ENGINEERING



Datasheets

Danfoss scroll compressors **H series**





Datasheet, technical data

Danfoss scroll compressor, HRP025T4

General Characteristics

Model number (on compressor nameplate)		HRP025T4LP6
Code number for Singlepack*		120U3088
Code number for Industrial pack**		120U3087
Drawing number		0XC6301B-2
Suction and discharge connections		Brazed
Suction connection		3/4 " ODF
Discharge connection		1/2 " ODF
Oil sight glass		None
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		Yes
Swept volume	33.77 c	m3/rev
Displacement @ Nominal speed	5.9 m3/h @ 2900 rpm	- 7.1 m3/h @ 3500 rpm
Net weight	30.8	3 kg
Oil charge	1.06 litre	e, PVE
Maximum system test pressure Low Side / High side	- bar(g)	/ - bar(g)
Maximum differential test pressure	- b	oar
Maximum number of starts per hour		-
Refrigerant charge limit	3.63	3 kg
Approved refrigerants	R40)7C

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℃	6.724 Ω
Winding resistance between phases 1-3 +/- 7% at 25℃	6.724 Ω
Winding resistance between phases 2-3 +/- 7% at 25℃	4.952 Ω
Rated Load Amps (RLA)	4.5 A
Maximum Continuous Current (MCC)	7 A
Locked Rotor Amps (LRA)	30 A
Motor protection	Internal overload protector

Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	0 Nm / 0 Nm

Parts shipped with compressor

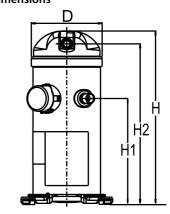
	1 arts simpped with compressor
	Mounting kit with grommets and sleeves
Į	Initial oil charge
ļ	Installation instructions

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

*Singlepack: Compressor in cardboard box

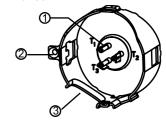
**Industrial pack: 12 or 16 Unboxed compressors on pallet

Dimensions



D=164.5 mm H=413 mm H1=250 mm H2=379 mm H3=- mm

Terminal box



IP22

3:

Spade connectors 1/4"
 Earth connection

Power cable passage



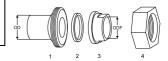
Datasheet, accessories and spare parts

Danfoss scroll compressor, HRP025T4

Rotolock accessories, suction side	Code no.
Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008
Angle adapter, C04 (1-1/4" Rotolock, 3/4" ODF)	8168006
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029
Gasket, 1-1/4"	8156131

Rotolock accessories, discharge side Code no. Solder sleeve, P06 (1" Rotolock, 1/2" ODF) 8153007 Angle adapter, C06 (1" Rotolock, 1/2" ODF) 8168007 Rotolock valve, V06 (1" Rotolock, 1/2" ODF) 8168031 8156130 Gasket, 1"

Solder sleeve adapter set



1: Rotolock adapter	(Suc	ጴ	Dis)

- 2: Gasket (Suc & Dis)
- 3: Solder sleeve (Suc & Dis)
- 4: Rotolock nut (Suc & Dis)

Rotolock accessories, sets	Code no.
Solder sleeve adapter set (1-1/4" Rotolock, 3/4" ODF), (1" Rotolock, 1/2" ODF)	120Z0126

120Z0126 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, 40 W, 230 V, CE mark, UL	120Z0055
Belt type crankcase heater, 40 W, 400 V, CE mark, UL	120Z0056

Miscellaneous accessories	Code no.
Acoustic hood	120Z5043
Discharge thermostat kit	7750009
IP54 ungrade kit	118U0056

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
No translation for 120Z5015	120Z5015



Danfoss scroll compressor. HRP025T4

Performance data at 50 Hz, EN 12900 rating conditions

R407C

Cooling capacity in W 30	Cond. temp. in	Evaporating temperature in °C (to)								
30	°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
30	Cooling canacity	in W								
35			1 021	2.414	2 997	3 673	4.450	5 333	6 327	7 440
40							1			7 126
45				1		1				
50										6 785
Section Sect							1	+		6 425
Common										6 056
Propertication Prop								+		5 686
Power input in W 30							1			5 322
1	65	-	-	-	-	-	-	3 561	4 223	4 971
35	Power input in W									
40	30	-	1 000	1 029	1 058	1 086	1 115	1 147	1 181	1 218
45	35	-	1 109	1 146	1 178	1 208	1 236	1 262	1 289	1 316
45		-					1			1 432
So		_								1 566
Second S		-	+	1						1 718
Company		-					1	+		1 888
Current consumption in A 30		-				1				2 075
Solution A Solu								+		2 279
30			1		1	l	L			
35	Current consump	tion in A								
40	30	-	1.80	1.86	1.91	1.96	2.01	2.07	2.13	2.20
45 2.50	35	-	2.00	2.07	2.13	2.18	2.23	2.28	2.32	2.37
50	40	-	2.20	2.28	2.35	2.41	2.46	2.51	2.55	2.58
55	45	-	-	2.50	2.58	2.66	2.72	2.76	2.80	2.83
60	50	-	-	-	2.82	2.92	2.99	3.04	3.08	3.10
Mass flow in kg/h 30 - 37 47 59 73 89 108 129 35 - 36 46 58 72 88 107 129 40 - 34 45 57 71 88 107 128 45 43 55 70 86 106 127 50 53 68 85 104 126 55 66 83 103 124 60 66 83 100 123 65 81 100 123 65 98 120 Coefficient of performance (C.O.P.) 30 - 1.92 2.35 2.83 3.38 3.99 4.65 5.36 35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 4.07 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 1.42 1.74 2.10 2.51 2.98 3.51 50 1.49 1.80 2.15 2.55 3.00 55 1.49 1.80 2.15 2.55 3.00	55	-	-	-	-	3.18	3.27	3.34	3.38	3.41
Mass flow in kg/h 30	60	-	-	-	-	-	3.57	3.66	3.71	3.74
30	65	-	-	-	-	-	-	3.99	4.07	4.11
30				•		•	-1	•		•
35	Mass flow in kg/h		_		_					
40 - 34 45 57 71 88 107 128 45 - - 43 55 70 86 106 127 50 - - - 53 68 85 104 126 55 - - - - 66 83 103 124 60 - - - - - 81 100 123 65 - - - - - - 98 120 Coefficient of performance (C.O.P.) 30	30	-	37	47	59	73	89	108	129	153
45 - - 43 55 70 86 106 127 50 - - - 53 68 85 104 126 55 - - - - 66 83 103 124 60 - - - - - 81 100 123 65 - - - - - 98 120 Coefficient of performance (C.O.P.) 30	35	-	36	46	58	72	88	107	129	153
50 - - - 53 68 85 104 126 55 - - - - 66 83 103 124 60 - - - - 81 100 123 65 - - - - - 98 120 Coefficient of performance (C.O.P.) 30 - 1.92 2.35 2.83 3.38 3.99 4.65 5.36 35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - - 1.55 1.84 2	40	-	34	45	57	71	88	107	128	152
55 - - - 66 83 103 124 60 - - - - 81 100 123 65 - - - - 98 120 Coefficient of performance (C.O.P.) 30 - 1.92 2.35 2.83 3.38 3.99 4.65 5.36 35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - - 1.55 1.84 2.18 2.57	45	-	-	43	55	70	86	106	127	151
60 - - - - 81 100 123 65 - - - - - 98 120 Coefficient of performance (C.O.P.) 30 - 1.92 2.35 2.83 3.38 3.99 4.65 5.36 35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - - 1.55 1.84 2.18 2.57	50	-	-	-	53	68	85	104	126	150
65 - - - - - 98 120 Coefficient of performance (C.O.P.) 30 - 1.92 2.35 2.83 3.38 3.99 4.65 5.36 35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - - 1.55 1.84 2.18 2.57	55	_	-	-	-	66	83	103	124	149
Coefficient of performance (C.O.P.) 30	60	-	-	-	-	-	81	100	123	147
30 - 1.92 2.35 2.83 3.38 3.99 4.65 5.36 35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - 1.55 1.84 2.18 2.57	65	-	-	-	-	-	-	98	120	145
30 - 1.92 2.35 2.83 3.38 3.99 4.65 5.36 35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - 1.55 1.84 2.18 2.57	Coefficient of roa	formance (C.C) P)							
35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - 1.55 1.84 2.18 2.57	•	•	· ·	2.35	2.83	3,38	3,99	4.65	5.36	6.11
40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - 1.55 1.84 2.18 2.57							1	+		5.42
45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - 1.55 1.84 2.18 2.57										4.74
50 - - 1.49 1.80 2.15 2.55 3.00 55 - - - 1.55 1.84 2.18 2.57	-						1	+		4.10
55 1.55 1.84 2.18 2.57										3.52
							1	+		3.01
	60	-	-		-	1.55				
60 1.59 1.87 2.19 65 1.61 1.87					_					2.56 2.18

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

Homman portormanoc acto o o, to	00 0	
Cooling capacity	5 124	W
Power input	1 706	W
Current consumption	3.08	Α
Mass flow	126	kg/h
C.O.P.	3.00	

to: Evaporating temperature at dew point

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

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	67	dB(A)
With accoustic hood	62	dB(A)

All performance data +/- 5%

tc: Condensing temperature at dew point



Danfoss scroll compressor. HRP025T4

Performance data at 50 Hz, ARI rating conditions

R407C

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Seeling consoits	:n \W								
Cooling capacity		2 063	2 590	3 210	3 930	4 757	5 694	6 750	7 929
30	-		1						
35	-	1 922	2 439	3 046	3 747	4 550	5 461	6 484	7 627
40	-	1 786	2 289	2 876	3 555	4 330	5 208	6 195	7 297
45	-	-	2 147	2 712	3 362	4 105	4 947	5 892	6 949
50	-	-	-	2 562	3 180	3 886	4 686	5 586	6 592
55	-	-	-	-	3 019	3 683	4 437	5 287	6 238
60	-	-	-	-	-	3 506	4 209	5 004	5 896
65	-	-	-	-	-	-	4 013	4 748	5 575
Power input in W									
30	-	1 000	1 029	1 058	1 086	1 115	1 147	1 181	1 218
35	-	1 109	1 146	1 178	1 208	1 236	1 262	1 289	1 316
40	-	1 217	1 264	1 304	1 337	1 366	1 391	1 412	1 432
45	-	-	1 383	1 433	1 473	1 506	1 532	1 552	1 566
50	-	-	-	1 565	1 616	1 656	1 685	1 706	1 718
55	-	-	-	-	1 764	1 814	1 850	1 875	1 888
60	-	-	-	-	_	1 980	2 026	2 058	2 075
65	-	-	-	-	-	-	2 214	2 255	2 279
1		-	•		•	-			•
Current consump	tion in A	1		I		1		1	T
30	-	1.80	1.86	1.91	1.96	2.01	2.07	2.13	2.20
35	-	2.00	2.07	2.13	2.18	2.23	2.28	2.32	2.37
40	-	2.20	2.28	2.35	2.41	2.46	2.51	2.55	2.58
45	-	-	2.50	2.58	2.66	2.72	2.76	2.80	2.83
50	-	-	-	2.82	2.92	2.99	3.04	3.08	3.10
55	-	-	-	-	3.18	3.27	3.34	3.38	3.41
60	-	-	-	-	-	3.57	3.66	3.71	3.74
65	-	-	-	-	-	-	3.99	4.07	4.11
Mass flow in kg/h	1								
30	_	37	47	58	72	89	107	128	152
35	-	36	46	58	72	88	107	128	152
40	_	34	44	57	71	87	106	127	151
45		-	43	55	69	86	105	126	151
50		-	-	53	68	84	103	125	150
55	<u> </u>	-		-	66	83	102	123	148
60	-	-	-	-	-	80	102	124	147
65		-	_	-	_	-	97	120	144
05							91	120	144
Coefficient of per	formance (C.0	· ·	T	Т		T	1	T	
30	-	2.06	2.52	3.04	3.62	4.26	4.97	5.72	6.51
35	-	1.73	2.13	2.58	3.10	3.68	4.33	5.03	5.80
40	-	1.47	1.81	2.21	2.66	3.17	3.74	4.39	5.10
45	-	-	1.55	1.89	2.28	2.73	3.23	3.80	4.44
50	-	-	-	1.64	1.97	2.35	2.78	3.27	3.84
55	-	-	-	-	1.71	2.03	2.40	2.82	3.30
60	-	-	-	-	-	1.77	2.08	2.43	2.84
65	-	-	-	-	-	-	1.81	2.11	2.45
lominal performa	ance at to = 7.	2 °C, tc = 54.4 °C			-	Pressure switch			
coling conceit:		F 704	14/			Marriagona LID acci		20	h/\

Mass flow C.O.P.

Cooling capacity

Current consumption

Power input

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

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

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

Sound power data

Sound power level	67	dB(A)
With accoustic hood	62	dB(A)

All performance data +/- 5%

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W

W

kg/h

5 731

1 861

3.36

134

3.08



Danfoss scroll compressor. HRP025T4

Performance data at 50 Hz, EN 12900 rating conditions

R407C

Cooling capacity in W 30	Cond. temp. in Evaporating temperature in °C (to)									
30	°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
30	Cooling canacity	in W								
35			1 021	2.414	2 997	3 673	4.450	5 333	6 327	7 440
40							1			7 126
45				1		1				
50										6 785
Section Sect							1	+		6 425
Common										6 056
Propertication Prop								+		5 686
Power input in W 30							1			5 322
1	65	-	-	-	-	-	-	3 561	4 223	4 971
35	Power input in W									
40	30	-	1 000	1 029	1 058	1 086	1 115	1 147	1 181	1 218
45	35	-	1 109	1 146	1 178	1 208	1 236	1 262	1 289	1 316
45		-					1			1 432
So		_								1 566
Second S		-	+	1						1 718
Company		-					1	+		1 888
Current consumption in A 30		-				1				2 075
Solution A Solu								+		2 279
30			1		1	l	L			
35	Current consump	tion in A								
40	30	-	1.80	1.86	1.91	1.96	2.01	2.07	2.13	2.20
45 2.50	35	-	2.00	2.07	2.13	2.18	2.23	2.28	2.32	2.37
50	40	-	2.20	2.28	2.35	2.41	2.46	2.51	2.55	2.58
55	45	-	-	2.50	2.58	2.66	2.72	2.76	2.80	2.83
60	50	-	-	-	2.82	2.92	2.99	3.04	3.08	3.10
Mass flow in kg/h 30 - 37 47 59 73 89 108 129 35 - 36 46 58 72 88 107 129 40 - 34 45 57 71 88 107 128 45 43 55 70 86 106 127 50 53 68 85 104 126 55 66 83 103 124 60 66 83 100 123 65 81 100 123 65 98 120 Coefficient of performance (C.O.P.) 30 - 1.92 2.35 2.83 3.38 3.99 4.65 5.36 35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 4.07 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 1.42 1.74 2.10 2.51 2.98 3.51 50 1.49 1.80 2.15 2.55 3.00 55 1.49 1.80 2.15 2.55 3.00	55	-	-	-	-	3.18	3.27	3.34	3.38	3.41
Mass flow in kg/h 30	60	-	-	-	-	-	3.57	3.66	3.71	3.74
30	65	-	-	-	-	-	-	3.99	4.07	4.11
30				•		•	-1	•		•
35	Mass flow in kg/h		_		_					
40 - 34 45 57 71 88 107 128 45 - - 43 55 70 86 106 127 50 - - - 53 68 85 104 126 55 - - - - 66 83 103 124 60 - - - - - 81 100 123 65 - - - - - - 98 120 Coefficient of performance (C.O.P.) 30	30	-	37	47	59	73	89	108	129	153
45 - - 43 55 70 86 106 127 50 - - - 53 68 85 104 126 55 - - - - 66 83 103 124 60 - - - - - 81 100 123 65 - - - - - 98 120 Coefficient of performance (C.O.P.) 30	35	-	36	46	58	72	88	107	129	153
50 - - - 53 68 85 104 126 55 - - - - 66 83 103 124 60 - - - - 81 100 123 65 - - - - - 98 120 Coefficient of performance (C.O.P.) 30 - 1.92 2.35 2.83 3.38 3.99 4.65 5.36 35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - - 1.55 1.84 2	40	-	34	45	57	71	88	107	128	152
55 - - - 66 83 103 124 60 - - - - 81 100 123 65 - - - - 98 120 Coefficient of performance (C.O.P.) 30 - 1.92 2.35 2.83 3.38 3.99 4.65 5.36 35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - - 1.55 1.84 2.18 2.57	45	-	-	43	55	70	86	106	127	151
60 - - - - 81 100 123 65 - - - - - 98 120 Coefficient of performance (C.O.P.) 30 - 1.92 2.35 2.83 3.38 3.99 4.65 5.36 35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - - 1.55 1.84 2.18 2.57	50	-	-	-	53	68	85	104	126	150
65 - - - - - 98 120 Coefficient of performance (C.O.P.) 30 - 1.92 2.35 2.83 3.38 3.99 4.65 5.36 35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - - 1.55 1.84 2.18 2.57	55	_	-	-	-	66	83	103	124	149
Coefficient of performance (C.O.P.) 30	60	-	-	-	-	-	81	100	123	147
30 - 1.92 2.35 2.83 3.38 3.99 4.65 5.36 35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - 1.55 1.84 2.18 2.57	65	-	-	-	-	-	-	98	120	145
30 - 1.92 2.35 2.83 3.38 3.99 4.65 5.36 35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - 1.55 1.84 2.18 2.57	Coefficient of roa	formance (C.C) P)							
35 - 1.61 1.98 2.40 2.89 3.43 4.03 4.70 40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - 1.55 1.84 2.18 2.57	•	•	· ·	2.35	2.83	3,38	3,99	4.65	5.36	6.11
40 - 1.35 1.67 2.04 2.46 2.94 3.47 4.07 45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - 1.55 1.84 2.18 2.57							1	+		5.42
45 - - 1.42 1.74 2.10 2.51 2.98 3.51 50 - - - 1.49 1.80 2.15 2.55 3.00 55 - - - 1.55 1.84 2.18 2.57										4.74
50 - - 1.49 1.80 2.15 2.55 3.00 55 - - - 1.55 1.84 2.18 2.57	-						1	+		4.10
55 1.55 1.84 2.18 2.57										3.52
							1	+		3.01
	60	-	-		-	1.55				
60 1.59 1.87 2.19 65 1.61 1.87					_					2.56 2.18

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

Homman portormanoc acto o o, to	00 0	
Cooling capacity	5 124	W
Power input	1 706	W
Current consumption	3.08	Α
Mass flow	126	kg/h
C.O.P.	3.00	

to: Evaporating temperature at dew point

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

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	67	dB(A)
With accoustic hood	62	dB(A)

All performance data +/- 5%

tc: Condensing temperature at dew point



Danfoss scroll compressor. HRP025T4

Performance data at 50 Hz, ARI rating conditions

R407C

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Seeling consoits	:n \W								
Cooling capacity		2 063	2 590	3 210	3 930	4 757	5 694	6 750	7 929
30	-		1						
35	-	1 922	2 439	3 046	3 747	4 550	5 461	6 484	7 627
40	-	1 786	2 289	2 876	3 555	4 330	5 208	6 195	7 297
45	-	-	2 147	2 712	3 362	4 105	4 947	5 892	6 949
50	-	-	-	2 562	3 180	3 886	4 686	5 586	6 592
55	-	-	-	-	3 019	3 683	4 437	5 287	6 238
60	-	-	-	-	-	3 506	4 209	5 004	5 896
65	-	-	-	-	-	-	4 013	4 748	5 575
Power input in W									
30	-	1 000	1 029	1 058	1 086	1 115	1 147	1 181	1 218
35	-	1 109	1 146	1 178	1 208	1 236	1 262	1 289	1 316
40	-	1 217	1 264	1 304	1 337	1 366	1 391	1 412	1 432
45	-	-	1 383	1 433	1 473	1 506	1 532	1 552	1 566
50	-	-	-	1 565	1 616	1 656	1 685	1 706	1 718
55	-	-	-	-	1 764	1 814	1 850	1 875	1 888
60	-	-	-	-	_	1 980	2 026	2 058	2 075
65	-	-	-	-	-	-	2 214	2 255	2 279
1		-	•		•	-			•
Current consump	tion in A	1		I		1		1	T
30	-	1.80	1.86	1.91	1.96	2.01	2.07	2.13	2.20
35	-	2.00	2.07	2.13	2.18	2.23	2.28	2.32	2.37
40	-	2.20	2.28	2.35	2.41	2.46	2.51	2.55	2.58
45	-	-	2.50	2.58	2.66	2.72	2.76	2.80	2.83
50	-	-	-	2.82	2.92	2.99	3.04	3.08	3.10
55	-	-	-	-	3.18	3.27	3.34	3.38	3.41
60	-	-	-	-	-	3.57	3.66	3.71	3.74
65	-	-	-	-	-	-	3.99	4.07	4.11
Mass flow in kg/h	1								
30	_	37	47	58	72	89	107	128	152
35	-	36	46	58	72	88	107	128	152
40	_	34	44	57	71	87	106	127	151
45		-	43	55	69	86	105	126	151
50		-	-	53	68	84	103	125	150
55	<u> </u>	-		-	66	83	102	123	148
60	-	-	-	-	-	80	102	124	147
65		-	_	-	_	-	97	120	144
05							91	120	144
Coefficient of per	formance (C.0	· ·	T	Т		T	1	T	
30	-	2.06	2.52	3.04	3.62	4.26	4.97	5.72	6.51
35	-	1.73	2.13	2.58	3.10	3.68	4.33	5.03	5.80
40	-	1.47	1.81	2.21	2.66	3.17	3.74	4.39	5.10
45	-	-	1.55	1.89	2.28	2.73	3.23	3.80	4.44
50	-	-	-	1.64	1.97	2.35	2.78	3.27	3.84
55	-	-	-	-	1.71	2.03	2.40	2.82	3.30
60	-	-	-	-	-	1.77	2.08	2.43	2.84
65	-	-	-	-	-	-	1.81	2.11	2.45
lominal performa	ance at to = 7.	2 °C, tc = 54.4 °C			-	Pressure switch			
coling conceit:		F 704	14/			Marriagona LID acci		20	h/\

Mass flow C.O.P.

Cooling capacity

Current consumption

Power input

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

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

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

Sound power data

Sound power level	67	dB(A)
With accoustic hood	62	dB(A)

All performance data +/- 5%

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W

W

kg/h

5 731

1 861

3.36

134

3.08



Danfoss scroll compressor. HRP025T4

Performance data at 60 Hz, EN 12900 rating conditions

R407C

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	in W								
30	-	2 305	2 897	3 596	4 408	5 340	6 399	7 593	8 928
35		2 137	2 716	3 396	4 183	5 085	6 109	7 263	8 552
40		1 974	2 534	3 189			5 798		8 142
	-	1974	2 362	2 988	3 947	4 814	5 474	6 905	
45					3 710	4 537		6 530	7 710
50	-	-	-	2 802	3 484	4 265	5 151	6 149	7 267
55	-	-	-	-	3 278	4 007	4 837	5 773	6 823
60	-	-	-	-	-	3 774	4 541	5 410	6 386
65	-	-	-	-	-	-	4 273	5 068	5 965
Power input in W									
30	-	1 183	1 220	1 255	1 290	1 326	1 364	1 405	1 451
35	-	1 307	1 354	1 396	1 433	1 468	1 501	1 533	1 567
40	-	1 431	1 491	1 542	1 585	1 622	1 653	1 681	1 706
45	-	-	1 630	1 694	1 746	1 788	1 821	1 847	1 866
50	-	-	-	1 850	1 915	1 965	2 003	2 030	2 047
55	_	_	-	_	2 090	2 153	2 199	2 230	2 248
60	-	-	-	-	-	2 350	2 408	2 447	2 468
65	_	-	_	-	_	-	2 629	2 679	2 708
		l		l		1		20.0	
Current consump	tion in A								
30	-	1.86	1.91	1.97	2.02	2.08	2.14	2.20	2.28
35	-	2.05	2.12	2.19	2.25	2.30	2.35	2.41	2.46
40	-	2.25	2.34	2.42	2.49	2.54	2.59	2.64	2.68
45	-	-	2.56	2.66	2.74	2.81	2.86	2.90	2.93
50	-	-	_	2.90	3.00	3.08	3.14	3.18	3.21
55	-	-	-	-	3.28	3.38	3.45	3.50	3.53
60	-	-	_	-	-	3.69	3.78	3.84	3.87
65	-	-	-	-	-	-	4.12	4.20	4.25
1			1		1		1		u
Mass flow in kg/h		_		_					
30	-	44	56	71	87	107	129	155	184
35	-	43	55	70	87	106	129	154	183
40	-	41	54	68	85	105	128	154	183
45	-	-	52	66	84	104	127	153	182
50	-	-	-	64	82	102	125	151	181
55	-	-	-	-	79	100	123	149	179
60	-	-	-	-	-	97	120	147	177
65	-	-	-	-	-	-	117	144	174
Coefficient of com	forman == 10 0								
30	formance (C.C	1.95	2.37	2.86	3.42	4.03	4.69	5.40	6.15
35		1.63	2.01	2.43	2.92	3.46	4.07	4.74	5.46
40	-	1.38	1.70	2.43	2.49	2.97	3.51	4.11	4.77
45					2.49				
-	-	-	1.45	1.76	•	2.54	3.01	3.54	4.13
50 55	-	-		1.51	1.82	2.17	2.57	3.03	3.55
55	-	-	-	-	1.57	1.86	2.20	2.59	3.04
60	-	-	-	-	-	1.61	1.89	2.21	2.59
65	-	-	-	-	-	-	1.63	1.89	2.20

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

Cooling capacity	6 149	W	
Power input	2 030	W	
Current consumption	3.18	Α	
Mass flow	151	kg/h	
C.O.P.	3.03		

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

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	71	dB(A)
With accoustic hood	66	dB(A)

All performance data +/- 5%



Danfoss scroll compressor. HRP025T4

Performance data at 60 Hz, ARI rating conditions

R407C

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	in W	T	T	Т	T	1		T	1
30	-	2 475	3 107	3 852	4 717	5 708	6 833	8 100	9 515
35	-	2 306	2 927	3 655	4 497	5 460	6 553	7 781	9 152
40	-	2 143	2 746	3 451	4 266	5 196	6 250	7 434	8 756
45	-	-	2 577	3 254	4 035	4 926	5 936	7 071	8 338
50	-	-	-	3 075	3 816	4 664	5 624	6 704	7 911
55	-	-	-	-	3 622	4 420	5 325	6 344	7 486
60	-	-	-	-	-	4 207	5 051	6 005	7 075
65	-	-	-	-	-	-	4 815	5 697	6 691
Power input in W									
30	_	1 183	1 220	1 255	1 290	1 326	1 364	1 405	1 451
35		1 307	1 354	1 396	1 433	1 468	1 501	1 533	1 567
40		1 431	1 491	1 542	1 585	1 622	1 653	1 681	1 706
45		-	1 630	1 694	1 746	1 788	1 821	1 847	1 866
50			1 630	1 850	1 915	1 788	2 003	2 030	2 047
55		-		-	2 090	2 153	2 199	2 230	2 248
60							2 199	2 447	2 468
	-	-	-	-	-	2 350	1		
65	-						2 629	2 679	2 708
Current consump	tion in A								
30	-	1.86	1.91	1.97	2.02	2.08	2.14	2.20	2.28
35	-	2.05	2.12	2.19	2.25	2.30	2.35	2.41	2.46
40	-	2.25	2.34	2.42	2.49	2.54	2.59	2.64	2.68
45	-	-	2.56	2.66	2.74	2.81	2.86	2.90	2.93
50	-	-	-	2.90	3.00	3.08	3.14	3.18	3.21
55	-	-	-	-	3.28	3.38	3.45	3.50	3.53
60	-	-	-	-	-	3.69	3.78	3.84	3.87
65	-	-	-	-	-	-	4.12	4.20	4.25
		-1	-1	•	•	•		•	•
Mass flow in kg/h				T		_	_	T	1
30	-	44	56	70	87	106	129	154	183
35	-	43	55	69	86	106	128	153	182
40	-	41	53	68	85	105	127	153	182
45	-	-	51	66	83	103	126	152	181
50	-	-	-	64	81	101	124	150	179
55	-	-	-	-	79	99	122	149	178
60	-	-	-	-	-	96	120	146	176
65	-	-	-	-	-	-	117	143	173
Coefficient of per	formance (C () P)							
30	-	2.09	2.55	3.07	3.66	4.30	5.01	5.76	6.56
35	-	1.76	2.16	2.62	3.14	3.72	4.37	5.07	5.84
40	-	1.50	1.84	2.24	2.69	3.20	3.78	4.42	5.13
45	-	-	1.58	1.92	2.31	2.76	3.26	3.83	4.47
50	-	-	-	1.66	1.99	2.37	2.81	3.30	3.87
55		_	_	-	1.73	2.05	2.42	2.84	3.33
60		-	-	-	-	1.79	2.10	2.45	2.87
65		_	_	_	-	-	1.83	2.43	2.47

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

Cooling capacity	6 877	W	
Power input	2 214	W	
Current consumption	3.47	Α	
Mass flow	161	kg/h	
C.O.P.	3.11		

to: Evaporating temperature at dew point

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

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	71	dB(A)
With accoustic hood	66	dB(A)

All performance data +/- 5%

tc: Condensing temperature at dew point



Danfoss scroll compressor. HRP025T4

Performance data at 60 Hz, EN 12900 rating conditions

R407C

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	in W								
30	-	2 305	2 897	3 596	4 408	5 340	6 399	7 593	8 928
35		2 137	2 716	3 396	4 183	5 085	6 109	7 263	8 552
40		1 974	2 534	3 189			5 798		8 142
	-	1974	2 362	2 988	3 947	4 814	5 474	6 905	
45					3 710	4 537		6 530	7 710
50	-	-	-	2 802	3 484	4 265	5 151	6 149	7 267
55	-	-	-	-	3 278	4 007	4 837	5 773	6 823
60	-	-	-	-	-	3 774	4 541	5 410	6 386
65	-	-	-	-	-	-	4 273	5 068	5 965
Power input in W									
30	-	1 183	1 220	1 255	1 290	1 326	1 364	1 405	1 451
35	-	1 307	1 354	1 396	1 433	1 468	1 501	1 533	1 567
40	-	1 431	1 491	1 542	1 585	1 622	1 653	1 681	1 706
45	-	-	1 630	1 694	1 746	1 788	1 821	1 847	1 866
50	-	-	-	1 850	1 915	1 965	2 003	2 030	2 047
55	_	_	-	_	2 090	2 153	2 199	2 230	2 248
60	-	-	-	-	-	2 350	2 408	2 447	2 468
65	_	-	_	-	-	-	2 629	2 679	2 708
		l		l		1		20.0	
Current consump	tion in A								
30	-	1.86	1.91	1.97	2.02	2.08	2.14	2.20	2.28
35	-	2.05	2.12	2.19	2.25	2.30	2.35	2.41	2.46
40	-	2.25	2.34	2.42	2.49	2.54	2.59	2.64	2.68
45	-	-	2.56	2.66	2.74	2.81	2.86	2.90	2.93
50	-	-	_	2.90	3.00	3.08	3.14	3.18	3.21
55	-	-	-	-	3.28	3.38	3.45	3.50	3.53
60	-	-	_	-	-	3.69	3.78	3.84	3.87
65	-	-	-	-	-	-	4.12	4.20	4.25
1			1		1		1		u
Mass flow in kg/h		_		_					
30	-	44	56	71	87	107	129	155	184
35	-	43	55	70	87	106	129	154	183
40	-	41	54	68	85	105	128	154	183
45	-	-	52	66	84	104	127	153	182
50	-	-	-	64	82	102	125	151	181
55	-	-	-	-	79	100	123	149	179
60	-	-	-	-	-	97	120	147	177
65	-	-	-	-	-	-	117	144	174
Coefficient of com	forman == 10 0								
30	formance (C.C	1.95	2.37	2.86	3.42	4.03	4.69	5.40	6.15
35		1.63	2.01	2.43	2.92	3.46	4.07	4.74	5.46
40	-	1.38	1.70	2.43	2.49	2.97	3.51	4.11	4.77
45					2.49				
-	-	-	1.45	1.76	•	2.54	3.01	3.54	4.13
50 55	-	-		1.51	1.82	2.17	2.57	3.03	3.55
55	-	-	-	-	1.57	1.86	2.20	2.59	3.04
60	-	-	-	-	-	1.61	1.89	2.21	2.59
65	-	-	-	-	-	-	1.63	1.89	2.20

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

Cooling capacity	6 149	W	
Power input	2 030	W	
Current consumption	3.18	Α	
Mass flow	151	kg/h	
C.O.P.	3.03		

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

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	71	dB(A)
With accoustic hood	66	dB(A)

All performance data +/- 5%



Danfoss scroll compressor. HRP025T4

Performance data at 60 Hz, ARI rating conditions

R407C

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity	in W	1	T	Т	T	1		T	1
30	-	2 475	3 107	3 852	4 717	5 708	6 833	8 100	9 515
35	-	2 306	2 927	3 655	4 497	5 460	6 553	7 781	9 152
40	-	2 143	2 746	3 451	4 266	5 196	6 250	7 434	8 756
45	-	-	2 577	3 254	4 035	4 926	5 936	7 071	8 338
50	-	-	-	3 075	3 816	4 664	5 624	6 704	7 911
55	-	-	-	-	3 622	4 420	5 325	6 344	7 486
60	-	-	-	-	-	4 207	5 051	6 005	7 075
65	-	-	-	-	-	-	4 815	5 697	6 691
Power input in W									
30	_	1 183	1 220	1 255	1 290	1 326	1 364	1 405	1 451
35		1 307	1 354	1 396	1 433	1 468	1 501	1 533	1 567
40		1 431	1 491	1 542	1 585	1 622	1 653	1 681	1 706
45		1431	1 630	1 694	1 746	1 788	1 821	1 847	1 866
50		-	1 630	1 850	1 915	1 788	2 003	2 030	2 047
55		-	-	1 850	2 090	2 153	2 199	2 230	2 248
60							2 199	2 447	2 468
	-	-	-	-	-	2 350	1	1	
65	-					<u> </u>	2 629	2 679	2 708
Current consump	tion in A								
30	-	1.86	1.91	1.97	2.02	2.08	2.14	2.20	2.28
35	-	2.05	2.12	2.19	2.25	2.30	2.35	2.41	2.46
40	-	2.25	2.34	2.42	2.49	2.54	2.59	2.64	2.68
45	-	-	2.56	2.66	2.74	2.81	2.86	2.90	2.93
50	-	_	-	2.90	3.00	3.08	3.14	3.18	3.21
55	-	-	-	-	3.28	3.38	3.45	3.50	3.53
60	-	_	-	-	-	3.69	3.78	3.84	3.87
65	-	-	-	-	-	-	4.12	4.20	4.25
		•	-1	•					•
Mass flow in kg/h		_		T	1	1	_	1	1
30	-	44	56	70	87	106	129	154	183
35	-	43	55	69	86	106	128	153	182
40	-	41	53	68	85	105	127	153	182
45	-	-	51	66	83	103	126	152	181
50	-	-	-	64	81	101	124	150	179
55	-	-	-	-	79	99	122	149	178
60	-	-	-	-	-	96	120	146	176
65	-	-	-	-	-	-	117	143	173
Coefficient of per	iormanas (C () P \							
30	-	2.09	2.55	3.07	3.66	4.30	5.01	5.76	6.56
35	_	1.76	2.16	2.62	3.14	3.72	4.37	5.07	5.84
40		1.50	1.84	2.24	2.69	3.20	3.78	4.42	5.13
45		-	1.58	1.92	2.31	2.76	3.26	3.83	4.47
50		-	-	1.66	1.99	2.70	2.81	3.30	3.87
55		-	-	-	1.73	2.05	2.42	2.84	3.33
60		-	-	-	-	1.79	2.42	2.45	2.87
00	-	+ -	-	-	-	1.18	1.83	4.40	2.67

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

Cooling capacity	6 877	W	
Power input	2 214	W	
Current consumption	3.47	Α	
Mass flow	161	kg/h	
C.O.P.	3.11		

to: Evaporating temperature at dew point

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

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)

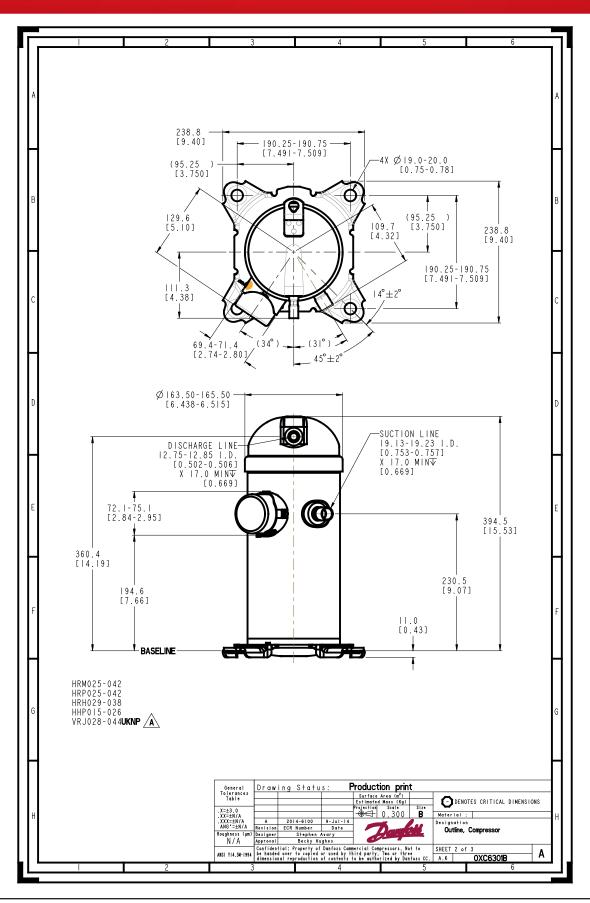
Sound power data

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

All performance data +/- 5%

tc: Condensing temperature at dew point





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