

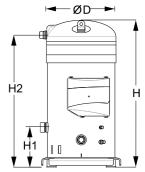




General Characteristics

Model number (on compressor nameplate)	SY240A4PBE	SY240A4CBE		
Code number for Singlepack*	SY240A4PBI	SY240A4CBI		
Code number for Industrial pack**	SY240A4PBM	SY240A4CBM		
Drawing number	8556098b	8556092b		
Suction and discharge connections	Rotolock	Brazed		
Suction connection	2-1/4 " Rotolock	1-5/8 " ODF		
Discharge connection	1-3/4 " Rotolock	1-1/8 " ODF		
Suction connection with supplied sleeve	1-5/8 " ODF			
Discharge connection with supplied sleeve	1-1/8 " ODF			
Oil sight glass	Threaded	Threaded		
Oil equalisation connection	1/2" flare	1/2" flare		
Oil drain connection	1/4" flare	1/4" flare		
LP gauge port	Schrader	Schrader		
IPR valve	Yes	Yes		
Reverse rotation protection	Electronic module	Electronic module		
Swept volume	347.8 0	:m3/rev		
Displacement @ Nominal speed	60.5 m3/h @ 2900 rpm	- 73.0 m3/h @ 3500 rpm		
Net weight	150) kg		
Oil charge	8 litre, PC	DE - 320SZ		
Maximum system test pressure Low Side / High side	20 bar(g)	/ 32 bar(g)		
Maximum differential test pressure	24	bar		
Maximum number of starts per hour	1	2		
Refrigerant charge limit	16	kg		
Approved refrigerants	R22, R40	7C, R134a		

Dimensions



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

Terminal box

Electrical Characteristics

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	342-440 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance (between phases) +/- 7% at 25°C	0.616 Ω
Rated Load Amps (RLA)	35.7 A
Maximum Continuous Current (MCC)	50 A
Locked Rotor Amps (LRA)	215 A
Motor protection	Electronic protection module, 110-240 V

Recommended Installation torques

Suction Rotolock nut or valve	130 Nm
Discharge Rotolock nut or valve	110 Nm
Oil sight glass	50 Nm
Power connections / Earth connection	3 Nm / 2 Nm
Mounting bolts	40 Nm

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")

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)



Danfoss scroll compressor. SY240-4

Performance data at 50 Hz, EN 12900 rating conditions

R22

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-20	-15	-10	-5	0	5	10	15		
Cooling capacity	in W									
30	24 826	30 969	38 151	46 483	56 075	67 035	79 474	93 502	_	
35	23 591	29 536	36 476	44 520	53 777	64 358	76 371	89 928		
40	22 285	28 012	34 687	42 421	51 323	61 502	73 069	86 133		
45		26 410	32 800	40 202	48 727	58 484	69 583	82 133		
	-	20 4 10		+		+		t		
50	-	-	30 830	37 880	46 007 43 176	55 320	65 929	77 943	-	
55	-	-	-	35 469		52 024	62 122	73 580	-	
60	-	-	-	-	40 252	48 613	58 178	69 058	-	
65	-	-	-	-	-	45 101	54 113	64 394	-	
ower input in W	ı									
30	10 588	10 704	10 846	11 020	11 237	11 504	11 830	12 226	-	
35	11 668	11 805	11 961	12 145	12 365	12 630	12 950	13 333	-	
40	12 835	12 991	13 161	13 353	13 576	13 838	14 150	14 519	-	
45	-	14 298	14 480	14 678	14 903	15 162	15 464	15 818	-	
50	-	-	15 952	16 156	16 381	16 634	16 926	17 264	-	
55	-	-	-	17 819	18 043	18 290	18 570	18 891	-	
60	-	-	-	-	19 924	20 163	20 430	20 732	-	
65	-	-	-	-	-	22 288	22 540	22 823	-	
Current consum		24.00	04.00	1 00.40	00.04		00.00			
30	21.65	21.83	21.98	22.13	22.31	22.55	22.88	23.33	-	
35	22.77	22.99	23.19	23.38	23.62	23.91	24.31	24.83	-	
40	24.09	24.33	24.54	24.77	25.04	25.38	25.82	26.39	-	
45	-	25.89	26.11	26.35	26.64	27.00	27.47	28.07	-	
50	-	-	27.96	28.19	28.47	28.84	29.32	29.94	-	
55	-	-	-	30.35	30.61	30.97	31.44	32.05	-	
60	-	-	-	-	33.12	33.44	33.88	34.48	-	
65	-	-	-	-	-	36.32	36.72	37.28	-	
Mass flow in kg/l	h									
30	534	657	799	961	1 145	1 353	1 588	1 850	_	
35	527	651	793	955	1 140	1 348	1 583	1 845	-	
40	519	643	785	947	1 131	1 339	1 574	1 835	_	
45	-	633	775	936	1 120	1 328	1 561	1 822	-	
50	-	-	762	923	1 106	1 313	1 545	1 805	_	
55	-	_	-	908	1 089	1 295	1 525	1 784	-	
60		_	-	-	1 070	1 274	1 503	1 759	_	
65	-	-	-	-	-	1 250	1 477	1 731	-	
	_									
30	rformance (C.C 2.34	2.89	3.52	4.22	4.99	5.83	6.72	7.65	_	
				+		+		t		
35	2.02	2.50	3.05	3.67	4.35	5.10	5.90	6.74	-	
40	1.74	2.16	2.64	3.18	3.78	4.44	5.16	5.93	-	
45	-	1.85	2.27	2.74	3.27	3.86	4.50	5.19	-	
50	-	-	1.93	2.34	2.81	3.33	3.90	4.51	-	
55	-	-	-	1.99	2.39	2.84	3.35	3.90	-	
60	-	-	-	-	2.02	2.41	2.85	3.33	-	
65	-	-	-	-	-	2.02	2.40	2.82	-	

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

Cooling capacity	55 320	W	
Power input	16 634	W	
Current consumption	28.84	Α	
Mass flow	1 313	kg/h	
C.O.P.	3.33		

to: Evaporating temperature at dew point

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

Tolerance according EN12900

tc: Condensing temperature at dew point

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



Danfoss scroll compressor. SY240-4

Performance data at 50 Hz, ARI rating conditions

R22

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-20	-15	-10	-5	0	5	10	15		
Cooling capacity	in W									
30	26 346	32 838	40 423	49 216	59 329	70 878	83 975	98 734	_	
35	25 123	31 427	38 778	47 292	57 082	68 263	80 948	95 252	_	
40	23 826	29 920	37 016	45 230	54 675	65 467	77 720	91 547		
45	-	28 333	35 153	43 045	52 125	62 507	74 306	87 637		
50	-	26 333		40 755	49 448	+	74 300	83 540	-	
	-	-	33 205	1		59 399 56 163		t		
55	-	-		38 377	46 662		66 996	79 275	-	
60	-	-	-	-	43 788	52 819	63 138	74 864	-	
65	-	-	-	-	-	49 387	59 177	70 332	-	
ower input in W	ı									
30	10 588	10 704	10 846	11 020	11 237	11 504	11 830	12 226	-	
35	11 668	11 805	11 961	12 145	12 365	12 630	12 950	13 333	-	
40	12 835	12 991	13 161	13 353	13 576	13 838	14 150	14 519	-	
45	-	14 298	14 480	14 678	14 903	15 162	15 464	15 818	-	
50	-	-	15 952	16 156	16 381	16 634	16 926	17 264	-	
55	-	-	-	17 819	18 043	18 290	18 570	18 891	-	
60	-	-	-	-	19 924	20 163	20 430	20 732	-	
65	-	-	-	-	-	22 288	22 540	22 823	-	
urrent consum		04.00	1 04 00	00.40	00.04	00.55	00.00	00.00		
30	21.65	21.83	21.98	22.13	22.31	22.55	22.88	23.33	-	
35	22.77	22.99	23.19	23.38	23.62	23.91	24.31	24.83	-	
40	24.09	24.33	24.54	24.77	25.04	25.38	25.82	26.39	-	
45	-	25.89	26.11	26.35	26.64	27.00	27.47	28.07	-	
50	-	-	27.96	28.19	28.47	28.84	29.32	29.94	-	
55	-	-	-	30.35	30.61	30.97	31.44	32.05	-	
60	-	-	-	-	33.12	33.44	33.88	34.48	-	
65	-	-	-	-	-	36.32	36.72	37.28	-	
Mass flow in kg/l	h									
30	531	654	795	956	1 139	1 346	1 579	1 840	-	
35	524	647	789	950	1 134	1 341	1 574	1 834	-	
40	516	639	781	942	1 125	1 332	1 565	1 825	-	
45	-	630	771	931	1 114	1 320	1 552	1 811	-	
50	-	-	758	918	1 100	1 305	1 536	1 794	-	
55	-	-	-	903	1 083	1 287	1 517	1 773	-	
60	-	_	_	-	1 064	1 267	1 494	1 749	-	
65	-	-	-	-	-	1 243	1 468	1 721	-	
Saaffialant of									_	
30	2.49	3.07	3.73	4.47	5.28	6.16	7.10	8.08		
35	2.49	2.66	3.73	3.89	4.62	5.40	6.25	7.14		
40	1.86	2.00	2.81	3.89	4.02	4.73	5.49	6.31		
				1				t	-	
45	-	1.98	2.43	2.93	3.50	4.12	4.81	5.54	-	
50	-	-	2.08	2.52	3.02	3.57	4.18	4.84	-	
55	-	-	-	2.15	2.59	3.07	3.61	4.20	-	
60	-	-	-	-	2.20	2.62	3.09	3.61	-	
65	-	-	-	-	-	2.22	2.63	3.08	-	

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

,	• •	
Cooling capacity	61 179	W
Power input	18 200	W
Current consumption	30.88	Α
Mass flow	1 387	kg/h
C.O.P.	3.36	

to: Evaporating temperature at dew point

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

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

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. SY240-4

Performance data at 50 Hz, EN 12900 rating conditions

R407C

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-20	-15	-10	-5	0	5	10	15		
Cooling capacity	ı in W									
30	22 179	28 382	35 758	44 467	54 671	66 532	80 209	95 865	-	
35	20 769	26 758	33 849	42 203	51 982	63 346	76 456	91 475		
40	19 313	25 061	31 840	39 811	49 137	59 977	72 493	86 846		
45	17 825	23 304	29 744	37 305	46 150	56 439	68 333	81 993		
50	-	21 504	27 576	34 700	43 036	52 746	63 991	76 931		
55	_	19 673	25 351	32 010	39 810	48 914	59 481	71 674	_	
60	_	-	23 084	29 249	36 486	44 956	54 819	66 237	_	
65	_	_	-	-	33 079	40 887	50 018	60 633		
			1		000.0	10 001	000.0	00 000		
Power input in W	v	1	,	1		1	,	, ,		
30	10 577	10 687	10 818	10 958	11 096	11 220	11 320	11 385	-	
35	11 690	11 798	11 934	12 086	12 244	12 395	12 530	12 636	-	
40	12 937	13 041	13 180	13 343	13 520	13 697	13 865	14 013	-	
45	14 347	14 446	14 588	14 761	14 955	15 157	15 358	15 544	-	
50	-	16 046	16 189	16 371	16 581	16 807	17 038	17 263	-	
55	-	17 872	18 015	18 205	18 429	18 678	18 939	19 201	-	
60	-	-	20 097	20 293	20 531	20 801	21 090	21 389	-	
65	-	-	-	-	22 918	23 208	23 525	23 858	-	
O										
Current consum	•	21 10	21.52	21.81	22.06	22.21	22.58	22.91		
30	20.74	21.18	21.53	1	22.06	22.31		1		
35 40	22.08	22.51 24.00	22.84 24.33	23.10 24.59	23.32 24.81	23.54 25.01	23.78 25.23	24.07	-	
	25.24	25.71		26.34	26.57		27.00	25.51 27.28	-	
45			26.06			26.78 28.88			-	
50	-	27.67	28.07	28.38	28.64		29.13	29.42	-	
55		29.94	30.40	30.76	31.08	31.36	31.66	31.98		
60 65	-	-	33.09	33.54	33.92	34.27	34.63	35.01	<u>-</u>	
65	-		-		37.21	37.65	38.09	38.55	-	
Mass flow in kg/	h									
30	466	588	729	892	1 081	1 296	1 542	1 821	-	
35	459	581	722	886	1 074	1 289	1 534	1 812	-	
40	449	572	714	877	1 065	1 279	1 523	1 800	-	
45	439	562	703	866	1 053	1 267	1 510	1 785	-	
50	-	549	691	853	1 040	1 252	1 494	1 767	-	
55	-	535	676	838	1 023	1 235	1 475	1 746	-	
60	-	-	659	820	1 004	1 214	1 453	1 722	-	
65	-	-	-	-	983	1 191	1 428	1 695	-	
Coefficient of pe	orformance (C.C) P)								
30	2.10	2.66	3.31	4.06	4.93	5.93	7.09	8.42	_	
35	1.78	2.27	2.84	3.49	4.35	5.33	6.10	7.24		
40	1.49	1.92	2.42	2.98	3.63	4.38	5.23	6.20		
45	1.49	1.61	2.42	2.53	3.09	3.72	4.45	5.27		
50	-	1.34	1.70	2.53	2.60	3.14	3.76	4.46	-	
		1.10	1.70	1.76	2.00	2.62	3.14	3.73	-	
			1.71	1.70	2.10	2.02	J. 1 4	3.73	-	
55 60	-	-	1.15	1.44	1.78	2.16	2.60	3.10	-	

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

Cooling capacity	52 746	W	
Power input	16 807	W	
Current consumption	28.88	Α	
Mass flow	1 252	kg/h	
C.O.P.	3.14		

to: Evaporating temperature at dew point

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

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 accoustic hood	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. SY240-4

Performance data at 50 Hz, ARI rating conditions

R407C

C(R) -20 -15 -10 -5 0 6 10 15 cooling capacity in W 30 23 788 30 406 38 284 47 533 58 381 70 976 68 6485 102 077 - 40 20 351 27 122 34 411 42 999 59 098 64 573 77 961 93 203 - 45 19 477 25 382 23 345 40 508 50 04 61 114 73 898 89 583 - 50 - 22 598 30 208 37 947 49 998 57 501 89 569 30 30 - 55 - 21 787 28 107 35 306 43 828 53 756 66 262 73 916 - 66 - - - 25 790 33 604 49 892 49 900 80 731 73 247 - 66 - - - 25 790 33 604 49 892 49 900 80 731 73 247 - 65 <th>Cond. temp. in</th> <th></th> <th></th> <th></th> <th>Evapora</th> <th>ting temperature</th> <th>in °C (to)</th> <th></th> <th></th> <th></th>	Cond. temp. in				Evapora	ting temperature	in °C (to)			
30	°C (tc)	-20	-15	-10	-5	0	5	10	15	
30				•		•		•		
35	cooling capacity		1	1		1		1	 	
40		23 788	30 405		47 533			85 485	102 077	-
45	35	22 384	28 801	36 389	45 316	55 753	67 868	81 828	97 804	-
So	40	20 931	27 122	34 411	42 969	52 968	64 575	77 961	93 293	-
	45	19 447	25 382	32 345	40 508	50 040	61 114	73 898	88 563	-
60	50	-	23 598	30 208	37 947	46 988	57 501	69 659	83 630	-
65 - - - - 37 277 45 963 56 098 67 858 - cover input in W 30 10 577 10 687 10 818 10 998 11 1096 11 220 11 320 12 636 - 40 12 937 13 041 13 180 13 343 13 520 13 697 13 865 14 013 - 45 14 347 14 446 14 588 14 761 14 955 15 157 15 586 15 544 - 50 - 16 048 16 189 16 371 16 881 16 807 17 038 17 283 - 65 - 17 872 18 015 18 205 18 429 18 678 18 939 19 201 - 60 - - 20 937 20 293 20 531 20 801 21 900 21 389 - 45 2 2 2 2 18 205 18 229 18 072 20 801 22 900 23 859 - 40	55	-	21 787	28 017	35 306	43 828	53 756	65 262	78 516	-
ower input in W 30 10 577 10 687 10 818 10 958 11 096 11 220 11 320 11 385 - 35 11 690 11 798 11 934 12 086 12 244 12 396 12 630 - 12 636 - 40 12 937 13 041 13 180 13 343 13 520 13 697 13 685 14 013 - 45 14 347 14 446 14 588 14 781 14 985 15 157 15 358 15 544 - 50 - 16 048 16 189 16 371 16 581 16 807 17 038 19 201 - 60 - - 20 097 20 293 20 531 20 801 21 090 21 389 - 65 - - - 20 097 20 293 20 531 20 801 21 090 21 389 - 40 23 25 22 51 22 81 22 918 23 208 22 52 22 91 - </td <td>60</td> <td>-</td> <td>-</td> <td>25 790</td> <td>32 604</td> <td>40 582</td> <td>49 900</td> <td>60 731</td> <td>73 247</td> <td>-</td>	60	-	-	25 790	32 604	40 582	49 900	60 731	73 247	-
30	65	-	-	-	-	37 277	45 963	56 098	67 858	-
30	Power input in V	v								
35			10 687	10.818	10 958	11 096	11 220	11 320	11 385	_
40									1	
45										_
SO									1	
Section 17 872							•		1	
60									+	
66 - - - - 22 918 23 208 23 525 23 858 - urrent consumption in A 30 20.74 21.18 21.53 21.81 22.06 22.31 22.58 22.91 - 35 22.08 22.51 22.84 23.10 23.32 23.54 23.78 24.07 - 40 23.56 24.00 24.33 24.59 24.81 25.01 25.23 25.51 - 45 25.24 25.71 22.60 26.34 26.57 26.78 27.00 27.28 - 50 - 27.67 28.07 28.38 28.64 28.88 29.13 29.42 - 55 - 29.94 30.40 30.76 31.08 31.36 31.66 31.98 - 60 - - 33.09 33.54 33.92 34.27 34.63 35.01 - 18ast flow in kg/h <td></td> <td></td> <td>11 012</td> <td></td> <td></td> <td></td> <td>•</td> <td></td> <td></td> <td></td>			11 012				•			
uurent consumption in A 30 20.74 21.18 21.53 21.81 22.06 22.31 22.58 22.91 - 35 22.08 22.51 22.84 23.10 23.32 23.54 23.78 24.07 - 40 23.56 24.00 24.33 24.59 24.81 25.01 25.23 25.51 - 45 25.24 25.71 26.06 26.34 26.67 26.78 27.00 27.28 - 50 - 27.67 28.07 28.38 28.64 28.88 29.13 29.42 - 55 - 29.94 30.40 30.76 31.08 31.36 31.66 31.98 - 66 - - 33.09 33.54 33.92 34.27 34.63 35.01 - clss flow in kg/h 30 464 585 725 887 10.75 1.289 1.533 1.810 -		<u> </u>	-						1	-
30	03		-	-	_	22 910	23 208	23 525	23 636	
30	urrent consum	ntion in A								
35		•	21 18	21 53	21.81	22.06	22 31	22 58	22 91	
40 23.56 24.00 24.33 24.59 24.81 25.01 25.23 25.51 - 45 25.24 25.71 26.06 26.34 26.57 26.78 27.00 27.28 - 50 - 27.67 28.07 28.38 28.64 28.88 29.13 29.42 - 55 - 29.94 30.40 30.76 31.08 31.36 31.66 31.98 - 60 330.09 33.54 33.92 34.27 34.63 35.01 - 65 37.21 37.65 38.09 38.55 - ass flow in kg/h 30 464 585 725 887 1075 1289 1533 1810 - 35 456 578 718 881 1068 1282 1525 1801 - 40 447 569 710 872 1059 1272 1514 1789 - 45 436 559 699 862 1047 1260 1501 1774 - 50 - 546 687 849 1034 1245 1485 1756 - 55 - 532 672 833 1018 1228 1446 1736 - 66 656 816 999 1207 1444 1712 - 65 977 1184 1419 1685 - oefficient of performance (C.O.P.) 30 2.25 2.85 3.54 4.34 5.26 6.33 7.55 8.97 - 35 1.91 2.44 3.05 3.75 4.55 5.48 6.53 7.74 - 40 1.62 2.08 2.61 3.22 3.92 4.71 5.62 6.66 - 45 1.36 1.76 2.22 2.74 3.35 4.03 4.81 5.70 - 50 - 1.47 1.87 2.32 2.83 3.42 4.09 4.84 - 55 - 1.22 1.56 1.94 2.38 2.40 2.88 3.42 -					<u> </u>		<u> </u>			
45									t	
So									†	
Section Sect			1						1	
60 33.09 33.54 33.92 34.27 34.63 35.01 - 65 37.21 37.65 38.09 38.55 -									t	
See See					1				†	
									t	
30	00					07.21	07.00	30.03	00.00	
30	lass flow in kg/	'h								
35 456 578 718 881 1 068 1 282 1 525 1 801 - 40 447 569 710 872 1 059 1 272 1 514 1 789 - 45 436 559 699 862 1 047 1 260 1 501 1 774 - 50 - 546 687 849 1 034 1 245 1 485 1 756 - 55 - 532 672 833 1 018 1 228 1 466 1 736 - 60 - - 656 816 999 1 207 1 444 1 712 - 65 - - - 977 1 184 1 419 1 685 - 40 1.62 2.85 3.54 4.34 5.26 6.33 7.55 8.97 - 35 1.91 2.44 3.05 3.75 4.55 5.48 6.53 7.74			585	725	887	1 075	1 289	1 533	1 810	
40 447 569 710 872 1 059 1 272 1 514 1 789 - 45 436 559 699 862 1 047 1 260 1 501 1 774 - 50 - 546 687 849 1 034 1 245 1 485 1 756 - 55 - 532 672 833 1 018 1 228 1 466 1 736 - 60 - - 656 816 999 1 207 1 444 1 712 - 65 - - - - 977 1 184 1 419 1 685 - 40 1 69 2.25 2.85 3.54 4.34 5.26 6.33 7.55 8.97 - 35 1.91 2.44 3.05 3.75 4.55 5.48 6.53 7.74 - 40 1.62 2.08 2.61 3.22 3.92 4.71 <									t	
45 436 559 699 862 1 047 1 260 1 501 1 774 - 50 - 546 687 849 1 034 1 245 1 485 1 756 - 55 - 532 672 833 1 018 1 228 1 466 1 736 - 60 - - 656 816 999 1 207 1 444 1 712 - 65 - - - - 977 1 184 1 419 1 685 - Coefficient of performance (C.O.P.) 30 2.25 2.85 3.54 4.34 5.26 6.33 7.55 8.97 - 35 1.91 2.44 3.05 3.75 4.55 5.48 6.53 7.74 - 40 1.62 2.08 2.61 3.22 3.92 4.71 5.62 6.66 - 45 1.36 1.76 2.22 2.74 3.35 4.03 4.81 5.70 - 50 -									†	
50 - 546 687 849 1 034 1 245 1 485 1 756 - 55 - 532 672 833 1 018 1 228 1 466 1 736 - 60 - - 656 816 999 1 207 1 444 1 712 - 65 - - - - 977 1 184 1 419 1 685 - Sofficient of performance (C.O.P.) 30 2.25 2.85 3.54 4.34 5.26 6.33 7.55 8.97 - 35 1.91 2.44 3.05 3.75 4.55 5.48 6.53 7.74 - 40 1.62 2.08 2.61 3.22 3.92 4.71 5.62 6.66 - 45 1.36 1.76 2.22 2.74 3.35 4.03 4.81 5.70 - 50 - 1.47 1.87 2.32<							•		1	
55 - 532 672 833 1 018 1 228 1 466 1 736 - 60 - - 656 816 999 1 207 1 444 1 712 - 65 - - - - 977 1 184 1 419 1 685 - Coefficient of performance (C.O.P.) 30 2.25 2.85 3.54 4.34 5.26 6.33 7.55 8.97 - 35 1.91 2.44 3.05 3.75 4.55 5.48 6.53 7.74 - 40 1.62 2.08 2.61 3.22 3.92 4.71 5.62 6.66 - 45 1.36 1.76 2.22 2.74 3.35 4.03 4.81 5.70 - 50 - 1.47 1.87 2.32 2.83 3.42 4.09 4.84 - 55 - 1.22 1.56 1.94<					1				t	
60 656 816 999 1207 1444 1712 - 65 7 977 1184 1419 1685 - 665 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1184 1419 1685 - 7 977 1885 1885 1885 1885 1885 1885 1885 18									1	
65 - - - 977 1 184 1 419 1 685 - Redficient of performance (C.O.P.) 30 2.25 2.85 3.54 4.34 5.26 6.33 7.55 8.97 - 35 1.91 2.44 3.05 3.75 4.55 5.48 6.53 7.74 - 40 1.62 2.08 2.61 3.22 3.92 4.71 5.62 6.66 - 45 1.36 1.76 2.22 2.74 3.35 4.03 4.81 5.70 - 50 - 1.47 1.87 2.32 2.83 3.42 4.09 4.84 - 55 - 1.22 1.56 1.94 2.38 2.88 3.45 4.09 - 60 - - 1.28 1.61 1.98 2.40 2.88 3.42 -									t	
30 2.25 2.85 3.54 4.34 5.26 6.33 7.55 8.97 - 3.55 3.54 4.34 5.26 6.33 7.55 8.97 - 3.55 1.91 2.44 3.05 3.75 4.55 5.48 6.53 7.74 - 3.25 4.71 5.62 6.66 - 3.25 4.71 5.62 6.66 - 3.25 6.55									†	
30 2.25 2.85 3.54 4.34 5.26 6.33 7.55 8.97 - 35 1.91 2.44 3.05 3.75 4.55 5.48 6.53 7.74 - 40 1.62 2.08 2.61 3.22 3.92 4.71 5.62 6.66 - 45 1.36 1.76 2.22 2.74 3.35 4.03 4.81 5.70 - 50 - 1.47 1.87 2.32 2.83 3.42 4.09 4.84 - 55 - 1.22 1.56 1.94 2.38 2.88 3.45 4.09 - 60 - - 1.28 1.61 1.98 2.40 2.88 3.42 -	00		<u> </u>			311	1 104	1 713	1 000	-
35 1.91 2.44 3.05 3.75 4.55 5.48 6.53 7.74 - 40 1.62 2.08 2.61 3.22 3.92 4.71 5.62 6.66 - 45 1.36 1.76 2.22 2.74 3.35 4.03 4.81 5.70 - 50 - 1.47 1.87 2.32 2.83 3.42 4.09 4.84 - 55 - 1.22 1.56 1.94 2.38 2.88 3.45 4.09 - 60 - - 1.28 1.61 1.98 2.40 2.88 3.42 -		•	1	254	4.04	F 00	0.00	7.55	0.07	
40 1.62 2.08 2.61 3.22 3.92 4.71 5.62 6.66 - 45 1.36 1.76 2.22 2.74 3.35 4.03 4.81 5.70 - 50 - 1.47 1.87 2.32 2.83 3.42 4.09 4.84 - 55 - 1.22 1.56 1.94 2.38 2.88 3.45 4.09 - 60 - - 1.28 1.61 1.98 2.40 2.88 3.42 -									†	
45 1.36 1.76 2.22 2.74 3.35 4.03 4.81 5.70 - 50 - 1.47 1.87 2.32 2.83 3.42 4.09 4.84 - 55 - 1.22 1.56 1.94 2.38 2.88 3.45 4.09 - 60 - - 1.28 1.61 1.98 2.40 2.88 3.42 -									t	
50 - 1.47 1.87 2.32 2.83 3.42 4.09 4.84 - 55 - 1.22 1.56 1.94 2.38 2.88 3.45 4.09 - 60 - - 1.28 1.61 1.98 2.40 2.88 3.42 -									†	
55 - 1.22 1.56 1.94 2.38 2.88 3.45 4.09 - 60 - - 1.28 1.61 1.98 2.40 2.88 3.42 -									t	
60 1.28 1.61 1.98 2.40 2.88 3.42 -									1	-
									t	-
65 1.63 1.98 2.38 2.84 -		-	-	1.28	1.61				†	-
	65	-	-	-	-	1.63	1.98	2.38	2.84	-
	ominal perforn	nance at to = 7.	2 °C, tc = 54.4 °C	10/	_		Pressure switch		20.5	

to: Evaporating temperature at dew point

Cooling capacity

Current consumption

Power input

Mass flow

C.O.P.

tc: Condensing temperature at dew point

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

59 104

18 553

31.17

1 331

3.19

W

W

kg/h

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 accoustic hood	dB(A)

Tolerance according EN12900



Danfoss scroll compressor. SY240-4

Performance data at 50 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
<u> </u>		•	•	•					-
Cooling capacity	y in W								
35	17 486	22 107	27 687	34 422	42 505	52 133	63 500	-	-
40	16 457	20 891	26 197	32 573	40 211	49 309	60 060	-	-
45	15 377	19 637	24 685	30 716	37 925	46 506	56 655	-	-
50	14 227	18 329	23 133	28 834	35 628	43 708	53 270	-	-
55	-	16 949	21 524	26 911	33 303	40 897	49 887	-	-
60	-	-	19 841	24 927	30 933	38 055	46 488	-	-
65	-	-	-	22 867	28 502	35 167	43 056	-	-
70	-	-	-	-	25 990	32 213	39 575	-	-
Power input in V	M								
<u> </u>		0.540	0.500	0.074	0.700	0.700	0.050		
35	8 409	8 510	8 596	8 671	8 738	8 799	8 856	-	-
40	9 210	9 328	9 431	9 523	9 607	9 684	9 758	-	-
45	10 089	10 224	10 345	10 455	10 557	10 652	10 744	-	-
50	11 056	11 211	11 351	11 479	11 599	11 713	11 823	-	-
55	-	12 299	12 459	12 607	12 746	12 880	13 009	-	-
60	-	-	13 682	13 850	14 010	14 163	14 313	-	-
65	-	-	-	15 220	15 401	15 576	15 746	-	-
70	-	-	-	-	16 932	17 129	17 321	-	-
urrent consum		1	1	I	_				
35	19.07	19.08	19.16	19.26	19.36	19.43	19.44	-	-
40	19.82	19.86	19.95	20.08	20.21	20.31	20.35	-	-
45	20.70	20.76	20.88	21.03	21.18	21.31	21.38	-	-
50	21.73	21.81	21.95	22.12	22.30	22.46	22.56	-	-
55	-	23.03	23.19	23.39	23.60	23.78	23.92	-	-
60	-	-	24.64	24.86	25.09	25.30	25.46	-	-
65	-	-	-	26.55	26.80	27.04	27.23	-	-
70	-	-	-	-	28.76	29.03	29.25	-	-
Mass flow in kg/	'h								
35	425	526	645	785	949	1 143	1 368	-	-
40	421	523	641	780	942	1 132	1 354	-	-
45	416	519	637	775	935	1 123	1 340	-	-
50	409	513	632	769	928	1 113	1 328	-	-
55	-	505	625	762	920	1 104	1 316	-	-
60	-	-	616	753	911	1 093	1 303	-	-
65	-	-	-	743	901	1 082	1 289	-	-
70	-	-	-	-	888	1 068	1 275	-	-
•		•		1	•	•			
coefficient of pe	•	1	2.00	2.07	4.00	F 00	747		
35	2.08	2.60	3.22	3.97	4.86	5.93	7.17	-	-
40	1.79	2.24	2.78	3.42	4.19	5.09	6.15	-	-
45	1.52	1.92	2.39	2.94	3.59	4.37	5.27	-	-
50	1.29	1.63	2.04	2.51	3.07	3.73	4.51	-	-
55	-	1.38	1.73	2.13	2.61	3.18	3.83	-	-
60	-	-	1.45	1.80	2.21	2.69	3.25	-	-
65	-	-	-	1.50	1.85	2.26	2.73	-	-
70	-	-	-	-	1.53	1.88	2.28	-	-
lausius Ie.		°C 4 50 °C				Dunnanumte t			
ominai perforn	nance at to = 5	°C, tc = 50 °C		_		Pressure switch			

-,		
Cooling capacity	35 628	W
Power input	11 599	W
Current consumption	22.30	Α
Mass flow	928	kg/h
C.O.P.	3.07	

to: Evaporating temperature at dew point

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

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 accoustic hood	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. SY240-4

Performance data at 50 Hz, ARI rating conditions

R134a

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling canacity	v in W								
Cooling capacity	18 939	23 904	29 889	37 101	45 745	56 027	68 149	_	_
40	17 922	22 707	28 423	35 279	43 481	53 234	64 742		
45	16 849	21 472	26 937	33 453	41 228	50 468	61 378		
50	15 701	20 180	25 411	31 604	38 969	47 713	58 042	-	-
55	13701	18 812	23 827	29 715	36 687	44 952	54 718	<u>-</u>	<u>-</u>
60		-	22 167	27 769	34 367	42 171	51 391	-	-
65	-	-	-	25 748	31 992	39 355	48 050	-	-
70		-	-	-	29 548	36 493	44 684	-	-
70		_	_		23 540	00 1 35	44 004	_	
Power input in V	V								
35	8 409	8 510	8 596	8 671	8 738	8 799	8 856	1	-
40	9 210	9 328	9 431	9 523	9 607	9 684	9 758	ı	-
45	10 089	10 224	10 345	10 455	10 557	10 652	10 744	-	-
50	11 056	11 211	11 351	11 479	11 599	11 713	11 823	-	
55	-	12 299	12 459	12 607	12 746	12 880	13 009	-	-
60	-	-	13 682	13 850	14 010	14 163	14 313	-	-
65	-	-	-	15 220	15 401	15 576	15 746	-	-
70	-	-	-	-	16 932	17 129	17 321	-	-
Current consum	ption in A	1	,		1		,		
35	19.07	19.08	19.16	19.26	19.36	19.43	19.44	-	-
40	19.82	19.86	19.95	20.08	20.21	20.31	20.35	-	-
45	20.70	20.76	20.88	21.03	21.18	21.31	21.38	-	-
50	21.73	21.81	21.95	22.12	22.30	22.46	22.56	-	-
55	-	23.03	23.19	23.39	23.60	23.78	23.92	-	-
60	-	-	24.64	24.86	25.09	25.30	25.46	-	-
65	-	-	-	26.55	26.80	27.04	27.23	-	-
70	-	-	-	-	28.76	29.03	29.25	-	-
Mass flow in kg/	'h								
35	423	523	641	781	944	1 137	1 360	_	_
40	419	520	638	776	937	1 126	1 346	-	_
45	414	516	634	771	930	1 117	1 333	-	_
50	407	510	628	765	923	1 107	1 321	-	-
55	-	503	622	758	915	1 098	1 308	-	-
60	-	-	613	750	907	1 087	1 296	-	_
65	-	_	-	739	896	1 076	1 282	-	_
70	-	-	-	-	883	1 063	1 268	-	-
•									
Coefficient of pe	•	1	1 _	T .	_	T .	T		
35	2.25	2.81	3.48	4.28	5.24	6.37	7.70	-	-
40	1.95	2.43	3.01	3.70	4.53	5.50	6.63	-	-
45	1.67	2.10	2.60	3.20	3.91	4.74	5.71	-	-
50	1.42	1.80	2.24	2.75	3.36	4.07	4.91	-	-
55	-	1.53	1.91	2.36	2.88	3.49	4.21	-	-
60	-	-	1.62	2.00	2.45	2.98	3.59	-	-
65	-	-	-	1.69	2.08	2.53	3.05	-	-
70	-	-	-	-	1.75	2.13	2.58	-	-
Nominal norfa	nanco at to = 7	2°C to = 54.4°C				Droceure owit-b	cottings		
Nominal perform	nance at to = /.	2 °C, tc = 54.4 °C				Pressure switch	วะเมา นูร		

-		 		
	Cooling capacity	40 452	W	
F	Power input	12 661	W	
(Current consumption	23.52	Α	
N	Mass flow	993	kg/h	
(C.O.P.	3.19		

to: Evaporating temperature at dew point

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

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 accoustic hood	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. SY240-4

Performance data at 50 Hz, EN 12900 rating conditions

R134a

Cond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
<u> </u>		•	•	•					-
Cooling capacity	y in W								
35	17 486	22 107	27 687	34 422	42 505	52 133	63 500	-	-
40	16 457	20 891	26 197	32 573	40 211	49 309	60 060	-	-
45	15 377	19 637	24 685	30 716	37 925	46 506	56 655	-	-
50	14 227	18 329	23 133	28 834	35 628	43 708	53 270	-	-
55	-	16 949	21 524	26 911	33 303	40 897	49 887	-	-
60	-	-	19 841	24 927	30 933	38 055	46 488	-	-
65	-	-	-	22 867	28 502	35 167	43 056	-	-
70	-	-	-	-	25 990	32 213	39 575	-	-
Power input in V	M								
<u> </u>		0.540	0.500	0.074	0.700	0.700	0.050		
35	8 409	8 510	8 596	8 671	8 738	8 799	8 856	-	-
40	9 210	9 328	9 431	9 523	9 607	9 684	9 758	-	-
45	10 089	10 224	10 345	10 455	10 557	10 652	10 744	-	-
50	11 056	11 211	11 351	11 479	11 599	11 713	11 823	-	-
55	-	12 299	12 459	12 607	12 746	12 880	13 009	-	-
60	-	-	13 682	13 850	14 010	14 163	14 313	-	-
65	-	-	-	15 220	15 401	15 576	15 746	-	-
70	-	-	-	-	16 932	17 129	17 321	-	-
urrent consum		1	1	T	_				
35	19.07	19.08	19.16	19.26	19.36	19.43	19.44	-	-
40	19.82	19.86	19.95	20.08	20.21	20.31	20.35	-	-
45	20.70	20.76	20.88	21.03	21.18	21.31	21.38	-	-
50	21.73	21.81	21.95	22.12	22.30	22.46	22.56	-	-
55	-	23.03	23.19	23.39	23.60	23.78	23.92	-	-
60	-	-	24.64	24.86	25.09	25.30	25.46	-	-
65	-	-	-	26.55	26.80	27.04	27.23	-	-
70	-	-	-	-	28.76	29.03	29.25	-	-
Mass flow in kg/	'h								
35	425	526	645	785	949	1 143	1 368	-	-
40	421	523	641	780	942	1 132	1 354	-	-
45	416	519	637	775	935	1 123	1 340	-	-
50	409	513	632	769	928	1 113	1 328	-	-
55	-	505	625	762	920	1 104	1 316	-	-
60	-	-	616	753	911	1 093	1 303	-	-
65	-	-	-	743	901	1 082	1 289	-	-
70	-	-	-	-	888	1 068	1 275	-	-
•		•		1	•	•			
coefficient of pe	•	1	2.00	2.07	4.00	F 00	747		
35	2.08	2.60	3.22	3.97	4.86	5.93	7.17	-	-
40	1.79	2.24	2.78	3.42	4.19	5.09	6.15	-	-
45	1.52	1.92	2.39	2.94	3.59	4.37	5.27	-	-
50	1.29	1.63	2.04	2.51	3.07	3.73	4.51	-	-
55	-	1.38	1.73	2.13	2.61	3.18	3.83	-	-
60	-	-	1.45	1.80	2.21	2.69	3.25	-	-
65	-	-	-	1.50	1.85	2.26	2.73	-	-
70	-	-	-	-	1.53	1.88	2.28	-	-
lausius Ie.		°C 4 50 °C				Dunnanus milit			
ominai perforn	nance at to = 5	°C, tc = 50 °C		_		Pressure switch			

-,		
Cooling capacity	35 628	W
Power input	11 599	W
Current consumption	22.30	Α
Mass flow	928	kg/h
C.O.P.	3.07	

to: Evaporating temperature at dew point

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

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 accoustic hood	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. SY240-4

Performance data at 50 Hz, ARI rating conditions

R134a

Cond. temp. in	Cond. temp. in Evaporating temperature in °C (to)								
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling canacity	v in W								
Cooling capacity	18 939	23 904	29 889	37 101	45 745	56 027	68 149	_	_
40	17 922	22 707	28 423	35 279	43 481	53 234	64 742		
45	16 849	21 472	26 937	33 453	41 228	50 468	61 378		
50	15 701	20 180	25 411	31 604	38 969	47 713	58 042	-	-
55	13701	18 812	23 827	29 715	36 687	44 952	54 718	<u>-</u>	<u>-</u>
60		-	22 167	27 769	34 367	42 171	51 391	-	-
65	-	-	-	25 748	31 992	39 355	48 050	-	-
70		-	-	-	29 548	36 493	44 684	-	-
70		_	_		23 540	00 1 35	44 004	_	
Power input in V	V								
35	8 409	8 510	8 596	8 671	8 738	8 799	8 856	1	-
40	9 210	9 328	9 431	9 523	9 607	9 684	9 758	ı	-
45	10 089	10 224	10 345	10 455	10 557	10 652	10 744	-	-
50	11 056	11 211	11 351	11 479	11 599	11 713	11 823	-	
55	-	12 299	12 459	12 607	12 746	12 880	13 009	-	-
60	-	-	13 682	13 850	14 010	14 163	14 313	-	-
65	-	-	-	15 220	15 401	15 576	15 746	-	-
70	-	-	-	-	16 932	17 129	17 321	-	-
Current consum	ption in A	1	,		1		,		
35	19.07	19.08	19.16	19.26	19.36	19.43	19.44	-	-
40	19.82	19.86	19.95	20.08	20.21	20.31	20.35	-	-
45	20.70	20.76	20.88	21.03	21.18	21.31	21.38	-	-
50	21.73	21.81	21.95	22.12	22.30	22.46	22.56	-	-
55	-	23.03	23.19	23.39	23.60	23.78	23.92	-	-
60	-	-	24.64	24.86	25.09	25.30	25.46	-	-
65	-	-	-	26.55	26.80	27.04	27.23	-	-
70	-	-	-	-	28.76	29.03	29.25	-	-
Mass flow in kg/	'h								
35	423	523	641	781	944	1 137	1 360	_	_
40	419	520	638	776	937	1 126	1 346	-	_
45	414	516	634	771	930	1 117	1 333	-	_
50	407	510	628	765	923	1 107	1 321	-	-
55	-	503	622	758	915	1 098	1 308	-	-
60	-	-	613	750	907	1 087	1 296	-	_
65	-	-	-	739	896	1 076	1 282	-	_
70	-	-	-	-	883	1 063	1 268	-	-
•									
Coefficient of pe	•	1	1 _	T .	_	T .	T		
35	2.25	2.81	3.48	4.28	5.24	6.37	7.70	-	-
40	1.95	2.43	3.01	3.70	4.53	5.50	6.63	-	-
45	1.67	2.10	2.60	3.20	3.91	4.74	5.71	-	-
50	1.42	1.80	2.24	2.75	3.36	4.07	4.91	-	-
55	-	1.53	1.91	2.36	2.88	3.49	4.21	-	-
60	-	-	1.62	2.00	2.45	2.98	3.59	-	-
65	-	-	-	1.69	2.08	2.53	3.05	-	-
70	-	-	-	-	1.75	2.13	2.58	-	-
Nominal norfa	nanco at to = 7	2°C to = 54.4°C				Droceure owit-b	cottings		
Nominal perform	nance at to = /.	2 °C, tc = 54.4 °C				Pressure switch	วะเมา นูร		

-		 		
	Cooling capacity	40 452	W	
F	Power input	12 661	W	
(Current consumption	23.52	Α	
N	Mass flow	993	kg/h	
(C.O.P.	3.19		

to: Evaporating temperature at dew point

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

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 accoustic hood	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. SY240-4

Performance data at 50 Hz, EN 12900 rating conditions

R407C

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-20	-15	-10	-5	0	5	10	15	
Cooling capacity	ı in W								
30	22 179	28 382	35 758	44 467	54 671	66 532	80 209	95 865	-
35	20 769	26 758	33 849	42 203	51 982	63 346	76 456	91 475	
40	19 313	25 061	31 840	39 811	49 137	59 977	72 493	86 846	
45	17 825	23 304	29 744	37 305	46 150	56 439	68 333	81 993	
50	-	21 504	27 576	34 700	43 036	52 746	63 991	76 931	
55	_	19 673	25 351	32 010	39 810	48 914	59 481	71 674	_
60	_	-	23 084	29 249	36 486	44 956	54 819	66 237	_
65	_	_	-	-	33 079	40 887	50 018	60 633	
			1		000.0	10 001	000.0	00 000	
Power input in W	v	1	,	1		1	,	, ,	
30	10 577	10 687	10 818	10 958	11 096	11 220	11 320	11 385	-
35	11 690	11 798	11 934	12 086	12 244	12 395	12 530	12 636	-
40	12 937	13 041	13 180	13 343	13 520	13 697	13 865	14 013	-
45	14 347	14 446	14 588	14 761	14 955	15 157	15 358	15 544	-
50	-	16 046	16 189	16 371	16 581	16 807	17 038	17 263	-
55	-	17 872	18 015	18 205	18 429	18 678	18 939	19 201	-
60	-	-	20 097	20 293	20 531	20 801	21 090	21 389	-
65	-	-	-	-	22 918	23 208	23 525	23 858	-
O									
Current consum	•	21 10	21.52	21.81	22.06	22.21	22.58	22.91	
30	20.74	21.18	21.53	1	22.06	22.31		1	
35 40	22.08	22.51 24.00	22.84 24.33	23.10 24.59	23.32 24.81	23.54 25.01	23.78 25.23	24.07	-
	25.24	25.71		26.34	26.57		27.00	25.51 27.28	-
45			26.06			26.78 28.88			-
50	-	27.67	28.07	28.38	28.64		29.13	29.42	-
55		29.94	30.40	30.76	31.08	31.36	31.66	31.98	
60 65	-	-	33.09	33.54	33.92	34.27	34.63	35.01	<u>-</u>
65	-		-		37.21	37.65	38.09	38.55	-
Mass flow in kg/	h								
30	466	588	729	892	1 081	1 296	1 542	1 821	-
35	459	581	722	886	1 074	1 289	1 534	1 812	-
40	449	572	714	877	1 065	1 279	1 523	1 800	-
45	439	562	703	866	1 053	1 267	1 510	1 785	-
50	-	549	691	853	1 040	1 252	1 494	1 767	-
55	-	535	676	838	1 023	1 235	1 475	1 746	-
60	-	-	659	820	1 004	1 214	1 453	1 722	-
65	-	-	-	-	983	1 191	1 428	1 695	-
Coefficient of pe	orformance (C.C) P)							
30	2.10	2.66	3.31	4.06	4.93	5.93	7.09	8.42	_
35	1.78	2.27	2.84	3.49	4.35	5.33	6.10	7.24	
40	1.49	1.92	2.42	2.98	3.63	4.38	5.23	6.20	
45	1.49	1.61	2.42	2.53	3.09	3.72	4.45	5.27	
50	-	1.34	1.70	2.53	2.60	3.14	3.76	4.46	-
		1.10	1.70	1.76	2.00	2.62	3.14	3.73	-
			1.71	1.70	2.10	2.02	J. 1 4	3.73	-
55 60	-	-	1.15	1.44	1.78	2.16	2.60	3.10	-

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

Cooling capacity	52 746	W	
Power input	16 807	W	
Current consumption	28.88	Α	
Mass flow	1 252	kg/h	
C.O.P.	3.14		

to: Evaporating temperature at dew point

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

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 accoustic hood	dB(A)

Tolerance according EN12900

tc: Condensing temperature at dew point



Danfoss scroll compressor. SY240-4

Performance data at 50 Hz, ARI rating conditions

R407C

°C (tc)	-20	-15	-10	-5	0	5	10	15	
		-							
								-	
			1	T		1	1	Т	
30	23 788	30 405	38 264	47 533	58 381	70 976	85 485	102 077	-
35	22 384	28 801	36 389	45 316	55 753	67 868	81 828	97 804	-
40	20 931	27 122	34 411	42 969	52 968	64 575	77 961	93 293	-
45	19 447	25 382	32 345	40 508	50 040	61 114	73 898	88 563	-
50	-	23 598	30 208	37 947	46 988	57 501	69 659	83 630	-
55	-	21 787	28 017	35 306	43 828	53 756	65 262	78 516	-
60	-	-	25 790	32 604	40 582	49 900	60 731	73 247	-
65	-	-	-	-	37 277	45 963	56 098	67 858	-
ower input in W	ı								
30	10 577	10 687	10 818	10 958	11 096	11 220	11 320	11 385	_
35	11 690	11 798	11 934	12 086	12 244	12 395	12 530	12 636	
40	12 937	13 041	13 180	13 343	13 520	13 697	13 865	14 013	
45	14 347	14 446	14 588	14 761	14 955	15 157	15 358	15 544	
50	-	16 046	16 189	16 371	16 581	16 807	17 038	17 263	
55		17 872	18 015	18 205	18 429	18 678	18 939	19 201	
60		11 012	20 097	20 293	20 531	20 801	21 090	21 389	
65	<u> </u>	-	- 20 097	-	22 918	23 208	23 525	23 858	
03					22 910	23 200	23 323	23 030	
urrent consum	ntion in A								
30	20.74	21.18	21.53	21.81	22.06	22.31	22.58	22.91	
35	22.08	22.51	22.84	23.10	23.32	23.54	23.78	24.07	
40	23.56	24.00	24.33	24.59	24.81	25.01	25.23	25.51	_
45	25.24	25.71	26.06	26.34	26.57	26.78	27.00	27.28	_
50	-	27.67	28.07	28.38	28.64	28.88	29.13	29.42	
55		29.94	30.40	30.76	31.08	31.36	31.66	31.98	
60		-	33.09	33.54	33.92	34.27	34.63	35.01	
65	<u> </u>	-	-	-	37.21	37.65	38.09	38.55	
00		L	ı		07.21	07.00	00.00	00.00	
lass flow in kg/h	h								
30	464	585	725	887	1 075	1 289	1 533	1 810	
35	456	578	718	881	1 068	1 282	1 525	1 801	
40	447	569	710	872	1 059	1 272	1 514	1 789	
45	436	559	699	862	1 039	1 260	1 501	1 774	
50	-	546	687	849	1 047	1 245	1 485	1 774	
55	<u>-</u>	532	672	833	1 034	1 228	1 466	1 736	
60	-	- 532	656	816	999	1 228	1 444	1 736	
65	<u> </u>	-	- 000	- 810	999	1 184	1 444	1 685	
00	<u> </u>	<u> </u>	<u> </u>		311	1 104	1418	1 000	-
coefficient of per	rformance (C.C		2.54	4.24	F 00	6.00	7.55	0.07	
30		2.85	3.54	4.34	5.26	6.33	7.55	8.97	-
35	1.91	2.44	3.05	3.75	4.55	5.48	6.53	7.74	-
40	1.62	2.08	2.61	3.22	3.92	4.71	5.62	6.66	-
45	1.36	1.76	2.22	2.74	3.35	4.03	4.81	5.70	-
50	-	1.47	1.87	2.32	2.83	3.42	4.09	4.84	-
	-	1.22	1.56	1.94	2.38	2.88	3.45	4.09	-
55					1 00	2.40	2.88	3.42	-
55 60 65	-	-	1.28	1.61	1.98 1.63	1.98	2.38	2.84	

to: Evaporating temperature at dew point

Cooling capacity

Current consumption

Power input

Mass flow

C.O.P.

tc: Condensing temperature at dew point

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

59 104

18 553

31.17

1 331

3.19

W

W

kg/h

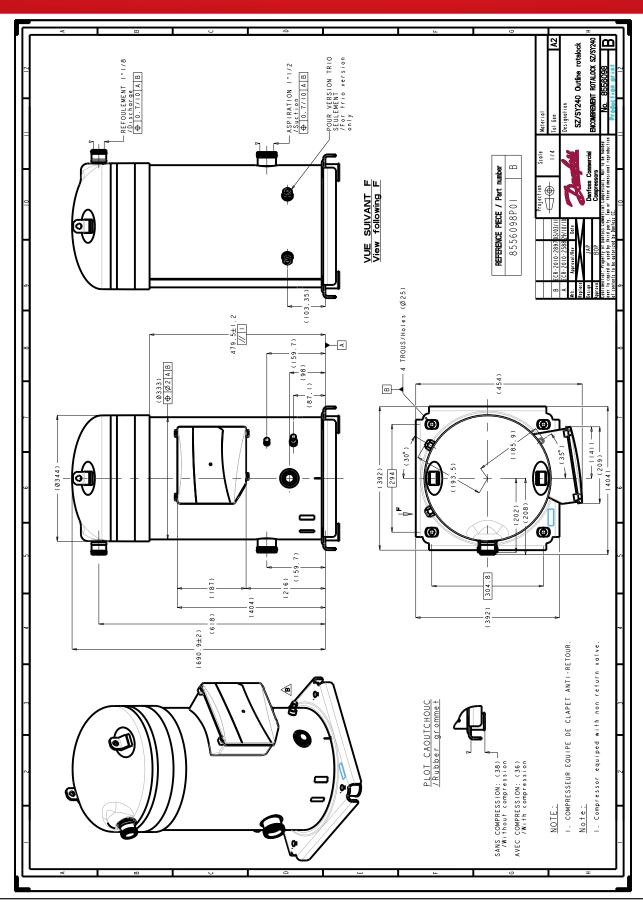
Maximum HP switch setting	29.5	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

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

Tolerance according EN12900

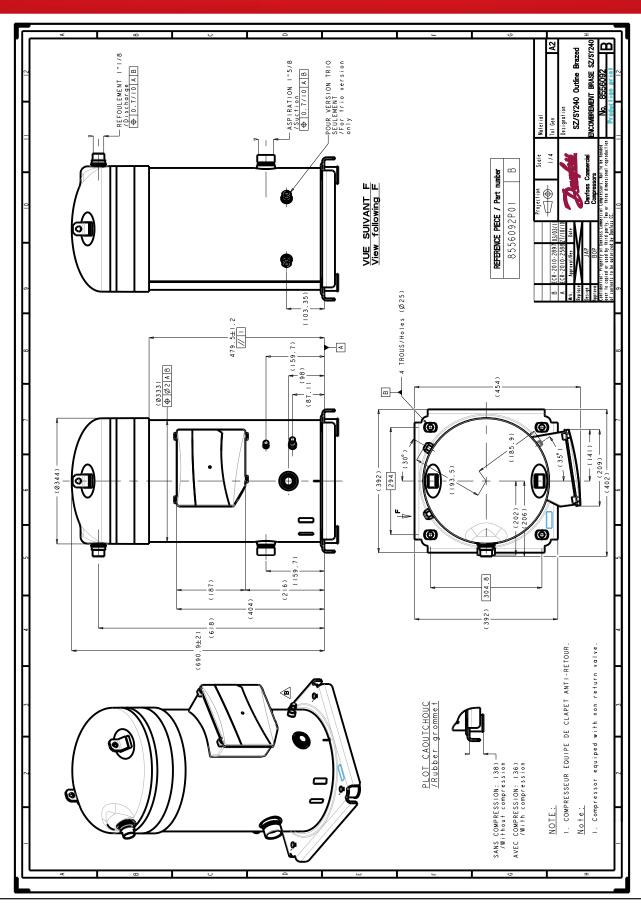




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