ENGINEERING TOMORROW



Datasheets

Danfoss scroll compressors **H series**





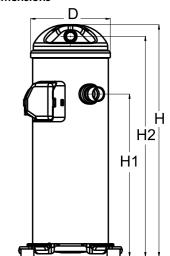
Datasheet, technical data

Danfoss scroll compressor, HLJ083T4

General Characteristics

Model number (on compressor nameplate)		HLJ083T4LC6		
Code number for Singlepack*		120U1401		
Code number for Industrial pack**		120U1398		
Drawing number		0XR6089B-1		
Suction and discharge connections		Brazed		
Suction connection		7/8 " ODF		
Discharge connection		1/2 " ODF		
Oil sight glass		None		
Oil equalisation connection		None		
Oil drain connection		None		
LP gauge port		None		
IPR valve		Yes		
Swept volume	78.08 c	m3/rev		
Displacement @ Nominal speed	13.6 m3/h @ 2900 rpm	- 16.4 m3/h @ 3500 rpm		
Net weight	37.2	2 kg		
Oil charge	1.57 litro	1.57 litre, PVE		
Maximum system test pressure Low Side / High side	- bar(g)	- bar(g) / - bar(g)		
Maximum differential test pressure	- bar			
Maximum number of starts per hour		-		
Refrigerant charge limit	5.44 kg			
Approved refrigerants	R410A			

Dimensions



Electrical Characteristics

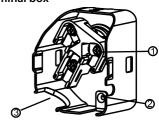
Electrical characteristics	
Nominal voltage	380-415V/3/50Hz - 460V/3/60Hz
Voltage range	342-457 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	1.617 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.595 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.630 Ω
Rated Load Amps (RLA)	13 A
Maximum Continuous Current (MCC)	19 A
Locked Rotor Amps (LRA)	100 A
Motor protection	Internal overload protector

D=183.5 mm H=455 mm H1=280 mm H2=422 mm H3=- mm

Recommended ins	taliation torques	
6:1 : 1 : 1		Ξ

Oil sight glass	52.5 Nm		
Power connections / Earth connection	3 Nm / 2 Nm		

Terminal box



Parts shipped with compressor

Mounting kit with grommets and sleeves Initial oil charge Installation instructions

Approvals: CE certified, UL certified (file SA11565), -

*Singlepack: Compressor in cardboard box

**Industrial pack: 12 or 16 Unboxed compressors on pallet

- Screw connectors 10-32 UNF x 9.5
- 2: Earth connection

IP22 1:

Power cable passage



Datasheet, accessories and spare parts

Danfoss scroll compressor, HLJ083T4

	Code no.		
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030		
Gasket, 1-1/4"	8156131		

 Rotolock accessories, discharge side
 Code no.

 Solder sleeve, P06 (1" Rotolock, 1/2" ODF)
 8153007

 Angle adapter, C06 (1" Rotolock, 1/2" ODF)
 8168007

 Rotolock valve, V06 (1" Rotolock, 1/2" ODF)
 8168031

 Gasket, 1"
 8156130

Rotolock accessories, sets	Code no.
Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
Gasket set. 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants	Code no.
PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034

Crankcase heaters	Code no.
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040
Belt type crankcase heater 70 W 240 V CF mark III	12075040

Miscellaneous accessories	Code no.
Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts	Code no.
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031
Terminal box cover	120Z5018

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. HLJ083T4

Performance data at 50 Hz, EN 12900 rating conditions

R410A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
		•	•						
Cooling capacity		0.400	44.045	42.002	40.500	20.025	24.404	20.455	
30	7 228	9 109	11 215	13 662	16 563	20 035	24 194	29 155	-
35	6 444	8 427	10 537	12 887	15 592	18 766	22 524	26 982	-
40	5 366	7 524	9 712	12 042	14 627	17 581	21 018	25 051	-
45	-	6 330	8 666	11 049	13 588	16 397	19 588	23 274	-
50	-	-	7 328	9 830	12 395	15 131	18 150	21 564	-
55	-	-	-	8 315	10 968	13 698	16 613	19 823	-
60	-	-	-	-	9 230	12 008	14 877	17 944	-
65	-	-	-	-	-	9 959	12 815	15 777	-
Power input in V	v								
30	3 884	3 940	3 973	3 981	3 962	3 911	3 827	3 706	-
35	4 234	4 304	4 354	4 380	4 380	4 351	4 291	4 195	-
40	4 624	4 704	4 765	4 805	4 820	4 808	4 766	4 691	-
45	-	5 149	5 217	5 265	5 291	5 291	5 262	5 203	_
50	-	-	5 718	5 770	5 802	5 809	5 790	5 741	_
55	-	_	-	6 330	6 363	6 373	6 358	6 316	_
60	-	-	_	-	6 984	6 992	6 977	6 936	_
65	_	-	_	-	-	7 675	7 656	7 612	_
55	*	_	_	_		, 575	, , , , , ,	1 012	
Current consum	ption in A								
30	8.94	8.89	8.84	8.80	8.78	8.76	8.76	8.77	-
35	9.24	9.24	9.24	9.23	9.22	9.21	9.19	9.18	-
40	9.63	9.69	9.72	9.74	9.75	9.74	9.71	9.68	-
45	-	10.24	10.32	10.36	10.38	10.37	10.34	10.28	_
50	-	_	11.04	11.11	11.14	11.13	11.08	11.00	_
55	-	_	-	12.00	12.04	12.03	11.97	11.86	
60	_	-	-	-	13.11	13.10	13.03	12.89	_
65	-	_	-	-	-	14.36	14.26	14.10	_
- 55		l	I	I	<u> </u>	1	20		
Mass flow in kg/	'h								
30	151	187	227	273	328	393	472	565	-
35	142	183	225	271	324	386	459	545	-
40	125	172	219	268	321	381	451	531	-
45	-	154	207	260	316	377	445	522	-
50	-	-	187	247	307	371	439	515	-
55	-	-	-	226	293	361	431	508	_
60	-	-	-	-	270	345	420	499	-
65	_	-	-	-	-	320	403	486	_
		II.	1	1	1	1		.50	
Coefficient of pe	•			Т	1		1	, , , , , , , , , , , , , , , , , , , 	
30	1.86	2.31	2.82	3.43	4.18	5.12	6.32	7.87	-
35	1.52	1.96	2.42	2.94	3.56	4.31	5.25	6.43	-
40	1.16	1.60	2.04	2.51	3.03	3.66	4.41	5.34	-
45	-	1.23	1.66	2.10	2.57	3.10	3.72	4.47	-
50	-	-	1.28	1.70	2.14	2.60	3.13	3.76	-
55	-	-	-	1.31	1.72	2.15	2.61	3.14	-
60	-	-	-	-	1.32	1.72	2.13	2.59	-
65	-	-	-	-	-	1.30	1.67	2.07	_

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

tronnia portornianos arto o o, to	•• •	
Cooling capacity	18 150	W
Power input	5 790	W
Current consumption	11.08	Α
Mass flow	439	kg/h
C.O.P.	3.13	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	71	dB(A)
With accoustic hood	66	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. HLJ083T4

Performance data at 50 Hz, ARI rating conditions

R410A

Cond. temp. in	emp. in Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacit		9 827	10.007	14 700	47.047	24 524	25.002	24.200	
30	7 806	1	12 087	14 709	17 817	21 534	25 982	31 286	-
35	7 004	9 149	11 426	13 960	16 873	20 289	24 330	29 121	-
40	5 878	8 231	10 611	13 141	15 944	19 143	22 861	27 223	-
45	-	6 990	9 556	12 166	14 943	18 009	21 490	25 506	-
50	-	-	8 175	10 949	13 784	16 803	20 130	23 886	-
55	-	-	-	9 406	12 384	15 439	18 696	22 276	-
60	-	-	-	-	10 656	13 832	17 103	20 591	-
65	-	-	-	-	-	11 895	15 265	18 746	-
Power input in \	N								
30	3 884	3 940	3 973	3 981	3 962	3 911	3 827	3 706	-
35	4 234	4 304	4 354	4 380	4 380	4 351	4 291	4 195	-
40	4 624	4 704	4 765	4 805	4 820	4 808	4 766	4 691	-
45	-	5 149	5 217	5 265	5 291	5 291	5 262	5 203	-
50	-	-	5 718	5 770	5 802	5 809	5 790	5 741	-
55	-	-	-	6 330	6 363	6 373	6 358	6 316	-
60	-	-	-	-	6 984	6 992	6 977	6 936	-
65	-	-	_	-	-	7 675	7 656	7 612	-
		•	1.	•	I.	1	I.	•	
urrent consum	nption in A								
30	8.94	8.89	8.84	8.80	8.78	8.76	8.76	8.77	-
35	9.24	9.24	9.24	9.23	9.22	9.21	9.19	9.18	-
40	9.63	9.69	9.72	9.74	9.75	9.74	9.71	9.68	-
45	-	10.24	10.32	10.36	10.38	10.37	10.34	10.28	-
50	-	-	11.04	11.11	11.14	11.13	11.08	11.00	-
55	-	-	-	12.00	12.04	12.03	11.97	11.86	-
60	-	-	-	-	13.11	13.10	13.03	12.89	_
65	-	-	-	-	-	14.36	14.26	14.10	-
					<u> </u>		<u> </u>	l	
lass flow in kg	/h	_							
30	150	186	226	272	326	391	468	561	-
35	141	182	224	270	322	383	456	541	-
40	124	171	218	266	319	379	447	527	-
45	-	153	206	259	314	374	442	518	-
50	-	-	186	246	306	368	436	511	-
55	-	-	-	225	291	358	429	504	-
60	ı	-	-	-	268	342	417	496	-
65	-	-	-	-	-	318	400	483	-
coefficient of ne	erformance (C.C	D.P.)							
30	2.01	2.49	3.04	3.69	4.50	5.51	6.79	8.44	-
35	1.65	2.13	2.62	3.19	3.85	4.66	5.67	6.94	-
40	1.27	1.75	2.23	2.73	3.31	3.98	4.80	5.80	-
45	-	1.36	1.83	2.31	2.82	3.40	4.08	4.90	-
50	-	-	1.43	1.90	2.38	2.89	3.48	4.16	-
55	-	-	-	1.49	1.95	2.42	2.94	3.53	_
00		-	-	-	1.53	1.98	2.45	2.97	-
60	-				1.00		2.70	4.31	

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

-, -, -,			
Cooling capacity	20 408	W	
Power input	6 272	W	
Current consumption	11.82	Α	
Mass flow	462	kg/h	
C.O.P.	3.25		

to: Evaporating temperature at dew point

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

Pressure switch settings

	Maximum HP switch setting	45	bar(g)
	Minimum LP switch setting	1.5	bar(g)
L	LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	71	dB(A)
With accoustic hood	66	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. HLJ083T4

Performance data at 60 Hz, EN 12900 rating conditions

R410A

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15	
Cooling capacity	r in W									
30	8 576	10 807	13 305	16 208	19 650	23 769	28 702	34 585		
35	7 653	10 005	12 509	15 300	18 511	22 280	26 742	32 032	_	
40	6 383	8 944	11 542	14 310	17 382	20 893	24 977	29 768		
45	-	7 536	10 312	13 144	16 165	19 507	23 303	27 688		
50		-	8 732	11 709	14 762	18 021	21 618	25 683		
55		-	-	9 918	13 078	16 333	19 810	23 639		
60	_	-	-	-	11 020	14 334	17 760	21 424	_	
65					-	11 902	15 315	18 857		
00				<u> </u>	<u>-</u>	11 302	10 010	10 001	_	
Power input in V	٧	T		T	1	T	T			
30	4 658	4 725	4 765	4 775	4 752	4 691	4 590	4 445	-	
35	5 081	5 165	5 225	5 256	5 256	5 222	5 149	5 034	-	
40	5 553	5 648	5 722	5 769	5 787	5 773	5 722	5 632	-	
45	-	6 187	6 268	6 326	6 356	6 356	6 322	6 251	-	
50	-	-	6 876	6 938	6 975	6 984	6 961	6 903	-	
55	-	-	-	7 617	7 655	7 668	7 650	7 599	-	
60	-	-	-	-	8 409	8 418	8 401	8 352	-	
65	-	-	-	-	-	9 249	9 225	9 172	-	
	·									
Current consum		7.70	T	7.00	7.00	7.00	0.44	0.00		
30	7.66	7.72	7.77	7.83	7.90	7.99	8.11	8.26	-	
35	8.06	8.14	8.20	8.26	8.33	8.40	8.50	8.61	-	
40	8.49	8.60	8.68	8.75	8.82	8.89	8.97	9.07	-	
45	-	9.11	9.22	9.32	9.40	9.47	9.55	9.63	-	
50	-	-	9.83	9.96	10.06	10.15	10.23	10.31	-	
55	-	-	-	10.68	10.82	10.93	11.03	11.11	-	
60	-	-	-	-	11.68	11.82	11.94	12.05	-	
65	-	-	-	-	-	12.84	12.99	13.12	-	
Mass flow in kg/	h									
30	179	222	270	324	389	467	559	671	-	
35	169	217	267	322	385	458	545	647	-	
40	149	205	260	318	382	453	535	631	_	
45	-	183	246	310	376	448	529	621	-	
50	-	-	223	294	366	441	523	613	-	
55	-	-	-	270	349	430	515	606	-	
60	-	-	-	-	323	411	501	596	-	
65	-	-	-	-	-	383	481	581	-	
Coefficient of pe	•	1	2.70	2 20	4 4 4	5.07	6.25	7 70	_	
30	1.84	2.29	2.79	3.39	4.14	5.07	6.25	7.78		
35	1.51	1.94	2.39	2.91	3.52	4.27	5.19	6.36	-	
40	1.15	1.58	2.02	2.48	3.00	3.62	4.36	5.29	-	
45	-	1.22	1.65	2.08	2.54	3.07	3.69	4.43	-	
50	-	-	1.27	1.69	2.12	2.58	3.11	3.72	-	
55	-	-	-	1.30	1.71	2.13	2.59	3.11	-	
60	-	-	-	-	1.31	1.70	2.11	2.57	-	
65	-	-	-	-	-	1.29	1.66	2.06	-	

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

-, -, -, -, -, -, -, -, -, -, -, -, -, -		
Cooling capacity	21 618	W
Power input	6 961	W
Current consumption	10.23	Α
Mass flow	523	kg/h
C.O.P.	3.11	

to: Evaporating temperature at dew point

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

Pressure switch settings

	Maximum HP switch setting	45	bar(g)
	Minimum LP switch setting	1.5	bar(g)
L	LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	74	dB(A)
With accoustic hood	69	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. HLJ083T4

Performance data at 60 Hz, ARI rating conditions

R410A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
2	. : 14/								
Cooling capacity	9 262	11 658	14 339	17 451	21 138	25 547	30 823	37 113	
30				+					-
35	8 318	10 862	13 565	16 574	20 033	24 088	28 886	34 571	-
40	6 993	9 784	12 610	15 616	18 947	22 749	27 168	32 349	-
45	-	8 322	11 370	14 473	17 776	21 425	25 565	30 343	-
50	-	-	9 741	13 042	16 417	20 013	23 975	28 449	-
55	-	-	-	11 219	14 767	18 410	22 294	26 564	-
60	-	-	-	-	12 721	16 512	20 417	24 584	-
65	-	-	-	-	-	14 215	18 243	22 406	-
Power input in V	v								
30	4 658	4 725	4 765	4 775	4 752	4 691	4 590	4 445	-
35	5 081	5 165	5 225	5 256	5 256	5 222	5 149	5 034	-
40	5 553	5 648	5 722	5 769	5 787	5 773	5 722	5 632	-
45	-	6 187	6 268	6 326	6 356	6 356	6 322	6 251	_
50	_	-	6 876	6 938	6 975	6 984	6 961	6 903	_
55	_	-	-	7 617	7 655	7 668	7 650	7 599	_
60	_	-	_	-	8 409	8 418	8 401	8 352	_
65	_	-	_	-	-	9 249	9 225	9 172	_
00		1	I.	1	I.	0210	0 220	0.172	
Current consum	ption in A								
30	7.66	7.72	7.77	7.83	7.90	7.99	8.11	8.26	-
35	8.06	8.14	8.20	8.26	8.33	8.40	8.50	8.61	-
40	8.49	8.60	8.68	8.75	8.82	8.89	8.97	9.07	-
45	-	9.11	9.22	9.32	9.40	9.47	9.55	9.63	-
50	-	_	9.83	9.96	10.06	10.15	10.23	10.31	_
55	-	-	-	10.68	10.82	10.93	11.03	11.11	_
60	_	_	-	_	11.68	11.82	11.94	12.05	_
65	-	_	-	-	-	12.84	12.99	13.12	_
		1				<u>.</u>			
Mass flow in kg/	h			_					
30	178	221	268	322	387	463	556	666	-
35	168	216	265	320	383	455	541	642	-
40	148	203	259	316	379	450	532	627	-
45	-	182	245	308	374	445	525	616	-
50	-	-	222	293	364	438	519	609	-
55	-	-	-	268	347	427	511	601	-
60	-	-	-	-	321	409	498	592	-
65	-	-	-	-	-	380	478	577	-
Coofficient of	rformance (C.C) B)							
Coefficient of pe	1.99	2.47	3.01	3.65	4.45	5.45	6.72	8.35	_
35	1.64	2.10	2.60	3.15	3.81	4.61	5.61	6.87	
40	1.26	1.73	2.20	2.71	3.27	3.94	4.75	5.74	
-								+	
45 50	-	1.35	1.81	2.29	2.80	3.37	4.04	4.85	-
50	-	-	1.42	1.88	2.35	2.87	3.44	4.12	-
55	-	-	-	1.47	1.93	2.40	2.91	3.50	-
60	-	-	-	-	1.51	1.96	2.43	2.94	-
65	-	-	-	-	-	1.54	1.98	2.44	-

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

Monimum portormanoo at to	. 0, 10 04.4 0	
Cooling capacity	24 333	W
Power input	7 546	W
Current consumption	10.96	Α
Mass flow	551	kg/h
C.O.P.	3.22	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

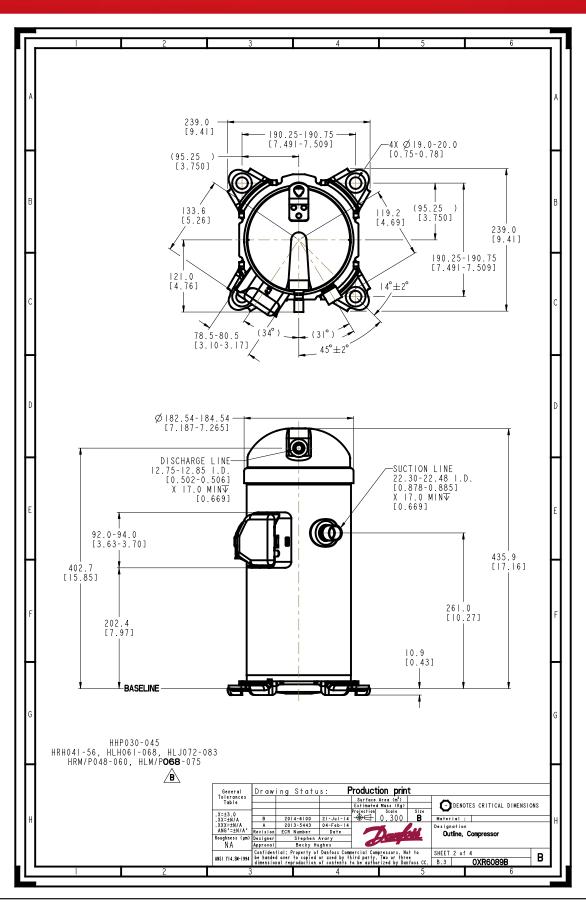
Sound power data

,	Sound power level	74	dB(A)
١	With accoustic hood	69	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point





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FRCC.PD.0XR6089Bb page drawings



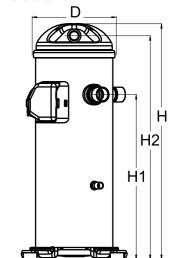
Datasheet, technical data

Danfoss scroll compressor, HLJ083T4

General Characteristics

Model number (on compressor nameplate)		HLJ083T4LC8	
Code number for Singlepack*		120U2172	
Code number for Industrial pack**		120U2169	
Drawing number		0XR6049B-2	
Suction and discharge connections		Brazed	
Suction connection		7/8 " ODF	
Discharge connection		1/2 " ODF	
Oil sight glass		None	
Oil equalisation connection		1/2"	
Oil drain connection		None	
LP gauge port		None	
IPR valve		Yes	
Swept volume	78.08 c	m3/rev	
Displacement @ Nominal speed	13.6 m3/h @ 2900 rpm	m - 16.4 m3/h @ 3500 rpm	
Net weight	37.2	37.2 kg	
Oil charge	1.57 litre	e, PVE	
Maximum system test pressure Low Side / High side	- bar(g)	/ - bar(g)	
Maximum differential test pressure	- b	oar	
Maximum number of starts per hour		-	
Refrigerant charge limit	5.44	1 kg	
Approved refrigerants	R41	10A	

Dimensions

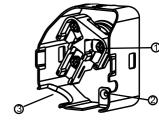


Electrical Characteristics

Electrical characteristics	
Nominal voltage	380-415V/3/50Hz - 460V/3/60Hz
Voltage range	342-457 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	1.617 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.595 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.630 Ω
Rated Load Amps (RLA)	13 A
Maximum Continuous Current (MCC)	19 A
Locked Rotor Amps (LRA)	100 A
Motor protection	Internal overload protector

D=183.5 mm H=455 mm H1=280 mm H2=422 mm H3=- mm

Terminal box



Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	3 Nm / 2 Nm

Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Approvals: CE certified, UL certified (file SA11565), -

 $\hbox{*Singlepack: Compressor in cardboard box}\\$

**Industrial pack: 12 or 16 Unboxed compressors on pallet

IP22

1: Screw connectors 10-32 UNF x 9.5

2: Earth connection

3: Power cable passage



Datasheet, accessories and spare parts

Danfoss scroll compressor, HLJ083T4

Rotolock accessories, suction side	Code no.
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131
Gashet, 1 1/4	0130131

 Rotolock accessories, discharge side
 Code no.

 Solder sleeve, P06 (1" Rotolock, 1/2" ODF)
 8153007

 Angle adapter, C06 (1" Rotolock, 1/2" ODF)
 8168007

 Rotolock valve, V06 (1" Rotolock, 1/2" ODF)
 8168031

 Gasket, 1"
 8156130

Rotolock accessories, sets	Code no. 120Z0127
Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
Gasket set. 1". 1-1/4". 1-3/4". OSG gaskets black & white	8156009

Oil / lubricants	Code no.
PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034

Crankcase heaters	Code no.
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040

Miscellaneous accessories	Code no.
Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts	Code no.		
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005		
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031		
Terminal box cover	120Z5018		

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. HLJ083T4

Performance data at 50 Hz, EN 12900 rating conditions

R410A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
		•	•						
Cooling capacity		0.400	44.045	42.002	40.500	20.025	24.404	20.455	
30	7 228	9 109	11 215	13 662	16 563	20 035	24 194	29 155	-
35	6 444	8 427	10 537	12 887	15 592	18 766	22 524	26 982	-
40	5 366	7 524	9 712	12 042	14 627	17 581	21 018	25 051	-
45	-	6 330	8 666	11 049	13 588	16 397	19 588	23 274	-
50	-	-	7 328	9 830	12 395	15 131	18 150	21 564	-
55	-	-	-	8 315	10 968	13 698	16 613	19 823	-
60	-	-	-	-	9 230	12 008	14 877	17 944	-
65	-	-	-	-	-	9 959	12 815	15 777	-
Power input in V	v								
30	3 884	3 940	3 973	3 981	3 962	3 911	3 827	3 706	-
35	4 234	4 304	4 354	4 380	4 380	4 351	4 291	4 195	-
40	4 624	4 704	4 765	4 805	4 820	4 808	4 766	4 691	-
45	-	5 149	5 217	5 265	5 291	5 291	5 262	5 203	_
50	-	-	5 718	5 770	5 802	5 809	5 790	5 741	_
55	-	_	-	6 330	6 363	6 373	6 358	6 316	_
60	-	-	_	-	6 984	6 992	6 977	6 936	_
65	_	-	_	-	-	7 675	7 656	7 612	_
55	*	_	_	_		, 575	, , , , , ,	1 012	
Current consum	ption in A								
30	8.94	8.89	8.84	8.80	8.78	8.76	8.76	8.77	-
35	9.24	9.24	9.24	9.23	9.22	9.21	9.19	9.18	-
40	9.63	9.69	9.72	9.74	9.75	9.74	9.71	9.68	-
45	-	10.24	10.32	10.36	10.38	10.37	10.34	10.28	_
50	-	_	11.04	11.11	11.14	11.13	11.08	11.00	_
55	-	_	-	12.00	12.04	12.03	11.97	11.86	
60	_	-	-	-	13.11	13.10	13.03	12.89	_
65	-	_	-	-	-	14.36	14.26	14.10	_
- 55		I	I	I	<u> </u>	1	20		
Mass flow in kg/	'h								
30	151	187	227	273	328	393	472	565	-
35	142	183	225	271	324	386	459	545	-
40	125	172	219	268	321	381	451	531	-
45	-	154	207	260	316	377	445	522	-
50	-	-	187	247	307	371	439	515	-
55	-	-	-	226	293	361	431	508	_
60	-	-	-	-	270	345	420	499	-
65	_	-	-	-	-	320	403	486	_
		II.	1	1	1	1		.50	
Coefficient of pe	•			Т	1		1	, , , , , , , , , , , , , , , , , , , 	
30	1.86	2.31	2.82	3.43	4.18	5.12	6.32	7.87	-
35	1.52	1.96	2.42	2.94	3.56	4.31	5.25	6.43	-
40	1.16	1.60	2.04	2.51	3.03	3.66	4.41	5.34	-
45	-	1.23	1.66	2.10	2.57	3.10	3.72	4.47	-
50	-	-	1.28	1.70	2.14	2.60	3.13	3.76	-
55	-	-	-	1.31	1.72	2.15	2.61	3.14	-
60	-	-	-	-	1.32	1.72	2.13	2.59	-
65	-	-	-	-	-	1.30	1.67	2.07	_

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

tronnia portornianos arto o o, to	•• •	
Cooling capacity	18 150	W
Power input	5 790	W
Current consumption	11.08	Α
Mass flow	439	kg/h
C.O.P.	3.13	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	71	dB(A)
With accoustic hood	66	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. HLJ083T4

Performance data at 50 Hz, ARI rating conditions

R410A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacit		9 827	10.007	14.700	47.047	24 524	25.002	24.200	
30	7 806	1	12 087	14 709	17 817	21 534	25 982	31 286	-
35	7 004	9 149	11 426	13 960	16 873	20 289	24 330	29 121	-
40	5 878	8 231	10 611	13 141	15 944	19 143	22 861	27 223	-
45	-	6 990	9 556	12 166	14 943	18 009	21 490	25 506	-
50	-	-	8 175	10 949	13 784	16 803	20 130	23 886	-
55	-	-	-	9 406	12 384	15 439	18 696	22 276	-
60	-	-	-	-	10 656	13 832	17 103	20 591	-
65	-	-	-	-	-	11 895	15 265	18 746	-
Power input in \	N								
30	3 884	3 940	3 973	3 981	3 962	3 911	3 827	3 706	-
35	4 234	4 304	4 354	4 380	4 380	4 351	4 291	4 195	-
40	4 624	4 704	4 765	4 805	4 820	4 808	4 766	4 691	-
45	-	5 149	5 217	5 265	5 291	5 291	5 262	5 203	-
50	-	-	5 718	5 770	5 802	5 809	5 790	5 741	-
55	-	-	-	6 330	6 363	6 373	6 358	6 316	-
60	-	-	-	-	6 984	6 992	6 977	6 936	-
65	-	-	_	-	-	7 675	7 656	7 612	-
		•	1.	•	ı	1	I.	•	
urrent consum	nption in A								
30	8.94	8.89	8.84	8.80	8.78	8.76	8.76	8.77	-
35	9.24	9.24	9.24	9.23	9.22	9.21	9.19	9.18	-
40	9.63	9.69	9.72	9.74	9.75	9.74	9.71	9.68	-
45	-	10.24	10.32	10.36	10.38	10.37	10.34	10.28	-
50	-	-	11.04	11.11	11.14	11.13	11.08	11.00	-
55	-	-	-	12.00	12.04	12.03	11.97	11.86	-
60	-	-	-	-	13.11	13.10	13.03	12.89	_
65	-	-	-	-	-	14.36	14.26	14.10	-
					<u> </u>		<u> </u>	l	
lass flow in kg	/h	_							
30	150	186	226	272	326	391	468	561	-
35	141	182	224	270	322	383	456	541	-
40	124	171	218	266	319	379	447	527	-
45	-	153	206	259	314	374	442	518	-
50	-	-	186	246	306	368	436	511	-
55	-	-	-	225	291	358	429	504	-
60	ı	-	-	-	268	342	417	496	-
65	-	-	-	-	-	318	400	483	-
coefficient of ne	erformance (C.C	D.P.)							
30	2.01	2.49	3.04	3.69	4.50	5.51	6.79	8.44	-
35	1.65	2.13	2.62	3.19	3.85	4.66	5.67	6.94	-
40	1.27	1.75	2.23	2.73	3.31	3.98	4.80	5.80	-
45	-	1.36	1.83	2.31	2.82	3.40	4.08	4.90	-
50	-	-	1.43	1.90	2.38	2.89	3.48	4.16	-
55	-	-	-	1.49	1.95	2.42	2.94	3.53	_
00		-	-	-	1.53	1.98	2.45	2.97	-
60	-				1.00		2.70	4.31	

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

-, -, -,			
Cooling capacity	20 408	W	
Power input	6 272	W	
Current consumption	11.82	Α	
Mass flow	462	kg/h	
C.O.P.	3.25		

to: Evaporating temperature at dew point

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

Pressure switch settings

	Maximum HP switch setting	45	bar(g)
	Minimum LP switch setting	1.5	bar(g)
L	LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	71	dB(A)
With accoustic hood	66	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. HLJ083T4

Performance data at 60 Hz, EN 12900 rating conditions

R410A

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15	
Cooling capacity	r in W									
30	8 576	10 807	13 305	16 208	19 650	23 769	28 702	34 585		
35	7 653	10 005	12 509	15 300	18 511	22 280	26 742	32 032	_	
40	6 383	8 944	11 542	14 310	17 382	20 893	24 977	29 768		
45	-	7 536	10 312	13 144	16 165	19 507	23 303	27 688		
50		-	8 732	11 709	14 762	18 021	21 618	25 683		
55		-	-	9 918	13 078	16 333	19 810	23 639		
60	_	-	-	-	11 020	14 334	17 760	21 424	_	
65					-	11 902	15 315	18 857		
00				<u> </u>	<u>-</u>	11 302	10 010	10 001	_	
Power input in V	٧	T		T	1	T	T			
30	4 658	4 725	4 765	4 775	4 752	4 691	4 590	4 445	-	
35	5 081	5 165	5 225	5 256	5 256	5 222	5 149	5 034	-	
40	5 553	5 648	5 722	5 769	5 787	5 773	5 722	5 632	-	
45	-	6 187	6 268	6 326	6 356	6 356	6 322	6 251	-	
50	-	-	6 876	6 938	6 975	6 984	6 961	6 903	-	
55	-	-	-	7 617	7 655	7 668	7 650	7 599	-	
60	-	-	-	-	8 409	8 418	8 401	8 352	-	
65	-	-	-	-	-	9 249	9 225	9 172	-	
	·									
Current consum		7.70	T	7.00	7.00	7.00	0.44	0.00		
30	7.66	7.72	7.77	7.83	7.90	7.99	8.11	8.26	-	
35	8.06	8.14	8.20	8.26	8.33	8.40	8.50	8.61	-	
40	8.49	8.60	8.68	8.75	8.82	8.89	8.97	9.07	-	
45	-	9.11	9.22	9.32	9.40	9.47	9.55	9.63	-	
50	-	-	9.83	9.96	10.06	10.15	10.23	10.31	-	
55	-	-	-	10.68	10.82	10.93	11.03	11.11	-	
60	-	-	-	-	11.68	11.82	11.94	12.05	-	
65	-	-	-	-	-	12.84	12.99	13.12	-	
Mass flow in kg/	h									
30	179	222	270	324	389	467	559	671	-	
35	169	217	267	322	385	458	545	647	-	
40	149	205	260	318	382	453	535	631	_	
45	-	183	246	310	376	448	529	621	-	
50	-	-	223	294	366	441	523	613	-	
55	-	-	-	270	349	430	515	606	-	
60	-	-	-	-	323	411	501	596	-	
65	-	-	-	-	-	383	481	581	-	
Coefficient of pe	•	1	2.70	2 20	4 4 4	5.07	6.25	7 70	_	
30	1.84	2.29	2.79	3.39	4.14	5.07	6.25	7.78		
35	1.51	1.94	2.39	2.91	3.52	4.27	5.19	6.36	-	
40	1.15	1.58	2.02	2.48	3.00	3.62	4.36	5.29	-	
45	-	1.22	1.65	2.08	2.54	3.07	3.69	4.43	-	
50	-	-	1.27	1.69	2.12	2.58	3.11	3.72	-	
55	-	-	-	1.30	1.71	2.13	2.59	3.11	-	
60	-	-	-	-	1.31	1.70	2.11	2.57	-	
65	-	-	-	-	-	1.29	1.66	2.06	-	

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

-, -, -, -, -, -, -, -, -, -, -, -, -, -		
Cooling capacity	21 618	W
Power input	6 961	W
Current consumption	10.23	Α
Mass flow	523	kg/h
C.O.P.	3.11	

to: Evaporating temperature at dew point

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

Pressure switch settings

	Maximum HP switch setting	45	bar(g)
	Minimum LP switch setting	1.5	bar(g)
L	LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	74	dB(A)
With accoustic hood	69	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. HLJ083T4

Performance data at 60 Hz, ARI rating conditions

R410A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
2	. : 14/								
Cooling capacity	9 262	11 658	14 339	17 451	21 138	25 547	30 823	37 113	
30				+					-
35	8 318	10 862	13 565	16 574	20 033	24 088	28 886	34 571	-
40	6 993	9 784	12 610	15 616	18 947	22 749	27 168	32 349	-
45	-	8 322	11 370	14 473	17 776	21 425	25 565	30 343	-
50	-	-	9 741	13 042	16 417	20 013	23 975	28 449	-
55	-	-	-	11 219	14 767	18 410	22 294	26 564	-
60	-	-	-	-	12 721	16 512	20 417	24 584	-
65	-	-	-	-	-	14 215	18 243	22 406	-
Power input in V	v								
30	4 658	4 725	4 765	4 775	4 752	4 691	4 590	4 445	-
35	5 081	5 165	5 225	5 256	5 256	5 222	5 149	5 034	-
40	5 553	5 648	5 722	5 769	5 787	5 773	5 722	5 632	-
45	-	6 187	6 268	6 326	6 356	6 356	6 322	6 251	_
50	_	-	6 876	6 938	6 975	6 984	6 961	6 903	_
55	_	-	-	7 617	7 655	7 668	7 650	7 599	_
60	_	-	_	-	8 409	8 418	8 401	8 352	_
65	_	-	_	-	-	9 249	9 225	9 172	_
00		1	I.	1	I.	0210	0 220	0.172	
Current consum	ption in A								
30	7.66	7.72	7.77	7.83	7.90	7.99	8.11	8.26	-
35	8.06	8.14	8.20	8.26	8.33	8.40	8.50	8.61	-
40	8.49	8.60	8.68	8.75	8.82	8.89	8.97	9.07	-
45	-	9.11	9.22	9.32	9.40	9.47	9.55	9.63	-
50	-	_	9.83	9.96	10.06	10.15	10.23	10.31	_
55	-	-	-	10.68	10.82	10.93	11.03	11.11	_
60	_	_	-	_	11.68	11.82	11.94	12.05	_
65	-	_	-	-	-	12.84	12.99	13.12	_
		1				<u>.</u>			
Mass flow in kg/	h			_					
30	178	221	268	322	387	463	556	666	-
35	168	216	265	320	383	455	541	642	-
40	148	203	259	316	379	450	532	627	-
45	-	182	245	308	374	445	525	616	-
50	-	-	222	293	364	438	519	609	-
55	-	-	-	268	347	427	511	601	-
60	-	-	-	-	321	409	498	592	-
65	-	-	-	-	-	380	478	577	-
Coofficient of	rformance (C.C) B)							
Coefficient of pe	1.99	2.47	3.01	3.65	4.45	5.45	6.72	8.35	_
35	1.64	2.10	2.60	3.15	3.81	4.61	5.61	6.87	
40	1.26	1.73	2.20	2.71	3.27	3.94	4.75	5.74	
-								+	
45 50	-	1.35	1.81	2.29	2.80	3.37	4.04	4.85	-
50	-	-	1.42	1.88	2.35	2.87	3.44	4.12	-
55	-	-	-	1.47	1.93	2.40	2.91	3.50	-
60	-	-	-	-	1.51	1.96	2.43	2.94	-
65	-	-	-	-	-	1.54	1.98	2.44	-

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

Monimum portormanoo at to	. 0, 10 04.4 0	
Cooling capacity	24 333	W
Power input	7 546	W
Current consumption	10.96	Α
Mass flow	551	kg/h
C.O.P.	3.22	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

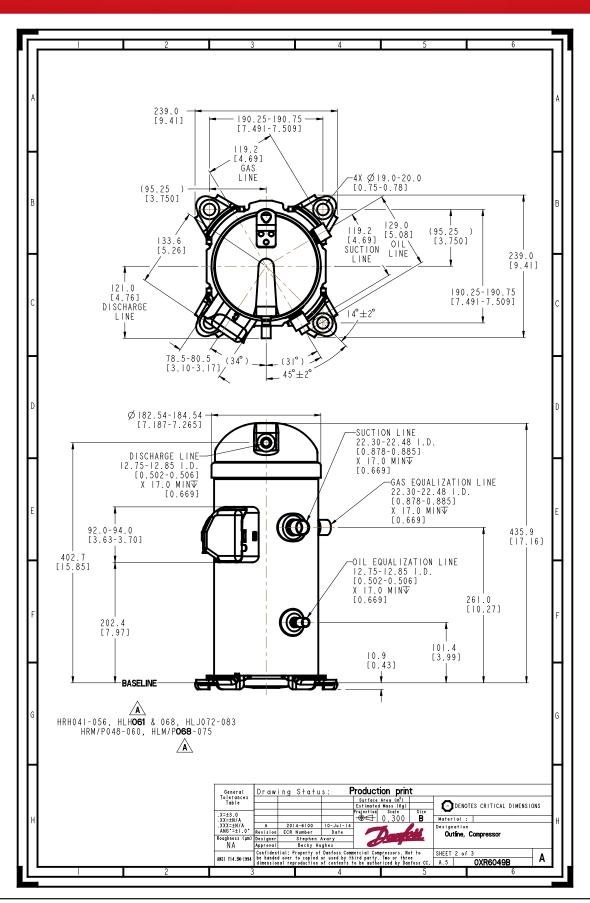
Sound power data

,	Sound power level	74	dB(A)
١	With accoustic hood	69	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point





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FRCC.PD.0XR6049Ba page drawings



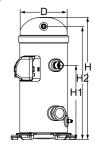
Datasheet, technical data

Danfoss scroll compressor, HLJ083T4

General Characteristics

Model number (on compressor nameplate)		HLJ083T4LCT
Code number for Singlepack*		121L3175
Code number for Industrial pack**		121L3174
Drawing number		0XR6089B-5
Suction and discharge connections		Brazed
Suction connection		7/8 " ODF
Discharge connection		1/2 " ODF
Oil sight glass		None
Oil equalisation connection		1-1/8" Rotolock
Oil drain connection		Schrader
LP gauge port		None
IPR valve		Yes
Swept volume	78.08 c	m3/rev
Displacement @ Nominal speed	13.6 m3/h @ 2900 rpm	- 16.4 m3/h @ 3500 rpm
Net weight	37.2	2 kg
Oil charge	1.57 litre	e, PVE
Maximum system test pressure Low Side / High side	- bar(g)	/ - bar(g)
Maximum differential test pressure	- b	oar
Maximum number of starts per hour		-
Refrigerant charge limit	5.44	4 kg
Approved refrigerants	R41	10A

Dimensions

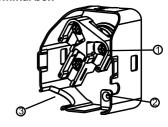


D=183.5 mm H=446.8 mm H1=271.9 mm H2=413.6 mm H3=- mm

Electrical Characteristics

Electrical characteristics	
Nominal voltage	380-415V/3/50Hz - 460V/3/60Hz
Voltage range	342-457 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	1.617 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.595 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.630 Ω
Rated Load Amps (RLA)	13 A
Maximum Continuous Current (MCC)	19 A
Locked Rotor Amps (LRA)	100 A
Motor protection	Internal overload protector

Terminal box



IP22 1:

3:

Screw connectors 10-32 UNF x 9.5

Earth connection
Power cable passage

Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	3 Nm / 2 Nm

Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Approvals: CE certified, UL certified (file SA11565), -

 $\hbox{*Singlepack: Compressor in cardboard box}\\$

**Industrial pack: 12 or 16 Unboxed compressors on pallet



Datasheet, accessories and spare parts

Danfoss scroll compressor, HLJ083T4

Rotolock accessories, suction side	Code no.
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

 Rotolock accessories, discharge side
 Code no.

 Solder sleeve, P06 (1" Rotolock, 1/2" ODF)
 8153007

 Angle adapter, C06 (1" Rotolock, 1/2" ODF)
 8168007

 Rotolock valve, V06 (1" Rotolock, 1/2" ODF)
 8168031

 Gasket, 1"
 8156130

Rotolock accessories, sets	Code no.
Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
Gasket set 1" 1-1/4" 1-3/4" OSG gaskets black & white	8156009

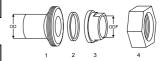
Oil / lubricants	Code no.
PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034

Crankcase heaters	Code no.
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040
Belt type crankcase heater, 70 W. 240 V. CF mark, UI	12075040

Miscellaneous accessories	Code no.
Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts	Code no.
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031
Terminal box cover	12075018

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. HLJ083T4

Performance data at 50 Hz, EN 12900 rating conditions

R410A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
		•	•						
Cooling capacity		0.400	44.045	42.002	40.500	20.025	24.404	20.455	
30	7 228	9 109	11 215	13 662	16 563	20 035	24 194	29 155	-
35	6 444	8 427	10 537	12 887	15 592	18 766	22 524	26 982	-
40	5 366	7 524	9 712	12 042	14 627	17 581	21 018	25 051	-
45	-	6 330	8 666	11 049	13 588	16 397	19 588	23 274	-
50	-	-	7 328	9 830	12 395	15 131	18 150	21 564	-
55	-	-	-	8 315	10 968	13 698	16 613	19 823	-
60	-	-	-	-	9 230	12 008	14 877	17 944	-
65	-	-	-	-	-	9 959	12 815	15 777	-
Power input in V	v								
30	3 884	3 940	3 973	3 981	3 962	3 911	3 827	3 706	-
35	4 234	4 304	4 354	4 380	4 380	4 351	4 291	4 195	-
40	4 624	4 704	4 765	4 805	4 820	4 808	4 766	4 691	-
45	-	5 149	5 217	5 265	5 291	5 291	5 262	5 203	_
50	-	-	5 718	5 770	5 802	5 809	5 790	5 741	_
55	-	_	-	6 330	6 363	6 373	6 358	6 316	_
60	-	-	_	-	6 984	6 992	6 977	6 936	_
65	_	-	_	-	-	7 675	7 656	7 612	_
55	*	_	_	_	_	, 575	, , , , , ,	1 012	
Current consum	ption in A								
30	8.94	8.89	8.84	8.80	8.78	8.76	8.76	8.77	-
35	9.24	9.24	9.24	9.23	9.22	9.21	9.19	9.18	-
40	9.63	9.69	9.72	9.74	9.75	9.74	9.71	9.68	-
45	-	10.24	10.32	10.36	10.38	10.37	10.34	10.28	_
50	-	_	11.04	11.11	11.14	11.13	11.08	11.00	_
55	-	_	-	12.00	12.04	12.03	11.97	11.86	
60	_	-	-	-	13.11	13.10	13.03	12.89	_
65	-	_	-	-	-	14.36	14.26	14.10	_
- 55		l	I	I	<u> </u>	1	20		
Mass flow in kg/	'h								
30	151	187	227	273	328	393	472	565	-
35	142	183	225	271	324	386	459	545	-
40	125	172	219	268	321	381	451	531	-
45	-	154	207	260	316	377	445	522	-
50	-	-	187	247	307	371	439	515	-
55	-	-	-	226	293	361	431	508	_
60	-	-	-	-	270	345	420	499	-
65	_	-	-	-	-	320	403	486	_
		II.	1	1	1	1		.50	
Coefficient of pe	•			Т	1		1	, , , , , , , , , , , , , , , , , , , 	
30	1.86	2.31	2.82	3.43	4.18	5.12	6.32	7.87	-
35	1.52	1.96	2.42	2.94	3.56	4.31	5.25	6.43	-
40	1.16	1.60	2.04	2.51	3.03	3.66	4.41	5.34	-
45	-	1.23	1.66	2.10	2.57	3.10	3.72	4.47	-
50	-	-	1.28	1.70	2.14	2.60	3.13	3.76	-
55	-	-	-	1.31	1.72	2.15	2.61	3.14	-
60	-	-	-	-	1.32	1.72	2.13	2.59	-
65	-	-	-	-	-	1.30	1.67	2.07	_

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

tronnia portornianos arto o o, to	•• •	
Cooling capacity	18 150	W
Power input	5 790	W
Current consumption	11.08	Α
Mass flow	439	kg/h
C.O.P.	3.13	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	71	dB(A)
With accoustic hood	66	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. HLJ083T4

Performance data at 50 Hz, ARI rating conditions

R410A

Cond. temp. in	d. temp. in Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacit		9 827	10.007	14.700	47.047	24 524	25.002	24.200	
30	7 806	1	12 087	14 709	17 817	21 534	25 982	31 286	-
35	7 004	9 149	11 426	13 960	16 873	20 289	24 330	29 121	-
40	5 878	8 231	10 611	13 141	15 944	19 143	22 861	27 223	-
45	-	6 990	9 556	12 166	14 943	18 009	21 490	25 506	-
50	-	-	8 175	10 949	13 784	16 803	20 130	23 886	-
55	-	-	-	9 406	12 384	15 439	18 696	22 276	-
60	-	-	-	-	10 656	13 832	17 103	20 591	-
65	-	-	-	-	-	11 895	15 265	18 746	-
Power input in \	N								
30	3 884	3 940	3 973	3 981	3 962	3 911	3 827	3 706	-
35	4 234	4 304	4 354	4 380	4 380	4 351	4 291	4 195	-
40	4 624	4 704	4 765	4 805	4 820	4 808	4 766	4 691	-
45	-	5 149	5 217	5 265	5 291	5 291	5 262	5 203	-
50	-	-	5 718	5 770	5 802	5 809	5 790	5 741	-
55	-	-	-	6 330	6 363	6 373	6 358	6 316	-
60	-	-	-	-	6 984	6 992	6 977	6 936	-
65	-	-	_	-	-	7 675	7 656	7 612	-
		•	1.	•	ı	1	I.	•	
urrent consum	nption in A								
30	8.94	8.89	8.84	8.80	8.78	8.76	8.76	8.77	-
35	9.24	9.24	9.24	9.23	9.22	9.21	9.19	9.18	-
40	9.63	9.69	9.72	9.74	9.75	9.74	9.71	9.68	-
45	-	10.24	10.32	10.36	10.38	10.37	10.34	10.28	-
50	-	-	11.04	11.11	11.14	11.13	11.08	11.00	-
55	-	-	-	12.00	12.04	12.03	11.97	11.86	-
60	-	-	-	-	13.11	13.10	13.03	12.89	_
65	-	-	-	-	-	14.36	14.26	14.10	-
					<u> </u>		<u> </u>	l	
lass flow in kg	/h	_							
30	150	186	226	272	326	391	468	561	-
35	141	182	224	270	322	383	456	541	-
40	124	171	218	266	319	379	447	527	-
45	-	153	206	259	314	374	442	518	-
50	-	-	186	246	306	368	436	511	-
55	-	-	-	225	291	358	429	504	-
60	ı	-	-	-	268	342	417	496	-
65	-	-	-	-	-	318	400	483	-
coefficient of ne	erformance (C.C	D.P.)							
30	2.01	2.49	3.04	3.69	4.50	5.51	6.79	8.44	-
35	1.65	2.13	2.62	3.19	3.85	4.66	5.67	6.94	-
40	1.27	1.75	2.23	2.73	3.31	3.98	4.80	5.80	-
45	-	1.36	1.83	2.31	2.82	3.40	4.08	4.90	-
50	-	-	1.43	1.90	2.38	2.89	3.48	4.16	-
55	-	-	-	1.49	1.95	2.42	2.94	3.53	_
00		-	-	-	1.53	1.98	2.45	2.97	-
60	-				1.00		2.70	4.31	

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

-, -, -,			
Cooling capacity	20 408	W	
Power input	6 272	W	
Current consumption	11.82	Α	
Mass flow	462	kg/h	
C.O.P.	3.25		

to: Evaporating temperature at dew point

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

Pressure switch settings

	Maximum HP switch setting	45	bar(g)
	Minimum LP switch setting	1.5	bar(g)
L	LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	71	dB(A)
With accoustic hood	66	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. HLJ083T4

Performance data at 60 Hz, EN 12900 rating conditions

R410A

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacity	r in W								
30	8 576	10 807	13 305	16 208	19 650	23 769	28 702	34 585	
35	7 653	10 005	12 509	15 300	18 511	22 280	26 742	32 032	_
40	6 383	8 944	11 542	14 310	17 382	20 893	24 977	29 768	
45	-	7 536	10 312	13 144	16 165	19 507	23 303	27 688	
50		-	8 732	11 709	14 762	18 021	21 618	25 683	
55		-	-	9 918	13 078	16 333	19 810	23 639	
60	_	-	-	-	11 020	14 334	17 760	21 424	_
65					-	11 902	15 315	18 857	
00				<u> </u>	<u>-</u>	11 302	10 010	10 001	_
Power input in V	٧	T		T	1	T	T		
30	4 658	4 725	4 765	4 775	4 752	4 691	4 590	4 445	-
35	5 081	5 165	5 225	5 256	5 256	5 222	5 149	5 034	-
40	5 553	5 648	5 722	5 769	5 787	5 773	5 722	5 632	-
45	-	6 187	6 268	6 326	6 356	6 356	6 322	6 251	-
50	-	-	6 876	6 938	6 975	6 984	6 961	6 903	-
55	-	-	-	7 617	7 655	7 668	7 650	7 599	-
60	-	-	-	-	8 409	8 418	8 401	8 352	-
65	-	-	-	-	-	9 249	9 225	9 172	-
	·								
Current consum		7.70	T	7.00	7.00	7.00	0.44	0.00	
30	7.66	7.72	7.77	7.83	7.90	7.99	8.11	8.26	-
35	8.06	8.14	8.20	8.26	8.33	8.40	8.50	8.61	-
40	8.49	8.60	8.68	8.75	8.82	8.89	8.97	9.07	-
45	-	9.11	9.22	9.32	9.40	9.47	9.55	9.63	-
50	-	-	9.83	9.96	10.06	10.15	10.23	10.31	-
55	-	-	-	10.68	10.82	10.93	11.03	11.11	-
60	-	-	-	-	11.68	11.82	11.94	12.05	-
65	-	-	-	-	-	12.84	12.99	13.12	-
Mass flow in kg/	h								
30	179	222	270	324	389	467	559	671	-
35	169	217	267	322	385	458	545	647	-
40	149	205	260	318	382	453	535	631	_
45	-	183	246	310	376	448	529	621	-
50	-	-	223	294	366	441	523	613	-
55	-	-	-	270	349	430	515	606	-
60	-	-	-	-	323	411	501	596	-
65	-	-	-	-	-	383	481	581	-
Coefficient of pe	•	1	2.70	2 20	4 4 4	5.07	6.25	7 70	_
30	1.84	2.29	2.79	3.39	4.14	5.07	6.25	7.78	
35	1.51	1.94	2.39	2.91	3.52	4.27	5.19	6.36	-
40	1.15	1.58	2.02	2.48	3.00	3.62	4.36	5.29	-
45	-	1.22	1.65	2.08	2.54	3.07	3.69	4.43	-
50	-	-	1.27	1.69	2.12	2.58	3.11	3.72	-
55	-	-	-	1.30	1.71	2.13	2.59	3.11	-
60	-	-	-	-	1.31	1.70	2.11	2.57	-
65	-	-	-	-	-	1.29	1.66	2.06	-

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

-, -, -, -, -, -, -, -, -, -, -, -, -, -		
Cooling capacity	21 618	W
Power input	6 961	W
Current consumption	10.23	Α
Mass flow	523	kg/h
C.O.P.	3.11	

to: Evaporating temperature at dew point

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

Pressure switch settings

	Maximum HP switch setting	45	bar(g)
	Minimum LP switch setting	1.5	bar(g)
L	LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	74	dB(A)
With accoustic hood	69	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. HLJ083T4

Performance data at 60 Hz, ARI rating conditions

R410A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
2	. : 14/								
Cooling capacity	9 262	11 658	14 339	17 451	21 138	25 547	30 823	37 113	
30				+					-
35	8 318	10 862	13 565	16 574	20 033	24 088	28 886	34 571	-
40	6 993	9 784	12 610	15 616	18 947	22 749	27 168	32 349	-
45	-	8 322	11 370	14 473	17 776	21 425	25 565	30 343	-
50	-	-	9 741	13 042	16 417	20 013	23 975	28 449	-
55	-	-	-	11 219	14 767	18 410	22 294	26 564	-
60	-	-	-	-	12 721	16 512	20 417	24 584	-
65	-	-	-	-	-	14 215	18 243	22 406	-
Power input in V	v								
30	4 658	4 725	4 765	4 775	4 752	4 691	4 590	4 445	-
35	5 081	5 165	5 225	5 256	5 256	5 222	5 149	5 034	-
40	5 553	5 648	5 722	5 769	5 787	5 773	5 722	5 632	-
45	-	6 187	6 268	6 326	6 356	6 356	6 322	6 251	_
50	_	-	6 876	6 938	6 975	6 984	6 961	6 903	_
55	_	-	-	7 617	7 655	7 668	7 650	7 599	_
60	_	-	_	-	8 409	8 418	8 401	8 352	_
65	_	-	_	-	-	9 249	9 225	9 172	_
00		1	I.	1	I.	0210	0 220	0.172	
Current consum	ption in A								
30	7.66	7.72	7.77	7.83	7.90	7.99	8.11	8.26	-
35	8.06	8.14	8.20	8.26	8.33	8.40	8.50	8.61	-
40	8.49	8.60	8.68	8.75	8.82	8.89	8.97	9.07	-
45	-	9.11	9.22	9.32	9.40	9.47	9.55	9.63	-
50	-	_	9.83	9.96	10.06	10.15	10.23	10.31	_
55	-	-	-	10.68	10.82	10.93	11.03	11.11	_
60	_	_	-	_	11.68	11.82	11.94	12.05	_
65	-	_	-	-	-	12.84	12.99	13.12	_
		1				<u>.</u>			
Mass flow in kg/	h			_					
30	178	221	268	322	387	463	556	666	-
35	168	216	265	320	383	455	541	642	-
40	148	203	259	316	379	450	532	627	-
45	-	182	245	308	374	445	525	616	-
50	-	-	222	293	364	438	519	609	-
55	-	-	-	268	347	427	511	601	-
60	-	-	-	-	321	409	498	592	-
65	-	-	-	-	-	380	478	577	-
Coofficient of	rformance (C.C) B)							
Coefficient of pe	1.99	2.47	3.01	3.65	4.45	5.45	6.72	8.35	_
35	1.64	2.10	2.60	3.15	3.81	4.61	5.61	6.87	
40	1.26	1.73	2.20	2.71	3.27	3.94	4.75	5.74	
-								+	
45 50	-	1.35	1.81	2.29	2.80	3.37	4.04	4.85	-
50	-	-	1.42	1.88	2.35	2.87	3.44	4.12	-
55	-	-	-	1.47	1.93	2.40	2.91	3.50	-
60	-	-	-	-	1.51	1.96	2.43	2.94	-
65	-	-	-	-	-	1.54	1.98	2.44	-

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

Monimum portormanoo at to	. 0, 10 04.4 0	
Cooling capacity	24 333	W
Power input	7 546	W
Current consumption	10.96	Α
Mass flow	551	kg/h
C.O.P.	3.22	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

,	Sound power level	74	dB(A)
١	With accoustic hood	69	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



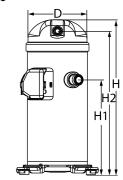
Datasheet, technical data

Danfoss scroll compressor, HLJ083T4

General Characteristics

Model number (on compressor nameplate)		HLJ083T4LQ6
Code number for Singlepack*		121U3129
Code number for Industrial pack**		121U3128
Drawing number		0XR6089B-3
Suction and discharge connections		Rotolock
Suction connection		3/4 " Rotolock
Discharge connection		1/2 " Rotolock
Oil sight glass		None
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		Yes
Swept volume	78.08 c	m3/rev
Displacement @ Nominal speed	13.6 m3/h @ 2900 rpm	- 16.4 m3/h @ 3500 rpm
Net weight	37.2	2 kg
Oil charge	1.57 litre	e, PVE
Maximum system test pressure Low Side / High side	- bar(g)	/ - bar(g)
Maximum differential test pressure	- b	oar
Maximum number of starts per hour		•
Refrigerant charge limit	5.44	4 kg
Approved refrigerants	R41	10A

Dimensions



D=183.5 mm H=455 mm H1=280 mm H2=422 mm H3=- mm

Electrical Characteristics

Nominal voltage	380-415V/3/50Hz - 460V/3/60Hz
Voltage range	342-457 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	1.617 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.595 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.630 Ω
Rated Load Amps (RLA)	13 A
Maximum Continuous Current (MCC)	19 A
Locked Rotor Amps (LRA)	100 A
Motor protection	Internal overload protector

Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	3 Nm / 2 Nm

Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Terminal box



IP22 1:

2:

3:

Screw connectors 10-32 UNF x 9.5

Earth connection

Power cable passage

Approvals: CE certified, UL certified (file SA11565), -

*Singlepack: Compressor in cardboard box

**Industrial pack: 12 or 16 Unboxed compressors on pallet



Danfoss scroll compressor, HLJ083T4 Datasheet, accessories and spare parts Rotolock accessories, suction side Code no. Rotolock accessories, discharge side Code no. Gaskets, sleeves and nuts Rotolock accessories, sets Code no. Oil / lubricants Code no. PVE lubricant, 320HV (FVC68D), 1 litre can 120Z5034 Crankcase heaters Code no. Belt type crankcase heater, 65 W, 230 V, CE mark, UL 120Z0059 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 120Z0060 Belt type crankcase heater, 70 W, 240 V, CE mark, UL 120Z5040 1: Gasket Belt type crankcase heater, 70 W, 240 V, CE mark, UL 120Z5040 2: Solder sleeve 3: Rotolock nut Miscellaneous accessories Code no. 120Z5044 Acoustic hood Discharge thermostat kit 7750009 IP54 upgrade kit 118U0057

Spare parts

Terminal box cover

Mounting kit, including 1 bolt, 1 sleeve, 1 washer

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers

Code no.

120Z5005

120Z5031

120Z5018



Danfoss scroll compressor. HLJ083T4

Performance data at 50 Hz, EN 12900 rating conditions

R410A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
		•	•						
Cooling capacity		0.400	44.045	42.002	40.500	20.025	24.404	20.455	
30	7 228	9 109	11 215	13 662	16 563	20 035	24 194	29 155	-
35	6 444	8 427	10 537	12 887	15 592	18 766	22 524	26 982	-
40	5 366	7 524	9 712	12 042	14 627	17 581	21 018	25 051	-
45	-	6 330	8 666	11 049	13 588	16 397	19 588	23 274	-
50	-	-	7 328	9 830	12 395	15 131	18 150	21 564	-
55	-	-	-	8 315	10 968	13 698	16 613	19 823	-
60	-	-	-	-	9 230	12 008	14 877	17 944	-
65	-	-	-	-	-	9 959	12 815	15 777	-
Power input in V	v								
30	3 884	3 940	3 973	3 981	3 962	3 911	3 827	3 706	-
35	4 234	4 304	4 354	4 380	4 380	4 351	4 291	4 195	-
40	4 624	4 704	4 765	4 805	4 820	4 808	4 766	4 691	-
45	-	5 149	5 217	5 265	5 291	5 291	5 262	5 203	_
50	-	-	5 718	5 770	5 802	5 809	5 790	5 741	_
55	-	_	-	6 330	6 363	6 373	6 358	6 316	_
60	-	-	_	-	6 984	6 992	6 977	6 936	_
65	_	-	_	-	-	7 675	7 656	7 612	_
55	*	_	_	_		, 575	, , , , , ,	1 012	
Current consum	ption in A								
30	8.94	8.89	8.84	8.80	8.78	8.76	8.76	8.77	-
35	9.24	9.24	9.24	9.23	9.22	9.21	9.19	9.18	-
40	9.63	9.69	9.72	9.74	9.75	9.74	9.71	9.68	-
45	-	10.24	10.32	10.36	10.38	10.37	10.34	10.28	_
50	-	_	11.04	11.11	11.14	11.13	11.08	11.00	_
55	-	_	-	12.00	12.04	12.03	11.97	11.86	
60	_	-	-	-	13.11	13.10	13.03	12.89	_
65	-	_	-	-	-	14.36	14.26	14.10	_
- 55		l	I	I	<u> </u>	1	20		
Mass flow in kg/	'h								
30	151	187	227	273	328	393	472	565	-
35	142	183	225	271	324	386	459	545	-
40	125	172	219	268	321	381	451	531	-
45	-	154	207	260	316	377	445	522	-
50	-	-	187	247	307	371	439	515	-
55	-	-	-	226	293	361	431	508	_
60	-	-	-	-	270	345	420	499	-
65	_	-	-	-	-	320	403	486	_
		II.	1	1	1	1		.50	
Coefficient of pe	•			Т	1		1	, , , , , , , , , , , , , , , , , , , 	
30	1.86	2.31	2.82	3.43	4.18	5.12	6.32	7.87	-
35	1.52	1.96	2.42	2.94	3.56	4.31	5.25	6.43	-
40	1.16	1.60	2.04	2.51	3.03	3.66	4.41	5.34	-
45	-	1.23	1.66	2.10	2.57	3.10	3.72	4.47	-
50	-	-	1.28	1.70	2.14	2.60	3.13	3.76	-
55	-	-	-	1.31	1.72	2.15	2.61	3.14	-
60	-	-	-	-	1.32	1.72	2.13	2.59	-
65	-	-	-	-	-	1.30	1.67	2.07	_

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

tronnia portornianos arto o o, to	•• •	
Cooling capacity	18 150	W
Power input	5 790	W
Current consumption	11.08	Α
Mass flow	439	kg/h
C.O.P.	3.13	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	71	dB(A)
With accoustic hood	66	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. HLJ083T4

Performance data at 50 Hz, ARI rating conditions

R410A

Cond. temp. in				Evapora	ting temperature i	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
	: \4/								
Cooling capacit		9 827	10.007	14 700	47.047	24 524	25.002	24.200	
30	7 806	1	12 087	14 709	17 817	21 534	25 982	31 286	-
35	7 004	9 149	11 426	13 960	16 873	20 289	24 330	29 121	-
40	5 878	8 231	10 611	13 141	15 944	19 143	22 861	27 223	-
45	-	6 990	9 556	12 166	14 943	18 009	21 490	25 506	-
50	-	-	8 175	10 949	13 784	16 803	20 130	23 886	-
55	-	-	-	9 406	12 384	15 439	18 696	22 276	-
60	-	-	-	-	10 656	13 832	17 103	20 591	-
65	-	-	-	-	-	11 895	15 265	18 746	-
Power input in \	N								
30	3 884	3 940	3 973	3 981	3 962	3 911	3 827	3 706	-
35	4 234	4 304	4 354	4 380	4 380	4 351	4 291	4 195	-
40	4 624	4 704	4 765	4 805	4 820	4 808	4 766	4 691	-
45	-	5 149	5 217	5 265	5 291	5 291	5 262	5 203	-
50	-	-	5 718	5 770	5 802	5 809	5 790	5 741	-
55	-	-	-	6 330	6 363	6 373	6 358	6 316	-
60	-	-	-	-	6 984	6 992	6 977	6 936	-
65	-	-	_	-	-	7 675	7 656	7 612	-
		•	1.	•	ı	1	I.	•	
urrent consum	nption in A								
30	8.94	8.89	8.84	8.80	8.78	8.76	8.76	8.77	-
35	9.24	9.24	9.24	9.23	9.22	9.21	9.19	9.18	-
40	9.63	9.69	9.72	9.74	9.75	9.74	9.71	9.68	-
45	-	10.24	10.32	10.36	10.38	10.37	10.34	10.28	-
50	-	-	11.04	11.11	11.14	11.13	11.08	11.00	-
55	-	-	-	12.00	12.04	12.03	11.97	11.86	-
60	-	-	-	-	13.11	13.10	13.03	12.89	_
65	-	-	-	-	-	14.36	14.26	14.10	-
					l .		<u> </u>	l	
lass flow in kg	/h	_							
30	150	186	226	272	326	391	468	561	-
35	141	182	224	270	322	383	456	541	-
40	124	171	218	266	319	379	447	527	-
45	-	153	206	259	314	374	442	518	-
50	-	-	186	246	306	368	436	511	-
55	-	-	-	225	291	358	429	504	-
60	ı	-	-	-	268	342	417	496	-
65	-	-	-	-	-	318	400	483	-
coefficient of ne	erformance (C.C	D.P.)							
30	2.01	2.49	3.04	3.69	4.50	5.51	6.79	8.44	-
35	1.65	2.13	2.62	3.19	3.85	4.66	5.67	6.94	-
40	1.27	1.75	2.23	2.73	3.31	3.98	4.80	5.80	-
45	-	1.36	1.83	2.31	2.82	3.40	4.08	4.90	-
50	-	-	1.43	1.90	2.38	2.89	3.48	4.16	-
55	-	-	-	1.49	1.95	2.42	2.94	3.53	_
00		-	-	-	1.53	1.98	2.45	2.97	-
60	-				1.00		2.70	4.31	

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

Cooling capacity	20 408	W
Power input	6 272	W
Current consumption	11.82	Α
Mass flow	462	kg/h
C.O.P.	3.25	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	71	dB(A)
With accoustic hood	66	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. HLJ083T4

Performance data at 60 Hz, EN 12900 rating conditions

R410A

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15	
Cooling capacity	in W									
30	8 576	10 807	13 305	16 208	19 650	23 769	28 702	34 585	_	
35	7 653	10 005	12 509	15 300	18 511	22 280	26 742	32 032	_	
40	6 383	8 944	11 542	14 310	17 382	20 893	24 977	29 768		
45	-	7 536	10 312	13 144	16 165	19 507	23 303	27 688		
50	<u>-</u>	-	8 732	11 709	14 762	18 021	21 618	25 683		
55		-	-	9 918	13 078	16 333	19 810	23 639		
60	-	-	-		11 020	14 334	17 760	21 424		
65		-	-	-	-	11 902	15 315	18 857		
00					<u>-</u>	11 302	10 0 10	10 057		
Power input in W	1	1		_	1	ı	1			
30	4 658	4 725	4 765	4 775	4 752	4 691	4 590	4 445	-	
35	5 081	5 165	5 225	5 256	5 256	5 222	5 149	5 034	-	
40	5 553	5 648	5 722	5 769	5 787	5 773	5 722	5 632	-	
45	-	6 187	6 268	6 326	6 356	6 356	6 322	6 251	-	
50	-	-	6 876	6 938	6 975	6 984	6 961	6 903	-	
55	-	-	-	7 617	7 655	7 668	7 650	7 599	-	
60	-	-	-	-	8 409	8 418	8 401	8 352	-	
65	-	-	-	-	-	9 249	9 225	9 172	-	
Current consum		T		1	T	T	T	1 1		
30	7.66	7.72	7.77	7.83	7.90	7.99	8.11	8.26	-	
35	8.06	8.14	8.20	8.26	8.33	8.40	8.50	8.61	-	
40	8.49	8.60	8.68	8.75	8.82	8.89	8.97	9.07	-	
45	-	9.11	9.22	9.32	9.40	9.47	9.55	9.63	-	
50	-	-	9.83	9.96	10.06	10.15	10.23	10.31	-	
55	-	-	-	10.68	10.82	10.93	11.03	11.11	-	
60	-	-	-	-	11.68	11.82	11.94	12.05	-	
65	-	-	-	-	-	12.84	12.99	13.12	-	
Mass flow in kg/l	h									
30	179	222	270	324	389	467	559	671	_	
35	169	217	267	322	385	458	545	647	_	
40	149	205	260	318	382	453	535	631	_	
45	-	183	246	310	376	448	529	621	_	
50	_	-	223	294	366	441	523	613	_	
55	_	_	-	270	349	430	515	606		
60		-	_	-	323	411	501	596		
65		-	-	-	-	383	481	581		
		1			1					
Coefficient of pe	•	1		1	1		1			
30	1.84	2.29	2.79	3.39	4.14	5.07	6.25	7.78	-	
35	1.51	1.94	2.39	2.91	3.52	4.27	5.19	6.36	-	
40	1.15	1.58	2.02	2.48	3.00	3.62	4.36	5.29	-	
45	-	1.22	1.65	2.08	2.54	3.07	3.69	4.43	-	
50	-	-	1.27	1.69	2.12	2.58	3.11	3.72	-	
55	-	-	-	1.30	1.71	2.13	2.59	3.11	-	
60	-	-	-	-	1.31	1.70	2.11	2.57	-	
65	-	-	-	-	-	1.29	1.66	2.06	-	

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

Cooling capacity	21 618	W
Power input	6 961	W
Current consumption	10.23	Α
Mass flow	523	kg/h
C.O.P.	3.11	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

Sound power data

Sound power level	74	dB(A)
With accoustic hood	69	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. HLJ083T4

Performance data at 60 Hz, ARI rating conditions

R410A

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
2	. : 14/								
Cooling capacity		11 650	14 220	17.451	24 420	25 547	20.922	27 112	
30	9 262	11 658	14 339	17 451	21 138	25 547	30 823	37 113	-
35	8 318	10 862	13 565	16 574	20 033	24 088	28 886	34 571	-
40	6 993	9 784	12 610	15 616	18 947	22 749	27 168	32 349	-
45	-	8 322	11 370	14 473	17 776	21 425	25 565	30 343	-
50	-	-	9 741	13 042	16 417	20 013	23 975	28 449	-
55	-	-	-	11 219	14 767	18 410	22 294	26 564	-
60	-	-	-	-	12 721	16 512	20 417	24 584	-
65	-	-	-	-	-	14 215	18 243	22 406	-
Power input in V	v								
30	4 658	4 725	4 765	4 775	4 752	4 691	4 590	4 445	-
35	5 081	5 165	5 225	5 256	5 256	5 222	5 149	5 034	-
40	5 553	5 648	5 722	5 769	5 787	5 773	5 722	5 632	-
45	-	6 187	6 268	6 326	6 356	6 356	6 322	6 251	_
50	_	-	6 876	6 938	6 975	6 984	6 961	6 903	_
55	_	-	-	7 617	7 655	7 668	7 650	7 599	_
60	_	-	_	-	8 409	8 418	8 401	8 352	_
65	_	-	_	-	-	9 249	9 225	9 172	_
00		1	I.	1	I.	0210	0 220	0.172	
Current consum	ption in A								
30	7.66	7.72	7.77	7.83	7.90	7.99	8.11	8.26	-
35	8.06	8.14	8.20	8.26	8.33	8.40	8.50	8.61	-
40	8.49	8.60	8.68	8.75	8.82	8.89	8.97	9.07	-
45	-	9.11	9.22	9.32	9.40	9.47	9.55	9.63	-
50	-	_	9.83	9.96	10.06	10.15	10.23	10.31	_
55	-	-	_	10.68	10.82	10.93	11.03	11.11	_
60	_	_	-	_	11.68	11.82	11.94	12.05	_
65	-	_	-	-	-	12.84	12.99	13.12	_
		1				<u>.</u>			
Mass flow in kg/	h			_					
30	178	221	268	322	387	463	556	666	-
35	168	216	265	320	383	455	541	642	-
40	148	203	259	316	379	450	532	627	-
45	-	182	245	308	374	445	525	616	-
50	-	-	222	293	364	438	519	609	-
55	-	-	-	268	347	427	511	601	-
60	-	-	-	-	321	409	498	592	-
65	-	-	-	-	-	380	478	577	-
0 655 - 1 1 1 1									
Coefficient of pe	1.99	2.47	3.01	3.65	4.45	5.45	6.72	8.35	_
35	1.64	2.47	2.60	3.15	3.81	4.61	5.61	6.87	
40	1.04			2.71	•			1	
-		1.73	2.20		3.27	3.94	4.75	5.74	-
45	-	1.35	1.81	2.29	2.80	3.37	4.04	4.85	-
50	-	-	1.42	1.88	2.35	2.87	3.44	4.12	-
55	-	-	-	1.47	1.93	2.40	2.91	3.50	-
60	-	-	-	-	1.51	1.96	2.43	2.94	-
65	-	-	-	-	-	1.54	1.98	2.44	-

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

Monimum portormanoo at to	. 0, 10 04.4 0	
Cooling capacity	24 333	W
Power input	7 546	W
Current consumption	10.96	Α
Mass flow	551	kg/h
C.O.P.	3.22	

to: Evaporating temperature at dew point

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

Maximum HP switch setting	45	bar(g)
Minimum LP switch setting	1.5	bar(g)
LP pump down setting	2.3	bar(g)

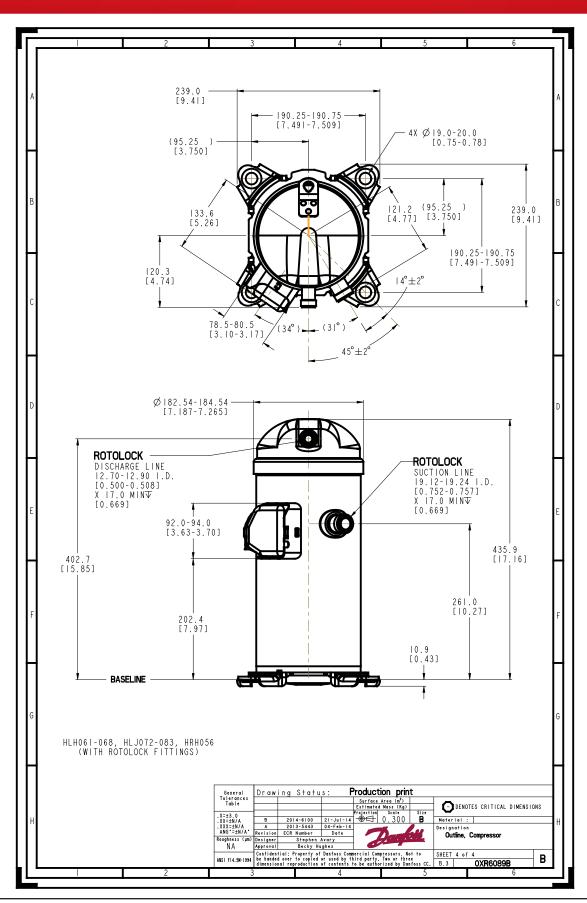
Sound power data

,	Sound power level	74	dB(A)
١	With accoustic hood	69	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point





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