling capacity	8 816	W							
Power input	5 276	W							
Current consumption	8.33	Α							
Mass flow	312	kg/h							
C.O.P.	1.67								

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 data Sound power level	0	dB(A)

Pressure switch settings

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

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

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Cond. temp. in		Evaporating temperature in °C (to)							
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
cooling capacity							T	<u>т г</u>	
20	5 008	6 756	8 935	11 592	14 773	18 524	-	-	-
30	4 183	5 764	7 729	10 124	12 998	16 397	20 369	24 959	-
35	3 775	5 256	7 097	9 345	12 049	15 256	19 013	23 366	-
40	3 376	4 745	6 451	8 541	11 065	14 069	17 601	21 708	-
45	2 991	4 236	5 795	7 717	10 049	12 841	16 139	19 991	-
50	-	3 734	5 135	6 877	9 009	11 578	14 633	18 223	-
55	-	-	4 478	6 030	7 951	10 291	13 097	16 418	-
60	-	-	-	5 186	6 890	8 996	11 551	14 605	-
ower input in W	1			-					
20	3 047	3 361	3 659	3 946	4 226	4 505	-	-	-
30	3 232	3 613	3 972	4 314	4 642	4 963	5 279	5 596	-
35	3 297	3 720	4 118	4 494	4 855	5 204	5 546	5 885	-
40	3 341	3 811	4 252	4 669	5 067	5 450	5 822	6 189	-
45	3 360	3 882	4 373	4 836	5 276	5 698	6 106	6 505	-
50	-	3 932	4 477	4 991	5 479	5 945	6 395	6 832	-
55	-	-	4 562	5 132	5 673	6 189	6 685	7 165	-
60	-	-	-	5 256	5 855	6 426	6 974	7 503	-
				•	•	·	•	·	
urrent consum	ption in A								
20	5.50	5.87	6.31	6.74	7.11	7.34	-	-	-
30	5.46	5.91	6.45	7.02	7.54	7.96	8.22	8.25	-
35	5.50	5.99	6.58	7.20	7.80	8.31	8.67	8.82	-
40	5.57	6.08	6.71	7.40	8.07	8.66	9.12	9.38	-
45	5.64	6.18	6.85	7.59	8.33	9.00	9.56	9.92	-
50	-	6.26	6.97	7.76	8.56	9.32	9.96	10.43	-
55	-	-	7.06	7.89	8.76	9.58	10.32	10.88	-
60	-	-	-	7.97	8.89	9.79	10.61	11.28	-
00	_	_	_	1.01	0.00	5.15	10.01	11.20	_
lass flow in kg/l	1								
20	126	168	217	275	343	420	-	-	_
30	118	159	208	266	334	413	503	605	-
35	113	155	200	260	328	406	496	598	-
40	108	134	196	253	320	397	490	589	
									-
45	104	142	189	244	310	387	476	577	-
50	-	136	181	235	300	375	463	563	-
55	-	-	172	225	288	362	448	547	-
60	-	-	-	214	275	348	432	529	-
oefficient of pe		1	0.44	0.07	0.50		1	,	
20	1.64	2.01	2.44	2.94	3.50	4.11	-	-	-
30	1.29	1.60	1.95	2.35	2.80	3.30	3.86	4.46	-
35	1.15	1.41	1.72	2.08	2.48	2.93	3.43	3.97	-
40	1.01	1.25	1.52	1.83	2.18	2.58	3.02	3.51	-
45	0.89	1.09	1.33	1.60	1.90	2.25	2.64	3.07	-
50	-	0.95	1.15	1.38	1.64	1.95	2.29	2.67	-
55	-	-	0.98	1.18	1.40	1.66	1.96	2.29	-
60	-	-	-	0.99	1.18	1.40	1.66	1.95	-
						_			
ominal perform	ance at to = -1	-				Pressure switch	-		
Cooling capacity		10 049 W 5 276 W				Maximum HP swi	•	27.7	bar(g)
Power input		5 276 W 8.33 A				Minimum LP switch setting LP pump down setting		0.2 0.9	bar(g) bar(g)
Current consumption Mass flow		8.33 310	A kg/h				Juny	0.9	uar(g)
C.O.P.		1.90	1.9/11			Sound power data			
		1.00		1		Sound power leve		0	dB(A)
	mperature at de	w point				With accoustic ho		0	dB(A)
5: Evaporating te									

Inverter reciprocating compressors VTZ121-G

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R404A

Performance data at 55 Hz, EN 12900 rating conditions, Superheat = 10 K

°C (tc) -30 -25 -20 -15 -10 -5 0 5	

Cooling capacity in W

20	5 048	6 824	9 042	11 751	15 003	18 848	-	-	-
30	4 130	5 707	7 675	10 082	12 978	16 415	20 442	25 109	-
35	3 682	5 145	6 970	9 209	11 911	15 127	18 907	23 302	-
40	3 248	4 583	6 256	8 316	10 812	13 797	17 319	21 429	-
45	2 829	4 027	5 535	7 405	9 685	12 426	15 680	19 494	-
50	2 430	3 479	4 812	6 480	8 532	11 020	13 993	17 501	-
55	-	2 942	4 089	5 544	7 358	9 580	12 262	15 452	-
60	-	-	3 370	4 601	6 165	8 111	10 490	13 352	-

Power input in W

20	3 362	3 718	4 059	4 389	4 712	5 031	-	-	-
30	3 551	3 979	4 388	4 781	5 162	5 534	5 903	6 271	-
35	3 617	4 088	4 538	4 969	5 387	5 793	6 193	6 590	-
40	3 661	4 181	4 676	5 150	5 608	6 054	6 490	6 920	-
45	3 681	4 253	4 799	5 322	5 825	6 314	6 790	7 260	-
50	3 674	4 304	4 905	5 481	6 035	6 571	7 093	7 606	-
55	-	4 331	4 992	5 625	6 234	6 824	7 396	7 957	-
60	-	-	5 058	5 753	6 422	7 069	7 697	8 310	-

Current consumption in A

20	5.95	6.35	6.85	7.37	7.83	8.17	-	-	-
30	5.94	6.40	6.99	7.63	8.25	8.77	9.12	9.21	-
35	6.00	6.49	7.12	7.82	8.51	9.12	9.57	9.78	-
40	6.08	6.59	7.26	8.02	8.78	9.48	10.03	10.36	-
45	6.16	6.69	7.40	8.21	9.04	9.82	10.48	10.92	-
50	6.23	6.78	7.52	8.38	9.28	10.14	10.89	11.45	-
55	-	6.84	7.61	8.52	9.48	10.42	11.26	11.94	-
60	-	-	7.64	8.60	9.62	10.64	11.57	12.35	-

Mass flow in kg/h

20	140	186	241	305	380	467	-	-	-
30	130	176	230	295	370	457	557	671	-
35	125	170	224	288	362	449	549	663	-
40	119	163	216	279	353	440	539	652	-
45	114	157	208	270	343	428	527	639	-
50	109	150	200	260	331	415	513	624	-
55	-	143	191	249	319	401	497	607	-
60	-	-	181	237	305	386	479	588	-

Coefficient of performance (C.O.P.)

20	1.50	1.84	2.23	2.68	3.18	3.75	-	-	-
30	1.16	1.43	1.75	2.11	2.51	2.97	3.46	4.00	-
35	1.02	1.26	1.54	1.85	2.21	2.61	3.05	3.54	-
40	0.89	1.10	1.34	1.61	1.93	2.28	2.67	3.10	-
45	0.77	0.95	1.15	1.39	1.66	1.97	2.31	2.69	-
50	0.66	0.81	0.98	1.18	1.41	1.68	1.97	2.30	-
55	-	0.68	0.82	0.99	1.18	1.40	1.66	1.94	-
60	-	-	0.67	0.80	0.96	1.15	1.36	1.61	-

Nominal performance at to = -10 °C	s, tc = 45 °C	
Cooling capacity	9 685	W
Power input	5 825	W
Current consumption	9.04	A
Mass flow	343	kg/h
C.O.P.	1.66	

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	0	dB(A)
With accoustic hood	0	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Performance data at 55 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

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Cond. temp. in		Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5			
ooling capacity	in W										
20	5 528	7 457	9 860	12 791	16 302	20 444	-	-	-		
30	4 597	6 336	8 498	11 136	14 303	18 051	22 433	27 501	-		
35	4 143	5 770	7 794	10 268	13 246	16 781	20 924	25 730	-		
40	3 702	5 205	7 080	9 379	12 157	15 467	19 362	23 895	-		
45	3 279	4 646	6 359	8 472	11 040	14 115	17 752	22 004	-		
40 50	-	4 097	5 637	7 553	9 900	12 732	16 102	20 065			
								1	-		
55	-	-	4 920	6 629	8 746	11 326	14 424	18 093	-		
60	-	-	-	5 712	7 592	9 917	12 741	16 118	-		
ower input in W											
20	3 362	3 718	4 059	4 389	4 712	5 031	-	-	-		
30	3 551	3 979	4 388	4 781	5 162	5 534	5 903	6 271	-		
35	3 617	4 088	4 538	4 969	5 387	5 793	6 193	6 590	-		
40	3 661	4 181	4 676	5 150	5 608	6 054	6 490	6 920	-		
45	3 681	4 253	4 799	5 322	5 825	6 314	6 790	7 260	-		
50	-	4 304	4 905	5 481	6 035	6 571	7 093	7 606	-		
55	-	-	4 992	5 625	6 234	6 824	7 396	7 957	-		
60	_	-		5 753	6 422	7 069	7 697	8 310	-		
00		-	_	5755	0 422	7 003	1 091	0.510			
urrent consum	ation in A										
		0.05	0.05	7.07	7.00	0.47		Г			
20	5.95	6.35	6.85	7.37	7.83	8.17	-	-	-		
30	5.94	6.40	6.99	7.63	8.25	8.77	9.12	9.21	-		
35	6.00	6.49	7.12	7.82	8.51	9.12	9.57	9.78	-		
40	6.08	6.59	7.26	8.02	8.78	9.48	10.03	10.36	-		
45	6.16	6.69	7.40	8.21	9.04	9.82	10.48	10.92	-		
50	-	6.78	7.52	8.38	9.28	10.14	10.89	11.45	-		
55	-	-	7.61	8.52	9.48	10.42	11.26	11.94	-		
60	-	-	-	8.60	9.62	10.64	11.57	12.35	-		
ass flow in kg/l 20	ו 139	185	239	304	378	464	-	-	-		
30	129	175	229	293	368	454	554	666	-		
35	124	169	222	286	360	447	546	658	-		
40	119	162	215	278	351	437	536	648	-		
45	114	156	207	268	341	426	523	635			
	-							1			
50		149	198	258	330	413	509	620	-		
55	-	-	189	247	317	399	494	603	-		
60	-	-	-	236	303	383	476	584	-		
oefficient of pe	•							,			
20	1.64	2.01	2.43	2.91	3.46	4.06	-	-	-		
30	1.29	1.59	1.94	2.33	2.77	3.26	3.80	4.39	-		
35	1.15	1.41	1.72	2.07	2.46	2.90	3.38	3.90	-		
40	1.01	1.25	1.51	1.82	2.17	2.56	2.98	3.45	-		
45	0.89	1.09	1.33	1.59	1.90	2.24	2.61	3.03	-		
50	-	0.95	1.15	1.38	1.64	1.94	2.27	2.64	-		
55	-	-	0.99	1.18	1.40	1.66	1.95	2.27	-		
60	-	-	-	0.99	1.18	1.40	1.66	1.94	-		
		1	1		1						
ominal perform	ance at to = -1	0 °C, tc = 45 °C				Pressure switch	settinas				
ooling capacity		11 040	W			Maximum HP swite		27.7	bar(g)		
ower input		5 825	Ŵ			Minimum LP switc	•	0.2	bar(g)		
urrent consumpt	ion	9.04	A			LP pump down set	•	0.9	bar(g)		
ass flow		341	kg/h				-				
.O.P.		1.90				Sound power dat	a				
				-		Sound power leve		0	dB(A)		
b: Evaporating te	•	•				With accoustic hoo	bd	0	dB(A)		
: Condensing te	•	•									
	: Superheat = 1	1.1 K , Subcooling									
oss can accept no		r possible errors in o order provided that				oss reserves the right to changes being necess					

Inverter reciprocating compressors VTZ121-G

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

°C (tc) -30 -25 -20 -15 -10	-5 0	5	

Cooling capacity in W

20	5 531	7 470	9 891	12 852	16 408	20 616	-	-	-
30	4 503	6 221	8 363	10 986	14 146	17 900	22 303	27 412	-
35	4 008	5 599	7 585	10 022	12 968	16 478	20 608	25 414	-
40	3 529	4 982	6 801	9 042	11 761	15 016	18 862	23 356	-
45	3 069	4 373	6 013	8 047	10 530	13 519	17 070	21 239	-
50	2 631	3 775	5 226	7 041	9 276	11 988	15 233	19 067	-
55	-	3 190	4 441	6 026	8 003	10 427	13 354	16 842	-
60	-	-	3 661	5 006	6 713	8 838	11 437	14 567	-

Power input in W

20	3 687	4 087	4 472	4 845	5 208	5 563	-	-	-
30	3 878	4 355	4 816	5 263	5 698	6 124	6 543	6 957	-
35	3 943	4 464	4 969	5 459	5 936	6 403	6 861	7 315	-
40	3 985	4 555	5 107	5 643	6 166	6 678	7 180	7 676	-
45	4 004	4 626	5 229	5 816	6 388	6 948	7 498	8 041	-
50	3 998	4 676	5 334	5 975	6 600	7 212	7 814	8 407	-
55	-	4 703	5 420	6 118	6 800	7 469	8 126	8 773	-
60	-	-	5 485	6 245	6 988	7 716	8 432	9 138	-

Current consumption in A

20	6.41	6.84	7.39	8.00	8.56	8.99	-	-	-
30	6.43	6.91	7.55	8.27	8.98	9.60	10.04	10.22	-
35	6.50	7.00	7.68	8.45	9.24	9.95	10.50	10.80	-
40	6.59	7.11	7.82	8.65	9.51	10.31	10.96	11.39	-
45	6.68	7.21	7.96	8.85	9.77	10.66	11.42	11.97	-
50	6.75	7.30	8.09	9.02	10.01	10.98	11.85	12.52	-
55	-	7.36	8.17	9.15	10.21	11.27	12.23	13.02	-
60	-	-	8.21	9.23	10.36	11.49	12.56	13.46	-

Mass flow in kg/h

20	153	204	263	334	416	511	-	-	-
30	142	192	251	321	403	498	608	732	-
35	136	185	243	313	395	489	598	723	-
40	130	177	235	304	384	478	587	711	-
45	124	170	226	293	373	466	573	696	-
50	118	162	217	282	360	452	558	680	-
55	-	155	207	271	347	437	541	662	-
60	-	-	197	258	332	420	523	641	-

Coefficient of performance (C.O.P.)

20	1.50	1.83	2.21	2.65	3.15	3.71	-	-	-
30	1.16	1.43	1.74	2.09	2.48	2.92	3.41	3.94	-
35	1.02	1.25	1.53	1.84	2.18	2.57	3.00	3.47	-
40	0.89	1.09	1.33	1.60	1.91	2.25	2.63	3.04	-
45	0.77	0.95	1.15	1.38	1.65	1.95	2.28	2.64	-
50	0.66	0.81	0.98	1.18	1.41	1.66	1.95	2.27	-
55	-	0.68	0.82	0.99	1.18	1.40	1.64	1.92	-
60	-	-	0.67	0.80	0.96	1.15	1.36	1.59	-

Nominal performance at to = -10 °C, tc = 45 °C 10 530 W Cooling capacity 6 388 Power input W

Current consumption	9.77	А
Mass flow	373	kg/h
C.O.P.	1.65	

o: Evaporating	temperature	at dew point
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1

tc: Condensing temperature at dew point

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

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Pressure switch settings Maximum HP switch setting

27.7	bar(g)
0.2	bar(g)
0.9	bar(g)
0.0	5a.(g)
	0.2

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

Inverter reciprocating compressors VTZ121-G

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

R404A

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Cond. temp. in				Evapora	ting temperatur	e in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
ooling capacit	y in W		-						
20	6 057	8 162	10 787	13 990	17 829	22 363	-	-	-
30	5 013	6 906	9 261	12 135	15 590	19 684	24 475	30 023	-
35	4 510	6 280	8 481	11 176	14 421	18 279	22 806	28 063	-
40	4 023	5 658	7 696	10 198	13 224	16 834	21 088	26 044	-
45	3 558	5 045	6 908	9 207	12 003	15 356	19 326	23 973	-
50	-	4 445	6 122	8 207	10 763	13 850	17 529	21 860	-
55	-	-	5 344	7 205	9 513	12 327	15 709	19 720	-
60	-	-	-	6 214	8 267	10 805	13 891	17 585	-
ower input in \	v								
20	3 687	4 087	4 472	4 845	5 208	5 563	-	-	-
30	3 878	4 355	4 816	5 263	5 698	6 124	6 543	6 957	-
35	3 943	4 464	4 969	5 459	5 936	6 403	6 861	7 315	
40	3 985	4 555	5 107	5 643	6 166	6 678	7 180	7 676	-
40	4 004	4 626	5 229	5 816	6 388	6 948	7 498	8 041	-
45 50	- 4 004	4 676	5 334	5 975	6 600	7 212	7 498	8 407	-
50 55	-	40/0	5 334	6 118	6 800	7 212	8 126	8 407	-
	-	-	5 420						-
60	-	-	-	6 245	6 988	7 716	8 432	9 138	-
urront or	ntion in A								
urrent consum	•	6.94	7.20	0.00	0 50	0.00		1	
20	6.41	6.84	7.39	8.00	8.56	8.99	-	-	-
30	6.43	6.91	7.55	8.27	8.98	9.60	10.04	10.22	-
35	6.50	7.00	7.68	8.45	9.24	9.95	10.50	10.80	-
40	6.59	7.11	7.82	8.65	9.51	10.31	10.96	11.39	-
45	6.68	7.21	7.96	8.85	9.77	10.66	11.42	11.97	-
50	-	7.30	8.09	9.02	10.01	10.98	11.85	12.52	-
55	-	-	8.17	9.15	10.21	11.27	12.23	13.02	-
60	-	-	-	9.23	10.36	11.49	12.56	13.46	-
lass flow in kg		1	T	1	1		1	1	
20	152	202	262	332	414	508	-	-	-
30	141	190	250	319	401	495	604	727	-
35	135	184	242	311	392	486	595	718	-
40	129	176	234	302	382	476	583	706	-
45	123	169	225	292	371	463	570	692	-
50	-	161	215	281	358	449	555	676	-
55	-	-	206	269	345	434	538	657	-
60	-	-	-	257	330	417	519	637	-
oefficient of pe	erformance (C.C	D.P.)		-				•	
20	1.64	2.00	2.41	2.89	3.42	4.02	-	-	-
30	1.29	1.59	1.92	2.31	2.74	3.21	3.74	4.32	-
35	1.14	1.41	1.71	2.05	2.43	2.85	3.32	3.84	-
40	1.01	1.24	1.51	1.81	2.14	2.52	2.94	3.39	-
45	0.89	1.09	1.32	1.58	1.88	2.21	2.58	2.98	-
50	-	0.95	1.15	1.37	1.63	1.92	2.24	2.60	-
55	-	-	0.99	1.18	1.40	1.65	1.93	2.25	-
60	-	-	-	1.00	1.18	1.40	1.65	1.92	-
			•					I	
ominal perform	nance at to = -1	0 °C, tc = 45 °C				Pressure switch	settings		
ooling capacity		12 003	3 W			Maximum HP swit		27.7	bar(g)
ower input		6 388	W			Minimum LP swite	-	0.2	bar(g)
urrent consump	otion	9.77	A			LP pump down se	tting	0.9	bar(g)
lass flow		371	kg/h			0	-		
.O.P.		1.88				Sound power lave		0	
						Sound power leve With accoustic ho		0 0	dB(A) dB(A)
: Evaporating te	emperature at de	ew point				VVIII accoustic no	00	U	UDIAI

Inverter reciprocating compressors VTZ121-G

Danfoss

R404A

Performance data at 65 Hz, EN 12900 rating conditions, Superheat = 10 K

	Cond. temp. in				Evapora	ting temperature i	n °C (to)			
-30 -25 -20 -15 -10 -5 0 5	°C (tc)	-30	-25	-20	-15	-10	-5	0	5	

Cooling capacity in W

20	6 021	8 120	10 742	13 951	17 811	22 384	-	-	-
30	4 879	6 733	9 045	11 879	15 299	19 366	24 144	29 697	-
35	4 333	6 048	8 190	10 821	14 005	17 803	22 281	27 499	-
40	3 806	5 373	7 334	9 751	12 688	16 208	20 373	25 248	-
45	3 301	4 709	6 478	8 671	11 351	14 581	18 425	22 945	-
50	2 820	4 058	5 625	7 583	9 996	12 926	16 437	20 592	-
55	-	3 423	4 777	6 490	8 624	11 244	14 412	18 191	-
60	-	-	3 935	5 393	7 239	9 538	12 352	15 745	-

Power input in W

20	4 023	4 468	4 898	5 313	5 714	6 101	-	-	-
30	4 212	4 741	5 257	5 760	6 252	6 732	7 199	7 655	-
35	4 274	4 848	5 410	5 962	6 502	7 032	7 551	8 059	-
40	4 314	4 935	5 546	6 148	6 740	7 322	7 895	8 458	-
45	4 330	5 002	5 664	6 319	6 964	7 601	8 230	8 850	-
50	4 323	5 047	5 764	6 473	7 175	7 869	8 556	9 236	-
55	-	5 071	5 844	6 610	7 371	8 125	8 873	9 615	-
60	-	-	5 905	6 731	7 552	8 368	9 179	9 986	-

Current consumption in A

20	6.86	7.32	7.94	8.63	9.28	9.83	-	-	-
30	6.92	7.43	8.12	8.91	9.72	10.44	11.00	11.29	-
35	7.00	7.52	8.25	9.10	9.98	10.79	11.46	11.87	-
40	7.09	7.63	8.40	9.30	10.25	11.16	11.92	12.47	-
45	7.18	7.74	8.54	9.50	10.52	11.51	12.38	13.05	-
50	7.25	7.82	8.66	9.67	10.76	11.84	12.82	13.61	-
55	-	7.87	8.74	9.80	10.96	12.13	13.22	14.13	-
60	-	-	8.78	9.89	11.11	12.37	13.56	14.59	-

Mass flow in kg/h

20	167	221	286	363	452	555	-	-	-
30	154	207	271	347	436	539	658	793	-
35	147	200	263	338	426	529	647	782	-
40	140	191	253	327	415	516	634	768	-
45	133	183	244	316	402	503	619	752	-
50	127	174	233	304	388	487	602	734	-
55	-	166	223	291	374	471	584	715	-
60	-	-	212	278	358	453	564	693	-

Coefficient of performance (C.O.P.)

20	1.50	1.82	2.19	2.63	3.12	3.67	-	-	-
30	1.16	1.42	1.72	2.06	2.45	2.88	3.35	3.88	-
35	1.01	1.25	1.51	1.82	2.15	2.53	2.95	3.41	-
40	0.88	1.09	1.32	1.59	1.88	2.21	2.58	2.99	-
45	0.76	0.94	1.14	1.37	1.63	1.92	2.24	2.59	-
50	0.65	0.80	0.98	1.17	1.39	1.64	1.92	2.23	-
55	-	0.67	0.82	0.98	1.17	1.38	1.62	1.89	-
60	-	-	0.67	0.80	0.96	1.14	1.35	1.58	-

Nominal performance at to = -10 °C, tc = 45 °C Cooling capacity 11 351 W Power input 6 964 W Current consumption 10 52 A

Current consumption	10.52	А
Mass flow	402	kg/h
C.O.P.	1.63	

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

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

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Maximum HP switch setting

Pressure switch settings

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

27.7

bar(g)

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

Inverter reciprocating compressors VTZ121-G

Performance data at 65 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

Danfoss

Cond. temp. in				Evapora	ting temperature	e in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
Cooling capacity	in W	-		-			-		
20	6 593	8 872	11 715	15 186	19 353	24 280	-	-	-
30	5 431	7 474	10 016	13 122	16 860	21 296	26 496	32 525	-
35	4 875	6 784	9 158	12 066	15 574	19 749	24 657	30 365	-
40	4 339	6 102	8 299	10 998	14 266	18 170	22 777	28 154	-
45	3 826	5 433	7 442	9 921	12 939	16 563	20 861	25 899	-
50	-	4 779	6 589	8 839	11 598	14 934	18 915	23 608	-
55	-	-	5 748	7 759	10 251	13 293	16 953	21 299	-
60	-	-	-	6 694	8 915	11 661	15 002	19 006	-
00	_			0.004	0010	11 001	10 002	10 000	_
ower input in W									
20	4 023	4 468	4 898	5 313	5 714	6 101	-	- 1	-
									-
30	4 212	4 741	5 257	5 760	6 252	6 732	7 199	7 655	-
35	4 274	4 848	5 410	5 962	6 502	7 032	7 551	8 059	-
40	4 314	4 935	5 546	6 148	6 740	7 322	7 895	8 458	-
45	4 330	5 002	5 664	6 319	6 964	7 601	8 230	8 850	-
50	-	5 047	5 764	6 473	7 175	7 869	8 556	9 236	-
55	-	-	5 844	6 610	7 371	8 125	8 873	9 615	-
60	-	-	-	6 731	7 552	8 368	9 179	9 986	-
urrent consump	tion in A	<u>.</u>		<u>.</u>			-		
20	6.86	7.32	7.94	8.63	9.28	9.83	-	-	-
30	6.92	7.43	8.12	8.91	9.72	10.44	11.00	11.29	-
35	7.00	7.52	8.25	9.10	9.98	10.79	11.46	11.87	-
40	7.09	7.63	8.40	9.30	10.25	11.16	11.92	12.47	-
45	7.18	7.74	8.54	9.50	10.52	11.51	12.38	13.05	_
50	-	7.82	8.66	9.67	10.76	11.84	12.82	13.61	-
55	_	-	8.74	9.80	10.96	12.13	13.22	14.13	_
60	-	-	-	9.89	11.11	12.10	13.56	14.59	-
00	_	-	-	3.03	11.11	12.57	15.50	14.55	
lass flow in kg/h									
20	166	220	285	361	449	552			
		220					-	- 700	-
30	153		270	345	434	536	654	788	-
35	146	198	261	336	424	525	643	777	-
40	139	190	252	326	412	513	630	763	-
45	132	182	242	314	400	500	615	747	-
50	-	174	232	302	386	484	599	730	-
55	-	-	221	290	372	468	580	710	-
60	-	-	-	277	356	451	561	688	-
oefficient of per	formance (C.C	D.P.)		<u>. </u>					
20	1.64	1.99	2.39	2.86	3.39	3.98	-	-	-
30	1.29	1.58	1.91	2.28	2.70	3.16	3.68	4.25	-
35	1.14	1.40	1.69	2.02	2.40	2.81	3.27	3.77	-
40	1.01	1.24	1.50	1.79	2.12	2.48	2.89	3.33	-
45	0.88	1.09	1.31	1.57	1.86	2.18	2.53	2.93	-
50	-	0.95	1.14	1.37	1.62	1.90	2.21	2.56	-
55	-	-	0.98	1.17	1.39	1.64	1.91	2.30	
60	-	-	-	0.99			1.63	1.90	-
00	-	-	-	0.99	1.18	1.39	1.03	1.90	-
ominal performa	anco at to - 4	0 °C to = 45 °C				Pressure switch	eattinge		
cooling capacity	ance at to = -1	12 939	9 W			Maximum HP swi		27.7	bar(g)
Power input		6 964	W			Minimum LP swite	•	0.2	bar(g) bar(g)
Current consumpti	on	10.52	A			LP pump down se	•	0.2	bar(g)
lass flow		400	kg/h					5.5	~u (g)
		1.86	<u>.</u>			Sound power da	ta		
				·				0	dB(A)
C.O.P.						Sound power leve	-	0	UD(A)
	nperature at de	w point				With accoustic ho		0	dB(A)

Inverter reciprocating compressors VTZ121-G

Danfoss

R404A

Performance data at 70 Hz, EN 12900 rating conditions, Superheat = 10 K

Cond. temp. in				Evapora	ting temperature i	n °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
				•				•	

Cooling capacity in W

20	6 519	8 774	11 593	15 049	19 211	24 149	-	-	-
30	5 256	7 242	9 720	12 761	16 435	20 813	25 966	31 964	-
35	4 656	6 493	8 786	11 605	15 021	19 105	23 927	29 557	-
40	4 078	5 757	7 855	10 443	13 592	17 371	21 852	27 106	-
45	3 524	5 035	6 929	9 277	12 148	15 614	19 745	24 611	-
50	2 995	4 329	6 009	8 106	10 691	13 834	17 605	22 075	-
55	-	3 640	5 097	6 934	9 222	12 032	15 434	19 499	-
60	-	-	4 193	5 760	7 743	10 211	13 234	16 884	-

Power input in W

20	4 369	4 861	5 337	5 795	6 232	6 645	-	-	-
30	4 554	5 136	5 710	6 273	6 823	7 357	7 872	8 365	-
35	4 611	5 239	5 862	6 479	7 087	7 682	8 262	8 824	-
40	4 646	5 320	5 994	6 665	7 330	7 987	8 633	9 265	-
45	4 658	5 379	6 104	6 830	7 554	8 273	8 985	9 687	-
50	4 649	5 418	6 194	6 975	7 759	8 541	9 320	10 092	-
55	-	5 437	6 265	7 102	7 945	8 791	9 637	10 481	-
60	-	-	6 318	7 211	8 114	9 024	9 939	10 854	-

Current consumption in A

20	7.31	7.82	8.49	9.25	10.01	10.66	-	-	-
30	7.42	7.96	8.71	9.57	10.47	11.30	11.98	12.41	-
35	7.50	8.06	8.85	9.77	10.74	11.66	12.44	13.00	-
40	7.59	8.17	8.99	9.97	11.01	12.02	12.91	13.59	-
45	7.67	8.27	9.13	10.16	11.27	12.37	13.37	14.18	-
50	7.73	8.35	9.24	10.33	11.52	12.71	13.81	14.74	-
55	-	8.39	9.32	10.47	11.72	13.00	14.22	15.27	-
60	-	-	9.35	10.55	11.88	13.26	14.58	15.76	-

Mass flow in kg/h

20	180	239	309	391	488	599	-	-	-
30	166	223	292	373	468	580	708	854	-
35	158	214	282	362	457	567	695	840	-
40	150	205	272	351	444	553	680	825	-
45	142	196	261	338	430	538	663	807	-
50	134	186	249	325	416	522	645	787	-
55	-	176	237	311	400	504	626	766	-
60	-	-	225	297	383	485	605	743	-

Coefficient of performance (C.O.P.)

20	1.49	1.80	2.17	2.60	3.08	3.63	-	-	-
30	1.15	1.41	1.70	2.03	2.41	2.83	3.30	3.82	-
35	1.01	1.24	1.50	1.79	2.12	2.49	2.90	3.35	-
40	0.88	1.08	1.31	1.57	1.85	2.17	2.53	2.93	-
45	0.76	0.94	1.14	1.36	1.61	1.89	2.20	2.54	-
50	0.64	0.80	0.97	1.16	1.38	1.62	1.89	2.19	-
55	-	0.67	0.81	0.98	1.16	1.37	1.60	1.86	-
60	-	-	0.66	0.80	0.95	1.13	1.33	1.56	-

Nominal performance at to = -10 °C, tc = 45 °C Cooling capacity 12 148 W Power input 7 554 W

Current consumption	11.27	А
Mass flow	430	kg/h
C.O.P.	1.61	

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

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

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Pressure switch settings Maximum HP switch setting

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	0	dB(A)
With accoustic hood	0	dB(A)

Inverter reciprocating compressors VTZ121-G

Performance data at 70 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

1

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Cond. temp. in		Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5		
ooling capacit	y in W					-				
20	7 138	9 587	12 643	16 381	20 874	26 195	-	-	-	
30	5 851	8 040	10 763	14 096	18 113	22 888	28 495	35 008	-	
35	5 238	7 282	9 825	12 940	16 705	21 193	26 479	32 636	-	
40	4 649	6 538	8 889	11 779	15 282	19 475	24 431	30 225	-	
45	4 085	5 809	7 960	10 614	13 847	17 736	22 355	27 780	-	
50	-	5 098	7 039	9 449	12 404	15 982	20 259	25 309	-	
55	-	-	6 133	8 290	10 962	14 224	18 155	22 831	_	
60	_	_	-	7 151	9 536	12 484	16 073	20 381	_	
00				1 101	0 000	12 101	10 07 0	20 001		
ower input in \	N									
20	4 369	4 861	5 337	5 795	6 232	6 645	-	-	_	
30	4 554	5 136	5 710	6 273	6 823	7 357	7 872	8 365		
							1		-	
35	4 611	5 239	5 862	6 479	7 087	7 682	8 262	8 824	-	
40	4 646	5 320	5 994	6 665	7 330	7 987	8 633	9 265	-	
45	4 658	5 379	6 104	6 830	7 554	8 273	8 985	9 687	-	
50	-	5 418	6 194	6 975	7 759	8 541	9 320	10 092	-	
55	-	-	6 265	7 102	7 945	8 791	9 637	10 481	-	
60	-	-	-	7 211	8 114	9 024	9 939	10 854	-	
urrent consum	ption in A	-								
20	7.31	7.82	8.49	9.25	10.01	10.66	-	-	-	
30	7.42	7.96	8.71	9.57	10.47	11.30	11.98	12.41	-	
35	7.50	8.06	8.85	9.77	10.74	11.66	12.44	13.00	-	
40	7.59	8.17	8.99	9.97	11.01	12.02	12.91	13.59	-	
45	7.67	8.27	9.13	10.16	11.27	12.37	13.37	14.18	_	
50	-	8.35	9.24	10.33	11.52	12.71	13.81	14.74	-	
55	-	-	9.32	10.47	11.72	13.00	14.22	15.27	-	
60	-	-	-	10.55	11.88	13.26	14.58	15.76	_	
60	-	-	-	10.55	11.00	13.20	14.50	15.70	-	
laas flaw in he	(h.									
lass flow in kg		000	0.07		105	500		<u> </u>		
20	179	238	307	389	485	596	-	-	-	
30	165	222	290	371	466	576	703	849	-	
35	157	213	280	360	454	564	690	835	-	
40	149	204	270	349	442	550	675	819	-	
45	141	195	259	336	428	535	659	802	-	
50	-	185	248	323	413	519	641	782	-	
55	-	-	236	310	397	501	622	761	-	
60	-	-	-	295	381	482	601	738	-	
oefficient of pe	erformance (C.O	D.P.)								
20	1.63	1.97	2.37	2.83	3.35	3.94	-	-	-	
	1.28	1.57	1.89	2.25	2.65	3.11	3.62	4.18	-	
30	1.14	1.39	1.68	2.00	2.36	2.76	3.20	3.70	-	
			1.48	1.77	2.08	2.44	2.83	3.26	-	
35			1.40	1.11	1.83	2.44	2.83	2.87	-	
35 40	1.00	1.23	1 20	1 55		2.14	1			
35 40 45	1.00 0.88	1.08	1.30	1.55		4 07			-	
35 40 45 50	1.00 0.88 -	1.08 0.94	1.14	1.35	1.60	1.87	2.17	2.51		
35 40 45 50 55	1.00 0.88	1.08	1.14 0.98	1.35 1.17	1.60 1.38	1.62	1.88	2.18	-	
35 40 45 50	1.00 0.88 -	1.08 0.94	1.14	1.35	1.60				-	
35 40 45 50 55 60	1.00 0.88 - - -	1.08 0.94 - -	1.14 0.98	1.35 1.17	1.60 1.38	1.62 1.38	1.88 1.62	2.18		
35 40 45 50 55 60 Iominal perform	1.00 0.88 - - - nance at to = -1	1.08 0.94 - - 0 °C, tc = 45 °C	1.14 0.98 -	1.35 1.17	1.60 1.38	1.62 1.38 Pressure switch	1.88 1.62 settings	2.18 1.88	-	
35 40 45 50 55 60 Iominal perform	1.00 0.88 - - - nance at to = -1	1.08 0.94 - 0 °C, tc = 45 °C 13 847	1.14 0.98 -	1.35 1.17	1.60 1.38	1.62 1.38 Pressure switch Maximum HP swi	1.88 1.62 settings tch setting	2.18 1.88 27.7	- bar(g)	
35 40 45 50 55 60 Iominal perform Cooling capacity Yower input	1.00 0.88 - - - nance at to = -1	1.08 0.94 - - 0 °C, tc = 45 °C 13 847 7 554	1.14 0.98 -	1.35 1.17	1.60 1.38	1.62 1.38 Pressure switch Maximum HP swit Minimum LP swite	1.88 1.62 settings tch setting ch setting	2.18 1.88 27.7 0.2	- bar(g) bar(g)	
35 40 45 50 55 60 Iominal perforr Cooling capacity Power input Current consump	1.00 0.88 - - - nance at to = -1	1.08 0.94 - 0 °C, tc = 45 °C 13 847 7 554 11.27	1.14 0.98 - 7 W W A	1.35 1.17	1.60 1.38	1.62 1.38 Pressure switch Maximum HP swi	1.88 1.62 settings tch setting ch setting	2.18 1.88 27.7	- bar(g) bar(g)	
35 40 45 50 55 60 Iominal perform Cooling capacity Yower input Current consump fass flow	1.00 0.88 - - - nance at to = -1	1.08 0.94 - 0 °C, tc = 45 °C 13 847 7 554 11.27 428	1.14 0.98 -	1.35 1.17	1.60 1.38	1.62 1.38 Pressure switch Maximum HP swit Minimum LP swit LP pump down se	1.88 1.62 settings tch setting ch setting etting	2.18 1.88 27.7 0.2	- bar(g) bar(g)	
35 40 45 50 55 60	1.00 0.88 - - - nance at to = -1	1.08 0.94 - 0 °C, tc = 45 °C 13 847 7 554 11.27	1.14 0.98 - 7 W W A	1.35 1.17	1.60 1.38	1.62 1.38 Pressure switch Maximum HP swit Minimum LP swit LP pump down set Sound power data	1.88 1.62 settings tch setting ch setting ch setting tting tting tting	2.18 1.88 27.7 0.2 0.9	- bar(g) bar(g) bar(g)	
35 40 45 50 55 60 Iominal perform Cooling capacity 'ower input 'urrent consump Aass flow C.O.P.	1.00 0.88 - - - nance at to = -1	1.08 0.94 - 0 °C, tc = 45 °C 13 847 7 554 11.27 428 1.83	1.14 0.98 - 7 W W A	1.35 1.17	1.60 1.38	1.62 1.38 Pressure switch Maximum HP swit Minimum LP swit LP pump down set Sound power da Sound power level	1.88 1.62 settings tch setting ch setting thing tting ta	2.18 1.88 27.7 0.2 0.9 0	bar(g) bar(g) bar(g) dB(A)	
35 40 45 50 55 60 Iominal perform Cooling capacity Yower input Current consump Aass flow C.O.P. D: Evaporating to	1.00 0.88 - - - nance at to = -1	1.08 0.94 - - 0 °C, tc = 45 °C 13 847 7 554 11.27 428 1.83 ew point	1.14 0.98 - 7 W W A	1.35 1.17	1.60 1.38	1.62 1.38 Pressure switch Maximum HP swit Minimum LP swit LP pump down set Sound power data	1.88 1.62 settings tch setting ch setting thing tting ta	2.18 1.88 27.7 0.2 0.9		

Inverter reciprocating compressors VTZ121-G

Danfoss

R404A

Performance data at 75 Hz, EN 12900 rating conditions, Superheat = 10 K

	Cond. temp. in				Evapora	ting temperature i	n °C (to)			
-30 -25 -20 -15 -10 -5 0 5	°C (tc)	-30	-25	-20	-15	-10	-5	0	5	

Cooling capacity in W

20	7 024	9 432	12 446	16 145	20 608	25 914	-	-	-
30	5 635	7 749	10 389	13 631	17 556	22 242	27 768	34 212	-
35	4 977	6 933	9 372	12 375	16 018	20 382	25 545	31 586	-
40	4 345	6 134	8 365	11 119	14 473	18 507	23 299	28 928	-
45	3 739	5 352	7 367	9 864	12 921	16 616	21 029	26 239	-
50	3 158	4 588	6 379	8 611	11 362	14 711	18 737	23 518	-
55	-	3 842	5 401	7 359	9 796	12 791	16 421	20 767	-
60	-	-	4 432	6 110	8 225	10 857	14 084	17 985	-

Power input in W

20	4 726	5 266	5 789	6 289	6 760	7 194	-	-	-
30	4 904	5 541	6 175	6 801	7 411	8 000	8 561	9 087	-
35	4 954	5 637	6 325	7 011	7 689	8 352	8 994	9 609	-
40	4 982	5 709	6 449	7 193	7 936	8 672	9 394	10 096	-
45	4 989	5 759	6 548	7 349	8 157	8 964	9 764	10 551	-
50	4 977	5 789	6 626	7 482	8 352	9 228	10 105	10 976	-
55	-	5 800	6 684	7 594	8 524	9 468	10 420	11 372	-
60	-	-	6 724	7 686	8 675	9 686	10 710	11 743	-

Current consumption in A

20	7.77	8.31	9.05	9.88	10.73	11.50	-	-	-
30	7.91	8.50	9.31	10.25	11.23	12.18	12.99	13.59	-
35	8.00	8.61	9.46	10.45	11.51	12.54	13.45	14.17	-
40	8.08	8.71	9.60	10.65	11.78	12.90	13.92	14.76	-
45	8.15	8.80	9.73	10.84	12.04	13.25	14.38	15.34	-
50	8.18	8.87	9.84	11.01	12.29	13.59	14.82	15.91	-
55	-	8.90	9.91	11.14	12.50	13.89	15.24	16.45	-
60	-	-	9.94	11.23	12.67	14.16	15.61	16.95	-

Mass flow in kg/h

20	194	257	332	420	523	644	-	-	-
30	177	239	312	398	500	619	757	914	-
35	169	229	301	386	487	605	741	898	-
40	160	219	289	373	473	589	725	880	-
45	151	208	277	360	458	573	706	860	-
50	142	197	265	345	442	555	687	839	-
55	-	186	252	330	425	536	666	816	-
60	-	-	238	315	407	516	644	792	-

Coefficient of performance (C.O.P.)

20	1.49	1.79	2.15	2.57	3.05	3.60	-	-	-
30	1.15	1.40	1.68	2.00	2.37	2.78	3.24	3.76	-
35	1.00	1.23	1.48	1.77	2.08	2.44	2.84	3.29	-
40	0.87	1.07	1.30	1.55	1.82	2.13	2.48	2.87	-
45	0.75	0.93	1.13	1.34	1.58	1.85	2.15	2.49	-
50	0.63	0.79	0.96	1.15	1.36	1.59	1.85	2.14	-
55	-	0.66	0.81	0.97	1.15	1.35	1.58	1.83	-
60	-	-	0.66	0.79	0.95	1.12	1.31	1.53	-

Nominal performance at to = -10 °C,	tc = 45 °C	
Cooling capacity	12 921	W
Power input	8 157	W
Current consumption	12.04	А
Maga flow	450	ka/h

Current consumption	12.04	A	
Mass flow	458	kg/h	
C.O.P.	1.58		
			1

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	0	dB(A)
With accoustic hood	0	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Performance data at 75 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

1

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Cond. temp. in		1	1		ating temperature			, , , , , , , , , , , , , , , , , , , ,	
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
ooling capacity	y in W		n		1	-	1		
20	7 691	10 306	13 573	17 575	22 392	28 109	-	-	-
30	6 272	8 603	11 503	15 057	19 348	24 459	30 472	37 470	-
35	5 600	7 776	10 480	13 798	17 814	22 610	28 270	34 877	-
40	4 954	6 966	9 467	12 541	16 273	20 748	26 048	32 258	-
45	4 334	6 175	8 463	11 286	14 728	18 875	23 810	29 617	-
50	-	5 403	7 473	10 037	13 183	16 996	21 561	26 964	-
55	-	-	6 499	8 799	11 644	15 121	19 317	24 315	-
60	-	-	-	7 584	10 129	13 273	17 105	21 710	-
I			1	1	1	I	1	I	
ower input in V	v								
20	4 726	5 266	5 789	6 289	6 760	7 194	-	-	-
30	4 904	5 541	6 175	6 801	7 411	8 000	8 561	9 087	-
35	4 954	5 637	6 325	7 011	7 689	8 352	8 994	9 609	-
40	4 982	5 709	6 449	7 193	7 936	8 672	9 394	10 096	-
45	4 989	5 759	6 548	7 349	8 157	8 964	9 764	10 551	-
43 50	- 505	5 789	6 626	7 482	8 352	9 228	10 105	10 976	_
50 55	-	5769	6 684	7 482	8 352 8 524	9 468	10 105	10 976	-
	-	-	- 0 084					1 1	-
60	-	1 -	1 -	7 686	8 675	9 686	10 710	11 743	-
	ntion in A								
urrent consum	•	0.01	0.05	0.00	40.70	44.50	1	1	
20	7.77	8.31	9.05	9.88	10.73	11.50	-	-	-
30	7.91	8.50	9.31	10.25	11.23	12.18	12.99	13.59	-
35	8.00	8.61	9.46	10.45	11.51	12.54	13.45	14.17	-
40	8.08	8.71	9.60	10.65	11.78	12.90	13.92	14.76	-
45	8.15	8.80	9.73	10.84	12.04	13.25	14.38	15.34	-
50	-	8.87	9.84	11.01	12.29	13.59	14.82	15.91	-
55	-	-	9.91	11.14	12.50	13.89	15.24	16.45	-
60	-	-	-	11.23	12.67	14.16	15.61	16.95	-
lass flow in kg/	'n								
20	193	256	330	417	520	640	-	-	-
30	176	237	310	396	497	615	752	908	-
35	168	227	299	384	484	601	737	892	-
40	159	217	288	371	470	586	720	874	-
45	150	207	276	358	455	569	702	855	-
50	-	196	263	343	439	551	682	833	-
55	-	-	250	329	422	533	662	811	-
60	-	-	-	313	405	513	640	786	-
			1						
oefficient of pe	erformance (C.C	D.P.)							
20	1.63	1.96	2.34	2.79	3.31	3.91	-	-	-
30	1.28	1.55	1.86	2.21	2.61	3.06	3.56	4.12	-
35	1.13	1.38	1.66	1.97	2.32	2.71	3.14	3.63	_
40	0.99	1.30	1.47	1.74	2.02	2.39	2.77	3.20	_
40 45	0.99	1.07	1.47	1.74	1.81	2.39	2.44	2.81	-
45 50	-	0.93	1.13	1.34	1.58	1.84	2.44	2.01	-
50 55	-	0.93	0.97	1.34			1.85	2.40	-
					1.37	1.60		1 1	
60	-	-	-	0.99	1.17	1.37	1.60	1.85	-
ominal porform	nance at to = -1	0 °C to = 45 °C				Pressure switch	eattinge		
ominal perform	nance at to = -1	<u>0 °C, tc = 45 °C</u> 14 728	3 W	_		Maximum HP swit	U U	27.7	bar(g)
ower input		8 157	Ŵ			Minimum LP swite		0.2	bar(g) bar(g)
	tion	12.04	A			LP pump down se	•	0.9	bar(g)
		455	kg/h				~		(3/
Current consump Nass flow		1.81				Sound power dat	a		
Current consump									
Current consump Mass flow C.O.P.						Sound power leve		0	. ,
Current consump Aass flow C.O.P.	emperature at de	ew point				Sound power leve With accoustic ho		0 0	dB(A) dB(A)

Inverter reciprocating compressors VTZ121-G

Danfoss

R404A

Performance data at 80 Hz, EN 12900 rating conditions, Superheat = 10 K

Cond. temp. in	d. temp. in Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	

Cooling capacity in W

oconing capaci									
20	7 536	10 094	13 300	17 240	22 003	27 676	-	-	-
30	6 015	8 254	11 050	14 490	18 661	23 652	29 550	36 443	-
35	5 297	7 368	9 949	13 129	16 995	21 635	27 137	33 588	-
40	4 608	6 503	8 864	11 777	15 332	19 614	24 714	30 717	-
45	3 945	5 659	7 792	10 433	13 670	17 589	22 279	27 828	-
50	3 308	4 834	6 734	9 096	12 008	15 558	19 833	24 921	-
55	-	4 028	5 689	7 766	10 347	13 520	17 374	21 994	-
60	-	-	4 655	6 440	8 685	11 476	14 901	19 048	-

Power input in W

20	5 094	5 683	6 254	6 796	7 298	7 750	-	-	-
30	5 261	5 956	6 654	7 344	8 017	8 661	9 266	9 821	-
35	5 303	6 044	6 798	7 557	8 308	9 042	9 747	10 414	-
40	5 322	6 104	6 911	7 733	8 559	9 378	10 179	10 953	-
45	5 322	6 141	6 997	7 877	8 773	9 673	10 566	11 443	-
50	5 307	6 159	7 058	7 993	8 955	9 931	10 912	11 887	-
55	-	6 161	7 099	8 085	9 107	10 156	11 220	12 288	-
60	-	-	7 124	8 156	9 235	10 351	11 494	12 652	-

Current consumption in A

20	8.22	8.82	9.61	10.51	11.45	12.35	-	-	-
30	8.42	9.06	9.93	10.94	12.01	13.07	14.03	14.82	-
35	8.50	9.17	10.08	11.15	12.29	13.43	14.49	15.39	-
40	8.57	9.27	10.22	11.35	12.56	13.79	14.96	15.97	-
45	8.61	9.34	10.35	11.53	12.83	14.15	15.41	16.55	-
50	8.62	9.39	10.44	11.70	13.07	14.48	15.85	17.11	-
55	-	9.40	10.51	11.83	13.28	14.79	16.27	17.65	-
60	-	-	10.54	11.93	13.47	15.07	16.67	18.17	-

Mass flow in kg/h

20	208	275	354	448	559	688	-	-	-
30	189	254	332	423	532	658	805	974	-
35	180	243	319	410	517	642	787	955	-
40	169	232	306	396	501	625	768	934	-
45	159	220	293	381	484	606	748	912	-
50	149	208	279	365	467	587	727	889	-
55	-	195	265	349	449	567	704	864	-
60	-	-	250	332	430	545	681	838	-

Coefficient of performance (C.O.P.)

20	1.48	1.78	2.13	2.54	3.01	3.57	-	-	-
30	1.14	1.39	1.66	1.97	2.33	2.73	3.19	3.71	-
35	1.00	1.22	1.46	1.74	2.05	2.39	2.78	3.23	-
40	0.87	1.07	1.28	1.52	1.79	2.09	2.43	2.80	-
45	0.74	0.92	1.11	1.32	1.56	1.82	2.11	2.43	-
50	0.62	0.78	0.95	1.14	1.34	1.57	1.82	2.10	-
55	-	0.65	0.80	0.96	1.14	1.33	1.55	1.79	-
60	-	-	0.65	0.79	0.94	1.11	1.30	1.51	-

Nominal performance at to = -10 °C, tc = 45 °C Cooling capacity 13 670 W Power input 8 773 W

i olioi ilipat	0110	••
Current consumption	12.83	A
Mass flow	484	kg/h
C.O.P.	1.56	

to:	Evaporating	temperature	at	dew	point
-----	-------------	-------------	----	-----	-------

tc: Condensing temperature at dew point

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

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Pressure switch settings

Maximum HP switch setting

Minimum LP switch setting

LP pump down setting

Sound power data

Sound power level

With accoustic hood

27.7

0.2

0.9

0

0

bar(g)

bar(g)

bar(g)

dB(A)

dB(A)

Inverter reciprocating compressors VTZ121-G

Performance data at 80 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

Danfoss

Cond. temp. in				Evapora	ting temperatur	re in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
ooling capacity	' in W	-	-	-					
20	8 252	11 030	14 504	18 766	23 908	30 021	-	-	-
30	6 696	9 164	12 236	16 005	20 566	26 009	32 428	39 913	-
35	5 960	8 264	11 126	14 640	18 900	24 000	30 032	37 088	-
40	5 253	7 386	10 031	13 284	17 239	21 989	27 630	34 252	-
45	4 572	6 529	8 952	11 937	15 582	19 979	25 224	31 410	-
50	-	5 693	7 889	10 603	13 933	17 974	22 822	28 571	-
55	-	_	6 845	9 285	12 299	15 984	20 436	25 753	-
60	-	-	-	7 995	10 695	14 030	18 097	22 994	-
			1	1				11	
ower input in W	I								
20	5 094	5 683	6 254	6 796	7 298	7 750	-	-	-
30	5 261	5 956	6 654	7 344	8 017	8 661	9 266	9 821	-
35	5 303	6 044	6 798	7 557	8 308	9 042	9 747	10 414	-
40	5 322	6 104	6 911	7 733	8 559	9 378	10 179	10 953	-
45	5 322	6 141	6 997	7 877	8 773	9 673	10 566	11 443	-
50	-	6 159	7 058	7 993	8 955	9 931	10 912	11 887	-
55	-	-	7 099	8 085	9 107	10 156	11 220	12 288	-
60	-	-	-	8 156	9 235	10 351	11 494	12 652	_
		I.	1	0.00	0 200				
Current consum	otion in A								
20	8.22	8.82	9.61	10.51	11.45	12.35	-	- [_
30	8.42	9.06	9.93	10.94	12.01	13.07	14.03	14.82	-
35	8.50	9.17	10.08	11.15	12.29	13.43	14.49	15.39	-
40	8.57	9.27	10.00	11.35	12.56	13.79	14.96	15.97	-
45	8.61	9.34	10.35	11.53	12.83	14.15	15.41	16.55	_
43 50	-	9.34	10.33	11.33	13.07	14.15	15.85	17.11	
55	-	-	10.44	11.83	13.28	14.79	16.27	17.65	-
60	_	-	-	11.93	13.47	15.07	16.67	18.17	
00	-	-	-	11.55	13.47	13.07	10.07	10.17	
lass flow in kg/l	.								
20	207	273	352	446	556	684	_		-
30	188	253	330	421	529	654	800	968	-
35	179	242	317	408	514	638	782	949	_
40	169	242	305	393	498	621	764	949	-
		230			490		764		
45	158		291	378	462	603		906	-
50 55	-	207	278 263	363 347	404	583	722 700	883 858	-
	-	-							-
60	-	-	-	330	427	542	677	833	-
oefficient of pe	rformanco (C (יפי							
20	1.62	1.94	2.32	2.76	3.28	3.87	-	-	-
30 35	1.27	1.54 1.37	1.84 1.64	2.18 1.94	2.57 2.27	3.00	3.50 3.08	4.06	-
								3.56	
40	0.99	1.21	1.45	1.72	2.01	2.34	2.71	3.13	-
45	0.86	1.06	1.28	1.52	1.78	2.07	2.39	2.75	-
50	-	0.92	1.12	1.33	1.56	1.81	2.09	2.40	-
55	-	-	0.96	1.15	1.35	1.57	1.82	2.10	-
60	-	-	-	0.98	1.16	1.36	1.57	1.82	-
ominal perform	anco at to - 4	0 °C to = 45 °C				Pressure switch	sattings		
Cooling capacity	ance at 101	15 582	2 W			Maximum HP swit	-	27.7	bar(g)
ower input		8 773	W			Minimum LP swite	•	0.2	bar(g)
Current consumption	tion	12.83	A			LP pump down se	•	0.9	bar(g)
Aass flow		482	kg/h						
C.O.P.		1.78				Sound power dat			
					Sound power level 0				dB(A) dB(A)
o: Evaporating te		un maint				With accoustic ho		0	

Inverter reciprocating compressors VTZ121-G

Danfoss

R404A

Performance data at 85 Hz, EN 12900 rating conditions, Superheat = 10 K

Cond. temp. in		Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5				
						_	-	-				

ecomig capac									
20	8 056	10 761	14 155	18 333	23 395	29 438	-	-	-
30	6 397	8 758	11 705	15 337	19 750	25 043	31 312	-	-
35	5 616	7 799	10 517	13 869	17 952	22 864	28 701	-	-
40	4 866	6 866	9 351	12 419	16 168	20 694	26 096	-	-
45	4 143	5 956	8 204	10 985	14 395	18 532	23 494	-	-
50	3 445	5 068	7 075	9 564	12 631	16 375	20 893	-	-
55	-	4 200	5 961	8 154	10 874	14 221	18 291	-	-
60	-	-	4 861	6 753	9 123	12 068	15 685	-	-

Power input in W

20	5 472	6 113	6 733	7 316	7 848	8 312	-	-	-
30	5 626	6 380	7 144	7 903	8 640	9 340	9 987	-	-
35	5 658	6 457	7 282	8 117	8 945	9 752	10 522	-	-
40	5 666	6 504	7 382	8 285	9 198	10 104	10 988	-	-
45	5 658	6 526	7 450	8 414	9 403	10 401	11 392	-	-
50	5 638	6 529	7 491	8 509	9 567	10 649	11 740	-	-
55	-	6 518	7 511	8 575	9 695	10 854	12 037	-	-
60	-	-	7 517	8 620	9 793	11 022	12 290	-	-

Current consumption in A

20	8.67	9.32	10.17	11.14	12.18	13.20	-	-	-
30	8.92	9.63	10.56	11.64	12.80	13.98	15.10	-	-
35	9.00	9.75	10.72	11.86	13.09	14.35	15.56	-	-
40	9.05	9.83	10.86	12.06	13.37	14.71	16.02	-	-
45	9.06	9.89	10.97	12.24	13.62	15.05	16.47	-	-
50	9.03	9.92	11.06	12.40	13.86	15.39	16.90	-	-
55	-	9.91	11.12	12.53	14.08	15.71	17.33	-	-
60	-	-	11.15	12.64	14.28	16.01	17.74	-	-

Mass flow in kg/h

20	223	293	377	477	595	732	-	-	-
30	201	270	351	448	563	697	853	-	-
35	190	257	338	433	546	678	833	-	-
40	179	245	323	417	528	659	811	-	-
45	167	231	309	401	510	639	789	-	-
50	155	218	293	384	491	618	766	-	-
55	-	203	277	366	472	596	742	-	-
60	-	-	261	348	451	574	717	-	-

Coefficient of performance (C.O.P.)

20	1.47	1.76	2.10	2.51	2.98	3.54	-	-	-
30	1.14	1.37	1.64	1.94	2.29	2.68	3.14	-	-
35	0.99	1.21	1.44	1.71	2.01	2.34	2.73	-	-
40	0.86	1.06	1.27	1.50	1.76	2.05	2.37	-	-
45	0.73	0.91	1.10	1.31	1.53	1.78	2.06	-	-
50	0.61	0.78	0.94	1.12	1.32	1.54	1.78	-	-
55	-	0.64	0.79	0.95	1.12	1.31	1.52	-	-
60	-	-	0.65	0.78	0.93	1.09	1.28	-	-

Nominal performance at to = -10 °C, tc = 45 °C Cooling capacity 14 395 W Power input 9 403 W

i owei input	3403	vv
Current consumption	13.62	A
Mass flow	510	kg/h
C.O.P.	1.53	

tc: Condensing temperature at dew point

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

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FRCC.ED.VTZ121-G.A5.02 / page performance R404A 85 Hz

27.7

0.2

0.9

0

0

bar(g)

bar(g)

bar(g)

dB(A)

dB(A)

Pressure switch settings Maximum HP switch setting

Minimum LP switch setting

LP pump down setting

Sound power data

Sound power level

With accoustic hood

Inverter reciprocating compressors VTZ121-G

Performance data at 85 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R40)4A
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Danfoss

Cond. temp. in				Evapora	ting temperatur	e in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	
		-	•						
ooling capacity	y in W	-		-	-				
20	8 821	11 759	15 437	19 956	25 421	31 932	-	-	-
30	7 121	9 722	12 961	16 941	21 766	27 539	34 361	-	-
35	6 319	8 747	11 761	15 465	19 965	25 363	31 763	-	-
40	5 547	7 797	10 582	14 008	18 179	23 200	29 175	-	-
45	4 802	6 872	9 425	12 568	16 408	21 051	26 600	-	-
50	-	5 969	8 288	11 147	14 655	18 918	24 042	-	-
55	-	-	7 173	9 749	12 925	16 812	21 515	-	-
60	-	-	-	8 383	11 235	14 754	19 050	-	-
ower input in V	v								
20	5 472	6 113	6 733	7 316	7 848	8 312	-	-	-
30	5 626	6 380	7 144	7 903	8 640	9 340	9 987	-	-
35	5 658	6 457	7 282	8 117	8 945	9 752	10 522	-	-
40	5 666	6 504	7 382	8 285	9 198	10 104	10 988	-	-
45	5 658	6 526	7 450	8 414	9 403	10 401	11 392	-	-
50	-	6 529	7 491	8 509	9 567	10 649	11 740	-	_
55	-	-	7 491	8 575	9 695	10 854	12 037	-	-
60	-	-	-	8 620	9 793	11 022	12 290	-	_
00	~		-	0.020	5135	11 022	12 230	-	-
urrent consum	ntion in A								
20	8.67	9.32	10.17	11.14	12.18	13.20	-	-	-
30	8.92	9.63	10.17	11.14	12.10	13.98	15.10	-	
30	9.00	9.65	10.56			14.35			-
				11.86	13.09		15.56	-	-
40	9.05	9.83	10.86	12.06	13.37	14.71	16.02	-	-
45	9.06	9.89	10.97	12.24	13.62	15.05	16.47	-	-
50	-	9.92	11.06	12.40	13.86	15.39	16.90	-	-
55	-	-	11.12	12.53	14.08	15.71	17.33	-	-
60	-	-	-	12.64	14.28	16.01	17.74	-	-
lass flow in kg/		Т	1		T		т г		
20	221	291	375	474	591	728	-	-	-
30	200	268	349	446	559	693	848	-	-
35	189	256	336	430	543	674	827	-	-
40	178	243	322	415	525	655	806	-	-
45	166	230	307	399	507	635	784	-	-
50	-	217	292	382	488	614	761	-	-
55	-	-	276	364	469	592	737	-	-
60	-	-	-	346	449	570	712	-	-
oefficient of pe	erformance (C.C).P.)			•				
20	1.61	1.92	2.29	2.73	3.24	3.84	-	-	-
30	1.27	1.52	1.81	2.14	2.52	2.95	3.44	-	-
35	1.12	1.35	1.62	1.91	2.23	2.60	3.02	-	-
40	0.98	1.20	1.43	1.69	1.98	2.30	2.66	-	-
45	0.85	1.05	1.27	1.49	1.75	2.02	2.33	-	-
50	-	0.91	1.11	1.31	1.53	1.78	2.05	-	-
55	-	-	0.95	1.14	1.33	1.55	1.79	-	-
	-	-	-	0.97	1.15	1.34	1.55	-	-
60		•							
60	nance at to = -10	0 °C, tc = 45 °C				Pressure switch	settings		
		16 408]		Maximum HP swi	•	27.7	bar(g)
ominal perforn		0 402	W			Minimum LP switch setting 0.2		bar(g)	
ominal perforn ooling capacity		9 403				LP pump down se	etting	0.9	bar(g)
lominal perforn Cooling capacity Yower input Current consump		13.62	A . "						
cominal perform cooling capacity cower input current consump lass flow		13.62 507	A kg/h			0 aum direction in the			
ominal perforn ooling capacity ower input urrent consump lass flow		13.62				Sound power dat		0	dD(A)
ominal perform ooling capacity ower input urrent consump lass flow .O.P.		13.62 507 1.75				Sound power dat Sound power leve With accoustic ho	9	0	dB(A) dB(A)

Inverter reciprocating compressors VTZ121-G

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R407C

Performance data at 30 Hz, EN 12900 rating conditions

Cond. temp. in		Evaporating temperature in °C (to)										
°C (tc)	-17.5	-15	-10	-5	0	5	10	15				
Cooling capacit	y in W											
20	4 523	5 234	6 890	8 887	11 258	-	-	-	-			
30	3 735	4 367	5 835	7 603	9 706	12 178	15 055	-	-			
40	2 993	3 546	4 826	6 366	8 201	10 364	12 892	15 817	-			
45	-	3 155	4 342	5 768	7 468	9 478	11 831	14 562	-			
50	-	-	3 872	5 185	6 751	8 606	10 785	13 321	-			
55	-	-	3 419	4 617	6 050	7 751	9 755	12 098	-			
60	-	-	-	4 067	5 366	6 913	8 743	10 891	-			

Power input in W

65

20	1 584	1 657	1 770	1 836	1 853	-	-	-	-
30	1 796	1 908	2 101	2 249	2 349	2 397	2 391	-	-
40	1 961	2 114	2 388	2 618	2 802	2 935	3 016	3 040	-
45	-	2 200	2 515	2 787	3 013	3 189	3 313	3 382	-
50	-	-	2 631	2 945	3 213	3 433	3 601	3 714	-
55	-	-	2 736	3 092	3 404	3 667	3 879	4 037	-
60	-	-	-	3 230	3 584	3 891	4 148	4 351	-
65	-	-	-	-	3 755	4 106	4 407	4 656	-

4 700

6 094

7 750

9 704

Current consumption in A

20	2.39	2.49	2.70	2.89	3.07	-	-	-	-
30	2.83	2.95	3.18	3.39	3.57	3.73	3.87	-	-
40	3.13	3.30	3.61	3.89	4.12	4.33	4.49	4.61	-
45	-	3.42	3.79	4.12	4.41	4.65	4.84	4.99	-
50	-	-	3.95	4.34	4.68	4.98	5.22	5.41	-
55	-	-	4.07	4.54	4.96	5.32	5.62	5.86	-
60	-	-	-	4.72	5.22	5.66	6.03	6.34	-
65	-	-	-	-	5.46	5.99	6.45	6.84	-

Mass flow in kg/h

20	87	100	129	164	205	-	-	-	-
30	78	90	119	153	192	237	289	-	-
40	69	81	108	140	178	221	271	328	-
45	-	76	103	134	170	213	262	317	-
50	-	-	97	127	163	204	252	306	-
55	-	-	91	121	155	196	242	295	-
60	-	-	-	114	148	187	232	283	-
65	-	-	-	-	140	178	221	271	-

Coefficient of performance (C.O.P.)

20	2.86	3.16	3.89	4.84	6.08	-	-	-	-
30	2.08	2.29	2.78	3.38	4.13	5.08	6.30	-	-
40	1.53	1.68	2.02	2.43	2.93	3.53	4.27	5.20	-
45	-	1.43	1.73	2.07	2.48	2.97	3.57	4.31	-
50	-	-	1.47	1.76	2.10	2.51	2.99	3.59	-
55	-	-	1.25	1.49	1.78	2.11	2.51	3.00	-
60	-	-	-	1.26	1.50	1.78	2.11	2.50	-
65	-	-	-	-	1.25	1.48	1.76	2.08	-

Nominal performance at to = 5 °C, tc = 50 °C									
Cooling capacity	8 606	W							
Power input	3 433	W							
Current consumption	4.98	Α							
Mass flow	204	kg/h							

2.51

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(q)
i i	_	(0)
	-	
Sound power data Sound power level	0	dB(A)

Pressure switch settings Maximum HP switch setting

to: Evaporating temperature at dew point

C.O.P.

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

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Performance data at 30 Hz, ARI rating conditions

Cond. temp. in		Evaporating temperature in °C (to)							
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	

Cooling capacity in W

20	4 810	5 564	7 317	9 429	11 935	-	-	-	-
30	4 004	4 679	6 244	8 128	10 365	12 992	16 045	-	-
40	3 241	3 838	5 216	6 871	8 840	11 159	13 864	16 992	-
45	-	3 437	4 722	6 263	8 098	10 263	12 794	15 728	-
50	-	-	4 242	5 670	7 371	9 382	11 740	14 481	-
55	-	-	-	5 093	6 661	8 518	10 703	13 252	-
60	-	-	-	4 533	5 968	7 673	9 686	12 044	-
65	-	-	-	-	5 297	6 850	8 692	10 860	-

Power input in W

20	1 584	1 657	1 770	1 836	1 853	-	-	-	-
30	1 796	1 908	2 101	2 249	2 349	2 397	2 391	-	-
40	1 961	2 114	2 388	2 618	2 802	2 935	3 016	3 040	-
45	-	2 200	2 515	2 787	3 013	3 189	3 313	3 382	-
50	-	-	2 631	2 945	3 213	3 433	3 601	3 714	-
55	-	-	-	3 092	3 404	3 667	3 879	4 037	-
60	-	-	-	3 230	3 584	3 891	4 148	4 351	-
65	-	-	-	-	3 755	4 106	4 407	4 656	-

Current consumption in A

20	2.39	2.49	2.70	2.89	3.07	-	-	-	-
30	2.83	2.95	3.18	3.39	3.57	3.73	3.87	-	-
40	3.13	3.30	3.61	3.89	4.12	4.33	4.49	4.61	-
45	-	3.42	3.79	4.12	4.41	4.65	4.84	4.99	-
50	-	-	3.95	4.34	4.68	4.98	5.22	5.41	-
55	-	-	-	4.54	4.96	5.32	5.62	5.86	-
60	-	-	-	4.72	5.22	5.66	6.03	6.34	-
65	-	-	-	-	5.46	5.99	6.45	6.84	-

Mass flow in kg/h

20	86	99	129	163	204	-	-	-	-
30	77	90	118	152	191	236	288	-	-
40	69	81	108	140	177	220	269	326	-
45	-	76	102	133	170	212	260	315	-
50	-	-	97	127	162	203	250	304	-
55	-	-	-	120	155	194	240	293	-
60	-	-	-	114	147	186	230	281	-
65	-	-	-	-	139	177	220	270	-

Coefficient of performance (C.O.P.)

20	3.04	3.36	4.13	5.14	6.44	-	-	-	-
30	2.23	2.45	2.97	3.61	4.41	5.42	6.71	-	-
40	1.65	1.82	2.18	2.62	3.15	3.80	4.60	5.59	-
45	-	1.56	1.88	2.25	2.69	3.22	3.86	4.65	-
50	-	-	1.61	1.93	2.29	2.73	3.26	3.90	-
55	-	-	-	1.65	1.96	2.32	2.76	3.28	-
60	-	-	-	1.40	1.67	1.97	2.34	2.77	-
65	-	-	-	-	1.41	1.67	1.97	2.33	-

Nominal performance at to = 7.2 °C,	tc = 54.4 °C	
Cooling capacity	9 549	W
Power input	3 737	W
Current consumption	5.41	А
Mass flow	215	kg/h
C.O.P.	2.56	

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 data Sound power level	0	dB(A)

Pressure switch settings

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Performance data at 35 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-17.5	-15	-10	-5	0	5	10	15		
Cooling capacit	y in W	r		1	r		1		-	
20	5 438	6 264	8 188	10 510	13 274	-	-	-	-	
30	4 503	5 238	6 947	9 010	11 473	14 378	17 769	-	-	
40	3 633	4 276	5 769	7 574	9 734	12 294	15 296	18 783	-	
45	-	3 821	5 206	6 881	8 890	11 277	14 084	17 356	-	
50	-	-	4 662	6 207	8 065	10 278	12 891	15 946	-	

Power input in W

55 60 65

20	1 964	2 048	2 188	2 290	2 349	-	-	-	-
30	2 175	2 294	2 506	2 679	2 809	2 894	2 931	-	-
40	2 357	2 519	2 816	3 073	3 287	3 456	3 575	3 642	-
45	-	2 613	2 957	3 261	3 522	3 737	3 903	4 016	-
50	-	-	3 082	3 437	3 748	4 013	4 229	4 391	-
55	-	-	3 188	3 597	3 962	4 280	4 548	4 764	-
60	-	-	-	3 736	4 158	4 532	4 857	5 129	-
65	-	-	-	-	4 332	4 767	5 151	5 482	-

Current consumption in A

20	3.57	3.73	4.02	4.26	4.46	-	-	-	-
30	3.90	4.09	4.43	4.72	4.95	5.12	5.24	-	-
40	4.21	4.45	4.90	5.28	5.58	5.83	6.00	6.11	-
45	-	4.61	5.12	5.56	5.93	6.22	6.44	6.58	-
50	-	-	5.32	5.83	6.27	6.62	6.89	7.09	-
55	-	-	5.48	6.08	6.59	7.02	7.36	7.62	-
60	-	-	-	6.28	6.89	7.40	7.82	8.15	-
65	-	-	-	-	7.14	7.75	8.27	8.68	-

Mass flow in kg/h

20	104	119	154	194	242	-	-	-	-
30	94	108	142	181	227	280	342	-	-
40	84	98	129	167	211	262	322	390	-
45	-	92	123	160	203	253	311	378	-
50	-	-	117	153	195	244	301	367	-
55	-	-	110	145	187	235	290	355	-
60	-	-	-	138	178	225	280	343	-
65	-	-	-	-	170	216	269	330	-

Coefficient of performance (C.O.P.)

20	2.77	3.06	3.74	4.59	5.65	-	-	-	-
30	2.07	2.28	2.77	3.36	4.08	4.97	6.06	-	-
40	1.54	1.70	2.05	2.46	2.96	3.56	4.28	5.16	-
45	-	1.46	1.76	2.11	2.52	3.02	3.61	4.32	-
50	-	-	1.51	1.81	2.15	2.56	3.05	3.63	-
55	-	-	1.30	1.54	1.83	2.17	2.58	3.06	-
60	-	-	-	1.32	1.56	1.84	2.17	2.57	-
65	-	-	-	-	1.32	1.55	1.83	2.16	-

Nominal performance at to = 5 °C, tc = 50 °C						
Cooling capacity	10 278	W				
Power input	4 013	W				
Current consumption	6.62	А				

i owoi input	1010	••	
Current consumption	6.62	A	
Mass flow	244	kg/h	
C.O.P.	2.56		

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

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

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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	0	dB(A)

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6 947	9 010	11 473	14 378	17 769	-	-	
5 769	7 574	9 734	12 294	15 296	18 783	-	
5 206	6 881	8 890	11 277	14 084	17 356	-	
4 662	6 207	8 065	10 278	12 891	15 946	-	
4 137	5 553	7 259	9 299	11 716	14 555	-	
-	4 918	6 473	8 339	10 562	13 183	-	
-	-	5 708	7 401	9 428	11 833	-	
2 188	2 290	2 349	-	-	-	-	
2 506	2 679	2 809	2 894	2 931	-	-	
2 816	3 073	3 287	3 456	3 575	3 642	-	
2 957	3 261	3 522	3 737	3 903	4 016	-	
3 082	3 437	3 748	4 013	4 229	4 391	-	
3 188	3 597	3 962	4 280	4 548	4 764	-	_
-	3 736	4 158	4 532	4 857	5 129	-	
-	-	4 332	4 767	5 151	5 482	-	
r						-	
4.02	4.26	4.46	-	-	-	-	

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	1.3	bar(g)
<u> </u>		
0		

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

Inverter reciprocating compressors VTZ121-G

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Performance data at 35 Hz, ARI rating conditions

Cond. temp. in	p. in Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	

Cooling capacity in W

20	5 783	6 658	8 695	11 151	14 072	-	-	-	-
30	4 827	5 611	7 434	9 632	12 252	15 338	18 938	-	-
40	3 934	4 627	6 235	8 175	10 493	13 236	16 449	20 178	-
45	-	4 162	5 661	7 472	9 640	12 211	15 231	18 746	-
50	-	-	5 107	6 788	8 805	11 205	14 032	17 334	-
55	-	-	-	6 124	7 991	10 219	12 855	15 944	-
60	-	-	-	5 482	7 199	9 256	11 701	14 579	-
65	-	-	-	-	6 432	8 319	10 574	13 243	-

Power input in W

20	1 964	2 048	2 188	2 290	2 349	-	-	-	-
30	2 175	2 294	2 506	2 679	2 809	2 894	2 931	-	-
40	2 357	2 519	2 816	3 073	3 287	3 456	3 575	3 642	-
45	-	2 613	2 957	3 261	3 522	3 737	3 903	4 016	-
50	-	-	3 082	3 437	3 748	4 013	4 229	4 391	-
55	-	-	-	3 597	3 962	4 280	4 548	4 764	-
60	-	-	-	3 736	4 158	4 532	4 857	5 129	-
65	-	-	-	-	4 332	4 767	5 151	5 482	-

Current consumption in A

20	3.57	3.73	4.02	4.26	4.46	-	-	-	-
30	3.90	4.09	4.43	4.72	4.95	5.12	5.24	-	-
40	4.21	4.45	4.90	5.28	5.58	5.83	6.00	6.11	-
45	-	4.61	5.12	5.56	5.93	6.22	6.44	6.58	-
50	-	-	5.32	5.83	6.27	6.62	6.89	7.09	-
55	-	-	-	6.08	6.59	7.02	7.36	7.62	-
60	-	-	-	6.28	6.89	7.40	7.82	8.15	-
65	-	-	-	-	7.14	7.75	8.27	8.68	-

Mass flow in kg/h

20	104	119	153	193	240	-	-	-	-
30	93	108	141	180	225	278	340	-	-
40	83	97	129	166	210	261	320	387	-
45	-	92	122	159	202	252	310	376	-
50	-	-	116	152	194	243	299	364	-
55	-	-	-	145	185	233	289	352	-
60	-	-	-	137	177	224	278	341	-
65	-	-	-	-	169	214	267	328	-

Coefficient of performance (C.O.P.)

20	2.94	3.25	3.97	4.87	5.99	-	-	-	-
30	2.22	2.45	2.97	3.60	4.36	5.30	6.46	-	-
40	1.67	1.84	2.21	2.66	3.19	3.83	4.60	5.54	-
45	-	1.59	1.91	2.29	2.74	3.27	3.90	4.67	-
50	-	-	1.66	1.98	2.35	2.79	3.32	3.95	-
55	-	-	-	1.70	2.02	2.39	2.83	3.35	-
60	-	-	-	1.47	1.73	2.04	2.41	2.84	-
65	-	-	-	-	1.48	1.75	2.05	2.42	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C							
Cooling capacity	11 453	W					
Power input	4 370	W					
Current consumption	7.13	Α					
Mass flow	258	kg/h					
C.O.P.	2.62						

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	٥	dB(A)
	0	ab(/ ()
With accoustic hood	0	dB(A)

Pressure switch settings

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

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Performance data at 40 Hz, EN 12900 rating conditions

Cond. temp. in				Evapora	ting temperature i	n °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling capacit	y in W								
Cooling capacit	y in W 6 333	7 273	9 460	12 102	15 251	-	-	-	-

30	5 258	6 094	8 04 1	10 396	13212	16 54 1	20 433	-	-
40	4 262	4 994	6 697	8 764	11 245	14 192	17 656	21 691	-
45	-	4 476	6 057	7 978	10 290	13 045	16 295	20 092	-
50	-	-	5 438	7 213	9 356	11 919	14 953	18 511	-
55	-	-	4 843	6 471	8 444	10 814	13 632	16 951	-
60	-	-	-	5 752	7 554	9 730	12 332	15 411	-
65	-	-	-	-	6 688	8 670	11 055	13 893	-

Power input in W

20	2 337	2 434	2 606	2 746	2 852	-	-	-	-
30	2 550	2 680	2 916	3 119	3 285	3 412	3 497	-	-
40	2 749	2 923	3 247	3 536	3 787	3 996	4 161	4 278	-
45	-	3 024	3 401	3 742	4 043	4 302	4 515	4 680	-
50	-	-	3 535	3 934	4 292	4 606	4 874	5 093	-
55	-	-	3 643	4 105	4 525	4 901	5 230	5 508	-
60	-	-	-	4 247	4 735	5 179	5 574	5 917	-
65	-	-	-	-	4 914	5 431	5 898	6 312	-

Current consumption in A

20	4.63	4.83	5.19	5.48	5.70	-	-	-	-
30	4.87	5.12	5.56	5.92	6.20	6.41	6.54	-	-
40	5.19	5.50	6.06	6.53	6.92	7.22	7.43	7.56	-
45	-	5.68	6.32	6.86	7.31	7.67	7.94	8.12	-
50	-	-	6.55	7.18	7.70	8.14	8.47	8.71	-
55	-	-	6.74	7.46	8.07	8.59	9.00	9.30	-
60	-	-	-	7.69	8.40	9.01	9.50	9.89	-
65	-	-	-	-	8.67	9.38	9.97	10.45	-

Mass flow in kg/h

20	121	138	177	224	278	-	-	-	-
30	110	126	164	209	261	322	393	-	-
40	98	114	150	193	244	303	371	450	-
45	-	108	143	185	235	293	360	438	-
50	-	-	136	177	226	283	349	426	-
55	-	-	129	169	217	273	338	413	-
60	-	-	-	161	208	263	327	400	-
65	-	-	-	-	199	253	315	388	-

Coefficient of performance (C.O.P.)

20	2.71	2.99	3.63	4.41	5.35	-	-	-	-
30	2.06	2.27	2.76	3.33	4.02	4.85	5.84	-	-
40	1.55	1.71	2.06	2.48	2.97	3.55	4.24	5.07	-
45	-	1.48	1.78	2.13	2.55	3.03	3.61	4.29	-
50	-	-	1.54	1.83	2.18	2.59	3.07	3.63	-
55	-	-	1.33	1.58	1.87	2.21	2.61	3.08	-
60	-	-	-	1.35	1.60	1.88	2.21	2.60	-
65	-	-	-	-	1.36	1.60	1.87	2.20	-

Nominal performance at to = 5 °C, tc = 50 °C Cooling capacity 11 919 W Power input 4 606 W Current concurrentian 9 14 A

Current consumption	8.14	A
Mass flow	283	kg/h
C.O.P.	2.59	

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

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

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Maximum HP switch setting29.4Minimum LP switch setting0.2LP pump down setting1.3

Pressure switch settings

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

bar(g)

bar(g)

bar(g)

Inverter reciprocating compressors VTZ121-G

Danfoss

R407C

Performance data at 40 Hz, ARI rating conditions

Cond. temp. in		Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15		

Cooling capacity in W

20	6 735	7 730	10 046	12 840	16 167	-	-	-	-
30	5 636	6 528	8 604	11 113	14 109	17 645	21 777	-	-
40	4 616	5 405	7 238	9 459	12 121	15 280	18 988	23 301	-
45	-	4 875	6 587	8 663	11 157	14 126	17 622	21 701	-
50	-	-	5 957	7 888	10 215	12 993	16 278	20 123	-
55	-	-	-	7 137	9 296	11 884	14 957	18 569	-
60	-	-	-	6 411	8 402	10 801	13 662	17 042	-
65	-	-	-	-	7 537	9 746	12 399	15 549	-

Power input in W

20	2 337	2 434	2 606	2 746	2 852	-	-	-	-
30	2 550	2 680	2 916	3 119	3 285	3 412	3 497	-	-
40	2 749	2 923	3 247	3 536	3 787	3 996	4 161	4 278	-
45	-	3 024	3 401	3 742	4 043	4 302	4 515	4 680	-
50	-	-	3 535	3 934	4 292	4 606	4 874	5 093	-
55	-	-	-	4 105	4 525	4 901	5 230	5 508	-
60	-	-	-	4 247	4 735	5 179	5 574	5 917	-
65	-	-	-	-	4 914	5 431	5 898	6 312	-

Current consumption in A

20	4.63	4.83	5.19	5.48	5.70	-	-	-	-
30	4.87	5.12	5.56	5.92	6.20	6.41	6.54	-	-
40	5.19	5.50	6.06	6.53	6.92	7.22	7.43	7.56	-
45	-	5.68	6.32	6.86	7.31	7.67	7.94	8.12	-
50	-	-	6.55	7.18	7.70	8.14	8.47	8.71	-
55	-	-	-	7.46	8.07	8.59	9.00	9.30	-
60	-	-	-	7.69	8.40	9.01	9.50	9.89	-
65	-	-	-	-	8.67	9.38	9.97	10.45	-

Mass flow in kg/h

20	121	138	177	222	276	-	-	-	-
30	109	126	163	207	260	320	390	-	-
40	98	113	149	192	242	301	369	447	-
45	-	107	142	184	234	291	358	435	-
50	-	-	136	176	225	281	347	423	-
55	-	-	-	168	216	271	336	411	-
60	-	-	-	161	207	261	325	398	-
65	-	-	-	-	198	251	313	385	-

Coefficient of performance (C.O.P.)

20	2.88	3.18	3.86	4.68	5.67	-	-	-	-
30	2.21	2.44	2.95	3.56	4.29	5.17	6.23	-	-
40	1.68	1.85	2.23	2.67	3.20	3.82	4.56	5.45	-
45	-	1.61	1.94	2.32	2.76	3.28	3.90	4.64	-
50	-	-	1.69	2.01	2.38	2.82	3.34	3.95	-
55	-	-	-	1.74	2.05	2.42	2.86	3.37	-
60	-	-	-	1.51	1.77	2.09	2.45	2.88	-
65	-	-	-	-	1.53	1.79	2.10	2.46	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C Cooling capacity 13 316 W Power input 5 014 W

Current consumption	8.72	А
Mass flow	300	kg/h
C.O.P.	2.66	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

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

0	
0	dB(A)
0	dB(A)
	0

Inverter reciprocating compressors VTZ121-G

Performance data at 45 Hz, EN 12900 rating conditions

Cond. temp. in		Evaporating temperature in °C (to)											
°C (tc)	-17.5	-15	-10	-5	0	5	10	15					
Cooling capacit	y in W												
20	7 208	8 259	10 706	13 663	17 189	-	-	-	-				
30	5 998	6 935	9 117	11 760	14 924	18 666	23 048	-	-				
40	4 881	5 700	7 612	9 936	12 732	16 058	19 974	24 539	-				
45	-	5 120	6 895	9 057	11 667	14 783	18 464	22 769	-				
50	-	-	6 202	8 202	10 624	13 528	16 973	21 018	-				
55	-	-	5 536	7 371	9 605	12 295	15 503	19 286	-				
60	-	-	-	6 566	8 610	11 086	14 055	17 575	-				

Power input in W

65

20	2 704	2 816	3 022	3 205	3 360	-	-	-	-
30	2 922	3 064	3 330	3 568	3 776	3 951	4 090	-	-
40	3 136	3 325	3 682	4 008	4 300	4 556	4 773	4 948	-
45	-	3 433	3 847	4 229	4 575	4 884	5 151	5 375	-
50	-	-	3 990	4 435	4 844	5 212	5 539	5 819	-
55	-	-	4 100	4 617	5 095	5 532	5 924	6 270	-
60	-	-	-	4 761	5 317	5 830	6 297	6 716	-
65	-	-	-	-	5 500	6 097	6 647	7 146	-

7 641

9 902

12 630

15 886

Current consumption in A

20	5.55	5.79	6.20	6.54	6.80	-	-	-	-
30	5.75	6.04	6.55	6.99	7.34	7.60	7.78	-	-
40	6.08	6.44	7.09	7.66	8.13	8.51	8.79	8.97	-
45	-	6.64	7.38	8.02	8.57	9.01	9.36	9.60	-
50	-	-	7.64	8.37	9.00	9.52	9.94	10.26	-
55	-	-	7.86	8.68	9.40	10.02	10.52	10.91	-
60	-	-	-	8.94	9.76	10.47	11.06	11.54	-
65	-	-	-	-	10.04	10.86	11.56	12.13	-

Mass flow in kg/h

20	138	157	201	253	313	-	-	-	-
30	125	144	186	236	295	363	443	-	-
40	112	130	171	219	276	343	420	509	-
45	-	123	163	210	266	332	408	496	-
50	-	-	155	202	257	321	396	483	-
55	-	-	148	193	247	310	384	470	-
60	-	-	-	184	237	299	372	457	-
65	-	-	-	-	227	288	360	443	-

Coefficient of performance (C.O.P.)

20	2.67	2.93	3.54	4.26	5.12	-	-	-	-
30	2.05	2.26	2.74	3.30	3.95	4.72	5.63	-	-
40	1.56	1.71	2.07	2.48	2.96	3.52	4.18	4.96	-
45	-	1.49	1.79	2.14	2.55	3.03	3.58	4.24	-
50	-	-	1.55	1.85	2.19	2.60	3.06	3.61	-
55	-	-	1.35	1.60	1.89	2.22	2.62	3.08	-
60	-	-	-	1.38	1.62	1.90	2.23	2.62	-
65	-	-	-	-	1.39	1.62	1.90	2.22	-

Nominal performance at to = 5 °C, tc = 50 °C Cooling capacity 13 528 W Power input 5 212 W

Current consumption	9.52	А
Mass flow	321	kg/h
C.O.P.	2.60	

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

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

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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)

0	dB(A)
0	dB(A)
	0 0

Danfoss

Inverter reciprocating compressors VTZ121-G

Danfoss

R407C

Performance data at 45 Hz, ARI rating conditions

Cond. temp. in	. temp. in Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	

Cooling capacity in W

econing oupdoi	.,								
20	7 666	8 779	11 369	14 496	18 222	-	-	-	-
30	6 429	7 429	9 756	12 571	15 936	19 913	24 564	-	-
40	5 286	6 169	8 227	10 725	13 725	17 289	21 481	26 360	-
45	-	5 577	7 498	9 835	12 650	16 007	19 968	24 594	-
50	-	-	6 794	8 969	11 599	14 748	18 476	22 848	-
55	-	-	-	8 130	10 574	13 513	17 009	21 127	-
60	-	-	-	7 319	9 576	12 306	15 571	19 435	-
65	-	-	-	-	8 611	11 131	14 166	17 778	-

Power input in W

20	2 704	2 816	3 022	3 205	3 360	-	-	-	-
30	2 922	3 064	3 330	3 568	3 776	3 951	4 090	-	-
40	3 136	3 325	3 682	4 008	4 300	4 556	4 773	4 948	-
45	-	3 433	3 847	4 229	4 575	4 884	5 151	5 375	-
50	-	-	3 990	4 435	4 844	5 212	5 539	5 819	-
55	-	-	-	4 617	5 095	5 532	5 924	6 270	-
60	-	-	-	4 761	5 317	5 830	6 297	6 716	-
65	-	-	-	-	5 500	6 097	6 647	7 146	-

Current consumption in A

20	5.55	5.79	6.20	6.54	6.80	-	-	-	-
30	5.75	6.04	6.55	6.99	7.34	7.60	7.78	-	-
40	6.08	6.44	7.09	7.66	8.13	8.51	8.79	8.97	-
45	-	6.64	7.38	8.02	8.57	9.01	9.36	9.60	-
50	-	-	7.64	8.37	9.00	9.52	9.94	10.26	-
55	-	-	-	8.68	9.40	10.02	10.52	10.91	-
60	-	-	-	8.94	9.76	10.47	11.06	11.54	-
65	-	-	-	-	10.04	10.86	11.56	12.13	-

Mass flow in kg/h

20	137	156	200	251	311	-	-	-	-
30	124	143	185	235	293	361	440	-	-
40	112	129	170	218	274	341	418	506	-
45	-	123	162	209	265	330	406	493	-
50	-	-	155	201	255	319	394	480	-
55	-	-	-	192	245	309	382	467	-
60	-	-	-	183	236	298	370	454	-
65	-	-	-	-	226	287	358	440	-

Coefficient of performance (C.O.P.)

20	2.83	3.12	3.76	4.52	5.42	-	-	-	-
30	2.20	2.42	2.93	3.52	4.22	5.04	6.01	-	-
40	1.69	1.86	2.23	2.68	3.19	3.79	4.50	5.33	-
45	-	1.62	1.95	2.33	2.77	3.28	3.88	4.58	-
50	-	-	1.70	2.02	2.39	2.83	3.34	3.93	-
55	-	-	-	1.76	2.08	2.44	2.87	3.37	-
60	-	-	-	1.54	1.80	2.11	2.47	2.89	-
65	-	-	-	-	1.57	1.83	2.13	2.49	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C 15 138 W Cooling capacity Power input 5 669 W

Current consumption	10.19	A
Mass flow	341	kg/h
C.O.P.	2.67	

to: Eva	aporating	temperature	at dew	point
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tc: Condensing temperature at dew point

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

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

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

bar(g)

bar(g)

Inverter reciprocating compressors VTZ121-G

Danfoss

R407C

Performance data at 50 Hz, EN 12900 rating conditions

Cond. temp. in				Evapora	iting temperature in	n °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling capacity	in W								
eeenig eapaeni	, III VV								
20	8 063	9 224	11 927	15 193	19 087	-	-	-	-
		9 224 7 761	11 927 10 176	15 193 13 103	19 087 16 607	- 20 755	- 25 613	-	-

40	5 489	6 396	8 513	11 092	14 196	17 893	22 249	27 328	-
45	-	5 754	7 720	10 120	13 021	16 489	20 590	25 389	-
50	-	-	6 953	9 174	11 869	15 106	18 949	23 466	-
55	-	-	6 216	8 254	10 742	13 745	17 329	21 560	-
60	-	-	-	7 363	9 640	12 407	15 730	19 674	-
65	-	-	-	-	8 567	11 096	14 155	17 809	-

Power input in W

20	3 065	3 193	3 439	3 667	3 875	-	-	-	-
30	3 290	3 447	3 748	4 028	4 283	4 511	4 710	-	-
40	3 520	3 725	4 120	4 488	4 828	5 137	5 413	5 652	-
45	-	3 840	4 295	4 722	5 119	5 483	5 810	6 100	-
50	-	-	4 446	4 941	5 404	5 831	6 221	6 570	-
55	-	-	4 559	5 132	5 670	6 171	6 632	7 050	-
60	-	-	-	5 281	5 904	6 487	7 029	7 525	-
65	-	-	-	-	6 091	6 767	7 399	7 984	-

Current consumption in A

20	6.35	6.60	7.05	7.44	7.76	-	-	-	-
30	6.54	6.85	7.43	7.93	8.36	8.70	8.95	-	-
40	6.88	7.27	8.00	8.65	9.22	9.69	10.07	10.34	-
45	-	7.49	8.30	9.04	9.68	10.24	10.69	11.03	-
50	-	-	8.58	9.41	10.15	10.79	11.32	11.74	-
55	-	-	8.82	9.75	10.58	11.31	11.93	12.44	-
60	-	-	-	10.02	10.96	11.79	12.51	13.12	-
65	-	-	-	-	11.26	12.20	13.03	13.73	-

Mass flow in kg/h

20	154	175	224	281	348	-	-	-	-
30	140	161	207	263	328	404	492	-	-
40	127	146	191	244	308	382	468	567	-
45	-	139	182	235	297	370	455	553	-
50	-	-	174	226	287	359	443	540	-
55	-	-	166	216	276	347	430	525	-
60	-	-	-	207	265	335	417	511	-
65	-	-	-	-	255	323	403	497	-

Coefficient of performance (C.O.P.)

20	2.63	2.89	3.47	4.14	4.93	-	-	-	-
30	2.04	2.25	2.71	3.25	3.88	4.60	5.44	-	-
40	1.56	1.72	2.07	2.47	2.94	3.48	4.11	4.84	-
45	-	1.50	1.80	2.14	2.54	3.01	3.54	4.16	-
50	-	-	1.56	1.86	2.20	2.59	3.05	3.57	-
55	-	-	1.36	1.61	1.89	2.23	2.61	3.06	-
60	-	-	-	1.39	1.63	1.91	2.24	2.61	-
65	-	-	-	-	1.41	1.64	1.91	2.23	-

Nominal performance at to = 5 °C, tc = 50 °C								
Cooling capacity	15 106	W						
Power input	5 831	W						
Current consumption	10.79	A						
Maga flow	250	ka/h						

i olioi iliput	0.001	••	
Current consumption	10.79	A	
Mass flow	359	kg/h	
C.O.P.	2.59		
			Ì

tc: Condensing temperature at dew point

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

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Pressure switch settings29.4bar(g)Maximum HP switch setting0.2bar(g)Minimum LP switch setting0.2bar(g)LP pump down setting1.3bar(g)

0	dB(A)
0	dB(A)
	0 0

Inverter reciprocating compressors VTZ121-G

Danfoss

R407C

Performance data at 50 Hz, ARI rating conditions

°C (tc) -17.5 -15 -10 -5 0 5 10 15	Cond. temp. in	in Evaporating temperature in °C (to)								
	°C (tc)	-17.5	-15	-10	-5	0	5	10	15	

Cooling capacity in W

econing oupdoi	.,								
20	8 575	9 805	12 666	16 120	20 235	-	-	-	-
30	7 208	8 314	10 889	14 006	17 734	22 142	27 298	-	-
40	5 944	6 922	9 201	11 972	15 303	19 265	23 927	29 357	-
45	-	6 267	8 395	10 989	14 119	17 855	22 267	27 423	-
50	-	-	7 617	10 032	12 959	16 468	20 628	25 509	-
55	-	-	-	9 104	11 826	15 105	19 013	23 619	-
60	-	-	-	8 208	10 723	13 772	17 426	21 757	-
65	-	-	-	-	9 655	12 473	15 875	19 931	-

Power input in W

20	3 065	3 193	3 439	3 667	3 875	-	-	-	-
30	3 290	3 447	3 748	4 028	4 283	4 511	4 710	-	-
40	3 520	3 725	4 120	4 488	4 828	5 137	5 413	5 652	-
45	-	3 840	4 295	4 722	5 119	5 483	5 810	6 100	-
50	-	-	4 446	4 941	5 404	5 831	6 221	6 570	-
55	-	-	-	5 132	5 670	6 171	6 632	7 050	-
60	-	-	-	5 281	5 904	6 487	7 029	7 525	-
65	-	-	-	-	6 091	6 767	7 399	7 984	-

Current consumption in A

20	6.35	6.60	7.05	7.44	7.76	-	-	-	-
30	6.54	6.85	7.43	7.93	8.36	8.70	8.95	-	-
40	6.88	7.27	8.00	8.65	9.22	9.69	10.07	10.34	-
45	-	7.49	8.30	9.04	9.68	10.24	10.69	11.03	-
50	-	-	8.58	9.41	10.15	10.79	11.32	11.74	-
55	-	-	-	9.75	10.58	11.31	11.93	12.44	-
60	-	-	-	10.02	10.96	11.79	12.51	13.12	-
65	-	-	-	-	11.26	12.20	13.03	13.73	-

Mass flow in kg/h

20	153	174	223	279	346	-	-	-	-
30	140	160	206	261	326	402	489	-	-
40	126	145	190	243	306	380	465	564	-
45	-	138	181	234	295	368	453	550	-
50	-	-	173	224	285	357	440	536	-
55	-	-	-	215	275	345	427	522	-
60	-	-	-	206	264	333	414	508	-
65	-	-	-	-	253	321	401	494	-

Coefficient of performance (C.O.P.)

20	2.80	3.07	3.68	4.40	5.22	-	-	-	-
30	2.19	2.41	2.91	3.48	4.14	4.91	5.80	-	-
40	1.69	1.86	2.23	2.67	3.17	3.75	4.42	5.19	-
45	-	1.63	1.95	2.33	2.76	3.26	3.83	4.50	-
50	-	-	1.71	2.03	2.40	2.82	3.32	3.88	-
55	-	-	-	1.77	2.09	2.45	2.87	3.35	-
60	-	-	-	1.55	1.82	2.12	2.48	2.89	-
65	-	-	-	-	1.58	1.84	2.15	2.50	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C Cooling capacity 16 918 W Power input 6 335 W Current consumption 11.53 A

Current consumption	11.53	A
Mass flow	381	kg/h
C.O.P.	2.67	

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

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

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Pressure switch settings Maximum HP switch setting 29.4 Minimum LP switch setting 0.2 LP nump down setting 1.3

Li pump down setting	1.5	bal(g)
Sound power data		
Sound power level	0	dB(A)
With accoustic hood	0	dB(A)

bar(g)

bar(g)

har(a)

Inverter reciprocating compressors VTZ121-G

Performance data at 55 Hz, EN 12900 rating conditions

Cond. temp. in				Evapora	ating temperature i	n °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling capacity	/ in W								
20	8 898	10 167	13 122	16 691	20 947	-	-	-	-
30	7 438	8 573	11 218	14 424	18 263	22 807	28 129	-	-
40	6 086	7 079	9 401	12 229	15 637	19 697	24 480	30 059	-
45		6 277	9 521	11 166	14.252	10 165	22.672	27.051	

40	6 086	7 079	9 401	12 229	15 637	19 697	24 480	30 059	-
45	-	6 377	8 531	11 166	14 353	18 165	22 673	27 951	-
50	-	-	7 691	10 129	13 091	16 652	20 883	25 855	-
55	-	-	6 883	9 120	11 855	15 161	19 110	23 774	-
60	-	-	-	8 142	10 645	13 693	17 357	21 709	-
65	-	-	-	-	9 466	12 252	15 628	19 664	-

Power input in W

20	3 419	3 566	3 854	4 132	4 395	-	-	-	-
30	3 654	3 830	4 171	4 497	4 805	5 092	5 356	-	-
40	3 899	4 124	4 561	4 977	5 370	5 738	6 079	6 389	-
45	-	4 245	4 745	5 223	5 674	6 099	6 493	6 854	-
50	-	-	4 904	5 452	5 973	6 464	6 922	7 345	-
55	-	-	5 021	5 651	6 251	6 819	7 352	7 847	-
60	-	-	-	5 804	6 494	7 149	7 767	8 345	-
65	-	-	-	-	6 687	7 440	8 153	8 825	-

Current consumption in A

20	7.01	7.26	7.75	8.19	8.57	-	-	-	-
30	7.23	7.55	8.17	8.74	9.26	9.70	10.04	-	-
40	7.59	8.00	8.78	9.51	10.18	10.77	11.27	11.66	-
45	-	8.22	9.09	9.91	10.67	11.35	11.93	12.40	-
50	-	-	9.39	10.30	11.15	11.92	12.59	13.16	-
55	-	-	9.64	10.66	11.60	12.47	13.24	13.90	-
60	-	-	-	10.95	12.00	12.97	13.84	14.61	-
65	-	-	-	-	12.33	13.41	14.39	15.26	-

Mass flow in kg/h

20	170	193	246	309	382	-	-	-	-
30	155	178	229	289	361	444	540	-	-
40	140	162	211	269	339	420	515	624	-
45	-	154	202	259	328	408	501	609	-
50	-	-	193	249	316	395	488	595	-
55	-	-	184	239	305	383	474	579	-
60	-	-	-	229	293	370	460	564	-
65	-	-	-	-	282	357	445	548	-

Coefficient of performance (C.O.P.)

20	2.60	2.85	3.40	4.04	4.77	-	-	-	-
30	2.04	2.24	2.69	3.21	3.80	4.48	5.25	-	-
40	1.56	1.72	2.06	2.46	2.91	3.43	4.03	4.70	-
45	-	1.50	1.80	2.14	2.53	2.98	3.49	4.08	-
50	-	-	1.57	1.86	2.19	2.58	3.02	3.52	-
55	-	-	1.37	1.61	1.90	2.22	2.60	3.03	-
60	-	-	-	1.40	1.64	1.92	2.23	2.60	-
65	-	-	-	-	1.42	1.65	1.92	2.23	-

Nominal performance at to = 5 °C, tc = 50 °C Cooling capacity 16 652 W Power input 6 464 W

Current consumption	11.92	A
Mass flow	395	kg/h
C.O.P.	2.58	

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

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

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Maximum HP switch setting29.4bar(g)Minimum LP switch setting0.2bar(g)LP pump down setting1.3bar(g)

Pressure switch settings

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



R407C

Inverter reciprocating compressors VTZ121-G

Danfoss

R407C

Performance data at 55 Hz, ARI rating conditions

Cond. temp. in	n Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	

Cooling capacity in W

econing oupdoi	.,								
20	9 462	10 807	13 935	17 710	22 206	-	-	-	-
30	7 972	9 184	12 004	15 418	19 502	24 330	29 979	-	-
40	6 591	7 661	10 160	13 199	16 856	21 207	26 326	32 290	-
45	-	6 945	9 277	12 124	15 563	19 670	24 520	30 190	-
50	-	-	8 425	11 076	14 293	18 153	22 732	28 106	-
55	-	-	-	10 059	13 051	16 661	20 967	26 043	-
60	-	-	-	9 075	11 841	15 199	19 229	24 007	-
65	-	-	-	-	10 667	13 773	17 527	22 008	-

Power input in W

20	3 419	3 566	3 854	4 132	4 395	-	-	-	-
30	3 654	3 830	4 171	4 497	4 805	5 092	5 356	-	-
40	3 899	4 124	4 561	4 977	5 370	5 738	6 079	6 389	-
45	-	4 245	4 745	5 223	5 674	6 099	6 493	6 854	-
50	-	-	4 904	5 452	5 973	6 464	6 922	7 345	-
55	-	-	-	5 651	6 251	6 819	7 352	7 847	-
60	-	-	-	5 804	6 494	7 149	7 767	8 345	-
65	-	-	-	-	6 687	7 440	8 153	8 825	-

Current consumption in A

20	7.01	7.26	7.75	8.19	8.57	-	-	-	-
30	7.23	7.55	8.17	8.74	9.26	9.70	10.04	-	-
40	7.59	8.00	8.78	9.51	10.18	10.77	11.27	11.66	-
45	-	8.22	9.09	9.91	10.67	11.35	11.93	12.40	-
50	-	-	9.39	10.30	11.15	11.92	12.59	13.16	-
55	-	-	-	10.66	11.60	12.47	13.24	13.90	-
60	-	-	-	10.95	12.00	12.97	13.84	14.61	-
65	-	-	-	-	12.33	13.41	14.39	15.26	-

Mass flow in kg/h

20	169	192	245	307	379	-	-	-	-
30	154	177	227	288	359	442	537	-	-
40	140	161	210	268	337	418	512	620	-
45	-	153	201	258	326	406	498	606	-
50	-	-	192	248	314	393	485	591	-
55	-	-	-	237	303	380	471	576	-
60	-	-	-	227	292	368	457	561	-
65	-	-	-	-	280	355	443	545	-

Coefficient of performance (C.O.P.)

20	2.77	3.03	3.62	4.29	5.05	-	-	-	-
30	2.18	2.40	2.88	3.43	4.06	4.78	5.60	-	-
40	1.69	1.86	2.23	2.65	3.14	3.70	4.33	5.05	-
45	-	1.64	1.95	2.32	2.74	3.23	3.78	4.40	-
50	-	-	1.72	2.03	2.39	2.81	3.28	3.83	-
55	-	-	-	1.78	2.09	2.44	2.85	3.32	-
60	-	-	-	1.56	1.82	2.13	2.48	2.88	-
65	-	-	-	-	1.60	1.85	2.15	2.49	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C										
Cooling capacity	18 657	W								
Power input	7 012	W								
Current consumption	12.75	Α								
Mass flow	420	ka/h								

Current consumption	12.75	A
Mass flow	420	kg/h
C.O.P.	2.66	

to: Eva	aporating	temperature	at dew	point
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tc: Condensing temperature at dew point

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

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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)

0	dB(A)
0	dB(A)
	0 0

Inverter reciprocating compressors VTZ121-G

Danfoss

R407C

Performance data at 60 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)										
°C (tc)	-17.5	-15	-10	-5	0	5	10	15			
Cooling capacity	in W										
20	9 712	11 089	14 292	18 159	22 768	-	-	-	-		
30	8 136	9 369	12 242	15 723	19 890	24 822	30 595	-	-		
40	6 672	7 751	10 274	13 350	17 055	21 469	26 668	32 730	-		
45	-	6 989	9.330	12 195	15 662	19 810	24 714	30 455	_		

40	6 672	7 751	10 274	13 350	17 055	21 469	26 668	32 730	-
45	-	6 989	9 330	12 195	15 662	19 810	24 714	30 455	-
50	-	-	8 416	11 066	14 291	18 167	22 772	28 185	-
55	-	-	7 538	9 968	12 944	16 544	20 845	25 926	-
60	-	-	-	8 902	11 625	14 944	18 936	23 680	-
65	-	-	-	-	10 338	13 371	17 049	21 451	-

Power input in W

20	3 766	3 935	4 269	4 599	4 922	-	-	-	-
30	4 014	4 211	4 599	4 977	5 342	5 694	6 029	-	-
40	4 273	4 521	5 005	5 474	5 927	6 360	6 772	7 160	-
45	-	4 649	5 198	5 729	6 241	6 732	7 198	7 639	-
50	-	-	5 363	5 968	6 550	7 109	7 641	8 145	-
55	-	-	5 485	6 174	6 838	7 476	8 084	8 663	-
60	-	-	-	6 332	7 089	7 816	8 513	9 176	-
65	-	-	-	-	7 287	8 116	8 911	9 670	-

Current consumption in A

20	7.54	7.78	8.29	8.78	9.24	-	-	-	-
30	7.82	8.14	8.79	9.43	10.04	10.59	11.07	-	-
40	8.21	8.61	9.43	10.23	11.01	11.74	12.39	12.93	-
45	-	8.85	9.75	10.65	11.52	12.34	13.08	13.72	-
50	-	-	10.05	11.04	12.01	12.93	13.77	14.51	-
55	-	-	10.31	11.41	12.47	13.49	14.43	15.28	-
60	-	-	-	11.71	12.89	14.01	15.06	16.01	-
65	-	-	-	-	13.23	14.47	15.63	16.69	-

Mass flow in kg/h

20	186	211	268	336	415	-	-	-	-
30	170	194	250	315	393	483	588	-	-
40	154	177	230	294	370	458	561	679	-
45	-	168	221	283	357	445	547	664	-
50	-	-	211	272	345	431	532	648	-
55	-	-	201	261	333	418	517	632	-
60	-	-	-	250	320	404	502	615	-
65	-	-	-	-	308	390	486	598	-

Coefficient of performance (C.O.P.)

20	2.58	2.82	3.35	3.95	4.63	-	-	-	-
30	2.03	2.22	2.66	3.16	3.72	4.36	5.07	-	-
40	1.56	1.71	2.05	2.44	2.88	3.38	3.94	4.57	-
45	-	1.50	1.79	2.13	2.51	2.94	3.43	3.99	-
50	-	-	1.57	1.85	2.18	2.56	2.98	3.46	-
55	-	-	1.37	1.61	1.89	2.21	2.58	2.99	-
60	-	-	-	1.41	1.64	1.91	2.22	2.58	-
65	-	-	-	-	1.42	1.65	1.91	2.22	-

Nominal performance at to = 5 °C, tc = 50 °C										
Cooling capacity	18 167	W								
Power input	7 109	W								
Current consumption	12.93	А								
Mass flow	431	ka/h								

2.56

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 data Sound power level	0	dB(A)

Pressure switch settings

to: Evaporating temperature at dew point

C.O.P.

tc: Condensing temperature at dew point Rating conditions : Superheat = 10 K , Subcooling = 0 K

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dB(A)

Inverter reciprocating compressors VTZ121-G

<u>Danfoss</u>

R407C

Performance data at 60 Hz, ARI rating conditions

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-17.5	-15	-10	-5	0	5	10	15		
				-	-	-				

Cooling capacity in W

econing capaci	.,								
20	10 328	11 787	15 177	19 267	24 137	-	-	-	-
30	8 721	10 037	13 100	16 807	21 240	26 480	32 607	-	-
40	7 226	8 388	11 104	14 409	18 385	23 115	28 679	35 160	-
45	-	7 612	10 146	13 242	16 983	21 451	26 727	32 895	-
50	-	-	9 220	12 102	15 603	19 805	24 789	30 640	-
55	-	-	-	10 994	14 250	18 182	22 871	28 401	-
60	-	-	-	9 923	12 930	16 588	20 979	26 186	-
65	-	-	-	-	11 650	15 031	19 122	24 007	-

Power input in W

20	3 766	3 935	4 269	4 599	4 922	-	-	-	-
30	4 014	4 211	4 599	4 977	5 342	5 694	6 029	-	-
40	4 273	4 521	5 005	5 474	5 927	6 360	6 772	7 160	-
45	-	4 649	5 198	5 729	6 241	6 732	7 198	7 639	-
50	-	-	5 363	5 968	6 550	7 109	7 641	8 145	-
55	-	-	-	6 174	6 838	7 476	8 084	8 663	-
60	-	-	-	6 332	7 089	7 816	8 513	9 176	-
65	-	-	-	-	7 287	8 116	8 911	9 670	-

Current consumption in A

20	7.54	7.78	8.29	8.78	9.24	-	-	-	-
30	7.82	8.14	8.79	9.43	10.04	10.59	11.07	-	-
40	8.21	8.61	9.43	10.23	11.01	11.74	12.39	12.93	-
45	-	8.85	9.75	10.65	11.52	12.34	13.08	13.72	-
50	-	-	10.05	11.04	12.01	12.93	13.77	14.51	-
55	-	-	-	11.41	12.47	13.49	14.43	15.28	-
60	-	-	-	11.71	12.89	14.01	15.06	16.01	-
65	-	-	-	-	13.23	14.47	15.63	16.69	-

Mass flow in kg/h

20	185	210	267	334	412	-	-	-	-
30	169	193	248	314	391	481	584	-	-
40	153	176	229	292	367	455	557	675	-
45	-	168	219	282	355	442	543	660	-
50	-	-	210	271	343	429	529	644	-
55	-	-	-	260	331	415	514	628	-
60	-	-	-	249	318	401	499	611	-
65	-	-	-	-	306	387	483	595	-

Coefficient of performance (C.O.P.)

20	2.74	3.00	3.55	4.19	4.90	-	-	-	-
30	2.17	2.38	2.85	3.38	3.98	4.65	5.41	-	-
40	1.69	1.86	2.22	2.63	3.10	3.63	4.24	4.91	-
45	-	1.64	1.95	2.31	2.72	3.19	3.71	4.31	-
50	-	-	1.72	2.03	2.38	2.79	3.24	3.76	-
55	-	-	-	1.78	2.08	2.43	2.83	3.28	-
60	-	-	-	1.57	1.82	2.12	2.46	2.85	-
65	-	-	-	-	1.60	1.85	2.15	2.48	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C Cooling capacity 20 355 W Power input 7 700 W Current consumption 13 85 A

Current consumption	13.85	A
Mass flow	458	kg/h
C.O.P.	2.64	

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

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

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Pressure switch settings29.4bar(g)Maximum HP switch setting0.2bar(g)Minimum LP switch setting0.2bar(g)LP pump down setting1.3bar(g)

0	dB(A)
0	dB(A)
	0 0

Inverter reciprocating compressors VTZ121-G

Performance data at 65 Hz, EN 12900 rating conditions

Cond. temp. in		Evaporating temperature in °C (to)										
°C (tc)	-17.5	-17.5 -15 -10 -5 0 5 10 15										
Cooling capacit	tv in W											
Cooling capacit	ty in W 10 507	11 989	15 436	19 595	24 550	-	-	-	-			

50	0 022	10 151	15 240	17 001	21 430	20 000	55 011	-	-
40	7 248	8 411	11 134	14 452	18 450	23 209	28 813	35 343	-
45	-	7 590	10 115	13 207	16 949	21 423	26 713	32 900	-
50	-	-	9 129	11 988	15 467	19 650	24 619	30 457	-
55	-	-	8 179	10 798	14 009	17 894	22 536	28 017	-
60	-	-	-	9 644	12 579	16 160	20 468	25 587	-
65	-	-	-	-	11 182	14 452	18 420	23 169	-

Power input in W

20	4 106	4 298	4 684	5 070	5 454	-	-	-	-
30	4 371	4 592	5 031	5 466	5 895	6 316	6 728	-	-
40	4 644	4 915	5 453	5 980	6 497	7 001	7 491	7 965	-
45	-	5 050	5 652	6 243	6 820	7 382	7 927	8 454	-
50	-	-	5 823	6 488	7 136	7 767	8 379	8 969	-
55	-	-	5 951	6 700	7 431	8 141	8 830	9 496	-
60	-	-	-	6 864	7 687	8 489	9 266	10 017	-
65	-	-	-	-	7 892	8 794	9 670	10 518	-

Current consumption in A

20	7.94	8.16	8.67	9.21	9.76	-	-	-	-
30	8.32	8.62	9.28	9.99	10.70	11.40	12.03	-	-
40	8.74	9.12	9.95	10.83	11.73	12.61	13.43	14.16	-
45	-	9.36	10.27	11.24	12.24	13.21	14.14	14.98	-
50	-	-	10.57	11.64	12.73	13.81	14.84	15.79	-
55	-	-	10.84	12.00	13.19	14.38	15.52	16.58	-
60	-	-	-	12.32	13.62	14.91	16.16	17.34	-
65	-	-	-	-	13.99	15.39	16.76	18.05	-

Mass flow in kg/h

20	201	228	290	362	447	-	-	-	-
30	184	210	270	341	425	522	634	-	-
40	167	192	250	318	400	495	606	733	-
45	-	183	239	307	387	481	591	717	-
50	-	-	229	295	374	466	575	700	-
55	-	-	218	283	360	452	559	683	-
60	-	-	-	271	346	436	542	665	-
65	-	-	-	-	333	421	525	646	-

Coefficient of performance (C.O.P.)

20	2.56	2.79	3.30	3.87	4.50	-	-	-	-
30	2.02	2.21	2.63	3.11	3.65	4.24	4.91	-	-
40	1.56	1.71	2.04	2.42	2.84	3.31	3.85	4.44	-
45	-	1.50	1.79	2.12	2.49	2.90	3.37	3.89	-
50	-	-	1.57	1.85	2.17	2.53	2.94	3.40	-
55	-	-	1.37	1.61	1.89	2.20	2.55	2.95	-
60	-	-	-	1.41	1.64	1.90	2.21	2.55	-
65	-	-	-	-	1.42	1.64	1.90	2.20	-

Nominal performance at to = 5 °C, tc = 50 °C Cooling capacity 19 650 W Power input 7 767 W

Current consumption	13.81	Α
Mass flow	466	kg/h
C.O.P.	2.53	

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

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

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

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



R407C

Inverter reciprocating compressors VTZ121-G

Danfoss

R407C

Performance data at 65 Hz, ARI rating conditions

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	

Cooling capacity in W

econing oupdon	. <u>.</u>								
20	11 173	12 743	16 392	20 791	26 026	-	-	-	-
30	9 456	10 874	14 177	18 173	22 948	28 590	35 183	-	-
40	7 850	9 103	12 033	15 599	19 888	24 989	30 986	37 967	-
45	-	8 267	11 000	14 341	18 378	23 198	28 889	35 536	-
50	-	-	10 000	13 109	16 887	21 422	26 800	33 109	-
55	-	-	-	11 910	15 423	19 665	24 726	30 692	-
60	-	-	-	10 750	13 991	17 937	22 675	28 295	-
65	-	-	-	-	12 601	16 246	20 659	25 930	-

Power input in W

20	4 106	4 298	4 684	5 070	5 454	-	-	-	-
30	4 371	4 592	5 031	5 466	5 895	6 316	6 728	-	-
40	4 644	4 915	5 453	5 980	6 497	7 001	7 491	7 965	-
45	-	5 050	5 652	6 243	6 820	7 382	7 927	8 454	-
50	-	-	5 823	6 488	7 136	7 767	8 379	8 969	-
55	-	-	-	6 700	7 431	8 141	8 830	9 496	-
60	-	-	-	6 864	7 687	8 489	9 266	10 017	-
65	-	-	-	-	7 892	8 794	9 670	10 518	-

Current consumption in A

20	7.94	8.16	8.67	9.21	9.76	-	-	-	-
30	8.32	8.62	9.28	9.99	10.70	11.40	12.03	-	-
40	8.74	9.12	9.95	10.83	11.73	12.61	13.43	14.16	-
45	-	9.36	10.27	11.24	12.24	13.21	14.14	14.98	-
50	-	-	10.57	11.64	12.73	13.81	14.84	15.79	-
55	-	-	-	12.00	13.19	14.38	15.52	16.58	-
60	-	-	-	12.32	13.62	14.91	16.16	17.34	-
65	-	-	-	-	13.99	15.39	16.76	18.05	-

Mass flow in kg/h

20	200	227	288	360	445	-	-	-	-
30	183	209	269	339	422	519	631	-	-
40	166	191	248	317	398	492	602	729	-
45	-	182	238	305	385	478	587	713	-
50	-	-	227	293	371	464	572	696	-
55	-	-	-	281	358	449	555	679	-
60	-	-	-	269	344	434	539	661	-
65	-	-	-	-	331	419	522	642	-

Coefficient of performance (C.O.P.)

20	2.72	2.96	3.50	4.10	4.77	-	-	-	-
30	2.16	2.37	2.82	3.32	3.89	4.53	5.23	-	-
40	1.69	1.85	2.21	2.61	3.06	3.57	4.14	4.77	-
45	-	1.64	1.95	2.30	2.69	3.14	3.64	4.20	-
50	-	-	1.72	2.02	2.37	2.76	3.20	3.69	-
55	-	-	-	1.78	2.08	2.42	2.80	3.23	-
60	-	-	-	1.57	1.82	2.11	2.45	2.82	-
65	-	-	-	-	1.60	1.85	2.14	2.47	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C Cooling capacity 22 012 W Power input 8 399 W

Current consumption	14.82	A
Mass flow	496	kg/h
C.O.P.	2.62	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

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Pressure switch settings Maximum HP switch setting 29.4 Minimum LP switch setting 0.2 LP pump down setting 1.3

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

bar(g)

bar(g)

bar(g)

Inverter reciprocating compressors VTZ121-G

Danfoss

R407C

Performance data at 70 Hz, EN 12900 rating conditions

Cond. temp. in				Evapora	ating temperature in	n °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling capacity	y in W				-	-	-	-	
20	11 281	12 867	16 554	21 001	26 294	-	-	-	-
30	9 493	10 918	14 238	18 257	23 062	28 741	35 379	-	-

40	7 813	9 060	11 980	15 538	19 822	24 918	30 915	37 897	-
45	-	8 181	10 888	14 203	18 213	23 006	28 669	35 288	-
50	-	-	9 828	12 892	16 621	21 102	26 423	32 669	-
55	-	-	8 808	11 611	15 050	19 211	24 182	30 048	-
60	-	-	-	10 368	13 508	17 340	21 952	27 429	-
65	-	-	-	-	12 000	15 495	19 739	24 819	-

Power input in W

20	4 440	4 658	5 097	5 543	5 993	-	-	-	-
30	4 724	4 972	5 468	5 966	6 463	6 960	7 454	-	-
40	5 010	5 309	5 903	6 495	7 082	7 663	8 238	8 804	-
45	-	5 449	6 108	6 763	7 410	8 049	8 679	9 299	-
50	-	-	6 285	7 012	7 730	8 438	9 134	9 818	-
55	-	-	6 420	7 230	8 029	8 815	9 588	10 346	-
60	-	-	-	7 400	8 291	9 166	10 026	10 869	-
65	-	-	-	-	8 501	9 476	10 433	11 371	-

Current consumption in A

20	8.21	8.40	8.89	9.49	10.14	-	-	-	-
30	8.73	9.00	9.65	10.42	11.25	12.10	12.91	-	-
40	9.18	9.53	10.34	11.29	12.31	13.36	14.39	15.35	-
45	-	9.76	10.66	11.69	12.82	13.97	15.11	16.18	-
50	-	-	10.95	12.08	13.30	14.56	15.81	17.00	-
55	-	-	11.21	12.44	13.76	15.13	16.49	17.80	-
60	-	-	-	12.77	14.19	15.67	17.15	18.58	-
65	-	-	-	-	14.59	16.18	17.78	19.33	-

Mass flow in kg/h

20	216	245	311	388	479	-	-	-	-
30	198	226	290	366	456	560	680	-	-
40	180	207	269	342	429	532	650	786	-
45	-	197	257	330	416	517	634	769	-
50	-	-	246	317	401	501	617	751	-
55	-	-	235	304	387	485	600	732	-
60	-	-	-	291	372	468	581	713	-
65	-	-	-	-	357	451	563	692	-

Coefficient of performance (C.O.P.)

20	2.54	2.76	3.25	3.79	4.39	-	-	-	-
30	2.01	2.20	2.60	3.06	3.57	4.13	4.75	-	-
40	1.56	1.71	2.03	2.39	2.80	3.25	3.75	4.30	-
45	-	1.50	1.78	2.10	2.46	2.86	3.30	3.79	-
50	-	-	1.56	1.84	2.15	2.50	2.89	3.33	-
55	-	-	1.37	1.61	1.87	2.18	2.52	2.90	-
60	-	-	-	1.40	1.63	1.89	2.19	2.52	-
65	-	-	-	-	1.41	1.64	1.89	2.18	-

Nominal performance at to = 5 °C, tc =	= 50 °C	
Cooling capacity	21 102	W
Power input	8 438	W
Current consumption	14.56	А

Current consumption	14.56	А
Mass flow	501	kg/h
C.O.P.	2.50	

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 data Sound power level	0	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Danfoss

R407C

Performance data at 70 Hz, ARI rating conditions

Cond. temp. in				Evapora	ting temperature in	n °C (to)			
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	

Cooling capacity in W

	· ·								
20	11 996	13 676	17 579	22 282	27 874	-	-	-	-
30	10 175	11 696	15 236	19 516	24 627	30 660	37 706	-	-
40	8 462	9 805	12 947	16 770	21 367	26 829	33 246	40 711	-
45	-	8 911	11 840	15 422	19 749	24 912	31 004	38 115	-
50	-	-	10 766	14 098	18 147	23 004	28 763	35 514	-
55	-	-	-	12 807	16 569	21 113	26 531	32 916	-
60	-	-	-	11 557	15 024	19 247	24 319	30 332	-
65	-	-	-	-	13 523	17 419	22 139	27 777	-

Power input in W

20	4 440	4 658	5 097	5 543	5 993	-	-	-	-
30	4 724	4 972	5 468	5 966	6 463	6 960	7 454	-	-
40	5 010	5 309	5 903	6 495	7 082	7 663	8 238	8 804	-
45	-	5 449	6 108	6 763	7 410	8 049	8 679	9 299	-
50	-	-	6 285	7 012	7 730	8 438	9 134	9 818	-
55	-	-	-	7 230	8 029	8 815	9 588	10 346	-
60	-	-	-	7 400	8 291	9 166	10 026	10 869	-
65	-	-	-	-	8 501	9 476	10 433	11 371	-

Current consumption in A

20	8.21	8.40	8.89	9.49	10.14	-	-	-	-
30	8.73	9.00	9.65	10.42	11.25	12.10	12.91	-	-
40	9.18	9.53	10.34	11.29	12.31	13.36	14.39	15.35	-
45	-	9.76	10.66	11.69	12.82	13.97	15.11	16.18	-
50	-	-	10.95	12.08	13.30	14.56	15.81	17.00	-
55	-	-	-	12.44	13.76	15.13	16.49	17.80	-
60	-	-	-	12.77	14.19	15.67	17.15	18.58	-
65	-	-	-	-	14.59	16.18	17.78	19.33	-

Mass flow in kg/h

20	215	243	309	386	476	-	-	-	-
30	197	225	289	364	453	556	676	-	-
40	179	206	267	340	427	529	646	782	-
45	-	196	256	328	413	514	630	765	-
50	-	-	245	315	399	498	613	747	-
55	-	-	-	302	385	482	596	728	-
60	-	-	-	289	370	466	578	708	-
65	-	-	-	-	355	449	559	688	-

Coefficient of performance (C.O.P.)

20	2.70	2.94	3.45	4.02	4.65	-	-	-	-
30	2.15	2.35	2.79	3.27	3.81	4.41	5.06	-	-
40	1.69	1.85	2.19	2.58	3.02	3.50	4.04	4.62	-
45	-	1.64	1.94	2.28	2.67	3.10	3.57	4.10	-
50	-	-	1.71	2.01	2.35	2.73	3.15	3.62	-
55	-	-	-	1.77	2.06	2.40	2.77	3.18	-
60	-	-	-	1.56	1.81	2.10	2.43	2.79	-
65	-	-	-	-	1.59	1.84	2.12	2.44	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C Cooling capacity 23 628 W Device input 0.400 W

Power input	9 109	VV
Current consumption	15.66	А
Mass flow	532	kg/h
C.O.P.	2.59	

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

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

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Pressure switch settingsMaximum HP switch setting29.4bar(g)Minimum LP switch setting0.2bar(g)LP pump down setting1.3bar(g)

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

Inverter reciprocating compressors VTZ121-G

Danfoss

R407C

Performance data at 75 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-17.5	-15	-10	-5	0	5	10	15		
Cooling capacity	y in W									
Cooling capacity 20	/ in W 12 035	13 723	17 647	22 375	27 998	-	-	-	-	

30	10 150	11 670	15 210	19 492	24 606	30 645	37 696	-	-
40	8 368	9 698	12 812	16 606	21 170	26 596	32 973	40 392	-
45	-	8 762	11 647	15 181	19 455	24 558	30 582	37 617	-
50	-	-	10 515	13 779	17 751	22 522	28 183	34 823	-
55	-	-	9 424	12 407	16 067	20 496	25 782	32 017	-
60	-	-	-	11 073	14 411	18 486	23 388	29 207	-
65	-	-	-	-	12 790	16 501	21 007	26 400	-

Power input in W

20	4 768	5 013	5 511	6 019	6 537	-	-	-	-
30	5 073	5 350	5 909	6 475	7 047	7 624	8 207	-	-
40	5 372	5 700	6 357	7 018	7 681	8 345	9 011	9 677	-
45	-	5 846	6 567	7 289	8 011	8 734	9 455	10 175	-
50	-	-	6 749	7 542	8 333	9 122	9 909	10 692	-
55	-	-	6 891	7 764	8 633	9 499	10 359	11 215	-
60	-	-	-	7 941	8 898	9 849	10 794	11 731	-
65	-	-	-	-	9 114	10 161	11 198	12 227	-

Current consumption in A

20	8.35	8.49	8.96	9.61	10.38	-	-	-	-
30	9.05	9.26	9.89	10.72	11.68	12.71	13.73	-	-
40	9.53	9.82	10.61	11.61	12.77	14.02	15.28	16.49	-
45	-	10.04	10.91	12.01	13.27	14.62	16.00	17.33	-
50	-	-	11.18	12.37	13.73	15.19	16.69	18.15	-
55	-	-	11.44	12.72	14.17	15.74	17.36	18.95	-
60	-	-	-	13.05	14.61	16.29	18.02	19.74	-
65	-	-	-	-	15.04	16.83	18.68	20.53	-

Mass flow in kg/h

20	230	261	331	414	510	-	-	-	-
30	212	242	310	391	486	597	724	-	-
40	193	221	287	366	459	567	693	838	-
45	-	211	275	352	444	551	676	820	-
50	-	-	263	339	429	535	658	801	-
55	-	-	251	325	413	517	639	780	-
60	-	-	-	311	397	499	619	759	-
65	-	-	-	-	381	481	599	737	-

Coefficient of performance (C.O.P.)

20	2.52	2.74	3.20	3.72	4.28	-	-	-	-
30	2.00	2.18	2.57	3.01	3.49	4.02	4.59	-	-
40	1.56	1.70	2.02	2.37	2.76	3.19	3.66	4.17	-
45	-	1.50	1.77	2.08	2.43	2.81	3.23	3.70	-
50	-	-	1.56	1.83	2.13	2.47	2.84	3.26	-
55	-	-	1.37	1.60	1.86	2.16	2.49	2.85	-
60	-	-	-	1.39	1.62	1.88	2.17	2.49	-
65	-	-	-	-	1.40	1.62	1.88	2.16	-

Nominal performance at to = 5 °C, tc	= 50 °C	
Cooling capacity	22 522	W
Power input	9 122	W
Current consumption	15.19	А

Current consumption	15.19	А
Mass flow	535	kg/h
C.O.P.	2.47	

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	0	dB(A)
With accoustic hood	0	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Performance data at 75 Hz, ARI rating conditions

Cond. temp. in	emp. in Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	

Cooling capacity in W

20	12 798	14 587	18 740	23 740	29 680	-	-	-	-
30	10 880	12 502	16 276	20 836	26 276	32 691	40 176	-	-
40	9 062	10 495	13 846	17 923	22 821	28 635	35 460	43 391	-
45	-	9 543	12 665	16 484	21 095	26 593	33 073	40 631	-
50	-	-	11 518	15 068	19 381	24 553	30 679	37 855	-
55	-	-	-	13 685	17 689	22 525	28 287	35 073	-
60	-	-	-	12 343	16 029	20 519	25 910	32 298	-
65	-	-	-	-	14 413	18 549	23 561	29 546	-

Power input in W

20	4 768	5 013	5 511	6 019	6 537	-	-	-	-
30	5 073	5 350	5 909	6 475	7 047	7 624	8 207	-	-
40	5 372	5 700	6 357	7 018	7 681	8 345	9 011	9 677	-
45	-	5 846	6 567	7 289	8 011	8 734	9 455	10 175	-
50	-	-	6 749	7 542	8 333	9 122	9 909	10 692	-
55	-	-	-	7 764	8 633	9 499	10 359	11 215	-
60	-	-	-	7 941	8 898	9 849	10 794	11 731	-
65	-	-	-	-	9 114	10 161	11 198	12 227	-

Current consumption in A

20	8.35	8.49	8.96	9.61	10.38	-	-	-	-
30	9.05	9.26	9.89	10.72	11.68	12.71	13.73	-	-
40	9.53	9.82	10.61	11.61	12.77	14.02	15.28	16.49	-
45	-	10.04	10.91	12.01	13.27	14.62	16.00	17.33	-
50	-	-	11.18	12.37	13.73	15.19	16.69	18.15	-
55	-	-	-	12.72	14.17	15.74	17.36	18.95	-
60	-	-	-	13.05	14.61	16.29	18.02	19.74	-
65	-	-	-	-	15.04	16.83	18.68	20.53	-

Mass flow in kg/h

20	229	260	329	411	507	-	-	-	-
30	211	240	308	389	483	593	720	-	-
40	192	220	286	364	456	564	689	833	-
45	-	210	274	351	441	548	672	815	-
50	-	-	262	337	426	532	654	796	-
55	-	-	-	323	411	514	635	775	-
60	-	-	-	309	395	496	616	754	-
65	-	-	-	-	378	478	595	732	-

Coefficient of performance (C.O.P.)

20	2.68	2.91	3.40	3.94	4.54	-	-	-	-
30	2.14	2.34	2.75	3.22	3.73	4.29	4.90	-	-
40	1.69	1.84	2.18	2.55	2.97	3.43	3.94	4.48	-
45	-	1.63	1.93	2.26	2.63	3.04	3.50	3.99	-
50	-	-	1.71	2.00	2.33	2.69	3.10	3.54	-
55	-	-	-	1.76	2.05	2.37	2.73	3.13	-
60	-	-	-	1.55	1.80	2.08	2.40	2.75	-
65	-	-	-	-	1.58	1.83	2.10	2.42	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C							
Cooling capacity	25 202	W					
Power input	9 830	W					
Current consumption	16.38	А					
Mass flow	568	ka/h					

Current consumption	16.38	A
Mass flow	568	kg/h
C.O.P.	2.56	

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

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

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

Sound power data		
Sound power level	0	dB(A)
With accoustic hood	0	dB(A)
		. ,



R407C

Inverter reciprocating compressors VTZ121-G

Danfoss

R407C

Performance data at 80 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	
Cooling capacit	v in W								
Cooling capacit	y in W 12 768	14 557	18 714	23 718	29 663	-	-	-	-

30	10 793	12 407	16 164	20 705	26 123	32 512	39 964	-	-
40	8 911	10 324	13 630	17 656	22 496	28 242	34 988	42 828	-
45	-	9 331	12 393	16 143	20 674	26 080	32 453	39 889	-
50	-	-	11 189	14 649	18 859	23 911	29 900	36 918	-
55	-	-	10 027	13 185	17 061	21 747	27 337	33 925	-
60	-	-	-	11 760	15 289	19 596	24 776	30 921	-
65	-	-	-	-	13 553	17 469	22 224	27 913	-

Power input in W

20	5 088	5 363	5 923	6 498	7 088	-	-	-	-
30	5 419	5 728	6 355	6 995	7 646	8 310	8 986	-	-
40	5 730	6 089	6 815	7 550	8 294	9 048	9 811	10 583	-
45	-	6 241	7 027	7 822	8 624	9 435	10 254	11 080	-
50	-	-	7 214	8 076	8 944	9 819	10 701	11 589	-
55	-	-	7 364	8 301	9 243	10 190	11 143	12 101	-
60	-	-	-	8 486	9 509	10 537	11 569	12 604	-
65	-	-	-	-	9 733	10 848	11 966	13 087	-

Current consumption in A

20	8.36	8.44	8.87	9.57	10.47	-	-	-	-
30	9.26	9.42	10.00	10.89	11.99	13.22	14.48	-	-
40	9.79	10.01	10.75	11.81	13.11	14.57	16.09	17.58	-
45	-	10.22	11.03	12.18	13.58	15.15	16.79	18.43	-
50	-	-	11.28	12.51	14.01	15.69	17.46	19.23	-
55	-	-	11.52	12.84	14.43	16.22	18.11	20.02	-
60	-	-	-	13.17	14.87	16.76	18.77	20.81	-
65	-	-	-	-	15.33	17.33	19.47	21.64	-

Mass flow in kg/h

20	244	277	351	438	540	-	-	-	-
30	225	257	330	415	516	633	768	-	-
40	205	236	306	389	487	603	736	889	-
45	-	225	293	375	472	586	718	870	-
50	-	-	280	360	455	568	698	849	-
55	-	-	267	345	438	549	678	827	-
60	-	-	-	330	421	529	656	803	-
65	-	-	-	-	403	509	634	779	-

Coefficient of performance (C.O.P.)

20	2.51	2.71	3.16	3.65	4.18	-	-	-	-
30	1.99	2.17	2.54	2.96	3.42	3.91	4.45	-	-
40	1.56	1.70	2.00	2.34	2.71	3.12	3.57	4.05	-
45	-	1.50	1.76	2.06	2.40	2.76	3.17	3.60	-
50	-	-	1.55	1.81	2.11	2.44	2.79	3.19	-
55	-	-	1.36	1.59	1.85	2.13	2.45	2.80	-
60	-	-	-	1.39	1.61	1.86	2.14	2.45	-
65	-	-	-	-	1.39	1.61	1.86	2.13	-

Nominal performance at to = 5 °C, tc = 50 °C						
Cooling capacity	23 911	W				
Power input	9 819	W				
Current consumption	15.69	А				
	=					

Current consumption	15.69	Α
Mass flow	568	kg/h
C.O.P.	2.44	

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 data Sound power level	0	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Inverter reciprocating compressors VTZ121-G

Danfoss

R407C

Performance data at 80 Hz, ARI rating conditions

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	

Cooling capacity in W

econing capaci	.,								
20	13 578	15 474	19 873	25 165	31 446	-	-	-	-
30	11 569	13 291	17 297	22 132	27 895	34 683	42 593	-	-
40	9 651	11 173	14 730	19 057	24 250	30 407	37 628	46 008	-
45	-	10 163	13 477	17 528	22 416	28 240	35 097	43 085	-
50	-	-	12 257	16 020	20 590	26 067	32 548	40 133	-
55	-	-	-	14 543	18 783	23 900	29 994	37 164	-
60	-	-	-	13 109	17 005	21 752	27 448	34 193	-
65	-	-	-	-	15 273	19 637	24 926	31 239	-

Power input in W

20	5 088	5 363	5 923	6 498	7 088	-	-	-	-
30	5 419	5 728	6 355	6 995	7 646	8 310	8 986	-	-
40	5 730	6 089	6 815	7 550	8 294	9 048	9 811	10 583	-
45	-	6 241	7 027	7 822	8 624	9 435	10 254	11 080	-
50	-	-	7 214	8 076	8 944	9 819	10 701	11 589	-
55	-	-	-	8 301	9 243	10 190	11 143	12 101	-
60	-	-	-	8 486	9 509	10 537	11 569	12 604	-
65	-	-	-	-	9 733	10 848	11 966	13 087	-

Current consumption in A

20	8.36	8.44	8.87	9.57	10.47	-	-	-	-
30	9.26	9.42	10.00	10.89	11.99	13.22	14.48	-	-
40	9.79	10.01	10.75	11.81	13.11	14.57	16.09	17.58	-
45	-	10.22	11.03	12.18	13.58	15.15	16.79	18.43	-
50	-	-	11.28	12.51	14.01	15.69	17.46	19.23	-
55	-	-	-	12.84	14.43	16.22	18.11	20.02	-
60	-	-	-	13.17	14.87	16.76	18.77	20.81	-
65	-	-	-	-	15.33	17.33	19.47	21.64	-

Mass flow in kg/h

20	243	275	349	436	537	-	-	-	-
30	224	256	328	413	513	629	763	-	-
40	204	234	304	387	485	599	731	883	-
45	-	224	291	373	469	582	713	864	-
50	-	-	279	358	453	564	694	844	-
55	-	-	-	343	436	546	674	822	-
60	-	-	-	328	419	526	652	798	-
65	-	-	-	-	401	506	630	774	-

Coefficient of performance (C.O.P.)

20	2.67	2.89	3.36	3.87	4.44	-	-	-	-
30	2.13	2.32	2.72	3.16	3.65	4.17	4.74	-	-
40	1.68	1.83	2.16	2.52	2.92	3.36	3.84	4.35	-
45	-	1.63	1.92	2.24	2.60	2.99	3.42	3.89	-
50	-	-	1.70	1.98	2.30	2.65	3.04	3.46	-
55	-	-	-	1.75	2.03	2.35	2.69	3.07	-
60	-	-	-	1.54	1.79	2.06	2.37	2.71	-
65	-	-	-	-	1.57	1.81	2.08	2.39	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C Cooling capacity 26 735 W Power input 10 562 W Current consumption 16.98 A

Current consumption 16.98	A
Mass flow 602	kg/h
C.O.P. 2.53	

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

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

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Pressure switch settings29.4bar(g)Maximum HP switch setting0.2bar(g)Minimum LP switch setting0.2bar(g)LP pump down setting1.3bar(g)

0	dB(A)
0	dB(A)
	0 0

Inverter reciprocating compressors VTZ121-G

Performance data at 85 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-17.5	-15	-10	-5	0	5	10	15		
Cooling capacit	y in W									
20	13/182	15 370	10 755	25.030	31 280	_	_	_	_	

20	13 482	15 370	19 755	25 030	31 289	-	-	-	-
30	11 423	13 129	17 101	21 896	27 611	34 342	42 183	-	-
40	9 444	10 938	14 434	18 689	23 798	29 857	36 961	45 206	-
45	-	9 890	13 126	17 088	21 870	27 570	34 282	42 102	-
50	-	-	11 850	15 503	19 944	25 269	31 574	38 954	-
55	-	-	10 617	13 946	18 030	22 966	28 848	35 773	-
60	-	-	-	12 430	16 141	20 672	26 116	32 570	-
65	-	-	-	-	14 289	18 399	23 390	29 358	-

Power input in W

20	5 403	5 709	6 335	6 980	7 644	-	-	-	-
30	5 761	6 105	6 806	7 524	8 261	9 016	9 791	-	-
40	6 084	6 477	7 275	8 090	8 922	9 771	10 638	11 524	-
45	-	6 634	7 490	8 361	9 249	10 153	11 075	12 016	-
50	-	-	7 681	8 615	9 564	10 530	11 512	12 512	-
55	-	-	7 840	8 842	9 859	10 891	11 940	13 005	-
60	-	-	-	9 035	10 125	11 230	12 351	13 487	-
65	-	-	-	-	10 355	11 539	12 737	13 951	-

Current consumption in A

20	8.24	8.25	8.62	9.38	10.41	-	-	-	-
30	9.39	9.46	9.99	10.93	12.18	13.63	15.16	-	-
40	9.96	10.09	10.76	11.87	13.32	15.01	16.81	18.63	-
45	-	10.28	11.01	12.21	13.76	15.56	17.50	19.46	-
50	-	-	11.23	12.50	14.15	16.06	18.13	20.24	-
55	-	-	11.45	12.80	14.54	16.56	18.76	21.01	-
60	-	-	-	13.14	14.97	17.10	19.41	21.81	-
65	-	-	-	-	15.47	17.70	20.14	22.67	-

Mass flow in kg/h

20	258	292	371	463	570	-	-	-	-
30	238	272	349	439	545	669	811	-	-
40	218	250	324	412	516	637	777	938	-
45	-	238	310	397	499	619	758	918	-
50	-	-	297	381	482	600	737	896	-
55	-	-	283	365	463	579	715	872	-
60	-	-	-	349	444	558	692	846	-
65	-	-	-	-	425	536	667	819	-

Coefficient of performance (C.O.P.)

20	2.50	2.69	3.12	3.59	4.09	-	-	-	-
30	1.98	2.15	2.51	2.91	3.34	3.81	4.31	-	-
40	1.55	1.69	1.98	2.31	2.67	3.06	3.47	3.92	-
45	-	1.49	1.75	2.04	2.36	2.72	3.10	3.50	-
50	-	-	1.54	1.80	2.09	2.40	2.74	3.11	-
55	-	-	1.35	1.58	1.83	2.11	2.42	2.75	-
60	-	-	-	1.38	1.59	1.84	2.11	2.41	-
65	-	-	-	-	1.38	1.59	1.84	2.10	-

Nominal performance at to = 5 °C, tc = 50 °C Cooling capacity 25 269 W Power input 10 530 W

Current consumption	16.06	А
Mass flow	600	kg/h
C.O.P.	2.40	

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

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

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Pressure switch settings29.4bar(g)Maximum HP switch setting0.2bar(g)Minimum LP switch setting0.2bar(g)LP pump down setting1.3bar(g)

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



R407C

Inverter reciprocating compressors VTZ121-G

Performance data at 85 Hz, ARI rating conditions

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-17.5	-15	-10	-5	0	5	10	15	

Cooling capacity in W

20	14 337	16 338	20 979	26 557	33 170	-	-	-	-
30	12 244	14 065	18 299	23 406	29 485	36 635	44 958	-	-
40	10 228	11 838	15 600	20 172	25 654	32 146	39 749	48 562	-
45	-	10 772	14 274	18 554	23 714	29 854	37 074	45 476	-
50	-	-	12 981	16 953	21 775	27 547	34 370	42 346	-
55	-	-	-	15 382	19 850	25 239	31 651	39 188	-
60	-	-	-	13 855	17 953	22 945	28 933	36 017	-
65	-	-	-	-	16 102	20 683	26 233	32 856	-

Power input in W

20	5 403	5 709	6 335	6 980	7 644	-	-	-	-
30	5 761	6 105	6 806	7 524	8 261	9 016	9 791	-	-
40	6 084	6 477	7 275	8 090	8 922	9 771	10 638	11 524	-
45	-	6 634	7 490	8 361	9 249	10 153	11 075	12 016	-
50	-	-	7 681	8 615	9 564	10 530	11 512	12 512	-
55	-	-	-	8 842	9 859	10 891	11 940	13 005	-
60	-	-	-	9 035	10 125	11 230	12 351	13 487	-
65	-	-	-	-	10 355	11 539	12 737	13 951	-

Current consumption in A

20	8.24	8.25	8.62	9.38	10.41	-	-	-	-
30	9.39	9.46	9.99	10.93	12.18	13.63	15.16	-	-
40	9.96	10.09	10.76	11.87	13.32	15.01	16.81	18.63	-
45	-	10.28	11.01	12.21	13.76	15.56	17.50	19.46	-
50	-	-	11.23	12.50	14.15	16.06	18.13	20.24	-
55	-	-	-	12.80	14.54	16.56	18.76	21.01	-
60	-	-	-	13.14	14.97	17.10	19.41	21.81	-
65	-	-	-	-	15.47	17.70	20.14	22.67	-

Mass flow in kg/h

20	257	291	369	460	567	-	-	-	-
30	237	270	347	437	542	665	806	-	-
40	217	248	322	409	513	633	773	932	-
45	-	237	309	395	496	615	754	912	-
50	-	-	295	379	479	596	733	890	-
55	-	-	-	363	461	576	711	866	-
60	-	-	-	347	442	555	688	841	-
65	-	-	-	-	423	533	663	814	-

Coefficient of performance (C.O.P.)

20	2.65	2.86	3.31	3.80	4.34	-	-	-	-
30	2.13	2.30	2.69	3.11	3.57	4.06	4.59	-	-
40	1.68	1.83	2.14	2.49	2.88	3.29	3.74	4.21	-
45	-	1.62	1.91	2.22	2.56	2.94	3.35	3.78	-
50	-	-	1.69	1.97	2.28	2.62	2.99	3.38	-
55	-	-	-	1.74	2.01	2.32	2.65	3.01	-
60	-	-	-	1.53	1.77	2.04	2.34	2.67	-
65	-	-	-	-	1.55	1.79	2.06	2.36	-

Nominal performance at to = 7.2 °C, t	nance at to = 7.2 °C, tc = 54.4 °C	
Cooling capacity	28 227	W
Power input	11 305	W
Current consumption	17.45	А
Mass flow	636	ka/h

Current consumption	17.45	A
Mass flow	636	kg/h
C.O.P.	2.50	

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

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

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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)

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



R407C