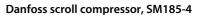
ENGINEERING TOMORROW



**Datasheets** 

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





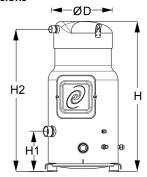




## **General Characteristics**

Model number (on compressor nameplate)	SM185S4RC	SM185S4CC
Code number for Singlepack*	SM185-4RI	SM185-4CAI
Code number for Industrial pack**	SM185-4RM	SM185-4CAM
Drawing number	8551119b	8551056c
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	1-3/8 " ODF	
Discharge connection with supplied sleeve	7/8 " ODF	
Oil sight glass	Threaded	Threaded
Oil equalisation connection	3/8" flare SAE	3/8" flare SAE
Oil drain connection	1/4" flare	1/4" flare
LP gauge port	Schrader	Schrader
IPR valve	None	None
Swept volume	249,9 cm3/rev	
Displacement @ Nominal speed	43.5 m3/h @ 2900 rpm - 52.5 m3/h @ 3500 rpm	
Net weight	100 kg	
Oil charge	6,2 litre, Mineral - 160P	
Maximum system test pressure Low Side / High side	25 bar(g) / 32 bar(g)	
Maximum differential test pressure	24 bar	
Maximum number of starts per hour	12	
Refrigerant charge limit	13,5 kg	
Approved refrigerants	R22, R417A-160SZ	

### **Dimensions**



D=317 mm H=678 mm H1=180 mm H2=643 mm H3=- mm

### **Electrical Characteristics**

Electrical characteristics	
Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-440 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance (between phases) +/- 7% at 25°C	0.77 Ω
Maximum Must Trip current (MMT)	35 A
Locked Rotor Amps (LRA)	175 A
Motor protection	Internal thermostat, ext. overload protector needed

**Recommended Installation torques** 

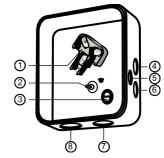
Suction Rotolock nut or valve	130 Nm
Discharge Rotolock nut or valve	110 Nm
Oil sight glass	50 Nm
Power connections / Earth connection	3 Nm / 2 Nm
Terminal box cover screws	2,3 Nm
Mounting bolts	21 Nm

### Parts shipped with compressor

to the figure of the first of t
Mounting kit with grommets, bolts, nuts, sleeves and washers
Initial oil charge
Installation instructions

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

### **Terminal box**



IP54 (with cable gland)

- 1: Power connection, 3 x 4.8 mm (3/16")
- 2: Earth M5
- 3: Thermostat connector
- 4: Knock-out Ø 22 mm (7/8") for 1/2" conduit
- 5: Knock-out Ø 16.5 mm (0.65")
- 6: Knock-out Ø 20.5 mm (0.81")
- 7: Double knock-out Ø 32.1 mm (1.26") & Ø 25.4 mm (1")
- 8: Double knock-out Ø 44 mm (1-3/4") for 1-1/4" conduit & Ø 34 mm (1-3/8") for 1" conduit

<sup>\*</sup>Singlepack: Compressor in cardboard box

<sup>\*\*</sup>Industrial pack: 6 Unboxed compressors on pallet (order per multiples of 6)



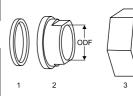
## Datasheet, accessories and spare parts

### Danfoss scroll compressor, SM185-4

Code no.
8153005
8153006
8168025
8168026
8156133

### Rotolock accessories, discharge side Code no. Solder sleeve, P07 (1-3/4" Rotolock, 7/8" ODF) 8153013 Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF) 8153004 Angle adapter, C07 (1-3/4" Rotolock, 7/8" ODF) 8168008 Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF) 8168005 Rotolock valve, V07 (1-3/4" Rotolock, 7/8" ODF) 8168032 Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF) 8168028

### Gaskets, sleeves and nuts



1: Gasket
2: Solder sleeve
3: Rotolock nut

Rotolo	ock a	ccess	ories,	sets

Gasket, 1-3/4"

Solder sleeve adapter set, (2-1/4" Rotolock, 1-5/8" ODF), (1-3/4" Rotolock, 1"1/8 ODF)	7765028
Valve set, V08 (2-1/4"~1-3/8"), V07 (1-3/4"~7/8")	7703010
Gasket set, 1-1/4", 1-3/4", 2-1/4", OSG gaskets black & white	8156013

# Code no.

8156132

Codono



Solder sleeve adapter set

Oil / lubricants	Code no.	
Mineral oil, 160P, 2 litre can	7754001	
Mineral oil 160P 5 litre can	7754002	

_			
(rar	うかんうてひ	heaters	

Crankcase heaters	Code no.
Surface sump heater + bottom insulation, 56 W, 24 V, CE mark, UL	120Z0360
Surface sump heater + bottom insulation, 56 W, 230 V, CE mark, UL	120Z0376
Surface sump heater + bottom insulation, 56 W, 400 V, CE mark, UL	120Z0377
Surface sump heater + bottom insulation, 56 W, 460 V, CE mark, UL	120Z0378
Belt type crankcase heater, 75 W, 230 V, CE mark, UL	7773108
Belt type crankcase heater, 75 W, 400 V, CE mark, UL	7773118
Belt type crankcase heater, 75 W, 460 V, CE mark, UL	120Z0464

1: Rotolock adapter (Suc & Dis)

2: Gasket (Suc & Dis)

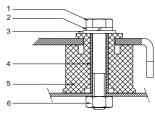
3: Solder sleeve (Suc & Dis)

4: Rotolock nut (Suc & Dis)

# Miscellaneous accessories

Miscellatieous accessories	Code no.
Electronic soft start kit, MCI 25 C	7705007
Acoustic hood for scroll compressor \$175-\$185	7755007
Acoustic bottom insulation for scroll compressor	120Z0353
Discharge thermostat kit	7750009

# Mounting kit



Spare parts	Code no.

Spare parts	couc no.
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	8156138
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers,	8156147
2 rotolock nuts, 2 solder sleeves, 2 gaskets	
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (white teflon)	8156129
Terminal box 186 x 198 mm, incl cover	8156139
T block connector 60 x 75 mm	8173021

1: Bolt (4x) 2: Lock washer (4x) 3: Flat washer (4x)

4: Sleeve (4x) 5: Grommet (4x)

6: Nut (4x)



# Performer scroll compressor. SM185-4

# Performance data at 50 Hz, EN 12900 rating conditions

**R22** 

°C (tc)  Cooling capacity 30 35 40	-20 <b>in W</b> 18 321	-15	-10	-5	0	5	10	15	
30 35									
30 35									· · · · ·
35		22 879	28 204	34 366	41 435	49 479	58 569	68 774	
								+	-
40	17 280	21 729	26 914	32 904	39 768	47 575	56 393	66 294	-
45	16 221	20 543	25 569	31 367	38 006	45 556	54 085	63 663	-
45		19 302	24 144	29 727	36 118	43 386	51 599	60 828	-
50	-	-	22 668	28 017	34 141	41 109	48 989	57 851	-
55	-	-	-	26 214	32 048	38 693	46 217	54 689	-
60	-	-	-	-	29 832	36 128	43 270	51 324	-
65	-	-	-	-	27 523	33 453	40 192	47 810	-
ower input in W									
30	7 964	8 050	8 133	8 212	8 284	8 347	8 399	8 437	-
35	8 819	8 906	8 991	9 071	9 145	9 211	9 265	9 306	-
40	9 773	9 861	9 947	10 030	10 106	10 174	10 231	10 275	-
45	-	10 925	11 013	11 097	11 176	11 247	11 307	11 354	-
50	-	-	12 196	12 283	12 364	12 438	12 501	12 553	-
55	-	-	-	13 596	13 680	13 757	13 824	13 879	-
60	-	-	-	-	15 132	15 212	15 283	15 342	-
65	-	-	-	-	16 731	16 814	16 889	16 953	-
urrent consump		17.70	47.00	17.00	47.00	17.07	47.00	17.00	
30	17.62	17.72	17.80	17.88	17.93	17.97	17.99	17.98	
35	18.55	18.65	18.74	18.82	18.88	18.93	18.95	18.95	-
40	19.61	19.72	19.82	19.90	19.97	20.03	20.06	20.08	-
45	-	20.94	21.05	21.14	21.22	21.29	21.33	21.36	-
50	-	-	22.45	22.55	22.64	22.72	22.78	22.82	-
55	-	-	-	24.14	24.25	24.34	24.42	24.48	-
60	-	-	-	-	26.06	26.17	26.26	26.34	-
65	-	-	-	-	28.09	28.21	28.32	28.42	-
lass flow in kg/h	ı								
30	394	486	592	712	848	1 001	1 172	1 363	_
35	387	480	586	707	844	999	1 171	1 363	-
40	378	472	580	702	840	994	1 167	1 359	-
45	-	464	572	694	832	988	1 161	1 353	-
50	-	-	562	685	823	978	1 151	1 343	-
55	-	-	-	673	811	966	1 138	1 330	-
60	-	-	-	-	796	950	1 122	1 313	-
65	-	-	-	-	778	931	1 102	1 292	-
30	formance (C.O 2.30	2.84	3.47	4.18	5.00	5.93	6.97	8.15	_
				1		+		<del>†</del>	
35	1.96	2.44	2.99	3.63	4.35	5.17	6.09	7.12	-
40	1.66	2.08	2.57	3.13	3.76	4.48	5.29	6.20	-
45	-	1.77	2.19	2.68	3.23	3.86	4.56	5.36	-
50	-	-	1.86	2.28	2.76	3.31	3.92	4.61	-
55	-	-	-	1.93	2.34	2.81	3.34	3.94	-
60 65	-	-	-	-	1.97 1.65	2.37 1.99	2.83 2.38	3.35 2.82	-

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

tronnia porto manos at to c, to	•• •	
Cooling capacity	41 109	W
Power input	12 438	W
Current consumption	22.72	Α
Mass flow	978	kg/h
C.O.P.	3.31	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 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	80	dB(A)
With accoustic hood	72	dB(A)

All performance data +/- 5%





# Performer scroll compressor. SM185-4

# Performance data at 50 Hz, ARI rating conditions

**R22** 

Cond. temp. in				Evapora	iting temperature	in °C (to)			
°C (tc)	-20	-15	-10	-5	0	5	10	15	
			•	•	•				
Cooling capacit	y in W								
30	19 439	24 255	29 878	36 380	43 832	52 306	61 875	72 610	-
35	18 400	23 118	28 611	34 951	42 209	50 458	59 770	70 215	-
40	17 337	21 936	27 278	33 434	40 478	48 480	57 512	67 647	-
45	-	20 708	25 877	31 829	38 637	46 371	55 103	64 906	-
50	-	-	24 409	30 136	36 686	44 131	52 542	61 992	-
55	-	-	-	28 354	34 625	41 760	49 828	58 904	-
60	-	-	-	-	32 455	39 257	46 962	55 642	-
65	-	-	-	-	30 174	36 623	43 943	52 207	-
Power input in \	N	•	•	•	•	•	T		
30	7 964	8 050	8 133	8 212	8 284	8 347	8 399	8 437	-
35	8 819	8 906	8 991	9 071	9 145	9 211	9 265	9 306	-
40	9 773	9 861	9 947	10 030	10 106	10 174	10 231	10 275	-
45	-	10 925	11 013	11 097	11 176	11 247	11 307	11 354	-
50	-	-	12 196	12 283	12 364	12 438	12 501	12 553	-
55	-	-	-	13 596	13 680	13 757	13 824	13 879	-
60	-	-	-	-	15 132	15 212	15 283	15 342	-
65	-	-	-	-	16 731	16 814	16 889	16 953	-
Current consum	nption in A								
30	17.62	17.72	17.80	17.88	17.93	17.97	17.99	17.98	-
35	18.55	18.65	18.74	18.82	18.88	18.93	18.95	18.95	-
40	19.61	19.72	19.82	19.90	19.97	20.03	20.06	20.08	-
45	-	20.94	21.05	21.14	21.22	21.29	21.33	21.36	-
50	-	-	22.45	22.55	22.64	22.72	22.78	22.82	-
55	-	-	-	24.14	24.25	24.34	24.42	24.48	-
60	-	-	-	-	26.06	26.17	26.26	26.34	-
65	-	-	-	-	28.09	28.21	28.32	28.42	-
Mass flow in kg	/h								
30	392	484	589	708	843	995	1 165	1 355	-
35	385	477	583	704	840	993	1 164	1 355	-
40	376	470	577	698	835	989	1 161	1 352	-
45	-	461	569	691	828	982	1 154	1 345	-
50	-	-	559	681	819	973	1 145	1 336	-
55	-	-	-	669	807	960	1 132	1 323	-
60	-	-	-	-	792	945	1 116	1 305	-
65	-	-	-	-	774	926	1 096	1 284	-
Coefficient of pe	erformance (C.C	).P.)	•	•	•	_	T		
30	2.44	3.01	3.67	4.43	5.29	6.27	7.37	8.61	-
35	2.09	2.60	3.18	3.85	4.62	5.48	6.45	7.55	-
40	1.77	2.22	2.74	3.33	4.01	4.77	5.62	6.58	-
45	-	1.90	2.35	2.87	3.46	4.12	4.87	5.72	-
50	-	-	2.00	2.45	2.97	3.55	4.20	4.94	-
55	-	-	-	2.09	2.53	3.04	3.60	4.24	-
60	-	-	-	-	2.14	2.58	3.07	3.63	-
			_		_				

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

reminar performance at to 7:2 0, to	U-1	
Cooling capacity	45 500	W
Power input	13 622	W
Current consumption	24.17	Α
Mass flow	1 035	kg/h
C.O.P.	3.34	

to: Evaporating temperature at dew point

tc: Condensing 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	80	dB(A)
With accoustic hood	72	dB(A)

All performance data +/- 5%





# Performer scroll compressor. SM185-4

# Performance data at 60 Hz, EN 12900 rating conditions

**R22** 

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-20	-15	-10	-5	0	5	10	15	
Caalian assasits	. : \								
Cooling capacity	22 382	27 798	34 083	41 309	49 548	58 873	69 357	81 072	
30									-
35	21 114	26 408	32 535	39 566	47 574	56 632	66 811	78 184	-
40	19 829	24 979	30 926	37 742	45 497	54 266	64 119	75 130	-
45	-	23 493	29 234	35 806	43 282	51 734	61 232	71 850	-
50	-	-	27 493	33 802	40 978	49 092	58 216	68 422	-
55	-	-	-	31 705	38 555	46 306	55 029	64 797	-
60	-	-	-	-	36 006	43 365	51 659	60 957	-
65	-	-	-	-	33 373	40 319	48 161	56 968	-
Power input in V	V								
30	9 493	9 669	9 842	10 008	10 161	10 298	10 415	10 506	-
35	10 422	10 600	10 777	10 946	11 104	11 246	11 368	11 467	-
40	11 468	11 649	11 829	12 002	12 165	12 313	12 442	12 548	-
45	-	12 827	13 010	13 188	13 357	13 511	13 647	13 760	-
50	-	-	14 331	14 514	14 689	14 850	14 993	15 114	-
55	-	-	-	15 990	16 171	16 339	16 491	16 620	-
60	-	-	-	-	17 815	17 991	18 151	18 290	-
65	-	-	-	-	19 632	19 816	19 985	20 133	-
Current consum	•	40.00	10.55	10.70	40.00	47.04	17.40	17.45	
30	16.16	16.36	16.55	16.73	16.88	17.01	17.10	17.15	-
35	17.11	17.32	17.52	17.71	17.87	18.01	18.12	18.19	-
40	18.22	18.44	18.65	18.85	19.03	19.19	19.31	19.40	-
45	-	19.73	19.96	20.17	20.37	20.54	20.69	20.80	-
50	-	-	21.46	21.69	21.91	22.10	22.27	22.40	-
55	-	-	-	23.43	23.67	23.88	24.07	24.23	-
60	-	-	-	-	25.66	25.90	26.11	26.30	-
65	-	-	-	-	27.92	28.18	28.42	28.63	-
Mass flow in kg/	h								
30	482	591	715	855	1 013	1 191	1 388	1 606	-
35	472	583	709	851	1 010	1 189	1 387	1 607	-
40	462	574	701	844	1 005	1 184	1 384	1 604	-
45	-	565	692	836	998	1 178	1 377	1 598	-
50		-	682	826	988	1 168	1 368	1 589	-
55	-	-	-	814	976	1 156	1 355	1 576	-
60	-	-	-	-	961	1 140	1 340	1 560	-
65	-	-	-	-	943	1 122	1 320	1 539	-
Coefficient of pe	orformance (C.C	) P )							
30	2.36	2.87	3.46	4.13	4.88	5.72	6.66	7.72	_
35	2.03	2.49	3.40	3.61	4.88	5.72	5.88	6.82	
40	1.73	2.49	2.61	3.01	3.74	4.41	5.88	5.99	-
45	-	1.83	2.01	2.71	3.74	3.83	4.49	5.99	
50	-	-	1.92	2.71	2.79	3.83	3.88	4.53	<u>-</u>
		+				2.83		3.90	
55 60	-	-	-	1.98	2.38		3.34 2.85		-
	-	-	-	-	2.02	2.41		3.33	-
65	-	-	-	-	1.70	2.03	2.41	2.83	-

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

Nominal portormance at to 0 0, to	00 0	
Cooling capacity	49 092	W
Power input	14 850	W
Current consumption	22.10	Α
Mass flow	1 168	kg/h
C.O.P.	3.31	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 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	82.5	dB(A)
With accoustic hood	75	dB(A)

All performance data +/- 5%





# Performer scroll compressor. SM185-4

# Performance data at 60 Hz, ARI rating conditions

**R22** 

9 493 10 422 11 468	-15  29 471 28 096 26 673 25 205 9 669 10 600 11 649 12 827 -	-10  36 106 34 586 32 993 31 332 29 605 9 842 10 777 11 829	-5  43 729  42 027  40 229  38 339  36 359  34 294  10 008  10 946	52 415 50 495 48 456 46 301 44 033 41 655 39 172 36 587	5 62 237 60 065 57 749 55 293 52 701 49 975 47 121 44 140	73 272 70 811 68 182 65 390 62 438 59 329 56 067 52 655	85 594 82 808 79 831 76 667 73 320 69 791 66 086 62 208	
23 747 22 483 21 194 9 493 10 422 11 468	28 096 26 673 25 205 - - - - - - - - 9 669 10 600 11 649 12 827	34 586 32 993 31 332 29 605 - - - - 9 842 10 777 11 829	42 027 40 229 38 339 36 359 34 294 - - -	50 495 48 456 46 301 44 033 41 655 39 172 36 587	60 065 57 749 55 293 52 701 49 975 47 121 44 140	70 811 68 182 65 390 62 438 59 329 56 067	82 808 79 831 76 667 73 320 69 791 66 086	- - - -
23 747 22 483 21 194 9 493 10 422 11 468	28 096 26 673 25 205 - - - - - - - - 9 669 10 600 11 649 12 827	34 586 32 993 31 332 29 605 - - - - 9 842 10 777 11 829	42 027 40 229 38 339 36 359 34 294 - - -	50 495 48 456 46 301 44 033 41 655 39 172 36 587	60 065 57 749 55 293 52 701 49 975 47 121 44 140	70 811 68 182 65 390 62 438 59 329 56 067	82 808 79 831 76 667 73 320 69 791 66 086	- - - -
22 483 21 194 9 493 10 422 11 468	28 096 26 673 25 205 - - - - - - - - 9 669 10 600 11 649 12 827	34 586 32 993 31 332 29 605 - - - - 9 842 10 777 11 829	42 027 40 229 38 339 36 359 34 294 - - -	50 495 48 456 46 301 44 033 41 655 39 172 36 587	60 065 57 749 55 293 52 701 49 975 47 121 44 140	70 811 68 182 65 390 62 438 59 329 56 067	82 808 79 831 76 667 73 320 69 791 66 086	- - - -
21 194 9 493 10 422 11 468	26 673 25 205 - - - - - - - 9 669 10 600 11 649 12 827	32 993 31 332 29 605 - - - - 9 842 10 777 11 829	40 229 38 339 36 359 34 294 - - - 10 008	48 456 46 301 44 033 41 655 39 172 36 587	57 749 55 293 52 701 49 975 47 121 44 140	68 182 65 390 62 438 59 329 56 067	79 831 76 667 73 320 69 791 66 086	- - - -
9 493 10 422 11 468 -	25 205 - - - - - - 9 669 10 600 11 649 12 827	31 332 29 605 - - - - 9 842 10 777 11 829	38 339 36 359 34 294 - - 10 008	46 301 44 033 41 655 39 172 36 587	55 293 52 701 49 975 47 121 44 140	65 390 62 438 59 329 56 067	76 667 73 320 69 791 66 086	- - -
9 493 10 422 11 468 - -	9 669 10 600 11 649 12 827	9 842 10 777 11 829	36 359 34 294 - - 10 008	44 033 41 655 39 172 36 587	52 701 49 975 47 121 44 140	62 438 59 329 56 067	73 320 69 791 66 086	-
9 493 10 422 11 468 - -	9 669 10 600 11 649 12 827	9 842 10 777 11 829	34 294 - - 10 008	41 655 39 172 36 587	49 975 47 121 44 140	59 329 56 067	69 791 66 086	-
9 493 10 422 11 468 - -	9 669 10 600 11 649 12 827	9 842 10 777 11 829	- - 10 008	39 172 36 587	47 121 44 140	56 067	66 086	-
9 493 10 422 11 468 - -	9 669 10 600 11 649 12 827	9 842 10 777 11 829	10 008	36 587	44 140			
9 493 10 422 11 468 - - -	9 669 10 600 11 649 12 827	9 842 10 777 11 829	10 008			52 655	62 208	-
10 422 11 468 - - -	10 600 11 649 12 827	10 777 11 829		10 161	1			
10 422 11 468 - - -	10 600 11 649 12 827	10 777 11 829		10 161	1			
10 422 11 468 - - -	10 600 11 649 12 827	10 777 11 829		10 161				
11 468	11 649 12 827	11 829	10 946		10 298	10 415	10 506	-
	12 827			11 104	11 246	11 368	11 467	-
			12 002	12 165	12 313	12 442	12 548	-
-	-	13 010	13 188	13 357	13 511	13 647	13 760	-
-		14 331	14 514	14 689	14 850	14 993	15 114	-
	-	-	15 990	16 171	16 339	16 491	16 620	-
-	-	-	-	17 815	17 991	18 151	18 290	-
	-	-	-	19 632	19 816	19 985	20 133	-
n in A				T	1			
16.16	16.36	16.55	16.73	16.88	17.01	17.10	17.15	-
17.11	17.32	17.52	17.71	17.87	18.01	18.12	18.19	-
18.22	18.44	18.65	18.85	19.03	19.19	19.31	19.40	-
-	19.73	19.96	20.17	20.37	20.54	20.69	20.80	-
-	-	21.46	21.69	21.91	22.10	22.27	22.40	-
-	-	-	23.43	23.67	23.88	24.07	24.23	-
-	-	-	-	25.66	25.90	26.11	26.30	-
-	-	-	-	27.92	28.18	28.42	28.63	-
470	500	744	051	4.000	4.404	4 200	4.507	
								-
1							<u> </u>	-
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-	-	-	-					-
-	-	-	-	938	1 116	1 313	1 530	
mance (C O P	1							
· · ·		3.67	4 37	5 16	6.04	7 04	8 15	_
					1			
								-
								-
								-
								-
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		- 19.73	- 19.73 19.96 21.46	- 19.73 19.96 20.17 21.46 21.69 23.43	-       19.73       19.96       20.17       20.37         -       -       21.46       21.69       21.91         -       -       -       23.43       23.67         -       -       -       -       25.66         -       -       -       -       27.92         479       588       711       851       1 008         470       580       705       846       1 005         460       571       698       840       1 000         -       562       689       832       992         -       -       678       822       983         -       -       -       956         -       -       -       970         -       -       -       938         mance (C.O.P.)         2.50       3.05       3.67       4.37       5.16         2.16       2.65       3.21       3.84       4.55         1.85       2.29       2.79       3.35       3.98         -       -       2.07       2.51       3.00         -       -       -       2.14       2.58	-       19.73       19.96       20.17       20.37       20.54         -       -       21.46       21.69       21.91       22.10         -       -       -       -       23.43       23.67       23.88         -       -       -       -       25.66       25.90         -       -       -       -       27.92       28.18         479       588       711       851       1 008       1 184         470       580       705       846       1 005       1 182         460       571       698       840       1 000       1 178         -       -       562       689       832       992       1 171         -       -       678       822       983       1 162         -       -       -       810       970       1 149         -       -       -       956       1 134         -       -       -       938       1 116         mance (C.O.P.)         2.50       3.05       3.67       4.37       5.16       6.04         2.16       2.65       3.21       3.84       4.55 <td>-         19.73         19.96         20.17         20.37         20.54         20.69           -         -         21.46         21.69         21.91         22.10         22.27           -         -         -         -         23.43         23.67         23.88         24.07           -         -         -         -         25.66         25.90         26.11           -         -         -         -         27.92         28.18         28.42           479         588         711         851         1 008         1 184         1 380           470         580         705         846         1 005         1 182         1 379           460         571         698         840         1 000         1 178         1 376           -         562         689         832         992         1 171         1 370           -         -         678         822         983         1 162         1 360           -         -         -         810         970         1 149         1 348           -         -         -         936         1 134         1 332           -<!--</td--><td>- 19.73</td></td>	-         19.73         19.96         20.17         20.37         20.54         20.69           -         -         21.46         21.69         21.91         22.10         22.27           -         -         -         -         23.43         23.67         23.88         24.07           -         -         -         -         25.66         25.90         26.11           -         -         -         -         27.92         28.18         28.42           479         588         711         851         1 008         1 184         1 380           470         580         705         846         1 005         1 182         1 379           460         571         698         840         1 000         1 178         1 376           -         562         689         832         992         1 171         1 370           -         -         678         822         983         1 162         1 360           -         -         -         810         970         1 149         1 348           -         -         -         936         1 134         1 332           - </td <td>- 19.73</td>	- 19.73

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

monima portormanos as to	0,	U-1T U	
Cooling capacity		54 313	W
Power input		16 221	W
Current consumption		23.74	Α
Mass flow		1 236	kg/h
C.O.P.		3.35	

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

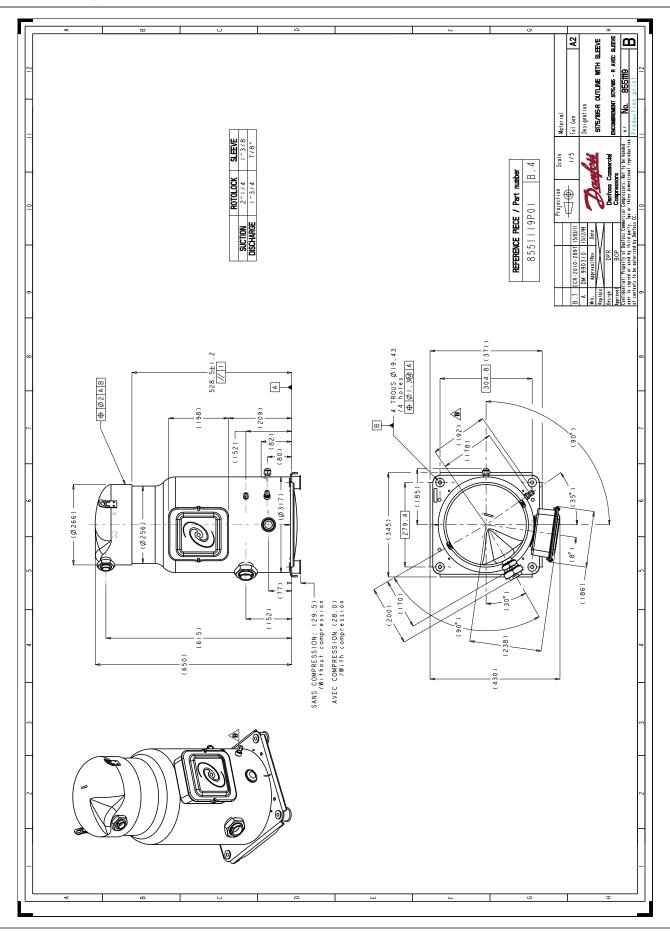
All performance data +/- 5%



tc: Condensing temperature at dew point

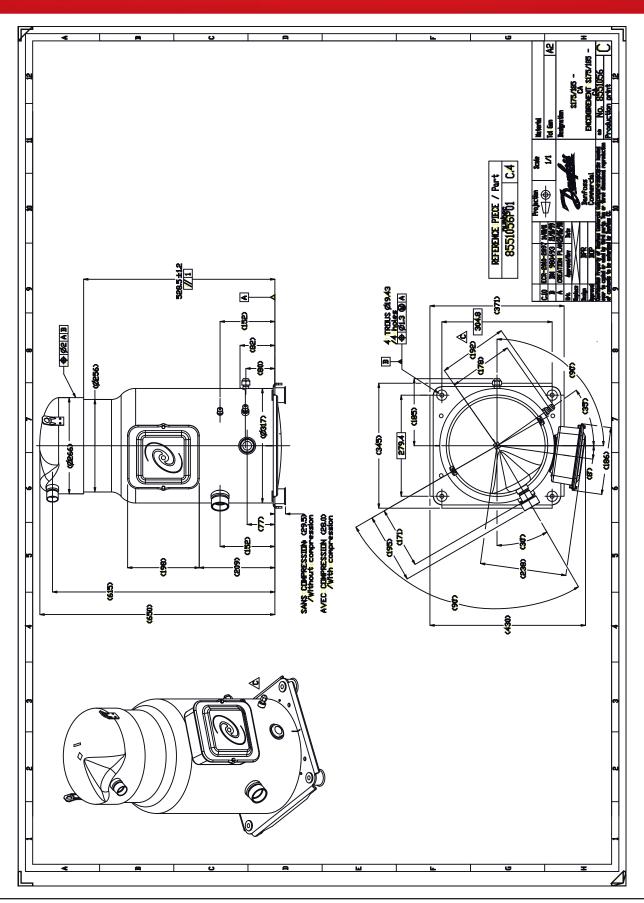


Datasheet, drawing Scroll compressor











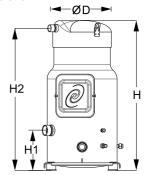
### Datasheet, technical data

## Danfoss scroll compressor, SM185-4

## **General Characteristics**

Model number (on compressor nameplate)		SM185S4QC	
Code number for Singlepack*		SM185-4QAI	
Code number for Industrial pack**		SM185-4QAM	
Drawing number		8551065c	
Suction and discharge connections		Brazed	
Suction connection		1-5/8 " ODF	
Discharge connection		1-1/8 " ODF	
Oil sight glass		Threaded	
Oil equalisation connection		3/8" ODF	
Oil drain connection		1/4" flare	
LP gauge port		Schrader	
IPR valve		None	
Swept volume	249,9 cm3/rev		
Displacement @ Nominal speed	43.5 m3/h @ 2900 rpm - 52.5 m3/h @ 3500 rpm		
Net weight	100 kg		
Oil charge	6,2 litre, Mineral - 160P		
Maximum system test pressure Low Side / High side	25 bar(g) / 32 bar(g)		
Maximum differential test pressure	24 bar		
Maximum number of starts per hour	12		
Refrigerant charge limit	13,5 kg		
Approved refrigerants	R22, R417A-160SZ		

### **Dimensions**



D=317 mm H=678 mm H1=180 mm H2=643 mm H3=- mm

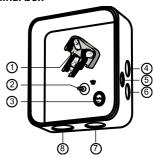
## **Electrical Characteristics**

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-440 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance (between phases) +/- 7% at 25℃	0.77 Ω
Maximum Must Trip current (MMT)	35 A
Locked Rotor Amps (LRA)	175 A
Motor protection	Internal thermostat, ext. overload protector needed

**Recommended Installation torques** 

Oil sight glass	50 Nm
Power connections / Earth connection	3 Nm / 2 Nm
Terminal box cover screws	2,3 Nm
Mounting bolts	21 Nm

### **Terminal box**



# Parts shipped with compressor

Mounting kit with grommets, bolts, nuts, sleeves and washers
Initial oil charge
Installation instructions

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

- \*Singlepack: Compressor in cardboard box
- \*\*Industrial pack: 6 Unboxed compressors on pallet (order per multiples of 6)

IP54 (with cable gland)

- 1: Power connection, 3 x 4.8 mm (3/16")
- 2: Earth M5
- 3: Thermostat connector
- 4: Knock-out Ø 22 mm (7/8") for 1/2" conduit
- 5: Knock-out Ø 16.5 mm (0.65")
- 6: Knock-out Ø 20.5 mm (0.81")
- 7: Double knock-out Ø 32.1 mm (1.26") & Ø 25.4 mm (1")
- 8: Double knock-out Ø 44 mm (1-3/4") for 1-1/4" conduit & Ø 34 mm (1-3/8") for 1" conduit



## Datasheet, accessories and spare parts

# Danfoss scroll compressor, SM185-4

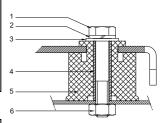
Rotolock accessories, suction side	Code no.
Rotolock accessories, discharge side	Code no.
Rotolock accessories, sets	Code no.
Oil / lubricants	Code no.
Mineral oil, 160P, 2 litre can	7754001
Mineral oil, 160P, 5 litre can	7754002

Crankcase heaters	Code no.
Surface sump heater + bottom insulation, 56 W, 24 V, CE mark, UL	120Z0360
Surface sump heater + bottom insulation, 56 W, 230 V, CE mark, UL	120Z0376
Surface sump heater + bottom insulation, 56 W, 400 V, CE mark, UL	120Z0377
Surface sump heater + bottom insulation, 56 W, 460 V, CE mark, UL	120Z0378
Belt type crankcase heater, 75 W, 230 V, CE mark, UL	7773108
Belt type crankcase heater, 75 W, 400 V, CE mark, UL	7773118
Belt type crankcase heater, 75 W, 460 V, CE mark, UL	120Z0464

### Miscellaneous accessories Code no. Electronic soft start kit, MCI 25 C 7705007 Acoustic hood for scroll compressor \$175-\$185 7755007 Acoustic bottom insulation for scroll compressor 120Z0353 Discharge thermostat kit 7750009

Spare parts	Code no.
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	8156138
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers,	8156147
2 rotolock nuts, 2 solder sleeves, 2 gaskets	
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (white teflon)	8156129
Terminal box 186 x 198 mm, incl cover	8156139
T block connector 60 x 75 mm	8173021

# Mounting kit



- 1: Bolt (4x)
- 2: Lock washer (4x)
- 3: Flat washer (4x)
- 4: Sleeve (4x) 5: Grommet (4x)
- 6: Nut (4x)



# Danfoss scroll compressor. SM185-4

# 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'	ne in W	•	•	•		•		•	
Cooling capacit		22.074	20.400	24.200	44.407	40.470	50.550	60.760	
30	18 318	22 874	28 199	34 360	41 427	49 470	58 559	68 762	-
35	17 278	21 728	26 912	32 902	39 765	47 572	56 390	66 290	-
40	16 216	20 537	25 561	31 358	37 996	45 544	54 071	63 646	-
45	-	19 302	24 145	29 728	36 119	43 387	51 601	60 830	-
50	-	-	22 663	28 011	34 133	41 100	48 979	57 839	-
55	-	-	-	26 206	32 039	38 682	46 204	54 673	-
60	-	-	-	-	29 834	36 131	43 273	51 327	-
65	-	-	-	-	27 517	33 445	40 183	47 799	-
Power input in \	W								
30	7 964	8 050	8 133	8 212	8 284	8 347	8 399	8 437	-
35	8 819	8 906	8 991	9 071	9 145	9 211	9 265	9 306	-
40	9 773	9 861	9 947	10 030	10 106	10 174	10 231	10 275	-
45	-	10 925	11 013	11 097	11 176	11 247	11 307	11 354	-
50	-	-	12 196	12 283	12 364	12 438	12 501	12 553	-
55	-	-	-	13 596	13 680	13 757	13 824	13 879	-
60	-	-	-	-	15 132	15 212	15 283	15 342	-
65	-	_	-	-	16 731	16 814	16 889	16 953	-
•		•		l					
urrent consum		17.70	17.00	17.00	17.00	17.07	17.00	17.00	
30	17.62	17.72	17.80	17.88	17.93	17.97	17.99	17.98	-
35	18.55	18.65	18.74	18.82	18.88	18.93	18.95	18.95	-
40	19.61	19.72	19.82	19.90	19.97	20.03	20.06	20.08	-
45	-	20.94	21.05	21.14	21.22	21.29	21.33	21.36	-
50	-	-	22.45	22.55	22.64	22.72	22.78	22.82	-
55	-	-	-	24.14	24.25	24.34	24.42	24.48	-
60	-	-	-	-	26.06	26.17	26.26	26.34	-
65	-	-	-	-	28.09	28.21	28.32	28.42	-
Mass flow in kg	/h								
30	394	486	592	712	848	1 001	1 172	1 363	-
35	387	480	586	707	844	999	1 171	1 363	-
40	378	472	580	702	840	994	1 167	1 359	-
45	-	464	572	694	832	988	1 161	1 353	-
50	-	-	562	685	823	978	1 151	1 343	-
55	-	-	-	673	811	966	1 138	1 330	-
60	-	_	-	-	796	950	1 122	1 313	-
65	-	_	-	-	778	931	1 102	1 292	-
	_		ı	ı	-				
-	erformance (C.C	1	2.47	4.40	E 00	E 00	6.07	0.45	
30	2.30	2.84	3.47	4.18	5.00	5.93	6.97	8.15	-
35	1.96	2.44	2.99	3.63	4.35	5.16	6.09	7.12	-
40	1.66	2.08	2.57	3.13	3.76	4.48	5.28	6.19	-
45	-	1.77	2.19	2.68	3.23	3.86	4.56	5.36	-
50	-	-	1.86	2.28	2.76	3.30	3.92	4.61	-
55	-	-	-	1.93	2.34	2.81	3.34	3.94	-
60	-	-	-	-	1.97	2.38	2.83	3.35	-
65	-	-	-	-	1.64	1.99	2.38	2.82	-

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

-, -, -,		
Cooling capacity	41 100	W
Power input	12 438	W
Current consumption	22.72	Α
Mass flow	978	kg/h
C.O.P.	3.30	

to: Evaporating temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 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	80	dB(A)
With accoustic hood	72	dB(A)

All performance data +/- 5%

tc: Condensing temperature at dew point



# Danfoss scroll compressor. SM185-4

# 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	19 439	24 255	29 878	36 380	43 832	52 306	61 875	72 610	
35	18 400	23 118	28 611	34 951	42 209	50 458	59 770	70 215	
40	17 337	21 936	27 278	33 434	40 478	48 480	57 512	67 647	
45	-	20 708	25 877	31 829	38 637	46 371	55 103	64 906	
50		20 708	24 409	30 136	36 686	44 131	52 542	61 992	
55		-	-	28 354	34 625	41 760	49 828	58 904	
60	<u>-</u>	-	-	-	32 455	39 257	46 962	55 642	<u> </u>
65		-	-	-	30 174	36 623	43 943	52 207	
03					30 174	30 023	40 940	32 201	
ower input in W	1								
30	7 964	8 050	8 133	8 212	8 284	8 347	8 399	8 437	-
35	8 819	8 906	8 991	9 071	9 145	9 211	9 265	9 306	-
40	9 773	9 861	9 947	10 030	10 106	10 174	10 231	10 275	-
45	-	10 925	11 013	11 097	11 176	11 247	11 307	11 354	-
50	-	-	12 196	12 283	12 364	12 438	12 501	12 553	-
55	-	-	-	13 596	13 680	13 757	13 824	13 879	-
60	-	-	-	-	15 132	15 212	15 283	15 342	-
65	-	-	-	-	16 731	16 814	16 889	16 953	-
Current consump	ption in A	•	•		1		1		
30	17.62	17.72	17.80	17.88	17.93	17.97	17.99	17.98	-
35	18.55	18.65	18.74	18.82	18.88	18.93	18.95	18.95	-
40	19.61	19.72	19.82	19.90	19.97	20.03	20.06	20.08	-
45	-	20.94	21.05	21.14	21.22	21.29	21.33	21.36	-
50	-	-	22.45	22.55	22.64	22.72	22.78	22.82	-
55	-	-	-	24.14	24.25	24.34	24.42	24.48	-
60	-	-	-	-	26.06	26.17	26.26	26.34	-
65	-	-	-	-	28.09	28.21	28.32	28.42	-
Acco flow in ka/l	_								
Mass flow in kg/h	392	484	589	708	843	995	1 165	1 355	
35	385	477	583	704	840	993	1 164	1 355	
		1					1	1	
40 45	376	470 461	577 569	698 691	835 828	989 982	1 161 1 154	1 352 1 345	-
	<u> </u>	401				982	1		<u> </u>
50			559	681	819		1 145	1 336	-
55	-	-	-	669	807	960	1 132	1 323	-
60	-	-	-	-	792	945	1 116	1 305	-
65	-	-	-	-	774	926	1 096	1 284	-
Coefficient of pe	rformance (C.C	).P.)	_		1		1		
30	2.44	3.01	3.67	4.43	5.29	6.27	7.37	8.61	-
35	2.09	2.60	3.18	3.85	4.62	5.48	6.45	7.55	-
40	1.77	2.22	2.74	3.33	4.01	4.77	5.62	6.58	-
45	-	1.90	2.35	2.87	3.46	4.12	4.87	5.72	-
50	-	-	2.00	2.45	2.97	3.55	4.20	4.94	-
55	-	-	-	2.09	2.53	3.04	3.60	4.24	-
60	-	-	-	-	2.14	2.58	3.07	3.63	-
65	-	-	_	-	1.80	2.18	2.60	3.08	-

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

recomman portormanoc acto	0,	U-1		
Cooling capacity		45 500	W	
Power input		13 622	W	
Current consumption		24.17	Α	
Mass flow		1 035	kg/h	
C.O.P.		3.34		

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	80	dB(A)
With accoustic	hood	72	dB(A)

All performance data +/- 5%

tc: Condensing temperature at dew point



# Danfoss scroll compressor. SM185-4

# Performance data at 60 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 conseil	hy in W		-	•		•			
Cooling capacit		27.702	24.077	41 201	40 F30	E0 063	60.245	91.059	
30	22 378	27 793	34 077	41 301	49 539	58 863	69 345	81 058	-
35	21 112	26 406	32 532	39 563	47 571	56 628	66 807	78 179	-
40	19 823	24 972	30 917	37 731	45 485	54 251	64 102	75 110	-
45	-	23 494	29 235	35 807	43 283	51 735	61 234	71 852	-
50	-	-	27 487	33 794	40 969	49 081	58 204	68 408	-
55	-	-	-	31 696	38 543	46 292	55 013	64 778	-
60	-	-	-	-	36 009	43 368	51 662	60 961	-
65	-	-	-	-	33 365	40 309	48 149	56 956	-
Power input in \	w								
30	9 493	9 669	9 842	10 008	10 161	10 298	10 415	10 506	_
35	10 422	10 600	10 777	10 946	11 104	11 246	11 368	11 467	_
40	11 468	11 649	11 829	12 002	12 165	12 313	12 442	12 548	_
45	-	12 827	13 010	13 188	13 357	13 511	13 647	13 760	_
50		-	14 331	14 514	14 689	14 850	14 993	15 114	_
55				15 990	16 171	16 339	16 491	16 620	
60	-	-	-	-	17 815	17 991	18 151	18 290	-
65	-	-	-	-	19 632	19 816	19 985	20 133	-
65	-			-	19 632	19810	19 985	20 133	
Current consum	nption in A								
30	16.16	16.36	16.55	16.73	16.88	17.01	17.10	17.15	-
35	17.11	17.32	17.52	17.71	17.87	18.01	18.12	18.19	-
40	18.22	18.44	18.65	18.85	19.03	19.19	19.31	19.40	-
45	-	19.73	19.96	20.17	20.37	20.54	20.69	20.80	-
50	-	-	21.46	21.69	21.91	22.10	22.27	22.40	-
55	-	_	_	23.43	23.67	23.88	24.07	24.23	-
60	-	_	_	-	25.66	25.90	26.11	26.30	-
65	-	_	_	-	27.92	28.18	28.42	28.63	_
Mass flow in kg	/h	<u>.l</u>			l	<b>!</b>	l		
30	482	591	715	855	1 013	1 191	1 388	1 606	_
35	472	583	713	851	1 010	1 189	1 387	1 607	-
40	462	574	709	844	1 005	1 184	1 384	1 604	_
45	- 402	565	692	836	998	1 178	1 377	1 598	-
50		-	682	826	988	1 168	1 368	1 589	
	-								-
55	-	-	-	814	976	1 156	1 355	1 576	-
60	-	-	-	-	961	1 140	1 340	1 560	-
65	-	-	-	-	943	1 122	1 320	1 539	-
Coefficient of p	erformance (C.C	).P.)	_		1	1	T	_	
30	2.36	2.87	3.46	4.13	4.88	5.72	6.66	7.72	-
35	2.03	2.49	3.02	3.61	4.28	5.04	5.88	6.82	-
40	1.73	2.14	2.61	3.14	3.74	4.41	5.15	5.99	-
45	-	1.83	2.25	2.72	3.24	3.83	4.49	5.22	-
50	-	-	1.92	2.33	2.79	3.31	3.88	4.53	-
55	-	-	-	1.98	2.38	2.83	3.34	3.90	-
60	-	-	-	-	2.02	2.41	2.85	3.33	-
			+		<b>.</b>	1	<b>.</b>	+	

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

Cooling capacity	49 081	W	
Power input	14 850	W	
Current consumption	22.10	Α	
Mass flow	1 168	kg/h	
C.O.P.	3.31		

to: Evaporating temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 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	82.5	dB(A)
With accoustic hood	75	dB(A)

All performance data +/- 5%

tc: Condensing temperature at dew point



# Danfoss scroll compressor. SM185-4

# Performance data at 60 Hz, ARI rating conditions

**R22** 

20	-15	-10	-5	0	5	10	45	
			•	U	5	10	15	
			T	T	T			
747 2	29 471	36 106	43 729	52 415	62 237	73 272	85 594	-
483 2	28 096	34 586	42 027	50 495	60 065	70 811	82 808	-
194 2	26 673	32 993	40 229	48 456	57 749	68 182	79 831	-
- 2	25 205	31 332	38 339	46 301	55 293	65 390	76 667	-
-	-	29 605	36 359	44 033	52 701	62 438	73 320	-
-	-	-	34 294	41 655	49 975	59 329	69 791	-
-	-	-	-	39 172	47 121	56 067	66 086	-
	-	-	-	36 587	44 140	52 655	62 208	-
193	9 669	9 842	10 008	10 161	10 298	10 415	10 506	-
	10 600	10 777	10 946	11 104	11 246	11 368	11 467	-
	11 649	11 829	12 002	12 165	12 313	12 442	12 548	-
	12 827	13 010	13 188	13 357	13 511	13 647	13 760	-
	-	14 331	14 514	14 689	14 850	14 993	15 114	-
-	-	-	15 990	16 171	16 339	16 491	16 620	-
	-	-	-	17 815	17 991	18 151	18 290	-
-	_	-	-	19 632	19 816	19 985	20 133	_
			1				00	
ı A								
	16.36	16.55	16.73	16.88	17.01	17.10	17.15	-
	17.32	17.52	17.71	17.87	18.01	18.12	18.19	_
	18.44	18.65	18.85	19.03	19.19	19.31	19.40	_
	19.73	19.96	20.17	20.37	20.54	20.69	20.80	_
	-	21.46	21.69	21.91	22.10	22.27	22.40	_
_	_	-	23.43	23.67	23.88	24.07	24.23	_
	-	-	-	25.66	25.90	26.11	26.30	-
-	-	-	-	27.92	28.18	28.42	28.63	-
			1					
79	588	711	851	1 008	1 184	1 380	1 597	_
70	580	705	846	1 005	1 182	1 379	1 598	_
60	571	698	840	1 000	1 178	1 376	1 595	
	562	689	832	992	1 171	1 370	1 589	
	-	678	822	983	1 162	1 360	1 580	
-	-	-	810	970	1 149	1 348	1 567	
-	-	-	-	956	1 134	1 332	1 557	-
	_		-	938	1 116	1 313	1 530	
	=	-		1 550	1 110	1010	1 330	<u>-</u>
nce (C.O.P.)					1		T	
	3.05	3.67	4.37	5.16	6.04	7.04	8.15	-
	2.65	3.21	3.84	4.55	5.34	6.23	7.22	-
	2.29	2.79	3.35	3.98	4.69	5.48	6.36	-
-	1.97	2.41	2.91	3.47	4.09	4.79	5.57	-
-	-	2.07	2.51	3.00	3.55	4.16	4.85	-
-	-	-	2.14	2.58	3.06	3.60	4.20	-
-	-	-	-	2.20	2.62	3.09	3.61	-
-	-	-	-	1.86	2.23	2.63	3.09	-
- - - -		1.97 - - - - o = 7.2 °C, tc = 54.4 °C	1.97 2.41 - 2.07	1.97 2.41 2.91 - 2.07 2.51 2.14	1.97 2.41 2.91 3.47  - 2.07 2.51 3.00  2.14 2.58  2.20  1.86  0 = 7.2 °C, tc = 54.4 °C	1.97 2.41 2.91 3.47 4.09  - 2.07 2.51 3.00 3.55  2.14 2.58 3.06  2.20 2.62  1.86 2.23  Pressure switch s	1.97 2.41 2.91 3.47 4.09 4.79  - 2.07 2.51 3.00 3.55 4.16  2.14 2.58 3.06 3.60  2.20 2.62 3.09  1.86 2.23 2.63   Pressure switch settings	1.97     2.41     2.91     3.47     4.09     4.79     5.57       -     2.07     2.51     3.00     3.55     4.16     4.85       -     -     2.14     2.58     3.06     3.60     4.20       -     -     -     2.20     2.62     3.09     3.61       -     -     -     1.86     2.23     2.63     3.09       Pressure switch settings

to: Evaporating temperature at dew point

Cooling capacity

Current consumption

Power input

Mass flow

C.O.P.

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

54 313

16 221

23.74

1 236

3.35

W

W

kg/h

Ν	Maximum HP switch setting	28	bar(g)
١	Minimum LP switch setting	0.5	bar(g)
L	P pump down setting	1.3	bar(g)

# Sound power data

Sound power level	82.5	dB(A)
With accoustic hood	75	dB(A)

All performance data +/- 5%

tc: Condensing temperature at dew point



