

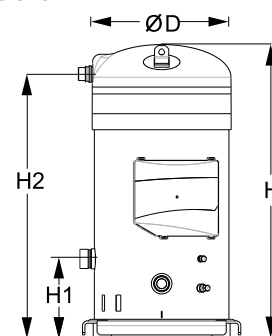
Datasheets

Danfoss scroll compressors **SM / SY / SZ / SH / WSH**



General Characteristics

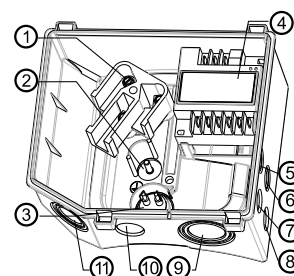
Model number (on compressor nameplate)		SY380A4CAE
Code number for Singlepack*		SY380A4CAI
Code number for Industrial pack**		SY380A4CAM
Drawing number		8556093b
Suction and discharge connections		Brazed
Suction connection		2-1/8" ODF
Discharge connection		1-3/8" ODF
Oil sight glass		Threaded
Oil equalisation connection		1/2" flare
Oil drain connection		1/4" flare
LP gauge port		Schrader
IPR valve		Yes
Reverse rotation protection		Electronic module
Swept volume	531.2 cm ³ /rev	
Displacement @ Nominal speed	92.4 m ³ /h @ 2900 rpm - 111.6 m ³ /h @ 3500 rpm	
Net weight	158 kg	
Oil charge	8.4 litre, POE - 320SZ	
Maximum system test pressure Low Side / High side	20 bar(g) / 27.9 bar(g)	
Maximum differential test pressure	24 bar	
Maximum number of starts per hour	12	
Refrigerant charge limit	20 kg	
Approved refrigerants	R22, R134a	

Dimensions


D=344 mm
 H=726.9 mm
 H1=195.7 mm
 H2=654 mm
 H3=- mm

Electrical Characteristics

Nominal voltage	380-415V/3/50Hz - 460V/3/60Hz
Voltage range	340-457 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance (between phases) +/- 7% at 25°C	0.410 Ω
Rated Load Amps (RLA)	56.4 A
Maximum Continuous Current (MCC)	79 A
Locked Rotor Amps (LRA)	300 A
Motor protection	Electronic protection module, 24 V AC

Terminal box


IP54 (with cable gland)

- 1: Power connection, 3 x 4.8 mm (3/16")
- 2: Earth M5
- 3: Thermistor connector
- 4: Electronic protection module
- 5: Double knock-out Ø 22.5 mm (7/8") & Ø 16.5 mm (0.65")
- 6: Double knock-out Ø 22.5 mm (7/8") & Ø 16.5 mm (0.65")
- 7: Knock-out Ø 20.7 mm (0.81")
- 8: Knock-out Ø 20.7 mm (0.81")
- 9: Triple knock-out Ø 50.8 mm (2") & Ø 43.7 mm (1.72") & Ø 34.5 mm (1.35")
- 10: Knock-out Ø 25.5 mm (1.00")
- 11: Triple knock-out Ø 40.5 mm (1.59") & Ø 32.2 mm (1.27") & Ø 25.5 mm (1")

Recommended Installation torques

Oil sight glass	50 Nm
Power connections / Earth connection	3 Nm / 2 Nm
Mounting bolts	40 Nm

Parts shipped with compressor

Mounting kit with grommets and sleeves
Electronic protection module mounted in terminal box
Initial oil charge
Installation instructions

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

*Singlepack: Compressor in cardboard box

**Industrial pack: 4 Unboxed compressors on pallet (order per multiples of 4)

Rotolock accessories, suction side
Code no.

Flange type valve, V12 (Flange ~ 2"1/8)	120Z0320
---	----------

Rotolock accessories, discharge side
Code no.

Solder sleeve, P10 (1-3/4" Rotolock, 1-3/8" ODF)	8153003
Rotolock valve, V10 (1-3/4" Rotolock, 1-3/8" ODF)	8168022
Gasket, 1-3/4"	8156132

Rotolock accessories, sets
Code no.

Flange	120Z0317
Valve set, V12 (flange ~ 2"1/8), V10(1"3/4~1"3/8)	120Z0316
Gasket set, 1-1/4", 1-3/4", 2-1/4", OSG gaskets black & white	8156013

Oil / lubricants
Code no.

POE lubricant, 320SZ, 1 litre can	7754121
POE lubricant, 320SZ, 2.5 litre can	120Z0572

Crankcase heaters
Code no.

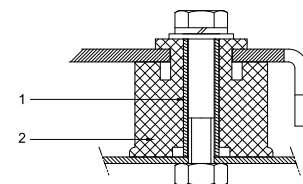
Surface sump heater + bottom insulation, 80 W, 24 V, CE mark, UL	120Z0359
Surface sump heater + bottom insulation, 80 W, 230 V, CE mark, UL	120Z0372
Surface sump heater + bottom insulation, 80 W, 400 V, CE mark, UL	120Z0373
Surface sump heater + bottom insulation, 80 W, 460 V, CE mark, UL	120Z0374
Belt type crankcase heater, 130 W, 230 V, CE mark, UL	7773122
Belt type crankcase heater, 130 W, 400 V, CE mark, UL	7773123

Miscellaneous accessories
Code no.

Electronic soft start kit, MCI 50 CM	037N0401
Acoustic hood for scroll compressor S380	7755022
Bottom insulation for scroll compressor	120Z0355
Discharge thermostat kit	7750009

Spare parts
Code no.

Electronic motor protection module, 24 V AC	120Z0584
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves	8156144
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (white teflon)	8156129
Terminal box 210 x 190 incl. cover	120Z0458
T block connector 60 x 75 mm	8173021

Mounting kit


1: Sleeve (4x)

2: Grommet (4x)

Bolts, nuts and washers not included

Performance data at 50 Hz, EN 12900 rating conditions
R22

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

Cooling capacity in W

30	39 683	48 859	59 594	72 065	86 447	102 918	121 654	142 831	-
35	37 640	46 547	56 951	69 028	82 955	98 908	117 063	137 598	-
40	35 520	44 121	54 157	65 805	79 239	94 638	112 178	132 035	-
45	-	41 598	51 231	62 412	75 319	90 127	107 015	126 157	-
50	-	-	48 187	58 867	71 209	85 392	101 590	119 982	-
55	-	-	-	55 186	66 928	80 448	95 922	113 527	-
60	-	-	-	-	62 492	75 313	90 026	106 808	-
65	-	-	-	-	-	70 003	83 920	99 842	-

Power input in W

30	15 724	16 045	16 395	16 780	17 207	17 683	18 212	18 801	-
35	17 345	17 649	17 985	18 360	18 779	19 249	19 775	20 364	-
40	19 155	19 435	19 751	20 107	20 511	20 968	21 484	22 066	-
45	-	21 444	21 732	22 063	22 444	22 881	23 380	23 948	-
50	-	-	23 969	24 267	24 619	25 028	25 503	26 049	-
55	-	-	-	26 762	27 076	27 452	27 895	28 412	-
60	-	-	-	-	29 857	30 192	30 596	31 077	-
65	-	-	-	-	-	33 289	33 647	34 085	-

Current consumption in A

30	30.36	30.55	30.65	30.71	30.81	31.01	31.40	32.02	-
35	32.26	32.59	32.83	33.04	33.30	33.66	34.19	34.98	-
40	34.33	34.77	35.11	35.43	35.79	36.27	36.92	37.82	-
45	-	37.20	37.61	38.00	38.43	38.97	39.70	40.68	-
50	-	-	40.45	40.86	41.32	41.90	42.66	43.67	-
55	-	-	-	44.15	44.59	45.16	45.91	46.92	-
60	-	-	-	-	48.37	48.89	49.59	50.55	-
65	-	-	-	-	-	53.20	53.81	54.69	-

Mass flow in kg/h

30	851	1 036	1 248	1 490	1 766	2 079	2 431	2 825	-
35	840	1 025	1 238	1 482	1 759	2 072	2 426	2 822	-
40	827	1 012	1 226	1 469	1 747	2 061	2 415	2 812	-
45	-	997	1 210	1 454	1 731	2 046	2 400	2 798	-
50	-	-	1 192	1 435	1 712	2 026	2 380	2 778	-
55	-	-	-	1 412	1 688	2 001	2 355	2 752	-
60	-	-	-	-	1 661	1 973	2 325	2 722	-
65	-	-	-	-	-	1 939	2 290	2 685	-

Coefficient of performance (C.O.P.)

30	2.52	3.05	3.63	4.29	5.02	5.82	6.68	7.60	-
35	2.17	2.64	3.17	3.76	4.42	5.14	5.92	6.76	-
40	1.85	2.27	2.74	3.27	3.86	4.51	5.22	5.98	-
45	-	1.94	2.36	2.83	3.36	3.94	4.58	5.27	-
50	-	-	2.01	2.43	2.89	3.41	3.98	4.61	-
55	-	-	-	2.06	2.47	2.93	3.44	4.00	-
60	-	-	-	-	2.09	2.49	2.94	3.44	-
65	-	-	-	-	-	2.10	2.49	2.93	-

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

Cooling capacity	85 392	W
Power input	25 028	W
Current consumption	41.90	A
Mass flow	2 026	kg/h
C.O.P.	3.41	

Pressure switch settings

Maximum HP switch setting	28	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	87	dB(A)
With acoustic hood	80	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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Datasheet, performance data

Danfoss scroll compressor. SY380-4

Performance data at 50 Hz, ARI rating conditions

R22

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

Cooling capacity in W

30	42 112	51 809	63 144	76 302	91 465	108 818	128 543	150 824	-
35	40 084	49 527	60 546	73 327	88 053	104 910	124 079	145 745	-
40	37 975	47 127	57 794	70 162	84 416	100 740	119 318	140 334	-
45	-	44 627	54 906	66 825	80 570	96 326	114 278	134 611	-
50	-	-	51 900	63 334	76 535	91 689	108 981	128 596	-
55	-	-	-	59 710	72 332	86 849	103 447	122 313	-
60	-	-	-	-	67 982	81 829	97 702	115 787	-
65	-	-	-	-	-	76 656	91 773	109 049	-

Power input in W

30	15 724	16 045	16 395	16 780	17 207	17 683	18 212	18 801	-
35	17 345	17 649	17 985	18 360	18 779	19 249	19 775	20 364	-
40	19 155	19 435	19 751	20 107	20 511	20 968	21 484	22 066	-
45	-	21 444	21 732	22 063	22 444	22 881	23 380	23 948	-
50	-	-	23 969	24 267	24 619	25 028	25 503	26 049	-
55	-	-	-	26 762	27 076	27 452	27 895	28 412	-
60	-	-	-	-	29 857	30 192	30 596	31 077	-
65	-	-	-	-	-	33 289	33 647	34 085	-

Current consumption in A

30	30.36	30.55	30.65	30.71	30.81	31.01	31.40	32.02	-
35	32.26	32.59	32.83	33.04	33.30	33.66	34.19	34.98	-
40	34.33	34.77	35.11	35.43	35.79	36.27	36.92	37.82	-
45	-	37.20	37.61	38.00	38.43	38.97	39.70	40.68	-
50	-	-	40.45	40.86	41.32	41.90	42.66	43.67	-
55	-	-	-	44.15	44.59	45.16	45.91	46.92	-
60	-	-	-	-	48.37	48.89	49.59	50.55	-
65	-	-	-	-	-	53.20	53.81	54.69	-

Mass flow in kg/h

30	846	1 030	1 241	1 483	1 757	2 067	2 417	2 809	-
35	835	1 020	1 232	1 474	1 749	2 061	2 412	2 805	-
40	823	1 007	1 219	1 462	1 738	2 050	2 402	2 796	-
45	-	992	1 204	1 446	1 722	2 035	2 387	2 782	-
50	-	-	1 185	1 427	1 702	2 015	2 367	2 762	-
55	-	-	-	1 404	1 679	1 990	2 342	2 737	-
60	-	-	-	-	1 652	1 962	2 312	2 706	-
65	-	-	-	-	-	1 929	2 278	2 670	-

Coefficient of performance (C.O.P.)

30	2.68	3.23	3.85	4.55	5.32	6.15	7.06	8.02	-
35	2.31	2.81	3.37	3.99	4.69	5.45	6.27	7.16	-
40	1.98	2.42	2.93	3.49	4.12	4.80	5.55	6.36	-
45	-	2.08	2.53	3.03	3.59	4.21	4.89	5.62	-
50	-	-	2.17	2.61	3.11	3.66	4.27	4.94	-
55	-	-	-	2.23	2.67	3.16	3.71	4.30	-
60	-	-	-	-	2.28	2.71	3.19	3.73	-
65	-	-	-	-	-	2.30	2.73	3.20	-

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

Cooling capacity	94 512	W
Power input	27 333	W
Current consumption	45.05	A
Mass flow	2 143	kg/h
C.O.P.	3.46	

Pressure switch settings

Maximum HP switch setting	28	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	87	dB(A)
With acoustic hood	80	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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Datasheet, performance data

Danfoss scroll compressor. SY380-4

Performance data at 50 Hz, EN 12900 rating conditions

R407C

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

Cooling capacity in W

30	35 242	44 275	55 011	67 668	82 459	99 601	119 308	141 797	-
35	33 285	42 021	52 363	64 527	78 729	95 184	114 107	135 714	-
40	31 207	39 605	49 512	61 143	74 715	90 442	108 540	129 224	-
45	29 019	37 039	46 470	57 528	70 429	85 388	102 620	122 341	-
50	-	34 335	43 250	53 694	65 883	80 033	96 359	115 076	-
55	-	31 506	39 864	49 653	61 090	74 390	89 769	107 441	-
60	-	-	36 324	45 418	56 062	68 472	82 863	99 449	-
65	-	-	-	-	50 812	62 291	75 653	91 113	-

Power input in W

30	15 293	15 644	15 958	16 258	16 566	16 903	17 291	17 753	-
35	16 920	17 309	17 648	17 958	18 261	18 580	18 937	19 352	-
40	18 721	19 158	19 531	19 862	20 172	20 483	20 818	21 197	-
45	20 719	21 216	21 634	21 995	22 322	22 636	22 959	23 312	-
50	-	23 505	23 979	24 381	24 735	25 062	25 384	25 723	-
55	-	26 052	26 591	27 045	27 437	27 787	28 118	28 452	-
60	-	-	29 495	30 011	30 450	30 834	31 185	31 525	-
65	-	-	-	-	33 801	34 229	34 610	34 965	-

Current consumption in A

30	29.28	29.58	29.99	30.48	31.05	31.67	32.32	32.98	-
35	31.22	31.57	32.00	32.48	33.01	33.55	34.09	34.60	-
40	33.40	33.83	34.30	34.80	35.31	35.80	36.25	36.65	-
45	35.87	36.41	36.96	37.49	38.00	38.47	38.86	39.17	-
50	-	39.35	40.00	40.60	41.15	41.61	41.97	42.22	-
55	-	42.72	43.49	44.18	44.79	45.27	45.63	45.83	-
60	-	-	47.47	48.28	48.97	49.51	49.88	50.07	-
65	-	-	-	-	53.74	54.36	54.78	54.99	-

Mass flow in kg/h

30	742	918	1 122	1 358	1 629	1 939	2 292	2 692	-
35	735	912	1 118	1 354	1 626	1 937	2 290	2 689	-
40	726	904	1 110	1 347	1 619	1 929	2 282	2 681	-
45	713	892	1 099	1 336	1 607	1 917	2 269	2 666	-
50	-	878	1 084	1 320	1 591	1 899	2 250	2 646	-
55	-	860	1 065	1 300	1 570	1 877	2 225	2 619	-
60	-	-	1 042	1 276	1 544	1 849	2 195	2 586	-
65	-	-	-	-	1 513	1 816	2 159	2 547	-

Coefficient of performance (C.O.P.)

30	2.30	2.83	3.45	4.16	4.98	5.89	6.90	7.99	-
35	1.97	2.43	2.97	3.59	4.31	5.12	6.03	7.01	-
40	1.67	2.07	2.53	3.08	3.70	4.42	5.21	6.10	-
45	1.40	1.75	2.15	2.62	3.16	3.77	4.47	5.25	-
50	-	1.46	1.80	2.20	2.66	3.19	3.80	4.47	-
55	-	1.21	1.50	1.84	2.23	2.68	3.19	3.78	-
60	-	-	1.23	1.51	1.84	2.22	2.66	3.15	-
65	-	-	-	-	1.50	1.82	2.19	2.61	-

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

Cooling capacity	80 033	W
Power input	25 062	W
Current consumption	41.61	A
Mass flow	1 899	kg/h
C.O.P.	3.19	

Pressure switch settings

Maximum HP switch setting	29.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Datasheet, performance data

Danfoss scroll compressor. SY380-4

Performance data at 50 Hz, ARI rating conditions

R407C

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

Cooling capacity in W

30	37 798	47 431	58 867	72 333	88 054	106 253	127 156	150 985	-
35	35 874	45 230	56 292	69 287	84 441	101 978	122 125	145 104	-
40	33 823	42 862	53 510	65 994	80 540	97 376	116 727	138 818	-
45	31 659	40 341	50 534	62 466	76 366	92 461	110 978	132 143	-
50	-	37 679	47 377	58 718	71 932	87 248	104 893	125 096	-
55	-	34 891	44 055	54 766	67 256	81 755	98 492	117 697	-
60	-	-	40 584	50 627	62 356	76 003	91 799	109 975	-
65	-	-	-	-	57 260	70 024	84 849	101 970	-

Power input in W

30	15 293	15 644	15 958	16 258	16 566	16 903	17 291	17 753	-
35	16 920	17 309	17 648	17 958	18 261	18 580	18 937	19 352	-
40	18 721	19 158	19 531	19 862	20 172	20 483	20 818	21 197	-
45	20 719	21 216	21 634	21 995	22 322	22 636	22 959	23 312	-
50	-	23 505	23 979	24 381	24 735	25 062	25 384	25 723	-
55	-	26 052	26 591	27 045	27 437	27 787	28 118	28 452	-
60	-	-	29 495	30 011	30 450	30 834	31 185	31 525	-
65	-	-	-	-	33 801	34 229	34 610	34 965	-

Current consumption in A

30	29.28	29.58	29.99	30.48	31.05	31.67	32.32	32.98	-
35	31.22	31.57	32.00	32.48	33.01	33.55	34.09	34.60	-
40	33.40	33.83	34.30	34.80	35.31	35.80	36.25	36.65	-
45	35.87	36.41	36.96	37.49	38.00	38.47	38.86	39.17	-
50	-	39.35	40.00	40.60	41.15	41.61	41.97	42.22	-
55	-	42.72	43.49	44.18	44.79	45.27	45.63	45.83	-
60	-	-	47.47	48.28	48.97	49.51	49.88	50.07	-
65	-	-	-	-	53.74	54.36	54.78	54.99	-

Mass flow in kg/h

30	738	913	1 116	1 350	1 620	1 928	2 279	2 675	-
35	731	908	1 112	1 347	1 617	1 926	2 276	2 673	-
40	722	899	1 104	1 340	1 610	1 918	2 269	2 664	-
45	710	888	1 093	1 328	1 598	1 906	2 255	2 650	-
50	-	873	1 078	1 313	1 582	1 888	2 237	2 630	-
55	-	855	1 059	1 293	1 561	1 866	2 212	2 603	-
60	-	-	1 037	1 269	1 535	1 838	2 182	2 570	-
65	-	-	-	-	1 505	1 805	2 146	2 532	-

Coefficient of performance (C.O.P.)

30	2.47	3.03	3.69	4.45	5.32	6.29	7.35	8.50	-
35	2.12	2.61	3.19	3.86	4.62	5.49	6.45	7.50	-
40	1.81	2.24	2.74	3.32	3.99	4.75	5.61	6.55	-
45	1.53	1.90	2.34	2.84	3.42	4.08	4.83	5.67	-
50	-	1.60	1.98	2.41	2.91	3.48	4.13	4.86	-
55	-	1.34	1.66	2.02	2.45	2.94	3.50	4.14	-
60	-	-	1.38	1.69	2.05	2.46	2.94	3.49	-
65	-	-	-	-	1.69	2.05	2.45	2.92	-

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

Cooling capacity	89 551	W
Power input	27 589	W
Current consumption	44.98	A
Mass flow	2 016	kg/h
C.O.P.	3.25	

Pressure switch settings

Maximum HP switch setting	29.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Performance data at 50 Hz, EN 12900 rating conditions
R134a

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

Cooling capacity in W

35	27 908	35 167	43 804	54 007	65 964	79 863	95 890	-	-
40	26 259	33 218	41 484	51 244	62 686	75 998	91 366	-	-
45	24 574	31 216	39 094	48 394	59 304	72 011	86 704	-	-
50	22 860	29 168	36 640	45 462	55 823	67 910	81 909	-	-
55	-	27 078	34 127	42 455	52 249	63 698	76 987	-	-
60	-	-	31 561	39 377	48 588	59 381	71 944	-	-
65	-	-	-	36 235	44 845	54 965	66 784	-	-
70	-	-	-	-	41 026	50 456	61 513	-	-

Power input in W

35	12 268	12 510	12 724	12 926	13 132	13 359	13 623	-	-
40	13 432	13 707	13 943	14 156	14 362	14 578	14 819	-	-
45	14 710	15 025	15 290	15 521	15 734	15 945	16 170	-	-
50	16 114	16 477	16 778	17 034	17 260	17 473	17 690	-	-
55	-	18 076	18 420	18 707	18 954	19 177	19 392	-	-
60	-	-	20 228	20 554	20 829	21 068	21 288	-	-
65	-	-	-	22 589	22 898	23 160	23 392	-	-
70	-	-	-	-	25 173	25 466	25 718	-	-

Current consumption in A

35	25.11	25.38	25.62	25.84	26.02	26.15	26.22	-	-
40	26.37	26.67	26.95	27.20	27.40	27.55	27.64	-	-
45	27.84	28.19	28.51	28.79	29.02	29.20	29.32	-	-
50	29.53	29.93	30.30	30.63	30.90	31.12	31.28	-	-
55	-	31.92	32.35	32.72	33.05	33.32	33.52	-	-
60	-	-	34.66	35.10	35.49	35.81	36.06	-	-
65	-	-	-	37.77	38.22	38.61	38.92	-	-
70	-	-	-	-	41.27	41.72	42.10	-	-

Mass flow in kg/h

35	678	836	1 020	1 232	1 474	1 751	2 065	-	-
40	672	831	1 015	1 227	1 469	1 746	2 060	-	-
45	665	824	1 008	1 220	1 462	1 739	2 052	-	-
50	657	817	1 000	1 212	1 454	1 730	2 042	-	-
55	-	808	991	1 202	1 443	1 719	2 030	-	-
60	-	-	980	1 190	1 431	1 705	2 016	-	-
65	-	-	-	1 178	1 417	1 690	2 000	-	-
70	-	-	-	-	1 402	1 673	1 982	-	-

Coefficient of performance (C.O.P.)

35	2.27	2.81	3.44	4.18	5.02	5.98	7.04	-	-
40	1.95	2.42	2.98	3.62	4.36	5.21	6.17	-	-
45	1.67	2.08	2.56	3.12	3.77	4.52	5.36	-	-
50	1.42	1.77	2.18	2.67	3.23	3.89	4.63	-	-
55	-	1.50	1.85	2.27	2.76	3.32	3.97	-	-
60	-	-	1.56	1.92	2.33	2.82	3.38	-	-
65	-	-	-	1.60	1.96	2.37	2.85	-	-
70	-	-	-	-	1.63	1.98	2.39	-	-

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

Cooling capacity	55 823	W
Power input	17 260	W
Current consumption	30.90	A
Mass flow	1 454	kg/h
C.O.P.	3.23	

Pressure switch settings

Maximum HP switch setting	20.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	0.5	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Performance data at 50 Hz, ARI rating conditions
R134a

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

Cooling capacity in W

35	30 227	38 024	47 286	58 211	70 993	85 827	102 910	-	-
40	28 595	36 105	45 009	55 502	67 783	82 047	98 490	-	-
45	26 927	34 133	42 660	52 706	64 469	78 146	93 933	-	-
50	25 229	32 114	40 247	49 830	61 059	74 132	89 247	-	-
55	-	30 054	37 778	46 880	57 559	70 014	84 443	-	-
60	-	-	35 261	43 867	53 981	65 803	79 532	-	-
65	-	-	-	40 801	50 337	61 512	74 529	-	-
70	-	-	-	-	46 640	57 159	69 455	-	-

Power input in W

35	12 268	12 510	12 724	12 926	13 132	13 359	13 623	-	-
40	13 432	13 707	13 943	14 156	14 362	14 578	14 819	-	-
45	14 710	15 025	15 290	15 521	15 734	15 945	16 170	-	-
50	16 114	16 477	16 778	17 034	17 260	17 473	17 690	-	-
55	-	18 076	18 420	18 707	18 954	19 177	19 392	-	-
60	-	-	20 228	20 554	20 829	21 068	21 288	-	-
65	-	-	-	22 589	22 898	23 160	23 392	-	-
70	-	-	-	-	25 173	25 466	25 718	-	-

Current consumption in A

35	25.11	25.38	25.62	25.84	26.02	26.15	26.22	-	-
40	26.37	26.67	26.95	27.20	27.40	27.55	27.64	-	-
45	27.84	28.19	28.51	28.79	29.02	29.20	29.32	-	-
50	29.53	29.93	30.30	30.63	30.90	31.12	31.28	-	-
55	-	31.92	32.35	32.72	33.05	33.32	33.52	-	-
60	-	-	34.66	35.10	35.49	35.81	36.06	-	-
65	-	-	-	37.77	38.22	38.61	38.92	-	-
70	-	-	-	-	41.27	41.72	42.10	-	-

Mass flow in kg/h

35	674	832	1 015	1 225	1 466	1 741	2 053	-	-
40	669	827	1 010	1 220	1 461	1 736	2 048	-	-
45	662	820	1 003	1 214	1 455	1 729	2 041	-	-
50	654	812	995	1 205	1 446	1 720	2 031	-	-
55	-	803	986	1 196	1 436	1 709	2 019	-	-
60	-	-	975	1 184	1 424	1 696	2 005	-	-
65	-	-	-	1 172	1 410	1 681	1 989	-	-
70	-	-	-	-	1 394	1 664	1 971	-	-

Coefficient of performance (C.O.P.)

35	2.46	3.04	3.72	4.50	5.41	6.42	7.55	-	-
40	2.13	2.63	3.23	3.92	4.72	5.63	6.65	-	-
45	1.83	2.27	2.79	3.40	4.10	4.90	5.81	-	-
50	1.57	1.95	2.40	2.93	3.54	4.24	5.05	-	-
55	-	1.66	2.05	2.51	3.04	3.65	4.35	-	-
60	-	-	1.74	2.13	2.59	3.12	3.74	-	-
65	-	-	-	1.81	2.20	2.66	3.19	-	-
70	-	-	-	-	1.85	2.24	2.70	-	-

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

Cooling capacity	63 265	W
Power input	18 841	W
Current consumption	32.90	A
Mass flow	1 553	kg/h
C.O.P.	3.36	

Pressure switch settings

Maximum HP switch setting	20.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	0.5	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Performance data at 50 Hz, EN 12900 rating conditions
R134a

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

Cooling capacity in W

35	27 908	35 167	43 804	54 007	65 964	79 863	95 890	-	-
40	26 259	33 218	41 484	51 244	62 686	75 998	91 366	-	-
45	24 574	31 216	39 094	48 394	59 304	72 011	86 704	-	-
50	22 860	29 168	36 640	45 462	55 823	67 910	81 909	-	-
55	-	27 078	34 127	42 455	52 249	63 698	76 987	-	-
60	-	-	31 561	39 377	48 588	59 381	71 944	-	-
65	-	-	-	36 235	44 845	54 965	66 784	-	-
70	-	-	-	-	41 026	50 456	61 513	-	-

Power input in W

35	12 268	12 510	12 724	12 926	13 132	13 359	13 623	-	-
40	13 432	13 707	13 943	14 156	14 362	14 578	14 819	-	-
45	14 710	15 025	15 290	15 521	15 734	15 945	16 170	-	-
50	16 114	16 477	16 778	17 034	17 260	17 473	17 690	-	-
55	-	18 076	18 420	18 707	18 954	19 177	19 392	-	-
60	-	-	20 228	20 554	20 829	21 068	21 288	-	-
65	-	-	-	22 589	22 898	23 160	23 392	-	-
70	-	-	-	-	25 173	25 466	25 718	-	-

Current consumption in A

35	25.11	25.38	25.62	25.84	26.02	26.15	26.22	-	-
40	26.37	26.67	26.95	27.20	27.40	27.55	27.64	-	-
45	27.84	28.19	28.51	28.79	29.02	29.20	29.32	-	-
50	29.53	29.93	30.30	30.63	30.90	31.12	31.28	-	-
55	-	31.92	32.35	32.72	33.05	33.32	33.52	-	-
60	-	-	34.66	35.10	35.49	35.81	36.06	-	-
65	-	-	-	37.77	38.22	38.61	38.92	-	-
70	-	-	-	-	41.27	41.72	42.10	-	-

Mass flow in kg/h

35	678	836	1 020	1 232	1 474	1 751	2 065	-	-
40	672	831	1 015	1 227	1 469	1 746	2 060	-	-
45	665	824	1 008	1 220	1 462	1 739	2 052	-	-
50	657	817	1 000	1 212	1 454	1 730	2 042	-	-
55	-	808	991	1 202	1 443	1 719	2 030	-	-
60	-	-	980	1 190	1 431	1 705	2 016	-	-
65	-	-	-	1 178	1 417	1 690	2 000	-	-
70	-	-	-	-	1 402	1 673	1 982	-	-

Coefficient of performance (C.O.P.)

35	2.27	2.81	3.44	4.18	5.02	5.98	7.04	-	-
40	1.95	2.42	2.98	3.62	4.36	5.21	6.17	-	-
45	1.67	2.08	2.56	3.12	3.77	4.52	5.36	-	-
50	1.42	1.77	2.18	2.67	3.23	3.89	4.63	-	-
55	-	1.50	1.85	2.27	2.76	3.32	3.97	-	-
60	-	-	1.56	1.92	2.33	2.82	3.38	-	-
65	-	-	-	1.60	1.96	2.37	2.85	-	-
70	-	-	-	-	1.63	1.98	2.39	-	-

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

Cooling capacity	55 823	W
Power input	17 260	W
Current consumption	30.90	A
Mass flow	1 454	kg/h
C.O.P.	3.23	

Pressure switch settings

Maximum HP switch setting	20.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	0.5	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Performance data at 50 Hz, ARI rating conditions
R134a

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

Cooling capacity in W

35	30 227	38 024	47 286	58 211	70 993	85 827	102 910	-	-
40	28 595	36 105	45 009	55 502	67 783	82 047	98 490	-	-
45	26 927	34 133	42 660	52 706	64 469	78 146	93 933	-	-
50	25 229	32 114	40 247	49 830	61 059	74 132	89 247	-	-
55	-	30 054	37 778	46 880	57 559	70 014	84 443	-	-
60	-	-	35 261	43 867	53 981	65 803	79 532	-	-
65	-	-	-	40 801	50 337	61 512	74 529	-	-
70	-	-	-	-	46 640	57 159	69 455	-	-

Power input in W

35	12 268	12 510	12 724	12 926	13 132	13 359	13 623	-	-
40	13 432	13 707	13 943	14 156	14 362	14 578	14 819	-	-
45	14 710	15 025	15 290	15 521	15 734	15 945	16 170	-	-
50	16 114	16 477	16 778	17 034	17 260	17 473	17 690	-	-
55	-	18 076	18 420	18 707	18 954	19 177	19 392	-	-
60	-	-	20 228	20 554	20 829	21 068	21 288	-	-
65	-	-	-	22 589	22 898	23 160	23 392	-	-
70	-	-	-	-	25 173	25 466	25 718	-	-

Current consumption in A

35	25.11	25.38	25.62	25.84	26.02	26.15	26.22	-	-
40	26.37	26.67	26.95	27.20	27.40	27.55	27.64	-	-
45	27.84	28.19	28.51	28.79	29.02	29.20	29.32	-	-
50	29.53	29.93	30.30	30.63	30.90	31.12	31.28	-	-
55	-	31.92	32.35	32.72	33.05	33.32	33.52	-	-
60	-	-	34.66	35.10	35.49	35.81	36.06	-	-
65	-	-	-	37.77	38.22	38.61	38.92	-	-
70	-	-	-	-	41.27	41.72	42.10	-	-

Mass flow in kg/h

35	674	832	1 015	1 225	1 466	1 741	2 053	-	-
40	669	827	1 010	1 220	1 461	1 736	2 048	-	-
45	662	820	1 003	1 214	1 455	1 729	2 041	-	-
50	654	812	995	1 205	1 446	1 720	2 031	-	-
55	-	803	986	1 196	1 436	1 709	2 019	-	-
60	-	-	975	1 184	1 424	1 696	2 005	-	-
65	-	-	-	1 172	1 410	1 681	1 989	-	-
70	-	-	-	-	1 394	1 664	1 971	-	-

Coefficient of performance (C.O.P.)

35	2.46	3.04	3.72	4.50	5.41	6.42	7.55	-	-
40	2.13	2.63	3.23	3.92	4.72	5.63	6.65	-	-
45	1.83	2.27	2.79	3.40	4.10	4.90	5.81	-	-
50	1.57	1.95	2.40	2.93	3.54	4.24	5.05	-	-
55	-	1.66	2.05	2.51	3.04	3.65	4.35	-	-
60	-	-	1.74	2.13	2.59	3.12	3.74	-	-
65	-	-	-	1.81	2.20	2.66	3.19	-	-
70	-	-	-	-	1.85	2.24	2.70	-	-

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

Cooling capacity	63 265	W
Power input	18 841	W
Current consumption	32.90	A
Mass flow	1 553	kg/h
C.O.P.	3.36	

Pressure switch settings

Maximum HP switch setting	20.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	0.5	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Datasheet, performance data

Danfoss scroll compressor. SY380-4

Performance data at 50 Hz, EN 12900 rating conditions

R407C

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

Cooling capacity in W

30	35 242	44 275	55 011	67 668	82 459	99 601	119 308	141 797	-
35	33 285	42 021	52 363	64 527	78 729	95 184	114 107	135 714	-
40	31 207	39 605	49 512	61 143	74 715	90 442	108 540	129 224	-
45	29 019	37 039	46 470	57 528	70 429	85 388	102 620	122 341	-
50	-	34 335	43 250	53 694	65 883	80 033	96 359	115 076	-
55	-	31 506	39 864	49 653	61 090	74 390	89 769	107 441	-
60	-	-	36 324	45 418	56 062	68 472	82 863	99 449	-
65	-	-	-	-	50 812	62 291	75 653	91 113	-

Power input in W

30	15 293	15 644	15 958	16 258	16 566	16 903	17 291	17 753	-
35	16 920	17 309	17 648	17 958	18 261	18 580	18 937	19 352	-
40	18 721	19 158	19 531	19 862	20 172	20 483	20 818	21 197	-
45	20 719	21 216	21 634	21 995	22 322	22 636	22 959	23 312	-
50	-	23 505	23 979	24 381	24 735	25 062	25 384	25 723	-
55	-	26 052	26 591	27 045	27 437	27 787	28 118	28 452	-
60	-	-	29 495	30 011	30 450	30 834	31 185	31 525	-
65	-	-	-	-	33 801	34 229	34 610	34 965	-

Current consumption in A

30	29.28	29.58	29.99	30.48	31.05	31.67	32.32	32.98	-
35	31.22	31.57	32.00	32.48	33.01	33.55	34.09	34.60	-
40	33.40	33.83	34.30	34.80	35.31	35.80	36.25	36.65	-
45	35.87	36.41	36.96	37.49	38.00	38.47	38.86	39.17	-
50	-	39.35	40.00	40.60	41.15	41.61	41.97	42.22	-
55	-	42.72	43.49	44.18	44.79	45.27	45.63	45.83	-
60	-	-	47.47	48.28	48.97	49.51	49.88	50.07	-
65	-	-	-	-	53.74	54.36	54.78	54.99	-

Mass flow in kg/h

30	742	918	1 122	1 358	1 629	1 939	2 292	2 692	-
35	735	912	1 118	1 354	1 626	1 937	2 290	2 689	-
40	726	904	1 110	1 347	1 619	1 929	2 282	2 681	-
45	713	892	1 099	1 336	1 607	1 917	2 269	2 666	-
50	-	878	1 084	1 320	1 591	1 899	2 250	2 646	-
55	-	860	1 065	1 300	1 570	1 877	2 225	2 619	-
60	-	-	1 042	1 276	1 544	1 849	2 195	2 586	-
65	-	-	-	-	1 513	1 816	2 159	2 547	-

Coefficient of performance (C.O.P.)

30	2.30	2.83	3.45	4.16	4.98	5.89	6.90	7.99	-
35	1.97	2.43	2.97	3.59	4.31	5.12	6.03	7.01	-
40	1.67	2.07	2.53	3.08	3.70	4.42	5.21	6.10	-
45	1.40	1.75	2.15	2.62	3.16	3.77	4.47	5.25	-
50	-	1.46	1.80	2.20	2.66	3.19	3.80	4.47	-
55	-	1.21	1.50	1.84	2.23	2.68	3.19	3.78	-
60	-	-	1.23	1.51	1.84	2.22	2.66	3.15	-
65	-	-	-	-	1.50	1.82	2.19	2.61	-

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

Cooling capacity	80 033	W
Power input	25 062	W
Current consumption	41.61	A
Mass flow	1 899	kg/h
C.O.P.	3.19	

Pressure switch settings

Maximum HP switch setting	29.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Datasheet, performance data

Danfoss scroll compressor. SY380-4

Performance data at 50 Hz, ARI rating conditions

R407C

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

Cooling capacity in W

30	37 798	47 431	58 867	72 333	88 054	106 253	127 156	150 985	-
35	35 874	45 230	56 292	69 287	84 441	101 978	122 125	145 104	-
40	33 823	42 862	53 510	65 994	80 540	97 376	116 727	138 818	-
45	31 659	40 341	50 534	62 466	76 366	92 461	110 978	132 143	-
50	-	37 679	47 377	58 718	71 932	87 248	104 893	125 096	-
55	-	34 891	44 055	54 766	67 256	81 755	98 492	117 697	-
60	-	-	40 584	50 627	62 356	76 003	91 799	109 975	-
65	-	-	-	-	57 260	70 024	84 849	101 970	-

Power input in W

30	15 293	15 644	15 958	16 258	16 566	16 903	17 291	17 753	-
35	16 920	17 309	17 648	17 958	18 261	18 580	18 937	19 352	-
40	18 721	19 158	19 531	19 862	20 172	20 483	20 818	21 197	-
45	20 719	21 216	21 634	21 995	22 322	22 636	22 959	23 312	-
50	-	23 505	23 979	24 381	24 735	25 062	25 384	25 723	-
55	-	26 052	26 591	27 045	27 437	27 787	28 118	28 452	-
60	-	-	29 495	30 011	30 450	30 834	31 185	31 525	-
65	-	-	-	-	33 801	34 229	34 610	34 965	-

Current consumption in A

30	29.28	29.58	29.99	30.48	31.05	31.67	32.32	32.98	-
35	31.22	31.57	32.00	32.48	33.01	33.55	34.09	34.60	-
40	33.40	33.83	34.30	34.80	35.31	35.80	36.25	36.65	-
45	35.87	36.41	36.96	37.49	38.00	38.47	38.86	39.17	-
50	-	39.35	40.00	40.60	41.15	41.61	41.97	42.22	-
55	-	42.72	43.49	44.18	44.79	45.27	45.63	45.83	-
60	-	-	47.47	48.28	48.97	49.51	49.88	50.07	-
65	-	-	-	-	53.74	54.36	54.78	54.99	-

Mass flow in kg/h

30	738	913	1 116	1 350	1 620	1 928	2 279	2 675	-
35	731	908	1 112	1 347	1 617	1 926	2 276	2 673	-
40	722	899	1 104	1 340	1 610	1 918	2 269	2 664	-
45	710	888	1 093	1 328	1 598	1 906	2 255	2 650	-
50	-	873	1 078	1 313	1 582	1 888	2 237	2 630	-
55	-	855	1 059	1 293	1 561	1 866	2 212	2 603	-
60	-	-	1 037	1 269	1 535	1 838	2 182	2 570	-
65	-	-	-	-	1 505	1 805	2 146	2 532	-

Coefficient of performance (C.O.P.)

30	2.47	3.03	3.69	4.45	5.32	6.29	7.35	8.50	-
35	2.12	2.61	3.19	3.86	4.62	5.49	6.45	7.50	-
40	1.81	2.24	2.74	3.32	3.99	4.75	5.61	6.55	-
45	1.53	1.90	2.34	2.84	3.42	4.08	4.83	5.67	-
50	-	1.60	1.98	2.41	2.91	3.48	4.13	4.86	-
55	-	1.34	1.66	2.02	2.45	2.94	3.50	4.14	-
60	-	-	1.38	1.69	2.05	2.46	2.94	3.49	-
65	-	-	-	-	1.69	2.05	2.45	2.92	-

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

Cooling capacity	89 551	W
Power input	27 589	W
Current consumption	44.98	A
Mass flow	2 016	kg/h
C.O.P.	3.25	

Pressure switch settings

Maximum HP switch setting	29.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Performance data at 60 Hz, EN 12900 rating conditions
R22

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

Cooling capacity in W

30	48 636	59 914	73 098	88 405	106 052	126 256	149 236	175 209	-
35	46 008	56 994	69 796	84 631	101 715	121 265	143 498	168 632	-
40	43 261	53 912	66 290	80 610	97 088	115 940	137 382	161 632	-
45	-	50 693	62 603	76 365	92 194	110 304	130 912	154 233	-
50	-	-	58 760	71 920	87 054	104 379	124 107	146 455	-
55	-	-	-	67 295	81 692	98 185	116 987	138 315	-
60	-	-	-	-	76 124	91 740	109 570	129 829	-
65	-	-	-	-	-	85 059	101 867	121 006	-

Power input in W

30	18 808	19 184	19 657	20 198	20 776	21 361	21 926	22 438	-
35	20 864	21 182	21 625	22 164	22 769	23 410	24 058	24 683	-
40	23 204	23 429	23 807	24 310	24 907	25 569	26 265	26 967	-
45	-	26 000	26 279	26 710	27 264	27 912	28 622	29 367	-
50	-	-	29 115	29 440	29 916	30 514	31 204	31 956	-
55	-	-	-	32 575	32 938	33 452	34 086	34 811	-
60	-	-	-	-	36 406	36 800	37 344	38 006	-
65	-	-	-	-	-	40 634	41 052	41 617	-

Current consumption in A

30	24.90	26.72	28.39	29.83	30.98	31.77	32.12	31.96	-
35	28.71	29.97	31.23	32.40	33.42	34.21	34.70	34.83	-
40	32.79	33.49	34.32	35.20	36.07	36.85	37.47	37.87	-
45	-	37.36	37.75	38.32	39.03	39.78	40.52	41.16	-
50	-	-	41.59	41.85	42.37	43.08	43.91	44.79	-
55	-	-	-	45.87	46.19	46.84	47.75	48.85	-
60	-	-	-	-	50.57	51.15	52.13	53.43	-
65	-	-	-	-	-	56.09	57.11	58.60	-

Mass flow in kg/h

30	1 040	1 269	1 531	1 829	2 168	2 551	2 982	3 466	-
35	1 024	1 255	1 518	1 817	2 157	2 541	2 974	3 459	-
40	1 005	1 236	1 500	1 801	2 141	2 526	2 958	3 443	-
45	-	1 215	1 479	1 779	2 120	2 504	2 937	3 421	-
50	-	-	1 453	1 753	2 093	2 476	2 908	3 391	-
55	-	-	-	1 722	2 061	2 443	2 872	3 354	-
60	-	-	-	-	2 023	2 403	2 830	3 309	-
65	-	-	-	-	-	2 356	2 781	3 257	-

Coefficient of performance (C.O.P.)

30	2.59	3.12	3.72	4.38	5.10	5.91	6.81	7.81	-
35	2.21	2.69	3.23	3.82	4.47	5.18	5.96	6.83	-
40	1.86	2.30	2.78	3.32	3.90	4.53	5.23	5.99	-
45	-	1.95	2.38	2.86	3.38	3.95	4.57	5.25	-
50	-	-	2.02	2.44	2.91	3.42	3.98	4.58	-
55	-	-	-	2.07	2.48	2.94	3.43	3.97	-
60	-	-	-	-	2.09	2.49	2.93	3.42	-
65	-	-	-	-	-	2.09	2.48	2.91	-

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

Cooling capacity	104 379	W
Power input	30 514	W
Current consumption	43.08	A
Mass flow	2 476	kg/h
C.O.P.	3.42	

Pressure switch settings

Maximum HP switch setting	28	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	92	dB(A)
With acoustic hood	85	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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Datasheet, performance data

Danfoss scroll compressor. SY380-4

Performance data at 60 Hz, ARI rating conditions

R22

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

Cooling capacity in W

30	51 613	63 531	77 453	93 603	112 208	133 494	157 687	185 013	-
35	48 995	60 642	74 202	89 902	107 967	128 624	152 098	178 616	-
40	46 251	57 584	70 741	85 948	103 430	123 414	146 126	171 792	-
45	-	54 384	67 094	81 765	98 621	117 890	139 797	164 569	-
50	-	-	63 286	77 377	93 565	112 076	133 135	156 970	-
55	-	-	-	72 811	88 287	105 997	126 165	149 019	-
60	-	-	-	-	82 812	99 677	118 912	140 743	-
65	-	-	-	-	-	93 142	111 400	132 165	-

Power input in W

30	18 808	19 184	19 657	20 198	20 776	21 361	21 926	22 438	-
35	20 864	21 182	21 625	22 164	22 769	23 410	24 058	24 683	-
40	23 204	23 429	23 807	24 310	24 907	25 569	26 265	26 967	-
45	-	26 000	26 279	26 710	27 264	27 912	28 622	29 367	-
50	-	-	29 115	29 440	29 916	30 514	31 204	31 956	-
55	-	-	-	32 575	32 938	33 452	34 086	34 811	-
60	-	-	-	-	36 406	36 800	37 344	38 006	-
65	-	-	-	-	-	40 634	41 052	41 617	-

Current consumption in A

30	24.90	26.72	28.39	29.83	30.98	31.77	32.12	31.96	-
35	28.71	29.97	31.23	32.40	33.42	34.21	34.70	34.83	-
40	32.79	33.49	34.32	35.20	36.07	36.85	37.47	37.87	-
45	-	37.36	37.75	38.32	39.03	39.78	40.52	41.16	-
50	-	-	41.59	41.85	42.37	43.08	43.91	44.79	-
55	-	-	-	45.87	46.19	46.84	47.75	48.85	-
60	-	-	-	-	50.57	51.15	52.13	53.43	-
65	-	-	-	-	-	56.09	57.11	58.60	-

Mass flow in kg/h

30	1 035	1 263	1 523	1 819	2 156	2 537	2 966	3 446	-
35	1 019	1 248	1 510	1 808	2 145	2 527	2 957	3 439	-
40	1 000	1 230	1 493	1 791	2 130	2 512	2 942	3 424	-
45	-	1 208	1 471	1 770	2 108	2 490	2 920	3 401	-
50	-	-	1 446	1 744	2 082	2 463	2 891	3 371	-
55	-	-	-	1 713	2 049	2 429	2 856	3 334	-
60	-	-	-	-	2 012	2 389	2 814	3 290	-
65	-	-	-	-	-	2 343	2 765	3 238	-

Coefficient of performance (C.O.P.)

30	2.74	3.31	3.94	4.63	5.40	6.25	7.19	8.25	-
35	2.35	2.86	3.43	4.06	4.74	5.49	6.32	7.24	-
40	1.99	2.46	2.97	3.54	4.15	4.83	5.56	6.37	-
45	-	2.09	2.55	3.06	3.62	4.22	4.88	5.60	-
50	-	-	2.17	2.63	3.13	3.67	4.27	4.91	-
55	-	-	-	2.24	2.68	3.17	3.70	4.28	-
60	-	-	-	-	2.27	2.71	3.18	3.70	-
65	-	-	-	-	-	2.29	2.71	3.18	-

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

Cooling capacity	115 344	W
Power input	33 350	W
Current consumption	46.74	A
Mass flow	2 615	kg/h
C.O.P.	3.46	

Pressure switch settings

Maximum HP switch setting	28	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	92	dB(A)
With accoustic hood	85	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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Datasheet, performance data

Danfoss scroll compressor. SY380-4

Performance data at 60 Hz, EN 12900 rating conditions

R407C

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

Cooling capacity in W

30	42 147	52 968	65 830	81 002	98 755	119 359	143 087	170 210	-
35	39 825	50 249	62 607	77 167	94 199	113 973	136 759	162 828	-
40	37 372	47 355	59 165	73 069	89 335	108 233	130 031	155 001	-
45	34 812	44 310	55 527	68 730	84 186	102 162	122 926	146 747	-
50	-	41 135	51 716	64 173	78 772	95 779	115 462	138 086	-
55	-	37 853	47 751	59 417	73 113	89 103	107 654	129 031	-
60	-	-	43 650	54 477	67 221	82 145	99 512	119 587	-
65	-	-	-	-	61 103	74 907	91 033	109 745	-

Power input in W

30	18 661	19 105	19 566	20 041	20 523	21 008	21 492	21 969	-
35	20 696	21 161	21 651	22 159	22 681	23 213	23 749	24 285	-
40	22 948	23 426	23 934	24 468	25 021	25 590	26 170	26 755	-
45	25 471	25 953	26 471	27 020	27 596	28 193	28 807	29 433	-
50	-	28 794	29 313	29 870	30 459	31 075	31 715	32 373	-
55	-	32 005	32 516	33 070	33 663	34 291	34 947	35 627	-
60	-	-	36 131	36 675	37 263	37 892	38 556	39 250	-
65	-	-	-	-	41 312	41 933	42 596	43 295	-

Current consumption in A

30	28.66	29.14	29.63	30.12	30.64	31.18	31.76	32.39	-
35	31.06	31.61	32.16	32.71	33.27	33.86	34.47	35.13	-
40	33.65	34.27	34.88	35.49	36.10	36.73	37.38	38.07	-
45	36.53	37.21	37.88	38.54	39.21	39.88	40.57	41.29	-
50	-	40.53	41.26	41.97	42.68	43.40	44.13	44.88	-
55	-	44.30	45.09	45.86	46.62	47.38	48.15	48.93	-
60	-	-	49.48	50.30	51.11	51.91	52.72	53.53	-
65	-	-	-	-	56.24	57.08	57.93	58.77	-

Mass flow in kg/h

30	887	1 098	1 342	1 625	1 951	2 324	2 749	3 231	-
35	879	1 091	1 336	1 620	1 946	2 319	2 745	3 226	-
40	869	1 081	1 326	1 610	1 936	2 309	2 734	3 216	-
45	856	1 068	1 313	1 596	1 922	2 294	2 718	3 198	-
50	-	1 052	1 296	1 578	1 903	2 274	2 696	3 174	-
55	-	1 033	1 276	1 557	1 879	2 248	2 668	3 144	-
60	-	-	1 253	1 531	1 851	2 218	2 635	3 108	-
65	-	-	-	-	1 819	2 182	2 597	3 066	-

Coefficient of performance (C.O.P.)

30	2.26	2.77	3.36	4.04	4.81	5.68	6.66	7.75	-
35	1.92	2.37	2.89	3.48	4.15	4.91	5.76	6.70	-
40	1.63	2.02	2.47	2.99	3.57	4.23	4.97	5.79	-
45	1.37	1.71	2.10	2.54	3.05	3.62	4.27	4.99	-
50	-	1.43	1.76	2.15	2.59	3.08	3.64	4.27	-
55	-	1.18	1.47	1.80	2.17	2.60	3.08	3.62	-
60	-	-	1.21	1.49	1.80	2.17	2.58	3.05	-
65	-	-	-	-	1.48	1.79	2.14	2.53	-

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

Cooling capacity	95 779	W
Power input	31 075	W
Current consumption	43.40	A
Mass flow	2 274	kg/h
C.O.P.	3.08	

Pressure switch settings

Maximum HP switch setting	29.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Datasheet, performance data

Danfoss scroll compressor. SY380-4

Performance data at 60 Hz, ARI rating conditions

R407C

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

Cooling capacity in W

30	45 204	56 744	70 444	86 587	105 455	127 332	152 499	181 240	-
35	42 922	54 086	67 304	82 859	101 033	122 108	146 368	174 095	-
40	40 505	51 250	63 943	78 865	96 300	116 531	139 839	166 508	-
45	37 978	48 260	60 383	74 630	91 283	110 624	132 937	158 505	-
50	-	45 142	56 652	70 178	86 005	104 414	125 688	150 110	-
55	-	41 919	52 772	65 535	80 492	97 924	118 115	141 348	-
60	-	-	48 769	60 725	74 767	91 180	110 244	132 244	-
65	-	-	-	-	68 857	84 205	102 100	122 822	-

Power input in W

30	18 661	19 105	19 566	20 041	20 523	21 008	21 492	21 969	-
35	20 696	21 161	21 651	22 159	22 681	23 213	23 749	24 285	-
40	22 948	23 426	23 934	24 468	25 021	25 590	26 170	26 755	-
45	25 471	25 953	26 471	27 020	27 596	28 193	28 807	29 433	-
50	-	28 794	29 313	29 870	30 459	31 075	31 715	32 373	-
55	-	32 005	32 516	33 070	33 663	34 291	34 947	35 627	-
60	-	-	36 131	36 675	37 263	37 892	38 556	39 250	-
65	-	-	-	-	41 312	41 933	42 596	43 295	-

Current consumption in A

30	28.66	29.14	29.63	30.12	30.64	31.18	31.76	32.39	-
35	31.06	31.61	32.16	32.71	33.27	33.86	34.47	35.13	-
40	33.65	34.27	34.88	35.49	36.10	36.73	37.38	38.07	-
45	36.53	37.21	37.88	38.54	39.21	39.88	40.57	41.29	-
50	-	40.53	41.26	41.97	42.68	43.40	44.13	44.88	-
55	-	44.30	45.09	45.86	46.62	47.38	48.15	48.93	-
60	-	-	49.48	50.30	51.11	51.91	52.72	53.53	-
65	-	-	-	-	56.24	57.08	57.93	58.77	-

Mass flow in kg/h

30	883	1 092	1 335	1 616	1 940	2 311	2 733	3 211	-
35	875	1 085	1 329	1 611	1 935	2 306	2 729	3 207	-
40	864	1 075	1 319	1 601	1 925	2 296	2 718	3 196	-
45	851	1 062	1 306	1 587	1 911	2 281	2 702	3 179	-
50	-	1 046	1 289	1 570	1 892	2 261	2 680	3 155	-
55	-	1 028	1 269	1 548	1 869	2 235	2 653	3 125	-
60	-	-	1 246	1 523	1 841	2 205	2 620	3 089	-
65	-	-	-	-	1 809	2 170	2 581	3 048	-

Coefficient of performance (C.O.P.)

30	2.42	2.97	3.60	4.32	5.14	6.06	7.10	8.25	-
35	2.07	2.56	3.11	3.74	4.45	5.26	6.16	7.17	-
40	1.77	2.19	2.67	3.22	3.85	4.55	5.34	6.22	-
45	1.49	1.86	2.28	2.76	3.31	3.92	4.61	5.39	-
50	-	1.57	1.93	2.35	2.82	3.36	3.96	4.64	-
55	-	1.31	1.62	1.98	2.39	2.86	3.38	3.97	-
60	-	-	1.35	1.66	2.01	2.41	2.86	3.37	-
65	-	-	-	-	1.67	2.01	2.40	2.84	-

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

Cooling capacity	107 301	W
Power input	34 170	W
Current consumption	47.21	A
Mass flow	2 416	kg/h
C.O.P.	3.14	

Pressure switch settings

Maximum HP switch setting	29.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Datasheet, performance data

Danfoss scroll compressor. SY380-4

Performance data at 60 Hz, EN 12900 rating conditions

R134a

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

Cooling capacity in W

35	33 436	42 049	52 332	64 517	78 832	95 510	114 783	-	-
40	31 474	39 711	49 544	61 204	74 919	90 922	109 442	-	-
45	29 487	37 327	46 689	57 803	70 897	86 202	103 948	-	-
50	27 483	34 904	43 774	54 320	66 771	81 356	98 304	-	-
55	-	32 450	40 806	50 763	62 548	76 389	92 515	-	-
60	-	-	37 790	47 135	58 230	71 303	86 582	-	-
65	-	-	-	43 438	53 820	66 099	80 503	-	-
70	-	-	-	-	49 315	60 772	74 271	-	-

Power input in W

35	15 204	15 650	16 000	16 285	16 536	16 782	17 054	-	-
40	16 558	17 059	17 444	17 742	17 984	18 200	18 421	-	-
45	18 045	18 610	19 037	19 357	19 599	19 795	19 974	-	-
50	19 677	20 315	20 793	21 143	21 395	21 578	21 724	-	-
55	-	22 185	22 724	23 113	23 382	23 562	23 683	-	-
60	-	-	24 842	25 279	25 574	25 759	25 864	-	-
65	-	-	-	27 652	27 983	28 182	28 280	-	-
70	-	-	-	-	30 621	30 843	30 942	-	-

Current consumption in A

35	24.29	24.83	25.21	25.50	25.77	26.09	26.54	-	-
40	25.75	26.36	26.77	27.06	27.30	27.57	27.92	-	-
45	27.40	28.10	28.57	28.89	29.12	29.35	29.64	-	-
50	29.26	30.07	30.62	30.98	31.23	31.44	31.68	-	-
55	-	32.25	32.90	33.33	33.62	33.83	34.05	-	-
60	-	-	35.43	35.95	36.30	36.54	36.75	-	-
65	-	-	-	38.84	39.27	39.56	39.79	-	-
70	-	-	-	-	42.53	42.89	43.16	-	-

Mass flow in kg/h

35	812	1 000	1 218	1 471	1 762	2 094	2 471	-	-
40	805	993	1 212	1 465	1 756	2 089	2 467	-	-
45	798	986	1 204	1 457	1 748	2 081	2 460	-	-
50	790	977	1 195	1 448	1 739	2 072	2 451	-	-
55	-	968	1 185	1 437	1 728	2 061	2 440	-	-
60	-	-	1 174	1 425	1 715	2 047	2 426	-	-
65	-	-	-	1 411	1 701	2 032	2 410	-	-
70	-	-	-	-	1 685	2 015	2 393	-	-

Coefficient of performance (C.O.P.)

35	2.20	2.69	3.27	3.96	4.77	5.69	6.73	-	-
40	1.90	2.33	2.84	3.45	4.17	5.00	5.94	-	-
45	1.63	2.01	2.45	2.99	3.62	4.35	5.20	-	-
50	1.40	1.72	2.11	2.57	3.12	3.77	4.53	-	-
55	-	1.46	1.80	2.20	2.68	3.24	3.91	-	-
60	-	-	1.52	1.86	2.28	2.77	3.35	-	-
65	-	-	-	1.57	1.92	2.35	2.85	-	-
70	-	-	-	-	1.61	1.97	2.40	-	-

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

Cooling capacity	66 771	W
Power input	21 395	W
Current consumption	31.23	A
Mass flow	1 739	kg/h
C.O.P.	3.12	

Pressure switch settings

Maximum HP switch setting	20.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	0.5	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Performance data at 60 Hz, ARI rating conditions
R134a

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

Cooling capacity in W

35	36 214	45 465	56 493	69 538	84 841	102 643	123 186	-	-
40	34 275	43 163	53 754	66 290	81 011	98 159	117 975	-	-
45	32 311	40 814	50 948	62 954	77 072	93 545	112 614	-	-
50	30 332	38 429	48 084	59 539	73 034	88 810	107 110	-	-
55	-	36 016	45 172	56 054	68 904	83 964	101 474	-	-
60	-	-	42 220	52 509	64 693	79 015	95 713	-	-
65	-	-	-	48 913	60 410	73 972	89 839	-	-
70	-	-	-	-	56 064	68 845	83 859	-	-

Power input in W

35	15 204	15 650	16 000	16 285	16 536	16 782	17 054	-	-
40	16 558	17 059	17 444	17 742	17 984	18 200	18 421	-	-
45	18 045	18 610	19 037	19 357	19 599	19 795	19 974	-	-
50	19 677	20 315	20 793	21 143	21 395	21 578	21 724	-	-
55	-	22 185	22 724	23 113	23 382	23 562	23 683	-	-
60	-	-	24 842	25 279	25 574	25 759	25 864	-	-
65	-	-	-	27 652	27 983	28 182	28 280	-	-
70	-	-	-	-	30 621	30 843	30 942	-	-

Current consumption in A

35	24.29	24.83	25.21	25.50	25.77	26.09	26.54	-	-
40	25.75	26.36	26.77	27.06	27.30	27.57	27.92	-	-
45	27.40	28.10	28.57	28.89	29.12	29.35	29.64	-	-
50	29.26	30.07	30.62	30.98	31.23	31.44	31.68	-	-
55	-	32.25	32.90	33.33	33.62	33.83	34.05	-	-
60	-	-	35.43	35.95	36.30	36.54	36.75	-	-
65	-	-	-	38.84	39.27	39.56	39.79	-	-
70	-	-	-	-	42.53	42.89	43.16	-	-

Mass flow in kg/h

35	808	995	1 212	1 463	1 752	2 083	2 458	-	-
40	801	988	1 206	1 457	1 747	2 077	2 453	-	-
45	794	981	1 198	1 449	1 739	2 070	2 447	-	-
50	786	972	1 189	1 440	1 730	2 061	2 437	-	-
55	-	963	1 179	1 430	1 719	2 050	2 426	-	-
60	-	-	1 168	1 417	1 706	2 036	2 413	-	-
65	-	-	-	1 404	1 692	2 021	2 397	-	-
70	-	-	-	-	1 676	2 005	2 379	-	-

Coefficient of performance (C.O.P.)

35	2.38	2.91	3.53	4.27	5.13	6.12	7.22	-	-
40	2.07	2.53	3.08	3.74	4.50	5.39	6.40	-	-
45	1.79	2.19	2.68	3.25	3.93	4.73	5.64	-	-
50	1.54	1.89	2.31	2.82	3.41	4.12	4.93	-	-
55	-	1.62	1.99	2.43	2.95	3.56	4.28	-	-
60	-	-	1.70	2.08	2.53	3.07	3.70	-	-
65	-	-	-	1.77	2.16	2.62	3.18	-	-
70	-	-	-	-	1.83	2.23	2.71	-	-

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

Cooling capacity	75 781	W
Power input	23 221	W
Current consumption	33.41	A
Mass flow	1 860	kg/h
C.O.P.	3.26	

Pressure switch settings

Maximum HP switch setting	20.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	0.5	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Datasheet, performance data

Danfoss scroll compressor. SY380-4

Performance data at 60 Hz, EN 12900 rating conditions

R134a

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

Cooling capacity in W

35	33 436	42 049	52 332	64 517	78 832	95 510	114 783	-	-
40	31 474	39 711	49 544	61 204	74 919	90 922	109 442	-	-
45	29 487	37 327	46 689	57 803	70 897	86 202	103 948	-	-
50	27 483	34 904	43 774	54 320	66 771	81 356	98 304	-	-
55	-	32 450	40 806	50 763	62 548	76 389	92 515	-	-
60	-	-	37 790	47 135	58 230	71 303	86 582	-	-
65	-	-	-	43 438	53 820	66 099	80 503	-	-
70	-	-	-	-	49 315	60 772	74 271	-	-

Power input in W

35	15 204	15 650	16 000	16 285	16 536	16 782	17 054	-	-
40	16 558	17 059	17 444	17 742	17 984	18 200	18 421	-	-
45	18 045	18 610	19 037	19 357	19 599	19 795	19 974	-	-
50	19 677	20 315	20 793	21 143	21 395	21 578	21 724	-	-
55	-	22 185	22 724	23 113	23 382	23 562	23 683	-	-
60	-	-	24 842	25 279	25 574	25 759	25 864	-	-
65	-	-	-	27 652	27 983	28 182	28 280	-	-
70	-	-	-	-	30 621	30 843	30 942	-	-

Current consumption in A

35	24.29	24.83	25.21	25.50	25.77	26.09	26.54	-	-
40	25.75	26.36	26.77	27.06	27.30	27.57	27.92	-	-
45	27.40	28.10	28.57	28.89	29.12	29.35	29.64	-	-
50	29.26	30.07	30.62	30.98	31.23	31.44	31.68	-	-
55	-	32.25	32.90	33.33	33.62	33.83	34.05	-	-
60	-	-	35.43	35.95	36.30	36.54	36.75	-	-
65	-	-	-	38.84	39.27	39.56	39.79	-	-
70	-	-	-	-	42.53	42.89	43.16	-	-

Mass flow in kg/h

35	812	1 000	1 218	1 471	1 762	2 094	2 471	-	-
40	805	993	1 212	1 465	1 756	2 089	2 467	-	-
45	798	986	1 204	1 457	1 748	2 081	2 460	-	-
50	790	977	1 195	1 448	1 739	2 072	2 451	-	-
55	-	968	1 185	1 437	1 728	2 061	2 440	-	-
60	-	-	1 174	1 425	1 715	2 047	2 426	-	-
65	-	-	-	1 411	1 701	2 032	2 410	-	-
70	-	-	-	-	1 685	2 015	2 393	-	-

Coefficient of performance (C.O.P.)

35	2.20	2.69	3.27	3.96	4.77	5.69	6.73	-	-
40	1.90	2.33	2.84	3.45	4.17	5.00	5.94	-	-
45	1.63	2.01	2.45	2.99	3.62	4.35	5.20	-	-
50	1.40	1.72	2.11	2.57	3.12	3.77	4.53	-	-
55	-	1.46	1.80	2.20	2.68	3.24	3.91	-	-
60	-	-	1.52	1.86	2.28	2.77	3.35	-	-
65	-	-	-	1.57	1.92	2.35	2.85	-	-
70	-	-	-	-	1.61	1.97	2.40	-	-

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

Cooling capacity	66 771	W
Power input	21 395	W
Current consumption	31.23	A
Mass flow	1 739	kg/h
C.O.P.	3.12	

Pressure switch settings

Maximum HP switch setting	20.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	0.5	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Performance data at 60 Hz, ARI rating conditions
R134a

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

Cooling capacity in W

35	36 214	45 465	56 493	69 538	84 841	102 643	123 186	-	-
40	34 275	43 163	53 754	66 290	81 011	98 159	117 975	-	-
45	32 311	40 814	50 948	62 954	77 072	93 545	112 614	-	-
50	30 332	38 429	48 084	59 539	73 034	88 810	107 110	-	-
55	-	36 016	45 172	56 054	68 904	83 964	101 474	-	-
60	-	-	42 220	52 509	64 693	79 015	95 713	-	-
65	-	-	-	48 913	60 410	73 972	89 839	-	-
70	-	-	-	-	56 064	68 845	83 859	-	-

Power input in W

35	15 204	15 650	16 000	16 285	16 536	16 782	17 054	-	-
40	16 558	17 059	17 444	17 742	17 984	18 200	18 421	-	-
45	18 045	18 610	19 037	19 357	19 599	19 795	19 974	-	-
50	19 677	20 315	20 793	21 143	21 395	21 578	21 724	-	-
55	-	22 185	22 724	23 113	23 382	23 562	23 683	-	-
60	-	-	24 842	25 279	25 574	25 759	25 864	-	-
65	-	-	-	27 652	27 983	28 182	28 280	-	-
70	-	-	-	-	30 621	30 843	30 942	-	-

Current consumption in A

35	24.29	24.83	25.21	25.50	25.77	26.09	26.54	-	-
40	25.75	26.36	26.77	27.06	27.30	27.57	27.92	-	-
45	27.40	28.10	28.57	28.89	29.12	29.35	29.64	-	-
50	29.26	30.07	30.62	30.98	31.23	31.44	31.68	-	-
55	-	32.25	32.90	33.33	33.62	33.83	34.05	-	-
60	-	-	35.43	35.95	36.30	36.54	36.75	-	-
65	-	-	-	38.84	39.27	39.56	39.79	-	-
70	-	-	-	-	42.53	42.89	43.16	-	-

Mass flow in kg/h

35	808	995	1 212	1 463	1 752	2 083	2 458	-	-
40	801	988	1 206	1 457	1 747	2 077	2 453	-	-
45	794	981	1 198	1 449	1 739	2 070	2 447	-	-
50	786	972	1 189	1 440	1 730	2 061	2 437	-	-
55	-	963	1 179	1 430	1 719	2 050	2 426	-	-
60	-	-	1 168	1 417	1 706	2 036	2 413	-	-
65	-	-	-	1 404	1 692	2 021	2 397	-	-
70	-	-	-	-	1 676	2 005	2 379	-	-

Coefficient of performance (C.O.P.)

35	2.38	2.91	3.53	4.27	5.13	6.12	7.22	-	-
40	2.07	2.53	3.08	3.74	4.50	5.39	6.40	-	-
45	1.79	2.19	2.68	3.25	3.93	4.73	5.64	-	-
50	1.54	1.89	2.31	2.82	3.41	4.12	4.93	-	-
55	-	1.62	1.99	2.43	2.95	3.56	4.28	-	-
60	-	-	1.70	2.08	2.53	3.07	3.70	-	-
65	-	-	-	1.77	2.16	2.62	3.18	-	-
70	-	-	-	-	1.83	2.23	2.71	-	-

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

Cooling capacity	75 781	W
Power input	23 221	W
Current consumption	33.41	A
Mass flow	1 860	kg/h
C.O.P.	3.26	

Pressure switch settings

Maximum HP switch setting	20.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	0.5	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Datasheet, performance data

Danfoss scroll compressor. SY380-4

Performance data at 60 Hz, EN 12900 rating conditions

R407C

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

Cooling capacity in W

30	42 147	52 968	65 830	81 002	98 755	119 359	143 087	170 210	-
35	39 825	50 249	62 607	77 167	94 199	113 973	136 759	162 828	-
40	37 372	47 355	59 165	73 069	89 335	108 233	130 031	155 001	-
45	34 812	44 310	55 527	68 730	84 186	102 162	122 926	146 747	-
50	-	41 135	51 716	64 173	78 772	95 779	115 462	138 086	-
55	-	37 853	47 751	59 417	73 113	89 103	107 654	129 031	-
60	-	-	43 650	54 477	67 221	82 145	99 512	119 587	-
65	-	-	-	-	61 103	74 907	91 033	109 745	-

Power input in W

30	18 661	19 105	19 566	20 041	20 523	21 008	21 492	21 969	-
35	20 696	21 161	21 651	22 159	22 681	23 213	23 749	24 285	-
40	22 948	23 426	23 934	24 468	25 021	25 590	26 170	26 755	-
45	25 471	25 953	26 471	27 020	27 596	28 193	28 807	29 433	-
50	-	28 794	29 313	29 870	30 459	31 075	31 715	32 373	-
55	-	32 005	32 516	33 070	33 663	34 291	34 947	35 627	-
60	-	-	36 131	36 675	37 263	37 892	38 556	39 250	-
65	-	-	-	-	41 312	41 933	42 596	43 295	-

Current consumption in A

30	28.66	29.14	29.63	30.12	30.64	31.18	31.76	32.39	-
35	31.06	31.61	32.16	32.71	33.27	33.86	34.47	35.13	-
40	33.65	34.27	34.88	35.49	36.10	36.73	37.38	38.07	-
45	36.53	37.21	37.88	38.54	39.21	39.88	40.57	41.29	-
50	-	40.53	41.26	41.97	42.68	43.40	44.13	44.88	-
55	-	44.30	45.09	45.86	46.62	47.38	48.15	48.93	-
60	-	-	49.48	50.30	51.11	51.91	52.72	53.53	-
65	-	-	-	-	56.24	57.08	57.93	58.77	-

Mass flow in kg/h

30	887	1 098	1 342	1 625	1 951	2 324	2 749	3 231	-
35	879	1 091	1 336	1 620	1 946	2 319	2 745	3 226	-
40	869	1 081	1 326	1 610	1 936	2 309	2 734	3 216	-
45	856	1 068	1 313	1 596	1 922	2 294	2 718	3 198	-
50	-	1 052	1 296	1 578	1 903	2 274	2 696	3 174	-
55	-	1 033	1 276	1 557	1 879	2 248	2 668	3 144	-
60	-	-	1 253	1 531	1 851	2 218	2 635	3 108	-
65	-	-	-	-	1 819	2 182	2 597	3 066	-

Coefficient of performance (C.O.P.)

30	2.26	2.77	3.36	4.04	4.81	5.68	6.66	7.75	-
35	1.92	2.37	2.89	3.48	4.15	4.91	5.76	6.70	-
40	1.63	2.02	2.47	2.99	3.57	4.23	4.97	5.79	-
45	1.37	1.71	2.10	2.54	3.05	3.62	4.27	4.99	-
50	-	1.43	1.76	2.15	2.59	3.08	3.64	4.27	-
55	-	1.18	1.47	1.80	2.17	2.60	3.08	3.62	-
60	-	-	1.21	1.49	1.80	2.17	2.58	3.05	-
65	-	-	-	-	1.48	1.79	2.14	2.53	-

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

Cooling capacity	95 779	W
Power input	31 075	W
Current consumption	43.40	A
Mass flow	2 274	kg/h
C.O.P.	3.08	

Pressure switch settings

Maximum HP switch setting	29.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

Datasheet, performance data

Danfoss scroll compressor. SY380-4

Performance data at 60 Hz, ARI rating conditions

R407C

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

Cooling capacity in W

30	45 204	56 744	70 444	86 587	105 455	127 332	152 499	181 240	-
35	42 922	54 086	67 304	82 859	101 033	122 108	146 368	174 095	-
40	40 505	51 250	63 943	78 865	96 300	116 531	139 839	166 508	-
45	37 978	48 260	60 383	74 630	91 283	110 624	132 937	158 505	-
50	-	45 142	56 652	70 178	86 005	104 414	125 688	150 110	-
55	-	41 919	52 772	65 535	80 492	97 924	118 115	141 348	-
60	-	-	48 769	60 725	74 767	91 180	110 244	132 244	-
65	-	-	-	-	68 857	84 205	102 100	122 822	-

Power input in W

30	18 661	19 105	19 566	20 041	20 523	21 008	21 492	21 969	-
35	20 696	21 161	21 651	22 159	22 681	23 213	23 749	24 285	-
40	22 948	23 426	23 934	24 468	25 021	25 590	26 170	26 755	-
45	25 471	25 953	26 471	27 020	27 596	28 193	28 807	29 433	-
50	-	28 794	29 313	29 870	30 459	31 075	31 715	32 373	-
55	-	32 005	32 516	33 070	33 663	34 291	34 947	35 627	-
60	-	-	36 131	36 675	37 263	37 892	38 556	39 250	-
65	-	-	-	-	41 312	41 933	42 596	43 295	-

Current consumption in A

30	28.66	29.14	29.63	30.12	30.64	31.18	31.76	32.39	-
35	31.06	31.61	32.16	32.71	33.27	33.86	34.47	35.13	-
40	33.65	34.27	34.88	35.49	36.10	36.73	37.38	38.07	-
45	36.53	37.21	37.88	38.54	39.21	39.88	40.57	41.29	-
50	-	40.53	41.26	41.97	42.68	43.40	44.13	44.88	-
55	-	44.30	45.09	45.86	46.62	47.38	48.15	48.93	-
60	-	-	49.48	50.30	51.11	51.91	52.72	53.53	-
65	-	-	-	-	56.24	57.08	57.93	58.77	-

Mass flow in kg/h

30	883	1 092	1 335	1 616	1 940	2 311	2 733	3 211	-
35	875	1 085	1 329	1 611	1 935	2 306	2 729	3 207	-
40	864	1 075	1 319	1 601	1 925	2 296	2 718	3 196	-
45	851	1 062	1 306	1 587	1 911	2 281	2 702	3 179	-
50	-	1 046	1 289	1 570	1 892	2 261	2 680	3 155	-
55	-	1 028	1 269	1 548	1 869	2 235	2 653	3 125	-
60	-	-	1 246	1 523	1 841	2 205	2 620	3 089	-
65	-	-	-	-	1 809	2 170	2 581	3 048	-

Coefficient of performance (C.O.P.)

30	2.42	2.97	3.60	4.32	5.14	6.06	7.10	8.25	-
35	2.07	2.56	3.11	3.74	4.45	5.26	6.16	7.17	-
40	1.77	2.19	2.67	3.22	3.85	4.55	5.34	6.22	-
45	1.49	1.86	2.28	2.76	3.31	3.92	4.61	5.39	-
50	-	1.57	1.93	2.35	2.82	3.36	3.96	4.64	-
55	-	1.31	1.62	1.98	2.39	2.86	3.38	3.97	-
60	-	-	1.35	1.66	2.01	2.41	2.86	3.37	-
65	-	-	-	-	1.67	2.01	2.40	2.84	-

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

Cooling capacity	107 301	W
Power input	34 170	W
Current consumption	47.21	A
Mass flow	2 416	kg/h
C.O.P.	3.14	

Pressure switch settings

Maximum HP switch setting	29.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

Sound power level		dB(A)
With acoustic hood		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 can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

