

Datasheet, technical data

Danfoss scroll compressor, VLZ028TG

General Characteristics

Model number (on compressor nameplate)	VLZ028TGNE9A		
Code number for Singlepack*	120G0162		
Code number for Industrial pack**	120G0164		
Drawing number	0VG8213b		
Suction and discharge connections	Brazed		
Suction connection	3/4 " ODF		
Discharge connection	1/2 " ODF		
Oil sight glass	Threaded		
Oil equalisation connection	None		
Oil drain connection	1/4" flare		
LP gauge port	None		
IPR valve	Yes		
Swept volume	27.8 cm3/rev		
Net weight	26 kg		
Oil charge	1.36 litre, POE - RL46HB		
Maximum number of starts per hour	6		
Refrigerant charge limit	3.6 kg		
Approved refrigerants	R404A, R448A, R449A		

Electrical Characteristics

Nominal voltage	Supply voltage 380-480V/3/50-60Hz
Voltage range	342-528 V supply to frequency converter
Winding resistance (between phases) +/- 7% at 25℃	0.71 Ω
Rated Load Amps (RLA)	7 A
Motor protection	Motor protection by frequency converter

Recommended Installation torques

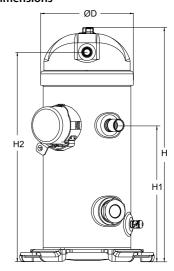
Oil sight glass	52.5 Nm		
Power connections / Earth connection	0 Nm / 2 Nm		
Mounting bolts	11 Nm		

Parts shipped with compressor

Mounting kit with grommets, bolts, nuts, sleeves and washers
Initial oil charge
Installation instructions

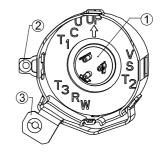
Approvals: CE certified, UL certified (file SA6873), -

Dimensions



D=164.5 mm H=415.4 mm H1=241.5 mm H2=371.4 mm H3=- mm

Terminal box



IP22

Power connections
 Earth connection

3: EMC braket with shielded cable

 $^{{}^*}$ Singlepack: Compressor in cardboard box

^{**}Industrial pack: 12 Unboxed compressors on pallet (order per multiples of 12)

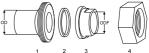


Datasheet, accessories and spare parts

Danfoss scroll compressor, VLZ028TG

Rotolock accessories, suction side	Code no.	
Rotolock adapter (1-1/4" Rotolock, 3/4" ODF)	120Z0366	
Rotolock accessories, discharge side	Code no.	
Rotolock adapter (1" Rotolock, 1/2" ODF)	120Z0365	
Rotolock accessories, sets	Code no.	
Solder sleeve adapter set (1-1/4" Rotolock, 3/4" ODF), (1" Rotolock, 1/2" ODF)	120Z0126	
Oil / lubricants	Code no.	
POE lubricant, 215PZ(PL46HB), 1 litre can	120Z0648	
Crankcase heaters	Code no.	
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040	
Belt type crankcase heater, 70 W, 400/460V, CE mark, UL	120Z5041	
Miscellaneous accessories	Code no.	
Acoustic hood	120Z5083	
Spare parts	Code no.	
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers, 2 grounding screws	120Z0622	
Terminal box cover	120Z5015	

Solder sleeve adapter set



1: Rotolock adapter (Suc & Dis)

2: Gasket (Suc & Dis)

3: Solder sleeve (Suc & Dis)

4: Rotolock nut (Suc & Dis)



Danfoss scroll compressor. VLZ028TGA

Performance data at 30 Hz, EN 12900 rating conditions

R448A

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
Caalinn aanaaite	: 1A/								
Cooling capacity		_	_	_	_	_	_	_	-
5				1		-	-	-	
15	1 044	1 342	1 699	2 124	2 625	1			-
20	985	1 273	1 619	2 030	2 513	3 077	-	-	-
30	-	1 128	1 448	1 827	2 273	2 793	3 397	4 090	-
40	-	-	1 262	1 605	2 010	2 484	3 034	3 669	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in W	1								
5	-	-	-	-	-	-	-	-	-
15	483	494	499	495	480	-	-	-	-
20	523	536	546	548	540	519	-	-	-
30	-	640	652	661	664	659	641	610	-
40	-	-	793	803	810	813	808	792	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
		•							
Current consum ₁ 5	otion in A	-	_	_	_	_	_	_	-
15	1.14	1.09	1.07	1.05	1.03	-	-	-	
20	1.14	1.16	1.07	1.05	1.13	1.11	-	-	-
				1		1			
30	-	1.32	1.31	1.31 1.52	1.33	1.33	1.30	1.23	-
40 50	-	-	1.51	-	1.54	1.56	1.55	1.51	-
55	<u>-</u>	-	_	-	<u>-</u>	-	-	-	-
60	<u>-</u>		-	-	-	-	-	-	-
00	-		-		-			-	-
Mass flow in kg/l	1								
5	-	-	-	-	-	-	-	-	ı
15	21	26	33	40	49	-	-	-	
20	20	26	32	40	48	58	-	-	1
30	-	25	31	39	48	58	69	82	-
40	-	-	30	38	47	57	68	81	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	rformance (C.0	D.P.)							
5	-	-	-	-	-	-	-	-	-
15	2.16	2.72	3.40	4.29	5.47	-	-	-	ı
20	1.88	2.37	2.97	3.71	4.66	5.92	-	-	-
30	-	1.76	2.22	2.76	3.42	4.24	5.30	6.70	1
40	-	-	1.59	2.00	2.48	3.06	3.76	4.63	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
									<u> </u>
Nominal perform	ance at to = -1	0 °C, tc = 45 °C				Pressure switch	settings		

	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R448A

Cond. temp. in				Evapora	ting temperature i	n °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
ooling capacity		T		Т	Т	T		1	
5	-	-	-	-	-	-	-	-	-
15	1 045	1 340	1 695	2 117	2 615	-	-	-	-
20	991	1 279	1 622	2 030	2 510	3 071	-	-	-
30	-	1 146	1 465	1 842	2 284	2 800	3 398	4 090	-
40	-	-	1 294	1 636	2 036	2 503	3 044	3 669	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in V			T	I		I		1	
5	-	-	-	-	-	-	-	-	-
15	483	494	499	495	480	-	-	-	-
20	523	536	546	548	540	519	-	-	-
30	-	640	652	661	664	659	641	610	-
40	-	-	793	803	810	813	808	792	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Surrent consum 5	iption in A	_	_	-	-	-	_	_ [-
15	1.14	1.09	1.07	1.05	1.03	_	_	_	
20	1.21	1.16	1.14	1.14	1.13	1.11	_	-	
	-	1	+				1	1	
30		1.32	1.31	1.31	1.33	1.33	1.30	1.23	
40	-	-	1.51	1.52	1.54	1.56	1.55	1.51	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Mass flow in kg/	/h								
5	-	-	_	-	-	_	_	_	_
15	18	23	29	36	45	_	_	_	-
20	17	23	29	36	45	56	-	-	
30	-	22	28	36	44	55	68	82	
	-		20	30	77	- 55	1	81	
		†	27	25	42	EΛ	ee.		-
40	-	-	27	35	43	54	66		
40 50	-	-	-	-	-	-	-	-	-
40 50 55	-		-	-	-	-	-	-	-
40 50	-	-	-	-	-	-	-	-	
40 50 55 60	-		-	-	-	-	-	-	-
40 50 55 60	- - -		-	-	-	-	-	-	-
40 50 55 60	- - - erformance (C.C	- - - - - D.P.)	-		-	-	-	-	-
40 50 55 60 Coefficient of pe	- - - erformance (C.C		-			-	-		
40 50 55 60 Coefficient of pe	- - erformance (C.C - 2.17		- - - 3.40	- - - 4.27	- - - - 5.45	-	-		
40 50 55 60 Coefficient of pe	- - erformance (C.C - 2.17 1.90		- - - 3.40 2.97	- - - 4.27 3.71	- - - 5.45 4.65	- - - - - 5.91	-		-
40 50 55 60 Coefficient of personal	- - erformance (C.C - 2.17 1.90		- - 3.40 2.97 2.25 1.63	- - 4.27 3.71 2.79	- - - 5.45 4.65 3.44	- - - - 5.91 4.25	- - - - - - - 5.30	- - - - - - 6.70	
40 50 55 60 Coefficient of pe 5 15 20 30	- - erformance (C.C - 2.17 1.90 -	- - - - D.P.) - 2.71 2.38 1.79	- - 3.40 2.97 2.25	- - 4.27 3.71 2.79 2.04	- - 5.45 4.65 3.44 2.51	- - - - 5.91 4.25 3.08	- - - - - 5.30	- - - - - - 6.70 4.63	

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

	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 35 Hz, EN 12900 rating conditions

R448A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
Cooling capacity		T	1	T	1		1		
5	-	-	-	-	-	-	-	-	-
15	1 238	1 588	2 008	2 505	3 089	-	-	-	-
20	1 170	1 510	1 916	2 397	2 962	3 618	-	-	-
30	-	1 342	1 718	2 163	2 685	3 292	3 992	4 795	-
40	-	-	1 502	1 905	2 378	2 931	3 571	4 307	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in W	ı								
5	-	-	-	-	-	-	-	-	-
15	551	561	562	551	525	-	-	-	-
20	598	612	618	616	600	569	-	-	_
30	-	733	745	753	753	742	716	674	-
40	-	-	909	919	927	928	919	899	-
50	-	_	-	-	-	-	-	-	-
55	-	_	-	_	-	-	_	-	-
60	-	_	-	_	-	-	_	-	-
•		•	•	•		•			
Current consump	ption in A	1	1	_	1	1	ı		
5	-	-	-	-	-	-	-	-	-
15	1.23	1.21	1.19	1.15	1.08	-	-	-	-
20	1.30	1.29	1.28	1.26	1.23	1.15	-	-	-
30	-	1.46	1.46	1.47	1.47	1.45	1.40	1.31	-
40	-	-	1.70	1.70	1.71	1.71	1.70	1.67	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Mass flow in kg/h			1		1	T	1		
5	- 04	- 24	-	- 47		-	-	-	-
15	24	31	38	47	57		-	-	-
20	24	31	38	47	57	69	-	-	-
30	-	30	37	46	56	68	81	97	-
40	-	-	36	45	55	67	80	95	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Coefficient of per	rformance (C.C	D.P.)						<u>, </u>	
5	-	-	-	-	-	-	-	-	-
15	2.25	2.83	3.57	4.55	5.88	-	-	-	-
20	1.95	2.47	3.10	3.89	4.94	6.36	-	-	-
30	-	1.83	2.31	2.87	3.57	4.44	5.57	7.12	-
40	-	-	1.65	2.07	2.57	3.16	3.88	4.79	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
lominal perform	ance at to = -10	0 °C, tc = 45 °C				Pressure switch	settings		

	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R448A

Cond. temp. in				Evapora	iting temperature i	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
cooling capacity		1	1	1	T			1	
5	-	-	-	-	-	-	-	-	-
15	1 239	1 587	2 003	2 497	3 077	-	-	-	-
20	1 177	1 516	1 920	2 398	2 958	3 611	-	-	-
30	-	1 364	1 739	2 181	2 698	3 299	3 995	4 795	-
40	-	-	1 539	1 941	2 409	2 953	3 583	4 307	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in W	ı								
5	-	-	-	-	-	_	_	_	_
15	551	561	562	551	525	_	_	-	_
20	598	612	618	616	600	569	_	_	_
30	-	733	745	753	753	742	716	674	_
40		-	909	919	927	928	919	899	<u> </u>
50		_	-	-	-	-	-	-	_
55		_	_	-	-	-	-	-	_
60		_	_	-	_	-	_	-	_
00		1	1	ı	l	I.	I.		
Current consum	ption in A								
5	-	-	-	-	_	-	_	-	-
15	1.23	1.21	1.19	1.15	1.08	-	_	-	_
20	1.30	1.29	1.28	1.26	1.23	1.15	_	-	-
30	-	1.46	1.46	1.47	1.47	1.45	1.40	1.31	-
40	-	-	1.70	1.70	1.71	1.71	1.70	1.67	_
50	-	-	-	-	-	-	_	-	-
55	-	-	-	_	-	-	_	-	-
60	-	-	-	-	_	-	_	-	-
		I.	I.	I.		1	I.		
Mass flow in kg/l	n								
5	-	-	-	-	-	-	-	-	-
15	21	27	34	43	53	-	-	-	-
20	21	27	34	43	53	65	-	-	-
30	-	26	33	42	52	65	79	97	-
40	-	-	32	41	51	64	78	95	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
	<u> </u>								
Coefficient of pe		1							
5	2.25	2 02	2.57	4.52	- 5 96	-	-	-	-
15	2.25	2.83	3.57	4.53	5.86	- 6.25	-	-	-
20	1.97	2.48	3.11	3.90	4.93	6.35		7.40	-
30	-	1.86	2.33	2.90	3.58	4.45	5.58	7.12	-
40	-	-	1.69	2.11	2.60	3.18	3.90	4.79	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 40 Hz, EN 12900 rating conditions

R448A

-20	-15	-10	-	1			
		-10	-5	0	5	10	20
	1		I		T	1	
-	-	-	-	-	-	-	-
1 832	2 313	2 882	3 550	-	-	-	-
1 744	2 210	2 761	3 406	4 155	-	-	-
1 553	1 985	2 495	3 091	3 785	4 584	5 499	-
-	1 738	2 200	2 742	3 373	4 103	4 941	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	_	-	_	-
632	630	613	578	-	-	-	-
691	696	690	668	627	_	_	-
830	843	850	847	831	799	746	-
-	1 028	1 040	1 048	1 048	1 037	1 012	
-	-	-	-	-	-	-	_
-	-	_	-	-	_	_	
-	-	_	_	_	_	_	_
		I	I	I.	I	l I	
-	-	-	-	_	-	_	-
1.34	1.32	1.26	1.15	_	_	_	_
1.42	1.42	1.39	1.33	1.22	-	_	_
1.61	1.62	1.62	1.61	1.58	1.51	1.40	-
-	1.88	1.88	1.88	1.88	1.86	1.83	_
-	-	-	-	-	-	-	-
-	_	_	-	_	-	_	_
-	_	_	-	_	-	_	_
		I	I	I.	I	l I	
-	-	-	-	-	-	-	-
36	44	54	66	-	-	-	-
35	44	54	66	79	-	-	_
34	43	53	65	78	94	111	-
-	42	52	64	77	92	110	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
O.P.)	-	-		_		 	
			- 0.44	1	-	-	-
2.90	3.67	4.70	6.14	-	-	-	-
2.52	3.17	4.00	5.10	6.63		- 7.07	-
1	•						-
					1	1	-
	+			1			-
-	-	-	-			-	-
	-	-	-	-	_	-	-
	1.87	1.87 2.35 - 1.69	1.87 2.35 2.93 - 1.69 2.12 - - - - - - - - - - - -	1.87 2.35 2.93 3.65 - 1.69 2.12 2.62 - - - - - - - - - - - - - - - -	1.87 2.35 2.93 3.65 4.55 - 1.69 2.12 2.62 3.22 - - - - - - - - - - - - - - - - - - - -	1.87 2.35 2.93 3.65 4.55 5.74 - 1.69 2.12 2.62 3.22 3.96 - - - - - - - - - - - - - - - - - - - - - - - - -	1.87 2.35 2.93 3.65 4.55 5.74 7.37 - 1.69 2.12 2.62 3.22 3.96 4.88 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R448A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
				•					
Cooling capacity		1			I				
5	-	-	-	-	-	-	-	-	-
15	1 431	1 830	2 307	2 873	3 536	-	-	-	-
20	1 362	1 751	2 214	2 761	3 402	4 148	-	-	-
30	-	1 579	2 009	2 516	3 107	3 794	4 586	5 499	-
40	-	-	1 782	2 242	2 778	3 399	4 117	4 941	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in W	1								
5	-	_	_	_	-	-	_	_	_
15	623	632	630	613	578	-	_	-	-
20	678	691	696	690	668	627	_	_	_
30	-	830	843	850	847	831	799	746	_
40		-	1 028	1 040	1 048	1 048	1 037	1 012	
50		_	-	-	-	-	-	-	
55		-	-	_	-	-	_	-	
60	_	_	_	_	_	_	_	_	_
			_	_		_	_	ı l	_
Current consump	otion in A								
5	-	-	_	_	_	_	_	_	-
15	1.33	1.34	1.32	1.26	1.15	-	-	-	_
20	1.40	1.42	1.42	1.39	1.33	1.22	-	-	_
30	_	1.61	1.62	1.62	1.61	1.58	1.51	1.40	-
40	-	-	1.88	1.88	1.88	1.88	1.86	1.83	_
50	-	-	-	-	-	-	-	-	-
55	-	_	_	_	_	-	_	_	_
60	-	_	_	_	_	-	_	_	_
00		ı	l	I	I	l	I		
Mass flow in kg/h	1								
5	-	-	-	-	-	-	-	-	-
15	24	31	40	49	61	-	-	-	_
20	24	31	39	49	61	75	-	-	-
30	-	30	39	49	60	74	91	111	-
40	-	-	37	47	59	73	90	110	-
50	-	-	-	-	-	-	_	_	-
55	-	-	-	_	-	-	_	-	-
60	-	-	-	-	-	-	-	-	_
<u>'</u>					•		•		
Coefficient of per	•		_						
5	-	-	1	-	- 0.40	-	-	-	-
15	2.30	2.90	3.66	4.69	6.12	-	-	-	-
20	2.01	2.53	3.18	4.00	5.10	6.62			-
30	-	1.90	2.38	2.96	3.67	4.56	5.74	7.37	-
40	-	-	1.73	2.16	2.65	3.24	3.97	4.88	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-

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

	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 45 Hz, EN 12900 rating conditions

R448A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
• "									
Cooling capacity		1		1	1		1	1	
5	-	-	-	-	-	-	-	-	-
15	1 620	2 073	2 614	3 256	4 008	-	-	-	-
20	1 534	1 974	2 499	3 119	3 846	4 689		-	-
30	-	1 762	2 248	2 822	3 493	4 273	5 171	6 199	-
40	-	-	1 972	2 492	3 102	3 811	4 631	5 572	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in V	v								
5	-	_	_	-	_	-	-	-	-
15	699	708	703	682	639	-	-	-	-
20	761	775	779	770	742	693	-	-	-
30	-	930	945	952	948	928	889	827	-
40	-	-	1 151	1 165	1 174	1 174	1 161	1 131	-
50	_	_	-	-	-	-	-	-	-
55	_	_	_	_	_	-	-	_	-
60	_	_	_	_	-	-	_	_	_
		I	1	l	l	L	L	<u> </u>	
Current consum	ption in A								
5	-	-	_	-	-	_	-	-	-
15	1.43	1.46	1.44	1.36	1.23	-	-	-	_
20	1.50	1.55	1.56	1.52	1.43	1.29	-	-	_
30	-	1.75	1.77	1.78	1.76	1.71	1.63	1.51	_
40	_	-	2.06	2.06	2.05	2.04	2.02	1.99	_
50	-	_	-	-	-	-	-	-	-
55	-	_	_	_	_	-	-	-	-
60	-	-	_	-	-	-	-	-	-
		1		l	l	L	1	<u> </u>	
Mass flow in kg/	'h								
5	-	-	-	-	-	-	-	-	_
15	32	40	50	61	74	-	-	-	-
20	32	40	50	61	74	89	-	-	-
30	_	39	49	60	73	88	106	125	-
40	_	-	48	59	72	87	104	123	_
50	_	_	-	-	-	-	-	-	_
55	-	-	_	-	-	-	-	-	-
60	-	_	_	_	_	-	-	_	_
		1				1	•		
	erformance (C.C	.P.)		1	1		T	 	
		-	-	-	-	-	-	-	-
5	-			4.70	6.27	-	-	-	-
5 15	2.32	2.93	3.72	4.78					
5			3.72 3.21	4.78	5.18	6.77	-	-	-
5 15	2.32	2.93				6.77 4.60	5.82	7.49	-
5 15 20	2.32 2.02	2.93 2.55	3.21	4.05	5.18			1	
5 15 20 30	2.32 2.02	2.93 2.55 1.89	3.21 2.38	4.05 2.96	5.18 3.69	4.60	5.82	7.49	-
5 15 20 30 40	2.32 2.02 - -	2.93 2.55 1.89	3.21 2.38 1.71	4.05 2.96 2.14	5.18 3.69 2.64	4.60 3.25	5.82 3.99	7.49 4.93	-
5 15 20 30 40 50	2.32 2.02 - - -	2.93 2.55 1.89 -	3.21 2.38 1.71	4.05 2.96 2.14	5.18 3.69 2.64	4.60 3.25 -	5.82 3.99 -	7.49 4.93 -	- - -

	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R448A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
Caaling canacity	r in W								
Cooling capacity 5		-	_	_			1		
	4 004	1	1	1	2 000	-	-	-	-
15	1 621	2 071	2 608	3 245	3 992	-	-	-	-
20	1 544	1 983	2 504	3 120	3 842	4 681		-	-
30	-	1 791	2 276	2 845	3 511	4 283	5 174	6 199	-
40	-	-	2 021	2 539	3 142	3 840	4 646	5 572	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in V	v								
5	-	-	-	-	-	-	-	-	_
15	699	708	703	682	639	-	-	-	-
20	761	775	779	770	742	693	-	-	-
30	-	930	945	952	948	928	889	827	_
40	-	-	1 151	1 165	1 174	1 174	1 161	1 131	_
50	-	-	-	-	-	-	-	-	_
55	-	-	-	-	-	-	_	-	_
60	_	-	_	-	-	_	_	_	_
		1	1	I.	l	L	ı		
Current consum	ption in A								
5	-	_	_	_	-	_	_	_	_
15	1.43	1.46	1.44	1.36	1.23	_	_	_	_
20	1.50	1.55	1.56	1.52	1.43	1.29	_	_	_
30	-	1.75	1.77	1.78	1.76	1.71	1.63	1.51	_
40	_	-	2.06	2.06	2.05	2.04	2.02	1.99	_
50	-	-	-	-	-	-	-	-	_
55	_	-	_	-	-	_	_	_	_
60	-	-	_	_	_	_	_	_	_
00		1	1						
Mass flow in kg/	h								
5	-	-	-	-	-	-	-	-	-
15	27	35	45	56	69	-	-	-	-
20	27	35	44	56	69	85	-	-	-
30	-	34	44	55	68	84	103	125	-
40	-	-	42	54	67	83	101	123	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
•	_		•	•	•		•		
Coefficient of pe		1					T	1	
5	-	-	- 0.74	- 4.70	- 0.05	-	-	-	-
15	2.32	2.92	3.71	4.76	6.25		-	-	-
20	2.03	2.56	3.21	4.05	5.18	6.75	-	-	-
30	-	1.92	2.41	2.99	3.70	4.61	5.82	7.49	-
40	-	-	1.76	2.18	2.68	3.27	4.00	4.93	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60									

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

	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 50 Hz, EN 12900 rating conditions

R448A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling conscit-	ı in W								
Cooling capacity 5	/ IN VV -	_	_	_	_	_	_	1	_
			+	1				-	
15	-	2 311	2 913	3 626	4 462		-	-	-
20	-	2 202	2 785	3 474	4 282	5 220		-	-
30	-	1 968	2 508	3 144	3 889	4 755	5 754	6 898	-
40	-	1 713	2 203	2 780	3 456	4 244	5 154	6 200	-
50	-	-	-	2 383	2 984	3 686	4 502	5 443	-
60	-	-	-	-	2 472	3 083	3 797	4 627	-
65	-	-	-	-	-	-	-	-	-
Power input in W	ı								
5	-	-	-	-	-	-	-	-	-
15	-	788	782	757	707	-	-	-	-
20	-	863	868	856	824	767	-	-	-
30	-	1 035	1 052	1 060	1 054	1 031	987	917	-
40	-	1 258	1 277	1 294	1 305	1 305	1 291	1 257	-
50	-	-	-	1 588	1 604	1 617	1 621	1 614	-
60	-	-	-	-	1 980	1 994	2 008	2 016	-
65	-	-	-	_	-	-	_	-	-
		1		1			1	•	
Current consum	ption in A		T		1	T		1	
5	-	-	-	-	-	-	-	-	-
15	-	1.59	1.57	1.48	1.32	-	-	-	-
20	-	1.68	1.69	1.65	1.55	1.38	-	-	-
30	-	1.90	1.93	1.94	1.91	1.85	1.76	1.62	-
40	-	2.25	2.24	2.24	2.23	2.22	2.19	2.16	-
50	-	-	-	2.68	2.62	2.59	2.58	2.60	-
60	-	-	-	-	3.21	3.10	3.04	3.04	-
65	-	-	-	-	-	-	-	-	-
Mana flam in lan	L								
Mass flow in kg/l			1		1	1		1	
5	-	- 45	-	-	-	-	-	-	-
15	-	45	56	68	83	-	-	-	-
20	-	45	55	68	83	99	-	-	-
30	-	44	55	67	82	98	117	139	-
40	-	42	53	66	80	97	116	137	-
50	-	-	-	64	78	95	114	135	-
60	-	-	-	-	75	92	110	132	-
65	-	-	-	-	-	-	-	-	-
Coefficient of pe			Т		T	Т		T	
5	-	-	-	-	-	-	-	-	-
15	-	2.93	3.72	4.79	6.31	-	-	-	-
20	-	2.55	3.21	4.06	5.20	6.80	-	-	-
30	-	1.90	2.38	2.97	3.69	4.61	5.83	7.52	-
40	-	1.36	1.72	2.15	2.65	3.25	3.99	4.93	-
50	-	-	-	1.50	1.86	2.28	2.78	3.37	-
60	-	-	-	-	1.25	1.55	1.89	2.30	-
	-	-	-	-	-	-	_	-	_

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

	,			
Cooling capacity		2 586	W	
Power input		1 432	W	
Current consumption		2.43	Α	
Mass flow		65	kg/h	
C.O.P.		1.81		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R448A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity					I				
5	-	-	-	-	-	-	-	-	-
15	-	2 309	2 906	3 614	4 446		-	-	-
20	-	2 211	2 791	3 475	4 277	5 210	-	-	-
30	-	2 000	2 538	3 171	3 909	4 767	5 757	6 898	-
40	-	-	2 258	2 832	3 501	4 276	5 171	6 200	-
50	-	-	-	2 461	3 054	3 740	4 533	5 443	-
60	-	-	-	-	-	3 159	3 843	4 627	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	_	_	_	_	_	-	_	-
15	-	788	782	757	707	-	-	-	-
20	-	863	868	856	824	767	-	-	-
30	-	1 035	1 052	1 060	1 054	1 031	987	917	_
40	-	-	1 277	1 294	1 305	1 305	1 291	1 257	_
50	_	_	-	1 588	1 604	1 617	1 621	1 614	_
60		-	-	-	-	1 994	2 008	2 016	
65		_	_	_	_	-	-	-	_
				_		_	_	ı l	_
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	_
15	-	1.59	1.57	1.48	1.32	-	_	-	-
20	-	1.68	1.69	1.65	1.55	1.38	-	-	-
30	-	1.90	1.93	1.94	1.91	1.85	1.76	1.62	-
40	-	-	2.24	2.24	2.23	2.22	2.19	2.16	_
50	-	_		2.68	2.62	2.59	2.58	2.60	-
60	-	_	_	-	-	3.10	3.04	3.04	_
65	-	_	_	_	-	-	-	-	_
		L	L	ı	I	ı	<u> </u>	I I	
Mass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	39	50	62	77	-	-	-	-
20	-	39	50	62	77	94	-	-	-
30	-	38	49	61	76	94	114	139	-
40	-	-	47	60	75	92	113	137	-
50	-	-	-	58	73	90	111	135	-
60	-	_	_	-	-	87	107	132	-
65	-	-	-	-	-	-	-	-	-
0									
Coefficient of peri	formance (C.C	D.P.) _	_	_	-	_	_	_	
15	-	2.93	3.71	4.78	6.28	-	-		
		•	3.71			1		-	-
20	-	2.56		4.06	5.19	6.79		- 7.52	-
30	-	1.93	2.41	2.99	3.71	4.62	5.83	7.52	-
40	-	-	1.77	2.19	2.68	3.28	4.01	4.93	-
50	-	-	-	1.55	1.90	2.31	2.80	3.37	-
60	-	-	-	-	-	1.58	1.91	2.30	-
65	-	-	-	-	-	-	-	-	-

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

	,		
Cooling capacity	2 651	W	
Power input	1 432	W	
Current consumption	2.43	Α	
Mass flow	59	kg/h	
C.O.P.	1.85		

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 55 Hz, EN 12900 rating conditions

R448A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity		T				T		1	
5	-	-	-	-	-	-	-	-	-
15	-	2 546	3 208	3 992	4 914	-	-	-	-
20	-	2 427	3 067	3 824	4 713	5 747	-	-	-
30	-	2 172	2 763	3 462	4 281	5 233	6 333	7 594	-
40	-	1 894	2 431	3 064	3 807	4 672	5 673	6 824	-
50	-	-	-	2 631	3 291	4 062	4 958	5 993	-
60	-	-	-	-	2 733	3 404	4 189	5 102	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	_	-	-	-	_	-	-
15	-	874	867	838	784	-	-	-	_
20	-	956	961	948	912	850	-	-	_
30	-	1 143	1 163	1 172	1 167	1 141	1 092	1 015	-
40	_	1 384	1 408	1 428	1 441	1 442	1 426	1 389	_
50	_	-	-	1 746	1 766	1 781	1 788	1 780	_
60	_	-	-	-	2 172	2 190	2 207	2 218	_
65	_	_	_	_	-	-	-	-	_
		1	L	1	L	ı	L	<u> </u>	
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	-
15	-	1.71	1.70	1.60	1.42	-	_	-	-
20	-	1.81	1.83	1.79	1.67	1.49	-	-	-
30	-	2.04	2.09	2.10	2.07	2.00	1.90	1.76	-
40	-	2.43	2.42	2.42	2.41	2.39	2.37	2.34	-
50	-	-	-	2.89	2.83	2.80	2.79	2.81	-
60	-	-	-	-	3.46	3.34	3.28	3.27	-
65	-	-	-	-	-	-	-	-	-
		•	•	•	•	•	•		
Mass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	49	61	75	91	-	-	-	-
20	-	49	61	75	91	109	_	-	-
30	-	48	60	74	90	108	129	153	-
40	-	47	59	73	88	107	128	151	-
50	-	-	-	70	86	104	125	149	-
60	-	-	-	-	83	101	122	145	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	· ·	1	1			T	1	 	
5	-	-	-	-	-	-	-	-	-
15	-	2.91	3.70	4.76	6.27	-	-	-	-
20	-	2.54	3.19	4.03	5.17	6.76	-	-	-
30	-	1.90	2.38	2.95	3.67	4.59	5.80	7.48	-
40	-	1.37	1.73	2.15	2.64	3.24	3.98	4.91	-
50	-	-	-	1.51	1.86	2.28	2.77	3.37	-
60	-	-	-	-	1.26	1.55	1.90	2.30	-
65	-	-	-	-	-	-	-	-	-
						_			
Nominal performa	ance at to = -1	0 °C, tc = 45 °C	10/	_		Pressure switch		27.4	h = =/=)

Cooling capacity	2 852	W
Power input	1 578	W
Current consumption	2.63	Α
Mass flow	72	kg/h
C.O.P.	1 81	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R448A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity					I		Ī		
5	-	-	-	-	-	-	-	-	-
15	-	2 544	3 200	3 980	4 896		-	-	-
20	-	2 437	3 073	3 825	4 708	5 736	-	-	-
30	-	2 207	2 797	3 491	4 302	5 246	6 336	7 594	-
40	-	-	2 492	3 122	3 856	4 708	5 691	6 824	-
50	-	-	-	2 717	3 368	4 122	4 992	5 993	-
60	-	-	-	-	-	3 488	4 239	5 102	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	874	867	838	784	-	-	-	-
20	-	956	961	948	912	850	-	-	-
30	-	1 143	1 163	1 172	1 167	1 141	1 092	1 015	-
40	-	-	1 408	1 428	1 441	1 442	1 426	1 389	-
50	-	-	-	1 746	1 766	1 781	1 788	1 780	-
60	-	-	-	-	-	2 190	2 207	2 218	-
65	-	-	-	-	-	-	-	-	-
				1	·	1		<u>. </u>	
Current consump	tion in A			_		1	1	1 1	
5	-	-	-	-	-	-	-	-	-
15	-	1.71	1.70	1.60	1.42	-	-	-	-
20	-	1.81	1.83	1.79	1.67	1.49	-	-	-
30	-	2.04	2.09	2.10	2.07	2.00	1.90	1.76	-
40	-	-	2.42	2.42	2.41	2.39	2.37	2.34	-
50	-	-	-	2.89	2.83	2.80	2.79	2.81	-
60	-	-	-	-	-	3.34	3.28	3.27	-
65	-	-	-	-	-	-	-	-	-
Maran (1 a.u.) (a. 1 a.u.)									
Mass flow in kg/h					I	T	1		
5	-	-	-	-	-	-	-	-	-
15	-	43	55	68	85	-	-	-	-
20	-	43	55	68	85	104	-	-	-
30	-	42	54	67	84	103	126	153	-
40	-	-	52	66	82	102	124	151	-
50	-	-	-	64	80	99	122	149	-
60	-	-	-	-	-	96	119	145	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.C).P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.91	3.69	4.75	6.25	-	-	-	-
20	-	2.55	3.20	4.03	5.16	6.75	-	-	-
30	-	1.93	2.41	2.98	3.69	4.60	5.80	7.48	-
40	-	-	1.77	2.19	2.68	3.26	3.99	4.91	-
50	-	-	-	1.56	1.91	2.31	2.79	3.37	-
60	-	-	-	-	-	1.59	1.92	2.30	-
65	-	-	-	-	-	-	-	-	-

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

Cooling capacity	2 924	W	
Power input	1 578	W	
Current consumption	2.63	Α	
Mass flow	65	kg/h	
C.O.P.	1.85		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 60 Hz, EN 12900 rating conditions

R448A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
S P	·- w								
Cooling capacity		1			T		T	l I	
5	-	-	-	-	-	-	-	-	-
15	-	2 779	3 499	4 356	5 363	-	-	-	-
20	-	2 649	3 345	4 170	5 141	6 271	-	-	-
30	-	2 372	3 015	3 775	4 667	5 706	6 907	8 287	-
40	-	2 073	2 657	3 345	4 152	5 095	6 187	7 444	-
50	-	-	-	2 878	3 595	4 435	5 412	6 542	-
60	-	-	-	-	2 993	3 725	4 581	5 577	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	_	-	_	-	-	_	_	_
15	-	963	957	927	868	-	-	-	_
20	-	1 053	1 060	1 046	1 008	941	_	_	_
30	-	1 255	1 279	1 290	1 285	1 258	1 205	1 121	_
40	-	1 514	1 542	1 567	1 582	1 584	1 568	1 528	-
50	_	-	-	1 908	1 932	1 950	1 958	1 951	_
60	_	-	-	-	2 366	2 389	2 409	2 422	_
65		-	-	-	-	-	-	-	
00				_	_	_	_	_	
Current consump	otion in A								
5	-	_	-	_	-	-	_	_	_
15	_	1.84	1.83	1.72	1.53	_	_	_	_
20	-	1.95	1.98	1.93	1.80	1.61	-	-	_
30	_	2.19	2.25	2.26	2.23	2.16	2.05	1.90	_
40	_	2.59	2.60	2.60	2.59	2.58	2.55	2.52	_
50	-	-	-	3.10	3.04	3.01	3.00	3.02	_
60	-	-	-	-	3.70	3.58	3.52	3.52	-
65	-	-	-	_	-	-	-	-	-
00			I	I	1	I	I		
Mass flow in kg/h)								
5	-	-	-	-	-	-	-	-	-
15	-	54	67	82	99	-	-	-	-
20	-	54	67	82	99	119	-	-	-
30	-	53	66	81	98	118	141	167	-
40	-	51	64	79	97	116	139	165	-
50	-	-	-	77	94	114	137	162	-
60	-	-	-	-	91	111	133	159	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.C	D.P.) 	-	-	_	-	_	-	_
				1		1			<u> </u>
15	-	2.88	3.66	4.70	6.18	- 6 67	-	-	
20	-	2.52	3.16	3.99	5.10	6.67	- 5.70	- 7.00	-
30	-	1.89	2.36	2.93	3.63	4.54	5.73	7.39	-
40	-	1.37	1.72	2.13	2.62	3.22	3.95	4.87	-
50	-	-	-	1.51	1.86	2.27	2.76	3.35	-
60	-	-	-	-	1.27	1.56	1.90	2.30	-
65	-	-	-	-	-	-	_	_	-

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

Cooling capacity	3 116	W
Power input	1 727	W
Current consumption	2.82	Α
Mass flow	78	kg/h
C.O.P.	1.80	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R448A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity			1		I		I		
5	-	-	-	-	-	-	-	-	-
15	-	2 776	3 491	4 341	5 343	-	-	-	-
20	-	2 660	3 352	4 171	5 135	6 259	-	-	-
30	-	2 411	3 052	3 807	4 690	5 719	6 911	8 287	-
40	-	-	2 724	3 408	4 206	5 134	6 207	7 444	-
50	-	-	-	2 972	3 680	4 500	5 449	6 542	-
60	-	-	-	-	-	3 817	4 635	5 577	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	_	-	-	-	_	_	_
15	-	963	957	927	868	-	-	_	-
20	-	1 053	1 060	1 046	1 008	941	_	_	_
30	-	1 255	1 279	1 290	1 285	1 258	1 205	1 121	_
40		-	1 542	1 567	1 582	1 584	1 568	1 528	
50		-	-	1 908	1 932	1 950	1 958	1 951	
60		-	-	-	- 1 932	2 389	2 409	2 422	
65		-	-	-	-	2 369	2 409	-	
0.5	-	<u> </u>	<u> </u>	<u> </u>		<u> </u>		<u> </u>	-
Current consump	tion in A								
5	-	-	_	-	_	-	_	_	_
15	_	1.84	1.83	1.72	1.53	_	_	_	_
20	-	1.95	1.98	1.93	1.80	1.61	_	_	-
30	-	2.19	2.25	2.26	2.23	2.16	2.05	1.90	_
40	-	-	2.60	2.60	2.59	2.58	2.55	2.52	_
50		-	-	3.10	3.04	3.01	3.00	3.02	_
60		_	-	-	-	3.58	3.52	3.52	
65	-		-	-	-	-	-	-	
05							-	-	
Mass flow in kg/h									
5	-	_	-	-	-	_	-	_	-
15	-	47	60	75	92	-	-	_	-
20	-	47	59	74	92	113	-	-	_
30	-	46	59	74	91	112	137	167	-
40	-	-	57	72	90	111	136	165	_
50		_	-	70	88	108	133	162	
60		_	-	-	-	105	130	159	
65		_	-	_	-	-	-	-	
		ı	1	1	1	1	1	<u> </u>	
Coefficient of per		1	T				1	 	
5	-	-	- 0.05	-	- 0.40	-	-	-	-
15	-	2.88	3.65	4.68	6.16	-	-	-	-
20	-	2.53	3.16	3.99	5.09	6.65	-	-	-
30	-	1.92	2.39	2.95	3.65	4.55	5.73	7.39	-
40	-	-	1.77	2.18	2.66	3.24	3.96	4.87	-
50	-	-	-	1.56	1.90	2.31	2.78	3.35	-
60	-	-	-	-	-	1.60	1.92	2.30	-
65	-	-	-	-	-	-	-	-	-

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

Cooling capacity	3 195	W	
Power input	1 727	W	
Current consumption	2.82	Α	
Mass flow	71	kg/h	
C.O.P.	1.85		

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	0.8	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 65 Hz, EN 12900 rating conditions

R448A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
aclina conceitu	in W								
ooling capacity 5		-	_	-	_	_	-	_	_
15		+	3 787		5 809				
		3 008		4 715		- 0.704	-	-	-
20	-	2 867	3 619	4 512	5 563	6 791			-
30	-	2 571	3 264	4 083	5 048	6 173	7 478	8 978	-
40	-	2 250	2 880	3 622	4 494	5 513	6 696	8 061	-
50	-	-	-	3 122	3 897	4 805	5 862	7 087	-
60	-	-	-	-	3 253	4 044	4 972	6 052	-
65	-	-	-	-	-	-	-	-	-
ower input in W	1								
5	-	-	-	-	-	-	-	-	-
15	-	1 058	1 053	1 022	960	-	-	-	-
20	-	1 154	1 163	1 151	1 111	1 040	-	-	-
30	-	1 371	1 399	1 413	1 409	1 382	1 326	1 236	-
40	-	1 646	1 680	1 709	1 728	1 732	1 715	1 673	-
50	-	-	-	2 073	2 101	2 123	2 134	2 127	-
60	-	-	-	-	2 562	2 590	2 614	2 630	-
65	-	-	-	-	-	-	-	-	-
Surrent consump	otion in A	-	-	-	-	-	-	-	-
15	-	1.97	1.96	1.85	1.66	-	-	-	-
20	-	2.09	2.12	2.07	1.94	1.74	-	-	-
30	-	2.35	2.41	2.42	2.39	2.32	2.20	2.06	-
40	-	2.76	2.78	2.79	2.78	2.76	2.74	2.71	-
50	-	-	-	3.31	3.25	3.22	3.22	3.24	-
60	-	-	-	-	3.95	3.83	3.78	3.78	-
65	-	-	-	-	-	-	-	-	-
L.									
<u> </u>	1								
/lass flow in kg/l	1 -		_	-	_	-	-	_	_
flass flow in kg/l						-	-	-	-
lass flow in kg/l 5 15	-	58	72	89	108	-			
5 15 20	-	58 58	72 72	89 88	108 107	129	-	-	-
5 15 20 30	- - -	58 58 57	72 72 71	89 88 87	108 107 106	- 129 128	- - 153	- - 181	-
5 15 20 30 40	- - - -	58 58 57 55	72 72 71 69	89 88 87 86	108 107 106 104	129 128 126	- - 153 151	- - 181 179	- - -
5 15 20 30 40 50		58 58 57 55	72 72 71 69	89 88 87 86 83	108 107 106 104 102	- 129 128 126 124	- 153 151 148	- 181 179 176	
5 15 20 30 40	- - - -	58 58 57 55	72 72 71 69	89 88 87 86	108 107 106 104	129 128 126	- - 153 151	- - 181 179	- - -
5 15 20 30 40 50 60 65	- - - - - -	58 58 57 55 - -	72 72 71 69 -	89 88 87 86 83	108 107 106 104 102 99	- 129 128 126 124 120	- 153 151 148 145	- 181 179 176	
5 15 20 30 40 50 60	- - - - - -	58 58 57 55 - -	72 72 71 69 -	89 88 87 86 83	108 107 106 104 102 99	- 129 128 126 124 120	- 153 151 148 145	- 181 179 176	
5 15 20 30 40 50 60 65	- - - - - - - rformance (C.0	58 58 57 55 - - -	72 72 71 69 - -	89 88 87 86 83 -	108 107 106 104 102 99	- 129 128 126 124 120	- 153 151 148 145	- - 181 179 176 172	- - - - -
5 15 20 30 40 50 60 65 Coefficient of pe	- - - - - - rformance (C.0	58 58 57 55 - - - - -	72 72 71 69 - -	89 88 87 86 83 -	108 107 106 104 102 99	- 129 128 126 124 120 -	- 153 151 148 145 -	- 181 179 176 172 -	- - - - -
5 15 20 30 40 50 60 65 Coefficient of pe	- - - - - - rformance (C.0	58 58 57 55 - - - - - - - - - - 2.P.) 2.84 2.48	72 72 71 69 - - - - 3.60 3.11	89 88 87 86 83 - - - 4.62 3.92	108 107 106 104 102 99 -	- 129 128 126 124 120 - -	- 153 151 148 145 -	- 181 179 176 172 - -	
5 15 20 30 40 50 60 65 Coefficient of pe	- - - - - - rformance (C.0	58 58 57 55 - - - - - - - 2.P.)	72 72 71 69 - - - - 3.60	89 88 87 86 83 - - - 4.62	108 107 106 104 102 99 -	- 129 128 126 124 120 -	- 153 151 148 145 -	- 181 179 176 172 -	- - - - - -
5 15 20 30 40 50 60 65 Coefficient of periods 15 20 30 40 40 40 40	- - - - - - rformance (C.0	58 58 57 55 - - - - - - - - - - 2.84 2.48 1.88	72 72 71 69 - - - 3.60 3.11 2.33	89 88 87 86 83 - - 4.62 3.92 2.89 2.12	108 107 106 104 102 99 - - - 6.05 5.01 3.58 2.60	- 129 128 126 124 120 - - - - - - - - - - - - - - - - - - -	- 153 151 148 145 - - - - - - - 5.64 3.90	- 181 179 176 172 - - - - - - 7.26 4.82	- - - - - - -
5 15 20 30 40 50 60 65 Coefficient of per 5 15 20 30	- - - - - - rformance (C.0	58 58 57 55 - - - - - - - - - - 2.P.) - 2.84 2.48 1.88 1.37	72 72 71 69 - - - 3.60 3.11 2.33 1.71	89 88 87 86 83 - - - 4.62 3.92 2.89	108 107 106 104 102 99 - - - 6.05 5.01 3.58	- 129 128 126 124 120 - - - - - - - - - - - - - - - - - - -	- 153 151 148 145 - - - - - - - - -	- 181 179 176 172 - - - - - 7.26	- - - - - - - - -

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

Cooling capacity	3 377	W
Power input	1 881	W
Current consumption	3.02	Α
Mass flow	85	kg/h
C.O.P.	1.80	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

	Maximum HP switch setting	27.4	bar(g)
	Minimum LP switch setting	8.0	bar(g)
l	LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900



Danfoss scroll compressor. VLZ028TGA

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

R448A

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity	in W								
5	-	-	-	_	-	-	_	_	_
15	_	3 005	3 779	4 700	5 787	_	_	-	_
					1	1		-	
20	-	2 879	3 626	4 513	5 557	6 778	1	+	<u> </u>
30		2 613	3 303	4 118	5 073	6 188	7 482	8 978	
40	-	-	2 952	3 690	4 552	5 555	6 718	8 061	-
50	-	-	-	3 224	3 988	4 876	5 903	7 087	-
60	-	-	-	-	-	4 145	5 031	6 052	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 058	1 053	1 022	960	-	-	-	-
20	-	1 154	1 163	1 151	1 111	1 040	-	-	-
30	-	1 371	1 399	1 413	1 409	1 382	1 326	1 236	_
40	-	-	1 680	1 709	1 728	1 732	1 715	1 673	-
50	-	-	-	2 073	2 101	2 123	2 134	2 127	-
60	-	-	-	-	-	2 590	2 614	2 630	-
65	-	-	-	_	_	-	-	-	_
		<u> </u>	I.	L		I.			
Current consump	tion in A								
5	-	_	-	_	-	-	_	_	_
15	_	1.97	1.96	1.85	1.66	_	_	_	_
20	-	2.09	2.12	2.07	1.94	1.74	_	_	-
30	-	2.35	2.41	2.42	2.39	2.32	2.20	2.06	-
40	_	-	2.78	2.79	2.78	2.76	2.74	2.71	
50	-	-	-	3.31	3.25	3.22	3.22	3.24	-
60	_	_	_	-	-	3.83	3.78	3.78	_
65	_	-	-	_	_	-	-	-	
00						1			
Mass flow in kg/h	I								
5	-	-	-	-	-	-	-	-	-
15	-	51	65	81	100	-	-	-	-
20	-	51	64	81	100	123	-	-	-
30	-	50	63	80	99	122	149	181	-
40	-	-	62	78	97	120	147	179	-
50	-	-	-	76	95	117	144	176	-
60	-	-	-	-	-	114	141	172	-
65	-	-	-	-	-	-	-	-	-
'			•	•	•	•			
Coefficient of per	formance (C.0	D.P.)	_	_	-	_	_	- [
15	-	2.84	3.59	4.60	6.03	_	-	-	
20	-	2.49	3.12	3.92	5.00	6.52	-	-	
30		1	2.36	2.91		1	1	1	
•	-	1.91		2.91	3.60	4.48	5.64 3.92	7.26	-
40	-	-	1.76		2.63	3.21	+	4.82	-
50	-	-	-	1.56	1.90	2.30	2.77	3.33	-
60	-	-	-	-	-	1.60	1.92	2.30	-
65	-	-	-	-	-	-	-	-	-

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

Cooling capacity	3 462	W	
Power input	1 881	W	
Current consumption	3.02	Α	
Mass flow	77	kg/h	
C.O.P.	1.84		

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900



Danfoss scroll compressor. VLZ028TGA

Performance data at 70 Hz, EN 12900 rating conditions

R448A

	-20 - 3 235 3 083 2 766 2 426 1 157 1 260 1 490 1 782	-15 -15 4 072 3 889 3 508 3 100 1 154 1 272 1 523 1 822	-10 - 5 071 4 849 4 387 3 895 3 364 1 123 1 261 1 541 1 857 2 241	-5 6 251 5 982 5 423 4 830 4 196 3 512 - 1 059 1 221 1 539 1 879	- 7 308 6 636 5 926 5 171 4 364 1 147 1 512	5 8 044 7 201 6 310 5 362 1 454	10 9 667 8 675 7 631 6 527 1 360	
	3 235 3 083 2 766 2 426 - - - 1 157 1 260 1 490 1 782 -	4 072 3 889 3 508 3 100 - - - 1 154 1 272 1 523 1 822 -	5 071 4 849 4 387 3 895 3 364 - - 1 123 1 261 1 541 1 857 2 241	6 251 5 982 5 423 4 830 4 196 3 512 - 1 059 1 221 1 539 1 879	- 7 308 6 636 5 926 5 171 4 364 1 147	- 8 044 7 201 6 310 5 362 	- 9 667 8 675 7 631 6 527 -	
	3 235 3 083 2 766 2 426 - - - 1 157 1 260 1 490 1 782 -	4 072 3 889 3 508 3 100 - - - 1 154 1 272 1 523 1 822 -	5 071 4 849 4 387 3 895 3 364 - - 1 123 1 261 1 541 1 857 2 241	6 251 5 982 5 423 4 830 4 196 3 512 - 1 059 1 221 1 539 1 879	- 7 308 6 636 5 926 5 171 4 364 1 147	- 8 044 7 201 6 310 5 362 	- 9 667 8 675 7 631 6 527 -	
	3 235 3 083 2 766 2 426 - - - 1 157 1 260 1 490 1 782 -	4 072 3 889 3 508 3 100 - - - 1 154 1 272 1 523 1 822 -	5 071 4 849 4 387 3 895 3 364 - - 1 123 1 261 1 541 1 857 2 241	6 251 5 982 5 423 4 830 4 196 3 512 - 1 059 1 221 1 539 1 879	- 7 308 6 636 5 926 5 171 4 364 1 147	- 8 044 7 201 6 310 5 362 	- 9 667 8 675 7 631 6 527 -	
	3 083 2 766 2 426 - - - 1 157 1 260 1 490 1 782 -	3 889 3 508 3 100 - - - 1 154 1 272 1 523 1 822 -	4 849 4 387 3 895 3 364 - - 1 123 1 261 1 541 1 857 2 241	5 982 5 423 4 830 4 196 3 512 - 1 059 1 221 1 539 1 879	7 308 6 636 5 926 5 171 4 364 - - - 1 147	- 8 044 7 201 6 310 5 362 	- 9 667 8 675 7 631 6 527 - -	
	2 766 2 426 - - - 1 157 1 260 1 490 1 782 -	3 508 3 100 - - - 1 154 1 272 1 523 1 822 -	4 387 3 895 3 364 - - 1 123 1 261 1 541 1 857 2 241	5 423 4 830 4 196 3 512 - 1 059 1 221 1 539 1 879	6 636 5 926 5 171 4 364 - - - 1 147	8 044 7 201 6 310 5 362 - -	9 667 8 675 7 631 6 527 -	-
	2 426 - - - 1 157 1 260 1 490 1 782 -	3 100 1 154 1 272 1 523 1 822	3 895 3 364 - - 1 123 1 261 1 541 1 857 2 241	4 830 4 196 3 512 - 1 059 1 221 1 539 1 879	5 926 5 171 4 364 - - - - 1 147	7 201 6 310 5 362 - - -	8 675 7 631 6 527 - - - -	
	- - 1 157 1 260 1 490 1 782	- - 1 154 1 272 1 523 1 822 -	3 364 - - 1 123 1 261 1 541 1 857 2 241	4 196 3 512 - 1 059 1 221 1 539 1 879	5 171 4 364 - - - - 1 147	6 310 5 362 - - - -	7 631 6 527 - - - -	-
	- - 1 157 1 260 1 490 1 782	- - 1 154 1 272 1 523 1 822 -	- - 1 123 1 261 1 541 1 857 2 241	3 512 - 1 059 1 221 1 539 1 879	4 364 - - - - 1 147	5 362 - - - -	6 527 - - - - -	
	- 1 157 1 260 1 490 1 782	- 1 154 1 272 1 523 1 822 -	- 1 123 1 261 1 541 1 857 2 241	- 1 059 1 221 1 539 1 879	- - - 1 147	- - -		
	- 1 157 1 260 1 490 1 782	- 1 154 1 272 1 523 1 822 -	- 1 123 1 261 1 541 1 857 2 241	1 059 1 221 1 539 1 879	- - 1 147			-
	1 157 1 260 1 490 1 782	1 154 1 272 1 523 1 822	1 123 1 261 1 541 1 857 2 241	1 059 1 221 1 539 1 879	- 1 147	-	-	-
	1 157 1 260 1 490 1 782	1 154 1 272 1 523 1 822	1 123 1 261 1 541 1 857 2 241	1 059 1 221 1 539 1 879	- 1 147	-	-	-
	1 260 1 490 1 782 -	1 272 1 523 1 822 -	1 261 1 541 1 857 2 241	1 221 1 539 1 879	1 147	-	-	
	1 490 1 782 - -	1 523 1 822 - -	1 541 1 857 2 241	1 539 1 879			1	-
	1 490 1 782 - -	1 523 1 822 - -	1 541 1 857 2 241	1 539 1 879		1 454	1 360	
- - - in A	1 782 - -	1 822 - -	1 857 2 241	1 879	1		1 300	-
- - - in A	-	-	2 241		1 885	1 869	1 825	-
- - in A	-	-		2 275	2 301	2 313	2 307	_
in A		1	-	2 761	2 794	2 822	2 840	_
in A		-	-	-	-	-	-	_
-		1	1	1	L	1	<u>l</u>	
-								
	-	-	-	-	-	-	-	-
-	2.10	2.09	1.99	1.79	-	-	-	-
-	2.22	2.26	2.21	2.09	1.89	-	-	-
-	2.50	2.57	2.59	2.56	2.48	2.37	2.22	-
-	2.93	2.96	2.97	2.97	2.96	2.93	2.90	-
-	-	-	3.51	3.47	3.45	3.44	3.46	-
-	-	-	-	4.19	4.09	4.04	4.04	-
-	-	-	-	-	-	-	-	-
		•	•	•	•			
-	-	-	-	-	-	-	-	-
-	63	78	95	116	-	-	-	-
-	62	77	95	115	139	-	-	-
-	61	76	94	114	137	164	195	-
-	60	75	92	112	135	162	192	-
-	-	-	90	110	133	159	189	-
-	-	-	-	107	130	156	186	-
-	-	-	-	-	-	-	-	-
					•			
ance (C.O.P.)		T	1	T		1		
-					1			-
-	2.80	3.53	4.52	5.90	-	-	-	-
-			1	4.90	6.37	-	-	-
-	1.86	2.30	2.85	3.52	4.39	5.53	7.11	-
-	1.36	1.70	2.10	2.57	3.14	3.85	4.75	-
-	-	-	1.50	1.84	2.25	2.73	3.31	-
	-	-	-	1.27	1.56	1.90	2.30	-
-	-	-	-	-	-	-	-	-
-								
£				90	90 110 107 107	90 110 133 107 130 107 130 107 130	90 110 133 159 107 130 156 107 130 156 107 130 156 107 130 156 107 130 156 108 156	90 110 133 159 189 107 130 156 186 107 130 156 186 107 130 156 186 107 130 156 186 107 130 156 186 107 130 156 186 107 130 156 186 107 130 156 186 - 108 189 - 108 189 - 108 189 - 108 189 - 108 189 - 108 189 - 108 189 - 108 189 - 108 189 - 108 189 - 108 189 - 108 189 - 108 189 108 186 - 108 186 - 108 186 - 108 186 - 108 188 - 108 188 - 108 188 - 108 189 - 108 1

Cooling capacity	3 635	W
Power input	2 038	W
Current consumption	3.21	Α
Mass flow	91	kg/h
C.O.P.	1.78	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R448A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
ooling capacity	in W								
5		_	_	_	_	_	_	-	_
	-	3 232	4 063	5 055	6 228	-	-	-	
15	-					1	-	-	
30	-	3 096 2 811	3 897 3 551	4 850 4 424	5 975 5 451	7 294	8 048	9 667	
40		-	1	3 968	4 893	6 651 5 972	7 224	8 675	
50	-		3 178	3 474	4 294		6 353		-
		-	-			5 248		7 631	
60 65	-	-	-	-	-	4 472	5 427	6 527	<u>-</u>
05	-	-	-	-	-	-	_	-	
ower input in W		1	1		1	1		, ,	
5	-	-	-	-	-	-	-	-	-
15	-	1 157	1 154	1 123	1 059	-	-	-	-
20	-	1 260	1 272	1 261	1 221	1 147	-	-	-
30	-	1 490	1 523	1 541	1 539	1 512	1 454	1 360	-
40	-	-	1 822	1 857	1 879	1 885	1 869	1 825	-
50	-	-	-	2 241	2 275	2 301	2 313	2 307	-
60	-	-	-	-	-	2 794	2 822	2 840	-
65	-	-	-	-	-	-	-	-	-
urrent consump	tion in A								
5	-	_	_	_	_	_	_	_	_
15	_	2.10	2.09	1.99	1.79	_	_	_	_
20	_	2.22	2.26	2.21	2.09	1.89	_	-	_
30	_	2.50	2.57	2.59	2.56	2.48	2.37	2.22	_
40	<u> </u>	-	2.96	2.97	2.97	2.46	2.93	2.90	
50	-	-	2.90	3.51	3.47	3.45	3.44	3.46	
60		-	-	-	-	4.09	4.04	4.04	
65	-	-	-	-	-	-	-	4.04	
03					-		<u> </u>	-	
lass flow in kg/h		1			1			1	
5	-	-	-	-	-	-	-	-	-
15	-	55	70	87	108	-	-	-	-
20	-	55	69	87	107	132	-	-	-
30	-	54	68	85	106	131	160	195	-
40	-	-	67	84	104	129	158	192	-
50	-	-	-	82	102	126	155	189	-
60	-	-	-	-	-	123	152	186	-
65	-	-	-	-	-	-	-	-	-
coefficient of per	formance (C.0	O.P.)					T.		
5	-	-	-	-	-	-	-	-	-
15	-	2.79	3.52	4.50	5.88	-	-	-	-
20	-	2.46	3.06	3.85	4.89	6.36	-	-	-
30	-	1.89	2.33	2.87	3.54	4.40	5.54	7.11	-
40	-	-	1.74	2.14	2.60	3.17	3.87	4.75	-
50	-	-	-	1.55	1.89	2.28	2.75	3.31	-
60	-	-	-	-	-	1.60	1.92	2.30	-
	-	_	-	_	_	-	_	-	-

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

Cooling capacity	3 726	W	
Power input	2 038	W	
Current consumption	3.21	Α	
Mass flow	83	kg/h	
C.O.P.	1.83		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	0.8	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 75 Hz, EN 12900 rating conditions

R448A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
N 11	·								
Cooling capacity		1	1	1	T			1	
5	-		-	-	-	-	-	-	-
15	-	3 459	4 354	5 424	6 691	-	-	-	-
20	-	3 296	4 156	5 182	6 397	7 821	-	-	-
30	-	2 959	3 749	4 686	5 794	7 093	8 605	10 353	-
40	-	2 600	3 317	4 164	5 163	6 334	7 701	9 285	-
50	-	-	-	3 604	4 492	5 535	6 754	8 172	-
60	-	-	-	-	3 771	4 683	5 753	7 003	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	_	_	_	_	-	_	_	-
15	_	1 260	1 260	1 231	1 167	-	_	_	_
20	_	1 370	1 386	1 377	1 338	1 263	_	_	_
30	_	1 614	1 653	1 675	1 675	1 649	1 589	1 492	
40	<u>-</u>	1 920	1 968	2 008	2 035	2 043	2 028	1 983	
50		-	-	2 412	2 452	2 482	2 497	2 491	
60		-	-	-	2 962	3 001	3 033	3 053	
65		-	-	-	-	-	-	-	
00					_				
Current consump	tion in A								
5	-	_	_	_	_	-	_	_	_
15	-	2.23	2.23	2.13	1.94	-	_	_	_
20	-	2.37	2.40	2.36	2.24	2.05	_	_	_
30	-	2.66	2.73	2.75	2.73	2.66	2.55	2.41	_
40	_	3.09	3.13	3.16	3.16	3.15	3.13	3.10	
50	-	-	-	3.72	3.69	3.67	3.67	3.70	_
60	_	-	-	-	4.43	4.35	4.31	4.32	_
65	-	-	-	-	-	-	-	-	
00			_	_			_	_	
Mass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	67	83	102	124	-	-	-	-
20	-	67	83	102	123	149	-	-	-
30	-	66	82	100	122	147	176	209	-
40	-	64	80	99	120	145	173	206	-
50	-	-	-	96	118	142	171	203	-
60	-	-	-	-	115	139	167	199	-
65	-	-	-	-	-	-	-	-	-
Coefficient of a	former 10 1) D)							
Coefficient of per	rormance (C.C	J.P.) -	_	_	_	-	_	-	
15	-	2.75		4.41	5.74	-	-		
20		•	3.45			1	-	-	<u> </u>
	-	2.41	3.00	3.76	4.78	6.19	1	- 6.04	
30	-	1.83	2.27	2.80	3.46	4.30	5.41	6.94	-
40	-	1.35	1.69	2.07	2.54	3.10	3.80	4.68	-
50	-	-	-	1.49	1.83	2.23	2.70	3.28	-
60	-	-	-	-	1.27	1.56	1.90	2.29	-
65	-	-	-	-	-	-	_	-	-

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

Cooling capacity	3 889	W
Power input	2 199	W
Current consumption	3.41	Α
Mass flow	98	kg/h
C.O.P.	1.77	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R448A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
S 11 16	· · · · · · · · · · · · · · · · · · ·								
Cooling capacity		1	1		I				
5	-		-		-	-	-	-	-
15	-	3 456	4 344	5 406	6 665		-	-	-
20	-	3 310	4 165	5 183	6 389	7 807	-	-	-
30	-	3 008	3 795	4 726	5 823	7 110	8 610	10 353	-
40	-	-	3 400	4 242	5 229	6 383	7 726	9 285	-
50	-	-	-	3 722	4 597	5 616	6 800	8 172	-
60	-	-	-	-	-	4 799	5 822	7 003	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	_	_	-	-	_	_	-
15	-	1 260	1 260	1 231	1 167	_	_	_	-
20	_	1 370	1 386	1 377	1 338	1 263	_	_	
30	<u>-</u>	1 614	1 653	1 675	1 675	1 649	1 589	1 492	
40	-	-	1 968	2 008	2 035	2 043	2 028	1 983	
50	-	-	-	2 412	2 452	2 482	2 497	2 491	
60	-	-	-	-	- 2 452	3 001	3 033	3 053	
65		-	-	-	-	-	-	3 053	
00	-	-		_	-			-	-
Current consump	tion in A								
5	-	_	-	_	-	_	_	_	
15	_	2.23	2.23	2.13	1.94	_	_	_	_
20	-	2.37	2.40	2.36	2.24	2.05	_	_	_
30	_	2.66	2.73	2.75	2.73	2.66	2.55	2.41	
40	<u>-</u>	-	3.13	3.16	3.16	3.15	3.13	3.10	
50		-	-	3.72	3.69	3.67	3.13	3.70	
-	-			-	-			1	-
60	-	-	-			4.35	4.31	4.32	-
65	-	-	-	-	-	-	-	-	-
Mass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	59	74	93	115	-	-	-	-
20	-	59	74	92	115	141	-	-	-
30	-	57	73	91	113	140	171	209	-
40	-	-	71	90	112	138	169	206	-
50	-	-	-	88	109	135	166	203	-
60	-	-	-	-	-	132	163	199	_
65	-	-	-	-	-	-	-	-	-
I.			•	•	•	•	•		
Coefficient of per		1	T		T .	1	T		
5	-	-	-	-	-	-	-	-	-
15	-	2.74	3.45	4.39	5.71	-	-	-	-
20	-	2.42	3.00	3.76	4.78	6.18	-	-	-
30	-	1.86	2.30	2.82	3.48	4.31	5.42	6.94	-
40	-	-	1.73	2.11	2.57	3.12	3.81	4.68	-
50	-	-	-	1.54	1.87	2.26	2.72	3.28	-
60	-	-	-	-	-	1.60	1.92	2.29	-
65	-	-	_	-	-	-	_	_	_

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

Cooling capacity	3 988	W	
Power input	2 199	W	
Current consumption	3.41	Α	
Mass flow	89	kg/h	
C.O.P.	1.81		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	0.8	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 80 Hz, EN 12900 rating conditions

R448A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity	in W								
5	-	-	-	-	_	-	-	-	
15	_	3 681	4 632	5 772	7 127	_	_	-	_
						+	-	-	
30	-	3 506 3 150	4 419 3 986	5 511 4 981	6 807	8 331 7 545	9 163		<u>-</u>
					6 159			11 037	
40	-	2 772	3 532	4 430	5 490	6 738	8 197	9 892	-
50	-	-	-	3 842	4 785	5 895	7 195	8 710	-
60	-	-	-	-	4 029	5 001	6 143	7 479	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	_
15	-	1 368	1 372	1 345	1 282	-	-	-	-
20	-	1 484	1 505	1 500	1 462	1 386	-	-	-
30	-	1 741	1 786	1 814	1 818	1 792	1 732	1 632	-
40	-	2 062	2 117	2 164	2 196	2 208	2 193	2 147	-
50	-	-	-	2 587	2 634	2 668	2 686	2 680	_
60	-	_	-	-	3 166	3 211	3 246	3 268	-
65	_	_	-	_	-	-	-	-	_
		L	I.	I.	I.	I.	I .		
Current consump	tion in A								
5	-	-	-	-	_	-	-	_	-
15	-	2.36	2.36	2.28	2.10	_	-	-	-
20	-	2.51	2.55	2.51	2.41	2.23	-	-	-
30	-	2.81	2.89	2.92	2.90	2.84	2.74	2.60	_
40	-	3.25	3.31	3.35	3.36	3.36	3.34	3.31	_
50	-	-	-	3.92	3.91	3.91	3.91	3.93	_
60	-	_	-	-	4.67	4.61	4.59	4.60	_
65	-	_	-	-	-	-	-	-	_
			1	1	I	1	I	<u> </u>	
Mass flow in kg/h	l								
5	-	-	-	-	-	-	-	-	-
15	-	72	89	109	132	-	-	-	-
20	-	71	88	108	131	158	-	-	-
30	-	70	87	106	129	156	187	222	-
40	-	68	85	105	128	154	184	219	-
50	-	-	-	103	125	152	182	216	-
60	-	-	-	-	123	149	179	213	-
65	-	-	-	-	-	-	-	-	-
'		•		•	•	•	•	· '	
Coefficient of period	formance (C.C	D.P.)	-	-	-	-	_	-	_
15		2.69	3.38	4.29	5.56	-			
	-	+					-	-	
20	-	2.36	2.94	3.67	4.66	6.01	- F 20	- 6.76	-
30	-	1.81	2.23	2.75	3.39	4.21	5.29	6.76	-
40	-	1.34	1.67	2.05	2.50	3.05	3.74	4.61	-
50	-	-	-	1.48	1.82	2.21	2.68	3.25	-
60	-	-	-	-	1.27	1.56	1.89	2.29	-
65	-	-	-	-	-	-	_	-	-

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

	,	
Cooling capacity	4 141	W
Power input	2 364	W
Current consumption	3.61	Α
Mass flow	104	kg/h
C.O.P.	1.75	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R448A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity	in W								
5	-	T -	-	_	_	_	_	_ [_
		+	†	1		-	-		
15	-	3 677	4 621	5 754	7 100	+		-	
20	-	3 521	4 428	5 512	6 799	8 316	-	-	-
30	-	3 201	4 035	5 023	6 190	7 563	9 168	11 037	-
40	-	-	3 620	4 513	5 561	6 790	8 224	9 892	-
50	-	-	-	3 968	4 897	5 982	7 244	8 710	-
60	-	-	-	-	-	5 125	6 216	7 479	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 368	1 372	1 345	1 282	-	-	-	-
20	-	1 484	1 505	1 500	1 462	1 386	-	_	-
30	-	1 741	1 786	1 814	1 818	1 792	1 732	1 632	_
40	-	-	2 117	2 164	2 196	2 208	2 193	2 147	_
50	_	-	-	2 587	2 634	2 668	2 686	2 680	_
60	_	-	-	-	-	3 211	3 246	3 268	
65	_	-	-	-	-	-	-	-	
55		_	_	_	_	_	_	<u>, </u>	
Current consump	tion in A								
5	-	_	_	-	_	-	_	_	_
15	-	2.36	2.36	2.28	2.10	_	_	_	_
20	-	2.51	2.55	2.51	2.41	2.23	_	_	_
30	_	2.81	2.89	2.92	2.90	2.84	2.74	2.60	_
40		-	3.31	3.35	3.36	3.36	3.34	3.31	
50		-	-	3.92	3.91	3.91	3.91	3.93	
60		-	-	-	-	4.61	4.59		
65	-	-	-	-	-	4.01	-	4.60	
05		_		-		-	_	-	-
Mass flow in kg/h	ı								
5	-	-	-	-	-	-	-	-	-
15	=	63	79	99	123	-	-	-	_
20	_	62	79	98	122	151	_	_	-
30	-	61	77	97	120	148	182	222	-
40	-	-	76	95	119	146	180	219	-
50	-	-	-	94	117	144	177	216	_
60	-	-	-	-	-	141	174	213	_
65	_	-	_	_	_	-	-	-	_
		1	1	ı	1	ı	1	<u>. </u>	
Coefficient of per	•	T .			1	1	1	 	
5	-	-	-	-	-	-	-	-	-
15	-	2.69	3.37	4.28	5.54	-	-	-	-
20	-	2.37	2.94	3.68	4.65	6.00	-	-	-
30	-	1.84	2.26	2.77	3.41	4.22	5.29	6.76	-
40	-	-	1.71	2.09	2.53	3.08	3.75	4.61	-
50	-	-	-	1.53	1.86	2.24	2.70	3.25	-
	-	-	-	-	-	1.60	1.91	2.29	-
60									

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

Cooling capacity	4 246	W	
Power input	2 364	W	
Current consumption	3.61	Α	
Mass flow	95	kg/h	
C.O.P.	1.80		

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	0.8	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900



Danfoss scroll compressor. VLZ028TGA

Performance data at 85 Hz, EN 12900 rating conditions

R448A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity	in W								
5	-	_	-	-	_	-	_	-	_
15	_	3 899	4 906	6 118	7 561	_	_	-	_
					1	+	-	-	
20	-	3 713	4 678	5 835	7 213	8 838	1		<u> </u>
30		3 338	4 219	5 271	6 519	7 992	9 716	11 719	
40	-	2 942	3 744	4 691	5 813	7 136	8 688	10 495	-
50	-	-	-	4 078	5 076	6 252	7 633	9 247	-
60	-	-	-	-	4 287	5 318	6 532	7 955	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	_	-	-
15	-	1 481	1 490	1 466	1 404	-	-	-	-
20	-	1 603	1 630	1 628	1 593	1 518	-	-	-
30	-	1 872	1 924	1 958	1 966	1 943	1 883	1 781	-
40	-	2 206	2 271	2 324	2 362	2 377	2 364	2 318	-
50	-	-	-	2 766	2 819	2 858	2 879	2 874	-
60	-	-	-	-	3 373	3 423	3 463	3 487	-
65	_	_	_	-	-	-	-	-	_
		1	1	ı	1	ı	L	<u>. </u>	
Current consump	otion in A								
5	-	-	-	-	-	-	-	-	-
15	-	2.50	2.50	2.43	2.28	-	-	-	-
20	-	2.65	2.69	2.66	2.57	2.42	-	-	-
30	-	2.97	3.05	3.09	3.08	3.03	2.94	2.81	-
40	_	3.40	3.48	3.54	3.56	3.57	3.55	3.51	-
50	-	-	-	4.11	4.13	4.15	4.16	4.17	-
60	-	-	-	-	4.90	4.88	4.88	4.89	_
65	-	-	-	-	-	-	-	-	-
		_1	L	1	ı	1		l l	
Mass flow in kg/h]								
5	-	-	-	-	-	-	-	-	-
15	-	76	94	115	140	-	-	-	-
20	-	75	93	114	139	168	-	-	-
30	-	74	92	113	137	165	198	236	-
40	-	72	90	111	135	163	195	233	-
50	-	-	-	109	133	161	193	229	-
	-	-	-	-	130	158	190	226	-
60		1		-	-	-	-	-	-
60 65	-	-	-						
65		- I	-	_					
65 Coefficient of per	formance (C.C	D.P.)		1		· ·	<u> </u>	_	
65 Coefficient of per	formance (C.0	D.P.)	-	-	- 5 38	-	-	-	<u>-</u>
65 Coefficient of per 5	formance (C.C	D.P.) - 2.63	3.29	- 4.17	5.38	-	-	-	-
65 Coefficient of per 5 15 20	formance (C.C - - -	D.P.) - 2.63 2.32	- 3.29 2.87	- 4.17 3.58	5.38 4.53	5.82	-	-	-
65 Coefficient of per 5 15 20 30	formance (C.C - - - -	2.63 2.32 1.78	- 3.29 2.87 2.19	- 4.17 3.58 2.69	5.38 4.53 3.32	- 5.82 4.11	- - 5.16	- - 6.58	- - -
65 Coefficient of per 5 15 20 30 40	formance (C.C - - - - -	2.63 2.32 1.78 1.33	3.29 2.87 2.19 1.65	- 4.17 3.58 2.69 2.02	5.38 4.53 3.32 2.46	5.82 4.11 3.00	- - 5.16 3.67	- - 6.58 4.53	- - -
65 Coefficient of per 5 15 20 30	formance (C.C - - - -	2.63 2.32 1.78	- 3.29 2.87 2.19	- 4.17 3.58 2.69	5.38 4.53 3.32	- 5.82 4.11	- - 5.16	- - 6.58	- - -

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

	-,	
Cooling capacity	4 390	W
Power input	2 533	W
Current consumption	3.80	Α
Mass flow	110	kg/h
C.O.P.	1.73	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R448A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
0 11 16 1									
Cooling capacity 5	<u>-</u>	_	_	_	_	_	_	_	_
			1			-		 	
15	-	3 896	4 895	6 098	7 532	1	-	-	
20	-	3 729	4 687	5 837	7 204	8 821	- 0.704	-	
30	-	3 392	4 271	5 315	6 552	8 011	9 721	11 719	-
40	-	-	3 838	4 780	5 889	7 191	8 716	10 495	
50	-	-	-	4 211	5 195	6 344	7 685	9 247	-
60	-	-	-	-	-	5 450	6 610	7 955	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 481	1 490	1 466	1 404	-	-	-	-
20	-	1 603	1 630	1 628	1 593	1 518	-	-	-
30	-	1 872	1 924	1 958	1 966	1 943	1 883	1 781	-
40	-	-	2 271	2 324	2 362	2 377	2 364	2 318	-
50	-	-	-	2 766	2 819	2 858	2 879	2 874	-
60	-	-	-	-	-	3 423	3 463	3 487	-
65	-	-	-	-	-	-	-	-	-
Current consump	tion in A	_	_	_	-	_	-	_ [
5		-	+				-		
15	-	2.50	2.50	2.43	2.28	- 2.42	-	-	-
20		2.65	2.69	2.66	2.57	2.42		1	
30	-	2.97	3.05	3.09	3.08	3.03	2.94	2.81	-
40	-	-	3.48	3.54	3.56	3.57	3.55	3.51	-
50	-	-	-	4.11	4.13	4.15	4.16	4.17	-
60	-	-	-	-	-	4.88	4.88	4.89	-
65	-	-	-	-	-	-	-	-	-
Mass flow in kg/h		1		ı			1		
5	-	-	-	-	-	-	-	-	-
15	-	66	84	105	130	-	-	-	-
20	-	66	83	104	129	160	-	-	-
30	-	65	82	103	127	157	193	236	-
40	-	-	81	101	126	155	190	233	-
50	-	-	-	99	124	153	188	229	-
60	-	-	-	-	-	150	185	226	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.C	D.P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.63	3.29	4.16	5.36	-	-	-	-
20	-	2.33	2.88	3.58	4.52	5.81	-	-	-
30	-	1.81	2.22	2.72	3.33	4.12	5.16	6.58	-
40	-	-	1.69	2.06	2.49	3.03	3.69	4.53	-
50	-	-	-	1.52	1.84	2.22	2.67	3.22	-
60	-	-	-	-	-	1.59	1.91	2.28	-
65	-	-	-	-	-	-	-	-	-

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

	,	
Cooling capacity	4 501	W
Power input	2 533	W
Current consumption	3.80	Α
Mass flow	100	kg/h
C.O.P.	1.78	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 90 Hz, EN 12900 rating conditions

R448A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity	in W								
5	-	-	-	_	_	-	-	_	_
		+	†	1	1	-	-		
15	-	4 115	5 178	6 460	7 991	+		-	
20	-	3 917	4 933	6 155	7 614	9 341	-	-	-
30	-	3 523	4 449	5 556	6 874	8 434	10 265	12 398	-
40	-	3 111	3 953	4 949	6 132	7 530	9 174	11 095	-
50	-	-	-	4 312	5 363	6 605	8 068	9 781	-
60	-	-	-	-	4 545	5 636	6 921	8 432	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 598	1 613	1 594	1 535	-	-	-	-
20	-	1 726	1 759	1 763	1 731	1 659	-	-	-
30	-	2 007	2 067	2 107	2 120	2 100	2 042	1 939	_
40	-	2 354	2 428	2 489	2 533	2 552	2 542	2 495	-
50	-	-	-	2 947	3 008	3 053	3 076	3 073	-
60	-	-	-	-	3 582	3 639	3 683	3 708	-
65	_	-	_	-	-	-	-	-	_
		1	1	L.	1	ı	1	<u>. </u>	
Current consump	otion in A								
5	-	-	-	-	-	-	-	-	-
15	-	2.63	2.64	2.58	2.46	-	_	-	-
20	-	2.80	2.84	2.82	2.75	2.63	-	-	-
30	-	3.13	3.22	3.26	3.26	3.22	3.14	3.03	_
40	-	3.56	3.66	3.73	3.77	3.78	3.77	3.73	_
50	-	-	-	4.31	4.36	4.39	4.41	4.42	_
60	-	-	-	-	5.13	5.15	5.18	5.20	_
65	-	-	-	-	-	-	-	-	_
		<u> </u>	I	I	I	I	I	<u> </u>	
Mass flow in kg/h	1								
5	-	-	-	-	-	-	-	-	-
15	-	80	99	122	148	-	-	-	-
20	-	79	98	121	147	178	-	-	-
30	-	78	97	119	145	175	209	250	-
40	-	76	95	117	143	172	206	246	-
50	-	-	-	115	141	170	204	243	-
60	-	-	-	-	138	168	201	240	-
65	-	-	-	-	-	-	-	-	_
		1	1	1	1	ı	1	1	
Coefficient of per		1							
5	-	- 0.57	-	-	-	-	-	-	-
15	-	2.57	3.21	4.05	5.21	-	-	-	-
20	-	2.27	2.80	3.49	4.40	5.63	-	-	-
30	-	1.76	2.15	2.64	3.24	4.02	5.03	6.39	-
40	-	1.32	1.63	1.99	2.42	2.95	3.61	4.45	-
50	-	-	-	1.46	1.78	2.16	2.62	3.18	-
60	-	-	-	-	1.27	1.55	1.88	2.27	-
00									

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

Cooling capacity	4 636	W	
Power input	2 706	W	
Current consumption	4.00	Α	
Mass flow	116	kg/h	
C.O.P.	1.71		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 90 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R448A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity	in W								
5	-	-	-	-	-	-	-	-	-
15	-	4 111	5 166	6 439	7 961	-	-	-	-
20	-	3 934	4 943	6 157	7 606	9 323	_	_	-
30	-	3 580	4 503	5 603	6 909	8 454	10 270	12 398	-
40	-	-	4 052	5 043	6 211	7 588	9 204	11 095	_
50	-	-	_	4 453	5 489	6 703	8 123	9 781	_
60	-	-	_	-	_	5 775	7 004	8 432	_
65	-	-	-	-	-	-	-	-	-
		1	•	•	•	1	•		
Power input in W		1	F		1	1		1	
5	-	-	-	-	-	-	-	-	-
15	-	1 598	1 613	1 594	1 535	-	-	-	-
20	-	1 726	1 759	1 763	1 731	1 659	-	-	-
30	-	2 007	2 067	2 107	2 120	2 100	2 042	1 939	-
40	-	-	2 428	2 489	2 533	2 552	2 542	2 495	-
50	-	-	-	2 947	3 008	3 053	3 076	3 073	-
60	-	-	-	-	-	3 639	3 683	3 708	-
65	-	-	-	-	-	-	-	-	-
Current consump	tion in A								
5	-	-	_	-	-	-	_	_	-
15	-	2.63	2.64	2.58	2.46	-	_	-	_
20	-	2.80	2.84	2.82	2.75	2.63	_	-	_
30	-	3.13	3.22	3.26	3.26	3.22	3.14	3.03	_
40	-	-	3.66	3.73	3.77	3.78	3.77	3.73	_
50	-	-	_	4.31	4.36	4.39	4.41	4.42	_
60	-	_	_	-	-	5.15	5.18	5.20	-
65	-	-	_	-	_	-	-	-	-
		-1			I.	-1		I I	
Mass flow in kg/h								, ,	
5	-	-	-	-	-	-	-	-	-
15	-	70	88	111	138	-	-	-	-
20	-	70	88	110	137	169	-	-	-
30	-	68	86	108	134	166	204	250	-
40	-	-	85	107	133	164	201	246	-
50	-	-	-	105	131	162	198	243	-
60	-	-	-	-	-	159	196	240	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.C	D.P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.57	3.20	4.04	5.19	-	-	-	-
20	-	2.28	2.81	3.49	4.39	5.62	-	-	-
30	-	1.78	2.18	2.66	3.26	4.03	5.03	6.39	-
40	-	-	1.67	2.03	2.45	2.97	3.62	4.45	-
50	-	-	-	1.51	1.83	2.20	2.64	3.18	-
60	-	-	-	-	-	1.59	1.90	2.27	-
65	-	-	-	-	-	-	_	-	-

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

Cooling capacity		4 753	W	
Power input		2 706	W	
Current consumpt	ion	4.00	Α	
Mass flow		106	kg/h	
C.O.P.		1.76		

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 95 Hz, EN 12900 rating conditions

R448A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity		1		1	1	1			
5	-	-		-	-	-	-	-	-
15	-	4 328	5 446	6 798	8 419	-	-	-	-
20	-	4 118	5 184	6 471	8 012	9 840	-	-	-
30	-	3 706	4 675	5 836	7 224	8 870	10 810	13 075	-
40	-	3 279	4 159	5 204	6 446	7 919	9 656	11 691	-
50	-	-	-	4 543	5 648	6 956	8 499	10 312	-
60	-	-	-	-	4 802	5 952	7 310	8 909	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 720	1 742	1 728	1 673	-	-	-	-
20	-	1 853	1 894	1 904	1 877	1 807	-	-	-
30	-	2 145	2 214	2 261	2 280	2 264	2 208	2 105	-
40	-	2 505	2 588	2 658	2 708	2 733	2 725	2 679	-
50	-	-	-	3 133	3 201	3 251	3 278	3 276	-
60	-	-	-	-	3 794	3 857	3 905	3 932	-
65	-	-	_	-	-	-	-	-	-
		1		•	1	•			
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	-
15	-	2.77	2.78	2.74	2.66	-	-	-	-
20	-	2.95	2.98	2.98	2.94	2.85	-	-	-
30	-	3.30	3.38	3.43	3.45	3.43	3.36	3.26	-
40	-	3.71	3.83	3.92	3.97	4.00	3.99	3.95	-
50	-	-	_	4.50	4.59	4.64	4.67	4.67	-
60	-	-	_	-	5.36	5.43	5.48	5.51	_
65	-	-	_	-	-	-	_	_	-
		1							
Mass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	84	104	128	156	-	-	-	-
20	-	83	103	127	154	187	-	-	-
30	-	82	102	125	152	184	221	263	-
40	-	81	100	123	150	181	217	259	-
50	-	-	-	121	148	179	215	256	-
60	-	-	-	-	146	177	212	253	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.C) P)							
5	-	J.P.) -	_	_	_	_	_	_	_
15	-	2.52	3.13	3.93	5.03	-	_	_	-
20	-	2.22	2.74	3.40	4.27	5.44	_	_	-
30	_	1.73	2.11	2.58	3.17	3.92	4.90	6.21	_
40		1.73	1.61	1.96	2.38	2.90	3.54	4.36	
10	-	-	-	1.45	1.76	2.14	2.59	3.15	
50	-	_	ļ <u>-</u>				1.87	2.27	
50 60	-	-	-	-	1.27	1.54			-

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

	-,	
Cooling capacity	4 879	W
Power input	2 884	W
Current consumption	4.19	Α
Mass flow	122	kg/h
C.O.P.	1.69	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	0.8	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 95 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R448A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity		T			1	1		1	
5	-	-			-	-	-	-	-
15	-	4 324	5 434	6 776	8 387	-	-	-	-
20	-	4 136	5 195	6 472	8 003	9 822	-	-	-
30	-	3 766	4 732	5 886	7 260	8 891	10 815	13 075	-
40	-	-	4 264	5 302	6 529	7 980	9 688	11 691	-
50	-	-	-	4 692	5 781	7 059	8 558	10 312	-
60	-	-	-	-	-	6 100	7 397	8 909	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 720	1 742	1 728	1 673	-	-	-	-
20	-	1 853	1 894	1 904	1 877	1 807	-	-	-
30	-	2 145	2 214	2 261	2 280	2 264	2 208	2 105	-
40	-	-	2 588	2 658	2 708	2 733	2 725	2 679	-
50	-	-	-	3 133	3 201	3 251	3 278	3 276	-
60	-	-	-	-	-	3 857	3 905	3 932	-
65	-	-	-	-	-	-	-	-	-
		•				•			
Current consump		1			1				
5	-	-	-	-	-	-	-	-	-
15	-	2.77	2.78	2.74	2.66	-	-	-	-
20	-	2.95	2.98	2.98	2.94	2.85	-	-	-
30	-	3.30	3.38	3.43	3.45	3.43	3.36	3.26	-
40	-	-	3.83	3.92	3.97	4.00	3.99	3.95	-
50	-	-	-	4.50	4.59	4.64	4.67	4.67	-
60	-	-	-	-	-	5.43	5.48	5.51	-
65	-	-	-	-	-	-	-	-	-
Mass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	74	93	117	145	-	-	-	-
20	-	73	92	115	144	178	-	-	-
30	-	72	91	114	141	175	215	263	-
40	-	-	90	112	139	172	212	259	-
50	-	-	-	111	138	170	209	256	-
60	-	-	-	-	-	168	207	253	-
65	-	-	-	-	-	-	-	-	-
Coefficient of peri	formanas (C.) P \							
5	-	J.P.) -	_	_	_	_	_	_	_
15	-	2.51	3.12	3.92	5.01	-	-	_	_
20	-	2.23	2.74	3.40	4.26	5.43	-	_	-
	_	1.76	2.14	2.60	3.18	3.93	4.90	6.21	_
30		-	1.65	1.99	2.41	2.92	3.56	4.36	_
30 40	-	1		1				t	_
40	-	_	_	1.50	1 1 81	2 17	2 h1	3.15	
	<u>-</u> -	-	-	1.50	1.81	2.17 1.58	2.61 1.89	3.15 2.27	-

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

Cooling capacity	5 002	W	
Power input	2 884	W	
Current consumption	4.19	Α	
Mass flow	111	kg/h	
C.O.P.	1.73		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 100 Hz, EN 12900 rating conditions

R448A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
	147								
Cooling capacity		1		1	1				
5	-	- 4.500		7.100	-	-	-	-	-
15	-	4 539	5 710	7 133	8 843	-	-	-	-
20	-	4 316	5 432	6 782	8 405	10 336	-	-	-
30	-	3 886	4 897	6 112	7 568	9 302	11 350	13 749	-
40	-	3 444	4 363	5 454	6 755	8 303	10 133	12 284	-
50	-	-	-	4 773	5 931	7 303	8 928	10 841	-
60	-	-	-	-	5 059	6 268	7 698	9 386	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	_	-	-	_	_	_	-
15	-	1 847	1 876	1 869	1 819	-	-	-	-
20	-	1 985	2 033	2 050	2 029	1 964	_	_	-
30	-	2 288	2 366	2 421	2 446	2 434	2 381	2 279	_
40	-	2 658	2 753	2 832	2 889	2 919	2 914	2 869	-
50	_	-	-	3 321	3 397	3 454	3 485	3 483	_
60	_	-	-	-	4 008	4 078	4 130	4 159	_
65	_	-	-	-	-	-	-	-	-
00		1	ı	I.	l	ı	I	I I	
Current consump	tion in A								
5	-	-	_	-	_	_	_	_	-
15	-	2.91	2.92	2.91	2.87	-	_	-	-
20	-	3.10	3.13	3.14	3.13	3.08	_	-	-
30	-	3.46	3.55	3.61	3.64	3.63	3.59	3.50	_
40	-	3.86	4.00	4.11	4.18	4.22	4.22	4.17	-
50	-	_	-	4.69	4.82	4.90	4.94	4.93	-
60	-	_	_	-	5.59	5.72	5.80	5.83	-
65	-	-	-	-	-	-	-	-	-
			L	-I	<u> </u>	L	-1	<u> </u>	
Mass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	88	109	134	164	-	-	-	-
20	-	87	108	133	162	197	-	-	-
30	-	86	107	131	159	193	232	277	-
40	-	85	105	129	157	190	228	272	-
50	-	-	-	128	155	188	225	269	-
60	-	-	-	-	154	186	224	267	-
65	-	-	-	-	-	-	-	-	-
Coefficient of peri	formance (C C) P)							
5	-	- -	_	_	_	_	_	-	_
15	-	2.46	3.04	3.82	4.86	-	_	-	
20		2.40	2.67	3.31	4.14	5.26	_	-	
30		1.70	2.07	2.52	3.09	3.82	4.77	6.03	
40	-	1.70	1.58	1.93	2.34	2.84	3.48	4.28	-
-							2.56		
50	-	-	-	1.44	1.75	2.11		3.11	-
60	-	-	-	-	1.26	1.54	1.86	2.26	-
65	-	-	-	-	-	-	-	-	-

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

Cooling capacity	5 119	W	
Power input	3 064	W	
Current consumption	4.39	Α	
Mass flow	128	kg/h	
C.O.P.	1.67		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 100 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R448A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
!!	· 14/								
ooling capacity 5	<u>-</u>	_	_	-	_	_	1	1	
			†	+			-	-	-
15	-	4 534	5 698	7 110	8 810	-	-	-	-
20	-	4 334	5 443	6 784	8 395	10 317	- 44.050	- 42.740	-
30	-	3 949	4 957	6 164	7 607	9 324	11 356	13 749	-
40	-	-	4 473	5 557	6 843	8 367	10 166	12 284	-
50	-	-	-	4 929	6 069	7 411	8 989	10 841	-
60	-	-	-	-	-	6 424	7 790	9 386	-
65	-	-	-	-	-	-	-	-	-
ower input in W		•							
5	-	-	-	-	-	-	-	-	-
15	-	1 847	1 876	1 869	1 819	-	-	-	-
20	-	1 985	2 033	2 050	2 029	1 964	-	-	-
30	-	2 288	2 366	2 421	2 446	2 434	2 381	2 279	-
40	-	-	2 753	2 832	2 889	2 919	2 914	2 869	-
50	-	-	-	3 321	3 397	3 454	3 485	3 483	-
60	-	-	-	-	-	4 078	4 130	4 159	-
65	-	-	-	-	-	-	-	-	-
Surrent consump	tion in A	1 -	_	_	_	_	1 -	_ [_
15	_	2.91	2.92	2.91	2.87	_	_	_	_
20	-	3.10	3.13	3.14	3.13	3.08	_	_	-
30	_	3.46	3.55	3.61	3.64	3.63	3.59	3.50	_
40	-	-	4.00	4.11	4.18	4.22	4.22	4.17	_
50	_	-	-	4.69	4.82	4.90	4.94	4.93	_
60	_	-	-	-	-	5.72	5.80	5.83	_
65		-	-		-	-	-	-	
00									
lass flow in kg/h			T	T	1	1	1	1 1	
5	-	-	-	-	-	-	-	-	-
15	-	77	98	122	153	-	-	-	-
20	-	77	97	121	151	187	-	-	-
30	-	75	95	119	148	183	226	277	-
40	-	-	94	118	146	180	222	272	-
50	-	-	-	116	145	179	220	269	-
60	-	-	-	-	-	177	218	267	-
65	-	-	-	-	-	-	-	-	-
coefficient of per	formance (C.0	O.P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.46	3.04	3.80	4.84	-	-	-	-
20	-	2.18	2.68	3.31	4.14	5.25	-	-	-
30	-	1.73	2.09	2.55	3.11	3.83	4.77	6.03	-
40	-	-	1.62	1.96	2.37	2.87	3.49	4.28	-
50	-	-	-	1.48	1.79	2.15	2.58	3.11	-
60	-	-	-	-	-	1.58	1.89	2.26	-
65	-	_	-	_	-	-	_	_	-

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

tronnia porto manos at to			
Cooling capacity	5 248	W	
Power input	3 064	W	
Current consumption	4.39	Α	
Mass flow	117	kg/h	
C.O.P.	1.71		

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 30 Hz, EN 12900 rating conditions

R449A

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
Cooling og ===='to	ı in W								
Cooling capacity 5	/ IN VV -	_	_	_	_	_	_	_	-
-				1		-	-	-	
15	1 044	1 342	1 699	2 124	2 625	1			-
20	985	1 273	1 619	2 030	2 513	3 077	-	-	-
30	-	1 128	1 448	1 827	2 273	2 793	3 397	4 090	-
40	-	-	1 262	1 605	2 010	2 484	3 034	3 669	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in W	ı								
5	-	-	-	-	-	-	-	-	-
15	483	494	499	495	480	-	-	-	-
20	523	536	546	548	540	519	-	-	-
30	-	640	652	661	664	659	641	610	-
40	-	-	793	803	810	813	808	792	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	_	-	-	-	-	-
60	_	-	-	_	-	_	_	_	_
		L	l	L	l	L	I.		
Current consum	ption in A								
5	-	-	-	-	-	-	-	-	-
15	1.14	1.09	1.07	1.05	1.03	-	_	-	-
20	1.21	1.16	1.14	1.14	1.13	1.11	-	-	-
30	-	1.32	1.31	1.31	1.33	1.33	1.30	1.23	-
40	-	-	1.51	1.52	1.54	1.56	1.55	1.51	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	
60	-	-	-	-	-	-	-	-	-
-		•		•		•			
Mass flow in kg/l	h								
5	-	-	-	-	-	-	-	-	-
15	21	27	33	41	50	-	-	-	-
20	21	26	33	40	49	60	-	-	-
30	-	26	32	40	49	59	71	84	-
40	-	-	31	39	48	58	70	83	-
50	-	-	-	-	-	-	-	-	
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	rformance (C. (D.P.)							
5	-	-	-	-	-	-	-	-	-
15	2.16	2.72	3.40	4.29	5.47	-	-	-	-
20	1.88	2.37	2.97	3.71	4.66	5.92	-	-	-
30	-	1.76	2.22	2.76	3.42	4.24	5.30	6.70	-
40	-	-	1.59	2.00	2.48	3.06	3.76	4.63	-
50	-	-	-	-	-	-	-	-	_
55	-	-	_	_	_	_	_	-	-
60	-	-	-	-	-	-	_	-	-
		<u>.</u>		1		1			1
Nominal perform	nance at to = -1	0 °C, tc = 45 °C				Pressure switch	settings		

	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R449A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
Cooling capacity					1				
5	-	-	-	-	-	-	-	-	-
15	1 047	1 343	1 698	2 120	2 617	-	-	-	-
20	993	1 281	1 625	2 033	2 512	3 073	-	-	-
30	-	1 149	1 468	1 844	2 286	2 802	3 399	4 090	-
40	-	-	1 297	1 638	2 038	2 505	3 045	3 669	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in W	ı								
5	-	_	_	_	_	-	_	_	_
15	483	494	499	495	480	-	-	-	-
20	523	536	546	548	540	519	_	-	_
30	-	640	652	661	664	659	641	610	_
40		-	793	803	810	813	808	792	
50		-	-	-	-	-	-	-	
55		-	-	-	_	-	-	-	
60		_		_				-	
00	-		·		·	·			-
Current consum	ption in A								
5	-	-	-	-	-	-	-	-	-
15	1.14	1.09	1.07	1.05	1.03	-	=	-	_
20	1.21	1.16	1.14	1.14	1.13	1.11	=	-	_
30	-	1.32	1.31	1.31	1.33	1.33	1.30	1.23	-
40	-	-	1.51	1.52	1.54	1.56	1.55	1.51	-
50	-	_	_	_	-	_	_	_	-
55	-	_	_	_	-	-	-	-	_
60	-	-	-	-	-	-	-	-	-
•		•		•	l		1		
Mass flow in kg/l	h								
5	-	-	-	-	-	-	-	-	-
15	18	23	30	37	46	-	-	-	-
20	18	23	29	37	46	57	-	-	-
30	-	22	29	36	45	56	69	84	-
40	-	-	28	35	44	55	68	83	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Coefficient	wformor (C.C.								
Coefficient of pe	rrormance (C.C	J.P.) _	_	_	_	_	_	-	
15	2.17	2.72	3.40	4.28	5.45	-	_	-	
20	1.90	2.72	2.98	3.71	4.66	5.92	-	-	
30	-	1.80	2.25	2.79	3.44	4.25	5.30	6.70	
40	-	-	1.64	2.79	2.52	3.08	3.77	4.63	
	-	1	1.04	-	- 2.52	3.08	-	4.03	
50		-	 			 			-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	

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

	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 35 Hz, EN 12900 rating conditions

R449A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
0 11									
Cooling capacity			1		I		1	1 1	
5		-	-	-	-	-	-	-	-
15	1 238	1 588	2 008	2 505	3 089	-	-	-	-
20	1 170	1 510	1 916	2 397	2 962	3 618	-	-	-
30	-	1 342	1 718	2 163	2 685	3 292	3 992	4 795	-
40	-	-	1 502	1 905	2 378	2 931	3 571	4 307	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in W	ı								
5	-	-	-	-	-	-	_	-	-
15	551	561	562	551	525	-	-	-	-
20	598	612	618	616	600	569	-	-	-
30	-	733	745	753	753	742	716	674	-
40		-	909	919	927	928	919	899	_
50	_	_	-	-	-	-	-	-	_
55		-	-	-	_	-	_	-	_
60	_	_	_	_	-	_	_	_	-
		L	l	L	l	1	l	<u> </u>	
Current consump	ption in A								
5	-	-	-	-	-	-	-	-	-
15	1.23	1.21	1.19	1.15	1.08	_	-	-	-
20	1.30	1.29	1.28	1.26	1.23	1.15	-	-	-
30	-	1.46	1.46	1.47	1.47	1.45	1.40	1.31	-
40	-	_	1.70	1.70	1.71	1.71	1.70	1.67	-
50	-	-	-	-	-	_	-	-	-
55	-	_	_	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
•		•	•	•	1	1	•		
Mass flow in kg/h	'n								
5	-	-	-	-	-	-	-	-	-
15	25	31	39	48	58	-	-	-	-
20	25	31	39	48	58	70	-	-	-
30	-	30	38	47	58	69	83	98	-
40	-	-	37	46	56	68	82	97	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Soefficient of per	rformance (C.C).P.) _	_	_	-	_	_	-	_
15	2.25	2.83	3.57	4.55	5.88	- 6 26	-	-	-
20	1.95	2.47	3.10	3.89	4.94	6.36		7.40	-
30	-	1.83	2.31	2.87	3.57	4.44	5.57	7.12	-
40	-	-	1.65	2.07	2.57	3.16	3.88	4.79	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
ominal perform	ance at to = -1	0 °C. tc = 45 °C				Pressure switch	settinas		
portorm		,							

	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R449A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
Cooling capacity		1			I				
5	-	-	-	-	-	-	-	-	-
15	1 241	1 589	2 006	2 499	3 079	-	-	-	-
20	1 180	1 519	1 923	2 401	2 961	3 613	-	-	-
30	-	1 367	1 742	2 184	2 701	3 301	3 996	4 795	-
40	-	-	1 543	1 944	2 412	2 956	3 584	4 307	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in W	ı								
5	-	_	_	_	-	-	_	_	_
15	551	561	562	551	525	-	-	_	-
20	598	612	618	616	600	569	_	_	_
30	-	733	745	753	753	742	716	674	_
40		-	909	919	927	928	919	899	
50		_	-	-	-	-	-	-	
55		-	-	_	-	-	-	_	
60	-	_	-	-	-	-	-	-	
00	-				<u> </u>			<u> </u>	-
Current consump	ption in A								
5	-	-	-	-	-	_	-	-	-
15	1.23	1.21	1.19	1.15	1.08	-	_	_	-
20	1.30	1.29	1.28	1.26	1.23	1.15	-	-	-
30	-	1.46	1.46	1.47	1.47	1.45	1.40	1.31	_
40	-	-	1.70	1.70	1.71	1.71	1.70	1.67	_
50	-	-	-	-	-	-	_	-	_
55	_	_	_	_	_	_	_	_	_
60	_	_	_	_	_	_	_	_	_
00		ı	l	I	I	l	1		
Mass flow in kg/h	า								
5	-	-	-	-	-	-	-	-	-
15	21	28	35	44	54	-	-	-	-
20	21	27	35	44	54	67	_	-	-
30	-	27	34	43	54	66	81	98	-
40	-	-	33	42	53	65	80	97	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
		. = .							
Coefficient of per	rformance (C.O).P.) -	_	_	-	_	_	_	
15	2.25	2.83	3.57	4.54	5.86	-	-	-	
20		1		3.90					-
	1.97	2.48	3.11	+	4.93	6.35	- E E0	- 7.10	-
30	-	1.86	2.34	2.90	3.59	4.45	5.58	7.12	-
40	-	-	1.70	2.11	2.60	3.19	3.90	4.79	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-

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

	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 40 Hz, EN 12900 rating conditions

R449A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
		•							
Cooling capacity		1	1	1	Т	T	Т	1	
5	-	-	-	-	-	-	-	-	-
15	1 430	1 832	2 313	2 882	3 550	-	-	-	-
20	1 353	1 744	2 210	2 761	3 406	4 155	-	-	-
30	-	1 553	1 985	2 495	3 091	3 785	4 584	5 499	-
40	-	-	1 738	2 200	2 742	3 373	4 103	4 941	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in W	v								
5	-	_	-	-	_	_	_	_	_
15	623	632	630	613	578	-	-	-	
		1	1	1	ł	+	_	-	
20	678	691	696	690	668	627	+	1	
30	-	830	843	850	847	831	799	746	-
40	-	-	1 028	1 040	1 048	1 048	1 037	1 012	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Current consum	ption in A								
5	-	-	-	-	-	-	-	-	-
15	1.33	1.34	1.32	1.26	1.15	-	-	-	_
20	1.40	1.42	1.42	1.39	1.33	1.22	-	-	-
30	-	1.61	1.62	1.62	1.61	1.58	1.51	1.40	-
40	-	_	1.88	1.88	1.88	1.88	1.86	1.83	_
50	-	-	-	-	_	-	-	-	_
55	_	_	_	_	_	_	_	-	_
60	-	-	-	-	_	-	-	-	_
•		ı	ı	ı			1		
Mass flow in kg/	-	_	_	_	_	_	_	_	
5			+			1	+	1	
15	29	36	45	55	67	-	-	-	-
20	28	36	45	55	67	80	-	-	-
30	-	35	44	54	66	80	95	113	-
40	-	-	43	53	65	79	94	112	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	rformance (C.C	1	T	T	1		T	1	
5	-	-	-	-	-	-	-	-	-
15	2.29	2.90	3.67	4.70	6.14	-	-	-	-
20	2.00	2.52	3.17	4.00	5.10	6.63	-	-	-
30	-	1.87	2.35	2.93	3.65	4.55	5.74	7.37	-
40	-	-	1.69	2.12	2.62	3.22	3.96	4.88	-
50	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
55									

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

	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R449A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
Cooling capacity			1	1	1	1	1	1	
5		-	-	-	-	-	-	-	-
15	1 434	1 833	2 311	2 876	3 539	-	-	-	-
20	1 365	1 754	2 217	2 764	3 405	4 150	-	-	-
30	-	1 582	2 013	2 519	3 110	3 796	4 588	5 499	-
40	-	-	1 786	2 245	2 781	3 402	4 118	4 941	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in W	ı								
5	-	-	-	_	_	-	_	_	_
15	623	632	630	613	578	-	-	-	-
20	678	691	696	690	668	627	_	_	_
30	-	830	843	850	847	831	799	746	_
40		-	1 028	1 040	1 048	1 048	1 037	1 012	
50		-	-	-	-	-	-	-	_
55		-	-	-	-	-	-	-	
60	-	-	-	-	<u>-</u>	-	-	-	
00	-	<u> </u>	<u> </u>	<u> </u>					-
Current consum	ption in A								
5	-	-	-	-	-	-	-	-	-
15	1.33	1.34	1.32	1.26	1.15	-	-	-	-
20	1.40	1.42	1.42	1.39	1.33	1.22	-	-	-
30	-	1.61	1.62	1.62	1.61	1.58	1.51	1.40	-
40	-	-	1.88	1.88	1.88	1.88	1.86	1.83	-
50	-	-	-	_	_	-	-	-	_
55	_	_	_	_	_	_	_	_	_
60	_	_	_	_	_	_	_	_	_
		I	1	1		1		1	
Mass flow in kg/l	h								
5	-	-	-	-	-	-	-	-	-
15	25	32	40	50	62	-	-	-	-
20	24	32	40	50	62	76	-	-	-
30	-	31	39	50	62	76	93	113	-
40	-	-	38	48	61	75	92	112	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	rformance (C.C) P)							
5	-	,.r., 	_	_	_	-	_	-	_
15	2.30	2.90	3.67	4.69	6.12	_	-	-	
20	2.01	2.54	3.18	4.01	5.10	6.62	-	-	-
30	-	1.91	2.39	2.96	3.67	4.57	5.74	7.37	
40	-	-	1.74	2.90	2.65	3.25	3.74	4.88	
	-	-	-	-	-	-	-	-	
			-	-	-	-	-	-	-
50 55	-	-							

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

	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 45 Hz, EN 12900 rating conditions

R449A

°C (tc)				Evapora	ting temperature	in °C (to)			
C (IC)	-25	-20	-15	-10	-5	0	5	10	20
Cooling capacit	v in W								
5	-	-	_	-	-	_	_	_	-
15	1 620	2 073	2 614	3 256	4 008	_	_	_	_
20	1 534	1 974	2 499	3 119	3 846	4 689	_	_	_
30	-	1 762	2 248	2 822	3 493	4 273	5 171	6 199	_
40	_	-	1 972	2 492	3 102	3 811	4 631	5 572	-
50	_	_	-	-	-	_	-	-	-
55	_	_	-	-	-	_	_	_	-
60	-	-	-	-	-	_	_	_	-
				l				l l	
Power input in \			1	T		T	T	1	
5	-	-	-	-	-	-	-	-	-
15	699	708	703	682	639	-	-	-	-
20	761	775	779	770	742	693	-	-	-
30	-	930	945	952	948	928	889	827	-
40	-	-	1 151	1 165	1 174	1 174	1 161	1 131	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Current consum		ı	1	T		ı	1	T T	
5	- 4.42	- 4.40	- 1 11	- 4.00	- 4.00	-	-	-	-
15	1.43	1.46	1.44	1.36	1.23	1	-	-	
20	1.50	1.55	1.56	1.52	1.43	1.29	1	- 4.54	-
30	-	1.75	1.77	1.78	1.76	1.71	1.63	1.51	-
40	-	-	2.06	2.06	2.05	2.04	2.02	1.99	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Mass flow in kg	/h	_	•	ı		1	1		
Mass flow in kg	/h -	-	-	-	-	-	-	-	-
_		- 41	- 51	- 62	- 76	-	-	-	-
5	-	1				1	1		
5 15	33	41	51	62	76	-	-	-	-
5 15 20	- 33 32	41 41	51 51	62 62	76 76	- 91	-	-	-
5 15 20 30	- 33 32 -	41 41 40	51 51 50	62 62 62	76 76 75	91 90	- - 108	- - 127	
5 15 20 30 40 50	- 33 32 -	41 41 40 -	51 51 50 49	62 62 62 60	76 76 75 74	91 90 89	- - 108 106	- - 127 126	- - -
5 15 20 30 40 50	- 33 32 - -	41 41 40 -	51 51 50 49	62 62 62 60 -	76 76 75 74	91 90 89	- - 108 106 -	- - 127 126 -	- - - -
5 15 20 30 40 50 55 60	- 33 32 - -	41 41 40 - - -	51 51 50 49	62 62 62 60 -	76 76 75 74	91 90 89	- - 108 106 -	- - 127 126 -	- - - -
5 15 20 30 40 50 55 60	- 33 32 - - - - -	41 41 40 - - -	51 51 50 49	62 62 62 60 -	76 76 75 74	91 90 89	- - 108 106 -	- - 127 126 -	- - - -
5 15 20 30 40 50 55 60	- 33 32 - - - - - -	41 41 40 - - - - -	51 50 50 49 - -	62 62 62 60 - -	76 76 75 74 - -	- 91 90 89 - -	- 108 106 - -	- - 127 126 - - -	
5 15 20 30 40 50 55 60	- 33 32 - - - - - - -	41 41 40 - - - - - -	51 50 49 - -	62 62 62 60 - -	76 76 75 74 - -	- 91 90 89 - - -	- 108 106 - - -	- - 127 126 - - -	
5 15 20 30 40 50 55 60 Coefficient of pt	- 33 32 - - - - - - - - - - - - - - - -	41 40 - - - - - - - - - - - - - - - - - -	51 51 50 49 - - - - 3.72	62 62 62 60 - - - - 4.78	76 76 75 74 - - - -	- 91 90 89 - - -	- 108 106 - - -	- 127 126 - - - -	
5 15 20 30 40 50 55 60 Coefficient of pt 5 15	- 33 32 - - - - - erformance (C.O	41 40 - - - - - - - - - - - 2. P.P.) 2.93 2.55	51 51 50 49 - - - - 3.72 3.21	62 62 62 60 - - - - - 4.78 4.05	76 76 75 74 - - - - - 6.27 5.18	- 91 90 89 - - - - -	- 108 106 - - - -	- - 127 126 - - - -	- - - - - - -
5 15 20 30 40 50 55 60 Coefficient of pr 5 15 20	- 33 32 - - - - - erformance (C.O	41 40 - - - - - - - - - - - - - - - - - -	51 51 50 49 - - - - 3.72 3.21 2.38	62 62 62 60 - - - - 4.78 4.05 2.96	76 76 75 74 - - - - 6.27 5.18 3.69	- 91 90 89 - - - - - - - 4.60	- 108 106 - - - - - - - - - - - - - - - - -	- 127 126 - - - - - - - - - - - -	- - - - - - - - -
5 15 20 30 40 50 55 60 Coefficient of pr 5 15 20 30 40	- 33 32 - - - - - erformance (C.O - 2.32 2.02	41 40 - - - - - - D.P.) 2.93 2.55 1.89	51 51 50 49 - - - 3.72 3.21 2.38 1.71	62 62 60 - - - - 4.78 4.05 2.96 2.14	76 76 75 74 - - - - 6.27 5.18 3.69 2.64	- 91 90 89 - - - - - 6.77 4.60	- 108 106 - - - - - - - - - - - - - - - - - - -	- 127 126 - - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -

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

	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R449A

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
0 11 16									
Cooling capacity		1			T		1	<u> </u>	
5	-	-	-	-	-	-	-	-	-
15	1 624	2 074	2 612	3 249	3 995	-	-	-	-
20	1 548	1 986	2 508	3 124	3 845	4 683		-	-
30	-	1 795	2 280	2 849	3 514	4 285	5 176	6 199	-
40	-	-	2 026	2 543	3 145	3 843	4 648	5 572	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in W	ı								
5	-	-	-	-	-	-	-	-	-
15	699	708	703	682	639	-	-	-	-
20	761	775	779	770	742	693	-	-	-
30	-	930	945	952	948	928	889	827	_
40	-	-	1 151	1 165	1 174	1 174	1 161	1 131	-
50	-	-	-	-	-	-	-	-	_
55	-	-	-	_	-	-	_	-	-
60	-	-	_	_	_	-	-	_	_
		L	1	L	l	L	I.	l l	
Current consum	ption in A								
5	-	-	-	-	-	-	-	-	-
15	1.43	1.46	1.44	1.36	1.23	-	-	-	-
20	1.50	1.55	1.56	1.52	1.43	1.29	-	-	-
30	-	1.75	1.77	1.78	1.76	1.71	1.63	1.51	-
40	-	-	2.06	2.06	2.05	2.04	2.02	1.99	-
50	-	-	-	-	-	-	-	-	-
55	-	-	_	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
		•	•	•	•	•	•		
Mass flow in kg/l	n								
5	-	-	-	-	-	-	-	-	-
15	28	36	45	57	70	-	-	-	-
20	28	36	45	57	70	86	-	-	-
30	-	35	45	56	70	86	105	127	-
40	-	-	43	55	68	85	103	126	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	rformance (C () P)							
5	-	- -	-	-	-	-	-	-	-
15	2.32	2.93	3.71	4.77	6.25	-	_	-	-
20	2.03	2.56	3.22	4.06	5.18	6.76	-	-	-
30	-	1.93	2.41	2.99	3.71	4.62	5.82	7.49	_
40	-	-	1.76	2.18	2.68	3.27	4.00	4.93	_
50		-	-	-	-	-	-	-	_
55	<u>-</u>	-	-	-	_	-	_	-	<u>-</u>
60		-	_	_	_	_	_	-	
		1	ı	1	1	1	1	1 1	
lominal perform	ance at to = -1	0 °C, tc = 45 °C				Pressure switch	settings		
_									

Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 50 Hz, EN 12900 rating conditions

R449A

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
S 19 16	· 14/								
Cooling capacity		1			T	T	1	1	
5	-	-	-	-	-	-	-	-	-
15	-	2 311	2 913	3 626	4 462	-	-	-	-
20	-	2 202	2 785	3 474	4 282	5 220		-	-
30	-	1 968	2 508	3 144	3 889	4 755	5 754	6 898	-
40	-	1 713	2 203	2 780	3 456	4 244	5 154	6 200	-
50	-	-	-	2 383	2 984	3 686	4 502	5 443	-
60	-	-	-	-	2 472	3 083	3 797	4 627	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	788	782	757	707	-	-	-	-
20	-	863	868	856	824	767	-	-	-
30	-	1 035	1 052	1 060	1 054	1 031	987	917	-
40	-	1 258	1 277	1 294	1 305	1 305	1 291	1 257	-
50	-	-	-	1 588	1 604	1 617	1 621	1 614	-
60	-	-	_	-	1 980	1 994	2 008	2 016	-
65	_	-	_	_	-	-	-	-	_
					ı		I	I I	
urrent consump		1	T		4	1	ı	1 1	
5	-	-	-	-	-	-	-	-	-
15	-	1.59	1.57	1.48	1.32	-	-	-	-
20	-	1.68	1.69	1.65	1.55	1.38	-	-	-
30	-	1.90	1.93	1.94	1.91	1.85	1.76	1.62	-
40	-	2.25	2.24	2.24	2.23	2.22	2.19	2.16	-
50	-	-	-	2.68	2.62	2.59	2.58	2.60	-
60	-	-	-	-	3.21	3.10	3.04	3.04	-
65	-	-	-	-	-	-	-	-	-
/lass flow in kg/h									
5	-	_	_	_	_	_	_	_	
15	_	46	57	69	84	-	-	-	_
20	_	45	56	69	84	101	-	-	_
30		44	56	69	83	100	120	141	
40		43	54	67	82	99	118	140	
50		-	-	65	80	97	116	138	
60	-	-	-	-	77	94	113	134	
65	-	-	-	-	-	-	-	-	
		1	1	ı	1	1	1	<u>ı</u>	
Coefficient of per	•	1	<u> </u>		1	1	1	 	
5	-	-	- 0.70	- 4.70	-	-	-	-	-
15	-	2.93	3.72	4.79	6.31	-	-	-	-
20	-	2.55	3.21	4.06	5.20	6.80	-	-	-
30	-	1.90	2.38	2.97	3.69	4.61	5.83	7.52	-
40	-	1.36	1.72	2.15	2.65	3.25	3.99	4.93	-
50	-	-	-	1.50	1.86	2.28	2.78	3.37	-
60	-	-	-	-	1.25	1.55	1.89	2.30	-
65	-	-	-	-	-	-	-	-	-
lominal performa	anco at to = 4	0°C to = 45°C				Pressure switch	eattings		
ommai periorma	ance at 101	U U, IL - 40 U			_	riessure SWILCH	seunys		

Cooling capacity	2 586	W	
Power input	1 432	W	
Current consumption	2.43	Α	
Mass flow	66	kg/h	
C.O.P.	1.81		

to: Evaporating temperature at dew point

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

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R449A

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
ooling capacity		1			1	1			
5	-	- 0.040	-	-	-	-	-	-	-
15	-	2 312	2 910	3 618	4 449	-	-	-	-
20	-	2 215	2 795	3 479	4 280	5 213		-	-
30	-	2 004	2 543	3 175	3 913	4 770	5 759	6 898	-
40	-	-	2 263	2 837	3 505	4 280	5 173	6 200	-
50	-	-	-	2 466	3 058	3 744	4 535	5 443	-
60	-	-	-	-	-	3 163	3 845	4 627	-
65	-	-	-	-	-	-	-	-	-
ower input in W									
5	-	-	-	-	-	-	-	-	-
15	-	788	782	757	707	-	-	-	-
20	-	863	868	856	824	767	-	-	-
30	-	1 035	1 052	1 060	1 054	1 031	987	917	-
40	-	-	1 277	1 294	1 305	1 305	1 291	1 257	-
50	-	-	-	1 588	1 604	1 617	1 621	1 614	-
60	-	-	-	-	-	1 994	2 008	2 016	-
65	-	-	-	-	-	-	-	-	-
urrent consump							1	 	
	-	- 4.50	- 4 57	- 4.40	-	-	-	-	-
15	-	1.59	1.57	1.48	1.32	-	-	-	-
20	-	1.68	1.69	1.65	1.55	1.38		-	-
30	-	1.90	1.93	1.94	1.91	1.85	1.76	1.62	-
40	-	-	2.24	2.24	2.23	2.22	2.19	2.16	-
50	-	-	-	2.68	2.62	2.59	2.58	2.60	-
60	-	-	-	-	-	3.10	3.04	3.04	-
65	-	-	-	-	-	-	-	-	-
lass flow in kg/h	l								
5	-	-	-	-	-	-	-	-	-
15	-	40	51	63	78	-	-	-	-
20	-	40	50	63	78	96	-	-	-
30	-	39	50	62	78	95	116	141	-
40	-	-	48	61	76	94	115	140	-
50	-	-	-	59	74	92	113	138	-
60	-	-	-	-	-	89	110	134	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.0	O.P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.93	3.72	4.78	6.29	-	-	-	-
20	-	2.57	3.22	4.06	5.20	6.79	_	-	-
30	-	1.94	2.42	3.00	3.71	4.62	5.84	7.52	-
40	-	-	1.77	2.19	2.69	3.28	4.01	4.93	_
50	-	-	-	1.55	1.91	2.32	2.80	3.37	-
	_	-	-	-	-	1.59	1.92	2.30	
60									

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

recommendation of the experience of the experien			
Cooling capacity	2 656	W	
Power input	1 432	W	
Current consumption	2.43	Α	
Mass flow	60	kg/h	
C.O.P.	1.85		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 55 Hz, EN 12900 rating conditions

R449A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
S	·- M								
Cooling capacity		1		1	1				
5	-		-	-	-	-	-	-	-
15	-	2 546	3 208	3 992	4 914	-	-	-	-
20	-	2 427	3 067	3 824	4 713	5 747	-	-	-
30	-	2 172	2 763	3 462	4 281	5 233	6 333	7 594	-
40	-	1 894	2 431	3 064	3 807	4 672	5 673	6 824	-
50	-	-	-	2 631	3 291	4 062	4 958	5 993	-
60	-	-	-	-	2 733	3 404	4 189	5 102	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	_	-	_	-	-	_	_	_
15	-	874	867	838	784	-	-	-	-
20	-	956	961	948	912	850	_	-	_
30	-	1 143	1 163	1 172	1 167	1 141	1 092	1 015	_
40	-	1 384	1 408	1 428	1 441	1 442	1 426	1 389	_
50	_	-	-	1 746	1 766	1 781	1 788	1 780	_
60	_	-	-	-	2 172	2 190	2 207	2 218	_
65		-	-	-	-	-	-	-	
55		_	_	_	_	_	_	1	
Current consump	otion in A								
5	-	_	-	-	-	_	_	_	-
15	_	1.71	1.70	1.60	1.42	_	_	_	_
20	-	1.81	1.83	1.79	1.67	1.49	-	-	_
30	_	2.04	2.09	2.10	2.07	2.00	1.90	1.76	_
40	_	2.43	2.42	2.42	2.41	2.39	2.37	2.34	_
50	-	-	-	2.89	2.83	2.80	2.79	2.81	_
60	-	-	-	-	3.46	3.34	3.28	3.27	_
65	-	-	-	-	-	-	-	-	_
00			I	I	1	I	I	<u> </u>	
/lass flow in kg/h	l								
5	-	-	-	-	-	-	-	-	-
15	-	50	62	76	93	-	-	-	-
20	-	50	62	76	93	111	-	-	-
30	-	49	61	75	92	110	132	156	-
40	-	48	60	74	90	109	130	154	-
50	-	-	-	72	88	107	128	152	-
60	-	-	-	-	85	104	125	148	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.C	D.P.) 	_	_	_	-	_	-	_
15	-	2.91	3.70	4.76	6.27	-	-		
20		•				1	-	-	
	-	2.54	3.19	4.03	5.17	6.76		7.40	-
30	-	1.90	2.38	2.95	3.67	4.59	5.80	7.48	-
40	-	1.37	1.73	2.15	2.64	3.24	3.98	4.91	-
50	-	-	-	1.51	1.86	2.28	2.77	3.37	-
60	-	-	-	-	1.26	1.55	1.90	2.30	-
65	-	_	-	-	-	_	_	_	_

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

Cooling capacity	2 852	W	
Power input	1 578	W	
Current consumption	2.63	Α	
Mass flow	73	kg/h	
C.O.P.	1.81		

to: Evaporating temperature at dew point

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

Pressure switch settings

	Maximum HP switch setting	27.4	bar(g)
	Minimum LP switch setting	8.0	bar(g)
l	LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R449A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity	in W								
5	-	-	_	-	-	-	_	-	
15	_	2 548	3 205	3 984	4 899	-	_	-	
						+		-	
20		2 441	3 077	3 829	4 712	5 739	1		-
30	-	2 212	2 802	3 496	4 307	5 249	6 338	7 594	-
40	-	-	2 498	3 127	3 861	4 711	5 694	6 824	-
50	-	-	-	2 723	3 373	4 126	4 995	5 993	-
60	-	-	-	-	-	3 493	4 242	5 102	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	_	-	_	-	_	-	-
15	-	874	867	838	784	-	_	-	-
20	-	956	961	948	912	850	-	-	-
30	-	1 143	1 163	1 172	1 167	1 141	1 092	1 015	_
40	_	-	1 408	1 428	1 441	1 442	1 426	1 389	_
50	_	-	-	1 746	1 766	1 781	1 788	1 780	_
60		-	-	-	-	2 190	2 207	2 218	
65		-	_	-	_	-	-	-	
00		_	_			_	_		
Current consump	otion in A								
5	-	_	_	_	-	_	_	_	_
15	_	1.71	1.70	1.60	1.42	_	_	_	_
20	-	1.81	1.83	1.79	1.67	1.49	-	-	_
30	_	2.04	2.09	2.10	2.07	2.00	1.90	1.76	_
40		-	2.42	2.42	2.41	2.39	2.37	2.34	_
50		-	-	2.89	2.83	2.80	2.79	2.81	
60		-	_	-	-	3.34	3.28	3.27	
65		-			 		-		
65	-	-	-	-	-	-	-	-	-
Mass flow in kg/h	1								
5	-	-	-	-	-	-	=	-	-
15	-	44	56	70	86	-	-	-	-
20	-	44	56	69	86	106	-	-	-
30	-	43	55	69	85	105	128	156	-
40	-	-	53	67	84	104	127	154	-
50	_	-	-	66	82	101	124	152	_
60	_	-	-	-	-	98	121	148	_
65		-	_	_	_	-	-	-	_
00	-			1 -		· -	· -		
Coefficient of per	formance (C.0	O.P.)		T	1	1	1	<u> </u>	
5	-	-	-	-	-	-	-	-	-
15	-	2.92	3.70	4.75	6.25	-	-	-	-
20	-	2.55	3.20	4.04	5.16	6.75	-	-	-
30	-	1.94	2.41	2.98	3.69	4.60	5.80	7.48	-
40	-	-	1.77	2.19	2.68	3.27	3.99	4.91	-
50	-	-	-	1.56	1.91	2.32	2.79	3.37	-
	-	-	-	-	-	1.59	1.92	2.30	-
60									

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

	,			
Cooling capacity		2 930	W	
Power input		1 578	W	
Current consumption		2.63	Α	
Mass flow		67	kg/h	
C.O.P.		1.86		

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 60 Hz, EN 12900 rating conditions

R449A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity		T		I	T	T		1	
5	-	-	-	-	-	-	-	-	-
15	-	2 779	3 499	4 356	5 363	-	-	-	-
20	-	2 649	3 345	4 170	5 141	6 271	-	-	-
30	-	2 372	3 015	3 775	4 667	5 706	6 907	8 287	-
40	-	2 073	2 657	3 345	4 152	5 095	6 187	7 444	-
50	-	-	-	2 878	3 595	4 435	5 412	6 542	-
60	-	-	-	-	2 993	3 725	4 581	5 577	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	_	-	-	-	_	_	-
15	-	963	957	927	868	-	-	-	-
20	_	1 053	1 060	1 046	1 008	941	-	-	-
30	_	1 255	1 279	1 290	1 285	1 258	1 205	1 121	_
40	-	1 514	1 542	1 567	1 582	1 584	1 568	1 528	_
50	_	-	-	1 908	1 932	1 950	1 958	1 951	_
60	-	_	_	-	2 366	2 389	2 409	2 422	_
65	_	_	_	_	-	-	-	-	
55		_		_		_	_	<u> </u>	
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	-
15	-	1.84	1.83	1.72	1.53	-	-	-	-
20	-	1.95	1.98	1.93	1.80	1.61	-	-	-
30	-	2.19	2.25	2.26	2.23	2.16	2.05	1.90	-
40	-	2.59	2.60	2.60	2.59	2.58	2.55	2.52	-
50	-	-	-	3.10	3.04	3.01	3.00	3.02	-
60	-	-	-	-	3.70	3.58	3.52	3.52	-
65	-	-	-	-	-	-	-	-	-
		•	•	•	•	•	•		
Mass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	55	68	83	101	-	-	-	-
20	-	55	68	83	101	121	-	-	-
30	-	54	67	82	100	120	144	170	-
40	-	52	65	81	99	119	142	168	-
50	-	-	-	79	96	117	140	166	-
60	-	-	-	-	93	113	136	162	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C C	. P.)							
5	-	J.P.) -	_	_	_	_	_	-	_
15	-	2.88	3.66	4.70	6.18	-	_	_	-
20	-	2.52	3.16	3.99	5.10	6.67	-	-	-
30	_	1.89	2.36	2.93	3.63	4.54	5.73	7.39	_
40	_	1.37	1.72	2.13	2.62	3.22	3.95	4.87	
		-	-	1.51	1.86	2.27	2.76	3.35	
50	-	<u> </u>	 				1.90	2.30	
50 60	-	-	-	-	1.27	1.56			

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

	-,		
Cooling capacity	3 116	W	
Power input	1 727	W	
Current consumption	2.82	Α	
Mass flow	80	kg/h	
C.O.P.	1.80		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R449A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity 5	<u>-</u>	_	_	_	_	_	_	_	
			1			-			
15	-	2 781	3 496	4 346	5 347	1	-	-	
20	-	2 664	3 356	4 176	5 139	6 262	-	- 0.007	-
30	-	2 416	3 057	3 812	4 695	5 723	6 913	8 287	-
40	-	-	2 729	3 413	4 211	5 138	6 209	7 444	-
50	-	-	-	2 978	3 685	4 505	5 452	6 542	-
60	-	-	-	-	-	3 821	4 638	5 577	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	963	957	927	868	-	-	-	-
20	-	1 053	1 060	1 046	1 008	941	-	-	-
30	-	1 255	1 279	1 290	1 285	1 258	1 205	1 121	-
40	-	-	1 542	1 567	1 582	1 584	1 568	1 528	-
50	-	-	-	1 908	1 932	1 950	1 958	1 951	-
60	-	-	-	-	-	2 389	2 409	2 422	-
65	-	-	-	-	-	-	-	-	-
		•	-		•				
Current consump	tion in A	1		•	T	•		, ,	
5	-	-	-	-	-	-	-	-	-
15	-	1.84	1.83	1.72	1.53	-	-	-	-
20	-	1.95	1.98	1.93	1.80	1.61	-	-	-
30	-	2.19	2.25	2.26	2.23	2.16	2.05	1.90	-
40	-	-	2.60	2.60	2.59	2.58	2.55	2.52	-
50	-	-	-	3.10	3.04	3.01	3.00	3.02	-
60	-	-	-	-	-	3.58	3.52	3.52	-
65	-	-	-	-	-	-	-	-	-
Manager (1 a									
Mass flow in kg/h		1					T	<u> </u>	
5	-	- 40	- 01	- 70	- 04	-	-	-	-
15		48	61	76	94				
20	-	48	61	76	94	115	- 140	- 470	-
30	-	47	60	75	93	114	140	170	-
40	-	-	58	74	92	113	138	168	-
50	-	-	-	72	90	111	136	166	-
60	-	-	-	-	-	108	133	162	-
65	-	-	-	=	=	=	-	-	-
Coefficient of per	formance (C.C	D.P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.89	3.65	4.69	6.16	-	-	-	-
20	-	2.53	3.17	3.99	5.10	6.66	-	-	-
30	-	1.93	2.39	2.95	3.65	4.55	5.74	7.39	-
40	-	-	1.77	2.18	2.66	3.24	3.96	4.87	-
50	-	-	-	1.56	1.91	2.31	2.78	3.35	-
60	-	-	-	-	-	1.60	1.93	2.30	-
65	-	-	-	-	-	-	-	-	-

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

	,			
Cooling capacity		3 200	W	
Power input		1 727	W	
Current consumption		2.82	Α	
Mass flow		73	kg/h	
C.O.P.		1.85		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 65 Hz, EN 12900 rating conditions

R449A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
0 11 16 1	14/								
Cooling capacity i		1	1			1		1	
5	-	- 2.000	- 2 707	4 745		-	-	-	-
15	-	3 008	3 787	4 715	5 809		-	-	-
20	-	2 867	3 619	4 512	5 563	6 791	- 7 470	- 0.070	-
30	-	2 571	3 264	4 083	5 048	6 173	7 478	8 978	-
40	-	2 250	2 880	3 622	4 494	5 513	6 696	8 061	-
50	-	-	-	3 122	3 897	4 805	5 862	7 087	-
60	-	-	-	-	3 253	4 044	4 972	6 052	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 058	1 053	1 022	960	-	-	-	-
20	-	1 154	1 163	1 151	1 111	1 040	-	-	-
30	-	1 371	1 399	1 413	1 409	1 382	1 326	1 236	-
40	-	1 646	1 680	1 709	1 728	1 732	1 715	1 673	-
50	-	-	-	2 073	2 101	2 123	2 134	2 127	_
60	-	_	_	-	2 562	2 590	2 614	2 630	_
65	_	-	_	_	-	-	-	-	
		1	1	L	L	1	ı	<u>l</u>	
Current consumpt	ion in A								
5	-	-	-	-	-	-	-	-	-
15	-	1.97	1.96	1.85	1.66	-	-	-	-
20	-	2.09	2.12	2.07	1.94	1.74	-	-	-
30	-	2.35	2.41	2.42	2.39	2.32	2.20	2.06	-
40	-	2.76	2.78	2.79	2.78	2.76	2.74	2.71	-
50	-	-	-	3.31	3.25	3.22	3.22	3.24	-
60	-	-	-	-	3.95	3.83	3.78	3.78	-
65	-	-	-	-	-	-	-	-	-
		•		-	-		•		
Mass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	60	74	90	110	-	-	-	-
20	-	59	73	90	109	131	-	-	-
30	-	58	72	89	108	130	155	184	-
40	-	57	71	88	107	129	154	182	-
50	-	-	-	85	104	126	151	179	-
60	-	-	-	-	101	123	148	176	-
65	-	-	-	-	-	-	-	-	-
		•	•			•	•	<u>. </u>	
Coefficient of perf		T '	1			1	1		
5	-	-	-	-	-	-	-	-	-
15	-	2.84	3.60	4.62	6.05	-	-	-	-
20	-	2.48	3.11	3.92	5.01	6.53	-	-	-
	-	1.88	2.33	2.89	3.58	4.47	5.64	7.26	-
30	-	1.37	1.71	2.12	2.60	3.18	3.90	4.82	-
30 40			-	1.51	1.85	2.26	2.75	3.33	-
	-	-	-						
40		-	-	-	1.27	1.56	1.90	2.30	-
40 50	-		1	1	1.27	1.56	1.90	2.30	-

Cooling capacity

Current consumption

Power input

Mass flow

C.O.P.

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

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	0.8	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

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W

W

kg/h

3 377

1 881

3.02

1.80

87

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



Danfoss scroll compressor. VLZ028TGA

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

R449A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity			1	1	I	1		1	
5	-	-	-	-	-	-	-	-	-
15	-	3 010	3 784	4 705	5 791	-	-	-	-
20	-	2 885	3 632	4 518	5 562	6 782	-	-	-
30	-	2 618	3 309	4 123	5 078	6 192	7 484	8 978	-
40	-	-	2 958	3 696	4 557	5 559	6 721	8 061	-
50	-	-	-	3 230	3 994	4 880	5 905	7 087	-
60	-	-	-	-	-	4 150	5 034	6 052	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	_	_	_	-	_	_	_	_
15	-	1 058	1 053	1 022	960	-	_	-	-
20	-	1 154	1 163	1 151	1 111	1 040	_	_	_
30	-	1 371	1 399	1 413	1 409	1 382	1 326	1 236	_
40		-	1 680	1 709	1 728	1 732	1 715	1 673	
50		-	-	2 073	2 101	2 123	2 134	2 127	
60		-	-	-	2 101	2 590	2 614	2 630	
65		-	-	-	-	2 390	-	-	
0.5	-			<u> </u>					-
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	-
15	-	1.97	1.96	1.85	1.66	-	-	-	-
20	-	2.09	2.12	2.07	1.94	1.74	-	-	-
30	-	2.35	2.41	2.42	2.39	2.32	2.20	2.06	_
40	-	-	2.78	2.79	2.78	2.76	2.74	2.71	-
50	_	-	-	3.31	3.25	3.22	3.22	3.24	-
60	-	_	-	-	_	3.83	3.78	3.78	_
65	-	-	-	-	-	-	_	_	_
			<u>I</u>	1		<u>I</u>		I I	
Mass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	52	66	82	102	-	-	-	-
20	-	52	66	82	102	125	-	-	-
30	-	51	65	81	101	124	151	184	-
40	-	-	63	80	99	122	150	182	-
50	-	-	-	78	97	120	147	179	-
60	-	-	-	-	-	117	144	176	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.C								
5	-	J.P.) -	_	_	-	_	_	-	_
15	-	2.85	3.59	4.61	6.03	-	_	-	-
20	-	2.50	3.12	3.93	5.01	6.52	_	_	-
30		1.91	2.37	2.92	3.60	4.48	5.65	7.26	
40		-	1.76	2.92	2.64	3.21	3.92	4.82	
		+	-				+		-
50		-		1.56	1.90	2.30	2.77	3.33	
			+				+		-
60 65	-	-	-	-	-	1.60	1.93	2.30	

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

	,			
Cooling capacity		3 468	W	
Power input		1 881	W	
Current consumption		3.02	Α	
Mass flow		79	kg/h	
C.O.P.		1.84		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 70 Hz, EN 12900 rating conditions

R449A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
cooling capacity		1			T			<u> </u>	
5	-	-	-	-	-	-	-	-	-
15	-	3 235	4 072	5 071	6 251	-	-	-	-
20	-	3 083	3 889	4 849	5 982	7 308	-	-	-
30	-	2 766	3 508	4 387	5 423	6 636	8 044	9 667	-
40	-	2 426	3 100	3 895	4 830	5 926	7 201	8 675	-
50	-	-	-	3 364	4 196	5 171	6 310	7 631	-
60	-	-	-	-	3 512	4 364	5 362	6 527	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 157	1 154	1 123	1 059	-	_	_	-
20	-	1 260	1 272	1 261	1 221	1 147	-	-	-
30	-	1 490	1 523	1 541	1 539	1 512	1 454	1 360	_
40	-	1 782	1 822	1 857	1 879	1 885	1 869	1 825	_
50	_	-	-	2 241	2 275	2 301	2 313	2 307	
60		-	-	-	2 761	2 794	2 822	2 840	
65		-	-	-	-	-	-	-	
00			_	_	_		_	_	
Current consump	tion in A								
5	-	_	_	-	_	-	_	_	_
15	_	2.10	2.09	1.99	1.79	_	_	_	_
20	-	2.22	2.26	2.21	2.09	1.89	-	-	_
30	_	2.50	2.57	2.59	2.56	2.48	2.37	2.22	_
40	_	2.93	2.96	2.97	2.97	2.96	2.93	2.90	_
50	-	-	-	3.51	3.47	3.45	3.44	3.46	_
60	-	-	_	-	4.19	4.09	4.04	4.04	_
65	-	-	_	-	-	-	-	-	_
00		1	I.	ı	1	ı	1	<u> </u>	
/lass flow in kg/h	l								
5	-	-	-	-	-	-	-	-	-
15	-	64	79	97	118	-	-	-	-
20	-	64	79	97	117	141	-	-	-
30	-	63	78	96	116	140	167	198	-
40	-	61	76	94	115	138	165	196	-
50	-	-	-	92	112	136	163	193	-
60	-	-	-	-	109	133	159	190	-
65	-	-	-	-	-	-	-	-	-
Coefficient of com	forman== 10 0								
Soefficient of per	formance (C.C	J.P.) _	-	_	_	_	_	-	_
15	-	2.80		4.52	5.90	-	-		
20			3.53		1	1	-	-	
	-	2.45	3.06	3.85	4.90	6.37	1	7 11	
30	-	1.86	2.30	2.85	3.52	4.39	5.53	7.11	-
40	-	1.36	1.70	2.10	2.57	3.14	3.85	4.75	-
50	-	-	-	1.50	1.84	2.25	2.73	3.31	-
60	-	-	-	-	1.27	1.56	1.90	2.30	-
65	-	-	_	_	-	-	_	_	_

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

Cooling capacity	3 635	W	
Power input	2 038	W	
Current consumption	3.21	Α	
Mass flow	93	kg/h	
C.O.P.	1.78		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R449A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
	: \A/								
ooling capacity 5			_	_	1	1	1		
	-	- 222	+	1		-	-	-	-
15	-	3 238	4 068	5 060	6 232	7,000	-	-	-
20	-	3 102	3 903	4 856	5 980	7 298	- 0.054	- 0.007	-
30	-	2 818	3 557	4 430	5 456	6 655	8 051	9 667	-
40	-	-	3 184	3 975	4 899	5 976	7 227	8 675	-
50	-	-	-	3 481	4 300	5 253	6 356	7 631	-
60	-	-	-	-	-	4 477	5 430	6 527	-
65	-	-	-	-	-	-	-	-	-
Power input in W					•				
5	-	-	-	-	-	-	-	-	-
15	-	1 157	1 154	1 123	1 059	-	-	-	-
20	-	1 260	1 272	1 261	1 221	1 147	-	-	-
30	-	1 490	1 523	1 541	1 539	1 512	1 454	1 360	-
40	-	-	1 822	1 857	1 879	1 885	1 869	1 825	-
50	-	-	-	2 241	2 275	2 301	2 313	2 307	-
60	-	-	-	-	-	2 794	2 822	2 840	-
65	-	-	-	-	-	-	-	-	-
Surrent consump	otion in A	_	_	_	_	_	_	_	_
15		2.10	2.09	1.99	1.79	-		-	
20	-	2.10	2.09	2.21	2.09	1.89	-	-	
30			2.57	2.59		2.48	2.37	2.22	
40		2.50		2.59	2.56 2.97	2.46		2.22	
50	-	-	2.96	3.51	3.47	3.45	2.93	1	-
	-	+	_	1		+	3.44	3.46	-
60	-	-	-	-	-	4.09	4.04	4.04	-
65	-	-	-	-	-	-	-	-	-
lass flow in kg/h	1								
5	-	-	-	-	-	-	-	-	-
15	-	56	71	89	110	-	-	-	-
20	-	56	70	88	109	134	-	-	-
30	-	55	70	87	108	133	163	198	-
40	-	-	68	86	107	131	161	196	-
50	-	-	-	84	105	129	158	193	-
60	-	-	-	-	-	126	155	190	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.0	O.P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.80	3.53	4.51	5.88	-	-	-	-
20	-	2.46	3.07	3.85	4.90	6.36	-	-	-
30	-	1.89	2.34	2.87	3.54	4.40	5.54	7.11	_
40	-	-	1.75	2.14	2.61	3.17	3.87	4.75	-
50	-	-	-	1.55	1.89	2.28	2.75	3.31	-
	-	_	-	-	-	1.60	1.92	2.30	_
60				1	1				

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

	,			
Cooling capacity		3 733	W	
Power input		2 038	W	
Current consumption		3.21	Α	
Mass flow		85	kg/h	
C.O.P.		1.83		

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 75 Hz, EN 12900 rating conditions

R449A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity		1		1	T				
5	-		-	-	-	-	-	-	-
15	-	3 459	4 354	5 424	6 691	-	-	-	-
20	-	3 296	4 156	5 182	6 397	7 821	-	-	
30	-	2 959	3 749	4 686	5 794	7 093	8 605	10 353	-
40	-	2 600	3 317	4 164	5 163	6 334	7 701	9 285	-
50	-	-	-	3 604	4 492	5 535	6 754	8 172	-
60	-	-	-	-	3 771	4 683	5 753	7 003	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	_	-	_	-	_	_	_	_
15	-	1 260	1 260	1 231	1 167	-	_	_	-
20	-	1 370	1 386	1 377	1 338	1 263	_	_	-
30	-	1 614	1 653	1 675	1 675	1 649	1 589	1 492	_
40	<u>-</u>	1 920	1 968	2 008	2 035	2 043	2 028	1 983	
50	_	-	-	2 412	2 452	2 482	2 497	2 491	
60		-	-	-	2 962	3 001	3 033	3 053	
65		-	-	-	-	-	-	-	
00	_		<u> </u>	<u> </u>	<u> </u>				
Current consump	tion in A								
5	-	-	-	-	-	-	_	_	-
15	_	2.23	2.23	2.13	1.94	_	_	_	_
20	-	2.37	2.40	2.36	2.24	2.05	-	_	_
30	-	2.66	2.73	2.75	2.73	2.66	2.55	2.41	_
40	_	3.09	3.13	3.16	3.16	3.15	3.13	3.10	_
50	-	-	-	3.72	3.69	3.67	3.67	3.70	_
60	_	-	-	-	4.43	4.35	4.31	4.32	_
65	_	-	-	_	-	-	-	-	_
00				_		_		_	
Mass flow in kg/h	ı								
5	-	-	-	-	-	-	-	-	-
15	-	68	85	104	126	-	-	-	-
20	-	68	84	103	126	151	-	-	-
30	-	67	83	102	124	150	179	212	-
40	-	65	82	101	123	148	177	210	-
50	-	-	-	99	120	145	174	207	-
60	-	-	-	-	117	142	171	203	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.C	D.P.) 	_	_	_	_	_	_	_
	-					-	<u> </u>		
15 20		2.75	3.45	4.41	5.74		-	-	
	-	2.41	3.00	3.76	4.78	6.19	1	- 6.04	
30	-	1.83	2.27	2.80	3.46	4.30	5.41	6.94	-
40	-	1.35	1.69	2.07	2.54	3.10	3.80	4.68	-
50	-	-	-	1.49	1.83	2.23	2.70	3.28	-
60	-	-	-	-	1.27	1.56	1.90	2.29	-
65	-	-	-	-	-	_	_	_	-

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

recinitial portormanos acto	0,			
Cooling capacity		3 889	W	
Power input		2 199	W	
Current consumption		3.41	Α	
Mass flow		100	kg/h	
C.O.P.		1.77		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R449A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity	/ in W	1	1		Т	1	1	1	
5	-	-	-	-	-	-	-	-	-
15	-	3 462	4 350	5 411	6 670	-	-	-	-
20	-	3 316	4 171	5 189	6 394	7 811	-	-	-
30	-	3 014	3 801	4 732	5 829	7 114	8 613	10 353	-
40	-	-	3 408	4 249	5 236	6 388	7 729	9 285	-
50	-	-	-	3 729	4 604	5 622	6 803	8 172	-
60	-	-	-	-	-	4 804	5 825	7 003	-
65	-	-	-	-	-	-	-	-	-
Power input in W		1					1	1	
5	-	-	-	-	-	-	-	-	-
15	-	1 260	1 260	1 231	1 167	-	-	-	-
20	-	1 370	1 386	1 377	1 338	1 263	-	-	-
30	-	1 614	1 653	1 675	1 675	1 649	1 589	1 492	-
40	-	-	1 968	2 008	2 035	2 043	2 028	1 983	-
50	-	-	-	2 412	2 452	2 482	2 497	2 491	-
60	-	-	-	-	-	3 001	3 033	3 053	-
65	-	-	-	-	-	-	-	-	-
Current consum	ption in A								
5	-	-	-	-	-	-	-	-	-
15	-	2.23	2.23	2.13	1.94	-	-	-	-
20	-	2.37	2.40	2.36	2.24	2.05	-	-	-
30	-	2.66	2.73	2.75	2.73	2.66	2.55	2.41	-
40	-	-	3.13	3.16	3.16	3.15	3.13	3.10	1
50	-	-	-	3.72	3.69	3.67	3.67	3.70	-
60	-	-	-	-	-	4.35	4.31	4.32	-
65	-	-	-	-	-	-	-	-	1
Mass flow in kg/l	h								
5	-	-	-	-	-	-	-	-	-
15	-	60	76	95	117	-	-	-	-
20	-	60	75	94	117	144	-	-	ı
30	-	59	74	93	115	142	174	212	-
40	-	-	73	92	114	140	172	210	-
50	-	-	-	90	112	138	170	207	-
60	-	-	-	-	-	135	166	203	-
65	-	-	-	-	-	-	-	-	-
1		•	•	•	-	•	•	•	
Coefficient of pe	rformance (C.C	D.P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.75	3.45	4.40	5.72	-	-	-	-
20	-	2.42	3.01	3.77	4.78	6.19	-	-	-
	-	1.87	2.30	2.83	3.48	4.31	5.42	6.94	-
30		-	1.73	2.12	2.57	3.13	3.81	4.68	-
•	-	_				+			
40	-	1	-	1.55	1.88	2,26	2.72	3.28	-
•		-	-	1.55	1.88	2.26 1.60	2.72 1.92	3.28 2.29	-

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

recommendation of the co			
Cooling capacity	3 995	W	
Power input	2 199	W	
Current consumption	3.41	Α	
Mass flow	91	kg/h	
C.O.P.	1.82		

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	0.8	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900



Danfoss scroll compressor. VLZ028TGA

Performance data at 80 Hz, EN 12900 rating conditions

R449A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
0 11 14 1	144								
Cooling capacity					1	1			
5	-	-	-	-	-	-	-	-	-
15	-	3 681	4 632	5 772	7 127	-	-	-	-
20	-	3 506	4 419	5 511	6 807	8 331	-	-	-
30	-	3 150	3 986	4 981	6 159	7 545	9 163	11 037	-
40	-	2 772	3 532	4 430	5 490	6 738	8 197	9 892	-
50	-	-	-	3 842	4 785	5 895	7 195	8 710	-
60	-	-	-	-	4 029	5 001	6 143	7 479	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	_	_	-	-	_	-	_
15	-	1 368	1 372	1 345	1 282	-	-	-	_
20	-	1 484	1 505	1 500	1 462	1 386	-	-	-
30	-	1 741	1 786	1 814	1 818	1 792	1 732	1 632	_
40	-	2 062	2 117	2 164	2 196	2 208	2 193	2 147	_
50	_	-	-	2 587	2 634	2 668	2 686	2 680	
60		-	-	-	3 166	3 211	3 246	3 268	
65		-	-	_	-	-	-	-	
		1	1	1	1	1	1	<u>. </u>	
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	-
15	-	2.36	2.36	2.28	2.10	-	-	-	-
20	-	2.51	2.55	2.51	2.41	2.23	-	-	-
30	-	2.81	2.89	2.92	2.90	2.84	2.74	2.60	-
40	-	3.25	3.31	3.35	3.36	3.36	3.34	3.31	-
50	-	-	-	3.92	3.91	3.91	3.91	3.93	-
60	-	-	-	-	4.67	4.61	4.59	4.60	-
65	-	-	-	-	-	-	-	-	-
•		1	•	•	•	•	•		
Mass flow in kg/h	I								
5	-	-	-	-	-	-	-	-	-
15	-	73	90	111	135	-	-	-	-
20	-	72	90	110	134	161	-	-	-
30	-	71	88	109	132	159	190	226	-
40	-	70	87	107	130	157	188	223	-
50	-	-	-	105	128	155	186	220	-
60	-	-	-	-	126	152	183	217	-
65	-	-	-	-	-	-	-	-	-
'								•	
Coefficient of per	`	1			T	T		 	
5	-	-	-	-	-	-	-	-	-
15	-	2.69	3.38	4.29	5.56	-	-	-	-
20	-	2.36	2.94	3.67	4.66	6.01	-	-	-
30	-	1.81	2.23	2.75	3.39	4.21	5.29	6.76	-
40	-	1.34	1.67	2.05	2.50	3.05	3.74	4.61	-
50	-	-	-	1.48	1.82	2.21	2.68	3.25	-
60	-	-	-	-	1.27	1.56	1.89	2.29	-
65	-	-	-	-	-	-	-	-	-
Nominal performa	ance at to = -1	0 °C, tc = 45 °C	10/			Pressure switch		27.4	

Current consumption	
Macc flow	

Cooling capacity Power input

C.O.P.

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

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

4 141

2 364

3.61 106

1.75

W

W

kg/h

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	0.8	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900



Danfoss scroll compressor. VLZ028TGA

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

R449A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
ooling capacity	in 14/								
5		_	_	_	_	_	_	- 1	_
	-		4 627			-	-	-	
15	-	3 683		5 760	7 106	+	-	-	
30	-	3 527 3 208	4 434 4 042	5 518 5 030	6 804	8 320 7 567	9 171	+	
40		-	3 628	4 520	6 196 5 568	6 795	8 227	11 037 9 892	
50	-		-	3 976		5 987	7 248	8 710	-
60		-			4 904			1	
65	-	-	-	-	-	5 131	6 220	7 479	-
05	-	-	-	-	-	-		-	
ower input in W		1	T	ı	1	T			
5	-	-	-	-	-	-	-	-	-
15	-	1 368	1 372	1 345	1 282	-	-	-	-
20	-	1 484	1 505	1 500	1 462	1 386	-	-	-
30	-	1 741	1 786	1 814	1 818	1 792	1 732	1 632	-
40	-	-	2 117	2 164	2 196	2 208	2 193	2 147	-
50	-	-	-	2 587	2 634	2 668	2 686	2 680	-
60	-	-	-	-	-	3 211	3 246	3 268	-
65	-	-	-	-	-	-	-	-	-
urrent consump	tion in A	_	_	_	_	_	_	-	_
15	_	2.36	2.36	2.28	2.10	_	_	-	_
20	_	2.51	2.55	2.51	2.41	2.23	_	_	
30	_	2.81	2.89	2.92	2.90	2.84	2.74	2.60	_
40	_	-	3.31	3.35	3.36	3.36	3.34	3.31	-
50	_	_	-	3.92	3.91	3.91	3.91	3.93	
60	_	-	_	-	-	4.61	4.59	4.60	_
65	_	_	_	_	_	-	-	-	
00			1	1		1		I	
lass flow in kg/h	l	1	1		1	1	_		
5	-	-	-	-	-	-	-	-	-
15	-	64	81	101	125	-	-	-	-
20	-	63	80	100	124	153	-	-	-
30	-	62	79	99	123	151	185	226	-
40	-	-	78	98	121	149	183	223	-
50	-	-	-	96	119	147	181	220	-
60	-	-	-	-	-	145	178	217	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.0	O.P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.69	3.37	4.28	5.54	-	-	-	-
20	-	2.38	2.95	3.68	4.65	6.00	-	-	-
30	-	1.84	2.26	2.77	3.41	4.22	5.29	6.76	-
40	-	-	1.71	2.09	2.54	3.08	3.75	4.61	-
50	-	-	-	1.54	1.86	2.24	2.70	3.25	-
60	-	-	-	-	-	1.60	1.92	2.29	-
			1	1	t	+	+	+	

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

	-,		
Cooling capacity	4 253	W	
Power input	2 364	W	
Current consumption	3.61	Α	
Mass flow	97	kg/h	
C.O.P.	1.80		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 85 Hz, EN 12900 rating conditions

R449A

-30 W	-20 -3 899 3 713 3 338 2 942 1 481 1 603 1 872 2 206 2.50 2.65	-15 -4 906 4 678 4 219 3 744 1 490 1 630 1 924 2 271 2.50 2.69	-10 -10 -10 -10 -118 5 835 5 271 4 691 4 078 - - 1 466 1 628 1 958 2 324 2 766 - - 2.43	-5 7 561 7 213 6 519 5 813 5 076 4 287 - 1 404 1 593 1 966 2 362 2 819 3 373 2.28	8 838 7 992 7 136 6 252 5 318 1 518 1 943 2 377 2 858 3 423	5 9716 8 688 7 633 6 532 1 883 2 364 2 879 3 463	10 11 719 10 495 9 247 7 955 1 781 2 318 2 874 3 487 -	
	3 899 3 713 3 338 2 942 1 481 1 603 1 872 2 206 2.50	4 906 4 678 4 219 3 744 1 490 1 630 1 924 2 271 2.50	6 118 5 835 5 271 4 691 4 078 - - 1 466 1 628 1 958 2 324 2 766 - -	7 561 7 213 6 519 5 813 5 076 4 287 - 1 404 1 593 1 966 2 362 2 819 3 373 -	- 8 838 7 992 7 136 6 252 5 318 	- 9 716 8 688 7 633 6 532 	- 11719 10 495 9 247 7 955 1781 2 318 2 874 3 487	- - - - - - - - - - - - - - - - - - -
	3 899 3 713 3 338 2 942 1 481 1 603 1 872 2 206 2.50	4 906 4 678 4 219 3 744 1 490 1 630 1 924 2 271 2.50	6 118 5 835 5 271 4 691 4 078 - - 1 466 1 628 1 958 2 324 2 766 - -	7 561 7 213 6 519 5 813 5 076 4 287 - 1 404 1 593 1 966 2 362 2 819 3 373 -	- 8 838 7 992 7 136 6 252 5 318 	- 9 716 8 688 7 633 6 532 	- 11719 10 495 9 247 7 955 1781 2 318 2 874 3 487	- - - - - - - - - - - - - - - - - - -
	3 899 3 713 3 338 2 942 1 481 1 603 1 872 2 206 2.50	4 906 4 678 4 219 3 744 1 490 1 630 1 924 2 271 2.50	6 118 5 835 5 271 4 691 4 078 - - 1 466 1 628 1 958 2 324 2 766 - -	7 561 7 213 6 519 5 813 5 076 4 287 - 1 404 1 593 1 966 2 362 2 819 3 373 -	- 8 838 7 992 7 136 6 252 5 318 	- 9 716 8 688 7 633 6 532 	- 11719 10 495 9 247 7 955 1781 2 318 2 874 3 487	- - - - - - - - - - - - - - - - - - -
	3 713 3 338 2 942 - - - 1 481 1 603 1 872 2 206 - - -	4 678 4 219 3 744 1 490 1 630 1 924 2 271 2.50	5 835 5 271 4 691 4 078 - - 1 466 1 628 1 958 2 324 2 766 - -	7 213 6 519 5 813 5 076 4 287 - 1 404 1 593 1 966 2 362 2 819 3 373 -	8 838 7 992 7 136 6 252 5 318 1 518 1 943 2 377 2 858 3 423 -	- 9 716 8 688 7 633 6 532 1 883 2 364 2 879 3 463 	- 11 719 10 495 9 247 7 955 1 781 2 318 2 874 3 487	- - - - - - - - - -
	3 338 2 942 - - - 1 481 1 603 1 872 2 206 - - -	4 219 3 744 1 490 1 630 1 924 2 271 2.50	5 271 4 691 4 078 - - - 1 466 1 628 1 958 2 324 2 766 - -	6 519 5 813 5 076 4 287 - 1 404 1 593 1 966 2 362 2 819 3 373 -	7 992 7 136 6 252 5 318 - - 1 518 1 943 2 377 2 858 3 423 -	9 716 8 688 7 633 6 532 - - - 1 883 2 364 2 879 3 463 -	11 719 10 495 9 247 7 955 - - - - 1 781 2 318 2 874 3 487	- - - - - - - - - -
	2 942 - - - 1 481 1 603 1 872 2 206 - - - - 2.50	3 744 1 490 1 630 1 924 2 271 2.50	4 691 4 078 - - - 1 466 1 628 1 958 2 324 2 766 - -	5 813 5 076 4 287 - - 1 404 1 593 1 966 2 362 2 819 3 373 -	7 136 6 252 5 318 - - - 1 518 1 943 2 377 2 858 3 423 -		10 495 9 247 7 955 - - - - - 1 781 2 318 2 874 3 487	- - - - - - - - -
	- - 1 481 1 603 1 872 2 206 - - - -	- - 1 490 1 630 1 924 2 271 - - - -	- 1 466 1 628 1 958 2 324 2 766 	5 076 4 287 - - 1 404 1 593 1 966 2 362 2 819 3 373 -	1518 1 943 2 377 2 858 3 423	7 633 6 532 - - - - 1 883 2 364 2 879 3 463 -	9 247 7 955 - - - - 1 781 2 318 2 874 3 487	- - - - - - - -
	- 1 481 1 603 1 872 2 206 - - - -	- 1 490 1 630 1 924 2 271 - - -	- - 1 466 1 628 1 958 2 324 2 766 - -	- 1 404 1 593 1 966 2 362 2 819 3 373 	- - - 1518 1943 2377 2858 3423	1 883 2 364 2 879 3 463	7 955 - - - 1 781 2 318 2 874 3 487	- - - - - - -
	- 1 481 1 603 1 872 2 206 - - - -	- 1 490 1 630 1 924 2 271 - - - -	- 1 466 1 628 1 958 2 324 2 766 - -	- 1 404 1 593 1 966 2 362 2 819 3 373 -	- - 1 518 1 943 2 377 2 858 3 423	- - - 1 883 2 364 2 879 3 463 -		
	- 1 481 1 603 1 872 2 206 - - - - -	- 1 490 1 630 1 924 2 271 - - - - -	- 1 466 1 628 1 958 2 324 2 766 - -	- 1 404 1 593 1 966 2 362 2 819 3 373 -	- - 1518 1943 2377 2858 3423	- - 1 883 2 364 2 879 3 463 -	- - - 1 781 2 318 2 874 3 487	
	1 481 1 603 1 872 2 206 - - - - 2.50	1 490 1 630 1 924 2 271 - - - - - 2.50	1 466 1 628 1 958 2 324 2 766 -	1 404 1 593 1 966 2 362 2 819 3 373	- 1 518 1 943 2 377 2 858 3 423	- 1 883 2 364 2 879 3 463	- 1 781 2 318 2 874 3 487	- - - -
	1 481 1 603 1 872 2 206 - - - - 2.50	1 490 1 630 1 924 2 271 - - - - - 2.50	1 466 1 628 1 958 2 324 2 766 -	1 404 1 593 1 966 2 362 2 819 3 373	- 1 518 1 943 2 377 2 858 3 423	- 1 883 2 364 2 879 3 463	- 1 781 2 318 2 874 3 487	- - - -
	1 603 1 872 2 206 - - - - 2.50	1 630 1 924 2 271 - - - - 2.50	1 628 1 958 2 324 2 766 - -	1 593 1 966 2 362 2 819 3 373	1 518 1 943 2 377 2 858 3 423	- 1 883 2 364 2 879 3 463 -	- 1 781 2 318 2 874 3 487	- - - -
	1 872 2 206 - - - - 2.50	1 924 2 271 - - - - 2.50	1 958 2 324 2 766 - -	1 966 2 362 2 819 3 373	1 943 2 377 2 858 3 423	1 883 2 364 2 879 3 463	1 781 2 318 2 874 3 487	- - - -
- - - on in A - -	2 206 - - - - - 2.50	2 271 - - - - 2.50	2 324 2 766 - -	2 362 2 819 3 373 -	2 377 2 858 3 423	2 364 2 879 3 463	2 318 2 874 3 487	- - -
- - on in A - -	- - - 2.50	- - - 2.50	2 766	2 819 3 373 - -	2 858 3 423 -	2 879 3 463 -	2 874 3 487	-
- - on in A - -	- - 2.50	- - - 2.50	-	3 373	3 423	3 463	3 487	-
- on in A	- 2.50	- 2.50	-	-	-	-	t	
on in A - -	- 2.50	- 2.50	-	-		I	-	-
	2.50	2.50			-	T _		
	2.50	2.50			-	_	,	
-			2.43	2 20			-	_
-			20	/ /0	-	_	_	_
	2.00	/ n9	2.66	2.57	2.42	_	_	_
	2.97	3.05	3.09	3.08	3.03	2.94	2.81	_
_	3.40	3.48	3.54	3.56	3.57	3.55	3.51	_
-	-	-	4.11	4.13	4.15	4.16	4.17	_
_	-	-	-	4.90	4.88	4.88	4.89	_
-	-	-	-	-	-	-	-	_
I_			I		l	I		
1			1			1		
-	-	-	-	-	-	-	-	-
-	77	96	117	143	-	-	-	-
-	77	95	116	142	171	-	-	-
-	75	94	115	140	169	202	240	-
-	74	92	113	138	166	199	237	-
-	-	-	111	136	164	197	234	-
-	-	-	-	134	162	194	231	-
-	-	-	-	-	-	-	-	-
rmance (C.O.P	2.)							
-		-	-	-	-	-	-	-
-	2.63	3.29	4.17	5.38	-	-	-	_
-					5.82	-	-	_
-							1	-
								-
_		-			1			_
-								_
_		-				-	-	_
<u> </u>		1	1		1	1	<u> </u>	
		77 - 77 - 77 - 75 - 74						

Cooling capacity	4 390	W	
Power input	2 533	W	
Current consumption	3.80	Α	
Mass flow	113	kg/h	
C.O.P.	1.73		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	0.8	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R449A

Cond. temp. in		Evaporating temperature in °C (to)							
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity	in W								
5	-	-	-	-	_	-	_	-	
15		3 902	4 902	6 104	7 538	-	_	-	
					1	1	-	-	
20	-	3 735	4 694	5 843	7 210	8 826	1		<u>-</u>
30		3 399	4 278	5 322	6 559	8 016	9 724	11 719	
40	-	-	3 846	4 788	5 896	7 197	8 719	10 495	-
50	-	-	-	4 220	5 202	6 350	7 689	9 247	-
60	-	-	-	-	-	5 457	6 614	7 955	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 481	1 490	1 466	1 404	-	-	-	-
20	-	1 603	1 630	1 628	1 593	1 518	-	-	-
30	-	1 872	1 924	1 958	1 966	1 943	1 883	1 781	-
40	-	-	2 271	2 324	2 362	2 377	2 364	2 318	-
50	-	-	-	2 766	2 819	2 858	2 879	2 874	-
60	-	-	-	-	-	3 423	3 463	3 487	-
65	-	-	-	-	-	-	-	-	_
			I.	I .		-1	1		
Current consump	otion in A								
5	-	-	_	-	_	-	_	_	-
15	-	2.50	2.50	2.43	2.28	_	_	-	-
20	-	2.65	2.69	2.66	2.57	2.42	_	-	-
30	-	2.97	3.05	3.09	3.08	3.03	2.94	2.81	_
40	-	-	3.48	3.54	3.56	3.57	3.55	3.51	_
50	-	_	-	4.11	4.13	4.15	4.16	4.17	_
60	-	-	_	-	-	4.88	4.88	4.89	_
65	-	-	-	-	-	-	-	-	_
			I	ı	l		I.	<u> </u>	
Mass flow in kg/h	1								
5	-	-	_	-	-	-	_	-	-
15	-	68	85	107	133	-	_	-	_
20	_	67	85	106	132	163	_	_	_
30	-	66	84	105	130	160	197	240	_
40	-	-	82	103	128	158	194	237	_
50	_	-	-	102	127	156	192	234	
60		-	-	-	-	154	189	231	
65		-	_	-	-	-	-	-	
55		_		_		_		<u>, </u>	
Coefficient of per	formance (C.0	D.P.)		1	1			, , , , , , , , , , , , , , , , , , , 	
5	-	-	-	-	-	-	-	-	-
15	-	2.63	3.29	4.16	5.37	-	-	-	-
20	-	2.33	2.88	3.59	4.53	5.81	-	-	-
30	-	1.82	2.22	2.72	3.34	4.13	5.16	6.58	-
40	-	-	1.69	2.06	2.50	3.03	3.69	4.53	-
50	-	-	-	1.53	1.85	2.22	2.67	3.22	-
		_	_	_	-	1.59	1.91	2.28	-
60	-		<u> </u>	<u> </u>					

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

Cooling capacity	4 509	W	
Power input	2 533	W	
Current consumption	3.80	Α	
Mass flow	102	kg/h	
C.O.P.	1.78		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 90 Hz, EN 12900 rating conditions

R449A

Cond. temp. in				Evapora	ating temperature	in °C (to)					
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20		
Cooling capacity	in W										
5	-	_	-	_	_	-	-	_	-		
		+	1	1	+	-	-	 			
15	-	4 115	5 178	6 460	7 991	1		-			
20	-	3 917	4 933	6 155	7 614	9 341	-	-	-		
30	-	3 523	4 449	5 556	6 874	8 434	10 265	12 398	-		
40	-	3 111	3 953	4 949	6 132	7 530	9 174	11 095	-		
50	-	-	-	4 312	5 363	6 605	8 068	9 781	-		
60	-	-	-	-	4 545	5 636	6 921	8 432	-		
65	-	-	-	-	-	-	-	-	-		
Power input in W											
5	-	-	-	-	-	-	-	-	-		
15	-	1 598	1 613	1 594	1 535	-	-	-	-		
20	-	1 726	1 759	1 763	1 731	1 659	-	-	-		
30	-	2 007	2 067	2 107	2 120	2 100	2 042	1 939	-		
40	-	2 354	2 428	2 489	2 533	2 552	2 542	2 495	-		
50	-	-	-	2 947	3 008	3 053	3 076	3 073	-		
60	-	-	-	-	3 582	3 639	3 683	3 708	-		
65	_	-	_	_	-	-	-	-	_		
			1	1	I	I	I				
Current consump	otion in A			Т				T T			
5	-	-	-	-	-	-	-	-	-		
15	-	2.63	2.64	2.58	2.46	-	-	-	-		
20	-	2.80	2.84	2.82	2.75	2.63	-	-	-		
30	-	3.13	3.22	3.26	3.26	3.22	3.14	3.03	-		
40	-	3.56	3.66	3.73	3.77	3.78	3.77	3.73	-		
50	-	-	-	4.31	4.36	4.39	4.41	4.42	-		
60	-	-	-	-	5.13	5.15	5.18	5.20	-		
65	-	-	-	-	-	-	-	-	-		
Mass flow in kg/h	•										
5	-	_	_	_	_	_	_	_	_		
15		81	101	124	151	-	_	-			
20		81	100	123	1	181	_	-			
30	-	80	99	123	149 147	178	213	254	-		
40		78	99	120	1	178	213	254			
	-				146				-		
50	-	-	-	118	144	174	208	248	-		
60	-	-	-	-	142	171	206	245	-		
65	-	-	-	-	-	-	-	-	-		
Coefficient of per		1	T	T							
5	-	-	-	-	-	-	-	-	-		
15	-	2.57	3.21	4.05	5.21	-	-	-	-		
20	-	2.27	2.80	3.49	4.40	5.63	-	-	-		
30	-	1.76	2.15	2.64	3.24	4.02	5.03	6.39	-		
40	-	1.32	1.63	1.99	2.42	2.95	3.61	4.45	-		
50	-	-	-	1.46	1.78	2.16	2.62	3.18	-		
	-	-	-	-	1.27	1.55	1.88	2.27	-		
60											

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

Cooling capacity	4 636	W	
Power input	2 706	W	
Current consumption	4.00	Α	
Mass flow	119	kg/h	
C.O.P.	1.71		

to: Evaporating temperature at dew point

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

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 90 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R449A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity		1	1	1	1		1		
5	-	-		-	-	-	-	-	-
15	-	4 118	5 173	6 445	7 967	-	-	-	-
20	-	3 941	4 950	6 164	7 612	9 328	-	-	-
30	-	3 588	4 511	5 610	6 916	8 459	10 274	12 398	-
40	-	-	4 061	5 051	6 219	7 594	9 208	11 095	-
50	-	-	-	4 462	5 497	6 709	8 127	9 781	-
60	-	-	-	-	-	5 782	7 008	8 432	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 598	1 613	1 594	1 535	-	-	-	-
20	-	1 726	1 759	1 763	1 731	1 659	-	-	-
30	-	2 007	2 067	2 107	2 120	2 100	2 042	1 939	_
40	-	-	2 428	2 489	2 533	2 552	2 542	2 495	_
50	-	-	-	2 947	3 008	3 053	3 076	3 073	-
60	-	-	-	-	-	3 639	3 683	3 708	-
65	_	-	-	-	_	-	-	-	_
		1	I.	ı		ı	ı	l l	
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	-
15	-	2.63	2.64	2.58	2.46	-	-	-	-
20	-	2.80	2.84	2.82	2.75	2.63	-	-	-
30	-	3.13	3.22	3.26	3.26	3.22	3.14	3.03	-
40	-	-	3.66	3.73	3.77	3.78	3.77	3.73	-
50	-	-	-	4.31	4.36	4.39	4.41	4.42	-
60	-	-	-	-	-	5.15	5.18	5.20	_
65	-	-	-	-	_	-	-	-	_
		1				1			
Mass flow in kg/h	l								
5	-	-	-	-	-	-	-	-	-
15	-	71	90	113	140	-	-	-	-
20	-	71	89	112	139	172	-	-	-
30	-	70	88	110	137	169	208	254	-
40	-	-	87	109	135	167	205	251	-
50	-	-	-	107	134	165	203	248	-
60	-	-	-	-	-	163	200	245	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C () P)							
5	-	-	-	-	-	-	-	- 1	_
15	-	2.58	3.21	4.04	5.19	-	-	-	-
20	-	2.28	2.81	3.50	4.40	5.62	-	_	-
30	-	1.79	2.18	2.66	3.26	4.03	5.03	6.39	-
40	_	-	1.67	2.03	2.46	2.98	3.62	4.45	_
50	_	-	-	1.51	1.83	2.20	2.64	3.18	_
	-	-	-	-	-	1.59	1.90	2.27	
60	-	_	_	_	-	1.05	1.50	4.41	-

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

	-,	
Cooling capacity	4 762	W
Power input	2 706	W
Current consumption	4.00	Α
Mass flow	108	kg/h
C.O.P.	1.76	

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	0.8	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 95 Hz, EN 12900 rating conditions

R449A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity		1					1		
5	-	-		-	-	-	-	-	-
15	-	4 328	5 446	6 798	8 419	-	-	-	-
20	-	4 118	5 184	6 471	8 012	9 840	-	-	-
30	-	3 706	4 675	5 836	7 224	8 870	10 810	13 075	-
40	-	3 279	4 159	5 204	6 446	7 919	9 656	11 691	-
50	-	-	-	4 543	5 648	6 956	8 499	10 312	-
60	-	-	-	-	4 802	5 952	7 310	8 909	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	_	-	-	-	_	-	_
15		1 720	1 742	1 728	1 673		-	_	
20		1 853	1 894	1 904	1 877	1 807	-	_	
30	-	2 145	2 214	2 261	2 280	2 264	2 208		
40	-	2 505	2 588	2 658	2 708	2 733	2 725	2 105 2 679	-
50		2 505		1	3 201	3 251	3 278	3 276	
60	-		-	3 133					-
	-	-		-	3 794	3 857	3 905	3 932	-
65	-	-	-	-	-	-	-	-	-
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	-
15	_	2.77	2.78	2.74	2.66	-	-	-	-
20	_	2.95	2.98	2.98	2.94	2.85	-	-	-
30	-	3.30	3.38	3.43	3.45	3.43	3.36	3.26	_
40	-	3.71	3.83	3.92	3.97	4.00	3.99	3.95	_
50	_	-	-	4.50	4.59	4.64	4.67	4.67	-
60	_	_	_	-	5.36	5.43	5.48	5.51	
65	_	_	_	_	-	-	-	-	_
00		I		1		1	<u> </u>		
Mass flow in kg/h									
5	-	-	-	-	i	-	-	-	-
15	-	86	106	130	159	-	-	-	-
20	-	85	105	129	157	190	-	-	-
30	-	84	104	127	155	187	225	268	-
40	-	82	102	126	153	185	222	264	-
50	-	-	-	124	151	183	219	261	-
60	-	-	-	-	150	181	217	259	-
65	-	-	-	-	-	-	-	-	_
								1	
Coefficient of period	formance (C.C	D.P.) 	_	-	_	_	_	-	_
15	-	2.52	3.13	3.93	5.03	-	-	-	
			2.74			1			
20	-	2.22		3.40	4.27	5.44	- 4.00	- 0.04	-
30	-	1.73	2.11	2.58	3.17	3.92	4.90	6.21	-
40	-	1.31	1.61	1.96	2.38	2.90	3.54	4.36	-
50	-	-	-	1.45	1.76	2.14	2.59	3.15	-
60	-	-	-	-	1.27	1.54	1.87	2.27	-
65	-	-	-	-	-	-	-	-	-

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

	,	
Cooling capacity	4 879	W
Power input	2 884	W
Current consumption	4.19	Α
Mass flow	125	kg/h
C.O.P.	1.69	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	0.8	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900



Danfoss scroll compressor. VLZ028TGA

Performance data at 95 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R449A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
S 11	· · · · · · · · · · · · · · · · · · ·								
Cooling capacity		1	1	1	T			I	
5	-	-		- 0.700	-	-	-	-	-
15	-	4 331	5 441	6 783	8 393	-	-	-	-
20	-	4 143	5 202	6 480	8 009	9 827	-	-	-
30	-	3 774	4 740	5 893	7 267	8 897	10 819	13 075	-
40	-	-	4 273	5 310	6 537	7 986	9 691	11 691	-
50	-	-	-	4 702	5 789	7 065	8 562	10 312	-
60	-	-	-	-	-	6 107	7 402	8 909	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 720	1 742	1 728	1 673	-	-	-	-
20	-	1 853	1 894	1 904	1 877	1 807	-	-	-
30	-	2 145	2 214	2 261	2 280	2 264	2 208	2 105	_
40	-	-	2 588	2 658	2 708	2 733	2 725	2 679	_
50	-	-	-	3 133	3 201	3 251	3 278	3 276	-
60	-	_	_	-	-	3 857	3 905	3 932	-
65	-	-	-	-	_	-	-	-	_
		1	1	1		1	1	<u>. </u>	
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	-
15	-	2.77	2.78	2.74	2.66	-	-	-	-
20	-	2.95	2.98	2.98	2.94	2.85	-	-	_
30	-	3.30	3.38	3.43	3.45	3.43	3.36	3.26	-
40	-	-	3.83	3.92	3.97	4.00	3.99	3.95	-
50	-	-	-	4.50	4.59	4.64	4.67	4.67	-
60	-	-	-	-	-	5.43	5.48	5.51	-
65	-	-	-	-	-	-	-	_	-
Mass flow in kg/h	l								
5	-	-	-	-	-	-	-	-	-
15	-	75	95	119	148	-	-	-	-
20	-	74	94	118	146	181	-	-	-
30	-	73	93	116	144	178	219	268	-
40	-	-	91	115	142	176	216	264	-
50	-	-	-	113	141	174	213	261	-
60	-	-	-	-	-	172	211	259	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C () P)							
5	-	- -	-	-	_	_	_	-	_
15	-	2.52	3.12	3.93	5.02	_	_	-	
20		2.24	2.75	3.40	4.27	5.44	_	_	
30		1.76	2.14	2.61	3.19	3.93	4.90	6.21	
40	-	-	1.65	2.00	2.41	2.92	3.56	4.36	
50	-	-	-	1.50		2.92	2.61		
	-	-	-	1.50	1.81		1	3.15	-
60	-	-	1 -	1 -	1 -	1.58	1.90	2.27	-

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

	,		
Cooling capacity	5 011	W	
Power input	2 884	W	
Current consumption	4.19	Α	
Mass flow	114	kg/h	
C.O.P.	1.74		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 100 Hz, EN 12900 rating conditions

R449A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
On alima anna aite.	: \4/								
Cooling capacity				_	_		1		
	-	- 4.520	- 5.740	1		-	-	-	-
15	-	4 539	5 710	7 133	8 843	- 40.220	-	-	-
20	-	4 316	5 432	6 782	8 405	10 336	-	-	-
30	-	3 886	4 897	6 112	7 568	9 302	11 350	13 749	-
40	-	3 444	4 363	5 454	6 755	8 303	10 133	12 284	-
50	-	-	-	4 773	5 931	7 303	8 928	10 841	-
60	-	-	-	-	5 059	6 268	7 698	9 386	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 847	1 876	1 869	1 819	-	-	-	-
20	-	1 985	2 033	2 050	2 029	1 964	-	-	-
30	-	2 288	2 366	2 421	2 446	2 434	2 381	2 279	-
40	-	2 658	2 753	2 832	2 889	2 919	2 914	2 869	-
50	-	-	-	3 321	3 397	3 454	3 485	3 483	_
60	-	-	_	-	4 008	4 078	4 130	4 159	-
65	-	_	-	-	-	-	-	-	-
		· I	I	I	I	-			
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	-
15	-	2.91	2.92	2.91	2.87	-	-	-	-
20	-	3.10	3.13	3.14	3.13	3.08	-	-	-
30	-	3.46	3.55	3.61	3.64	3.63	3.59	3.50	-
40	-	3.86	4.00	4.11	4.18	4.22	4.22	4.17	-
50	-	-	-	4.69	4.82	4.90	4.94	4.93	-
60	-	-	-	-	5.59	5.72	5.80	5.83	-
65	-	-	-	-	-	-	-	-	-
Mass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	90	111	137	167	-	-	-	-
20	-	89	110	135	165	200	-	-	-
30	-	88	109	133	162	196	236	282	-
40	-	87	107	132	160	194	233	277	-
50	-	-	-	131	159	192	230	274	-
60	-	-	-	-	158	191	229	272	-
65	-	-	-	-	-	-	-	-	-
Coefficient of peri	`	1	T	T	1	1	1		
5	-	-	-	-	-	-	-	-	-
15	-	2.46	3.04	3.82	4.86	-	-	-	-
20	-	2.17	2.67	3.31	4.14	5.26	-	-	-
30	-	1.70	2.07	2.52	3.09	3.82	4.77	6.03	-
40	-	1.30	1.58	1.93	2.34	2.84	3.48	4.28	-
50	-	-	-	1.44	1.75	2.11	2.56	3.11	-
60	-	-	-	-	1.26	1.54	1.86	2.26	-
65	-	-	-	-	-	-	-	-	-
						_			
Nominal performa	ance at to = -1	0 °C, tc = 45 °C	10/		F	Pressure switch		07.4	h = =/=)

Cooling capacity

Current consumption

Power input

Mass flow

C.O.P.

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

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

5 119

3 064

4.39

131

1.67

W

W

kg/h

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	0.8	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900



Danfoss scroll compressor. VLZ028TGA

Performance data at 100 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R449A

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20	
Caalina aanaaitu	: \W									
Cooling capacity 5	<u>-</u>	_	_	_	-	_	_	_	_	
				+		-				
15	-	4 542	5 705	7 117	8 816	+	-	-	-	
20	-	4 342	5 451	6 791	8 402	10 322	-	-	-	
30	-	3 958	4 965	6 172	7 614	9 330	11 360	13 749	-	
40	-	-	4 482	5 566	6 851	8 373	10 170	12 284	-	
50	-	-	-	4 939	6 078	7 418	8 993	10 841	-	
60	-	-	-	-	-	6 431	7 795	9 386	-	
65	-	-	-	-	-	-	-	-	-	
Power input in W										
5	-	-	-	-	-	-	-	-	-	
15	-	1 847	1 876	1 869	1 819	-	-	-	-	
20	-	1 985	2 033	2 050	2 029	1 964	-	-	-	
30	-	2 288	2 366	2 421	2 446	2 434	2 381	2 279	-	
40	-	-	2 753	2 832	2 889	2 919	2 914	2 869	-	
50	-	-	-	3 321	3 397	3 454	3 485	3 483	_	
60	-	-	-	-	-	4 078	4 130	4 159	-	
65	_	-	_	_	_	-	-	-	_	
00		1	I.	1	I	1	I.	l l		
Current consump	tion in A									
5	-	-	-	-	-	-	-	-	-	
15	-	2.91	2.92	2.91	2.87	-	=	-	_	
20	-	3.10	3.13	3.14	3.13	3.08	-	-	-	
30	_	3.46	3.55	3.61	3.64	3.63	3.59	3.50	-	
40	-	_	4.00	4.11	4.18	4.22	4.22	4.17	_	
50	-	-	-	4.69	4.82	4.90	4.94	4.93	_	
60	-	_	_	-	-	5.72	5.80	5.83		
65	-	_	_	_	_	-	-	-	_	
			ı	I	I		<u> </u>	I I		
Mass flow in kg/h										
5	-	-	-	-	-	-	-	-	-	
15	-	79	99	125	155	-	-	-	-	
20	-	78	98	123	153	190	-	-	-	
30	-	77	97	121	151	187	230	282	-	
40	-	-	96	120	149	184	226	277	-	
50	-	-	-	119	148	183	224	274	-	
60	-	-	-	-	-	181	223	272	-	
65	-	-	-	-	-	-	-	-	-	
Coefficient of per	formance (C C	ופו								
5	-	J.P.) -	_	-	-	-	_	_	_	
15	-	2.46	3.04	3.81	4.85	-	_	_	-	
20	-	2.19	2.68	3.31	4.14	5.26	-	-	-	
30	_	1.73	2.10	2.55	3.11	3.83	4.77	6.03	_	
40		-	1.63	1.97	2.37	2.87	3.49	4.28	_	
50		-	-	1.49	1.79	2.15	2.58	3.11		
50		-	-	-	-	1.58	1.89	2.26		
60	-								-	

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

	-,	
Cooling capacity	5 257	W
Power input	3 064	W
Current consumption	4.39	Α
Mass flow	120	kg/h
C.O.P.	1.72	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.4	bar(g)
Minimum LP switch setting	8.0	bar(g)
LP pump down setting	1.1	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 30 Hz, EN 12900 rating conditions

R404A

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20	
Cooling capacity		1	1		1			1 1		
5	-	-	-	-	-	-	-	-	-	
15	1 184	1 506	1 891	2 347	2 881	-	-	-	-	
20	1 108	1 418	1 787	2 224	2 736	3 330	-	-	-	
30	952	1 234	1 569	1 964	2 426	2 964	3 583	4 293	-	
40	-	-	1 335	1 682	2 090	2 566	3 116	3 749	-	
50	-	-	-	-	-	-	-	-	-	
55	-	-	-	-	-	-	-	-	-	
60	-	-	-	-	-	-	-	-	-	
Power input in W	ı									
5	_	_	_	_	_	-	_	_	_	
15	554	556	549	531	498	_	_	_	-	
20	600	605	604	593	570	532	_	_	_	
30	708	718	724	724	716	696	663	612		
40	-	-	871	876	877	870	853	823		
50		-	-	-	-	-	-	-		
55		-	-	-	-	-	-	-		
60	<u> </u>	-	_	-	<u>-</u>	-	-	-		
00	_		_	_	_	_	_			
Current consum	ption in A									
5	-	_	-	_	_	_	_	_	_	
15	1.18	1.17	1.15	1.12	1.07	_	_	-	_	
20	1.25	1.24	1.24	1.22	1.18	1.13	_	-	_	
30	1.41	1.41	1.41	1.41	1.40	1.37	1.32	1.25	-	
40	-	-	1.63	1.63	1.63	1.62	1.60	1.55	_	
50	_	_	-	-	-	-	_	-	-	
55	_	_	_	_	_	_	_	_	_	
60	_	_	_	_	_	_	_	_	_	
		- I	<u> </u>	1	<u> </u>					
Mass flow in kg/l	h									
5	-	-	-	-	-	-	-	-	-	
15	30	38	47	57	68	-	-	-	-	
20	30	38	47	57	68	81	-	-	-	
30	29	37	46	56	68	81	96	113	-	
40	-	-	45	55	67	80	95	112	-	
50	-	-	-	-	-	-	-	-	-	
55	-	-	-	-	-	-	-	-	-	
60	-	-	-	-	-	-	-	-	-	
Coefficient of pe	rformance (C () P \								
5	rrormance (C.C	J.P.) -	_	_	_	_	_	_	_	
15	2.14	2.71	3.44	4.42	5.79	-	-	-		
20	1.85	2.71	2.96	3.75	4.80	6.26	-	-		
30			2.96	2.71			1	1	-	
40	1.34	1.72	1	1.92	3.39 2.38	4.26	5.41	7.01	-	
	-	-	1.53	1.92		2.95	3.65	4.56	-	
50	-	-			-	-	<u> </u>	-	-	
55	-	-	-	-	-	-	-	-	-	
60	-	-	-	-	-	-	-	-	-	
ominal perform	ance at to = -1	0 °C, tc = 45 °C				Pressure switch	settings			

	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R404A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
		•	•	•			•		
cooling capacity		1	1	1			1	1 1	
5	-	-	-	-	-	-	-	-	-
15	1 235	1 557	1 940	2 391	2 916	-	-	-	-
20	1 167	1 479	1 847	2 279	2 781	3 362	-	-	-
30	1 027	1 314	1 650	2 041	2 493	3 014	3 610	4 293	-
40	-	-	1 437	1 781	2 178	2 634	3 155	3 749	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in W	v								
-		1					1	1 1	
5 15		- 556	549	- 521	498	-	-	-	-
	554	1	1	531	1	-	-	-	-
20	600	605	604	593	570	532		- 040	-
30	708	718	724	724	716	696	663	612	-
40	-	-	871	876	877	870	853	823	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Current consum		1	1	1			1	1 1	
5	- 4.40	-	- 4.45	-	- 4.07	-	-	-	-
15	1.18	1.17	1.15	1.12	1.07	-	-	-	-
20	1.25	1.24	1.24	1.22	1.18	1.13	-	-	-
30	1.41	1.41	1.41	1.41	1.40	1.37	1.32	1.25	-
40	-	-	1.63	1.63	1.63	1.62	1.60	1.55	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Mass flow in kg/	h								
5	-	-	-	-	_	-	_	_	-
15	26	33	41	51	63	-	-	-	-
20	26	33	41	51	63	77	_	_	-
30	25	32	41	51	63	77	93	113	-
40	-	-	40	50	62	76	92	112	-
50	-	_	-	-	-	-	-	-	-
55	-	-	-	-	_	-	_	_	_
60	_	-	-	-	_	_	_	_	_
		1	1	1	1	1	1	<u>ı</u>	
Coefficient of pe		1	1	T			T	 	
5	-	-	-	-	-	-	-	-	-
15	2.23	2.80	3.53	4.51	5.86	-	-	-	-
20	1.95	2.44	3.06	3.84	4.88	6.32	-	-	-
30	1.45	1.83	2.28	2.82	3.48	4.33	5.45	7.01	-
40	-	-	1.65	2.03	2.48	3.03	3.70	4.56	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-

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

pooaoo at to	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 35 Hz, EN 12900 rating conditions

R404A

Cond. temp. in		ı	ı		ting temperature		T	1	
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
cooling capacit				1	T	1	T		
5	-	-	-	-	-	-	-	-	-
15	1 411	1 791	2 245	2 783	3 413	-	-	-	-
20	1 318	1 682	2 117	2 631	3 232	3 930	-	-	-
30	1 130	1 461	1 853	2 316	2 857	3 487	4 213	5 044	-
40	-	-	1 577	1 983	2 460	3 016	3 660	4 401	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in \	N								
5	-	-	-	-	-	-	-	-	-
15	636	640	632	610	571	-	-	-	-
20	687	696	696	684	656	609	-	-	-
30	811	824	834	835	825	802	761	699	-
40	-	-	999	1 007	1 009	1 001	980	943	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	_	-	-
		1	1				1		
Current consum	nption in A								
5	-	-	-	-	-	-	_	_	_
15	1.29	1.29	1.27	1.23	1.16	_	_	-	-
20	1.38	1.38	1.38	1.35	1.30	1.23	_	-	-
30	1.56	1.58	1.59	1.59	1.56	1.52	1.46	1.37	_
40	-	-	1.84	1.85	1.84	1.82	1.77	1.71	
50	-	-	-	-	-	-	-	-	_
55	_	-	-	_	-	-	_	_	_
60		-	-	_	-	-	_	-	
00	<u> </u>	1 -	1 -				<u> </u>		
Mass flow in kg	/h								
5	-	_		1	1	1			
	36	45	-	- 67	81	-	-	-	-
15		†	55	67	1	-	-	-	-
20	36	45	55	67	81	96	-	-	-
30	35	44	54	66	80	95	113	132	-
40	-	-	53	65	78	94	111	131	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-		-	-	-	-
-	erformance (C.C	1	T	Т	Т	1		<u></u>	
5	-	-	-	-	-	-	-	-	-
15	2.22	2.80	3.55	4.56	5.98	-	-	-	-
20	1.92	2.42	3.04	3.85	4.93	6.45	-	-	-
30	1.39	1.77	2.22	2.77	3.46	4.35	5.54	7.22	-
40	-	-	1.58	1.97	2.44	3.01	3.74	4.67	-
	-	-	-	-	-	-	-	-	-
50		1	1				1		
50 55	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	<u>-</u>

Coolir	ng capacity	-	W
Powe	r input	-	W
Curre	nt consumption	-	Α
Mass	flow	-	kg/h
C.O.F) _.	_	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R404A

Cond. temp. in				Evapora	ting temperature	n °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
		•			•	•	•		
ooling capacity		T	1	T	T	Т		1 1	
5	-	-	-	-	-	-	-	-	-
15	1 471	1 852	2 304	2 835	3 455	-	-	-	-
20	1 387	1 755	2 188	2 696	3 286	3 968	-	-	-
30	1 220	1 556	1 949	2 406	2 936	3 546	4 245	5 044	-
40	-	-	1 697	2 100	2 564	3 097	3 706	4 401	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in V	ı								
5	<u>-</u>	_	-	_	-	_	_	_	_
15	636	640	632	610	571	-	-	-	
20	687	696	696	684	656	609		-	
30	811	824	834	835	825	802	761	699	
40	-	- 824	999	1 007	1 009	1 001	980	943	
50			- 999	-	1 009	-	- 980	943	<u> </u>
55	-	-		-	-	-	-	-	
60	-	-	-	-	-	-	-	-	-
UU	<u> </u>					<u> </u>			
Current consum	ntion in A								
5	-	_	-	_	_	_	_	_	_
15	1.29	1.29	1.27	1.23	1.16	_	_	_	_
20	1.38	1.38	1.38	1.35	1.30	1.23	_	-	_
30	1.56	1.58	1.59	1.59	1.56	1.52	1.46	1.37	
40	-	-	1.84	1.85	1.84	1.82	1.77	1.71	
50		-	-	-	-	-	-	-	
55		_	-	_	-	_	-	-	
60		-	-	-	-	-	-	-	
00				<u> </u>	<u> </u>				
Mass flow in kg/	h								
5	-	-	-	-	-	-	-	-	-
15	31	39	49	61	75	-	-	-	-
20	31	39	49	61	75	91	-	-	-
30	30	38	48	60	74	90	109	132	-
40	-	-	47	59	73	89	108	131	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Coefficient of	ufaumar 10 C	\D\							
Coefficient of pe	- rtormance (C.C	J.P.) 	-	_	-	_	_	_	_
15	2.31	2.90	3.65	4.65	6.05	-	-	-	
20	2.02		•				-	-	-
		2.52	3.14	3.94	5.01	6.51	1		-
30	1.50	1.89	2.34	2.88	3.56	4.42	5.58	7.22	-
40	-	-	1.70	2.08	2.54	3.09	3.78	4.67	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-

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

rioinna porioinanos arte	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 40 Hz, EN 12900 rating conditions

R404A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
N II		•				•			
Cooling capacity			T	T			T	1	
5	-	-	-	-	-	-	-	-	-
15	1 636	2 073	2 596	3 214	3 938	-	-	-	-
20	1 525	1 944	2 444	3 034	3 724	4 525	-	-	-
30	1 308	1 687	2 136	2 666	3 286	4 007	4 839	5 791	-
40	-	-	1 818	2 283	2 829	3 466	4 203	5 050	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in W	ı								
5	-	-	-	-	-	-	-	-	-
15	721	728	720	695	649	-	-	-	-
20	780	792	793	779	747	693	-	-	-
30	918	935	948	951	940	913	865	792	-
40	-	-	1 132	1 143	1 146	1 138	1 114	1 070	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	_	-	-	-	_	-	-	_	-
		L	L	L	1	L	-1		
Current consum	ption in A								
5	-	-	_	_	_	-	_	_	_
15	1.41	1.41	1.39	1.34	1.26	_	_	-	_
20	1.51	1.53	1.52	1.48	1.43	1.34	_	-	_
30	1.73	1.76	1.77	1.76	1.73	1.68	1.60	1.50	-
40	-	-	2.05	2.06	2.04	2.01	1.96	1.88	-
50	-	_	-	-	-	-	-	-	-
55	_	_	-	-	_	_	-	_	-
60	-	-	-	-	_	_	-	_	-
00							1		
Mass flow in kg/l	h								
5	-	-	-	-	-	-	-	-	-
15	42	52	64	78	93	-	-	-	-
20	41	52	64	77	93	111	-	-	-
30	40	51	62	76	92	109	129	152	-
40	-	-	61	75	90	108	128	150	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	rformance (C. C).P.)							
5	-	-	-	-	_	-	-	-	-
15	2.27	2.85	3.60	4.62	6.07	_	-	-	-
20	1.96	2.46	3.08	3.89	4.98	6.53	-	-	-
30	1.43	1.80	2.25	2.80	3.49	4.39	5.59	7.31	-
40	-	-	1.61	2.00	2.47	3.05	3.77	4.72	-
+∪	-	+							-
50		-	-	-	-	-	-	-	
50 55	_	-	-	_	-	-	-	_	-

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

pooaoo at to	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R404A

Cond. temp. in				Evapora	ting temperature	n °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
			•						
cooling capacity		T	1		ı	T	T	1 1	
5	-	-	-	-	-	-	-	-	-
15	1 705	2 144	2 664	3 275	3 986	-	-	-	-
20	1 606	2 028	2 526	3 109	3 786	4 569	-	-	-
30	1 411	1 796	2 246	2 770	3 377	4 075	4 875	5 791	-
40	-	-	1 957	2 417	2 948	3 558	4 255	5 050	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in M	ı								
Power input in V			1					I I	
5 15	721	728	720	695	649	-	-	-	-
		1	+	1		- 602	-	-	-
20	780	792	793	779	747	693	-	- 700	-
30	918	935	948	951	940	913	865	792	-
40	-	-	1 132	1 143	1 146	1 138	1 114	1 070	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
_									
Current consum		ı	1		ı		1	1 1	
5	-	-	-	-	-	-	-	-	-
15	1.41	1.41	1.39	1.34	1.26	-	-	-	-
20	1.51	1.53	1.52	1.48	1.43	1.34	-	-	-
30	1.73	1.76	1.77	1.76	1.73	1.68	1.60	1.50	-
40	-	-	2.05	2.06	2.04	2.01	1.96	1.88	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Mass flow in kg/	h	T	1	T	1	T	1	1	
5	-	-	-	-	-	-	-	-	-
15	36	46	57	70	86	-	-	-	-
20	35	45	56	70	86	105	-	-	-
30	34	44	55	69	85	103	126	152	-
40	-	-	54	68	83	102	124	150	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	rformance (C.C	D.P.) 	-	_	-	_	_	-	
		1				ł	1		
15	2.36	2.95	3.70	4.71	6.14	- 6 50	-	-	-
20	2.06	2.56	3.19	3.99	5.07	6.59	-	- 7.04	-
30	1.54	1.92	2.37	2.91	3.59	4.46	5.64	7.31	-
40	-	-	1.73	2.11	2.57	3.13	3.82	4.72	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-

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

pooaoo at to	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 45 Hz, EN 12900 rating conditions

R404A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
Cooling course!	ı in W								
Cooling capacity		_	_		1	1		1	
5	4.057	1	1	-	4 457	-	-	-	-
15	1 857	2 352	2 942	3 640	4 457		-	-	-
20	1 731	2 204	2 767	3 433	4 211	5 115	-	- 0.500	-
30	1 485	1 912	2 418	3 014	3 713	4 525	5 461	6 533	-
40	-	-	2 059	2 583	3 197	3 914	4 743	5 697	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in W	٧								
5	-	-	-	-	-	-	-	-	-
15	811	820	813	786	734	-	-	-	-
20	876	891	894	880	845	783	-	-	-
30	1 028	1 050	1 066	1 071	1 061	1 031	976	893	-
40	-	-	1 269	1 284	1 289	1 280	1 254	1 204	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Current consum	•	1	1	1	T		1	1	
5					-	-	-	-	-
15	1.54	1.54	1.52	1.46	1.37	-	-	-	-
20	1.65	1.67	1.66	1.63	1.56	1.46		-	-
30	1.89	1.93	1.95	1.94	1.90	1.84	1.75	1.63	-
40	-	-	2.26	2.27	2.25	2.21	2.15	2.06	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Mass flow in kg/l	h								
5	-	-	-	-	-	-	-	-	-
15	48	59	73	88	106	-	-	-	-
20	47	59	72	87	105	125	-	-	-
30	46	57	71	86	103	123	146	171	-
40	-	-	69	84	102	122	144	170	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Coefficient of pe	erformance (C.C	D.P.)							
5	-	-	-	-	-	-	-	-	-
15	2.29	2.87	3.62	4.63	6.07	-	-	-	-
20	1.98	2.47	3.09	3.90	4.99	6.53	-	-	-
30	1.44	1.82	2.27	2.81	3.50	4.39	5.59	7.31	-
40	-	-	1.62	2.01	2.48	3.06	3.78	4.73	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
lominal perform	nance at to = -1	0 °C, tc = 45 °C				Pressure switch	settings		

pooaoo at to	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R404A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	20
Cooling capacit		1	1		I			I	
5	-	-	-	-	-	-	-	-	-
15	1 936	2 432	3 019	3 709	4 512	-	-	-	-
20	1 823	2 299	2 860	3 518	4 282	5 164	-	-	-
30	1 602	2 036	2 543	3 132	3 815	4 601	5 503	6 533	-
40	-	-	2 216	2 734	3 332	4 018	4 803	5 697	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
Power input in \	w								
5	-	-	_	_	-	-	_	_	-
15	811	820	813	786	734	-	-	-	-
20	876	891	894	880	845	783	_	-	_
30	1 028	1 050	1 066	1 071	1 061	1 031	976	893	_
40	-	-	1 269	1 284	1 289	1 280	1 254	1 204	
50	-	_	-	-	-	-	-	-	_
55	-	-	-	_	-	-	_	-	-
60	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
urrent consum	nption in A								
5	-	-	-	-	-	-	-	-	-
15	1.54	1.54	1.52	1.46	1.37	-	-	-	-
20	1.65	1.67	1.66	1.63	1.56	1.46	-	-	-
30	1.89	1.93	1.95	1.94	1.90	1.84	1.75	1.63	-
40	-	-	2.26	2.27	2.25	2.21	2.15	2.06	-
50	-	-	-	-	-	-	_	-	-
55	-	-	-	-	-	-	_	-	_
60	-	-	-	-	-	-	_	-	-
		-1			<u> </u>			<u> </u>	
lass flow in kg		1	1	T	ı	I	T	ı	
5	-	-	-	-	-	-	-	-	-
15	41	52	65	80	98	-	-	-	-
20	40	51	64	79	97	118	-	-	-
30	39	50	63	78	96	117	142	171	-
40	-	-	61	76	94	115	140	170	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
coefficient of pe	erformance (C.C	D.P.)							
5	-	-	-	-	-	-	-	-	-
15	2.39	2.97	3.71	4.72	6.15	-	-	-	-
20	2.08	2.58	3.20	4.00	5.07	6.59	-	-	-
30	1.56	1.94	2.38	2.92	3.60	4.46	5.64	7.31	-
40	-	-	1.75	2.13	2.59	3.14	3.83	4.73	-
	-	-	-	-	-	-	-	-	-
50				1		1	+	.	
50 55	-	-	-	-	-	-	-	-	-

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

pooaoo at to	,	
Cooling capacity	-	W
Power input	-	W
Current consumption	-	Α
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 50 Hz, EN 12900 rating conditions

R404A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity	in W								
5	-	-	-	_	_	-	_	_	_
15	_	2 627	3 284	4 061	4 970	_	_	-	
						+		-	
20	-	2 461	3 088	3 828	4 694	5 698	1		<u> </u>
30		2 135	2 698	3 361	4 138	5 040	6 080	7 271	
40	-	1 804	2 299	2 882	3 565	4 361	5 282	6 342	-
50	-	1 456	1 878	2 376	2 962	3 648	4 447	5 371	-
60	-	-	1 423	1 832	2 317	2 888	3 560	4 345	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	917	911	882	825	-	-	-	-
20	-	996	1 001	987	948	880	-	-	-
30	-	1 170	1 190	1 197	1 187	1 154	1 094	1 002	-
40	-	1 387	1 411	1 429	1 437	1 429	1 400	1 346	-
50	-	1 674	1 691	1 709	1 723	1 729	1 721	1 694	-
60	-	-	2 055	2 062	2 072	2 081	2 082	2 072	-
65	_	-	-	-	-	-	-	-	_
		1	1	1	1	ı	L	<u>ı</u> l	
Current consump	otion in A								
5	-	-	-	-	-	-	-	-	-
15	-	1.68	1.65	1.59	1.49	-	_	-	-
20	-	1.82	1.81	1.77	1.70	1.59	_	-	-
30	-	2.11	2.13	2.12	2.08	2.01	1.91	1.78	_
40	-	2.44	2.47	2.47	2.45	2.41	2.34	2.24	_
50	-	2.85	2.88	2.88	2.87	2.83	2.78	2.70	_
60	-	_	3.39	3.38	3.36	3.32	3.26	3.18	-
65	-	-	-	-	-	-	-	-	-
		<u> </u>	L	L	<u> </u>	<u> </u>		<u> </u>	
Mass flow in kg/h	1								
5	-	-	-	-	-	-	-	-	-
15	-	66	81	98	118	-	-	-	-
20	-	66	80	97	117	139	_	-	-
30	-	64	79	96	115	137	162	191	-
40	-	62	77	94	114	136	161	189	-
50	-	60	75	92	112	134	159	187	-
60	-	-	73	90	110	132	157	185	-
65	-	-	-	-	-	-	-	-	_
		1	1	1	1	1	1	<u>. </u>	
Coefficient of per	`	T .			1	1	1		
5	-	-	-	-	-	-	-	-	-
15	-	2.86	3.61	4.61	6.03	-	-	-	-
20	-	2.47	3.09	3.88	4.95	6.48	-	-	-
30	-	1.83	2.27	2.81	3.49	4.37	5.56	7.26	-
40	-	1.30	1.63	2.02	2.48	3.05	3.77	4.71	-
50	-	0.87	1.11	1.39	1.72	2.11	2.58	3.17	-
	_	-	0.69	0.89	1.12	1.39	1.71	2.10	-
60									

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

Cooling capaci	ty	2 633	W	
Power input		1 561	W	
Current consur	nption	2.67	Α	
Mass flow		93	kg/h	
C.O.P.		1.69		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R404A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity		T		T	T		T		
5	-	-	-	-	-	-	-	-	-
15	-	2 717	3 370	4 138	5 031	-	-	-	-
20	-	2 567	3 192	3 923	4 772	5 753	-	<u>-</u>	-
30	-	2 274	2 837	3 493	4 252	5 125	6 126	7 271	-
40	-	1 975	2 474	3 051	3 715	4 477	5 348	6 342	-
50	-	-	2 090	2 584	3 150	3 797	4 534	5 371	-
60	-	-	-	2 082	2 546	3 074	3 672	4 345	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	_	_	-	_	-	_	-
15	-	917	911	882	825	_	-	-	_
20	-	996	1 001	987	948	880	-	-	-
30	-	1 170	1 190	1 197	1 187	1 154	1 094	1 002	_
40	-	1 387	1 411	1 429	1 437	1 429	1 400	1 346	-
50	_	-	1 691	1 709	1 723	1 729	1 721	1 694	_
60	-	_	-	2 062	2 072	2 081	2 082	2 072	-
65	_	-	_	-	-	-	-	-	_
		1		1				<u> </u>	
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	-
15	-	1.68	1.65	1.59	1.49	-	-	-	-
20	-	1.82	1.81	1.77	1.70	1.59	-	-	-
30	-	2.11	2.13	2.12	2.08	2.01	1.91	1.78	-
40	-	2.44	2.47	2.47	2.45	2.41	2.34	2.24	-
50	-	-	2.88	2.88	2.87	2.83	2.78	2.70	-
60	-	-	-	3.38	3.36	3.32	3.26	3.18	_
65	-	-	-	-	-	-	-	-	-
•		•	•	•	•	•	•		
Mass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	58	72	89	109	-	-	-	-
20	-	57	71	88	108	132	-	-	-
30	-	56	70	87	107	130	158	191	-
40	-	54	69	85	105	128	156	189	-
50	-	-	67	84	103	127	154	187	-
60	-	-	-	82	102	125	152	185	-
65	-	-	-	-	-	-	-	-	-
Coefficient of a co	forman== 10 C	.							
Coefficient of per	rormance (C.C	J.P.) 	_	_	_	_	_	-	
15	-	2.96	3.70	4.69	6.10	-	-	-	
20	-	2.96	3.70	3.98	5.03	6.54	-	-	
30			2.39	2.92	3.58		†	7.26	
40	<u>-</u>	1.94 1.42	1.75	2.92	2.59	4.44 3.13	5.60 3.82	4.71	<u> </u>
50	-	-	1.24	1.51	1.83	2.20	2.63	3.17	-
60	-	-	-	1.01	1.23	1.48	1.76	2.10	-
65	-	-	-	-	-	-	-	-	-

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

Cooling capacity	2 821	W	
Power input	1 561	W	
Current consumption	2.67	Α	
Mass flow	85	kg/h	
C.O.P.	1.81		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 55 Hz, EN 12900 rating conditions

R404A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity		1	1	1	1	1	1	ı	
5	-	-	-	-	-	-	-	-	-
15	-	2 899	3 622	4 477	5 477	-	-	-	-
20	-	2 717	3 406	4 220	5 173	6 277	-	-	-
30	-	2 358	2 977	3 707	4 560	5 552	6 696	8 005	-
40	-	1 994	2 539	3 180	3 931	4 806	5 820	6 984	-
50	-	1 611	2 076	2 625	3 269	4 024	4 903	5 919	-
60	-	-	1 576	2 027	2 561	3 191	3 931	4 794	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	_	_	_	-	-	_	_
15	_	1 019	1 014	983	922	-	_	_	_
20	_	1 105	1 112	1 098	1 057	983	_	_	_
30		1 293	1 317	1 328	1 318	1 284	1 219	1 118	
40	-	1 528	1 557	1 579	1 590	1 583	1 553	1 494	
50	_	1 837	1 858	1 881	1 899	1 908	1 901	1 873	_
60		-	2 249	2 260	2 274	2 286	2 291	2 282	
65		-	-	-	-	-	-	-	
55		_	_	1	_			1	
Current consump	otion in A								
5	-	-	-	-	_	-	_	_	-
15	-	1.81	1.79	1.72	1.62	-	_	-	_
20	-	1.97	1.96	1.92	1.84	1.72	_	-	_
30	-	2.28	2.31	2.30	2.25	2.18	2.07	1.93	_
40	-	2.64	2.67	2.68	2.66	2.61	2.54	2.43	_
50	_	3.08	3.11	3.12	3.10	3.07	3.00	2.92	-
60	-	-	3.66	3.65	3.63	3.59	3.52	3.44	_
65	-	-	-	-	-	-	-	-	-
		- L	L		I	L	L	l l	
Mass flow in kg/h	1								
5	-	-	-	-	-	-	-	-	-
15	-	73	89	108	130	-	-	-	-
20	-	72	89	107	129	153	-	-	-
30	-	71	87	106	127	151	179	210	-
40	-	69	85	104	125	149	177	208	-
50	-	67	83	102	123	148	175	206	-
60	-	-	81	100	122	146	173	204	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per		1		1	1				
5	-	- 0.05	-	-	-	-	-	-	-
15	-	2.85	3.57	4.55	5.94	-	-	-	-
20	-	2.46	3.06	3.84	4.89	6.38		-	-
30	-	1.82	2.26	2.79	3.46	4.32	5.49	7.16	-
40	-	1.30	1.63	2.01	2.47	3.04	3.75	4.67	-
50	-	0.88	1.12	1.40	1.72	2.11	2.58	3.16	-
60	-	-	0.70	0.90	1.13	1.40	1.72	2.10	-
65	-	-	-	-	-	-	_	_	-

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

Tronina portormanos arto 10 c	,		
Cooling capacity	2 907	W	
Power input	1 722	W	
Current consumption	2.89	Α	
Mass flow	103	kg/h	
C.O.P.	1.69		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R404A

Cooling capacity in W	Cond. temp. in				Evapora	ating temperature	in °C (to)			
S	°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
S										
15			1	1			1	1		
20			+	1	†	1			1	-
30							+			-
40										-
Solid					1					-
60										-
Power input in W					1					-
Power input in W 5			+			1			1	-
S	65	-	-	-	-	-	-	-	-	-
15	Power input in W									
20	5	-	-	-	-	-	-	-	-	-
1 1 1 1 1 1 1 1 1 1	15	-	1 019	1 014	983	922	-	-	-	-
1 1 1 1 1 1 1 1 1 1	20	-	1 105	1 112	1 098	1 057	983	-	-	-
40	30	-	1 293		1 328	1 318	1 284	1 219	1 118	-
So		-					1			-
60	50	-	-		1 881	1 899	1 908	1 901	1 873	-
Current consumption in A Sample Sa		-	-				1		1	-
5 -	65	-	-	-			_	-	_	-
5 -										
15	ı.	ion in A	1	T		1	T	Γ	1	
20 - 1.97			+		1	1	+	+	1	-
30 - 2.28								+		-
40 - 2.64		-			1					-
50 - - 3.11 3.12 3.10 3.07 3.00 2.92 60 - - - - 3.65 3.63 3.59 3.52 3.44 65 - - - - - - - - 5 - - - - - - - - 15 - 64 79 98 120 - - - 20 - 63 79 97 119 145 - - - 30 - 62 77 96 117 143 174 210 40 - 60 76 94 116 142 172 208 50 - - 74 92 114 140 170 206 60 - - - 91 112 138 168 204		-			1		1		1	-
60 3.65 3.63 3.59 3.52 3.44 65		-	2.64						1	-
Mass flow in kg/h		-	-	1	1					-
S		-	-	-	3.65	3.63	3.59		3.44	-
5 -	65	-	-	-	-	-	-	-	-	-
5 -	Mass flow in kg/h									
15 - 64 79 98 120 - </td <td></td> <td>_</td> <td>_</td> <td>_</td> <td>-</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td>		_	_	_	-	_	_	_	_	_
20 - 63 79 97 119 145 -		-	64	79	98	120	-	-	-	-
30 - 62 77 96 117 143 174 210 40 - 60 76 94 116 142 172 208 50 - - 74 92 114 140 170 206 60 - - - 91 112 138 168 204 65 -		-	1		1		1	-	-	-
40 - 60 76 94 116 142 172 208 50 - - - 74 92 114 140 170 206 60 - - - 91 112 138 168 204 65 -		-						1		-
50 - - 74 92 114 140 170 206 60 - - - 91 112 138 168 204 65 -		-		+			+	+	1	-
60 91 112 138 168 204 65										_
65 -					1					-
5 -					†		+			-
5 -										
15 - 2.94 3.67 4.64 6.02 - - - 20 - 2.57 3.17 3.94 4.98 6.45 - - 30 - 1.94 2.38 2.90 3.55 4.40 5.54 7.16 40 - 1.43 1.76 2.13 2.58 3.12 3.79 4.67			1	_	_	_	_	_		_
20 - 2.57 3.17 3.94 4.98 6.45 - - 30 - 1.94 2.38 2.90 3.55 4.40 5.54 7.16 40 - 1.43 1.76 2.13 2.58 3.12 3.79 4.67					1		+			
30 - 1.94 2.38 2.90 3.55 4.40 5.54 7.16 40 - 1.43 1.76 2.13 2.58 3.12 3.79 4.67			•						1	-
40 - 1.43 1.76 2.13 2.58 3.12 3.79 4.67					1			1	1	
									1	<u>-</u>
50 104 150 100 100 100 100										
50 1.24 1.52 1.83 2.20 2.63 3.16						1			1	-
60 - - - 1.02 1.24 1.49 1.77 2.10 65 - - - - - - -										-

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

	-,	
Cooling capacity	3 114	W
Power input	1 722	W
Current consumption	2.89	Α
Mass flow	93	kg/h
C.O.P.	1.81	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 60 Hz, EN 12900 rating conditions

R404A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
!!	·- w								
cooling capacity		1		1	1	1			
5	-	-	-	-	-	-	-	-	-
15	-	3 168	3 957	4 888	5 977	-	-	-	-
20	-	2 970	3 722	4 609	5 646	6 849		-	-
30	-	2 579	3 255	4 050	4 981	6 062	7 308	8 734	-
40	-	2 183	2 778	3 477	4 297	5 251	6 355	7 624	-
50	-	1 766	2 274	2 873	3 576	4 400	5 358	6 466	-
60	-	-	1 728	2 221	2 804	3 492	4 299	5 241	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	_	-	-	-	-	_	-
15	-	1 125	1 122	1 090	1 024	-	_	-	-
20	-	1 218	1 228	1 215	1 172	1 093	_	-	-
30	-	1 421	1 450	1 463	1 455	1 420	1 350	1 241	_
40	-	1 673	1 707	1 734	1 748	1 743	1 712	1 650	_
50	_	2 002	2 029	2 057	2 080	2 092	2 087	2 059	_
60	_	-	2 446	2 462	2 481	2 498	2 505	2 498	_
65		-	-	-	-	-	-	-	
00				-	_				
Current consump	otion in A								
5	-	-	_	-	-	-	_	-	-
15	-	1.95	1.93	1.86	1.75	-	-	-	_
20	-	2.12	2.12	2.07	1.99	1.87	-	-	_
30	_	2.46	2.48	2.47	2.43	2.36	2.24	2.09	_
40	_	2.84	2.88	2.89	2.87	2.82	2.74	2.62	_
50	_	3.31	3.34	3.35	3.34	3.30	3.24	3.15	_
60	-	-	3.93	3.92	3.90	3.86	3.80	3.71	_
65	-	-	-	-	-	-	-	-	_
00		1	1	l	l	1	1	l	
/lass flow in kg/h	l								
5	-	-	-	-	-	-	-	-	-
15	-	80	98	118	142	-	-	-	-
20	-	79	97	117	141	167	-	-	-
30	-	77	95	115	139	165	195	229	-
40	-	75	93	114	137	163	193	227	-
50	-	73	91	112	135	161	191	225	-
60	-	-	89	110	133	160	190	223	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.C	D.P.) _	_	-	-	_	_	-	
15	-	2.82	3.53	4.48	5.83	-	-	-	
20	-	2.62	3.03	3.79	4.82	6.27	-	-	
							1		
30	-	1.82	2.24	2.77	3.42	4.27	5.41	7.04	-
40	-	1.31	1.63	2.00	2.46	3.01	3.71	4.62	-
50	-	0.88	1.12	1.40	1.72	2.10	2.57	3.14	-
60	-	-	0.71	0.90	1.13	1.40	1.72	2.10	-
65	-	-	-	-	-	-	-	-	-

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

Cooling capacity	3 180	W	
Power input	1 887	W	
Current consumption	3.11	Α	
Mass flow	113	kg/h	
C.O.P.	1.68		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R404A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
!!	· · · · · · · · · · · · · · · · · · ·								
ooling capacity		1	1	1	1				
5	-	-	-	-	-	-	-	-	-
15	-	3 276	4 060	4 980	6 050	-	-	-	-
20	-	3 097	3 847	4 723	5 740	6 915	-		-
30	-	2 746	3 423	4 209	5 118	6 164	7 363	8 734	-
40	-	2 391	2 990	3 681	4 477	5 391	6 435	7 624	-
50	-	-	2 531	3 124	3 803	4 579	5 463	6 466	-
60	-	-	-	2 524	3 082	3 716	4 434	5 241	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 125	1 122	1 090	1 024	-	-	-	-
20	-	1 218	1 228	1 215	1 172	1 093	-	-	-
30	-	1 421	1 450	1 463	1 455	1 420	1 350	1 241	-
40	-	1 673	1 707	1 734	1 748	1 743	1 712	1 650	-
50	-	-	2 029	2 057	2 080	2 092	2 087	2 059	-
60	-	-	-	2 462	2 481	2 498	2 505	2 498	_
65	-	-	-	-	-	-	-	-	-
•				•	•	•	•		
Current consump	tion in A	_		1		_			
5	-	-	-	-	-	-	-	-	-
15	-	1.95	1.93	1.86	1.75	-	-	-	-
20	-	2.12	2.12	2.07	1.99	1.87	-	-	-
30	-	2.46	2.48	2.47	2.43	2.36	2.24	2.09	-
40	-	2.84	2.88	2.89	2.87	2.82	2.74	2.62	-
50	-	-	3.34	3.35	3.34	3.30	3.24	3.15	-
60	-	-	-	3.92	3.90	3.86	3.80	3.71	-
65	-	-	-	-	-	-	-	-	-
Mass flow in kg/h		1	I	1	1			1	
5	-	-	-	-	-	-	-	-	-
15	-	70	87	107	131	-	-	-	-
20	-	69	86	106	130	159	-	-	-
30	-	67	84	105	128	156	190	229	-
40	-	66	83	103	127	155	188	227	-
50	-	-	81	101	125	153	186	225	-
60	-	-	-	99	123	151	184	223	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.C	D.P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.91	3.62	4.57	5.91	-	-	-	-
20	-	2.54	3.13	3.89	4.90	6.33	-	-	-
30	-	1.93	2.36	2.88	3.52	4.34	5.45	7.04	-
40	-	1.43	1.75	2.12	2.56	3.09	3.76	4.62	-
50	-	-	1.25	1.52	1.83	2.19	2.62	3.14	-
60	-	-	-	1.03	1.24	1.49	1.77	2.10	-
65	_	_	-	-	-	_	_	_	_

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

	,			
Cooling capacity		3 407	W	
Power input		1 887	W	
Current consumption		3.11	Α	
Mass flow		102	kg/h	
C.O.P.		1.81		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 65 Hz, EN 12900 rating conditions

R404A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
	: \A/								
ooling capacity		1		1	1		1		
5	-	- 2 424	- 4 207	- 5 204	- 0.474	-	-	-	-
15	-	3 434	4 287	5 294	6 471	7.440	-	-	-
20	-	3 220	4 034	4 994	6 116	7 416	-	- 0.450	-
30	-	2 799	3 531	4 392	5 399	6 569	7 916	9 458	-
40	-	2 372	3 016	3 774	4 661	5 694	6 889	8 262	-
50	-	1 920	2 472	3 121	3 883	4 774	5 812	7 011	-
60	-	-	1 880	2 415	3 047	3 792	4 666	5 686	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 236	1 235	1 202	1 133	-	-	-	-
20	-	1 336	1 349	1 337	1 293	1 209	-	-	-
30	-	1 553	1 587	1 604	1 598	1 561	1 488	1 372	-
40	-	1 821	1 862	1 894	1 912	1 909	1 878	1 813	-
50	-	2 171	2 204	2 238	2 266	2 283	2 280	2 252	-
60	-	-	2 647	2 668	2 693	2 714	2 726	2 721	_
65	-	-	-	-	-	-	-	-	-
		•	•	•	•	•	•		
Current consump	otion in A								
5	-	-	-	-	-	-	-	-	-
15	-	2.10	2.07	2.01	1.90	-	-	-	-
20	-	2.28	2.27	2.23	2.15	2.03	-	-	-
30	-	2.64	2.66	2.65	2.61	2.54	2.42	2.26	-
40	-	3.04	3.08	3.09	3.07	3.02	2.94	2.83	-
50	-	3.54	3.57	3.59	3.58	3.54	3.48	3.39	-
60	-	-	4.19	4.19	4.17	4.14	4.08	3.99	-
65	-	-	-	-	-	-	-	-	-
Mass flow in kg/h		T	T	1	T	Т	1	T	
5	-	-	-	-	-	-	-	-	-
15	-	87	106	128	154	-	-	-	-
20	-	86	105	127	152	181	-	-	-
30	-	84	103	125	150	179	212	248	-
40	-	82	101	123	148	177	209	246	-
50	-	80	99	121	147	175	208	244	-
60	-	-	97	119	145	173	206	242	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.0	O.P.)							
5	-	T -	-	-	-	-	-	-	-
15	-	2.78	3.47	4.40	5.71	-	-	-	-
20	-	2.41	2.99	3.73	4.73	6.14	-	-	-
30	-	1.80	2.22	2.74	3.38	4.21	5.32	6.90	-
40	-	1.30	1.62	1.99	2.44	2.98	3.67	4.56	-
50	-	0.88	1.12	1.39	1.71	2.09	2.55	3.11	-
60	-	-	0.71	0.91	1.13	1.40	1.71	2.09	_
		1						,_	

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

recommendation of the experience of the experien			
Cooling capacity	3 453	W	
Power input	2 057	W	
Current consumption	3.33	Α	
Mass flow	122	kg/h	
C.O.P.	1.68		

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900



Danfoss scroll compressor. VLZ028TGA

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

R404A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity		T	T	T	1	Г	T	T	
5	-	-	-	-	-	-	-	-	-
15	-	3 551	4 399	5 393	6 550	-	-	-	-
20	-	3 359	4 169	5 117	6 217	7 487	-	-	-
30	-	2 981	3 713	4 564	5 548	6 680	7 976	9 458	-
40	-	2 597	3 246	3 995	4 857	5 846	6 975	8 262	-
50	-	-	2 751	3 393	4 129	4 969	5 925	7 011	-
60	-	-	-	2 745	3 349	4 035	4 812	5 686	-
65	-	-	-	-	-	-	-	-	-
	_								
Power input in W		1	1	ı	T		ı	T	
5	-	-	-	-	-	-	-	-	-
15	-	1 236	1 235	1 202	1 133	-	-	-	-
20	-	1 336	1 349	1 337	1 293	1 209	-	-	-
30	-	1 553	1 587	1 604	1 598	1 561	1 488	1 372	-
40	-	1 821	1 862	1 894	1 912	1 909	1 878	1 813	-
50	-	-	2 204	2 238	2 266	2 283	2 280	2 252	-
60	-	-	-	2 668	2 693	2 714	2 726	2 721	-
65	-	-	-	-	-	-	-	-	-
Current consump	ption in A	1	1	T	ı	T	T	1	
5	-	-	-	-	-	-	-	-	-
15	-	2.10	2.07	2.01	1.90	-	-	-	-
20	-	2.28	2.27	2.23	2.15	2.03	-	-	-
30	-	2.64	2.66	2.65	2.61	2.54	2.42	2.26	-
40	-	3.04	3.08	3.09	3.07	3.02	2.94	2.83	-
50	-	-	3.57	3.59	3.58	3.54	3.48	3.39	-
60	-	-	-	4.19	4.17	4.14	4.08	3.99	-
65	-	-	-	-	-	-	-	-	-
Mass flow in kg/l		1	1	ı	T		ı	T	
5	-	-	-	-	-	-	-	-	-
15	-	75	94	116	142	-	-	-	-
20	-	75	93	115	141	172	-	-	-
30	-	73	92	113	139	169	205	248	-
40	-	71	90	112	137	168	203	246	-
50	-	-	88	110	136	166	202	244	-
60	-	-	-	108	134	164	200	242	-
65	-	-	-	-	-	-	-	-	-
Coefficient of pe	rformance (C.0	D.P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.87	3.56	4.49	5.78	-	_	-	-
20	-	2.51	3.09	3.83	4.81	6.19	-	-	-
30	-	1.92	2.34	2.84	3.47	4.28	5.36	6.90	_
40	-	1.43	1.74	2.11	2.54	3.06	3.71	4.56	-
50		-	1.25	1.52	1.82	2.18	2.60	3.11	
60	-	-	-	1.03	1.02	1.49	1.77	2.09	
		+	-	-	-	-	-	2.09	
65	-	-	_	-	ı -	1 -	1 -	1 -	-

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

recommendation of the experience of the experien			
Cooling capacity	3 699	W	
Power input	2 057	W	
Current consumption	3.33	Α	
Mass flow	111	kg/h	
C.O.P.	1.80		

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 70 Hz, EN 12900 rating conditions

R404A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
0 1 : : : : - :	: \W								
Cooling capacity 5			1	_	_	1	1		
	-	- 2.000	4 040	1	1	-	-	-	-
15	-	3 696	4 613	5 694	6 959	7.070	-	-	-
20	-	3 469	4 343	5 375	6 580	7 978	- 0.504	-	-
30	-	3 019	3 806	4 733	5 816	7 073	8 521	10 179	-
40	-	2 560	3 254	4 070	5 025	6 136	7 421	8 898	-
50	-	2 074	2 669	3 368	4 189	5 148	6 264	7 554	-
60	-	-	2 032	2 608	3 289	4 091	5 031	6 129	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 352	1 352	1 320	1 248	-	-	-	-
20	-	1 458	1 475	1 465	1 419	1 331	-	-	_
30	-	1 689	1 729	1 750	1 746	1 709	1 633	1 510	_
40	-	1 973	2 020	2 059	2 081	2 081	2 050	1 983	_
50	-	2 344	2 383	2 423	2 458	2 478	2 479	2 452	_
60	-	-	2 850	2 878	2 909	2 936	2 953	2 951	_
65	-	-	-	-	-	-	-	-	_
Į.						•	•		
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	-
15	-	2.25	2.22	2.16	2.05	-	-	-	-
20	-	2.44	2.43	2.39	2.31	2.19	-	-	-
30	-	2.82	2.84	2.83	2.80	2.72	2.60	2.44	-
40	-	3.24	3.28	3.29	3.28	3.23	3.15	3.03	-
50	-	3.77	3.80	3.82	3.81	3.78	3.72	3.63	-
60	-	-	4.46	4.46	4.45	4.42	4.37	4.29	_
65	-	-	-	-	-	-	-	-	-
·					•				
Mass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	93	114	138	165	-	-	-	-
20	-	92	113	137	164	195	-	-	-
30	-	90	111	135	162	193	228	267	-
40	-	88	109	133	160	191	226	265	-
50	-	86	107	131	158	189	224	263	-
60	-	-	105	129	156	187	222	261	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	•	1	1			T	T		
5	-	-	-	-	-	-	-	-	-
15	-	2.73	3.41	4.31	5.57	-	-	-	-
20	-	2.38	2.94	3.67	4.64	5.99	-	-	-
30	-	1.79	2.20	2.70	3.33	4.14	5.22	6.74	-
	-	1.30	1.61	1.98	2.41	2.95	3.62	4.49	-
40		0.89	1.12	1.39	1.70	2.08	2.53	3.08	-
50	-								
	-	-	0.71	0.91	1.13	1.39	1.70	2.08	-

Cooling capacity	3 725	W	
Power input	2 232	W	
Current consumption	3.54	Α	
Mass flow	132	kg/h	
C.O.P.	1.67		

to: Evaporating temperature at dew point

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

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R404A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
1									
Cooling capacity	in W	1	1		1	1	1	1	
5	-	-	-	-	-	-	-	-	-
15	-	3 822	4 733	5 801	7 044	-	-	-	-
20	-	3 618	4 489	5 508	6 690	8 054	-	-	-
30	-	3 215	4 003	4 918	5 975	7 192	8 586	10 179	-
40	-	2 803	3 503	4 309	5 236	6 299	7 514	8 898	-
50	-	-	2 971	3 662	4 454	5 358	6 387	7 554	-
60	-	-	-	2 964	3 615	4 353	5 189	6 129	ı
65	-	-	-	-	-	-	-	-	1
Power input in W	ı	1	1		1	1	1	1	
5	-	-	-	-	-	-	-	-	-
15	-	1 352	1 352	1 320	1 248	-	-	-	-
20	-	1 458	1 475	1 465	1 419	1 331	-	-	-
30	-	1 689	1 729	1 750	1 746	1 709	1 633	1 510	-
40	-	1 973	2 020	2 059	2 081	2 081	2 050	1 983	-
50	-	-	2 383	2 423	2 458	2 478	2 479	2 452	-
60	-	-	-	2 878	2 909	2 936	2 953	2 951	-
65	-	-	-	-	-	-	-	-	-
									<u></u>
Current consump	ption in A								
5	-	-	-	-	-	-	-	-	-
15	-	2.25	2.22	2.16	2.05	-	-	-	-
20	-	2.44	2.43	2.39	2.31	2.19	-	-	-
30	-	2.82	2.84	2.83	2.80	2.72	2.60	2.44	-
40	-	3.24	3.28	3.29	3.28	3.23	3.15	3.03	-
50	-	-	3.80	3.82	3.81	3.78	3.72	3.63	-
60	-	-	-	4.46	4.45	4.42	4.37	4.29	-
65	-	-	-	-	_	-	-	-	-
				1	ı	L	L		
Mass flow in kg/h	h								
5	-	-	-	-	_	-	_	-	_
15	_	81	101	125	153	_	_	_	_
20	_	80	100	124	152	185	_	_	_
30	-	79	99	122	150	183	221	267	_
40	_	77	97	120	148	181	219	265	_
50		-	95	119	146	179	217	263	_
60		-	-	117	144	179	217	261	-
65	<u> </u>	-	-	-	-	-	-	-	-
00	-	<u> </u>	<u> </u>				<u> </u>		<u> </u>
Coefficient of pe	rformance (C. (D.P.)							
5	-	-	-	-	-	-	-	-	-
15		2.83	3.50	4.39	5.64	-	-	-	
20		2.48	3.04	3.76	4.71	6.05	_	-	-
					3.42		1		
30	-	1.90	2.32	2.81		4.21	5.26	6.74	-
40	-	1.42	1.73	2.09	2.52	3.03	3.67	4.49	-
50	-	-	1.25	1.51	1.81	2.16	2.58	3.08	-
60	-	-	-	1.03	1.24	1.48	1.76	2.08	-
65	-	-							

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

Cooling capacity	3 991	W	
Power input	2 232	W	
Current consumption	3.54	Α	
Mass flow	120	kg/h	
C.O.P.	1.79		

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 75 Hz, EN 12900 rating conditions

R404A

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
•		•							
ooling capacity		1		T	T	T	T	T T	
5	-	-	-	-	-	-	-	-	-
15	-	3 955	4 934	6 090	7 440	-	-	-	-
20	-	3 715	4 650	5 753	7 041	8 533	-	-	-
30	-	3 237	4 080	5 071	6 230	7 574	9 123	10 895	-
40	-	2 748	3 492	4 365	5 387	6 577	7 952	9 531	-
50	-	2 228	2 866	3 615	4 494	5 521	6 715	8 096	-
60	-	-	2 184	2 801	3 530	4 388	5 395	6 569	-
65	-	-	-	-	-	-	-	-	-
ower input in W									
5	-	_	_	_	_	-	-	_	-
15	-	1 472	1 475	1 444	1 369	-	_	_	_
20	-	1 585	1 606	1 598	1 552	1 460	_	_	_
30	-	1 830	1 875	1 901	1 900	1 863	1 785	1 656	-
40	_	2 130	2 184	2 228	2 255	2 258	2 229	2 159	_
50	_	2 519	2 566	2 613	2 654	2 680	2 684	2 659	_
60	_	-	3 057	3 091	3 129	3 163	3 185	3 188	_
65	_	_	-	-	-	-	-	-	_
		1	1	1	1	1	1	<u> </u>	
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	-
15	-	2.40	2.38	2.32	2.22	-	-	-	-
20	-	2.60	2.59	2.56	2.48	2.36	-	-	-
30	-	2.99	3.02	3.01	2.98	2.91	2.79	2.62	-
40	-	3.44	3.47	3.49	3.48	3.45	3.37	3.25	-
50	-	4.00	4.02	4.04	4.05	4.03	3.98	3.88	-
60	-	-	4.72	4.73	4.73	4.71	4.67	4.59	-
65	-	-	-	-	-	-	-	-	-
Mass flow in kg/h		1	T	T	Т	T	T	1	
5	-	-	-	-	-	-	-	-	-
15	-	100	122	147	177	-	-	-	-
20	-	99	121	146	175	209	-	-	-
30	-	97	119	145	173	206	244	286	-
40	-	95	117	143	172	204	242	284	-
50	-	92	115	141	170	203	240	282	-
60	-	-	112	138	168	201	238	280	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.0	D.P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.69	3.35	4.22	5.43	-	-	-	-
20	-	2.34	2.90	3.60	4.54	5.84	-	-	-
30	-	1.77	2.18	2.67	3.28	4.06	5.11	6.58	-
40	-	1.29	1.60	1.96	2.39	2.91	3.57	4.41	-
50	-	0.88	1.12	1.38	1.69	2.06	2.50	3.05	_
60	-	-	0.71	0.91	1.13	1.39	1.69	2.06	-
		1							

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

tronnia porto manos arto io o,			
Cooling capacity	3 997	W	
Power input	2 411	W	
Current consumption	3.76	Α	
Mass flow	142	kg/h	
C.O.P.	1.66		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

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

R404A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity				1	1		1		
5	-	-	-	-		-	-	-	-
15	-	4 090	5 064	6 204	7 531	-	-	-	-
20	-	3 875	4 806	5 895	7 158	8 615	-	-	-
30	-	3 447	4 291	5 270	6 401	7 702	9 192	10 895	-
40	-	3 009	3 758	4 621	5 614	6 752	8 051	9 531	-
50	-	-	3 190	3 931	4 778	5 746	6 847	8 096	-
60	-	-	-	3 183	3 880	4 670	5 564	6 569	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	_	-	-	_	_
15	-	1 472	1 475	1 444	1 369	-	-	-	-
20	-	1 585	1 606	1 598	1 552	1 460	-	-	-
30	-	1 830	1 875	1 901	1 900	1 863	1 785	1 656	_
40	-	2 130	2 184	2 228	2 255	2 258	2 229	2 159	_
50	_	-	2 566	2 613	2 654	2 680	2 684	2 659	_
60	-	_	-	3 091	3 129	3 163	3 185	3 188	_
65		_	_	-	-	-	-	-	
55		_	_	_	_	_	1	1	
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	-
15	_	2.40	2.38	2.32	2.22	-	-	-	-
20	-	2.60	2.59	2.56	2.48	2.36	-	-	-
30	-	2.99	3.02	3.01	2.98	2.91	2.79	2.62	-
40	-	3.44	3.47	3.49	3.48	3.45	3.37	3.25	_
50	-	-	4.02	4.04	4.05	4.03	3.98	3.88	_
60	-	_	_	4.73	4.73	4.71	4.67	4.59	_
65	-	_	_	-	-	-	-	-	_
		I	I	1		I		I I	
Mass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	87	108	133	163	-	-	-	-
20	-	86	107	133	162	198	-	-	-
30	-	84	106	131	161	195	237	286	-
40	-	83	104	129	159	194	235	284	-
50	-	-	102	127	157	192	233	282	-
60	-	-	-	125	155	190	231	280	-
65	-	-	-	-	-	-	-	-	-
O - efficient of								1	
Coefficient of period	formance (C.C	D.P.) _	_	_	_	_	_	_	_
15	-	2.78	3.43	4.30	5.50	-	-		
			2.99			1		-	
20	-	2.45	1	3.69	4.61	5.90		- 6 F9	-
30	-	1.88	2.29	2.77	3.37	4.13	5.15	6.58	-
40	-	1.41	1.72	2.07	2.49	2.99	3.61	4.41	-
50	-	-	1.24	1.50	1.80	2.14	2.55	3.05	-
60	-	-	-	1.03	1.24	1.48	1.75	2.06	-
65	-	-	-	-	-	-	-	-	-

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

Cooling capacity	4 283	W	
Power input	2 411	W	
Current consumption	3.76	Α	
Mass flow	128	kg/h	
C.O.P.	1.78		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 80 Hz, EN 12900 rating conditions

R404A

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity	in W								
5	-	-	-	-	-	_	-	-	-
15	_	4 211	5 252	6 480	7 915	_	_	-	
							-	-	
20		3 959	4 954	6 127	7 497	9 084		+	-
30	-	3 454	4 353	5 409	6 642	8 073	9 721	11 607	-
40	-	2 935	3 729	4 660	5 749	7 016	8 480	10 162	-
50	-	2 382	3 063	3 862	4 798	5 893	7 166	8 636	-
60	-	-	2 335	2 993	3 770	4 684	5 757	7 008	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	_
15	-	1 596	1 603	1 572	1 497	-	-	-	-
20	-	1 716	1 742	1 736	1 690	1 596	-	-	-
30	-	1 974	2 026	2 057	2 059	2 023	1 943	1 809	-
40	-	2 290	2 351	2 402	2 435	2 442	2 414	2 343	-
50	-	2 698	2 752	2 807	2 855	2 887	2 895	2 872	_
60	-	-	3 266	3 309	3 355	3 396	3 424	3 432	_
65	_	-	-	-	-	-	-	-	_
55		_	_	_		_	_		
Current consump	otion in A								
5	-	-	_	-	-	-	-	-	_
15	-	2.56	2.54	2.49	2.39	-	-	-	_
20	-	2.76	2.76	2.73	2.66	2.55	-	-	_
30	-	3.17	3.19	3.20	3.17	3.10	2.99	2.81	_
40	_	3.64	3.67	3.69	3.69	3.66	3.59	3.47	_
50	_	4.22	4.25	4.27	4.28	4.27	4.23	4.15	_
60	-	-	4.98	4.99	5.00	5.00	4.97	4.91	_
65		-	-	-	-	-	-	-	_
00					ı	1		<u>l</u>	
Mass flow in kg/h	ì								
5	-	-	_	-	-	-	-	-	_
15	-	106	130	157	188	-	-	-	_
20	-	105	129	156	187	222	_	_	_
30	-	104	127	154	185	220	260	305	_
40	_	101	125	152	183	218	258	302	_
50		99	123	150	181	216	256	300	
60	-	-	120	148	179	214	254	298	
65	-	-	-	-	-		-	- 290	
00	-			<u> </u>	<u> </u>	<u> </u>	<u> </u>		-
Coefficient of per	formance (C.0	D.P.)	_	1	1	.	1	, , , , , , , , , , , , , , , , , , , 	
5	-	-	-	-	-	-	-	-	-
15	-	2.64	3.28	4.12	5.29	-	-	-	-
20	-	2.31	2.84	3.53	4.44	5.69	-	-	-
30	-	1.75	2.15	2.63	3.23	3.99	5.00	6.42	-
40	-	1.28	1.59	1.94	2.36	2.87	3.51	4.34	-
50	-	0.88	1.11	1.38	1.68	2.04	2.47	3.01	-
	-	-	0.71	0.90	1.12	1.38	1.68	2.04	-
60		<u> </u>	<u> </u>	<u> </u>					

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

	-,	
Cooling capacity	4 268	W
Power input	2 595	W
Current consumption	3.97	Α
Mass flow	151	kg/h
C.O.P.	1.64	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900



Danfoss scroll compressor. VLZ028TGA

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

R404A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity		1	T		1	T		1	
5	-	-	-	-	-	-	-	-	-
15	-	4 355	5 390	6 602	8 012	-	-	-	-
20	-	4 129	5 120	6 278	7 621	9 171	-	-	-
30	-	3 678	4 577	5 620	6 825	8 209	9 795	11 607	-
40	-	3 214	4 013	4 933	5 991	7 203	8 586	10 162	-
50	-	-	3 409	4 199	5 102	6 133	7 306	8 636	-
60	-	-	-	3 402	4 144	4 985	5 937	7 008	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
-			1		1				
5 15	-	1 506	1 602	1 572	1 497	-	-	-	<u>-</u>
		1 596	1 603	1 572	1	1 506		-	
20	-	1 716	1 742	1 736	1 690	1 596	-	-	-
30	-	1 974	2 026	2 057	2 059	2 023	1 943	1 809	-
40	-	2 290	2 351	2 402	2 435	2 442	2 414	2 343	-
50	-	-	2 752	2 807	2 855	2 887	2 895	2 872	-
60	-	-	-	3 309	3 355	3 396	3 424	3 432	-
65	-	-	-	-	-	-	-	-	-
Current consump		1	1		1	T		T	
5	-	-	-	-	-	-	-	-	-
15	-	2.56	2.54	2.49	2.39	-	-	-	-
20	-	2.76	2.76	2.73	2.66	2.55	-	-	-
30	-	3.17	3.19	3.20	3.17	3.10	2.99	2.81	-
40	-	3.64	3.67	3.69	3.69	3.66	3.59	3.47	-
50	-	-	4.25	4.27	4.28	4.27	4.23	4.15	-
60	-	-	-	4.99	5.00	5.00	4.97	4.91	-
65	-	-	-	-	-	-	-	-	-
Mass flow in kg/h	ì								
5	-	-	_	_	_	-	_	_	_
15	-	93	115	142	174	-	_	_	-
20	_	92	114	141	173	210	_	_	_
30	_	90	113	140	171	208	252	305	_
40	_	88	111	138	169	207	250	302	_
50	_	-	109	136	168	205	249	300	_
60		-	-	134	166	203	249	298	
65	-	-	-	-	-	-	-	-	
00	_	I -	1 -	<u> </u>	1 -	· -	<u> </u>	<u> </u>	
Coefficient of per	formance (C.C	D.P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.73	3.36	4.20	5.35	-	-	-	-
20	-	2.41	2.94	3.62	4.51	5.75	-	-	-
30	-	1.86	2.26	2.73	3.31	4.06	5.04	6.42	-
40	-	1.40	1.71	2.05	2.46	2.95	3.56	4.34	-
50	-	-	1.24	1.50	1.79	2.12	2.52	3.01	-
60	-	-	-	1.03	1.24	1.47	1.73	2.04	-
65	-	-	_	_	-	-	_	_	_

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

ſ	Cooling capacity	4 573	W	
	Power input	2 595	W	
	Current consumption	3.97	Α	
	Mass flow	137	kg/h	
	C.O.P.	1.76		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 85 Hz, EN 12900 rating conditions

R404A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity	in W								
5	-	_	_	-	_	-	-	-	_
15	_	4 464	5 566	6 866	8 384	_	_	-	
						1	-	-	
20	-	4 200	5 255	6 497	7 948	9 628			<u> </u>
30		3 670	4 624	5 744	7 052	8 569	10 316	12 314	
40	-	3 122	3 965	4 954	6 110	7 454	9 007	10 791	-
50	-	2 536	3 259	4 108	5 102	6 264	7 614	9 174	-
60	-	-	2 486	3 185	4 009	4 980	6 118	7 444	-
65	-	-	-	-	-	-	-	-	-
Power input in W	,								
5	-	-	-	-	-	-	-	-	-
15	-	1 725	1 736	1 707	1 630	-	-	-	-
20	-	1 851	1 882	1 879	1 834	1 738	-	-	-
30	-	2 123	2 182	2 218	2 224	2 190	2 108	1 970	_
40	-	2 453	2 523	2 581	2 620	2 631	2 605	2 534	-
50	-	2 880	2 943	3 006	3 061	3 100	3 113	3 093	-
60	-	-	3 479	3 530	3 585	3 634	3 669	3 682	-
65	_	_	-	-	-	-	-	-	_
		I.	L	I.	l	ı	ı	l l	
Current consump	otion in A								
5	_	-	_	-	_	_	-	_	-
15	-	2.72	2.70	2.66	2.58	-	-	-	_
20	-	2.93	2.93	2.90	2.84	2.74	-	-	_
30	_	3.35	3.37	3.38	3.36	3.30	3.19	3.02	_
40	_	3.84	3.86	3.89	3.90	3.88	3.81	3.69	_
50	_	4.45	4.47	4.50	4.52	4.52	4.49	4.42	-
60	-	-	5.24	5.26	5.28	5.30	5.29	5.24	_
65	-	-	-	-	-	-	-	-	_
			I.	l	l	I	I	<u> </u>	
Mass flow in kg/h	1								
5	_	_	_	_	_	_	_	_	_
15	-	113	138	166	199	-	_	_	-
20	_	112	137	165	198	235	-	_	_
30	_	110	135	164	196	234	276	323	
40	_	108	133	162	195	232	274	321	_
50	_	105	131	160	193	230	272	319	
60		-	128	157	190	228	270	317	
65	-		-	-	-	-	-	-	
0.5	-			<u> </u>	<u> </u>		<u> </u>	<u> </u>	-
Coefficient of per	rformance (C.	O.P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.59	3.21	4.02	5.14	-	-	-	-
20	-	2.27	2.79	3.46	4.33	5.54	-	-	-
30	-	1.73	2.12	2.59	3.17	3.91	4.89	6.25	-
	-	1.27	1.57	1.92	2.33	2.83	3.46	4.26	-
40		0.00	1.11	1.37	1.67	2.02	2.45	2.97	-
40 50	-	0.88							
	-	-	0.71	0.90	1.12	1.37	1.67	2.02	-

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

	,	
Cooling capacity	4 539	W
Power input	2 783	W
Current consumption	4.18	Α
Mass flow	161	kg/h
C.O.P.	1.63	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900



Danfoss scroll compressor. VLZ028TGA

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

R404A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity		1	1		I	1			
5	-	- 4 047		-	-	-	-	-	-
15	-	4 617	5 712	6 995	8 487	-	-	-	-
20	-	4 381	5 431	6 658	8 080	9 721	-	-	-
30	-	3 908	4 863	5 969	7 246	8 714	10 394	12 314	-
40	-	3 418	4 268	5 245	6 367	7 653	9 120	10 791	-
50	-	-	3 627	4 467	5 425	6 519	7 764	9 174	-
60	-	-	-	3 619	4 407	5 299	6 309	7 444	-
65	-	-	-	-	-	-	-	-	-
ower input in W									
5	-	_	_	_	-	_	_	_	-
15	_	1 725	1 736	1 707	1 630	-	_	_	_
20	_	1 851	1 882	1 879	1 834	1 738	_	_	_
30	_	2 123	2 182	2 218	2 224	2 190	2 108	1 970	
40	-	2 453	2 523	2 581	2 620	2 631	2 605	2 534	
50		-	2 943	3 006	3 061	3 100	3 113	3 093	
60		-	-	3 530	3 585	3 634	3 669	3 682	
65		-	-	-	-	-	-	-	
00				_		_	_		
Current consump	tion in A								
5	_	_	_	-	-	_	_	_	_
15	_	2.72	2.70	2.66	2.58	_	_	_	_
20	-	2.93	2.93	2.90	2.84	2.74	_	_	_
30	_	3.35	3.37	3.38	3.36	3.30	3.19	3.02	_
40	_	3.84	3.86	3.89	3.90	3.88	3.81	3.69	_
50	-	-	4.47	4.50	4.52	4.52	4.49	4.42	_
60	-	-	-	5.26	5.28	5.30	5.29	5.24	_
65	-	-	-	-	-	-	-	-	_
55				I.	I	I	I	I I	
/lass flow in kg/h									
5	-	-	-	-	-	-	-	-	-
15	-	98	122	150	184	-	-	-	-
20	=	97	121	150	183	223	-	-	-
30	-	96	120	148	182	221	268	323	-
40	-	94	118	147	180	219	266	321	-
50	-	-	116	145	178	218	264	319	-
60	-	-	-	142	176	216	262	317	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per		1	1		<u> </u>			 	
5	-	-	-	-	-	-	-	-	-
15	-	2.68	3.29	4.10	5.21	-	-	-	-
20	-	2.37	2.89	3.54	4.41	5.59	-	-	-
30	-	1.84	2.23	2.69	3.26	3.98	4.93	6.25	-
40	-	1.39	1.69	2.03	2.43	2.91	3.50	4.26	-
50	-	-	1.23	1.49	1.77	2.10	2.49	2.97	-
60	-	-	-	1.03	1.23	1.46	1.72	2.02	-
65	-	-	-	-	-	-	_	_	-

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

Cooling capacity	4 864	W	
Power input	2 783	W	
Current consumption	4.18	Α	
Mass flow	146	kg/h	
C.O.P.	1.75		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 90 Hz, EN 12900 rating conditions

R404A

Cond. temp. in	in Evaporating temperature in °C (to)								
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Na alim m a a ma a ido	. i 18/								
cooling capacity		1		T	I	1	T	1	
5	-	-	-	-	-	-	-	-	-
15	-	4 714	5 876	7 246	8 847	-	-	-	-
20	-	4 439	5 553	6 864	8 395	10 167	-	-	-
30	-	3 885	4 894	6 078	7 460	9 062	10 907	13 017	-
40	-	3 308	4 201	5 248	6 470	7 891	9 533	11 417	-
50	-	2 689	3 455	4 353	5 406	6 634	8 062	9 711	-
60	-	-	2 637	3 376	4 248	5 273	6 476	7 879	-
65	-	-	-	-	-	-	-	-	-
Power input in V	,								
5	_	_	_	_	_	_	_	_	_
15	_	1 859	1 873	1 846	1 769	-	_	-	_
20	_	1 991	2 027	2 028	1 984	1 887	_	-	-
30		2 277	2 342	2 384	2 394	2 362	2 280	2 138	
40		2 621	2 699	2 765	2 810	2 826	2 803	2 733	-
-		1		1		+	1		
50	-	3 065	3 137	3 209	3 272	3 318	3 337	3 320	-
60	-	-	3 695	3 755	3 819	3 877	3 920	3 939	-
65	-	-	-	-	-	-	-	-	-
urrent consum	ption in A								
5	-	_	_	_	_	_	-	_	_
15	_	2.89	2.87	2.84	2.77	_	-	_	-
20	_	3.10	3.10	3.08	3.04	2.94	_	-	-
30	-	3.53	3.55	3.56	3.55	3.51	3.40	3.22	
40	-	4.03	4.05	4.08	4.10	4.10	4.04	3.93	-
50		4.67	4.68	4.72	4.75	4.77	4.76	4.69	-
60		-	5.50	5.52	5.56	5.60	5.61	5.58	-
65	-	-	-	-	-	-	5.01	5.56	-
05	-	-	-	-	-	-	_	-	-
lass flow in kg/	h								
5	-	-	-	-	-	-	-	-	-
15	-	119	145	175	210	-	-	-	-
20	-	118	144	175	209	249	-	-	-
30	-	116	143	173	208	247	291	342	-
40	-	114	141	171	206	245	290	340	-
50	-	112	139	169	204	243	288	338	-
60	-	-	136	167	202	241	286	335	-
65	-	-	-	-	-	-	-	-	-
Coefficient of pe	rformance (C.C								
5	-	J.P.) -	_	-	-	-	-	-	-
15	-	2.54	3.14	3.92	5.00	-	-	-	-
20	-	2.23	2.74	3.38	4.23	5.39	-	-	-
30	-	1.71	2.09	2.55	3.12	3.84	4.78	6.09	-
40	-	1.71	1.56	1.90	2.30	2.79	3.40	4.18	-
							2.42		
50	-	0.88	1.10	1.36	1.65	2.00	1	2.92	-
60	-	-	0.71	0.90	1.11	1.36	1.65	2.00	-
65	-	-	-	-	-			1 -	-

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

	-,	
Cooling capacity	4 810	W
Power input	2 977	W
Current consumption	4.38	Α
Mass flow	170	kg/h
C.O.P.	1.62	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 90 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R404A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
!!	· 14/								
ooling capacity 5		1	_	_	1		1		
	-	4 975	1		- 0.055	-	-	-	-
15	-	4 875	6 029	7 382	8 955	-	-	-	-
20	-	4 630	5 739	7 033	8 534	10 265	-	- 42.047	-
30	-	4 137	5 147	6 316	7 665	9 215	10 990	13 017	-
40	-	3 622	4 521	5 555	6 742	8 101	9 652	11 417	-
50	-	-	3 845	4 734	5 748	6 905	8 220	9 711	-
60	-	-	-	3 837	4 669	5 612	6 679	7 879	-
65	-	-	-	-	-	-	-	-	-
ower input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 859	1 873	1 846	1 769	-	-	-	-
20	-	1 991	2 027	2 028	1 984	1 887	-	-	-
30	-	2 277	2 342	2 384	2 394	2 362	2 280	2 138	-
40	-	2 621	2 699	2 765	2 810	2 826	2 803	2 733	-
50	-	-	3 137	3 209	3 272	3 318	3 337	3 320	-
60	-	-	-	3 755	3 819	3 877	3 920	3 939	-
65	-	-	-	-	-	-	-	-	-
urrent consump	tion in A	1	1					T T	
5	-	-	-	-	-	-	-	-	-
15	-	2.89	2.87	2.84	2.77	-	-	-	-
20	-	3.10	3.10	3.08	3.04	2.94	-	-	-
30	-	3.53	3.55	3.56	3.55	3.51	3.40	3.22	-
40	-	4.03	4.05	4.08	4.10	4.10	4.04	3.93	-
50	-	-	4.68	4.72	4.75	4.77	4.76	4.69	-
60	-	-	-	5.52	5.56	5.60	5.61	5.58	-
65	-	-	-	-	-	-	-	-	-
lass flow in kg/h	I								
5	-	-	_	-	-	-	_	-	-
15	-	104	129	159	194	-	-	-	-
20	-	103	128	158	194	235	-	-	-
30	-	101	127	157	192	234	283	342	-
40	-	100	125	155	191	232	281	340	-
50	-	-	123	153	189	230	280	338	_
60	-	-	-	151	187	228	277	335	-
65	-	-	-	-	-	-	-	-	-
coefficient of per	formance (C.C	O.P.) -	-	-	_	_	-	_	
15	-	2.62	3.22	4.00	5.06	-	-	-	
20	-	2.02	2.83	3.47	4.30	5.44	-	-	-
-			+	1		1	ł	†	
30	-	1.82	2.20	2.65	3.20	3.90	4.82	6.09	-
40	-	1.38	1.68	2.01	2.40	2.87	3.44	4.18	-
50	-	-	1.23	1.48	1.76	2.08	2.46	2.92	-
60	-	-	-	1.02	1.22	1.45	1.70	2.00	-
65	-	-	-	-	-	-	-	-	-

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

itoiiiiiai porioriiiaiioo at to	0,	70 0		
Cooling capacity		5 153	W	
Power input		2 977	W	
Current consumption		4.38	Α	
Mass flow		154	kg/h	
C.O.P.		1.73		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 95 Hz, EN 12900 rating conditions

R404A

Cond. temp. in			ı		ting temperature		1	1	
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity	in W	_	ı	.	•	1	.	,	
5	-	-	-	-	-	-	-	-	-
15	-	4 960	6 181	7 621	9 303	-	-	-	-
20	-	4 676	5 848	7 227	8 837	10 701	-	-	-
30	-	4 099	5 163	6 410	7 866	9 553	11 495	13 715	-
40	-	3 494	4 436	5 540	6 829	8 327	10 056	12 042	-
50	-	2 842	3 651	4 599	5 708	7 004	8 509	10 246	-
60	-	-	2 788	3 567	4 485	5 566	6 833	8 311	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	1 997	2 016	1 992	1 914	-	-	-	-
20	-	2 136	2 178	2 182	2 140	2 042	-	-	-
30	-	2 434	2 507	2 555	2 570	2 540	2 458	2 313	-
40	-	2 793	2 879	2 953	3 006	3 027	3 007	2 938	-
50	-	3 253	3 335	3 416	3 489	3 542	3 567	3 554	-
60	-	-	3 914	3 984	4 058	4 126	4 177	4 203	_
65	-	-	-	-	-	-	-	-	_
		1	1	ı	1	1	ı	1	
Current consump	tion in A								
5	-	_	_	-	_	-	_	_	_
15	_	3.06	3.05	3.03	2.97	_	_	_	_
20	_	3.27	3.27	3.26	3.23	3.15	_	-	
30		3.71	3.72	3.74	3.75	3.71	3.62	3.44	
					1				
40	-	4.23 4.89	4.24	4.28	4.31	4.32	4.28	4.17	
50			4.90	4.94	4.99	5.03	5.03	4.98	
60	-	-	5.75	5.79	5.85	5.91	5.94	5.94	-
65	-	-	-	-	-	-	-	-	-
Mana fla : / -									
Mass flow in kg/h		T	T	1	1	T	1		
5	-	-	-	-	-	-	-	-	-
15	-	125	153	184	221	-	-	-	-
20	-	124	152	184	220	262	-	-	-
30	-	123	151	183	219	260	307	360	-
40	-	121	149	181	218	259	306	358	-
50	-	118	146	179	216	257	304	356	-
60	-	-	143	176	213	254	301	354	-
65	-	-	-	-	-	-	-	-	-
Coefficient of per	formance (C.0	D.P.)	T	1	1	T	1	, , , , , , , , , , , , , , , , , , , ,	
5	-	-	-	-	-	-	-	-	-
15	-	2.48	3.07	3.83	4.86	-	-	-	-
20	-	2.19	2.69	3.31	4.13	5.24	-	-	-
30	-	1.68	2.06	2.51	3.06	3.76	4.68	5.93	-
40	-	1.25	1.54	1.88	2.27	2.75	3.34	4.10	-
50	-	0.87	1.09	1.35	1.64	1.98	2.39	2.88	-
60	-	-	0.71	0.90	1.11	1.35	1.64	1.98	-
		-	-	-	-	_	-	_	-

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

Cooling capacity	5 079	W	
Power input	3 174	W	
Current consumption	4.59	Α	
Mass flow	180	kg/h	
C.O.P.	1.60		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 95 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R404A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity	ı in W								
5	/ IN VV -	_	-	_	_	_	_	_	_
			1	1					
15	-	5 129	6 343	7 764	9 417	-	-	-	-
20	-	4 878	6 044	7 406	8 984	10 803	-	-	-
30	-	4 365	5 429	6 661	8 082	9 714	11 582	13 715	-
40	-	3 825	4 775	5 865	7 117	8 548	10 182	12 042	-
50	-	-	4 063	5 000	6 070	7 289	8 675	10 246	-
60	-	-	-	4 053	4 930	5 924	7 047	8 311	-
65	-	-	-	-	-	-	-	-	-
Power input in V	v								
5	=	-	-	-	-	-	-	-	-
15	-	1 997	2 016	1 992	1 914	-	-	-	-
20	-	2 136	2 178	2 182	2 140	2 042	-	-	-
30	-	2 434	2 507	2 555	2 570	2 540	2 458	2 313	-
40	-	2 793	2 879	2 953	3 006	3 027	3 007	2 938	-
50	-	-	3 335	3 416	3 489	3 542	3 567	3 554	-
60	-	-	-	3 984	4 058	4 126	4 177	4 203	-
65	-	-	-	-	-	-	-	-	-
Surrent consum 5	ption in A	_	_	_	_	_	_	_	_
15		3.06	3.05	3.03	2.97	-	-	-	
20	<u>-</u>	3.00	3.03	3.26	3.23	3.15	-	-	
30		3.71	3.72	3.74	3.75	3.71	3.62	3.44	
40		4.23	4.24	4.28	4.31	4.32	4.28		
	-	4.23		4.28	4.31	5.03	5.03	4.17	
50	-	+	4.90				1	4.98	-
60	-	-	-	5.79	5.85	5.91	5.94	5.94	-
65	-	-	-	-	-	-	-	-	-
Mass flow in kg/	h	_	_		1	_		,	
5	-	-	-	-	-	-	-	-	-
15	-	109	136	167	204	-	-	-	-
20	-	108	135	167	204	248	-	-	-
30	-	107	134	165	203	247	298	360	-
40	-	105	132	164	201	245	297	358	-
50	-	-	130	162	199	243	295	356	-
60	-	-	-	159	197	241	293	354	-
65	-	-	-	-	-	-	-	-	-
Coefficient of pe	erformance (C.0	D.P.)							
5	-	-	-	-	-	-	-	-	-
15	-	2.57	3.15	3.90	4.92	-	-	-	-
20	-	2.28	2.78	3.39	4.20	5.29	-	-	-
30	-	1.79	2.17	2.61	3.15	3.82	4.71	5.93	-
40	-	1.37	1.66	1.99	2.37	2.82	3.39	4.10	-
	_	-	1.22	1.46	1.74	2.06	2.43	2.88	-
50		1	+			•	•		
50 60	_	-	-	1.02	1.21	1.44	1.69	1.98	-

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

	,			
Cooling capacity		5 442	W	
Power input		3 174	W	
Current consumption		4.59	Α	
Mass flow		163	kg/h	
C.O.P.		1.71		

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 100 Hz, EN 12900 rating conditions

R404A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
Cooling capacity		T			I	T			
5	-	-	-	- 7.004	- 0.750	-	-	-	-
15	-	5 203	6 483	7 991	9 753	-	-	-	-
20	-	4 911	6 140	7 587	9 275	11 229	-	-	-
30	-	4 312	5 430	6 741	8 270	10 041	12 079	14 409	-
40	-	3 679	4 671	5 832	7 187	8 761	10 578	12 663	-
50	-	2 994	3 846	4 843	6 011	7 372	8 954	10 780	-
60	-	-	2 938	3 757	4 722	5 858	7 189	8 741	-
65	-	-	-	-	-	-	-	-	-
Power input in W									
5	-	-	-	-	-	-	-	-	-
15	-	2 140	2 164	2 142	2 066	-	-	-	-
20	-	2 285	2 333	2 341	2 301	2 203	-	-	-
30	_	2 596	2 677	2 732	2 751	2 725	2 643	2 496	-
40	-	2 968	3 064	3 147	3 207	3 234	3 218	3 150	-
50	-	3 445	3 536	3 628	3 710	3 771	3 803	3 796	_
60	-	-	4 135	4 217	4 302	4 379	4 440	4 474	-
65	-	-	-	-	-	-	-	-	_
00		1	L	I.	l .	I.	I.	I I	
Current consump	tion in A								
5	-	-	-	-	-	-	-	-	-
15	-	3.23	3.23	3.22	3.18	-	_	-	-
20	-	3.44	3.45	3.45	3.44	3.37	_	-	-
30	-	3.89	3.90	3.93	3.94	3.92	3.84	3.66	-
40	-	4.43	4.43	4.47	4.52	4.54	4.51	4.41	-
50	-	5.11	5.11	5.16	5.22	5.28	5.31	5.27	-
60	-	-	6.00	6.05	6.13	6.22	6.29	6.31	_
65	-	-	-	-	-	-	-	_	_
<u>'</u>			•	1	l.	II.		1	
Mass flow in kg/h		_							
5	-	-	-	-	-	-	-	-	-
15	-	131	160	193	231	-	-	-	-
20	-	131	160	193	231	274	-	-	-
30	-	129	159	192	230	274	323	378	-
40	-	127	157	191	229	272	322	377	-
50	-	124	154	188	227	270	320	375	-
60	-	-	151	185	224	268	317	372	-
65	-	-	-	-	-	-	-	-	-
Coefficient of peri	formance (C.C) P)							
5	-	-	-	-	-	-	-	-	-
15	-	2.43	3.00	3.73	4.72	-	-	-	-
20	-	2.15	2.63	3.24	4.03	5.10	-	-	-
30	_	1.66	2.03	2.47	3.01	3.68	4.57	5.77	_
40	_	1.24	1.52	1.85	2.24	2.71	3.29	4.02	_
	_	0.87	1.09	1.33	1.62	1.95	2.35	2.84	_
	_	1		0.89	1.10	1.34	1.62	1.95	
50 60	-	-	0.71						

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

Cooling capacity	5 349	W	
Power input	3 377	W	
Current consumption	4.79	Α	
Mass flow	190	kg/h	
C.O.P.	1.58		

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. VLZ028TGA

Performance data at 100 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R404A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-20	-15	-10	-5	0	5	10	20
	· 14/								
ooling capacity 5	<u>-</u>	1	_	_	_	_		1	
		- - 201	1		†		-	-	-
15	-	5 381	6 653	8 142	9 872	-	-	-	-
20	-	5 122	6 347	7 774	9 429	11 336	- 40 474	-	-
30	-	4 592	5 710	7 005	8 497	10 210	12 171	14 409	-
40	-	4 028	5 027	6 174	7 490	8 994	10 711	12 663	-
50	-	-	4 280	5 267	6 391	7 673	9 129	10 780	-
60	-	-	-	4 269	5 190	6 234	7 414	8 741	-
65	-	-	-	-	-	-	-	-	-
ower input in W									
5	-	-	-	-	-	-	-	-	-
15	-	2 140	2 164	2 142	2 066	-	-	-	-
20	-	2 285	2 333	2 341	2 301	2 203	-	-	-
30	-	2 596	2 677	2 732	2 751	2 725	2 643	2 496	-
40	-	2 968	3 064	3 147	3 207	3 234	3 218	3 150	-
50	-	-	3 536	3 628	3 710	3 771	3 803	3 796	-
60	-	-	-	4 217	4 302	4 379	4 440	4 474	-
65	-	-	-	-	-	-	-	-	-
						•			
urrent consump	tion in A	1			1	T		1 1	
5	-	-	-	-	-	-	-	-	-
15	-	3.23	3.23	3.22	3.18	-	-	-	-
20	-	3.44	3.45	3.45	3.44	3.37	-	-	-
30	-	3.89	3.90	3.93	3.94	3.92	3.84	3.66	-
40	-	4.43	4.43	4.47	4.52	4.54	4.51	4.41	-
50	-	-	5.11	5.16	5.22	5.28	5.31	5.27	-
60	-	-	-	6.05	6.13	6.22	6.29	6.31	-
65	-	-	-	-	-	-	-	-	-
/lass flow in kg/h									
5	_	-	_	_	_	-	_	_	_
15	-	114	142	175	214	-	_	_	_
20	_	114	142	175	214	260	_	_	_
30	_	113	141	174	213	259	314	378	_
40	_	111	139	173	212	258	312	377	_
50	_	-	137	171	210	256	310	375	_
60		-	-	168	207	254	308	372	
65	-	-	_	-	-	-	-	-	
L					1	1		<u>. </u>	
coefficient of per		1			1			1	
5	-	-	- 2.07	- 2.00	- 4.70	-	-	-	-
15	-	2.51	3.07	3.80	4.78	- 5.45	-	-	-
20	-	2.24	2.72	3.32	4.10	5.15	-	-	-
30	-	1.77	2.13	2.56	3.09	3.75	4.60	5.77	-
40	-	1.36	1.64	1.96	2.34	2.78	3.33	4.02	-
50	-	-	1.21	1.45	1.72	2.03	2.40	2.84	-
60	-	-	-	1.01	1.21	1.42	1.67	1.95	-
65	-	-	-	_	-	-	_	_	-

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

Cooling capacity	5 731	W	
Power input	3 377	W	
Current consumption	4.79	Α	
Mass flow	172	kg/h	
C.O.P.	1.70		

to: Evaporating temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.3	bar(g)
LP pump down setting	1.6	bar(g)

Sound power data

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

Tolerance according EN12900

tc: Condensing temperature at dew point