ENGINEERING



Datasheets

Danfoss scroll compressors **H series**





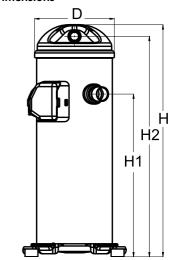
Datasheet, technical data

Danfoss scroll compressor, HCJ091T4

General Characteristics

Model number (on compressor nameplate)		HCJ091T4LC6	
Code number for Singlepack*		121L3113	
Code number for Industrial pack**		121L3112	
Drawing number		0SR4109B1	
Suction and discharge connections		Brazed	
Suction connection		1-1/8 " ODF	
Discharge connection		7/8 " ODF	
Oil sight glass		None	
Oil equalisation connection		None	
Oil drain connection		None	
LP gauge port		None	
IPR valve		None	
Swept volume	86.9 cr	m3/rev	
Displacement @ Nominal speed	15.1 m3/h @ 2900 rpm	- 18.3 m3/h @ 3500 rpm	
Net weight	49	kg	
Oil charge	2.46 litre, PVE		
Maximum system test pressure Low Side / High side	- bar(g) / - bar(g)		
Maximum differential test pressure	- bar		
Maximum number of starts per hour		-	
Refrigerant charge limit	7.26 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	0.960 Ω				
Winding resistance between phases 1-3 +/- 7% at 25°C	0.940 Ω				
Winding resistance between phases 2-3 +/- 7% at 25°C	0.960 Ω				
Rated Load Amps (RLA)	17.9 A				
Maximum Continuous Current (MCC)	25 A				
Locked Rotor Amps (LRA)	125 A				
Motor protection	Internal overload protector				

D=184 mm H=565 mm H1=404.7 mm H2=537.8 mm H3=- mm

Recommended Installation torques

Oil sight glass	0 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 Unboxed compressors on pallet (order per multiples of 12)

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

IP22 1:

3: Power cable passage



Datasheet, accessories and spare parts

Danfoss scroll compressor, HCJ091T4

Rotolock accessories, suction side	Code no.
Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

Rotolock accessories, discharge sideCode no.Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)8168030Gasket, 1-3/4"8156132

Rotolock accessories, sets	Code no.
Solder sleeve adapter set (1-3/4" Rotolock, 1-1/8" ODF), (1-1/4" Rotolock, 7/8" ODF)	120Z0125
Valve set, V02(1"3/4~1"1/8), V05(1"1/4~7/8")	120Z0403
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, 70 W, 230 V, UL	120Z5011
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, 460 V, UL	120Z5012

Miscellaneous accessories	Code no.		
Discharge thermostat kit	7750009		

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
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (white teflon)	8156129

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. HCJ091T4

Performance data at 50 Hz, EN 12900 rating conditions

R410A

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
2linnib	. : \A/								
Cooling capacity		10.209	12.507	15 104	10 202	21.940	25.029	20 565	
30	8 240	10 208	12 507	15 184	18 283	21 849	25 928	30 565	-
35	7 667	9 561	11 769	14 336	17 306	20 723	24 634	29 083	-
40	7 047	8 854	10 957	13 399	16 225	19 480	23 208	27 454	-
45	-	8 098	10 081	12 384	15 052	18 129	21 659	25 686	-
50	-	-	9 151	11 300	13 794	16 677	19 992	23 783	-
55	-	-	-	10 152	12 455	15 126	18 208	21 743	-
60	-	-	-	-	11 029	13 466	16 290	19 544	-
65	-	-	-	-	-	11 654	14 185	17 118	-
Power input in W	ı								
30	4 071	4 069	4 059	4 059	4 085	4 156	4 289	4 502	-
35	4 524	4 537	4 530	4 520	4 526	4 563	4 651	4 806	-
40	5 017	5 054	5 058	5 048	5 041	5 054	5 106	5 212	-
45	-	5 630	5 655	5 653	5 642	5 640	5 663	5 729	-
50	_	-	6 330	6 345	6 339	6 330	6 334	6 369	_
55	_	-	-	7 135	7 143	7 134	7 128	7 140	_
60	_	-	_	-	8 062	8 064	8 056	8 054	_
65		-	_	_	-	9 130	9 128	9 121	-
00		1	ı	1	I.	0.100	0 120	0 121	
Current consum	ption in A								
30	8.95	8.88	8.92	9.00	9.07	9.10	9.04	8.83	-
35	9.61	9.53	9.57	9.67	9.79	9.87	9.88	9.75	-
40	10.27	10.16	10.18	10.27	10.40	10.52	10.56	10.50	1
45	-	10.88	10.85	10.92	11.03	11.15	11.22	11.19	-
50	-	_	11.70	11.71	11.79	11.89	11.95	11.93	-
55	-	-	-	12.79	12.80	12.85	12.88	12.85	-
60	-	_	-	-	14.17	14.14	14.12	14.05	-
65	_	_	-	-	-	15.90	15.79	15.65	-
			<u> </u>	<u> </u>					
Mass flow in kg/l	h	1	T	T	•	T	1		
30	172	210	254	304	362	428	503	588	-
35	168	207	251	302	360	426	502	587	-
40	164	203	247	298	356	423	498	584	-
45	-	197	242	292	351	417	493	579	-
50	-	-	235	286	344	410	486	572	-
55	-	-	-	277	335	401	477	562	-
60	-	-	-	-	325	391	465	550	-
65	-	-	-	-	-	378	452	537	-
Coefficient of pe	rformance (C.C	D.P.)							
30	2.02	2.51	3.08	3.74	4.48	5.26	6.04	6.79	-
35	1.69	2.11	2.60	3.17	3.82	4.54	5.30	6.05	-
40	1.40	1.75	2.17	2.65	3.22	3.85	4.55	5.27	_
45	-	1.44	1.78	2.19	2.67	3.21	3.82	4.48	-
50		-	1.75	1.78	2.07	2.63	3.16	3.73	-
55				1.78	1.74	2.03	2.55		
	-	-	-	-	1.74	1.67	2.55	3.05 2.43	-
60	-	-							

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

	•••		
Cooling capacity	19 992	W	
Power input	6 334	W	
Current consumption	11.95	Α	
Mass flow	486	kg/h	
C.O.P.	3.16		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 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	75	dB(A)
With accoustic hood	0	dB(A)

All performance data +/- 5%

tc: Condensing temperature at dew point



Danfoss scroll compressor. HCJ091T4

Performance data at 50 Hz, ARI rating conditions

R410A

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacit	v in W								
30	8 898	11 012	13 479	16 349	19 667	23 483	27 844	32 798	_
35	8 333	10 380	12 763	15 530	18 728	22 405	26 609	31 388	
40	7 719	9 686	11 971	14 622	17 685	21 210	25 244	29 834	_
45	-	8 942	11 116	13 636	16 552	19 911	23 761	28 149	-
50	-	-	10 209	12 586	15 341	18 520	22 172	26 344	_
55		_	-	11 484	14 063	17 050	20 490	24 433	
60	-	-	_	11404	12 732	15 512	18 728	22 427	
65	-	-	-	-	-	13 919	16 897	20 340	-
05	-	-	_	_	-	13 919	10 097	20 340	-
ower input in \	W								
30	4 071	4 069	4 059	4 059	4 085	4 156	4 289	4 502	-
35	4 524	4 537	4 530	4 520	4 526	4 563	4 651	4 806	-
40	5 017	5 054	5 058	5 048	5 041	5 054	5 106	5 212	-
45	-	5 630	5 655	5 653	5 642	5 640	5 663	5 729	-
50	-	-	6 330	6 345	6 339	6 330	6 334	6 369	-
55	-	-	-	7 135	7 143	7 134	7 128	7 140	-
60	-	-	-	-	8 062	8 064	8 056	8 054	_
65	-	-	-	-	-	9 130	9 128	9 121	-
urrent consum	ention in A								
30	8.95	8.88	8.92	9.00	9.07	9.10	9.04	8.83	_
35	9.61	9.53	9.57	9.67	9.79	9.87	9.88	9.75	_
40	10.27	10.16	10.18	10.27	10.40	10.52	10.56	10.50	
45	-	10.10	10.16	10.92	11.03	11.15	11.22	11.19	
50	-	-	11.70	11.71	11.79	11.13	11.95	11.93	-
55	-	-	-	12.79	12.80	12.85	12.88	12.85	-
						+			
60 65	-	-	-	-	14.17	14.14	14.12	14.05	-
65	=	-	-	-	-	15.90	15.79	15.65	-
lass flow in kg		T		T	T	Т	T	T	
30	171	209	252	303	360	425	500	584	-
35	167	206	250	300	358	423	498	583	-
40	163	201	245	296	354	420	495	580	-
45	-	196	240	291	349	415	490	575	-
50	-	-	233	284	342	408	483	567	-
55	-	-	-	276	333	399	473	558	-
60	-	-	-	-	323	388	462	547	-
65	-	-	-	-	-	375	449	533	-
oefficient of pe	erformance (C.0			<u> </u>	1		1	1	
30	2.19	2.71	3.32	4.03	4.81	5.65	6.49	7.29	-
35	1.84	2.29	2.82	3.44	4.14	4.91	5.72	6.53	-
40	1.54	1.92	2.37	2.90	3.51	4.20	4.94	5.72	-
45	-	1.59	1.97	2.41	2.93	3.53	4.20	4.91	-
50	ı	-	1.61	1.98	2.42	2.93	3.50	4.14	-
55	-	-	-	1.61	1.97	2.39	2.87	3.42	-
60	-	-	-	-	1.58	1.92	2.32	2.78	-
65	-	-	_	_	-	1.52	1.85	2.23	_

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

	• •		
Cooling capacity	22 379	W	
Power input	7 029	W	
Current consumption	12.75	Α	
Mass flow	511	kg/h	
C.O.P.	3.18		

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

All performance data +/- 5%

tc: Condensing temperature at dew point



Danfoss scroll compressor. HCJ091T4

Performance data at 60 Hz, EN 12900 rating conditions

R410A

°C (tc)	-25	-20	-15	-10	-5	0	_		
					-5	0	5	10	15
	in M								
20	9 643	12 055	14 877	18 164	21 972	26 356	31 371	37 072	_
30									
35	8 993	11 313	14 018	17 164	20 805	24 996	29 791	35 247	-
40	8 293	10 506	13 079	16 067	19 525	23 506	28 066	33 258	-
45	-	9 645	12 070	14 885	18 142	21 897	26 203	31 115	-
50	-	-	11 003	13 626	16 666	20 177	24 210	28 822	-
55	-	-	-	12 297	15 100	18 345	22 085	26 373	-
60	-	-	-	-	13 434	16 388	19 807	23 743	-
65	-	-	-	-	-	14 251	17 307	20 844	-
Power input in W									
30	4 832	4 867	4 909	4 959	5 015	5 077	5 145	5 218	-
35	5 356	5 383	5 418	5 461	5 512	5 571	5 637	5 709	-
40	5 966	5 980	6 004	6 038	6 081	6 133	6 193	6 262	-
45	-	6 679	6 689	6 710	6 742	6 784	6 836	6 898	-
50	-	-	7 495	7 500	7 517	7 546	7 586	7 637	-
55	-	_	-	8 427	8 426	8 438	8 464	8 501	_
60	-	_	_	-	9 490	9 483	9 490	9 510	_
65	_	-	_	-	-	10 700	10 686	10 686	_
- 00		I	1	1	I.	10 700	10 000	10 000	
Current consump	otion in A								
30	8.45	8.52	8.58	8.64	8.70	8.77	8.84	8.93	-
35	9.08	9.15	9.21	9.27	9.34	9.40	9.47	9.54	-
40	9.73	9.81	9.88	9.94	10.00	10.05	10.11	10.18	-
45	-	10.56	10.63	10.69	10.74	10.79	10.84	10.89	-
50	-	-	11.52	11.58	11.63	11.67	11.71	11.74	-
55	-	_	-	12.67	12.71	12.74	12.76	12.79	-
60	-	_	-	-	14.04	14.06	14.07	14.07	_
65	-	-	-	-	-	15.68	15.68	15.66	-
4		•		ı		1			
Mass flow in kg/h		Т	T	1	T	T	1	T T	
30	201	248	302	364	435	517	609	713	-
35	197	245	299	361	433	514	607	712	-
40	193	240	295	357	429	510	603	707	-
45	-	235	289	351	423	504	597	701	-
50	-	-	282	344	415	496	588	693	-
55	-	-	-	336	406	487	578	682	-
60	-	-	-	-	396	475	566	669	-
65	-	-	-	-	-	462	552	653	-
Coefficient of per	formance (C.C).P.)							
30	2.00	2.48	3.03	3.66	4.38	5.19	6.10	7.11	_
35	1.68	2.10	2.59	3.14	3.77	4.49	5.29	6.17	_
40	1.39	1.76	2.18	2.66	3.21	3.83	4.53	5.31	_
45	-	1.44	1.80	2.22	2.69	3.23	3.83	4.51	_
50	<u>-</u>	-	1.47	1.82	2.09	2.67	3.19	3.77	
55	-		-	1.46	1.79	2.07	2.61	3.10	
60	-	<u>-</u>		1.40		1.73		1	
65	<u>-</u>	-	-	-	1.42	1.73	2.09 1.62	2.50 1.95	-

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

rionina poriorinarios arto o o, to		
Cooling capacity	24 210	W
Power input	7 586	W
Current consumption	11.71	Α
Mass flow	588	kg/h
C.O.P.	3.19	

to: Evaporating temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 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	78	dB(A)
With accoustic hood	0	dB(A)

All performance data +/- 5%

tc: Condensing temperature at dew point



Danfoss scroll compressor. HCJ091T4

Performance data at 60 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
Cooling capacit	w in W								
30	10 414	13 004	16 033	19 557	23 635	28 327	33 690	39 781	_
35	9 775	12 282	15 202	18 593	22 515	27 024	32 180	38 041	-
								36 142	-
40	9 084	11 493	14 289	17 533	21 282	25 594	30 528		-
45	-	10 651	13 309	16 390	19 950	24 050	28 746	34 098	-
50	-	-	12 276	15 177	18 535	22 407	26 851	31 925	-
55	-	-	-	13 910	17 049	20 678	24 854	29 636	-
60	-	-	-	-	15 508	18 878	22 771	27 245	-
65	-	-	-	-	-	17 021	20 616	24 767	-
ower input in \	W								
30	4 832	4 867	4 909	4 959	5 015	5 077	5 145	5 218	-
35	5 356	5 383	5 418	5 461	5 512	5 571	5 637	5 709	-
40	5 966	5 980	6 004	6 038	6 081	6 133	6 193	6 262	-
45	-	6 679	6 689	6 710	6 742	6 784	6 836	6 898	-
50	-	-	7 495	7 500	7 517	7 546	7 586	7 637	-
55	-	_	-	8 427	8 426	8 438	8 464	8 501	-
60	-	_	-	-	9 490	9 483	9 490	9 510	-
65	-	-	-	-	-	10 700	10 686	10 686	_
00		.1	1	1	I	10 700	10 000	10 000	<u> </u>
urrent consum	nption in A								
30	8.45	8.52	8.58	8.64	8.70	8.77	8.84	8.93	-
35	9.08	9.15	9.21	9.27	9.34	9.40	9.47	9.54	-
40	9.73	9.81	9.88	9.94	10.00	10.05	10.11	10.18	-
45	-	10.56	10.63	10.69	10.74	10.79	10.84	10.89	-
50	-	-	11.52	11.58	11.63	11.67	11.71	11.74	-
55	-	-	-	12.67	12.71	12.74	12.76	12.79	-
60	-	-	-	-	14.04	14.06	14.07	14.07	-
65	-	-	-	-	-	15.68	15.68	15.66	-
lass flow in kg	/h							,	
30	200	247	300	362	433	513	605	708	_
35	196	243	297	359	430	511	603	706	_
40	192	239	293	355	426	507	599	702	_
45	-	234	287	349	420	501	592	696	_
50	-	-	281	342	413	493	584	688	_
55	-	-	-	334	404	484	574	677	-
60	-	-	-	-	393	472	562	664	-
65	-	-	-	-	- 393	472	548	649	-
05	-		-	-	-	409	540	049	
-	erformance (C.C	1	1	1		1			
30	2.16	2.67	3.27	3.94	4.71	5.58	6.55	7.62	-
35	1.82	2.28	2.81	3.40	4.08	4.85	5.71	6.66	-
40	1.52	1.92	2.38	2.90	3.50	4.17	4.93	5.77	-
45	-	1.59	1.99	2.44	2.96	3.54	4.20	4.94	-
50	-	-	1.64	2.02	2.47	2.97	3.54	4.18	-
55	-	-	-	1.65	2.02	2.45	2.94	3.49	-
60	-	-	-	-	1.63	1.99	2.40	2.86	-
65	-	-	-	-	-	1.59	1.93	2.32	_

reciminal portermance at to 7:2 0, to	U-1	
Cooling capacity	27 140	W
Power input	8 367	W
Current consumption	12.64	Α
Mass flow	619	kg/h
C.O.P.	3.24	

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)

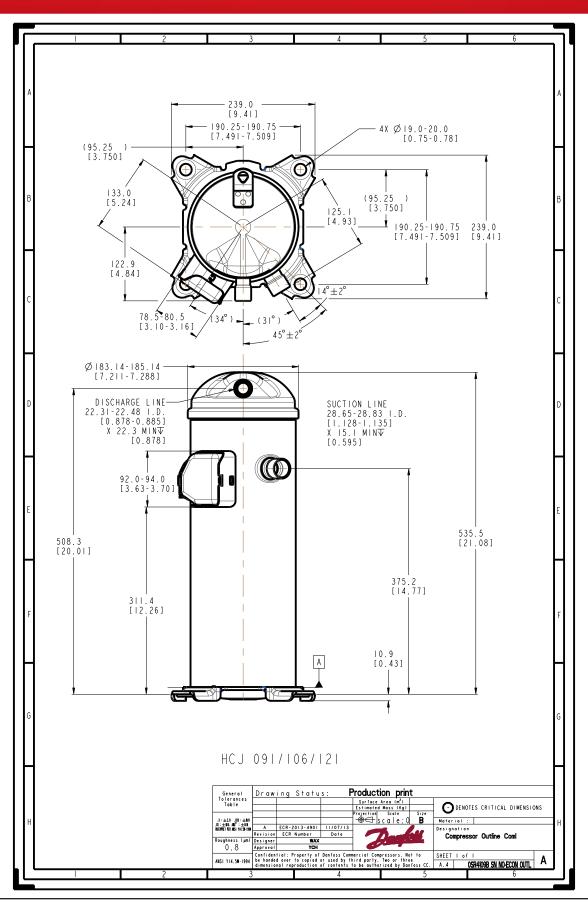
Sound power data

Sound power level	78	dB(A)
With accoustic hood	0	dB(A)

All performance data +/- 5%

tc: Condensing temperature at dew point





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FRCC.PD.0SR4109Ba page drawings



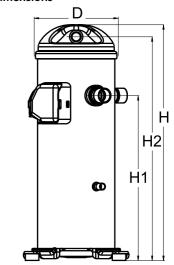
Datasheet, technical data

Danfoss scroll compressor, HCJ091T4

General Characteristics

Model number (on compressor nameplate)		HCJ091T4LC8	
Code number for Singlepack*		121L3119	
Code number for Industrial pack**		121L3118	
Drawing number		0SR4110B1	
Suction and discharge connections		Brazed	
Suction connection		1-1/8 " ODF	
Discharge connection		7/8 " ODF	
Oil sight glass		None	
Oil equalisation connection		1/2"	
Oil drain connection		None	
LP gauge port		None	
IPR valve		None	
Swept volume	86.9 cm3/rev		
Displacement @ Nominal speed	15.1 m3/h @ 2900 rpm - 18.3 m3/h @ 3500 rpm		
Net weight	49 kg		
Oil charge	2.46 litre, PVE		
Maximum system test pressure Low Side / High side	- bar(g) / - bar(g)		
Maximum differential test pressure	- bar		
Maximum number of starts per hour	-		
Refrigerant charge limit	7.26 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	0.960 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	0.940 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	0.960 Ω
Rated Load Amps (RLA)	17.9 A
Maximum Continuous Current (MCC)	25 A
Locked Rotor Amps (LRA)	125 A
Motor protection	Internal overload protector

D=184 mm H=565 mm H1=404.7 mm H2=537.8 mm H3=- mm

Recommended Installation torques

Oil sight glass	0 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 Unboxed compressors on pallet (order per multiples of 12)

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, HCJ091T4

Rotolock accessories, suction side	Code no.
Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

Rotolock accessories, discharge sideCode no.Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)8168030Gasket, 1-3/4"8156132

Rotolock accessories, sets	Code no.
Solder sleeve adapter set (1-3/4" Rotolock, 1-1/8" ODF), (1-1/4" Rotolock, 7/8" ODF)	120Z0125
Valve set, V02(1"3/4~1"1/8), V05(1"1/4~7/8")	120Z0403
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

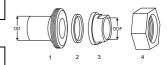
Oil / lubricants	Code no.
PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034

Crankcase heaters	Code no.
Belt type crankcase heater, 70 W, 230 V, UL	120Z5011
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. 460 V. UL	120Z5012

Miscellaneous accessories	Code no.		
Discharge thermostat kit	7750009		

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

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. HCJ091T4

Performance data at 50 Hz, EN 12900 rating conditions

R410A

Cond. temp. in	p. in Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
2linnib	. : \A/								
Cooling capacity		10.209	12.507	15 104	10 202	21.940	25.029	20 565	
30	8 240	10 208	12 507	15 184	18 283	21 849	25 928	30 565	-
35	7 667	9 561	11 769	14 336	17 306	20 723	24 634	29 083	-
40	7 047	8 854	10 957	13 399	16 225	19 480	23 208	27 454	-
45	-	8 098	10 081	12 384	15 052	18 129	21 659	25 686	-
50	-	-	9 151	11 300	13 794	16 677	19 992	23 783	-
55	-	-	-	10 152	12 455	15 126	18 208	21 743	-
60	-	-	-	-	11 029	13 466	16 290	19 544	-
65	-	-	-	-	-	11 654	14 185	17 118	-
Power input in W	ı								
30	4 071	4 069	4 059	4 059	4 085	4 156	4 289	4 502	-
35	4 524	4 537	4 530	4 520	4 526	4 563	4 651	4 806	-
40	5 017	5 054	5 058	5 048	5 041	5 054	5 106	5 212	-
45	-	5 630	5 655	5 653	5 642	5 640	5 663	5 729	-
50	_	-	6 330	6 345	6 339	6 330	6 334	6 369	_
55	_	-	-	7 135	7 143	7 134	7 128	7 140	_
60	_	-	_	-	8 062	8 064	8 056	8 054	_
65		-	_	_	-	9 130	9 128	9 121	-
00		1	ı	1	I.	0.100	0 120	0 121	
Current consum	ption in A								
30	8.95	8.88	8.92	9.00	9.07	9.10	9.04	8.83	-
35	9.61	9.53	9.57	9.67	9.79	9.87	9.88	9.75	-
40	10.27	10.16	10.18	10.27	10.40	10.52	10.56	10.50	1
45	-	10.88	10.85	10.92	11.03	11.15	11.22	11.19	-
50	-	_	11.70	11.71	11.79	11.89	11.95	11.93	-
55	-	-	-	12.79	12.80	12.85	12.88	12.85	-
60	-	_	-	-	14.17	14.14	14.12	14.05	-
65	_	_	-	-	-	15.90	15.79	15.65	-
			<u> </u>	<u>I</u>					
Mass flow in kg/l	h	1	T	T	•	T	1		
30	172	210	254	304	362	428	503	588	-
35	168	207	251	302	360	426	502	587	-
40	164	203	247	298	356	423	498	584	-
45	-	197	242	292	351	417	493	579	-
50	-	-	235	286	344	410	486	572	-
55	-	-	-	277	335	401	477	562	-
60	-	-	-	-	325	391	465	550	-
65	-	-	-	-	-	378	452	537	-
Coefficient of pe	rformance (C.C	D.P.)							
30	2.02	2.51	3.08	3.74	4.48	5.26	6.04	6.79	-
35	1.69	2.11	2.60	3.17	3.82	4.54	5.30	6.05	-
40	1.40	1.75	2.17	2.65	3.22	3.85	4.55	5.27	_
45	-	1.44	1.78	2.19	2.67	3.21	3.82	4.48	-
50		-	1.75	1.78	2.07	2.63	3.16	3.73	-
55				1.78	1.74	2.03	2.55		
	-	-	-	-	1.74	1.67	2.55	3.05 2.43	-
60	-	-							

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

	•••		
Cooling capacity	19 992	W	
Power input	6 334	W	
Current consumption	11.95	Α	
Mass flow	486	kg/h	
C.O.P.	3.16		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 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	75	dB(A)
With accoustic hood	0	dB(A)

All performance data +/- 5%

tc: Condensing temperature at dew point



Danfoss scroll compressor. HCJ091T4

Performance data at 50 Hz, ARI rating conditions

R410A

Cond. temp. in	p. in Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacit	v in W								
30	8 898	11 012	13 479	16 349	19 667	23 483	27 844	32 798	_
35	8 333	10 380	12 763	15 530	18 728	22 405	26 609	31 388	
40	7 719	9 686	11 971	14 622	17 685	21 210	25 244	29 834	_
45	-	8 942	11 116	13 636	16 552	19 911	23 761	28 149	-
50	-	-	10 209	12 586	15 341	18 520	22 172	26 344	_
55		_	-	11 484	14 063	17 050	20 490	24 433	
60	-	-	_	11404	12 732	15 512	18 728	22 427	
65	-	-	-	-	-	13 919	16 897	20 340	-
05	-	-	_	_	-	13 919	10 097	20 340	-
ower input in \	W								
30	4 071	4 069	4 059	4 059	4 085	4 156	4 289	4 502	-
35	4 524	4 537	4 530	4 520	4 526	4 563	4 651	4 806	-
40	5 017	5 054	5 058	5 048	5 041	5 054	5 106	5 212	-
45	-	5 630	5 655	5 653	5 642	5 640	5 663	5 729	-
50	-	-	6 330	6 345	6 339	6 330	6 334	6 369	-
55	-	-	-	7 135	7 143	7 134	7 128	7 140	-
60	-	-	-	-	8 062	8 064	8 056	8 054	_
65	-	-	-	-	-	9 130	9 128	9 121	-
urrent consum	ention in A								
30	8.95	8.88	8.92	9.00	9.07	9.10	9.04	8.83	_
35	9.61	9.53	9.57	9.67	9.79	9.87	9.88	9.75	_
40	10.27	10.16	10.18	10.27	10.40	10.52	10.56	10.50	
45	-	10.10	10.16	10.92	11.03	11.15	11.22	11.19	
50	-	-	11.70	11.71	11.79	11.13	11.95	11.93	-
55	-	-	-	12.79	12.80	12.85	12.88	12.85	-
						+			
60 65	-	-	-	-	14.17	14.14	14.12	14.05	-
65	=	-	-	-	-	15.90	15.79	15.65	-
lass flow in kg		T		T	T	Т	T	T	
30	171	209	252	303	360	425	500	584	-
35	167	206	250	300	358	423	498	583	-
40	163	201	245	296	354	420	495	580	-
45	-	196	240	291	349	415	490	575	-
50	-	-	233	284	342	408	483	567	-
55	-	-	-	276	333	399	473	558	-
60	-	-	-	-	323	388	462	547	-
65	-	-	-	-	-	375	449	533	-
oefficient of pe	erformance (C.0			<u> </u>	1		1	1	
30	2.19	2.71	3.32	4.03	4.81	5.65	6.49	7.29	-
35	1.84	2.29	2.82	3.44	4.14	4.91	5.72	6.53	-
40	1.54	1.92	2.37	2.90	3.51	4.20	4.94	5.72	-
45	-	1.59	1.97	2.41	2.93	3.53	4.20	4.91	-
50	ı	-	1.61	1.98	2.42	2.93	3.50	4.14	-
55	-	-	-	1.61	1.97	2.39	2.87	3.42	-
60	-	-	-	-	1.58	1.92	2.32	2.78	-
65	-	-	_	_	-	1.52	1.85	2.23	_

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

	• •		
Cooling capacity	22 379	W	
Power input	7 029	W	
Current consumption	12.75	Α	
Mass flow	511	kg/h	
C.O.P.	3.18		

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

All performance data +/- 5%

tc: Condensing temperature at dew point



Danfoss scroll compressor. HCJ091T4

Performance data at 60 Hz, EN 12900 rating conditions

R410A

°C (tc)	-25	-20	-15	-10	-5	0	_		
					-5	0	5	10	15
	in M								
20	9 643	12 055	14 877	18 164	21 972	26 356	31 371	37 072	_
30									
35	8 993	11 313	14 018	17 164	20 805	24 996	29 791	35 247	-
40	8 293	10 506	13 079	16 067	19 525	23 506	28 066	33 258	-
45	-	9 645	12 070	14 885	18 142	21 897	26 203	31 115	-
50	-	-	11 003	13 626	16 666	20 177	24 210	28 822	-
55	-	-	-	12 297	15 100	18 345	22 085	26 373	-
60	-	-	-	-	13 434	16 388	19 807	23 743	-
65	-	-	-	-	-	14 251	17 307	20 844	-
Power input in W									
30	4 832	4 867	4 909	4 959	5 015	5 077	5 145	5 218	-
35	5 356	5 383	5 418	5 461	5 512	5 571	5 637	5 709	-
40	5 966	5 980	6 004	6 038	6 081	6 133	6 193	6 262	-
45	-	6 679	6 689	6 710	6 742	6 784	6 836	6 898	_
50	-	-	7 495	7 500	7 517	7 546	7 586	7 637	-
55	-	_	-	8 427	8 426	8 438	8 464	8 501	_
60	-	_	_	-	9 490	9 483	9 490	9 510	_
65	_	-	_	-	-	10 700	10 686	10 686	_
- 00		I	1	1	I.	10 700	10 000	10 000	
Current consump	otion in A								
30	8.45	8.52	8.58	8.64	8.70	8.77	8.84	8.93	-
35	9.08	9.15	9.21	9.27	9.34	9.40	9.47	9.54	-
40	9.73	9.81	9.88	9.94	10.00	10.05	10.11	10.18	-
45	-	10.56	10.63	10.69	10.74	10.79	10.84	10.89	-
50	-	-	11.52	11.58	11.63	11.67	11.71	11.74	-
55	-	_	-	12.67	12.71	12.74	12.76	12.79	-
60	-	_	-	-	14.04	14.06	14.07	14.07	_
65	-	-	-	-	-	15.68	15.68	15.66	-
<u>"</u>		•		ı		1			
Mass flow in kg/h		Т	T	1	T	T	1	T T	
30	201	248	302	364	435	517	609	713	-
35	197	245	299	361	433	514	607	712	-
40	193	240	295	357	429	510	603	707	-
45	-	235	289	351	423	504	597	701	-
50	-	-	282	344	415	496	588	693	-
55	-	-	-	336	406	487	578	682	-
60	-	-	-	-	396	475	566	669	-
65	-	-	-	-	-	462	552	653	-
Coefficient of per	formance (C.C).P.)							
30	2.00	2.48	3.03	3.66	4.38	5.19	6.10	7.11	_
35	1.68	2.10	2.59	3.14	3.77	4.49	5.29	6.17	_
40	1.39	1.76	2.18	2.66	3.21	3.83	4.53	5.31	_
45	-	1.44	1.80	2.22	2.69	3.23	3.83	4.51	_
50	<u>-</u>	-	1.47	1.82	2.09	2.67	3.19	3.77	
55	-		-	1.46	1.79	2.07	2.61	3.10	
60	-	<u>-</u>		1.40		1.73		1	
65	<u>-</u>	-	-	-	1.42	1.73	2.09 1.62	2.50 1.95	-

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

rionina poriorinarios arto o o, to		
Cooling capacity	24 210	W
Power input	7 586	W
Current consumption	11.71	Α
Mass flow	588	kg/h
C.O.P.	3.19	

to: Evaporating temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 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	78	dB(A)
With accoustic hood	0	dB(A)

All performance data +/- 5%

tc: Condensing temperature at dew point



Danfoss scroll compressor. HCJ091T4

Performance data at 60 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
Cooling capacit	w in W								
30	10 414	13 004	16 033	19 557	23 635	28 327	33 690	39 781	_
35	9 775	12 282	15 202	18 593	22 515	27 024	32 180	38 041	-
								36 142	-
40	9 084	11 493	14 289	17 533	21 282	25 594	30 528		-
45	-	10 651	13 309	16 390	19 950	24 050	28 746	34 098	-
50	-	-	12 276	15 177	18 535	22 407	26 851	31 925	-
55	-	-	-	13 910	17 049	20 678	24 854	29 636	-
60	-	-	-	-	15 508	18 878	22 771	27 245	-
65	-	-	-	-	-	17 021	20 616	24 767	-
ower input in \	W								
30	4 832	4 867	4 909	4 959	5 015	5 077	5 145	5 218	-
35	5 356	5 383	5 418	5 461	5 512	5 571	5 637	5 709	-
40	5 966	5 980	6 004	6 038	6 081	6 133	6 193	6 262	-
45	-	6 679	6 689	6 710	6 742	6 784	6 836	6 898	-
50	-	-	7 495	7 500	7 517	7 546	7 586	7 637	-
55	-	_	-	8 427	8 426	8 438	8 464	8 501	-
60	-	_	-	-	9 490	9 483	9 490	9 510	-
65	-	-	-	-	-	10 700	10 686	10 686	_
00		.1	1	1	I	10 700	10 000	10 000	<u> </u>
urrent consum	nption in A								
30	8.45	8.52	8.58	8.64	8.70	8.77	8.84	8.93	-
35	9.08	9.15	9.21	9.27	9.34	9.40	9.47	9.54	-
40	9.73	9.81	9.88	9.94	10.00	10.05	10.11	10.18	-
45	-	10.56	10.63	10.69	10.74	10.79	10.84	10.89	-
50	-	-	11.52	11.58	11.63	11.67	11.71	11.74	-
55	-	-	-	12.67	12.71	12.74	12.76	12.79	-
60	-	-	-	-	14.04	14.06	14.07	14.07	-
65	-	-	-	-	-	15.68	15.68	15.66	-
lass flow in kg	/h							,	
30	200	247	300	362	433	513	605	708	_
35	196	243	297	359	430	511	603	706	_
40	192	239	293	355	426	507	599	702	_
45	-	234	287	349	420	501	592	696	_
50	-	-	281	342	413	493	584	688	_
55	-	-	-	334	404	484	574	677	-
60	-	-	-	-	393	472	562	664	-
65	-	-	-	-	- 393	472	548	649	-
05	-		-	-	-	409	540	049	
-	erformance (C.C	1	1	1		1			
30	2.16	2.67	3.27	3.94	4.71	5.58	6.55	7.62	-
35	1.82	2.28	2.81	3.40	4.08	4.85	5.71	6.66	-
40	1.52	1.92	2.38	2.90	3.50	4.17	4.93	5.77	-
45	-	1.59	1.99	2.44	2.96	3.54	4.20	4.94	-
50	-	-	1.64	2.02	2.47	2.97	3.54	4.18	-
55	-	-	-	1.65	2.02	2.45	2.94	3.49	-
60	-	-	-	-	1.63	1.99	2.40	2.86	-
65	-	-	-	-	-	1.59	1.93	2.32	_

reciminal portermance at to 7:2 0, to	U-1	
Cooling capacity	27 140	W
Power input	8 367	W
Current consumption	12.64	Α
Mass flow	619	kg/h
C.O.P.	3.24	

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)

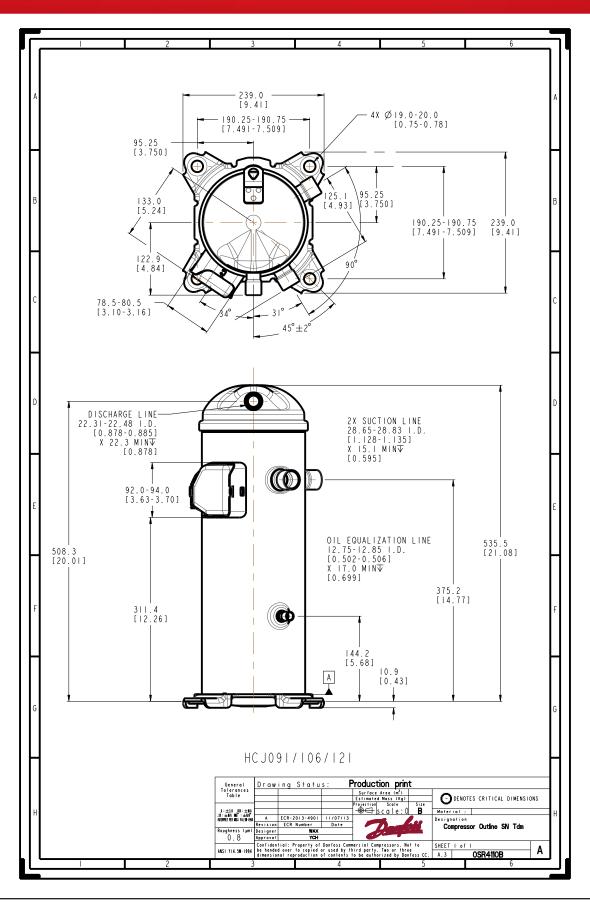
Sound power data

Sound power level	78	dB(A)
With accoustic hood	0	dB(A)

All performance data +/- 5%

tc: Condensing temperature at dew point





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