



Datasheets

# Danfoss scroll compressors **H series**



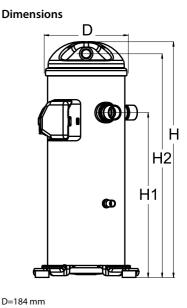
# Danfoss scroll compressor, HCP094T4

Pantoss

#### Datasheet, technical data

# **General Characteristics**

Model number (on compressor nameplate)	HCP094T4LC6
Code number for Singlepack*	120U0601
Code number for Industrial pack**	120U0598 C
Drawing number	0SR4103B-3
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	126.02 cm3/rev
Displacement @ Nominal speed	21.9 m3/h @ 2900 rpm - 26.5 m3/h @ 3500 rpm
Net weight	44 kg
Oil charge	2.66 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	R407C



# **Electrical Characteristics**

Nominal voltage	380-415V/3/50Hz - 460V/3/60Hz 342-457 V @ 50Hz - 414-506 V @ 60Hz	D=184 mm H=536 mm
Voltage range Winding resistance between phases 1-2 +/- 7% at 25℃ Winding resistance between phases 1-3 +/- 7% at 25℃	342-457 V @ 50H2 - 414-506 V @ 60H2 1.480 Ω 1.480 Ω	H1=369 mm H2=509 mm
Winding resistance between phases 2-3 +/- 7% at 25°C	1.480 Ω	H3=- mm
Rated Load Amps (RLA) Maximum Continuous Current (MCC)	13.5 A 21 A	
Locked Rotor Amps (LRA) Motor protection	84 A Internal overload protector	Terminal b

# **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), -\*Singlepack: Compressor in cardboard box

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

erminal box



#### IP22 1:

Screw connectors 10-32 UNF x 9.5

2: Earth connection 3:

Power cable passage

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# Datasheet, accessories and spare parts

Danfoss scroll compressor, HCP094T4

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 side	Code no.	Solder sleeve adapter set
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030	
Gasket, 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	1 2 3 4
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	
		1: Rotolock adapter (Suc & Dis)
Oil / lubricants	Code no.	2: Gasket (Suc & Dis)
PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034	3: Solder sleeve (Suc & Dis)
		4: Rotolock nut (Suc & Dis)
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	120Z5045	
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	

# Danfoss scroll compressor. HCP094T4

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R407C

# Performance data at 50 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	
Cooling capacity	in W									
30	-	6 498	8 338	10 575	13 253	16 415	20 104	24 364	29 237	
35	-	6 118	7 865	9 990	12 536	15 547	19 065	23 134	27 797	
40	-	5 720	7 373	9 386	11 801	14 660	18 008	21 886	26 339	
45	-	-	6 849	8 750	11 033	13 741	16 917	20 604	24 845	
50	-	-	-	8 067	10 218	12 774	15 778	19 273	23 301	
55	-	-	-	-	9 343	11 746	14 577	17 878	21 692	
60	-	-	-	-	-	10 642	13 297	16 403	20 000	
65	-	-	-	-	-	-	11 926	14 832	18 208	
•		•			•	•	•			
ower input in W										

30	-	4 133	4 114	4 100	4 082	4 052	4 002	3 924	3 808
35	-	4 612	4 586	4 567	4 546	4 517	4 469	4 395	4 287
40	-	5 121	5 088	5 065	5 044	5 015	4 972	4 904	4 804
45	-	-	5 630	5 605	5 584	5 558	5 519	5 459	5 369
50	-	-	-	6 194	6 174	6 152	6 120	6 069	5 990
55	-	-	-	-	6 825	6 808	6 783	6 742	6 676
60	-	-	-	-	-	7 534	7 518	7 488	7 436
65	-	-	-	-	-	-	8 333	8 316	8 279

#### Current consumption in A

30	-	8.77	8.76	8.77	8.79	8.80	8.81	8.81	8.77
35	-	9.37	9.35	9.35	9.36	9.37	9.38	9.37	9.34
40	-	10.08	10.06	10.05	10.05	10.05	10.05	10.04	10.01
45	-	-	10.87	10.85	10.84	10.84	10.83	10.82	10.79
50	-	-	-	11.76	11.74	11.73	11.71	11.70	11.66
55	-	-	-	-	12.74	12.71	12.69	12.67	12.63
60	-	-	-	-	-	13.80	13.77	13.73	13.68
65	-	-	-	-	-	-	14.93	14.88	14.83

#### Mass flow in kg/h

30	-	145	183	229	282	343	414	494	585
35	-	144	182	227	279	341	411	491	581
40	-	143	180	224	277	338	408	487	577
45	-	-	177	221	273	334	404	483	573
50	-	-	-	216	268	329	399	478	568
55	-	-	-	-	262	322	392	472	561
60	-	-	-	-	-	314	383	463	553
65	-	-	-	-	-	-	372	452	542

#### Coefficient of performance (C.O.P.)

30	-	1.57	2.03	2.58	3.25	4.05	5.02	6.21	7.68
35	-	1.33	1.71	2.19	2.76	3.44	4.27	5.26	6.48
40	-	1.12	1.45	1.85	2.34	2.92	3.62	4.46	5.48
45	-	-	1.22	1.56	1.98	2.47	3.07	3.77	4.63
50	-	-	-	1.30	1.65	2.08	2.58	3.18	3.89
55	-	-	-	-	1.37	1.73	2.15	2.65	3.25
60	-	-	-	-	-	1.41	1.77	2.19	2.69
65	-	-	-	-	-	-	1.43	1.78	2.20

Nominal performance at to = 5 °C	Nominal performance at to = 5 °C, tc = 50 °C						
Cooling capacity	19 273	W					
Power input	6 069	W					
Current consumption	11.70	А					
Mass flow	478	kg/h					
C.O.P.	3.18						

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
-		
Sound power data		
Sound power level	74	dB(A)
With accoustic hood	69	dB(A)

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

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

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

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# Performance data at 50 Hz, ARI rating conditions

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

#### Cooling capacity in W

30	-	6 978	8 943	11 329	14 182	17 547	21 468	25 991	31 160
35	-	6 603	8 476	10 753	13 477	16 694	20 448	24 786	29 751
40	-	6 209	7 991	10 158	12 754	15 823	19 412	23 564	28 325
45	-	-	7 472	9 530	11 997	14 920	18 343	22 311	26 868
50	-	-	-	8 853	11 193	13 969	17 227	21 010	25 365
55	-	-	-	-	10 325	12 955	16 048	19 648	23 800
60	-	-	-	-	-	11 862	14 790	18 207	22 157
65	-	-	-	-	-	-	13 439	16 673	20 421

# Power input in W

30	-	4 133	4 114	4 100	4 082	4 052	4 002	3 924	3 808
35	-	4 612	4 586	4 567	4 546	4 517	4 469	4 395	4 287
40	-	5 121	5 088	5 065	5 044	5 015	4 972	4 904	4 804
45	-	-	5 630	5 605	5 584	5 558	5 519	5 459	5 369
50	-	-	-	6 194	6 174	6 152	6 120	6 069	5 990
55	-	-	-	-	6 825	6 808	6 783	6 742	6 676
60	-	-	-	-	-	7 534	7 518	7 488	7 436
65	-	-	-	-	-	-	8 333	8 316	8 279

#### Current consumption in A

30	-	8.77	8.76	8.77	8.79	8.80	8.81	8.81	8.77
35	-	9.37	9.35	9.35	9.36	9.37	9.38	9.37	9.34
40	-	10.08	10.06	10.05	10.05	10.05	10.05	10.04	10.01
45	-	-	10.87	10.85	10.84	10.84	10.83	10.82	10.79
50	-	-	-	11.76	11.74	11.73	11.71	11.70	11.66
55	-	-	-	-	12.74	12.71	12.69	12.67	12.63
60	-	-	-	-	-	13.80	13.77	13.73	13.68
65	-	-	-	-	-	-	14.93	14.88	14.83

#### Mass flow in kg/h

30	-	145	183	228	280	341	412	491	581
35	-	144	181	226	278	339	409	488	578
40	-	142	179	223	275	336	405	485	574
45	-	-	176	220	272	332	401	480	570
50	-	-	-	215	267	327	396	475	565
55	-	-	-	-	261	321	390	469	558
60	-	-	-	-	-	312	381	460	550
65	-	-	-	-	-	-	370	449	539

#### Coefficient of performance (C.O.P.)

30	-	1.69	2.17	2.76	3.47	4.33	5.36	6.62	8.18
35	-	1.43	1.85	2.35	2.96	3.70	4.58	5.64	6.94
40	-	1.21	1.57	2.01	2.53	3.15	3.90	4.81	5.90
45	-	-	1.33	1.70	2.15	2.68	3.32	4.09	5.00
50	-	-	-	1.43	1.81	2.27	2.81	3.46	4.23
55	-	-	-	-	1.51	1.90	2.37	2.91	3.57
60	-	-	-	-	-	1.57	1.97	2.43	2.98
65	-	-	-	-	-	-	1.61	2.00	2.47

Nominal performance at to = 7.2 °	C, tc = 54.4 °C		
Cooling capacity	21 582	W	
Power input	6 631	W	
Current consumption	12.53	А	
Mass flow	508	kg/h	
COP	3 25		

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	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

to: Evaporating temperature at dew point

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

# Danfoss scroll compressor. HCP094T4

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R407C

# Performance data at 50 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10		
Cooling capacity	in W										
30	-	6 498	8 338	10 575	13 253	16 415	20 104	24 364	29 237		
35	-	6 118	7 865	9 990	12 536	15 547	19 065	23 134	27 797		
40	-	5 720	7 373	9 386	11 801	14 660	18 008	21 886	26 339		
45	-	-	6 849	8 750	11 033	13 741	16 917	20 604	24 845		
50	-	-	-	8 067	10 218	12 774	15 778	19 273	23 301		
55	-	-	-	-	9 343	11 746	14 577	17 878	21 692		
60	-	-	-	-	-	10 642	13 297	16 403	20 000		
65	-	-	-	-	-	-	11 926	14 832	18 208		
•		•			•	•	•				
ower input in W											

30	-	4 133	4 114	4 100	4 082	4 052	4 002	3 924	3 808
35	-	4 612	4 586	4 567	4 546	4 517	4 469	4 395	4 287
40	-	5 121	5 088	5 065	5 044	5 015	4 972	4 904	4 804
45	-	-	5 630	5 605	5 584	5 558	5 519	5 459	5 369
50	-	-	-	6 194	6 174	6 152	6 120	6 069	5 990
55	-	-	-	-	6 825	6 808	6 783	6 742	6 676
60	-	-	-	-	-	7 534	7 518	7 488	7 436
65	-	-	-	-	-	-	8 333	8 316	8 279

#### Current consumption in A

30	-	8.77	8.76	8.77	8.79	8.80	8.81	8.81	8.77
35	-	9.37	9.35	9.35	9.36	9.37	9.38	9.37	9.34
40	-	10.08	10.06	10.05	10.05	10.05	10.05	10.04	10.01
45	-	-	10.87	10.85	10.84	10.84	10.83	10.82	10.79
50	-	-	-	11.76	11.74	11.73	11.71	11.70	11.66
55	-	-	-	-	12.74	12.71	12.69	12.67	12.63
60	-	-	-	-	-	13.80	13.77	13.73	13.68
65	-	-	-	-	-	-	14.93	14.88	14.83

#### Mass flow in kg/h

30	-	145	183	229	282	343	414	494	585
35	-	144	182	227	279	341	411	491	581
40	-	143	180	224	277	338	408	487	577
45	-	-	177	221	273	334	404	483	573
50	-	-	-	216	268	329	399	478	568
55	-	-	-	-	262	322	392	472	561
60	-	-	-	-	-	314	383	463	553
65	-	-	-	-	-	-	372	452	542

#### Coefficient of performance (C.O.P.)

30	-	1.57	2.03	2.58	3.25	4.05	5.02	6.21	7.68
35	-	1.33	1.71	2.19	2.76	3.44	4.27	5.26	6.48
40	-	1.12	1.45	1.85	2.34	2.92	3.62	4.46	5.48
45	-	-	1.22	1.56	1.98	2.47	3.07	3.77	4.63
50	-	-	-	1.30	1.65	2.08	2.58	3.18	3.89
55	-	-	-	-	1.37	1.73	2.15	2.65	3.25
60	-	-	-	-	-	1.41	1.77	2.19	2.69
65	-	-	-	-	-	-	1.43	1.78	2.20

Nominal performance at to = 5 °C	Nominal performance at to = 5 °C, tc = 50 °C							
Cooling capacity	19 273	W						
Power input	6 069	W						
Current consumption	11.70	А						
Mass flow	478	kg/h						
C.O.P.	3.18							

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
-		
Sound power data		
Sound power level	74	dB(A)
With accoustic hood	69	dB(A)

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

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

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

Danfoss

R407C

# Performance data at 50 Hz, ARI rating conditions

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

#### Cooling capacity in W

30	-	6 978	8 943	11 329	14 182	17 547	21 468	25 991	31 160
35	-	6 603	8 476	10 753	13 477	16 694	20 448	24 786	29 751
40	-	6 209	7 991	10 158	12 754	15 823	19 412	23 564	28 325
45	-	-	7 472	9 530	11 997	14 920	18 343	22 311	26 868
50	-	-	-	8 853	11 193	13 969	17 227	21 010	25 365
55	-	-	-	-	10 325	12 955	16 048	19 648	23 800
60	-	-	-	-	-	11 862	14 790	18 207	22 157
65	-	-	-	-	-	-	13 439	16 673	20 421

# Power input in W

30	-	4 133	4 114	4 100	4 082	4 052	4 002	3 924	3 808
35	-	4 612	4 586	4 567	4 546	4 517	4 469	4 395	4 287
40	-	5 121	5 088	5 065	5 044	5 015	4 972	4 904	4 804
45	-	-	5 630	5 605	5 584	5 558	5 519	5 459	5 369
50	-	-	-	6 194	6 174	6 152	6 120	6 069	5 990
55	-	-	-	-	6 825	6 808	6 783	6 742	6 676
60	-	-	-	-	-	7 534	7 518	7 488	7 436
65	-	-	-	-	-	-	8 333	8 316	8 279

#### Current consumption in A

30	-	8.77	8.76	8.77	8.79	8.80	8.81	8.81	8.77
35	-	9.37	9.35	9.35	9.36	9.37	9.38	9.37	9.34
40	-	10.08	10.06	10.05	10.05	10.05	10.05	10.04	10.01
45	-	-	10.87	10.85	10.84	10.84	10.83	10.82	10.79
50	-	-	-	11.76	11.74	11.73	11.71	11.70	11.66
55	-	-	-	-	12.74	12.71	12.69	12.67	12.63
60	-	-	-	-	-	13.80	13.77	13.73	13.68
65	-	-	-	-	-	-	14.93	14.88	14.83

#### Mass flow in kg/h

30	-	145	183	228	280	341	412	491	581
35	-	144	181	226	278	339	409	488	578
40	-	142	179	223	275	336	405	485	574
45	-	-	176	220	272	332	401	480	570
50	-	-	-	215	267	327	396	475	565
55	-	-	-	-	261	321	390	469	558
60	-	-	-	-	-	312	381	460	550
65	-	-	-	-	-	-	370	449	539

#### Coefficient of performance (C.O.P.)

30	-	1.69	2.17	2.76	3.47	4.33	5.36	6.62	8.18
35	-	1.43	1.85	2.35	2.96	3.70	4.58	5.64	6.94
40	-	1.21	1.57	2.01	2.53	3.15	3.90	4.81	5.90
45	-	-	1.33	1.70	2.15	2.68	3.32	4.09	5.00
50	-	-	-	1.43	1.81	2.27	2.81	3.46	4.23
55	-	-	-	-	1.51	1.90	2.37	2.91	3.57
60	-	-	-	-	-	1.57	1.97	2.43	2.98
65	-	-	-	-	-	-	1.61	2.00	2.47

Nominal performance at to = 7.2 °	C, tc = 54.4 °C		
Cooling capacity	21 582	W	
Power input	6 631	W	
Current consumption	12.53	А	
Mass flow	508	kg/h	
COP	3 25		

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	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

to: Evaporating temperature at dew point

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

# Danfoss scroll compressor. HCP094T4

19 510

17 534

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R407C

23 886

21 600

# Performance data at 60 Hz, EN 12900 rating conditions

Cond. temp. in		Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10			
Cooling capacit	y in W		•	•			•	•				
30	-	8 031	10 309	13 120	16 432	20 210	24 422	29 031	34 006			
35	-	7 619	9 637	12 240	15 394	19 066	23 222	27 830	32 855			
40	-	7 366	9 071	11 408	14 347	17 855	21 898	26 444	31 459			
45	-	-	8 628	10 646	13 314	16 601	20 472	24 897	29 842			
50	-	-	-	9 973	12 315	15 324	18 966	23 212	28 026			
55	-	-	-	-	11 370	14 045	17 402	21 409	26 034			

12 785

15 800

14 177

#### Power input in W

60 65

30	-	4 453	4 563	4 635	4 686	4 733	4 794	4 886	5 027
35	-	4 909	5 050	5 140	5 196	5 236	5 276	5 336	5 431
40	-	5 386	5 566	5 683	5 752	5 793	5 822	5 856	5 914
45	-	-	6 126	6 277	6 369	6 419	6 444	6 463	6 491
50	-	-	-	6 939	7 062	7 130	7 160	7 171	7 179
55	-	-	-	-	7 846	7 940	7 985	7 996	7 993
60	-	-	-	-	-	8 866	8 933	8 954	8 947
65	-	-	-	-	-	-	10 020	10 059	10 057

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#### Current consumption in A

30	-	9.29	9.36	9.43	9.49	9.56	9.61	9.66	9.70
35	-	9.87	9.91	9.96	10.01	10.07	10.12	10.16	10.20
40	-	10.50	10.52	10.55	10.59	10.63	10.68	10.72	10.76
45	-	-	11.22	11.24	11.26	11.30	11.34	11.38	11.43
50	-	-	-	12.06	12.08	12.11	12.15	12.20	12.25
55	-	-	-	-	13.08	13.11	13.15	13.20	13.26
60	-	-	-	-	-	14.34	14.38	14.44	14.50
65	-	-	-	-	-	-	15.89	15.96	16.03

#### Mass flow in kg/h

30	-	182	228	283	347	422	507	604	713
35	-	180	226	280	343	417	502	598	706
40	-	176	221	275	339	412	496	591	699
45	-	-	215	269	332	405	489	584	692
50	-	-	-	260	323	396	480	575	683
55	-	-	-	-	312	385	469	565	672
60	-	-	-	-	-	371	455	551	659
65	-	-	-	-	-	-	438	535	644

#### Coefficient of performance (C.O.P.)

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

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

30	-	1.80	2.26	2.83	3.51	4.27	5.09	5.94	6.76
35	-	1.55	1.91	2.38	2.96	3.64	4.40	5.22	6.05
40	-	1.37	1.63	2.01	2.49	3.08	3.76	4.52	5.32
45	-	-	1.41	1.70	2.09	2.59	3.18	3.85	4.60
50	-	-	-	1.44	1.74	2.15	2.65	3.24	3.90
55	-	-	-	-	1.45	1.77	2.18	2.68	3.26
60	-	-	-	-	-	1.44	1.77	2.18	2.67
65	-	-	-	-	-	-	1.41	1.74	2.15

Nominal performance at to = 5 °	°C, tc = 50 °C	
Cooling capacity	23 212	W
Power input	7 171	W
Current consumption	12.20	А
Mass flow	575	kg/h
C.O.P.	3.24	

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	77	dB(A)
With accoustic hood	72	dB(A)

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

Danfoss

R407C

# Performance data at 60 Hz, ARI rating conditions

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

#### Cooling capacity in W

30	-	8 624	11 056	14 055	17 584	21 604	26 079	30 971	36 243
35	-	8 222	10 387	13 175	16 549	20 472	24 907	29 816	35 163
40	-	7 996	9 831	12 347	15 506	19 271	23 606	28 472	33 832
45	-	-	9 412	11 595	14 479	18 025	22 198	26 960	32 273
50	-	-	-	10 944	13 491	16 758	20 708	25 304	30 509
55	-	-	-	-	12 565	15 492	19 159	23 528	28 564
60	-	-	-	-	-	14 251	17 574	21 656	26 462
65	-	-	-	-	-	-	15 977	19 711	24 225

# Power input in W

30	-	4 453	4 563	4 635	4 686	4 733	4 794	4 886	5 027
35	-	4 909	5 050	5 140	5 196	5 236	5 276	5 336	5 431
40	-	5 386	5 566	5 683	5 752	5 793	5 822	5 856	5 914
45	-	-	6 126	6 277	6 369	6 419	6 444	6 463	6 491
50	-	-	-	6 939	7 062	7 130	7 160	7 171	7 179
55	-	-	-	-	7 846	7 940	7 985	7 996	7 993
60	-	-	-	-	-	8 866	8 933	8 954	8 947
65	-	-	-	-	-	-	10 020	10 059	10 057

#### Current consumption in A

30	-	9.29	9.36	9.43	9.49	9.56	9.61	9.66	9.70
35	-	9.87	9.91	9.96	10.01	10.07	10.12	10.16	10.20
40	-	10.50	10.52	10.55	10.59	10.63	10.68	10.72	10.76
45	-	-	11.22	11.24	11.26	11.30	11.34	11.38	11.43
50	-	-	-	12.06	12.08	12.11	12.15	12.20	12.25
55	-	-	-	-	13.08	13.11	13.15	13.20	13.26
60	-	-	-	-	-	14.34	14.38	14.44	14.50
65	-	-	-	-	-	-	15.89	15.96	16.03

#### Mass flow in kg/h

30	-	181	227	282	345	419	504	600	709
35	-	179	224	278	342	415	499	594	702
40	-	175	220	274	337	410	493	588	695
45	-	-	214	268	330	403	486	581	688
50	-	-	-	259	322	394	477	572	679
55	-	-	-	-	310	383	467	561	668
60	-	-	-	-	-	369	453	548	655
65	-	-	-	-	-	-	436	532	640

#### Coefficient of performance (C.O.P.)

30	-	1.94	2.42	3.03	3.75	4.56	5.44	6.34	7.21
35	-	1.67	2.06	2.56	3.18	3.91	4.72	5.59	6.47
40	-	1.48	1.77	2.17	2.70	3.33	4.05	4.86	5.72
45	-	-	1.54	1.85	2.27	2.81	3.44	4.17	4.97
50	-	-	-	1.58	1.91	2.35	2.89	3.53	4.25
55	-	-	-	-	1.60	1.95	2.40	2.94	3.57
60	-	-	-	-	-	1.61	1.97	2.42	2.96
65	-	-	-	-	-	-	1.59	1.96	2.41

Nominal performance at to = 7.2 °C, tc = 54.4 °C										
Cooling capacity	25 894	W								
Power input	7 890	W								
Current consumption	13.09	А								
Mass flow	608	kg/h								
C.O.P.	3.28									

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	77	dB(A)
With accoustic hood	72	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

19 510

17 534

Danfoss

R407C

23 886

21 600

# Performance data at 60 Hz, EN 12900 rating conditions

Cond. temp. in		Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10			
Cooling capacit	y in W		•	•			•	•				
30	-	8 031	10 309	13 120	16 432	20 210	24 422	29 031	34 006			
35	-	7 619	9 637	12 240	15 394	19 066	23 222	27 830	32 855			
40	-	7 366	9 071	11 408	14 347	17 855	21 898	26 444	31 459			
45	-	-	8 628	10 646	13 314	16 601	20 472	24 897	29 842			
50	-	-	-	9 973	12 315	15 324	18 966	23 212	28 026			
55	-	-	-	-	11 370	14 045	17 402	21 409	26 034			

12 785

15 800

14 177

#### Power input in W

60 65

30	-	4 453	4 563	4 635	4 686	4 733	4 794	4 886	5 027
35	-	4 909	5 050	5 140	5 196	5 236	5 276	5 336	5 431
40	-	5 386	5 566	5 683	5 752	5 793	5 822	5 856	5 914
45	-	-	6 126	6 277	6 369	6 419	6 444	6 463	6 491
50	-	-	-	6 939	7 062	7 130	7 160	7 171	7 179
55	-	-	-	-	7 846	7 940	7 985	7 996	7 993
60	-	-	-	-	-	8 866	8 933	8 954	8 947
65	-	-	-	-	-	-	10 020	10 059	10 057

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#### Current consumption in A

30	-	9.29	9.36	9.43	9.49	9.56	9.61	9.66	9.70
35	-	9.87	9.91	9.96	10.01	10.07	10.12	10.16	10.20
40	-	10.50	10.52	10.55	10.59	10.63	10.68	10.72	10.76
45	-	-	11.22	11.24	11.26	11.30	11.34	11.38	11.43
50	-	-	-	12.06	12.08	12.11	12.15	12.20	12.25
55	-	-	-	-	13.08	13.11	13.15	13.20	13.26
60	-	-	-	-	-	14.34	14.38	14.44	14.50
65	-	-	-	-	-	-	15.89	15.96	16.03

#### Mass flow in kg/h

30	-	182	228	283	347	422	507	604	713
35	-	180	226	280	343	417	502	598	706
40	-	176	221	275	339	412	496	591	699
45	-	-	215	269	332	405	489	584	692
50	-	-	-	260	323	396	480	575	683
55	-	-	-	-	312	385	469	565	672
60	-	-	-	-	-	371	455	551	659
65	-	-	-	-	-	-	438	535	644

#### Coefficient of performance (C.O.P.)

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

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

30	-	1.80	2.26	2.83	3.51	4.27	5.09	5.94	6.76
35	-	1.55	1.91	2.38	2.96	3.64	4.40	5.22	6.05
40	-	1.37	1.63	2.01	2.49	3.08	3.76	4.52	5.32
45	-	-	1.41	1.70	2.09	2.59	3.18	3.85	4.60
50	-	-	-	1.44	1.74	2.15	2.65	3.24	3.90
55	-	-	-	-	1.45	1.77	2.18	2.68	3.26
60	-	-	-	-	-	1.44	1.77	2.18	2.67
65	-	-	-	-	-	-	1.41	1.74	2.15

Nominal performance at to = 5 °	Nominal performance at to = 5 °C, tc = 50 °C								
Cooling capacity	23 212	W							
Power input	7 171	W							
Current consumption	12.20	А							
Mass flow	575	kg/h							
C.O.P.	3.24								

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	77	dB(A)
With accoustic hood	72	dB(A)

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

Danfoss

R407C

# Performance data at 60 Hz, ARI rating conditions

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

#### Cooling capacity in W

30	-	8 624	11 056	14 055	17 584	21 604	26 079	30 971	36 243
35	-	8 222	10 387	13 175	16 549	20 472	24 907	29 816	35 163
40	-	7 996	9 831	12 347	15 506	19 271	23 606	28 472	33 832
45	-	-	9 412	11 595	14 479	18 025	22 198	26 960	32 273
50	-	-	-	10 944	13 491	16 758	20 708	25 304	30 509
55	-	-	-	-	12 565	15 492	19 159	23 528	28 564
60	-	-	-	-	-	14 251	17 574	21 656	26 462
65	-	-	-	-	-	-	15 977	19 711	24 225

# Power input in W

30	-	4 453	4 563	4 635	4 686	4 733	4 794	4 886	5 027
35	-	4 909	5 050	5 140	5 196	5 236	5 276	5 336	5 431
40	-	5 386	5 566	5 683	5 752	5 793	5 822	5 856	5 914
45	-	-	6 126	6 277	6 369	6 419	6 444	6 463	6 491
50	-	-	-	6 939	7 062	7 130	7 160	7 171	7 179
55	-	-	-	-	7 846	7 940	7 985	7 996	7 993
60	-	-	-	-	-	8 866	8 933	8 954	8 947
65	-	-	-	-	-	-	10 020	10 059	10 057

#### Current consumption in A

30	-	9.29	9.36	9.43	9.49	9.56	9.61	9.66	9.70
35	-	9.87	9.91	9.96	10.01	10.07	10.12	10.16	10.20
40	-	10.50	10.52	10.55	10.59	10.63	10.68	10.72	10.76
45	-	-	11.22	11.24	11.26	11.30	11.34	11.38	11.43
50	-	-	-	12.06	12.08	12.11	12.15	12.20	12.25
55	-	-	-	-	13.08	13.11	13.15	13.20	13.26
60	-	-	-	-	-	14.34	14.38	14.44	14.50
65	-	-	-	-	-	-	15.89	15.96	16.03

#### Mass flow in kg/h

30	-	181	227	282	345	419	504	600	709
35	-	179	224	278	342	415	499	594	702
40	-	175	220	274	337	410	493	588	695
45	-	-	214	268	330	403	486	581	688
50	-	-	-	259	322	394	477	572	679
55	-	-	-	-	310	383	467	561	668
60	-	-	-	-	-	369	453	548	655
65	-	-	-	-	-	-	436	532	640

#### Coefficient of performance (C.O.P.)

30	-	1.94	2.42	3.03	3.75	4.56	5.44	6.34	7.21
35	-	1.67	2.06	2.56	3.18	3.91	4.72	5.59	6.47
40	-	1.48	1.77	2.17	2.70	3.33	4.05	4.86	5.72
45	-	-	1.54	1.85	2.27	2.81	3.44	4.17	4.97
50	-	-	-	1.58	1.91	2.35	2.89	3.53	4.25
55	-	-	-	-	1.60	1.95	2.40	2.94	3.57
60	-	-	-	-	-	1.61	1.97	2.42	2.96
65	-	-	-	-	-	-	1.59	1.96	2.41

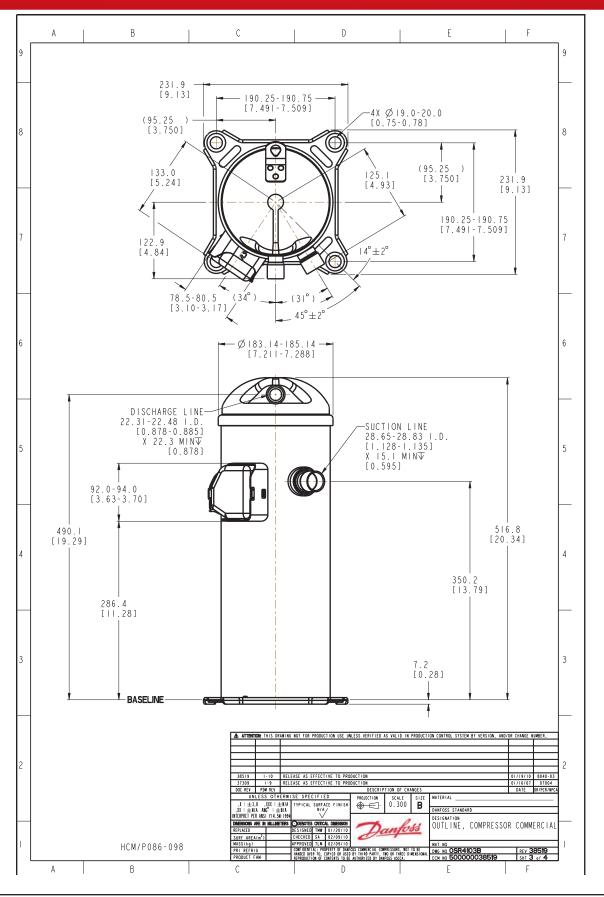
Nominal performance at to = 7.2 °C	C, tc = 54.4 °C		
Cooling capacity	25 894	W	
Power input	7 890	W	
Current consumption	13.09	А	
Mass flow	608	kg/h	
C.O.P.	3.28		

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	77	dB(A)
With accoustic hood	72	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Tolerance according EN12900



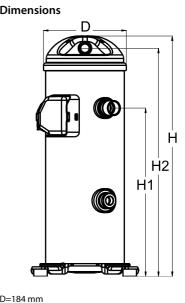
# Danfoss scroll compressor, HCP094T4

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#### Datasheet, technical data

# **General Characteristics**

Model number (on compressor nameplate)	HCP094T4LC7	
Code number for Singlepack*	120U0606	
Code number for Industrial pack**	120U0603	
Drawing number	0SR6169B-3	
Suction and discharge connections	Brazed	
Suction connection	1-1/8 " ODF	
Discharge connection	7/8 " ODF	
Oil sight glass	Threaded	
Oil equalisation connection	None	
Oil drain connection	None	
LP gauge port	None	
IPR valve	None	
Swept volume	126.02 cm3/rev	
Displacement @ Nominal speed	21.9 m3/h @ 2900 rpm - 26.5 m3/h @ 3500 rpm	
Net weight	44 kg	
Oil charge	2.66 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	R407C	



# **Electrical Characteristics**

Nominal voltage	380-415V/3/50Hz - 460V/3/60Hz	D=184 mm
Voltage range	342-457 V @ 50Hz - 414-506 V @ 60Hz	H=536 mm
Winding resistance between phases 1-2 +/- 7% at 25°C	1.480 Ω	H1=369 mm
Winding resistance between phases 1-3 +/- 7% at 25°C	1.480 Ω	H2=509 mm H3=- mm
Winding resistance between phases 2-3 +/- 7% at 25°C	1.480 Ω	H3=- mm
Rated Load Amps (RLA)	13.5 A	
Maximum Continuous Current (MCC)	21 A	
Locked Rotor Amps (LRA)	84 A	Terminal b
Motor protection	Internal overload protector	Terriniari

#### **Recommended Installation torgues**

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

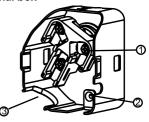
# Parts shipped with compressor

Mounting kit with grommets and sleeves Initial oil charge Installation instructions

Approvals : CE certified, UL certified (file SA11565), -\*Singlepack: Compressor in cardboard box

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

erminal box



IP22 1:

3:

Screw connectors 10-32 UNF x 9.5

2: Earth connection

Power cable passage



# Danfoss

# Datasheet, accessories and spare parts

Danfoss scroll compressor, HCP094T4

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 side	Code no.	Solder sleeve adapter set
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030	
Gasket, 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	1 2 3 4
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	
		1: Rotolock adapter (Suc & Dis)
Oil / lubricants	Code no.	2: Gasket (Suc & Dis)
PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034	3: Solder sleeve (Suc & Dis)
		4: Rotolock nut (Suc & Dis)
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	120Z5045	
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	

# Danfoss scroll compressor. HCP094T4

Danfoss

R407C

# Performance data at 50 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	
Cooling capacity	in W									
30	-	6 498	8 338	10 575	13 253	16 415	20 104	24 364	29 237	
35	-	6 118	7 865	9 990	12 536	15 547	19 065	23 134	27 797	
40	-	5 720	7 373	9 386	11 801	14 660	18 008	21 886	26 339	
45	-	-	6 849	8 750	11 033	13 741	16 917	20 604	24 845	
50	-	-	-	8 067	10 218	12 774	15 778	19 273	23 301	
55	-	-	-	-	9 343	11 746	14 577	17 878	21 692	
60	-	-	-	-	-	10 642	13 297	16 403	20 000	
65	-	-	-	-	-	-	11 926	14 832	18 208	
•		•			•	•	•			
ower input in W										

30	-	4 133	4 114	4 100	4 082	4 052	4 002	3 924	3 808
35	-	4 612	4 586	4 567	4 546	4 517	4 469	4 395	4 287
40	-	5 121	5 088	5 065	5 044	5 015	4 972	4 904	4 804
45	-	-	5 630	5 605	5 584	5 558	5 519	5 459	5 369
50	-	-	-	6 194	6 174	6 152	6 120	6 069	5 990
55	-	-	-	-	6 825	6 808	6 783	6 742	6 676
60	-	-	-	-	-	7 534	7 518	7 488	7 436
65	-	-	-	-	-	-	8 333	8 316	8 279

#### Current consumption in A

30	-	8.77	8.76	8.77	8.79	8.80	8.81	8.81	8.77
35	-	9.37	9.35	9.35	9.36	9.37	9.38	9.37	9.34
40	-	10.08	10.06	10.05	10.05	10.05	10.05	10.04	10.01
45	-	-	10.87	10.85	10.84	10.84	10.83	10.82	10.79
50	-	-	-	11.76	11.74	11.73	11.71	11.70	11.66
55	-	-	-	-	12.74	12.71	12.69	12.67	12.63
60	-	-	-	-	-	13.80	13.77	13.73	13.68
65	-	-	-	-	-	-	14.93	14.88	14.83

#### Mass flow in kg/h

30	-	145	183	229	282	343	414	494	585
35	-	144	182	227	279	341	411	491	581
40	-	143	180	224	277	338	408	487	577
45	-	-	177	221	273	334	404	483	573
50	-	-	-	216	268	329	399	478	568
55	-	-	-	-	262	322	392	472	561
60	-	-	-	-	-	314	383	463	553
65	-	-	-	-	-	-	372	452	542

#### Coefficient of performance (C.O.P.)

30	-	1.57	2.03	2.58	3.25	4.05	5.02	6.21	7.68
35	-	1.33	1.71	2.19	2.76	3.44	4.27	5.26	6.48
40	-	1.12	1.45	1.85	2.34	2.92	3.62	4.46	5.48
45	-	-	1.22	1.56	1.98	2.47	3.07	3.77	4.63
50	-	-	-	1.30	1.65	2.08	2.58	3.18	3.89
55	-	-	-	-	1.37	1.73	2.15	2.65	3.25
60	-	-	-	-	-	1.41	1.77	2.19	2.69
65	-	-	-	-	-	-	1.43	1.78	2.20

Nominal performance at to = 5 °C	, tc = 50 °C	
Cooling capacity	19 273	W
Power input	6 069	W
Current consumption	11.70	А
Mass flow	478	kg/h
C.O.P.	3.18	

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
-		
Sound power data		
Sound power level	74	dB(A)
With accoustic hood	69	dB(A)

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

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

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

Danfoss

R407C

# Performance data at 50 Hz, ARI rating conditions

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

#### Cooling capacity in W

30	-	6 978	8 943	11 329	14 182	17 547	21 468	25 991	31 160
35	-	6 603	8 476	10 753	13 477	16 694	20 448	24 786	29 751
40	-	6 209	7 991	10 158	12 754	15 823	19 412	23 564	28 325
45	-	-	7 472	9 530	11 997	14 920	18 343	22 311	26 868
50	-	-	-	8 853	11 193	13 969	17 227	21 010	25 365
55	-	-	-	-	10 325	12 955	16 048	19 648	23 800
60	-	-	-	-	-	11 862	14 790	18 207	22 157
65	-	-	-	-	-	-	13 439	16 673	20 421

# Power input in W

30	-	4 133	4 114	4 100	4 082	4 052	4 002	3 924	3 808
35	-	4 612	4 586	4 567	4 546	4 517	4 469	4 395	4 287
40	-	5 121	5 088	5 065	5 044	5 015	4 972	4 904	4 804
45	-	-	5 630	5 605	5 584	5 558	5 519	5 459	5 369
50	-	-	-	6 194	6 174	6 152	6 120	6 069	5 990
55	-	-	-	-	6 825	6 808	6 783	6 742	6 676
60	-	-	-	-	-	7 534	7 518	7 488	7 436
65	-	-	-	-	-	-	8 333	8 316	8 279

#### Current consumption in A

30	-	8.77	8.76	8.77	8.79	8.80	8.81	8.81	8.77
35	-	9.37	9.35	9.35	9.36	9.37	9.38	9.37	9.34
40	-	10.08	10.06	10.05	10.05	10.05	10.05	10.04	10.01
45	-	-	10.87	10.85	10.84	10.84	10.83	10.82	10.79
50	-	-	-	11.76	11.74	11.73	11.71	11.70	11.66
55	-	-	-	-	12.74	12.71	12.69	12.67	12.63
60	-	-	-	-	-	13.80	13.77	13.73	13.68
65	-	-	-	-	-	-	14.93	14.88	14.83

#### Mass flow in kg/h

30	-	145	183	228	280	341	412	491	581
35	-	144	181	226	278	339	409	488	578
40	-	142	179	223	275	336	405	485	574
45	-	-	176	220	272	332	401	480	570
50	-	-	-	215	267	327	396	475	565
55	-	-	-	-	261	321	390	469	558
60	-	-	-	-	-	312	381	460	550
65	-	-	-	-	-	-	370	449	539

#### Coefficient of performance (C.O.P.)

30	-	1.69	2.17	2.76	3.47	4.33	5.36	6.62	8.18
35	-	1.43	1.85	2.35	2.96	3.70	4.58	5.64	6.94
40	-	1.21	1.57	2.01	2.53	3.15	3.90	4.81	5.90
45	-	-	1.33	1.70	2.15	2.68	3.32	4.09	5.00
50	-	-	-	1.43	1.81	2.27	2.81	3.46	4.23
55	-	-	-	-	1.51	1.90	2.37	2.91	3.57
60	-	-	-	-	-	1.57	1.97	2.43	2.98
65	-	-	-	-	-	-	1.61	2.00	2.47

Nominal performance at to = 7.2 °	C, tc = 54.4 °C		
Cooling capacity	21 582	W	
Power input	6 631	W	
Current consumption	12.53	А	
Mass flow	508	kg/h	
COP	3 25		

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	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

to: Evaporating temperature at dew point

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

# Danfoss scroll compressor. HCP094T4

Danfoss

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# Performance data at 50 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10		
Cooling capacity	in W										
30	-	6 498	8 338	10 575	13 253	16 415	20 104	24 364	29 237		
35	-	6 118	7 865	9 990	12 536	15 547	19 065	23 134	27 797		
40	-	5 720	7 373	9 386	11 801	14 660	18 008	21 886	26 339		
45	-	-	6 849	8 750	11 033	13 741	16 917	20 604	24 845		
50	-	-	-	8 067	10 218	12 774	15 778	19 273	23 301		
55	-	-	-	-	9 343	11 746	14 577	17 878	21 692		
60	-	-	-	-	-	10 642	13 297	16 403	20 000		
65	-	-	-	-	-	-	11 926	14 832	18 208		
•		•			•	•	•				
ower input in W											

30	-	4 133	4 114	4 100	4 082	4 052	4 002	3 924	3 808
35	-	4 612	4 586	4 567	4 546	4 517	4 469	4 395	4 287
40	-	5 121	5 088	5 065	5 044	5 015	4 972	4 904	4 804
45	-	-	5 630	5 605	5 584	5 558	5 519	5 459	5 369
50	-	-	-	6 194	6 174	6 152	6 120	6 069	5 990
55	-	-	-	-	6 825	6 808	6 783	6 742	6 676
60	-	-	-	-	-	7 534	7 518	7 488	7 436
65	-	-	-	-	-	-	8 333	8 316	8 279

#### Current consumption in A

30	-	8.77	8.76	8.77	8.79	8.80	8.81	8.81	8.77
35	-	9.37	9.35	9.35	9.36	9.37	9.38	9.37	9.34
40	-	10.08	10.06	10.05	10.05	10.05	10.05	10.04	10.01
45	-	-	10.87	10.85	10.84	10.84	10.83	10.82	10.79
50	-	-	-	11.76	11.74	11.73	11.71	11.70	11.66
55	-	-	-	-	12.74	12.71	12.69	12.67	12.63
60	-	-	-	-	-	13.80	13.77	13.73	13.68
65	-	-	-	-	-	-	14.93	14.88	14.83

#### Mass flow in kg/h

30	-	145	183	229	282	343	414	494	585
35	-	144	182	227	279	341	411	491	581
40	-	143	180	224	277	338	408	487	577
45	-	-	177	221	273	334	404	483	573
50	-	-	-	216	268	329	399	478	568
55	-	-	-	-	262	322	392	472	561
60	-	-	-	-	-	314	383	463	553
65	-	-	-	-	-	-	372	452	542

#### Coefficient of performance (C.O.P.)

30	-	1.57	2.03	2.58	3.25	4.05	5.02	6.21	7.68
35	-	1.33	1.71	2.19	2.76	3.44	4.27	5.26	6.48
40	-	1.12	1.45	1.85	2.34	2.92	3.62	4.46	5.48
45	-	-	1.22	1.56	1.98	2.47	3.07	3.77	4.63
50	-	-	-	1.30	1.65	2.08	2.58	3.18	3.89
55	-	-	-	-	1.37	1.73	2.15	2.65	3.25
60	-	-	-	-	-	1.41	1.77	2.19	2.69
65	-	-	-	-	-	-	1.43	1.78	2.20

Nominal performance at to = 5 °C	Nominal performance at to = 5 °C, tc = 50 °C								
Cooling capacity	19 273	W							
Power input	6 069	W							
Current consumption	11.70	А							
Mass flow	478	kg/h							
C.O.P.	3.18								

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
-		
Sound power data		
Sound power level	74	dB(A)
With accoustic hood	69	dB(A)

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

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

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

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# Performance data at 50 Hz, ARI rating conditions

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

#### Cooling capacity in W

30	-	6 978	8 943	11 329	14 182	17 547	21 468	25 991	31 160
35	-	6 603	8 476	10 753	13 477	16 694	20 448	24 786	29 751
40	-	6 209	7 991	10 158	12 754	15 823	19 412	23 564	28 325
45	-	-	7 472	9 530	11 997	14 920	18 343	22 311	26 868
50	-	-	-	8 853	11 193	13 969	17 227	21 010	25 365
55	-	-	-	-	10 325	12 955	16 048	19 648	23 800
60	-	-	-	-	-	11 862	14 790	18 207	22 157
65	-	-	-	-	-	-	13 439	16 673	20 421

# Power input in W

30	-	4 133	4 114	4 100	4 082	4 052	4 002	3 924	3 808
35	-	4 612	4 586	4 567	4 546	4 517	4 469	4 395	4 287
40	-	5 121	5 088	5 065	5 044	5 015	4 972	4 904	4 804
45	-	-	5 630	5 605	5 584	5 558	5 519	5 459	5 369
50	-	-	-	6 194	6 174	6 152	6 120	6 069	5 990
55	-	-	-	-	6 825	6 808	6 783	6 742	6 676
60	-	-	-	-	-	7 534	7 518	7 488	7 436
65	-	-	-	-	-	-	8 333	8 316	8 279

#### Current consumption in A

30	-	8.77	8.76	8.77	8.79	8.80	8.81	8.81	8.77
35	-	9.37	9.35	9.35	9.36	9.37	9.38	9.37	9.34
40	-	10.08	10.06	10.05	10.05	10.05	10.05	10.04	10.01
45	-	-	10.87	10.85	10.84	10.84	10.83	10.82	10.79
50	-	-	-	11.76	11.74	11.73	11.71	11.70	11.66
55	-	-	-	-	12.74	12.71	12.69	12.67	12.63
60	-	-	-	-	-	13.80	13.77	13.73	13.68
65	-	-	-	-	-	-	14.93	14.88	14.83

#### Mass flow in kg/h

30	-	145	183	228	280	341	412	491	581
35	-	144	181	226	278	339	409	488	578
40	-	142	179	223	275	336	405	485	574
45	-	-	176	220	272	332	401	480	570
50	-	-	-	215	267	327	396	475	565
55	-	-	-	-	261	321	390	469	558
60	-	-	-	-	-	312	381	460	550
65	-	-	-	-	-	-	370	449	539

#### Coefficient of performance (C.O.P.)

30	-	1.69	2.17	2.76	3.47	4.33	5.36	6.62	8.18
35	-	1.43	1.85	2.35	2.96	3.70	4.58	5.64	6.94
40	-	1.21	1.57	2.01	2.53	3.15	3.90	4.81	5.90
45	-	-	1.33	1.70	2.15	2.68	3.32	4.09	5.00
50	-	-	-	1.43	1.81	2.27	2.81	3.46	4.23
55	-	-	-	-	1.51	1.90	2.37	2.91	3.57
60	-	-	-	-	-	1.57	1.97	2.43	2.98
65	-	-	-	-	-	-	1.61	2.00	2.47

Nominal performance at to = 7.2 °	C, tc = 54.4 °C		
Cooling capacity	21 582	W	
Power input	6 631	W	
Current consumption	12.53	А	
Mass flow	508	kg/h	
COP	3 25		

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	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

to: Evaporating temperature at dew point

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

# Danfoss scroll compressor. HCP094T4

19 510

17 534

Danfoss

R407C

23 886

21 600

# Performance data at 60 Hz, EN 12900 rating conditions

Cond. temp. in		Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10		
Cooling capacit	y in W		•	•			•	•			
30	-	8 031	10 309	13 120	16 432	20 210	24 422	29 031	34 006		
35	-	7 619	9 637	12 240	15 394	19 066	23 222	27 830	32 855		
40	-	7 366	9 071	11 408	14 347	17 855	21 898	26 444	31 459		
45	-	-	8 628	10 646	13 314	16 601	20 472	24 897	29 842		
50	-	-	-	9 973	12 315	15 324	18 966	23 212	28 026		
55	-	-	-	-	11 370	14 045	17 402	21 409	26 034		

12 785

15 800

14 177

#### Power input in W

60 65

30	-	4 453	4 563	4 635	4 686	4 733	4 794	4 886	5 027
35	-	4 909	5 050	5 140	5 196	5 236	5 276	5 336	5 431
40	-	5 386	5 566	5 683	5 752	5 793	5 822	5 856	5 914
45	-	-	6 126	6 277	6 369	6 419	6 444	6 463	6 491
50	-	-	-	6 939	7 062	7 130	7 160	7 171	7 179
55	-	-	-	-	7 846	7 940	7 985	7 996	7 993
60	-	-	-	-	-	8 866	8 933	8 954	8 947
65	-	-	-	-	-	-	10 020	10 059	10 057

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#### Current consumption in A

30	-	9.29	9.36	9.43	9.49	9.56	9.61	9.66	9.70
35	-	9.87	9.91	9.96	10.01	10.07	10.12	10.16	10.20
40	-	10.50	10.52	10.55	10.59	10.63	10.68	10.72	10.76
45	-	-	11.22	11.24	11.26	11.30	11.34	11.38	11.43
50	-	-	-	12.06	12.08	12.11	12.15	12.20	12.25
55	-	-	-	-	13.08	13.11	13.15	13.20	13.26
60	-	-	-	-	-	14.34	14.38	14.44	14.50
65	-	-	-	-	-	-	15.89	15.96	16.03

#### Mass flow in kg/h

30	-	182	228	283	347	422	507	604	713
35	-	180	226	280	343	417	502	598	706
40	-	176	221	275	339	412	496	591	699
45	-	-	215	269	332	405	489	584	692
50	-	-	-	260	323	396	480	575	683
55	-	-	-	-	312	385	469	565	672
60	-	-	-	-	-	371	455	551	659
65	-	-	-	-	-	-	438	535	644

#### Coefficient of performance (C.O.P.)

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

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

30	-	1.80	2.26	2.83	3.51	4.27	5.09	5.94	6.76
35	-	1.55	1.91	2.38	2.96	3.64	4.40	5.22	6.05
40	-	1.37	1.63	2.01	2.49	3.08	3.76	4.52	5.32
45	-	-	1.41	1.70	2.09	2.59	3.18	3.85	4.60
50	-	-	-	1.44	1.74	2.15	2.65	3.24	3.90
55	-	-	-	-	1.45	1.77	2.18	2.68	3.26
60	-	-	-	-	-	1.44	1.77	2.18	2.67
65	-	-	-	-	-	-	1.41	1.74	2.15

Nominal performance at to = 5 °C, tc = 50 °C							
Cooling capacity	23 212	W					
Power input	7 171	W					
Current consumption	12.20	А					
Mass flow	575	kg/h					
C.O.P.	3.24						

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	77	dB(A)
With accoustic hood	72	dB(A)

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

Danfoss

R407C

# Performance data at 60 Hz, ARI rating conditions

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

#### Cooling capacity in W

30	-	8 624	11 056	14 055	17 584	21 604	26 079	30 971	36 243
35	-	8 222	10 387	13 175	16 549	20 472	24 907	29 816	35 163
40	-	7 996	9 831	12 347	15 506	19 271	23 606	28 472	33 832
45	-	-	9 412	11 595	14 479	18 025	22 198	26 960	32 273
50	-	-	-	10 944	13 491	16 758	20 708	25 304	30 509
55	-	-	-	-	12 565	15 492	19 159	23 528	28 564
60	-	-	-	-	-	14 251	17 574	21 656	26 462
65	-	-	-	-	-	-	15 977	19 711	24 225

# Power input in W

30	-	4 453	4 563	4 635	4 686	4 733	4 794	4 886	5 027
35	-	4 909	5 050	5 140	5 196	5 236	5 276	5 336	5 431
40	-	5 386	5 566	5 683	5 752	5 793	5 822	5 856	5 914
45	-	-	6 126	6 277	6 369	6 419	6 444	6 463	6 491
50	-	-	-	6 939	7 062	7 130	7 160	7 171	7 179
55	-	-	-	-	7 846	7 940	7 985	7 996	7 993
60	-	-	-	-	-	8 866	8 933	8 954	8 947
65	-	-	-	-	-	-	10 020	10 059	10 057

#### Current consumption in A

30	-	9.29	9.36	9.43	9.49	9.56	9.61	9.66	9.70
35	-	9.87	9.91	9.96	10.01	10.07	10.12	10.16	10.20
40	-	10.50	10.52	10.55	10.59	10.63	10.68	10.72	10.76
45	-	-	11.22	11.24	11.26	11.30	11.34	11.38	11.43
50	-	-	-	12.06	12.08	12.11	12.15	12.20	12.25
55	-	-	-	-	13.08	13.11	13.15	13.20	13.26
60	-	-	-	-	-	14.34	14.38	14.44	14.50
65	-	-	-	-	-	-	15.89	15.96	16.03

#### Mass flow in kg/h

30	-	181	227	282	345	419	504	600	709
35	-	179	224	278	342	415	499	594	702
40	-	175	220	274	337	410	493	588	695
45	-	-	214	268	330	403	486	581	688
50	-	-	-	259	322	394	477	572	679
55	-	-	-	-	310	383	467	561	668
60	-	-	-	-	-	369	453	548	655
65	-	-	-	-	-	-	436	532	640

#### Coefficient of performance (C.O.P.)

30	-	1.94	2.42	3.03	3.75	4.56	5.44	6.34	7.21
35	-	1.67	2.06	2.56	3.18	3.91	4.72	5.59	6.47
40	-	1.48	1.77	2.17	2.70	3.33	4.05	4.86	5.72
45	-	-	1.54	1.85	2.27	2.81	3.44	4.17	4.97
50	-	-	-	1.58	1.91	2.35	2.89	3.53	4.25
55	-	-	-	-	1.60	1.95	2.40	2.94	3.57
60	-	-	-	-	-	1.61	1.97	2.42	2.96
65	-	-	-	-	-	-	1.59	1.96	2.41

Nominal performance at to = 7.2 °C, tc = 54.4 °C											
Cooling capacity	25 894	W									
Power input	7 890	W									
Current consumption	13.09	А									
Mass flow	608	kg/h									
C.O.P.	3.28										

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	77	dB(A)
With accoustic hood	72	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

19 510

17 534

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R407C

23 886

21 600

# Performance data at 60 Hz, EN 12900 rating conditions

Cond. temp. in		Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10			
Cooling capacit	y in W		•	•			•	•				
30	-	8 031	10 309	13 120	16 432	20 210	24 422	29 031	34 006			
35	-	7 619	9 637	12 240	15 394	19 066	23 222	27 830	32 855			
40	-	7 366	9 071	11 408	14 347	17 855	21 898	26 444	31 459			
45	-	-	8 628	10 646	13 314	16 601	20 472	24 897	29 842			
50	-	-	-	9 973	12 315	15 324	18 966	23 212	28 026			
55	-	-	-	-	11 370	14 045	17 402	21 409	26 034			

12 785

15 800

14 177

#### Power input in W

60 65

30	-	4 453	4 563	4 635	4 686	4 733	4 794	4 886	5 027
35	-	4 909	5 050	5 140	5 196	5 236	5 276	5 336	5 431
40	-	5 386	5 566	5 683	5 752	5 793	5 822	5 856	5 914
45	-	-	6 126	6 277	6 369	6 419	6 444	6 463	6 491
50	-	-	-	6 939	7 062	7 130	7 160	7 171	7 179
55	-	-	-	-	7 846	7 940	7 985	7 996	7 993
60	-	-	-	-	-	8 866	8 933	8 954	8 947
65	-	-	-	-	-	-	10 020	10 059	10 057

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#### Current consumption in A

30	-	9.29	9.36	9.43	9.49	9.56	9.61	9.66	9.70
35	-	9.87	9.91	9.96	10.01	10.07	10.12	10.16	10.20
40	-	10.50	10.52	10.55	10.59	10.63	10.68	10.72	10.76
45	-	-	11.22	11.24	11.26	11.30	11.34	11.38	11.43
50	-	-	-	12.06	12.08	12.11	12.15	12.20	12.25
55	-	-	-	-	13.08	13.11	13.15	13.20	13.26
60	-	-	-	-	-	14.34	14.38	14.44	14.50
65	-	-	-	-	-	-	15.89	15.96	16.03

#### Mass flow in kg/h

30	-	182	228	283	347	422	507	604	713
35	-	180	226	280	343	417	502	598	706
40	-	176	221	275	339	412	496	591	699
45	-	-	215	269	332	405	489	584	692
50	-	-	-	260	323	396	480	575	683
55	-	-	-	-	312	385	469	565	672
60	-	-	-	-	-	371	455	551	659
65	-	-	-	-	-	-	438	535	644

#### Coefficient of performance (C.O.P.)

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

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

30	-	1.80	2.26	2.83	3.51	4.27	5.09	5.94	6.76
35	-	1.55	1.91	2.38	2.96	3.64	4.40	5.22	6.05
40	-	1.37	1.63	2.01	2.49	3.08	3.76	4.52	5.32
45	-	-	1.41	1.70	2.09	2.59	3.18	3.85	4.60
50	-	-	-	1.44	1.74	2.15	2.65	3.24	3.90
55	-	-	-	-	1.45	1.77	2.18	2.68	3.26
60	-	-	-	-	-	1.44	1.77	2.18	2.67
65	-	-	-	-	-	-	1.41	1.74	2.15

Nominal performance at to = 5 °C, tc = 50 °C								
Cooling capacity	23 212	W						
Power input	7 171	W						
Current consumption	12.20	А						
Mass flow	575	kg/h						
C.O.P.	3.24							

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	77	dB(A)
With accoustic hood	72	dB(A)

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

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# Performance data at 60 Hz, ARI rating conditions

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

#### Cooling capacity in W

30	-	8 624	11 056	14 055	17 584	21 604	26 079	30 971	36 243
35	-	8 222	10 387	13 175	16 549	20 472	24 907	29 816	35 163
40	-	7 996	9 831	12 347	15 506	19 271	23 606	28 472	33 832
45	-	-	9 412	11 595	14 479	18 025	22 198	26 960	32 273
50	-	-	-	10 944	13 491	16 758	20 708	25 304	30 509
55	-	-	-	-	12 565	15 492	19 159	23 528	28 564
60	-	-	-	-	-	14 251	17 574	21 656	26 462
65	-	-	-	-	-	-	15 977	19 711	24 225

# Power input in W

30	-	4 453	4 563	4 635	4 686	4 733	4 794	4 886	5 027
35	-	4 909	5 050	5 140	5 196	5 236	5 276	5 336	5 431
40	-	5 386	5 566	5 683	5 752	5 793	5 822	5 856	5 914
45	-	-	6 126	6 277	6 369	6 419	6 444	6 463	6 491
50	-	-	-	6 939	7 062	7 130	7 160	7 171	7 179
55	-	-	-	-	7 846	7 940	7 985	7 996	7 993
60	-	-	-	-	-	8 866	8 933	8 954	8 947
65	-	-	-	-	-	-	10 020	10 059	10 057

#### Current consumption in A

30	-	9.29	9.36	9.43	9.49	9.56	9.61	9.66	9.70
35	-	9.87	9.91	9.96	10.01	10.07	10.12	10.16	10.20
40	-	10.50	10.52	10.55	10.59	10.63	10.68	10.72	10.76
45	-	-	11.22	11.24	11.26	11.30	11.34	11.38	11.43
50	-	-	-	12.06	12.08	12.11	12.15	12.20	12.25
55	-	-	-	-	13.08	13.11	13.15	13.20	13.26
60	-	-	-	-	-	14.34	14.38	14.44	14.50
65	-	-	-	-	-	-	15.89	15.96	16.03

#### Mass flow in kg/h

30	-	181	227	282	345	419	504	600	709
35	-	179	224	278	342	415	499	594	702
40	-	175	220	274	337	410	493	588	695
45	-	-	214	268	330	403	486	581	688
50	-	-	-	259	322	394	477	572	679
55	-	-	-	-	310	383	467	561	668
60	-	-	-	-	-	369	453	548	655
65	-	-	-	-	-	-	436	532	640

#### Coefficient of performance (C.O.P.)

30	-	1.94	2.42	3.03	3.75	4.56	5.44	6.34	7.21
35	-	1.67	2.06	2.56	3.18	3.91	4.72	5.59	6.47
40	-	1.48	1.77	2.17	2.70	3.33	4.05	4.86	5.72
45	-	-	1.54	1.85	2.27	2.81	3.44	4.17	4.97
50	-	-	-	1.58	1.91	2.35	2.89	3.53	4.25
55	-	-	-	-	1.60	1.95	2.40	2.94	3.57
60	-	-	-	-	-	1.61	1.97	2.42	2.96
65	-	-	-	-	-	-	1.59	1.96	2.41

Nominal performance at to = 7.2 °C	C, tc = 54.4 °C		
Cooling capacity	25 894	W	
Power input	7 890	W	
Current consumption	13.09	А	
Mass flow	608	kg/h	
C.O.P.	3.28		

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	77	dB(A)
With accoustic hood	72	dB(A)

to: Evaporating temperature at dew point

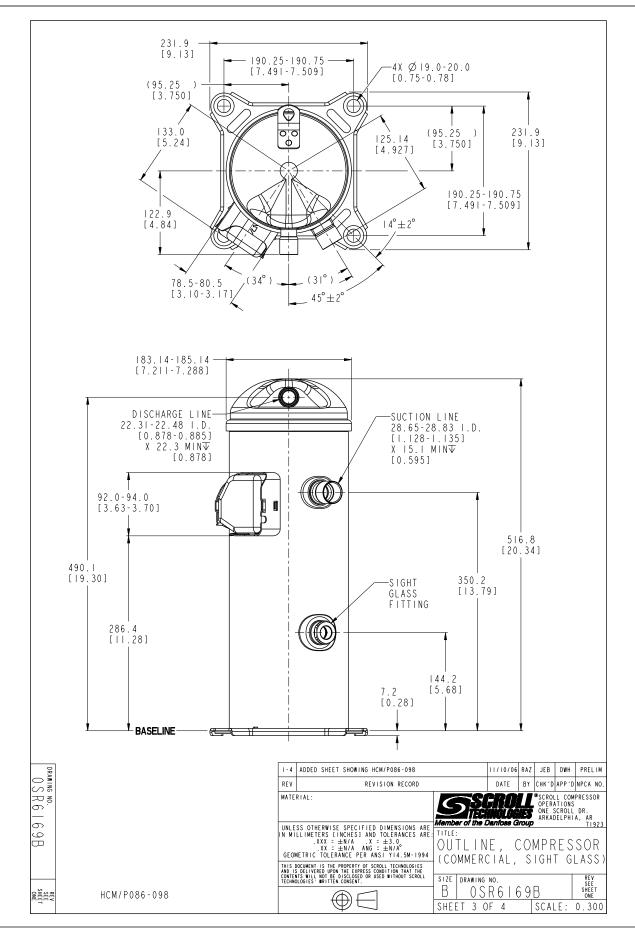
tc: Condensing temperature at dew point Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Tolerance according EN12900

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# Datasheet, drawing

#### Performer scroll compressor





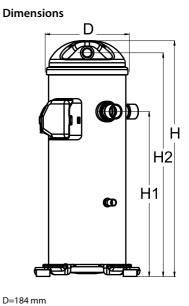
#### Datasheet, technical data

# Danfoss scroll compressor, HCP094T4

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#### **General Characteristics**

Model number (on compressor nameplate)		HCP094T4LC8			
Code number for Singlepack*		120U0611			
Code number for Industrial pack**		120U0608			
Drawing number		0SR4103B-3			
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	126.02 cm	3/rev			
Displacement @ Nominal speed	21.9 m3/h @ 2900 rpm - 2	6.5 m3/h @ 3500 rpm			
Net weight	44 kg	ļ			
Oil charge	2.66 litre, F	2.66 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 k	g			
Approved refrigerants	R4070	C			



# **Electrical Characteristics**

		D=184 mm
Nominal voltage	380-415V/3/50Hz - 460V/3/60Hz	H=536 mm
Voltage range	342-457 V @ 50Hz - 414-506 V @ 60Hz	H1=369 mm
Winding resistance between phases 1-2 +/- 7% at 25°C	1.480 Ω	
Winding resistance between phases 1-3 +/- 7% at 25°C	1.480 Ω	H2=509 mm H3=- mm
Winding resistance between phases 2-3 +/- 7% at 25°C	1.480 Ω	H3=- mm
Rated Load Amps (RLA)	13.5 A	
Maximum Continuous Current (MCC)	21 A	
Locked Rotor Amps (LRA)	84 A	Terminal k
Motor protection	Internal overload protector	

#### **Recommended Installation torgues**

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), -\*Singlepack: Compressor in cardboard box

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

erminal box



#### IP22 1:

Screw connectors 10-32 UNF x 9.5

2: Earth connection 3:

Power cable passage

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# Datasheet, accessories and spare parts

Danfoss scroll compressor, HCP094T4

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 side	Code no.	Solder sleeve adapter set
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030	
Gasket, 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	1 2 3 4
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	
		1: Rotolock adapter (Suc & Dis)
Oil / lubricants	Code no.	2: Gasket (Suc & Dis)
PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034	3: Solder sleeve (Suc & Dis)
		4: Rotolock nut (Suc & Dis)
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	120Z5045	
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	

# Danfoss scroll compressor. HCP094T4

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# Performance data at 50 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10		
Cooling capacity i	in W										
30	-	6 498	8 338	10 575	13 253	16 415	20 104	24 364	29 237		
35	-	6 118	7 865	9 990	12 536	15 547	19 065	23 134	27 797		
40	-	5 720	7 373	9 386	11 801	14 660	18 008	21 886	26 339		
45	-	-	6 849	8 750	11 033	13 741	16 917	20 604	24 845		
50	-	-	-	8 067	10 218	12 774	15 778	19 273	23 301		
55	-	-	-	-	9 343	11 746	14 577	17 878	21 692		
60	-	-	-	-	-	10 642	13 297	16 403	20 000		
65	-	-	-	-	-	-	11 926	14 832	18 208		

30	-	4 133	4 114	4 100	4 082	4 052	4 002	3 924	3 808
35	-	4 612	4 586	4 567	4 546	4 517	4 469	4 395	4 287
40	-	5 121	5 088	5 065	5 044	5 015	4 972	4 904	4 804
45	-	-	5 630	5 605	5 584	5 558	5 519	5 459	5 369
50	-	-	-	6 194	6 174	6 152	6 120	6 069	5 990
55	-	-	-	-	6 825	6 808	6 783	6 742	6 676
60	-	-	-	-	-	7 534	7 518	7 488	7 436
65	-	-	-	-	-	-	8 333	8 316	8 279

#### Current consumption in A

30	-	8.77	8.76	8.77	8.79	8.80	8.81	8.81	8.77
35	-	9.37	9.35	9.35	9.36	9.37	9.38	9.37	9.34
40	-	10.08	10.06	10.05	10.05	10.05	10.05	10.04	10.01
45	-	-	10.87	10.85	10.84	10.84	10.83	10.82	10.79
50	-	-	-	11.76	11.74	11.73	11.71	11.70	11.66
55	-	-	-	-	12.74	12.71	12.69	12.67	12.63
60	-	-	-	-	-	13.80	13.77	13.73	13.68
65	-	-	-	-	-	-	14.93	14.88	14.83

#### Mass flow in kg/h

30	-	145	183	229	282	343	414	494	585
35	-	144	182	227	279	341	411	491	581
40	-	143	180	224	277	338	408	487	577
45	-	-	177	221	273	334	404	483	573
50	-	-	-	216	268	329	399	478	568
55	-	-	-	-	262	322	392	472	561
60	-	-	-	-	-	314	383	463	553
65	-	-	-	-	-	-	372	452	542

#### Coefficient of performance (C.O.P.)

30	-	1.57	2.03	2.58	3.25	4.05	5.02	6.21	7.68
35	-	1.33	1.71	2.19	2.76	3.44	4.27	5.26	6.48
40	-	1.12	1.45	1.85	2.34	2.92	3.62	4.46	5.48
45	-	-	1.22	1.56	1.98	2.47	3.07	3.77	4.63
50	-	-	-	1.30	1.65	2.08	2.58	3.18	3.89
55	-	-	-	-	1.37	1.73	2.15	2.65	3.25
60	-	-	-	-	-	1.41	1.77	2.19	2.69
65	-	-	-	-	-	-	1.43	1.78	2.20

Nominal performance at to = 5 °C	C, tc = 50 °C	
Cooling capacity	19 273	W
Power input	6 069	W
Current consumption	11.70	А
Mass flow	478	kg/h
C.O.P.	3.18	

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Cound nousen lovel	74	dB(A)
Sound power level	74	UD(A)

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

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

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

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# Performance data at 50 Hz, ARI rating conditions

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

#### Cooling capacity in W

30	-	6 978	8 943	11 329	14 182	17 547	21 468	25 991	31 160
35	-	6 603	8 476	10 753	13 477	16 694	20 448	24 786	29 751
40	-	6 209	7 991	10 158	12 754	15 823	19 412	23 564	28 325
45	-	-	7 472	9 530	11 997	14 920	18 343	22 311	26 868
50	-	-	-	8 853	11 193	13 969	17 227	21 010	25 365
55	-	-	-	-	10 325	12 955	16 048	19 648	23 800
60	-	-	-	-	-	11 862	14 790	18 207	22 157
65	-	-	-	-	-	-	13 439	16 673	20 421

# Power input in W

30	-	4 133	4 114	4 100	4 082	4 052	4 002	3 924	3 808
35	-	4 612	4 586	4 567	4 546	4 517	4 469	4 395	4 287
40	-	5 121	5 088	5 065	5 044	5 015	4 972	4 904	4 804
45	-	-	5 630	5 605	5 584	5 558	5 519	5 459	5 369
50	-	-	-	6 194	6 174	6 152	6 120	6 069	5 990
55	-	-	-	-	6 825	6 808	6 783	6 742	6 676
60	-	-	-	-	-	7 534	7 518	7 488	7 436
65	-	-	-	-	-	-	8 333	8 316	8 279

#### Current consumption in A

30	-	8.77	8.76	8.77	8.79	8.80	8.81	8.81	8.77
35	-	9.37	9.35	9.35	9.36	9.37	9.38	9.37	9.34
40	-	10.08	10.06	10.05	10.05	10.05	10.05	10.04	10.01
45	-	-	10.87	10.85	10.84	10.84	10.83	10.82	10.79
50	-	-	-	11.76	11.74	11.73	11.71	11.70	11.66
55	-	-	-	-	12.74	12.71	12.69	12.67	12.63
60	-	-	-	-	-	13.80	13.77	13.73	13.68
65	-	-	-	-	-	-	14.93	14.88	14.83

#### Mass flow in kg/h

30	-	145	183	228	280	341	412	491	581
35	-	144	181	226	278	339	409	488	578
40	-	142	179	223	275	336	405	485	574
45	-	-	176	220	272	332	401	480	570
50	-	-	-	215	267	327	396	475	565
55	-	-	-	-	261	321	390	469	558
60	-	-	-	-	-	312	381	460	550
65	-	-	-	-	-	-	370	449	539

#### Coefficient of performance (C.O.P.)

30	-	1.69	2.17	2.76	3.47	4.33	5.36	6.62	8.18
35	-	1.43	1.85	2.35	2.96	3.70	4.58	5.64	6.94
40	-	1.21	1.57	2.01	2.53	3.15	3.90	4.81	5.90
45	-	-	1.33	1.70	2.15	2.68	3.32	4.09	5.00
50	-	-	-	1.43	1.81	2.27	2.81	3.46	4.23
55	-	-	-	-	1.51	1.90	2.37	2.91	3.57
60	-	-	-	-	-	1.57	1.97	2.43	2.98
65	-	-	-	-	-	-	1.61	2.00	2.47

Nominal performance at to = 7.2 °	C, tc = 54.4 °C		
Cooling capacity	21 582	W	
Power input	6 631	W	
Current consumption	12.53	А	
Mass flow	508	kg/h	
COP	3 25		

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	74	dB(A)
With accoustic hood	69	dB(A)

tc: Condensing temperature at dew point

to: Evaporating temperature at dew point

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

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

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# Performance data at 50 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10		
Cooling capacity i	in W										
30	-	6 498	8 338	10 575	13 253	16 415	20 104	24 364	29 237		
35	-	6 118	7 865	9 990	12 536	15 547	19 065	23 134	27 797		
40	-	5 720	7 373	9 386	11 801	14 660	18 008	21 886	26 339		
45	-	-	6 849	8 750	11 033	13 741	16 917	20 604	24 845		
50	-	-	-	8 067	10 218	12 774	15 778	19 273	23 301		
55	-	-	-	-	9 343	11 746	14 577	17 878	21 692		
60	-	-	-	-	-	10 642	13 297	16 403	20 000		
65	-	-	-	-	-	-	11 926	14 832	18 208		

30	-	4 133	4 114	4 100	4 082	4 052	4 002	3 924	3 808
35	-	4 612	4 586	4 567	4 546	4 517	4 469	4 395	4 287
40	-	5 121	5 088	5 065	5 044	5 015	4 972	4 904	4 804
45	-	-	5 630	5 605	5 584	5 558	5 519	5 459	5 369
50	-	-	-	6 194	6 174	6 152	6 120	6 069	5 990
55	-	-	-	-	6 825	6 808	6 783	6 742	6 676
60	-	-	-	-	-	7 534	7 518	7 488	7 436
65	-	-	-	-	-	-	8 333	8 316	8 279

#### Current consumption in A

30	-	8.77	8.76	8.77	8.79	8.80	8.81	8.81	8.77
35	-	9.37	9.35	9.35	9.36	9.37	9.38	9.37	9.34
40	-	10.08	10.06	10.05	10.05	10.05	10.05	10.04	10.01
45	-	-	10.87	10.85	10.84	10.84	10.83	10.82	10.79
50	-	-	-	11.76	11.74	11.73	11.71	11.70	11.66
55	-	-	-	-	12.74	12.71	12.69	12.67	12.63
60	-	-	-	-	-	13.80	13.77	13.73	13.68
65	-	-	-	-	-	-	14.93	14.88	14.83

#### Mass flow in kg/h

30	-	145	183	229	282	343	414	494	585
35	-	144	182	227	279	341	411	491	581
40	-	143	180	224	277	338	408	487	577
45	-	-	177	221	273	334	404	483	573
50	-	-	-	216	268	329	399	478	568
55	-	-	-	-	262	322	392	472	561
60	-	-	-	-	-	314	383	463	553
65	-	-	-	-	-	-	372	452	542

#### Coefficient of performance (C.O.P.)

30	-	1.57	2.03	2.58	3.25	4.05	5.02	6.21	7.68
35	-	1.33	1.71	2.19	2.76	3.44	4.27	5.26	6.48
40	-	1.12	1.45	1.85	2.34	2.92	3.62	4.46	5.48
45	-	-	1.22	1.56	1.98	2.47	3.07	3.77	4.63
50	-	-	-	1.30	1.65	2.08	2.58	3.18	3.89
55	-	-	-	-	1.37	1.73	2.15	2.65	3.25
60	-	-	-	-	-	1.41	1.77	2.19	2.69
65	-	-	-	-	-	-	1.43	1.78	2.20

Nominal performance at to = 5 °C	C, tc = 50 °C	
Cooling capacity	19 273	W
Power input	6 069	W
Current consumption	11.70	А
Mass flow	478	kg/h
C.O.P.	3.18	

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Cound nousen lovel	74	dB(A)
Sound power level	74	UD(A)

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

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

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

Danfoss

R407C

# Performance data at 50 Hz, ARI rating conditions

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

#### Cooling capacity in W

30	-	6 978	8 943	11 329	14 182	17 547	21 468	25 991	31 160
35	-	6 603	8 476	10 753	13 477	16 694	20 448	24 786	29 751
40	-	6 209	7 991	10 158	12 754	15 823	19 412	23 564	28 325
45	-	-	7 472	9 530	11 997	14 920	18 343	22 311	26 868
50	-	-	-	8 853	11 193	13 969	17 227	21 010	25 365
55	-	-	-	-	10 325	12 955	16 048	19 648	23 800
60	-	-	-	-	-	11 862	14 790	18 207	22 157
65	-	-	-	-	-	-	13 439	16 673	20 421

# Power input in W

30	-	4 133	4 114	4 100	4 082	4 052	4 002	3 924	3 808
35	-	4 612	4 586	4 567	4 546	4 517	4 469	4 395	4 287
40	-	5 121	5 088	5 065	5 044	5 015	4 972	4 904	4 804
45	-	-	5 630	5 605	5 584	5 558	5 519	5 459	5 369
50	-	-	-	6 194	6 174	6 152	6 120	6 069	5 990
55	-	-	-	-	6 825	6 808	6 783	6 742	6 676
60	-	-	-	-	-	7 534	7 518	7 488	7 436
65	-	-	-	-	-	-	8 333	8 316	8 279

#### Current consumption in A

30	-	8.77	8.76	8.77	8.79	8.80	8.81	8.81	8.77
35	-	9.37	9.35	9.35	9.36	9.37	9.38	9.37	9.34
40	-	10.08	10.06	10.05	10.05	10.05	10.05	10.04	10.01
45	-	-	10.87	10.85	10.84	10.84	10.83	10.82	10.79
50	-	-	-	11.76	11.74	11.73	11.71	11.70	11.66
55	-	-	-	-	12.74	12.71	12.69	12.67	12.63
60	-	-	-	-	-	13.80	13.77	13.73	13.68
65	-	-	-	-	-	-	14.93	14.88	14.83

#### Mass flow in kg/h

30	-	145	183	228	280	341	412	491	581
35	-	144	181	226	278	339	409	488	578
40	-	142	179	223	275	336	405	485	574
45	-	-	176	220	272	332	401	480	570
50	-	-	-	215	267	327	396	475	565
55	-	-	-	-	261	321	390	469	558
60	-	-	-	-	-	312	381	460	550
65	-	-	-	-	-	-	370	449	539

#### Coefficient of performance (C.O.P.)

30	-	1.69	2.17	2.76	3.47	4.33	5.36	6.62	8.18
35	-	1.43	1.85	2.35	2.96	3.70	4.58	5.64	6.94
40	-	1.21	1.57	2.01	2.53	3.15	3.90	4.81	5.90
45	-	-	1.33	1.70	2.15	2.68	3.32	4.09	5.00
50	-	-	-	1.43	1.81	2.27	2.81	3.46	4.23
55	-	-	-	-	1.51	1.90	2.37	2.91	3.57
60	-	-	-	-	-	1.57	1.97	2.43	2.98
65	-	-	-	-	-	-	1.61	2.00	2.47

Nominal performance at to = 7.2 °	C, tc = 54.4 °C		
Cooling capacity	21 582	W	
Power input	6 631	W	
Current consumption	12.53	А	
Mass flow	508	kg/h	
COP	3 25		

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	74	dB(A)
With accoustic hood	69	dB(A)

tc: Condensing temperature at dew point

to: Evaporating temperature at dew point

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

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

19 510

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Danfoss

R407C

23 886

21 600

# Performance data at 60 Hz, EN 12900 rating conditions

Cond. temp. in		Evaporating temperature in °C (to)											
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10				
• • •													
Cooling capacity	y in W				•								
30	-	8 031	10 309	13 120	16 432	20 210	24 422	29 031	34 006				
35	-	7 619	9 637	12 240	15 394	19 066	23 222	27 830	32 855				
40	-	7 366	9 071	11 408	14 347	17 855	21 898	26 444	31 459				
45	-	-	8 628	10 646	13 314	16 601	20 472	24 897	29 842				
50	-	-	-	9 973	12 315	15 324	18 966	23 212	28 026				
55	-	-	-	-	11 370	14 045	17 402	21 409	26 034				

12 785

15 800

14 177

#### Power input in W

60 65

30	-	4 453	4 563	4 635	4 686	4 733	4 794	4 886	5 027
35	-	4 909	5 050	5 140	5 196	5 236	5 276	5 336	5 431
40	-	5 386	5 566	5 683	5 752	5 793	5 822	5 856	5 914
45	-	-	6 126	6 277	6 369	6 419	6 444	6 463	6 491
50	-	-	-	6 939	7 062	7 130	7 160	7 171	7 179
55	-	-	-	-	7 846	7 940	7 985	7 996	7 993
60	-	-	-	-	-	8 866	8 933	8 954	8 947
65	-	-	-	-	-	-	10 020	10 059	10 057

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#### Current consumption in A

30	-	9.29	9.36	9.43	9.49	9.56	9.61	9.66	9.70
35	-	9.87	9.91	9.96	10.01	10.07	10.12	10.16	10.20
40	-	10.50	10.52	10.55	10.59	10.63	10.68	10.72	10.76
45	-	-	11.22	11.24	11.26	11.30	11.34	11.38	11.43
50	-	-	-	12.06	12.08	12.11	12.15	12.20	12.25
55	-	-	-	-	13.08	13.11	13.15	13.20	13.26
60	-	-	-	-	-	14.34	14.38	14.44	14.50
65	-	-	-	-	-	-	15.89	15.96	16.03

#### Mass flow in kg/h

30	-	182	228	283	347	422	507	604	713
35	-	180	226	280	343	417	502	598	706
40	-	176	221	275	339	412	496	591	699
45	-	-	215	269	332	405	489	584	692
50	-	-	-	260	323	396	480	575	683
55	-	-	-	-	312	385	469	565	672
60	-	-	-	-	-	371	455	551	659
65	-	-	-	-	-	-	438	535	644

#### Coefficient of performance (C.O.P.)

30	-	1.80	2.26	2.83	3.51	4.27	5.09	5.94	6.76
35	-	1.55	1.91	2.38	2.96	3.64	4.40	5.22	6.05
40	-	1.37	1.63	2.01	2.49	3.08	3.76	4.52	5.32
45	-	-	1.41	1.70	2.09	2.59	3.18	3.85	4.60
50	-	-	-	1.44	1.74	2.15	2.65	3.24	3.90
55	-	-	-	-	1.45	1.77	2.18	2.68	3.26
60	-	-	-	-	-	1.44	1.77	2.18	2.67
65	-	-	-	-	-	-	1.41	1.74	2.15

Nominal performance at to = 5 °C, tc = 50 °C								
Cooling capacity	23 212	W						
Power input	7 171	W						
Current consumption	12.20	Α						
Mass flow	575	kg/h						
C.O.P.	3.24							

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	77	dB(A)
With accoustic hood	72	dB(A)

to: Evaporating temperature at dew point

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

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

Danfoss

R407C

# Performance data at 60 Hz, ARI rating conditions

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

#### Cooling capacity in W

30	-	8 624	11 056	14 055	17 584	21 604	26 079	30 971	36 243
35	-	8 222	10 387	13 175	16 549	20 472	24 907	29 816	35 163
40	-	7 996	9 831	12 347	15 506	19 271	23 606	28 472	33 832
45	-	-	9 412	11 595	14 479	18 025	22 198	26 960	32 273
50	-	-	-	10 944	13 491	16 758	20 708	25 304	30 509
55	-	-	-	-	12 565	15 492	19 159	23 528	28 564
60	-	-	-	-	-	14 251	17 574	21 656	26 462
65	-	-	-	-	-	-	15 977	19 711	24 225

# Power input in W

30	-	4 453	4 563	4 635	4 686	4 733	4 794	4 886	5 027
35	-	4 909	5 050	5 140	5 196	5 236	5 276	5 336	5 431
40	-	5 386	5 566	5 683	5 752	5 793	5 822	5 856	5 914
45	-	-	6 126	6 277	6 369	6 419	6 444	6 463	6 491
50	-	-	-	6 939	7 062	7 130	7 160	7 171	7 179
55	-	-	-	-	7 846	7 940	7 985	7 996	7 993
60	-	-	-	-	-	8 866	8 933	8 954	8 947
65	-	-	-	-	-	-	10 020	10 059	10 057

#### Current consumption in A

30	-	9.29	9.36	9.43	9.49	9.56	9.61	9.66	9.70
35	-	9.87	9.91	9.96	10.01	10.07	10.12	10.16	10.20
40	-	10.50	10.52	10.55	10.59	10.63	10.68	10.72	10.76
45	-	-	11.22	11.24	11.26	11.30	11.34	11.38	11.43
50	-	-	-	12.06	12.08	12.11	12.15	12.20	12.25
55	-	-	-	-	13.08	13.11	13.15	13.20	13.26
60	-	-	-	-	-	14.34	14.38	14.44	14.50
65	-	-	-	-	-	-	15.89	15.96	16.03

#### Mass flow in kg/h

30	-	181	227	282	345	419	504	600	709
35	-	179	224	278	342	415	499	594	702
40	-	175	220	274	337	410	493	588	695
45	-	-	214	268	330	403	486	581	688
50	-	-	-	259	322	394	477	572	679
55	-	-	-	-	310	383	467	561	668
60	-	-	-	-	-	369	453	548	655
65	-	-	-	-	-	-	436	532	640

#### Coefficient of performance (C.O.P.)

30	-	1.94	2.42	3.03	3.75	4.56	5.44	6.34	7.21
35	-	1.67	2.06	2.56	3.18	3.91	4.72	5.59	6.47
40	-	1.48	1.77	2.17	2.70	3.33	4.05	4.86	5.72
45	-	-	1.54	1.85	2.27	2.81	3.44	4.17	4.97
50	-	-	-	1.58	1.91	2.35	2.89	3.53	4.25
55	-	-	-	-	1.60	1.95	2.40	2.94	3.57
60	-	-	-	-	-	1.61	1.97	2.42	2.96
65	-	-	-	-	-	-	1.59	1.96	2.41

Nominal performance at to = 7.2 °	C, tc = 54.4 °C		
Cooling capacity	25 894	W	
Power input	7 890	W	
Current consumption	13.09	A	
Mass flow	608	kg/h	
C.O.P.	3.28		

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	77	dB(A)
With accoustic hood	72	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

19 510

17 534

Danfoss

R407C

23 886

21 600

# Performance data at 60 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10		
• • •											
Cooling capacity	y in W				•						
30	-	8 031	10 309	13 120	16 432	20 210	24 422	29 031	34 006		
35	-	7 619	9 637	12 240	15 394	19 066	23 222	27 830	32 855		
40	-	7 366	9 071	11 408	14 347	17 855	21 898	26 444	31 459		
45	-	-	8 628	10 646	13 314	16 601	20 472	24 897	29 842		
50	-	-	-	9 973	12 315	15 324	18 966	23 212	28 026		
55	-	-	-	-	11 370	14 045	17 402	21 409	26 034		

12 785

15 800

14 177

#### Power input in W

60 65

30	-	4 453	4 563	4 635	4 686	4 733	4 794	4 886	5 027
35	-	4 909	5 050	5 140	5 196	5 236	5 276	5 336	5 431
40	-	5 386	5 566	5 683	5 752	5 793	5 822	5 856	5 914
45	-	-	6 126	6 277	6 369	6 419	6 444	6 463	6 491
50	-	-	-	6 939	7 062	7 130	7 160	7 171	7 179
55	-	-	-	-	7 846	7 940	7 985	7 996	7 993
60	-	-	-	-	-	8 866	8 933	8 954	8 947
65	-	-	-	-	-	-	10 020	10 059	10 057

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#### Current consumption in A

30	-	9.29	9.36	9.43	9.49	9.56	9.61	9.66	9.70
35	-	9.87	9.91	9.96	10.01	10.07	10.12	10.16	10.20
40	-	10.50	10.52	10.55	10.59	10.63	10.68	10.72	10.76
45	-	-	11.22	11.24	11.26	11.30	11.34	11.38	11.43
50	-	-	-	12.06	12.08	12.11	12.15	12.20	12.25
55	-	-	-	-	13.08	13.11	13.15	13.20	13.26
60	-	-	-	-	-	14.34	14.38	14.44	14.50
65	-	-	-	-	-	-	15.89	15.96	16.03

#### Mass flow in kg/h

30	-	182	228	283	347	422	507	604	713
35	-	180	226	280	343	417	502	598	706
40	-	176	221	275	339	412	496	591	699
45	-	-	215	269	332	405	489	584	692
50	-	-	-	260	323	396	480	575	683
55	-	-	-	-	312	385	469	565	672
60	-	-	-	-	-	371	455	551	659
65	-	-	-	-	-	-	438	535	644

#### Coefficient of performance (C.O.P.)

30	-	1.80	2.26	2.83	3.51	4.27	5.09	5.94	6.76
35	-	1.55	1.91	2.38	2.96	3.64	4.40	5.22	6.05
40	-	1.37	1.63	2.01	2.49	3.08	3.76	4.52	5.32
45	-	-	1.41	1.70	2.09	2.59	3.18	3.85	4.60
50	-	-	-	1.44	1.74	2.15	2.65	3.24	3.90
55	-	-	-	-	1.45	1.77	2.18	2.68	3.26
60	-	-	-	-	-	1.44	1.77	2.18	2.67
65	-	-	-	-	-	-	1.41	1.74	2.15

Nominal performance at to = 5 °C, tc = 50 °C								
Cooling capacity	23 212	W						
Power input	7 171	W						
Current consumption	12.20	Α						
Mass flow	575	kg/h						
C.O.P.	3.24							

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	77	dB(A)
With accoustic hood	72	dB(A)

to: Evaporating temperature at dew point

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

Tolerance according EN12900

# Danfoss scroll compressor. HCP094T4

Danfoss

R407C

# Performance data at 60 Hz, ARI rating conditions

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

#### Cooling capacity in W

30	-	8 624	11 056	14 055	17 584	21 604	26 079	30 971	36 243
35	-	8 222	10 387	13 175	16 549	20 472	24 907	29 816	35 163
40	-	7 996	9 831	12 347	15 506	19 271	23 606	28 472	33 832
45	-	-	9 412	11 595	14 479	18 025	22 198	26 960	32 273
50	-	-	-	10 944	13 491	16 758	20 708	25 304	30 509
55	-	-	-	-	12 565	15 492	19 159	23 528	28 564
60	-	-	-	-	-	14 251	17 574	21 656	26 462
65	-	-	-	-	-	-	15 977	19 711	24 225

# Power input in W

30	-	4 453	4 563	4 635	4 686	4 733	4 794	4 886	5 027
35	-	4 909	5 050	5 140	5 196	5 236	5 276	5 336	5 431
40	-	5 386	5 566	5 683	5 752	5 793	5 822	5 856	5 914
45	-	-	6 126	6 277	6 369	6 419	6 444	6 463	6 491
50	-	-	-	6 939	7 062	7 130	7 160	7 171	7 179
55	-	-	-	-	7 846	7 940	7 985	7 996	7 993
60	-	-	-	-	-	8 866	8 933	8 954	8 947
65	-	-	-	-	-	-	10 020	10 059	10 057

#### Current consumption in A

30	-	9.29	9.36	9.43	9.49	9.56	9.61	9.66	9.70
35	-	9.87	9.91	9.96	10.01	10.07	10.12	10.16	10.20
40	-	10.50	10.52	10.55	10.59	10.63	10.68	10.72	10.76
45	-	-	11.22	11.24	11.26	11.30	11.34	11.38	11.43
50	-	-	-	12.06	12.08	12.11	12.15	12.20	12.25
55	-	-	-	-	13.08	13.11	13.15	13.20	13.26
60	-	-	-	-	-	14.34	14.38	14.44	14.50
65	-	-	-	-	-	-	15.89	15.96	16.03

#### Mass flow in kg/h

30	-	181	227	282	345	419	504	600	709
35	-	179	224	278	342	415	499	594	702
40	-	175	220	274	337	410	493	588	695
45	-	-	214	268	330	403	486	581	688
50	-	-	-	259	322	394	477	572	679
55	-	-	-	-	310	383	467	561	668
60	-	-	-	-	-	369	453	548	655
65	-	-	-	-	-	-	436	532	640

#### Coefficient of performance (C.O.P.)

30	-	1.94	2.42	3.03	3.75	4.56	5.44	6.34	7.21
35	-	1.67	2.06	2.56	3.18	3.91	4.72	5.59	6.47
40	-	1.48	1.77	2.17	2.70	3.33	4.05	4.86	5.72
45	-	-	1.54	1.85	2.27	2.81	3.44	4.17	4.97
50	-	-	-	1.58	1.91	2.35	2.89	3.53	4.25
55	-	-	-	-	1.60	1.95	2.40	2.94	3.57
60	-	-	-	-	-	1.61	1.97	2.42	2.96
65	-	-	-	-	-	-	1.59	1.96	2.41

Nominal performance at to = 7.2 °	C, tc = 54.4 °C		
Cooling capacity	25 894	W	
Power input	7 890	W	
Current consumption	13.09	A	
Mass flow	608	kg/h	
C.O.P.	3.28		

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	77	dB(A)
With accoustic hood	72	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Tolerance according EN12900

