

Datasheets

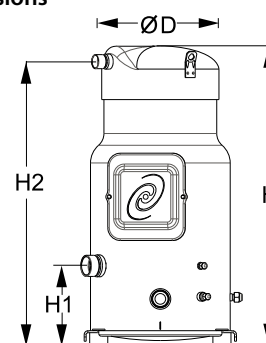
# Danfoss scroll compressors **SM / SY / SZ / SH / WSH**



**General Characteristics**

Model number (on compressor nameplate)	SY185S4RC	SY185S4CC
Code number for Singlepack*	SY185-4RI	SY185-4CAI
Code number for Industrial pack**	SY185-4RM	SY185-4CAM
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 cm <sup>3</sup> /rev	
Displacement @ Nominal speed	43.5 m <sup>3</sup> /h @ 2900 rpm - 52.5 m <sup>3</sup> /h @ 3500 rpm	
Net weight	100 kg	
Oil charge	6,2 litre, POE - 320SZ	
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, R407C	

**Dimensions**

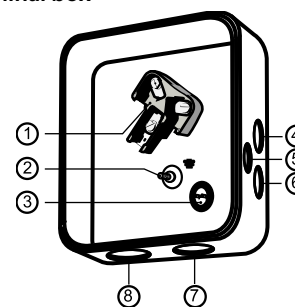


D=317 mm  
H=678 mm  
H1=180 mm  
H2=643 mm  
H3=- mm

**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°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

**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

**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**

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

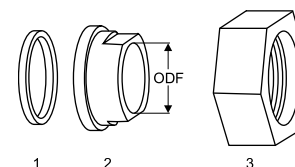
\*\*Industrial pack: 6 Unboxed compressors on pallet (order per multiples of 6)

**Rotolock accessories, suction side**
**Code no.**

Solder sleeve, P08 (2-1/4" Rotolock, 1-3/8" ODF)	8153005
Solder sleeve, P03 (2-1/4" Rotolock, 1-5/8" ODF)	8153006
Rotolock valve, V08 (2-1/4" Rotolock, 1-3/8" ODF)	8168025
Rotolock valve, V03 (2-1/4" Rotolock, 1-5/8" ODF)	8168026
Gasket, 2-1/4"	8156133

**Rotolock accessories, discharge side**
**Code no.**

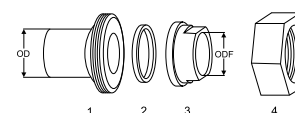
Solder sleeve, P07 (1-3/4" Rotolock, 7/8" ODF)	8153013
Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C07 (1-3/4" Rotolock, 7/8" ODF)	8168008
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V07 (1-3/4" Rotolock, 7/8" ODF)	8168032
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

**Gaskets, sleeves and nuts**


- 1: Gasket
- 2: Solder sleeve
- 3: Rotolock nut

**Rotolock accessories, sets**
**Code no.**

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

**Solder sleeve adapter set**


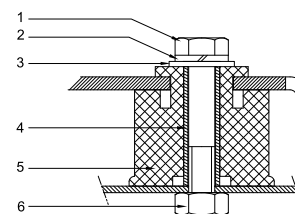
- 1: Rotolock adapter (Suc & Dis)
- 2: Gasket (Suc & Dis)
- 3: Solder sleeve (Suc & Dis)
- 4: Rotolock nut (Suc & Dis)

**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, 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

**Mounting kit**


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

**Miscellaneous accessories**
**Code no.**

Electronic soft start kit, MCI 25 C	7705007
Acoustic hood for scroll compressor S175-S185	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, 2 rotolock nuts, 2 solder sleeves, 2 gaskets	8156147
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

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	17 348	22 018	27 493	33 857	41 196	49 595	59 140	69 916	-
35	16 569	21 117	26 403	32 514	39 534	47 550	56 647	66 910	-
40	15 711	20 142	25 247	31 112	37 821	45 461	54 117	63 873	-
45	-	19 079	24 010	29 636	36 042	43 313	51 534	60 792	-
50	-	-	22 678	28 072	34 181	41 090	48 885	57 651	-
55	-	-	-	26 404	32 223	38 778	46 153	54 435	-
60	-	-	-	-	30 154	36 361	43 324	51 129	-
65	-	-	-	-	27 957	33 825	40 383	47 718	-

Power input in W

30	7 759	7 792	7 840	7 902	7 981	8 078	8 193	8 329	-
35	8 662	8 683	8 723	8 783	8 863	8 965	9 090	9 239	-
40	9 663	9 668	9 694	9 745	9 820	9 921	10 050	10 208	-
45	-	10 764	10 772	10 807	10 872	10 967	11 094	11 254	-
50	-	-	11 975	11 990	12 038	12 122	12 241	12 397	-
55	-	-	-	13 312	13 339	13 404	13 509	13 656	-
60	-	-	-	-	14 791	14 833	14 919	15 051	-
65	-	-	-	-	16 416	16 429	16 490	16 601	-

Current consumption in A

30	17.74	17.78	17.71	17.61	17.50	17.46	17.53	17.76	-
35	18.69	18.81	18.81	18.76	18.71	18.71	18.81	19.06	-
40	19.66	19.84	19.90	19.90	19.89	19.92	20.04	20.30	-
45	-	20.93	21.05	21.09	21.11	21.16	21.30	21.57	-
50	-	-	22.32	22.40	22.44	22.51	22.65	22.92	-
55	-	-	-	23.90	23.96	24.03	24.17	24.43	-
60	-	-	-	-	25.72	25.80	25.93	26.17	-
65	-	-	-	-	27.81	27.88	27.99	28.20	-

Mass flow in kg/h

30	372	467	575	700	841	1 002	1 182	1 384	-
35	370	465	574	698	838	996	1 174	1 372	-
40	366	462	571	695	834	990	1 165	1 360	-
45	-	457	567	690	829	983	1 156	1 348	-
50	-	-	561	684	822	975	1 145	1 335	-
55	-	-	-	676	813	965	1 133	1 320	-
60	-	-	-	-	801	952	1 119	1 303	-
65	-	-	-	-	787	937	1 102	1 284	-

Coefficient of performance (C.O.P.)

30	2.24	2.83	3.51	4.28	5.16	6.14	7.22	8.39	-
35	1.91	2.43	3.03	3.70	4.46	5.30	6.23	7.24	-
40	1.63	2.08	2.60	3.19	3.85	4.58	5.38	6.26	-
45	-	1.77	2.23	2.74	3.32	3.95	4.65	5.40	-
50	-	-	1.89	2.34	2.84	3.39	3.99	4.65	-
55	-	-	-	1.98	2.42	2.89	3.42	3.99	-
60	-	-	-	-	2.04	2.45	2.90	3.40	-
65	-	-	-	-	1.70	2.06	2.45	2.87	-

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

Cooling capacity	41 090	W
Power input	12 122	W
Current consumption	22.51	A
Mass flow	975	kg/h
C.O.P.	3.39	

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 acoustic hood	72	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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 alternations 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

R22

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

Cooling capacity in W

30	18 409	23 348	29 131	35 848	43 587	52 438	62 489	73 829	-
35	17 645	22 468	28 070	34 539	41 964	50 436	60 042	70 871	-
40	16 797	21 514	26 942	33 172	40 292	48 392	57 561	67 888	-
45	-	20 469	25 733	31 731	38 554	46 291	55 032	64 866	-
50	-	-	24 425	30 202	36 737	44 120	52 441	61 790	-
55	-	-	-	28 568	34 825	41 863	49 774	58 648	-
60	-	-	-	-	32 803	39 507	47 018	55 427	-
65	-	-	-	-	30 657	37 039	44 162	52 118	-

Power input in W

30	7 759	7 792	7 840	7 902	7 981	8 078	8 193	8 329	-
35	8 662	8 683	8 723	8 783	8 863	8 965	9 090	9 239	-
40	9 663	9 668	9 694	9 745	9 820	9 921	10 050	10 208	-
45	-	10 764	10 772	10 807	10 872	10 967	11 094	11 254	-
50	-	-	11 975	11 990	12 038	12 122	12 241	12 397	-
55	-	-	-	13 312	13 339	13 404	13 509	13 656	-
60	-	-	-	-	14 791	14 833	14 919	15 051	-
65	-	-	-	-	16 416	16 429	16 490	16 601	-

Current consumption in A

30	17.74	17.78	17.71	17.61	17.50	17.46	17.53	17.76	-
35	18.69	18.81	18.81	18.76	18.71	18.71	18.81	19.06	-
40	19.66	19.84	19.90	19.90	19.89	19.92	20.04	20.30	-
45	-	20.93	21.05	21.09	21.11	21.16	21.30	21.57	-
50	-	-	22.32	22.40	22.44	22.51	22.65	22.92	-
55	-	-	-	23.90	23.96	24.03	24.17	24.43	-
60	-	-	-	-	25.72	25.80	25.93	26.17	-
65	-	-	-	-	27.81	27.88	27.99	28.20	-

Mass flow in kg/h

30	371	464	572	696	837	996	1 175	1 376	-
35	368	463	571	694	834	991	1 167	1 364	-
40	364	460	568	691	829	985	1 159	1 352	-
45	-	455	564	687	824	978	1 149	1 340	-
50	-	-	558	680	817	970	1 139	1 327	-
55	-	-	-	672	808	959	1 127	1 312	-
60	-	-	-	-	797	947	1 113	1 295	-
65	-	-	-	-	782	932	1 096	1 276	-

Coefficient of performance (C.O.P.)

30	2.37	3.00	3.72	4.54	5.46	6.49	7.63	8.86	-
35	2.04	2.59	3.22	3.93	4.73	5.63	6.61	7.67	-
40	1.74	2.23	2.78	3.40	4.10	4.88	5.73	6.65	-
45	-	1.90	2.39	2.94	3.55	4.22	4.96	5.76	-
50	-	-	2.04	2.52	3.05	3.64	4.28	4.98	-
55	-	-	-	2.15	2.61	3.12	3.68	4.29	-
60	-	-	-	-	2.22	2.66	3.15	3.68	-
65	-	-	-	-	1.87	2.25	2.68	3.14	-

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

Cooling capacity	45 527	W
Power input	13 285	W
Current consumption	23.89	A
Mass flow	1 032	kg/h
C.O.P.	3.43	

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 acoustic hood	72	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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 alternations 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

R407C

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

Cooling capacity in W

30	15 950	20 344	25 573	31 753	38 997	47 421	57 138	68 264	-
35	15 037	19 302	24 357	30 317	37 297	45 410	54 771	65 495	-
40	14 066	18 174	23 026	28 737	35 421	43 194	52 169	62 461	-
45	-	16 977	21 596	27 029	33 389	40 791	49 351	59 182	-
50	-	-	20 086	25 210	31 217	38 220	46 334	55 674	-
55	-	-	-	23 299	28 922	35 496	43 136	51 956	-
60	-	-	-	-	26 523	32 639	39 774	48 044	-
65	-	-	-	-	24 037	29 665	36 266	43 957	-

Power input in W

30	7 766	7 870	7 956	8 029	8 095	8 161	8 231	8 313	-
35	8 660	8 769	8 858	8 931	8 995	9 056	9 120	9 193	-
40	9 674	9 787	9 876	9 948	10 009	10 064	10 119	10 181	-
45	-	10 942	11 031	11 100	11 156	11 203	11 248	11 298	-
50	-	-	12 344	12 408	12 457	12 495	12 529	12 564	-
55	-	-	-	13 892	13 932	13 960	13 980	14 000	-
60	-	-	-	-	15 603	15 618	15 624	15 627	-
65	-	-	-	-	17 491	17 491	17 481	17 465	-

Current consumption in A

30	18.35	18.34	18.35	18.38	18.42	18.47	18.54	18.61	-
35	19.17	19.21	19.24	19.29	19.34	19.39	19.45	19.50	-
40	20.15	20.22	20.29	20.36	20.42	20.47	20.51	20.54	-
45	-	21.43	21.53	21.62	21.68	21.73	21.77	21.78	-
50	-	-	23.00	23.11	23.18	23.23	23.25	23.24	-
55	-	-	-	24.87	24.95	25.00	25.01	24.97	-
60	-	-	-	-	27.03	27.08	27.07	27.02	-
65	-	-	-	-	29.47	29.51	29.49	29.41	-

Mass flow in kg/h

30	335	421	522	637	771	924	1 098	1 295	-
35	332	419	520	636	771	924	1 099	1 297	-
40	327	415	516	633	768	922	1 097	1 295	-
45	-	409	511	628	762	916	1 091	1 289	-
50	-	-	503	620	754	907	1 082	1 280	-
55	-	-	-	610	743	896	1 069	1 266	-
60	-	-	-	-	730	881	1 053	1 249	-
65	-	-	-	-	715	864	1 035	1 228	-

Coefficient of performance (C.O.P.)

30	2.05	2.58	3.21	3.95	4.82	5.81	6.94	8.21	-
35	1.74	2.20	2.75	3.39	4.15	5.01	6.01	7.12	-
40	1.45	1.86	2.33	2.89	3.54	4.29	5.16	6.13	-
45	-	1.55	1.96	2.43	2.99	3.64	4.39	5.24	-
50	-	-	1.63	2.03	2.51	3.06	3.70	4.43	-
55	-	-	-	1.68	2.08	2.54	3.09	3.71	-
60	-	-	-	-	1.70	2.09	2.55	3.07	-
65	-	-	-	-	1.37	1.70	2.07	2.52	-

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

Cooling capacity	38 220	W
Power input	12 495	W
Current consumption	23.23	A
Mass flow	907	kg/h
C.O.P.	3.06	

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

All performance data +/- 5%

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 alternations 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

R407C

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

Cooling capacity in W

30	17 107	21 794	27 365	33 942	41 643	50 588	60 897	72 688	-
35	16 206	20 776	26 185	32 554	40 002	48 651	58 619	70 026	-
40	15 245	19 669	24 885	31 017	38 183	46 506	56 104	67 098	-
45	-	18 491	23 485	29 349	36 203	44 170	53 370	63 924	-
50	-	-	22 003	27 569	34 083	41 665	50 438	60 522	-
55	-	-	-	25 698	31 841	39 010	47 328	56 916	-
60	-	-	-	-	29 501	36 228	44 064	53 129	-
65	-	-	-	-	27 087	33 347	40 675	49 195	-

Power input in W

30	7 766	7 870	7 956	8 029	8 095	8 161	8 231	8 313	-
35	8 660	8 769	8 858	8 931	8 995	9 056	9 120	9 193	-
40	9 674	9 787	9 876	9 948	10 009	10 064	10 119	10 181	-
45	-	10 942	11 031	11 100	11 156	11 203	11 248	11 298	-
50	-	-	12 344	12 408	12 457	12 495	12 529	12 564	-
55	-	-	-	13 892	13 932	13 960	13 980	14 000	-
60	-	-	-	-	15 603	15 618	15 624	15 627	-
65	-	-	-	-	17 491	17 491	17 481	17 465	-

Current consumption in A

30	18.35	18.34	18.35	18.38	18.42	18.47	18.54	18.61	-
35	19.17	19.21	19.24	19.29	19.34	19.39	19.45	19.50	-
40	20.15	20.22	20.29	20.36	20.42	20.47	20.51	20.54	-
45	-	21.43	21.53	21.62	21.68	21.73	21.77	21.78	-
50	-	-	23.00	23.11	23.18	23.23	23.25	23.24	-
55	-	-	-	24.87	24.95	25.00	25.01	24.97	-
60	-	-	-	-	27.03	27.08	27.07	27.02	-
65	-	-	-	-	29.47	29.51	29.49	29.41	-

Mass flow in kg/h

30	334	419	519	634	766	918	1 091	1 287	-
35	330	417	517	633	766	919	1 093	1 290	-
40	326	413	513	630	763	916	1 090	1 288	-
45	-	407	508	624	758	911	1 085	1 282	-
50	-	-	501	616	750	902	1 075	1 272	-
55	-	-	-	607	739	890	1 063	1 258	-
60	-	-	-	-	726	876	1 047	1 241	-
65	-	-	-	-	711	859	1 028	1 221	-

Coefficient of performance (C.O.P.)

30	2.20	2.77	3.44	4.23	5.14	6.20	7.40	8.74	-
35	1.87	2.37	2.96	3.64	4.45	5.37	6.43	7.62	-
40	1.58	2.01	2.52	3.12	3.82	4.62	5.54	6.59	-
45	-	1.69	2.13	2.64	3.25	3.94	4.74	5.66	-
50	-	-	1.78	2.22	2.74	3.33	4.03	4.82	-
55	-	-	-	1.85	2.29	2.79	3.39	4.07	-
60	-	-	-	-	1.89	2.32	2.82	3.40	-
65	-	-	-	-	1.55	1.91	2.33	2.82	-

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

Cooling capacity	42 871	W
Power input	13 784	W
Current consumption	24.78	A
Mass flow	965	kg/h
C.O.P.	3.11	

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

All performance data +/- 5%

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 alternations 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

R407C

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

Cooling capacity in W

30	15 950	20 344	25 573	31 753	38 997	47 421	57 138	68 264	-
35	15 037	19 302	24 357	30 317	37 297	45 410	54 771	65 495	-
40	14 066	18 174	23 026	28 737	35 421	43 194	52 169	62 461	-
45	-	16 977	21 596	27 029	33 389	40 791	49 351	59 182	-
50	-	-	20 086	25 210	31 217	38 220	46 334	55 674	-
55	-	-	-	23 299	28 922	35 496	43 136	51 956	-
60	-	-	-	-	26 523	32 639	39 774	48 044	-
65	-	-	-	-	24 037	29 665	36 266	43 957	-

Power input in W

30	7 766	7 870	7 956	8 029	8 095	8 161	8 231	8 313	-
35	8 660	8 769	8 858	8 931	8 995	9 056	9 120	9 193	-
40	9 674	9 787	9 876	9 948	10 009	10 064	10 119	10 181	-
45	-	10 942	11 031	11 100	11 156	11 203	11 248	11 298	-
50	-	-	12 344	12 408	12 457	12 495	12 529	12 564	-
55	-	-	-	13 892	13 932	13 960	13 980	14 000	-
60	-	-	-	-	15 603	15 618	15 624	15 627	-
65	-	-	-	-	17 491	17 491	17 481	17 465	-

Current consumption in A

30	18.35	18.34	18.35	18.38	18.42	18.47	18.54	18.61	-
35	19.17	19.21	19.24	19.29	19.34	19.39	19.45	19.50	-
40	20.15	20.22	20.29	20.36	20.42	20.47	20.51	20.54	-
45	-	21.43	21.53	21.62	21.68	21.73	21.77	21.78	-
50	-	-	23.00	23.11	23.18	23.23	23.25	23.24	-
55	-	-	-	24.87	24.95	25.00	25.01	24.97	-
60	-	-	-	-	27.03	27.08	27.07	27.02	-
65	-	-	-	-	29.47	29.51	29.49	29.41	-

Mass flow in kg/h

30	335	421	522	637	771	924	1 098	1 295	-
35	332	419	520	636	771	924	1 099	1 297	-
40	327	415	516	633	768	922	1 097	1 295	-
45	-	409	511	628	762	916	1 091	1 289	-
50	-	-	503	620	754	907	1 082	1 280	-
55	-	-	-	610	743	896	1 069	1 266	-
60	-	-	-	-	730	881	1 053	1 249	-
65	-	-	-	-	715	864	1 035	1 228	-

Coefficient of performance (C.O.P.)

30	2.05	2.58	3.21	3.95	4.82	5.81	6.94	8.21	-
35	1.74	2.20	2.75	3.39	4.15	5.01	6.01	7.12	-
40	1.45	1.86	2.33	2.89	3.54	4.29	5.16	6.13	-
45	-	1.55	1.96	2.43	2.99	3.64	4.39	5.24	-
50	-	-	1.63	2.03	2.51	3.06	3.70	4.43	-
55	-	-	-	1.68	2.08	2.54	3.09	3.71	-
60	-	-	-	-	1.70	2.09	2.55	3.07	-
65	-	-	-	-	1.37	1.70	2.07	2.52	-

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

Cooling capacity	38 220	W
Power input	12 495	W
Current consumption	23.23	A
Mass flow	907	kg/h
C.O.P.	3.06	

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

All performance data +/- 5%

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 alternations 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

R407C

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

Cooling capacity in W

30	17 107	21 794	27 365	33 942	41 643	50 588	60 897	72 688	-
35	16 206	20 776	26 185	32 554	40 002	48 651	58 619	70 026	-
40	15 245	19 669	24 885	31 017	38 183	46 506	56 104	67 098	-
45	-	18 491	23 485	29 349	36 203	44 170	53 370	63 924	-
50	-	-	22 003	27 569	34 083	41 665	50 438	60 522	-
55	-	-	-	25 698	31 841	39 010	47 328	56 916	-
60	-	-	-	-	29 501	36 228	44 064	53 129	-
65	-	-	-	-	27 087	33 347	40 675	49 195	-

Power input in W

30	7 766	7 870	7 956	8 029	8 095	8 161	8 231	8 313	-
35	8 660	8 769	8 858	8 931	8 995	9 056	9 120	9 193	-
40	9 674	9 787	9 876	9 948	10 009	10 064	10 119	10 181	-
45	-	10 942	11 031	11 100	11 156	11 203	11 248	11 298	-
50	-	-	12 344	12 408	12 457	12 495	12 529	12 564	-
55	-	-	-	13 892	13 932	13 960	13 980	14 000	-
60	-	-	-	-	15 603	15 618	15 624	15 627	-
65	-	-	-	-	17 491	17 491	17 481	17 465	-

Current consumption in A

30	18.35	18.34	18.35	18.38	18.42	18.47	18.54	18.61	-
35	19.17	19.21	19.24	19.29	19.34	19.39	19.45	19.50	-
40	20.15	20.22	20.29	20.36	20.42	20.47	20.51	20.54	-
45	-	21.43	21.53	21.62	21.68	21.73	21.77	21.78	-
50	-	-	23.00	23.11	23.18	23.23	23.25	23.24	-
55	-	-	-	24.87	24.95	25.00	25.01	24.97	-
60	-	-	-	-	27.03	27.08	27.07	27.02	-
65	-	-	-	-	29.47	29.51	29.49	29.41	-

Mass flow in kg/h

30	334	419	519	634	766	918	1 091	1 287	-
35	330	417	517	633	766	919	1 093	1 290	-
40	326	413	513	630	763	916	1 090	1 288	-
45	-	407	508	624	758	911	1 085	1 282	-
50	-	-	501	616	750	902	1 075	1 272	-
55	-	-	-	607	739	890	1 063	1 258	-
60	-	-	-	-	726	876	1 047	1 241	-
65	-	-	-	-	711	859	1 028	1 221	-

Coefficient of performance (C.O.P.)

30	2.20	2.77	3.44	4.23	5.14	6.20	7.40	8.74	-
35	1.87	2.37	2.96	3.64	4.45	5.37	6.43	7.62	-
40	1.58	2.01	2.52	3.12	3.82	4.62	5.54	6.59	-
45	-	1.69	2.13	2.64	3.25	3.94	4.74	5.66	-
50	-	-	1.78	2.22	2.74	3.33	4.03	4.82	-
55	-	-	-	1.85	2.29	2.79	3.39	4.07	-
60	-	-	-	-	1.89	2.32	2.82	3.40	-
65	-	-	-	-	1.55	1.91	2.33	2.82	-

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

Cooling capacity	42 871	W
Power input	13 784	W
Current consumption	24.78	A
Mass flow	965	kg/h
C.O.P.	3.11	

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

All performance data +/- 5%

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 alternations 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	22 174	27 542	33 843	41 190	49 695	59 470	70 629	83 282	-
35	21 110	26 330	32 446	39 570	47 813	57 289	68 108	80 383	-
40	19 992	25 042	30 951	37 829	45 789	54 941	65 398	77 271	-
45	-	23 691	29 370	35 980	43 633	52 439	62 511	73 960	-
50	-	-	27 716	34 035	41 359	49 796	59 459	70 459	-
55	-	-	-	32 006	38 977	47 022	56 253	66 779	-
60	-	-	-	-	36 498	44 127	52 900	62 929	-
65	-	-	-	-	33 930	41 118	49 409	58 912	-

**Power input in W**

30	9 378	9 466	9 555	9 648	9 744	9 844	9 950	10 062	-
35	10 370	10 486	10 601	10 713	10 825	10 936	11 049	11 163	-
40	11 411	11 567	11 717	11 860	11 998	12 131	12 261	12 388	-
45	-	12 714	12 910	13 094	13 269	13 434	13 592	13 742	-
50	-	-	14 184	14 421	14 643	14 851	15 047	15 231	-
55	-	-	-	15 845	16 125	16 387	16 632	16 860	-
60	-	-	-	-	17 722	18 047	18 352	18 635	-
65	-	-	-	-	19 438	19 838	20 212	20 561	-

**Current consumption in A**

30	16.61	16.66	16.76	16.90	17.07	17.26	17.47	17.68	-
35	17.50	17.57	17.67	17.82	17.98	18.15	18.33	18.51	-
40	18.53	18.64	18.77	18.93	19.10	19.28	19.45	19.60	-
45	-	19.86	20.04	20.23	20.43	20.63	20.81	20.96	-
50	-	-	21.47	21.72	21.96	22.19	22.40	22.58	-
55	-	-	-	23.37	23.68	23.97	24.22	24.44	-
60	-	-	-	-	25.58	25.94	26.26	26.53	-
65	-	-	-	-	27.65	28.11	28.51	28.85	-

**Mass flow in kg/h**

30	476	584	709	852	1 016	1 201	1 411	1 647	-
35	471	580	706	849	1 014	1 200	1 411	1 648	-
40	466	575	701	845	1 010	1 197	1 408	1 646	-
45	-	568	694	838	1 003	1 190	1 402	1 640	-
50	-	-	685	830	994	1 182	1 393	1 631	-
55	-	-	-	819	983	1 170	1 381	1 619	-
60	-	-	-	-	970	1 156	1 366	1 604	-
65	-	-	-	-	954	1 139	1 349	1 585	-

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

30	2.36	2.91	3.54	4.27	5.10	6.04	7.10	8.28	-
35	2.04	2.51	3.06	3.69	4.42	5.24	6.16	7.20	-
40	1.75	2.16	2.64	3.19	3.82	4.53	5.33	6.24	-
45	-	1.86	2.28	2.75	3.29	3.90	4.60	5.38	-
50	-	-	1.95	2.36	2.82	3.35	3.95	4.63	-
55	-	-	-	2.02	2.42	2.87	3.38	3.96	-
60	-	-	-	-	2.06	2.45	2.88	3.38	-
65	-	-	-	-	1.75	2.07	2.44	2.87	-

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

Cooling capacity	49 796	W
Power input	14 851	W
Current consumption	22.19	A
Mass flow	1 182	kg/h
C.O.P.	3.35	

**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 acoustic hood	75	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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 alternations 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

R22

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

Cooling capacity in W

30	23 532	29 204	35 859	43 612	52 580	62 879	74 628	87 943	-
35	22 481	28 016	34 494	42 034	50 752	60 765	72 189	85 142	-
40	21 374	26 748	33 029	40 334	48 780	58 483	69 560	82 128	-
45	-	25 416	31 477	38 524	46 675	56 046	66 754	78 916	-
50	-	-	29 851	36 618	44 452	53 469	63 785	75 518	-
55	-	-	-	34 630	42 124	50 764	60 666	71 948	-
60	-	-	-	-	39 704	47 945	57 411	68 219	-
65	-	-	-	-	37 207	45 026	54 033	64 345	-

Power input in W

30	9 378	9 466	9 555	9 648	9 744	9 844	9 950	10 062	-
35	10 370	10 486	10 601	10 713	10 825	10 936	11 049	11 163	-
40	11 411	11 567	11 717	11 860	11 998	12 131	12 261	12 388	-
45	-	12 714	12 910	13 094	13 269	13 434	13 592	13 742	-
50	-	-	14 184	14 421	14 643	14 851	15 047	15 231	-
55	-	-	-	15 845	16 125	16 387	16 632	16 860	-
60	-	-	-	-	17 722	18 047	18 352	18 635	-
65	-	-	-	-	19 438	19 838	20 212	20 561	-

Current consumption in A

30	16.61	16.66	16.76	16.90	17.07	17.26	17.47	17.68	-
35	17.50	17.57	17.67	17.82	17.98	18.15	18.33	18.51	-
40	18.53	18.64	18.77	18.93	19.10	19.28	19.45	19.60	-
45	-	19.86	20.04	20.23	20.43	20.63	20.81	20.96	-
50	-	-	21.47	21.72	21.96	22.19	22.40	22.58	-
55	-	-	-	23.37	23.68	23.97	24.22	24.44	-
60	-	-	-	-	25.58	25.94	26.26	26.53	-
65	-	-	-	-	27.65	28.11	28.51	28.85	-

Mass flow in kg/h

30	473	581	705	848	1 010	1 195	1 403	1 638	-
35	469	577	702	845	1 008	1 194	1 403	1 639	-
40	463	572	697	840	1 004	1 190	1 400	1 637	-
45	-	565	690	834	998	1 184	1 394	1 631	-
50	-	-	682	825	989	1 175	1 385	1 622	-
55	-	-	-	815	978	1 164	1 374	1 610	-
60	-	-	-	-	965	1 149	1 359	1 594	-
65	-	-	-	-	949	1 133	1 341	1 576	-

Coefficient of performance (C.O.P.)

30	2.51	3.09	3.75	4.52	5.40	6.39	7.50	8.74	-
35	2.17	2.67	3.25	3.92	4.69	5.56	6.53	7.63	-
40	1.87	2.31	2.82	3.40	4.07	4.82	5.67	6.63	-
45	-	2.00	2.44	2.94	3.52	4.17	4.91	5.74	-
50	-	-	2.10	2.54	3.04	3.60	4.24	4.96	-
55	-	-	-	2.19	2.61	3.10	3.65	4.27	-
60	-	-	-	-	2.24	2.66	3.13	3.66	-
65	-	-	-	-	1.91	2.27	2.67	3.13	-

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

Cooling capacity	55 311	W
Power input	16 303	W
Current consumption	23.86	A
Mass flow	1 254	kg/h
C.O.P.	3.39	

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 acoustic hood	75	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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 alternations 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**
**R407C**

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

**Cooling capacity in W**

30	19 959	25 310	31 682	39 217	48 059	58 353	70 242	83 870	-
35	18 756	23 896	30 000	37 211	45 672	55 525	66 914	79 984	-
40	17 534	22 447	28 267	35 137	43 198	52 594	63 466	75 959	-
45	-	20 968	26 488	32 999	40 644	49 564	59 902	71 801	-
50	-	-	24 668	30 804	38 015	46 441	56 226	67 510	-
55	-	-	-	28 553	35 312	43 227	52 440	63 090	-
60	-	-	-	-	32 539	39 922	48 541	58 535	-
65	-	-	-	-	29 690	36 520	44 522	53 835	-

**Power input in W**

30	9 425	9 607	9 762	9 901	10 034	10 172	10 323	10 499	-
35	10 428	10 629	10 798	10 946	11 083	11 218	11 362	11 524	-
40	11 549	11 771	11 956	12 113	12 255	12 389	12 526	12 677	-
45	-	13 054	13 256	13 425	13 571	13 706	13 838	13 978	-
50	-	-	14 720	14 901	15 054	15 190	15 318	15 449	-
55	-	-	-	16 563	16 725	16 863	16 988	17 110	-
60	-	-	-	-	18 604	18 746	18 869	18 983	-
65	-	-	-	-	20 714	20 860	20 982	21 091	-

**Current consumption in A**

30	16.66	16.92	17.09	17.20	17.27	17.32	17.37	17.45	-
35	17.68	17.97	18.17	18.30	18.40	18.47	18.54	18.63	-
40	18.80	19.12	19.35	19.52	19.63	19.72	19.81	19.92	-
45	-	20.44	20.70	20.89	21.03	21.14	21.25	21.37	-
50	-	-	22.26	22.48	22.64	22.78	22.90	23.04	-
55	-	-	-	24.33	24.52	24.68	24.82	24.98	-
60	-	-	-	-	26.71	26.89	27.06	27.23	-
65	-	-	-	-	29.27	29.48	29.67	29.86	-

**Mass flow in kg/h**

30	420	524	646	787	950	1 137	1 350	1 592	-
35	414	519	640	781	944	1 130	1 343	1 584	-
40	408	512	634	774	936	1 122	1 334	1 575	-
45	-	505	626	766	928	1 113	1 324	1 564	-
50	-	-	618	757	918	1 102	1 313	1 552	-
55	-	-	-	748	907	1 091	1 300	1 537	-
60	-	-	-	-	896	1 078	1 286	1 522	-
65	-	-	-	-	883	1 064	1 270	1 505	-

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

30	2.12	2.63	3.25	3.96	4.79	5.74	6.80	7.99	-
35	1.80	2.25	2.78	3.40	4.12	4.95	5.89	6.94	-
40	1.52	1.91	2.36	2.90	3.53	4.25	5.07	5.99	-
45	-	1.61	2.00	2.46	2.99	3.62	4.33	5.14	-
50	-	-	1.68	2.07	2.53	3.06	3.67	4.37	-
55	-	-	-	1.72	2.11	2.56	3.09	3.69	-
60	-	-	-	-	1.75	2.13	2.57	3.08	-
65	-	-	-	-	1.43	1.75	2.12	2.55	-

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

Cooling capacity	46 441	W
Power input	15 190	W
Current consumption	22.78	A
Mass flow	1 102	kg/h
C.O.P.	3.06	

**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

All performance data +/- 5%

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 alternations 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

R407C

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

Cooling capacity in W

30	21 407	27 114	33 902	41 921	51 320	62 251	74 862	89 305	-
35	20 214	25 721	32 251	39 956	48 985	59 488	71 616	85 518	-
40	19 004	24 293	30 550	37 924	46 566	56 626	68 253	81 599	-
45	-	22 838	28 804	35 832	44 070	53 670	64 781	77 553	-
50	-	-	27 022	33 686	41 505	50 628	61 206	73 389	-
55	-	-	-	31 494	38 876	47 507	57 535	69 112	-
60	-	-	-	-	36 192	44 313	53 776	64 730	-
65	-	-	-	-	33 457	41 053	49 934	60 250	-

Power input in W

30	9 425	9 607	9 762	9 901	10 034	10 172	10 323	10 499	-
35	10 428	10 629	10 798	10 946	11 083	11 218	11 362	11 524	-
40	11 549	11 771	11 956	12 113	12 255	12 389	12 526	12 677	-
45	-	13 054	13 256	13 425	13 571	13 706	13 838	13 978	-
50	-	-	14 720	14 901	15 054	15 190	15 318	15 449	-
55	-	-	-	16 563	16 725	16 863	16 988	17 110	-
60	-	-	-	-	18 604	18 746	18 869	18 983	-
65	-	-	-	-	20 714	20 860	20 982	21 091	-

Current consumption in A

30	16.66	16.92	17.09	17.20	17.27	17.32	17.37	17.45	-
35	17.68	17.97	18.17	18.30	18.40	18.47	18.54	18.63	-
40	18.80	19.12	19.35	19.52	19.63	19.72	19.81	19.92	-
45	-	20.44	20.70	20.89	21.03	21.14	21.25	21.37	-
50	-	-	22.26	22.48	22.64	22.78	22.90	23.04	-
55	-	-	-	24.33	24.52	24.68	24.82	24.98	-
60	-	-	-	-	26.71	26.89	27.06	27.23	-
65	-	-	-	-	29.27	29.48	29.67	29.86	-

Mass flow in kg/h

30	417	522	642	783	944	1 130	1 342	1 582	-
35	412	516	637	777	938	1 124	1 335	1 575	-
40	406	510	630	770	931	1 116	1 327	1 566	-
45	-	503	623	762	922	1 107	1 317	1 555	-
50	-	-	615	753	913	1 096	1 305	1 542	-
55	-	-	-	744	902	1 084	1 292	1 528	-
60	-	-	-	-	891	1 071	1 278	1 512	-
65	-	-	-	-	878	1 057	1 262	1 495	-

Coefficient of performance (C.O.P.)

30	2.27	2.82	3.47	4.23	5.11	6.12	7.25	8.51	-
35	1.94	2.42	2.99	3.65	4.42	5.30	6.30	7.42	-
40	1.65	2.06	2.56	3.13	3.80	4.57	5.45	6.44	-
45	-	1.75	2.17	2.67	3.25	3.92	4.68	5.55	-
50	-	-	1.84	2.26	2.76	3.33	4.00	4.75	-
55	-	-	-	1.90	2.32	2.82	3.39	4.04	-
60	-	-	-	-	1.95	2.36	2.85	3.41	-
65	-	-	-	-	1.62	1.97	2.38	2.86	-

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

Cooling capacity	52 145	W
Power input	16 708	W
Current consumption	24.49	A
Mass flow	1 174	kg/h
C.O.P.	3.12	

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

All performance data +/- 5%

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 alternations 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**
**R407C**

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

**Cooling capacity in W**

30	19 959	25 310	31 682	39 217	48 059	58 353	70 242	83 870	-
35	18 756	23 896	30 000	37 211	45 672	55 525	66 914	79 984	-
40	17 534	22 447	28 267	35 137	43 198	52 594	63 466	75 959	-
45	-	20 968	26 488	32 999	40 644	49 564	59 902	71 801	-
50	-	-	24 668	30 804	38 015	46 441	56 226	67 510	-
55	-	-	-	28 553	35 312	43 227	52 440	63 090	-
60	-	-	-	-	32 539	39 922	48 541	58 535	-
65	-	-	-	-	29 690	36 520	44 522	53 835	-

**Power input in W**

30	9 425	9 607	9 762	9 901	10 034	10 172	10 323	10 499	-
35	10 428	10 629	10 798	10 946	11 083	11 218	11 362	11 524	-
40	11 549	11 771	11 956	12 113	12 255	12 389	12 526	12 677	-
45	-	13 054	13 256	13 425	13 571	13 706	13 838	13 978	-
50	-	-	14 720	14 901	15 054	15 190	15 318	15 449	-
55	-	-	-	16 563	16 725	16 863	16 988	17 110	-
60	-	-	-	-	18 604	18 746	18 869	18 983	-
65	-	-	-	-	20 714	20 860	20 982	21 091	-

**Current consumption in A**

30	16.66	16.92	17.09	17.20	17.27	17.32	17.37	17.45	-
35	17.68	17.97	18.17	18.30	18.40	18.47	18.54	18.63	-
40	18.80	19.12	19.35	19.52	19.63	19.72	19.81	19.92	-
45	-	20.44	20.70	20.89	21.03	21.14	21.25	21.37	-
50	-	-	22.26	22.48	22.64	22.78	22.90	23.04	-
55	-	-	-	24.33	24.52	24.68	24.82	24.98	-
60	-	-	-	-	26.71	26.89	27.06	27.23	-
65	-	-	-	-	29.27	29.48	29.67	29.86	-

**Mass flow in kg/h**

30	420	524	646	787	950	1 137	1 350	1 592	-
35	414	519	640	781	944	1 130	1 343	1 584	-
40	408	512	634	774	936	1 122	1 334	1 575	-
45	-	505	626	766	928	1 113	1 324	1 564	-
50	-	-	618	757	918	1 102	1 313	1 552	-
55	-	-	-	748	907	1 091	1 300	1 537	-
60	-	-	-	-	896	1 078	1 286	1 522	-
65	-	-	-	-	883	1 064	1 270	1 505	-

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

30	2.12	2.63	3.25	3.96	4.79	5.74	6.80	7.99	-
35	1.80	2.25	2.78	3.40	4.12	4.95	5.89	6.94	-
40	1.52	1.91	2.36	2.90	3.53	4.25	5.07	5.99	-
45	-	1.61	2.00	2.46	2.99	3.62	4.33	5.14	-
50	-	-	1.68	2.07	2.53	3.06	3.67	4.37	-
55	-	-	-	1.72	2.11	2.56	3.09	3.69	-
60	-	-	-	-	1.75	2.13	2.57	3.08	-
65	-	-	-	-	1.43	1.75	2.12	2.55	-

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

Cooling capacity	46 441	W
Power input	15 190	W
Current consumption	22.78	A
Mass flow	1 102	kg/h
C.O.P.	3.06	

**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

All performance data +/- 5%

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 alternations 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

R407C

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

Cooling capacity in W

30	21 407	27 114	33 902	41 921	51 320	62 251	74 862	89 305	-
35	20 214	25 721	32 251	39 956	48 985	59 488	71 616	85 518	-
40	19 004	24 293	30 550	37 924	46 566	56 626	68 253	81 599	-
45	-	22 838	28 804	35 832	44 070	53 670	64 781	77 553	-
50	-	-	27 022	33 686	41 505	50 628	61 206	73 389	-
55	-	-	-	31 494	38 876	47 507	57 535	69 112	-
60	-	-	-	-	36 192	44 313	53 776	64 730	-
65	-	-	-	-	33 457	41 053	49 934	60 250	-

Power input in W

30	9 425	9 607	9 762	9 901	10 034	10 172	10 323	10 499	-
35	10 428	10 629	10 798	10 946	11 083	11 218	11 362	11 524	-
40	11 549	11 771	11 956	12 113	12 255	12 389	12 526	12 677	-
45	-	13 054	13 256	13 425	13 571	13 706	13 838	13 978	-
50	-	-	14 720	14 901	15 054	15 190	15 318	15 449	-
55	-	-	-	16 563	16 725	16 863	16 988	17 110	-
60	-	-	-	-	18 604	18 746	18 869	18 983	-
65	-	-	-	-	20 714	20 860	20 982	21 091	-

Current consumption in A

30	16.66	16.92	17.09	17.20	17.27	17.32	17.37	17.45	-
35	17.68	17.97	18.17	18.30	18.40	18.47	18.54	18.63	-
40	18.80	19.12	19.35	19.52	19.63	19.72	19.81	19.92	-
45	-	20.44	20.70	20.89	21.03	21.14	21.25	21.37	-
50	-	-	22.26	22.48	22.64	22.78	22.90	23.04	-
55	-	-	-	24.33	24.52	24.68	24.82	24.98	-
60	-	-	-	-	26.71	26.89	27.06	27.23	-
65	-	-	-	-	29.27	29.48	29.67	29.86	-

Mass flow in kg/h

30	417	522	642	783	944	1 130	1 342	1 582	-
35	412	516	637	777	938	1 124	1 335	1 575	-
40	406	510	630	770	931	1 116	1 327	1 566	-
45	-	503	623	762	922	1 107	1 317	1 555	-
50	-	-	615	753	913	1 096	1 305	1 542	-
55	-	-	-	744	902	1 084	1 292	1 528	-
60	-	-	-	-	891	1 071	1 278	1 512	-
65	-	-	-	-	878	1 057	1 262	1 495	-

Coefficient of performance (C.O.P.)

30	2.27	2.82	3.47	4.23	5.11	6.12	7.25	8.51	-
35	1.94	2.42	2.99	3.65	4.42	5.30	6.30	7.42	-
40	1.65	2.06	2.56	3.13	3.80	4.57	5.45	6.44	-
45	-	1.75	2.17	2.67	3.25	3.92	4.68	5.55	-
50	-	-	1.84	2.26	2.76	3.33	4.00	4.75	-
55	-	-	-	1.90	2.32	2.82	3.39	4.04	-
60	-	-	-	-	1.95	2.36	2.85	3.41	-
65	-	-	-	-	1.62	1.97	2.38	2.86	-

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

Cooling capacity	52 145	W
Power input	16 708	W
Current consumption	24.49	A
Mass flow	1 174	kg/h
C.O.P.	3.12	

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)

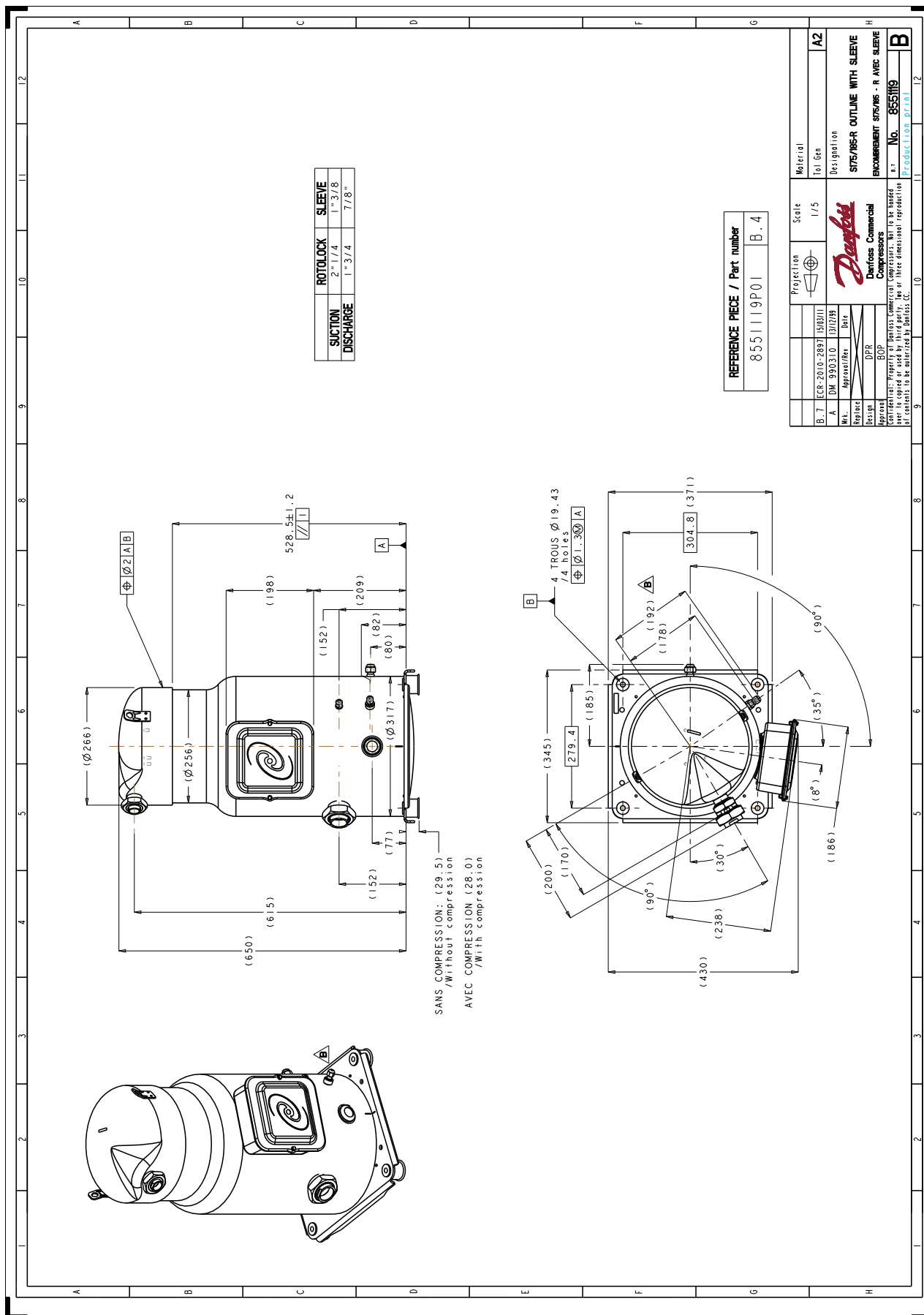
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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 alternations 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.



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 alternations can be made without consequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss, the Danfoss logotype and Maneurop are trademarks of Danfoss A/S. All rights reserved.



