ENGINEERING
TOMORROW

Datasheets

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

FRCC.UD.180315.131928

www.danfoss.com/odsg

General Characteristics

Model number (on compressor nameplate)	SY300A4PAE	SY300A4CAE
Code number for Singlepack*	SY300A4PAI	SY300A4CAI
Code number for Industrial pack**	SY300A4PAM	SY300A4CAM
Drawing number	8556099b	8556094b
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	437.5 cm3/rev	
Displacement @ Nominal speed	76.1 m3/h @ 2900 rpm - 91.9 m3/h @ 3500 rpm	
Net weight	157 kg	
Oil charge	8 litre, POE - 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	12	
Refrigerant charge limit	20 kg	
Approved refrigerants	R22, R407C, R134a	

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 25ºC	0.516 Ω
Rated Load Amps (RLA)	49.3 A
Maximum Continuous Current (MCC)	69 A
Locked Rotor Amps (LRA)	270 A
Motor protection	Electronic protection module, 24 V AC

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

Parts shipped with compressor

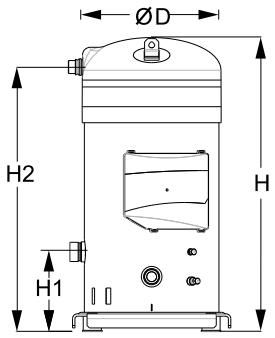
Mounting kit with grommets and sleeves
Electronic protection module mounted in terminal box
Initial oil charge
Installation instructions

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

*Singlepack: Compressor in cardboard box

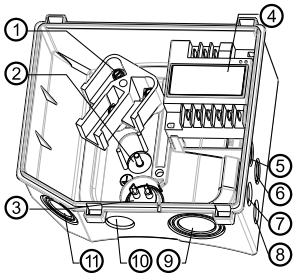
**Industrial pack: 4 Unboxed compressors on pallet (order per multiples of 4)

Dimensions



D=344 mm
H=737.9 mm
H1=195.7 mm
H2=665 mm
H3=- mm

Terminal box



IP54 (with cable gland)

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

Rotolock accessories, suction side	Code no.
Solder sleeve, P03 (2-1/4" Rotolock, 1-5/8" ODF)	8153006
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, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

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, V03 (2-1/4"~1-5/8"), V02 (1-3/4"~1-1/8")	7703383
Gasket set, 1-1/4", 1-3/4", 2-1/4", OSG gaskets black & white	8156013

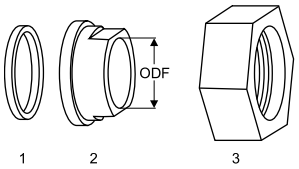
Oil / lubricants	Code no.
POE lubricant, 320SZ, 1 litre can	7754121
POE lubricant, 320SZ, 2.5 litre can	120Z0572

Crankcase heaters	Code no.
Surface sump heater + bottom insulation, 80 W, 24 V, CE mark, UL	120Z0359
Surface sump heater + bottom insulation, 80 W, 230 V, CE mark, UL	120Z0372
Surface sump heater + bottom insulation, 80 W, 400 V, CE mark, UL	120Z0373
Surface sump heater + bottom insulation, 80 W, 460 V, CE mark, UL	120Z0374
Belt type crankcase heater, 130 W, 230 V, CE mark, UL	7773122
Belt type crankcase heater, 130 W, 400 V, CE mark, UL	7773123

Miscellaneous accessories	Code no.
Electronic soft start kit, MCI 50 CM	037N0401
Acoustic hood for scroll compressor S240-S300	7755016
Bottom insulation for scroll compressor	120Z0355
Discharge thermostat kit	7750009

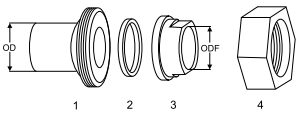
Spare parts	Code no.
Electronic motor protection module, 24 V AC	120Z0584
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves	8156144
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 2 rotolock nuts, 2 solder sleeves, 2 gaskets	8156148
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (white teflon)	8156129
Terminal box 210 x 190 incl. cover	120Z0458
T block connector 60 x 75 mm	8173021

Gaskets, sleeves and nuts



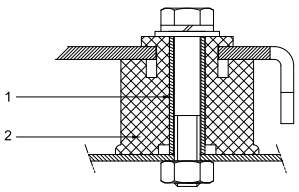
1: Gasket
2: Solder sleeve
3: Rotolock nut

Solder sleeve adapter set



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

Mounting kit



1: Sleeve (4x)
2: Grommet (4x)
Bolts, nuts and washers not included

Performance data at 50 Hz, EN 12900 rating conditions

R22

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-20	-15	-10	-5	0	5	10	15	
Cooling capacity in W									
30	31 527	39 319	48 549	59 382	71 981	86 509	103 131	122 008	-
35	29 981	37 481	46 359	56 776	68 897	82 885	98 903	117 114	-
40	28 351	35 533	44 029	54 002	65 617	79 036	94 423	111 941	-
45	-	33 496	41 582	51 084	62 164	74 986	89 713	106 509	-
50	-	-	39 040	48 041	58 559	70 756	84 795	100 841	-
55	-	-	-	44 898	54 825	66 368	79 692	94 959	-
60	-	-	-	-	50 983	61 845	74 425	88 886	-
65	-	-	-	-	-	57 208	69 015	82 642	-
Power input in W									
30	12 910	13 150	13 459	13 839	14 294	14 826	15 437	16 132	-
35	14 234	14 459	14 755	15 123	15 568	16 093	16 699	17 390	-
40	15 707	15 915	16 195	16 550	16 983	17 498	18 097	18 783	-
45	-	17 546	17 809	18 149	18 569	19 072	19 661	20 340	-
50	-	-	19 627	19 950	20 355	20 845	21 423	22 092	-
55	-	-	-	21 984	22 372	22 846	23 411	24 069	-
60	-	-	-	-	24 649	25 106	25 656	26 300	-
65	-	-	-	-	-	27 656	28 188	28 817	-
Current consumption in A									
30	27.53	27.70	27.91	28.22	28.69	29.37	30.32	31.61	-
35	28.95	29.18	29.42	29.73	30.18	30.82	31.70	32.89	-
40	30.54	30.83	31.11	31.43	31.87	32.47	33.29	34.38	-
45	-	32.70	33.03	33.38	33.81	34.38	35.14	36.16	-
50	-	-	35.24	35.62	36.06	36.61	37.33	38.27	-
55	-	-	-	38.23	38.68	39.21	39.90	40.78	-
60	-	-	-	-	41.72	42.26	42.91	43.74	-
65	-	-	-	-	-	45.79	46.43	47.21	-
Mass flow in kg/h									
30	678	834	1 017	1 227	1 470	1 746	2 060	2 414	-
35	670	826	1 008	1 218	1 460	1 736	2 049	2 403	-
40	660	815	996	1 206	1 446	1 721	2 033	2 386	-
45	-	803	982	1 190	1 429	1 702	2 013	2 363	-
50	-	-	965	1 171	1 408	1 679	1 987	2 335	-
55	-	-	-	1 149	1 383	1 651	1 957	2 302	-
60	-	-	-	-	1 355	1 620	1 922	2 264	-
65	-	-	-	-	-	1 585	1 883	2 221	-
Coefficient of performance (C.O.P.)									
30	2.44	2.99	3.61	4.29	5.04	5.84	6.68	7.56	-
35	2.11	2.59	3.14	3.75	4.43	5.15	5.92	6.73	-
40	1.81	2.23	2.72	3.26	3.86	4.52	5.22	5.96	-
45	-	1.91	2.33	2.81	3.35	3.93	4.56	5.24	-
50	-	-	1.99	2.41	2.88	3.39	3.96	4.56	-
55	-	-	-	2.04	2.45	2.90	3.40	3.95	-
60	-	-	-	-	2.07	2.46	2.90	3.38	-
65	-	-	-	-	-	2.07	2.45	2.87	-

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

Cooling capacity	70 756	W
Power input	20 845	W
Current consumption	36.61	A
Mass flow	1 679	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	dB(A)
With accoustic hood	75	dB(A)

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Tolerance according EN12900

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	33 457	41 692	51 441	62 873	76 159	91 469	108 971	128 835	-
35	31 927	39 880	49 285	60 312	73 132	87 914	104 830	124 048	-
40	30 311	37 953	46 985	57 578	69 903	84 131	100 433	118 977	-
45	-	35 934	44 565	54 695	66 498	80 143	95 802	113 647	-
50	-	-	42 048	51 687	62 939	75 974	90 964	108 081	-
55	-	-	-	48 579	59 251	71 649	85 944	102 309	-
60	-	-	-	-	55 462	67 196	80 770	96 358	-
65	-	-	-	-	-	62 645	75 474	90 263	-
Power input in W									
30	12 910	13 150	13 459	13 839	14 294	14 826	15 437	16 132	-
35	14 234	14 459	14 755	15 123	15 568	16 093	16 699	17 390	-
40	15 707	15 915	16 195	16 550	16 983	17 498	18 097	18 783	-
45	-	17 546	17 809	18 149	18 569	19 072	19 661	20 340	-
50	-	-	19 627	19 950	20 355	20 845	21 423	22 092	-
55	-	-	-	21 984	22 372	22 846	23 411	24 069	-
60	-	-	-	-	24 649	25 106	25 656	26 300	-
65	-	-	-	-	-	27 656	28 188	28 817	-
Current consumption in A									
30	27.53	27.70	27.91	28.22	28.69	29.37	30.32	31.61	-
35	28.95	29.18	29.42	29.73	30.18	30.82	31.70	32.89	-
40	30.54	30.83	31.11	31.43	31.87	32.47	33.29	34.38	-
45	-	32.70	33.03	33.38	33.81	34.38	35.14	36.16	-
50	-	-	35.24	35.62	36.06	36.61	37.33	38.27	-
55	-	-	-	38.23	38.68	39.21	39.90	40.78	-
60	-	-	-	-	41.72	42.26	42.91	43.74	-
65	-	-	-	-	-	45.79	46.43	47.21	-
Mass flow in kg/h									
30	674	830	1 011	1 221	1 462	1 737	2 049	2 401	-
35	666	822	1 003	1 212	1 452	1 727	2 038	2 389	-
40	657	811	991	1 199	1 439	1 712	2 022	2 372	-
45	-	798	977	1 183	1 421	1 693	2 001	2 349	-
50	-	-	960	1 165	1 400	1 670	1 976	2 321	-
55	-	-	-	1 143	1 376	1 642	1 946	2 288	-
60	-	-	-	-	1 348	1 611	1 911	2 251	-
65	-	-	-	-	-	1 577	1 873	2 208	-
Coefficient of performance (C.O.P.)									
30	2.59	3.17	3.82	4.54	5.33	6.17	7.06	7.99	-
35	2.24	2.76	3.34	3.99	4.70	5.46	6.28	7.13	-
40	1.93	2.38	2.90	3.48	4.12	4.81	5.55	6.33	-
45	-	2.05	2.50	3.01	3.58	4.20	4.87	5.59	-
50	-	-	2.14	2.59	3.09	3.64	4.25	4.89	-
55	-	-	-	2.21	2.65	3.14	3.67	4.25	-
60	-	-	-	-	2.25	2.68	3.15	3.66	-
65	-	-	-	-	-	2.27	2.68	3.13	-

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

Cooling capacity	78 258	W
Power input	22 831	W
Current consumption	39.16	A
Mass flow	1 775	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	82	dB(A)
With accoustic 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

Tolerance according EN12900

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	27 955	35 114	43 610	53 631	65 362	78 990	94 702	112 684	-
35	26 571	33 564	41 830	51 554	62 924	76 125	91 345	108 768	-
40	25 038	31 803	39 774	49 139	60 083	72 794	87 457	104 259	-
45	23 395	29 868	37 482	46 423	56 879	69 035	83 078	99 195	-
50	-	27 798	34 991	43 445	53 349	64 887	78 247	93 615	-
55	-	25 633	32 340	40 245	49 532	60 389	73 002	87 558	-
60	-	-	29 569	36 859	45 468	55 580	67 382	81 062	-
65	-	-	-	-	41 194	50 497	61 426	74 166	-
Power input in W									
30	12 224	12 358	12 495	12 642	12 803	12 986	13 197	13 442	-
35	13 685	13 885	14 081	14 278	14 483	14 702	14 942	15 208	-
40	15 233	15 501	15 757	16 008	16 259	16 517	16 788	17 079	-
45	16 896	17 235	17 555	17 862	18 162	18 461	18 766	19 083	-
50	-	19 118	19 504	19 869	20 220	20 564	20 905	21 251	-
55	-	21 179	21 633	22 059	22 464	22 854	23 234	23 612	-
60	-	-	23 972	24 462	24 924	25 362	25 784	26 196	-
65	-	-	-	-	27 628	28 118	28 584	29 032	-
Current consumption in A									
30	24.79	25.11	25.32	25.46	25.57	25.68	25.84	26.09	-
35	26.98	27.37	27.64	27.85	28.03	28.22	28.46	28.78	-
40	29.04	29.49	29.83	30.10	30.35	30.62	30.93	31.33	-
45	31.12	31.62	32.03	32.37	32.69	33.02	33.41	33.89	-
50	-	33.93	34.39	34.80	35.18	35.58	36.04	36.60	-
55	-	36.55	37.07	37.54	37.99	38.46	38.99	39.62	-
60	-	-	40.23	40.75	41.26	41.80	42.40	43.10	-
65	-	-	-	-	45.16	45.76	46.42	47.19	-
Mass flow in kg/h									
30	588	727	889	1 076	1 292	1 539	1 821	2 141	-
35	587	729	892	1 082	1 299	1 549	1 833	2 155	-
40	583	726	892	1 082	1 302	1 553	1 838	2 162	-
45	576	720	886	1 078	1 298	1 550	1 836	2 160	-
50	-	710	877	1 068	1 289	1 540	1 827	2 151	-
55	-	697	862	1 054	1 273	1 524	1 810	2 133	-
60	-	-	844	1 034	1 252	1 501	1 786	2 108	-
65	-	-	-	-	1 224	1 472	1 754	2 074	-
Coefficient of performance (C.O.P.)									
30	2.29	2.84	3.49	4.24	5.11	6.08	7.18	8.38	-
35	1.94	2.42	2.97	3.61	4.34	5.18	6.11	7.15	-
40	1.64	2.05	2.52	3.07	3.70	4.41	5.21	6.10	-
45	1.38	1.73	2.14	2.60	3.13	3.74	4.43	5.20	-
50	-	1.45	1.79	2.19	2.64	3.16	3.74	4.41	-
55	-	1.21	1.49	1.82	2.20	2.64	3.14	3.71	-
60	-	-	1.23	1.51	1.82	2.19	2.61	3.09	-
65	-	-	-	-	1.49	1.80	2.15	2.55	-

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

Cooling capacity	64 887	W
Power input	20 564	W
Current consumption	35.58	A
Mass flow	1 540	kg/h
C.O.P.	3.16	

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)

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Tolerance according EN12900

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	29 982	37 617	46 667	57 328	69 797	84 267	100 932	119 986	-
35	28 637	36 127	44 969	55 357	67 489	81 559	97 763	116 294	-
40	27 137	34 418	42 986	53 037	64 768	78 375	94 053	111 999	-
45	25 523	32 531	40 759	50 408	61 673	74 753	89 844	107 142	-
50	-	30 506	38 330	47 511	58 247	70 737	85 177	101 766	-
55	-	28 386	35 740	44 389	54 531	66 367	80 096	95 916	-
60	-	-	33 036	41 087	50 572	61 693	74 649	89 641	-
65	-	-	-	-	46 421	56 766	68 893	83 004	-
Power input in W									
30	12 224	12 358	12 495	12 642	12 803	12 986	13 197	13 442	-
35	13 685	13 885	14 081	14 278	14 483	14 702	14 942	15 208	-
40	15 233	15 501	15 757	16 008	16 259	16 517	16 788	17 079	-
45	16 896	17 235	17 555	17 862	18 162	18 461	18 766	19 083	-
50	-	19 118	19 504	19 869	20 220	20 564	20 905	21 251	-
55	-	21 179	21 633	22 059	22 464	22 854	23 234	23 612	-
60	-	-	23 972	24 462	24 924	25 362	25 784	26 196	-
65	-	-	-	-	27 628	28 118	28 584	29 032	-
Current consumption in A									
30	24.79	25.11	25.32	25.46	25.57	25.68	25.84	26.09	-
35	26.98	27.37	27.64	27.85	28.03	28.22	28.46	28.78	-
40	29.04	29.49	29.83	30.10	30.35	30.62	30.93	31.33	-
45	31.12	31.62	32.03	32.37	32.69	33.02	33.41	33.89	-
50	-	33.93	34.39	34.80	35.18	35.58	36.04	36.60	-
55	-	36.55	37.07	37.54	37.99	38.46	38.99	39.62	-
60	-	-	40.23	40.75	41.26	41.80	42.40	43.10	-
65	-	-	-	-	45.16	45.76	46.42	47.19	-
Mass flow in kg/h									
30	585	724	884	1 070	1 284	1 530	1 810	2 128	-
35	584	725	888	1 076	1 292	1 540	1 822	2 142	-
40	580	722	887	1 076	1 294	1 544	1 827	2 148	-
45	573	716	882	1 072	1 291	1 541	1 825	2 147	-
50	-	706	872	1 063	1 281	1 531	1 816	2 138	-
55	-	693	858	1 048	1 266	1 515	1 799	2 120	-
60	-	-	839	1 028	1 245	1 493	1 775	2 095	-
65	-	-	-	-	1 217	1 463	1 744	2 061	-
Coefficient of performance (C.O.P.)									
30	2.45	3.04	3.73	4.53	5.45	6.49	7.65	8.93	-
35	2.09	2.60	3.19	3.88	4.66	5.55	6.54	7.65	-
40	1.78	2.22	2.73	3.31	3.98	4.74	5.60	6.56	-
45	1.51	1.89	2.32	2.82	3.40	4.05	4.79	5.61	-
50	-	1.60	1.97	2.39	2.88	3.44	4.07	4.79	-
55	-	1.34	1.65	2.01	2.43	2.90	3.45	4.06	-
60	-	-	1.38	1.68	2.03	2.43	2.90	3.42	-
65	-	-	-	-	1.68	2.02	2.41	2.86	-

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

Cooling capacity	72 743	W
Power input	22 734	W
Current consumption	38.31	A
Mass flow	1 638	kg/h
C.O.P.	3.20	

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)

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Tolerance according EN12900

Performance data at 50 Hz, EN 12900 rating conditions

R134a

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-15	-10	-5	0	5	10	15		
Cooling capacity in W									
35	21 926	27 748	34 715	42 986	52 717	64 065	77 186	-	-
40	20 606	26 167	32 823	40 728	50 041	60 917	73 514	-	-
45	19 268	24 553	30 879	38 402	47 280	57 669	69 725	-	-
50	17 919	22 912	28 892	36 017	44 443	54 328	65 827	-	-
55	-	21 251	26 869	33 579	41 537	50 901	61 827	-	-
60	-	-	24 819	31 097	38 571	47 397	57 733	-	-
65	-	-	-	28 578	35 551	43 824	53 553	-	-
70	-	-	-	-	32 486	40 188	49 293	-	-
Power input in W									
35	10 233	10 390	10 516	10 622	10 722	10 828	10 953	-	-
40	11 267	11 450	11 605	11 742	11 875	12 017	12 179	-	-
45	12 372	12 583	12 767	12 936	13 104	13 282	13 483	-	-
50	13 575	13 814	14 028	14 230	14 433	14 649	14 889	-	-
55	-	15 167	15 414	15 650	15 889	16 143	16 424	-	-
60	-	-	16 948	17 220	17 495	17 789	18 112	-	-
65	-	-	-	18 965	19 279	19 613	19 979	-	-
70	-	-	-	-	21 264	21 639	22 049	-	-
Current consumption in A									
35	24.54	24.69	24.71	24.67	24.64	24.69	24.88	-	-
40	25.39	25.59	25.66	25.66	25.66	25.73	25.94	-	-
45	26.40	26.67	26.80	26.86	26.91	27.02	27.27	-	-
50	27.58	27.94	28.15	28.28	28.40	28.56	28.85	-	-
55	-	29.40	29.70	29.92	30.12	30.35	30.71	-	-
60	-	-	31.46	31.78	32.07	32.40	32.83	-	-
65	-	-	-	33.86	34.26	34.69	35.22	-	-
70	-	-	-	-	36.70	37.24	37.88	-	-
Mass flow in kg/h									
35	533	660	808	980	1 178	1 405	1 662	-	-
40	527	655	803	975	1 173	1 400	1 657	-	-
45	522	648	796	968	1 166	1 393	1 650	-	-
50	515	641	789	960	1 158	1 384	1 641	-	-
55	-	634	780	951	1 148	1 373	1 630	-	-
60	-	-	771	940	1 136	1 361	1 617	-	-
65	-	-	-	929	1 124	1 347	1 603	-	-
70	-	-	-	-	1 110	1 332	1 586	-	-
Coefficient of performance (C.O.P.)									
35	2.14	2.67	3.30	4.05	4.92	5.92	7.05	-	-
40	1.83	2.29	2.83	3.47	4.21	5.07	6.04	-	-
45	1.56	1.95	2.42	2.97	3.61	4.34	5.17	-	-
50	1.32	1.66	2.06	2.53	3.08	3.71	4.42	-	-
55	-	1.40	1.74	2.15	2.61	3.15	3.76	-	-
60	-	-	1.46	1.81	2.20	2.66	3.19	-	-
65	-	-	-	1.51	1.84	2.23	2.68	-	-
70	-	-	-	-	1.53	1.86	2.24	-	-

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

Cooling capacity	44 443	W
Power input	14 433	W
Current consumption	28.40	A
Mass flow	1 158	kg/h
C.O.P.	3.08	

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Tolerance according EN12900

Performance data at 50 Hz, ARI rating conditions

R134a

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-15	-10	-5	0	5	10	15		
Cooling capacity in W									
35	23 748	30 002	37 476	46 332	56 736	68 850	82 837	-	-
40	22 439	28 442	35 612	44 113	54 110	65 766	79 246	-	-
45	21 113	26 847	33 695	41 824	51 398	62 582	75 538	-	-
50	19 777	25 225	31 737	39 477	48 611	59 306	71 724	-	-
55	-	23 587	29 744	37 079	45 759	55 949	67 814	-	-
60	-	-	27 728	34 643	42 852	52 523	63 822	-	-
65	-	-	-	32 180	39 904	49 043	59 763	-	-
70	-	-	-	-	36 932	45 527	55 657	-	-
Power input in W									
35	10 233	10 390	10 516	10 622	10 722	10 828	10 953	-	-
40	11 267	11 450	11 605	11 742	11 875	12 017	12 179	-	-
45	12 372	12 583	12 767	12 936	13 104	13 282	13 483	-	-
50	13 575	13 814	14 028	14 230	14 433	14 649	14 889	-	-
55	-	15 167	15 414	15 650	15 889	16 143	16 424	-	-
60	-	-	16 948	17 220	17 495	17 789	18 112	-	-
65	-	-	-	18 965	19 279	19 613	19 979	-	-
70	-	-	-	-	21 264	21 639	22 049	-	-
Current consumption in A									
35	24.54	24.69	24.71	24.67	24.64	24.69	24.88	-	-
40	25.39	25.59	25.66	25.66	25.66	25.73	25.94	-	-
45	26.40	26.67	26.80	26.86	26.91	27.02	27.27	-	-
50	27.58	27.94	28.15	28.28	28.40	28.56	28.85	-	-
55	-	29.40	29.70	29.92	30.12	30.35	30.71	-	-
60	-	-	31.46	31.78	32.07	32.40	32.83	-	-
65	-	-	-	33.86	34.26	34.69	35.22	-	-
70	-	-	-	-	36.70	37.24	37.88	-	-
Mass flow in kg/h									
35	530	657	804	975	1 172	1 397	1 653	-	-
40	525	651	799	970	1 167	1 392	1 648	-	-
45	519	645	792	963	1 160	1 385	1 641	-	-
50	513	638	785	955	1 151	1 376	1 632	-	-
55	-	631	776	946	1 142	1 366	1 621	-	-
60	-	-	767	935	1 130	1 354	1 608	-	-
65	-	-	-	924	1 118	1 340	1 594	-	-
70	-	-	-	-	1 104	1 325	1 577	-	-
Coefficient of performance (C.O.P.)									
35	2.32	2.89	3.56	4.36	5.29	6.36	7.56	-	-
40	1.99	2.48	3.07	3.76	4.56	5.47	6.51	-	-
45	1.71	2.13	2.64	3.23	3.92	4.71	5.60	-	-
50	1.46	1.83	2.26	2.77	3.37	4.05	4.82	-	-
55	-	1.56	1.93	2.37	2.88	3.47	4.13	-	-
60	-	-	1.64	2.01	2.45	2.95	3.52	-	-
65	-	-	-	1.70	2.07	2.50	2.99	-	-
70	-	-	-	-	1.74	2.10	2.52	-	-

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

Cooling capacity	50 418	W
Power input	15 814	W
Current consumption	29.99	A
Mass flow	1 238	kg/h
C.O.P.	3.19	

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	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

Performance data at 50 Hz, EN 12900 rating conditions

R134a

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-15	-10	-5	0	5	10	15		
Cooling capacity in W									
35	21 926	27 748	34 715	42 986	52 717	64 065	77 186	-	-
40	20 606	26 167	32 823	40 728	50 041	60 917	73 514	-	-
45	19 268	24 553	30 879	38 402	47 280	57 669	69 725	-	-
50	17 919	22 912	28 892	36 017	44 443	54 328	65 827	-	-
55	-	21 251	26 869	33 579	41 537	50 901	61 827	-	-
60	-	-	24 819	31 097	38 571	47 397	57 733	-	-
65	-	-	-	28 578	35 551	43 824	53 553	-	-
70	-	-	-	-	32 486	40 188	49 293	-	-
Power input in W									
35	10 233	10 390	10 516	10 622	10 722	10 828	10 953	-	-
40	11 267	11 450	11 605	11 742	11 875	12 017	12 179	-	-
45	12 372	12 583	12 767	12 936	13 104	13 282	13 483	-	-
50	13 575	13 814	14 028	14 230	14 433	14 649	14 889	-	-
55	-	15 167	15 414	15 650	15 889	16 143	16 424	-	-
60	-	-	16 948	17 220	17 495	17 789	18 112	-	-
65	-	-	-	18 965	19 279	19 613	19 979	-	-
70	-	-	-	-	21 264	21 639	22 049	-	-
Current consumption in A									
35	24.54	24.69	24.71	24.67	24.64	24.69	24.88	-	-
40	25.39	25.59	25.66	25.66	25.66	25.73	25.94	-	-
45	26.40	26.67	26.80	26.86	26.91	27.02	27.27	-	-
50	27.58	27.94	28.15	28.28	28.40	28.56	28.85	-	-
55	-	29.40	29.70	29.92	30.12	30.35	30.71	-	-
60	-	-	31.46	31.78	32.07	32.40	32.83	-	-
65	-	-	-	33.86	34.26	34.69	35.22	-	-
70	-	-	-	-	36.70	37.24	37.88	-	-
Mass flow in kg/h									
35	533	660	808	980	1 178	1 405	1 662	-	-
40	527	655	803	975	1 173	1 400	1 657	-	-
45	522	648	796	968	1 166	1 393	1 650	-	-
50	515	641	789	960	1 158	1 384	1 641	-	-
55	-	634	780	951	1 148	1 373	1 630	-	-
60	-	-	771	940	1 136	1 361	1 617	-	-
65	-	-	-	929	1 124	1 347	1 603	-	-
70	-	-	-	-	1 110	1 332	1 586	-	-
Coefficient of performance (C.O.P.)									
35	2.14	2.67	3.30	4.05	4.92	5.92	7.05	-	-
40	1.83	2.29	2.83	3.47	4.21	5.07	6.04	-	-
45	1.56	1.95	2.42	2.97	3.61	4.34	5.17	-	-
50	1.32	1.66	2.06	2.53	3.08	3.71	4.42	-	-
55	-	1.40	1.74	2.15	2.61	3.15	3.76	-	-
60	-	-	1.46	1.81	2.20	2.66	3.19	-	-
65	-	-	-	1.51	1.84	2.23	2.68	-	-
70	-	-	-	-	1.53	1.86	2.24	-	-

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

Cooling capacity	44 443	W
Power input	14 433	W
Current consumption	28.40	A
Mass flow	1 158	kg/h
C.O.P.	3.08	

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Tolerance according EN12900

Performance data at 50 Hz, ARI rating conditions

R134a

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-15	-10	-5	0	5	10	15		
Cooling capacity in W									
35	23 748	30 002	37 476	46 332	56 736	68 850	82 837	-	-
40	22 439	28 442	35 612	44 113	54 110	65 766	79 246	-	-
45	21 113	26 847	33 695	41 824	51 398	62 582	75 538	-	-
50	19 777	25 225	31 737	39 477	48 611	59 306	71 724	-	-
55	-	23 587	29 744	37 079	45 759	55 949	67 814	-	-
60	-	-	27 728	34 643	42 852	52 523	63 822	-	-
65	-	-	-	32 180	39 904	49 043	59 763	-	-
70	-	-	-	-	36 932	45 527	55 657	-	-
Power input in W									
35	10 233	10 390	10 516	10 622	10 722	10 828	10 953	-	-
40	11 267	11 450	11 605	11 742	11 875	12 017	12 179	-	-
45	12 372	12 583	12 767	12 936	13 104	13 282	13 483	-	-
50	13 575	13 814	14 028	14 230	14 433	14 649	14 889	-	-
55	-	15 167	15 414	15 650	15 889	16 143	16 424	-	-
60	-	-	16 948	17 220	17 495	17 789	18 112	-	-
65	-	-	-	18 965	19 279	19 613	19 979	-	-
70	-	-	-	-	21 264	21 639	22 049	-	-
Current consumption in A									
35	24.54	24.69	24.71	24.67	24.64	24.69	24.88	-	-
40	25.39	25.59	25.66	25.66	25.66	25.73	25.94	-	-
45	26.40	26.67	26.80	26.86	26.91	27.02	27.27	-	-
50	27.58	27.94	28.15	28.28	28.40	28.56	28.85	-	-
55	-	29.40	29.70	29.92	30.12	30.35	30.71	-	-
60	-	-	31.46	31.78	32.07	32.40	32.83	-	-
65	-	-	-	33.86	34.26	34.69	35.22	-	-
70	-	-	-	-	36.70	37.24	37.88	-	-
Mass flow in kg/h									
35	530	657	804	975	1 172	1 397	1 653	-	-
40	525	651	799	970	1 167	1 392	1 648	-	-
45	519	645	792	963	1 160	1 385	1 641	-	-
50	513	638	785	955	1 151	1 376	1 632	-	-
55	-	631	776	946	1 142	1 366	1 621	-	-
60	-	-	767	935	1 130	1 354	1 608	-	-
65	-	-	-	924	1 118	1 340	1 594	-	-
70	-	-	-	-	1 104	1 325	1 577	-	-
Coefficient of performance (C.O.P.)									
35	2.32	2.89	3.56	4.36	5.29	6.36	7.56	-	-
40	1.99	2.48	3.07	3.76	4.56	5.47	6.51	-	-
45	1.71	2.13	2.64	3.23	3.92	4.71	5.60	-	-
50	1.46	1.83	2.26	2.77	3.37	4.05	4.82	-	-
55	-	1.56	1.93	2.37	2.88	3.47	4.13	-	-
60	-	-	1.64	2.01	2.45	2.95	3.52	-	-
65	-	-	-	1.70	2.07	2.50	2.99	-	-
70	-	-	-	-	1.74	2.10	2.52	-	-

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

Cooling capacity	50 418	W
Power input	15 814	W
Current consumption	29.99	A
Mass flow	1 238	kg/h
C.O.P.	3.19	

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	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

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	27 955	35 114	43 610	53 631	65 362	78 990	94 702	112 684	-
35	26 571	33 564	41 830	51 554	62 924	76 125	91 345	108 768	-
40	25 038	31 803	39 774	49 139	60 083	72 794	87 457	104 259	-
45	23 395	29 868	37 482	46 423	56 879	69 035	83 078	99 195	-
50	-	27 798	34 991	43 445	53 349	64 887	78 247	93 615	-
55	-	25 633	32 340	40 245	49 532	60 389	73 002	87 558	-
60	-	-	29 569	36 859	45 468	55 580	67 382	81 062	-
65	-	-	-	-	41 194	50 497	61 426	74 166	-
Power input in W									
30	12 224	12 358	12 495	12 642	12 803	12 986	13 197	13 442	-
35	13 685	13 885	14 081	14 278	14 483	14 702	14 942	15 208	-
40	15 233	15 501	15 757	16 008	16 259	16 517	16 788	17 079	-
45	16 896	17 235	17 555	17 862	18 162	18 461	18 766	19 083	-
50	-	19 118	19 504	19 869	20 220	20 564	20 905	21 251	-
55	-	21 179	21 633	22 059	22 464	22 854	23 234	23 612	-
60	-	-	23 972	24 462	24 924	25 362	25 784	26 196	-
65	-	-	-	-	27 628	28 118	28 584	29 032	-
Current consumption in A									
30	24.79	25.11	25.32	25.46	25.57	25.68	25.84	26.09	-
35	26.98	27.37	27.64	27.85	28.03	28.22	28.46	28.78	-
40	29.04	29.49	29.83	30.10	30.35	30.62	30.93	31.33	-
45	31.12	31.62	32.03	32.37	32.69	33.02	33.41	33.89	-
50	-	33.93	34.39	34.80	35.18	35.58	36.04	36.60	-
55	-	36.55	37.07	37.54	37.99	38.46	38.99	39.62	-
60	-	-	40.23	40.75	41.26	41.80	42.40	43.10	-
65	-	-	-	-	45.16	45.76	46.42	47.19	-
Mass flow in kg/h									
30	588	727	889	1 076	1 292	1 539	1 821	2 141	-
35	587	729	892	1 082	1 299	1 549	1 833	2 155	-
40	583	726	892	1 082	1 302	1 553	1 838	2 162	-
45	576	720	886	1 078	1 298	1 550	1 836	2 160	-
50	-	710	877	1 068	1 289	1 540	1 827	2 151	-
55	-	697	862	1 054	1 273	1 524	1 810	2 133	-
60	-	-	844	1 034	1 252	1 501	1 786	2 108	-
65	-	-	-	-	1 224	1 472	1 754	2 074	-
Coefficient of performance (C.O.P.)									
30	2.29	2.84	3.49	4.24	5.11	6.08	7.18	8.38	-
35	1.94	2.42	2.97	3.61	4.34	5.18	6.11	7.15	-
40	1.64	2.05	2.52	3.07	3.70	4.41	5.21	6.10	-
45	1.38	1.73	2.14	2.60	3.13	3.74	4.43	5.20	-
50	-	1.45	1.79	2.19	2.64	3.16	3.74	4.41	-
55	-	1.21	1.49	1.82	2.20	2.64	3.14	3.71	-
60	-	-	1.23	1.51	1.82	2.19	2.61	3.09	-
65	-	-	-	-	1.49	1.80	2.15	2.55	-

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

Cooling capacity	64 887	W
Power input	20 564	W
Current consumption	35.58	A
Mass flow	1 540	kg/h
C.O.P.	3.16	

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)

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Tolerance according EN12900

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	29 982	37 617	46 667	57 328	69 797	84 267	100 932	119 986	-
35	28 637	36 127	44 969	55 357	67 489	81 559	97 763	116 294	-
40	27 137	34 418	42 986	53 037	64 768	78 375	94 053	111 999	-
45	25 523	32 531	40 759	50 408	61 673	74 753	89 844	107 142	-
50	-	30 506	38 330	47 511	58 247	70 737	85 177	101 766	-
55	-	28 386	35 740	44 389	54 531	66 367	80 096	95 916	-
60	-	-	33 036	41 087	50 572	61 693	74 649	89 641	-
65	-	-	-	-	46 421	56 766	68 893	83 004	-
Power input in W									
30	12 224	12 358	12 495	12 642	12 803	12 986	13 197	13 442	-
35	13 685	13 885	14 081	14 278	14 483	14 702	14 942	15 208	-
40	15 233	15 501	15 757	16 008	16 259	16 517	16 788	17 079	-
45	16 896	17 235	17 555	17 862	18 162	18 461	18 766	19 083	-
50	-	19 118	19 504	19 869	20 220	20 564	20 905	21 251	-
55	-	21 179	21 633	22 059	22 464	22 854	23 234	23 612	-
60	-	-	23 972	24 462	24 924	25 362	25 784	26 196	-
65	-	-	-	-	27 628	28 118	28 584	29 032	-
Current consumption in A									
30	24.79	25.11	25.32	25.46	25.57	25.68	25.84	26.09	-
35	26.98	27.37	27.64	27.85	28.03	28.22	28.46	28.78	-
40	29.04	29.49	29.83	30.10	30.35	30.62	30.93	31.33	-
45	31.12	31.62	32.03	32.37	32.69	33.02	33.41	33.89	-
50	-	33.93	34.39	34.80	35.18	35.58	36.04	36.60	-
55	-	36.55	37.07	37.54	37.99	38.46	38.99	39.62	-
60	-	-	40.23	40.75	41.26	41.80	42.40	43.10	-
65	-	-	-	-	45.16	45.76	46.42	47.19	-
Mass flow in kg/h									
30	585	724	884	1 070	1 284	1 530	1 810	2 128	-
35	584	725	888	1 076	1 292	1 540	1 822	2 142	-
40	580	722	887	1 076	1 294	1 544	1 827	2 148	-
45	573	716	882	1 072	1 291	1 541	1 825	2 147	-
50	-	706	872	1 063	1 281	1 531	1 816	2 138	-
55	-	693	858	1 048	1 266	1 515	1 799	2 120	-
60	-	-	839	1 028	1 245	1 493	1 775	2 095	-
65	-	-	-	-	1 217	1 463	1 744	2 061	-
Coefficient of performance (C.O.P.)									
30	2.45	3.04	3.73	4.53	5.45	6.49	7.65	8.93	-
35	2.09	2.60	3.19	3.88	4.66	5.55	6.54	7.65	-
40	1.78	2.22	2.73	3.31	3.98	4.74	5.60	6.56	-
45	1.51	1.89	2.32	2.82	3.40	4.05	4.79	5.61	-
50	-	1.60	1.97	2.39	2.88	3.44	4.07	4.79	-
55	-	1.34	1.65	2.01	2.43	2.90	3.45	4.06	-
60	-	-	1.38	1.68	2.03	2.43	2.90	3.42	-
65	-	-	-	-	1.68	2.02	2.41	2.86	-

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

Cooling capacity	72 743	W
Power input	22 734	W
Current consumption	38.31	A
Mass flow	1 638	kg/h
C.O.P.	3.20	

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)

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Tolerance according EN12900

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	39 403	48 776	59 739	72 463	87 121	103 884	122 925	144 419	-
35	37 380	46 416	56 979	69 239	83 368	99 537	117 920	138 688	-
40	35 287	43 964	54 103	65 875	79 451	95 003	112 702	132 721	-
45	-	41 435	51 127	62 387	75 387	90 297	107 288	126 531	-
50	-	-	48 067	58 791	71 190	85 433	101 690	120 133	-
55	-	-	-	55 102	66 875	80 425	95 922	113 536	-
60	-	-	-	-	62 453	75 283	89 993	106 750	-
65	-	-	-	-	-	70 017	83 909	99 778	-
Power input in W									
30	14 401	14 864	15 379	15 933	16 512	17 103	17 691	18 263	-
35	16 390	16 852	17 382	17 968	18 594	19 247	19 914	20 580	-
40	18 282	18 732	19 267	19 871	20 532	21 237	21 970	22 720	-
45	-	20 621	21 147	21 759	22 444	23 187	23 976	24 796	-
50	-	-	23 140	23 747	24 444	25 215	26 047	26 926	-
55	-	-	-	25 952	26 648	27 434	28 298	29 224	-
60	-	-	-	-	29 172	29 962	30 845	31 807	-
65	-	-	-	-	-	32 914	33 804	34 790	-
Current consumption in A									
30	25.09	25.44	26.00	26.74	27.62	28.63	29.73	30.90	-
35	26.79	27.12	27.64	28.34	29.18	30.13	31.17	32.26	-
40	28.71	29.03	29.54	30.21	31.02	31.93	32.92	33.96	-
45	-	31.21	31.72	32.39	33.18	34.07	35.02	36.02	-
50	-	-	34.20	34.88	35.67	36.55	37.50	38.47	-
55	-	-	-	37.71	38.52	39.41	40.36	41.33	-
60	-	-	-	-	41.75	42.68	43.64	44.63	-
65	-	-	-	-	-	46.36	47.36	48.37	-
Mass flow in kg/h									
30	847	1 035	1 251	1 498	1 779	2 098	2 456	2 858	-
35	835	1 023	1 239	1 486	1 767	2 085	2 444	2 845	-
40	822	1 009	1 224	1 471	1 752	2 069	2 427	2 828	-
45	-	993	1 208	1 453	1 733	2 050	2 407	2 807	-
50	-	-	1 189	1 433	1 712	2 027	2 383	2 782	-
55	-	-	-	1 410	1 687	2 001	2 355	2 753	-
60	-	-	-	-	1 660	1 972	2 324	2 719	-
65	-	-	-	-	-	1 940	2 290	2 682	-
Coefficient of performance (C.O.P.)									
30	2.74	3.28	3.88	4.55	5.28	6.07	6.95	7.91	-
35	2.28	2.75	3.28	3.85	4.48	5.17	5.92	6.74	-
40	1.93	2.35	2.81	3.32	3.87	4.47	5.13	5.84	-
45	-	2.01	2.42	2.87	3.36	3.89	4.47	5.10	-
50	-	-	2.08	2.48	2.91	3.39	3.90	4.46	-
55	-	-	-	2.12	2.51	2.93	3.39	3.89	-
60	-	-	-	-	2.14	2.51	2.92	3.36	-
65	-	-	-	-	-	2.13	2.48	2.87	-

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

Cooling capacity	85 433	W
Power input	25 215	W
Current consumption	36.55	A
Mass flow	2 027	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	86	dB(A)
With accoustic hood	79	dB(A)

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Tolerance according EN12900

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	41 814	51 721	63 297	76 723	92 177	109 839	129 887	152 500	-
35	39 807	49 387	60 576	73 551	88 492	105 578	124 987	146 900	-
40	37 727	46 959	57 736	70 237	84 641	101 128	119 876	141 064	-
45	-	44 452	54 794	66 798	80 643	96 507	114 570	135 011	-
50	-	-	51 770	63 253	76 514	91 733	109 088	128 758	-
55	-	-	-	59 619	72 274	86 824	103 447	122 323	-
60	-	-	-	-	67 940	81 797	97 665	115 724	-
65	-	-	-	-	-	76 671	91 761	108 979	-
Power input in W									
30	14 401	14 864	15 379	15 933	16 512	17 103	17 691	18 263	-
35	16 390	16 852	17 382	17 968	18 594	19 247	19 914	20 580	-
40	18 282	18 732	19 267	19 871	20 532	21 237	21 970	22 720	-
45	-	20 621	21 147	21 759	22 444	23 187	23 976	24 796	-
50	-	-	23 140	23 747	24 444	25 215	26 047	26 926	-
55	-	-	-	25 952	26 648	27 434	28 298	29 224	-
60	-	-	-	-	29 172	29 962	30 845	31 807	-
65	-	-	-	-	-	32 914	33 804	34 790	-
Current consumption in A									
30	25.09	25.44	26.00	26.74	27.62	28.63	29.73	30.90	-
35	26.79	27.12	27.64	28.34	29.18	30.13	31.17	32.26	-
40	28.71	29.03	29.54	30.21	31.02	31.93	32.92	33.96	-
45	-	31.21	31.72	32.39	33.18	34.07	35.02	36.02	-
50	-	-	34.20	34.88	35.67	36.55	37.50	38.47	-
55	-	-	-	37.71	38.52	39.41	40.36	41.33	-
60	-	-	-	-	41.75	42.68	43.64	44.63	-
65	-	-	-	-	-	46.36	47.36	48.37	-
Mass flow in kg/h									
30	843	1 029	1 244	1 490	1 770	2 086	2 443	2 842	-
35	831	1 018	1 232	1 478	1 758	2 074	2 430	2 829	-
40	817	1 004	1 218	1 463	1 742	2 058	2 414	2 812	-
45	-	988	1 201	1 446	1 724	2 039	2 393	2 791	-
50	-	-	1 182	1 426	1 702	2 016	2 370	2 766	-
55	-	-	-	1 403	1 678	1 990	2 342	2 737	-
60	-	-	-	-	1 651	1 961	2 311	2 704	-
65	-	-	-	-	-	1 929	2 277	2 667	-
Coefficient of performance (C.O.P.)									
30	2.90	3.48	4.12	4.82	5.58	6.42	7.34	8.35	-
35	2.43	2.93	3.48	4.09	4.76	5.49	6.28	7.14	-
40	2.06	2.51	3.00	3.53	4.12	4.76	5.46	6.21	-
45	-	2.16	2.59	3.07	3.59	4.16	4.78	5.44	-
50	-	-	2.24	2.66	3.13	3.64	4.19	4.78	-
55	-	-	-	2.30	2.71	3.16	3.66	4.19	-
60	-	-	-	-	2.33	2.73	3.17	3.64	-
65	-	-	-	-	-	2.33	2.71	3.13	-

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

Cooling capacity	94 506	W
Power input	27 524	W
Current consumption	39.46	A
Mass flow	2 143	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	86	dB(A)
With accoustic hood	79	dB(A)

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Tolerance according EN12900

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	35 508	44 340	54 861	67 375	82 190	99 614	119 954	143 520	-
35	33 246	41 713	51 770	63 723	77 877	94 539	114 015	136 615	-
40	30 972	39 042	48 606	59 967	73 428	89 297	107 877	129 477	-
45	28 709	36 352	45 391	56 129	68 867	83 909	101 561	122 127	-
50	-	33 665	42 149	52 232	64 215	78 399	95 087	114 584	-
55	-	31 001	38 899	48 296	59 490	72 782	88 473	106 865	-
60	-	-	35 658	44 336	54 708	67 073	81 728	98 975	-
65	-	-	-	-	49 875	61 274	74 852	90 908	-
Power input in W									
30	15 091	15 409	15 720	16 025	16 326	16 625	16 922	17 219	-
35	16 746	17 089	17 426	17 759	18 089	18 417	18 745	19 075	-
40	18 544	18 917	19 286	19 651	20 015	20 379	20 743	21 111	-
45	20 517	20 926	21 331	21 735	22 138	22 543	22 949	23 359	-
50	-	23 148	23 595	24 043	24 490	24 940	25 394	25 852	-
55	-	25 615	26 110	26 606	27 104	27 605	28 110	28 622	-
60	-	-	28 907	29 457	30 010	30 568	31 131	31 702	-
65	-	-	-	-	33 243	33 862	34 488	35 123	-
Current consumption in A									
30	24.47	24.90	25.37	25.91	26.55	27.31	28.22	29.31	-
35	26.21	26.63	27.08	27.59	28.19	28.91	29.76	30.77	-
40	28.22	28.64	29.09	29.59	30.17	30.85	31.66	32.62	-
45	30.53	30.97	31.43	31.93	32.50	33.17	33.95	34.88	-
50	-	33.65	34.13	34.65	35.23	35.90	36.67	37.58	-
55	-	36.70	37.23	37.79	38.39	39.07	39.85	40.76	-
60	-	-	40.75	41.36	42.01	42.72	43.53	44.45	-
65	-	-	-	-	46.12	46.88	47.73	48.68	-
Mass flow in kg/h									
30	746	918	1 119	1 352	1 624	1 940	2 305	2 724	-
35	734	905	1 105	1 338	1 609	1 924	2 288	2 706	-
40	721	891	1 089	1 321	1 591	1 905	2 268	2 685	-
45	707	876	1 073	1 303	1 572	1 884	2 245	2 661	-
50	-	861	1 056	1 284	1 551	1 861	2 220	2 634	-
55	-	847	1 039	1 265	1 529	1 836	2 193	2 604	-
60	-	-	1 022	1 245	1 506	1 811	2 165	2 573	-
65	-	-	-	-	1 483	1 785	2 135	2 540	-
Coefficient of performance (C.O.P.)									
30	2.35	2.88	3.49	4.20	5.03	5.99	7.09	8.34	-
35	1.99	2.44	2.97	3.59	4.31	5.13	6.08	7.16	-
40	1.67	2.06	2.52	3.05	3.67	4.38	5.20	6.13	-
45	1.40	1.74	2.13	2.58	3.11	3.72	4.43	5.23	-
50	-	1.45	1.79	2.17	2.62	3.14	3.74	4.43	-
55	-	1.21	1.49	1.82	2.19	2.64	3.15	3.73	-
60	-	-	1.23	1.51	1.82	2.19	2.63	3.12	-
65	-	-	-	-	1.50	1.81	2.17	2.59	-

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

Cooling capacity	78 399	W
Power input	24 940	W
Current consumption	35.90	A
Mass flow	1 861	kg/h
C.O.P.	3.14	

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Tolerance according EN12900

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	38 083	47 501	58 706	72 021	87 767	106 268	127 844	152 820	-
35	35 831	44 898	55 655	68 424	83 527	101 287	122 026	146 067	-
40	33 568	42 253	52 531	64 724	79 153	96 143	116 014	139 089	-
45	31 320	39 593	49 361	60 947	74 672	90 860	109 832	131 912	-
50	-	36 944	46 172	57 120	70 111	85 466	103 509	124 562	-
55	-	34 331	42 989	53 269	65 494	79 987	97 070	117 066	-
60	-	-	39 839	49 420	60 850	74 450	90 542	109 450	-
65	-	-	-	-	56 204	68 880	83 952	101 741	-
Power input in W									
30	15 091	15 409	15 720	16 025	16 326	16 625	16 922	17 219	-
35	16 746	17 089	17 426	17 759	18 089	18 417	18 745	19 075	-
40	18 544	18 917	19 286	19 651	20 015	20 379	20 743	21 111	-
45	20 517	20 926	21 331	21 735	22 138	22 543	22 949	23 359	-
50	-	23 148	23 595	24 043	24 490	24 940	25 394	25 852	-
55	-	25 615	26 110	26 606	27 104	27 605	28 110	28 622	-
60	-	-	28 907	29 457	30 010	30 568	31 131	31 702	-
65	-	-	-	-	33 243	33 862	34 488	35 123	-
Current consumption in A									
30	24.47	24.90	25.37	25.91	26.55	27.31	28.22	29.31	-
35	26.21	26.63	27.08	27.59	28.19	28.91	29.76	30.77	-
40	28.22	28.64	29.09	29.59	30.17	30.85	31.66	32.62	-
45	30.53	30.97	31.43	31.93	32.50	33.17	33.95	34.88	-
50	-	33.65	34.13	34.65	35.23	35.90	36.67	37.58	-
55	-	36.70	37.23	37.79	38.39	39.07	39.85	40.76	-
60	-	-	40.75	41.36	42.01	42.72	43.53	44.45	-
65	-	-	-	-	46.12	46.88	47.73	48.68	-
Mass flow in kg/h									
30	742	914	1 113	1 345	1 615	1 929	2 291	2 707	-
35	730	901	1 099	1 330	1 600	1 913	2 275	2 690	-
40	717	886	1 084	1 314	1 582	1 894	2 255	2 669	-
45	704	872	1 067	1 296	1 563	1 873	2 232	2 645	-
50	-	857	1 050	1 277	1 542	1 850	2 207	2 618	-
55	-	842	1 034	1 258	1 520	1 826	2 180	2 588	-
60	-	-	1 017	1 238	1 498	1 800	2 152	2 557	-
65	-	-	-	-	1 475	1 774	2 122	2 524	-
Coefficient of performance (C.O.P.)									
30	2.52	3.08	3.73	4.49	5.38	6.39	7.55	8.88	-
35	2.14	2.63	3.19	3.85	4.62	5.50	6.51	7.66	-
40	1.81	2.23	2.72	3.29	3.95	4.72	5.59	6.59	-
45	1.53	1.89	2.31	2.80	3.37	4.03	4.79	5.65	-
50	-	1.60	1.96	2.38	2.86	3.43	4.08	4.82	-
55	-	1.34	1.65	2.00	2.42	2.90	3.45	4.09	-
60	-	-	1.38	1.68	2.03	2.44	2.91	3.45	-
65	-	-	-	-	1.69	2.03	2.43	2.90	-

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

Cooling capacity	87 877	W
Power input	27 489	W
Current consumption	39.00	A
Mass flow	1 979	kg/h
C.O.P.	3.20	

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)

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Tolerance according EN12900

Performance data at 60 Hz, EN 12900 rating conditions

R134a

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-15	-10	-5	0	5	10	15		
Cooling capacity in W									
35	26 851	33 748	42 013	51 843	63 433	76 980	92 680	-	-
40	25 246	31 823	39 706	49 091	60 172	73 145	88 207	-	-
45	23 631	29 873	37 360	46 284	56 841	69 225	83 632	-	-
50	22 011	27 904	34 979	43 427	53 444	65 223	78 959	-	-
55	-	25 920	32 568	40 526	49 987	61 144	74 193	-	-
60	-	-	30 132	37 583	46 471	56 990	69 332	-	-
65	-	-	-	34 600	42 899	52 760	64 376	-	-
70	-	-	-	-	39 267	48 450	59 318	-	-
Power input in W									
35	12 319	12 685	12 975	13 207	13 402	13 577	13 751	-	-
40	13 528	13 951	14 292	14 567	14 797	15 000	15 195	-	-
45	14 832	15 317	15 711	16 033	16 302	16 537	16 756	-	-
50	16 244	16 794	17 246	17 618	17 930	18 200	18 447	-	-
55	-	18 396	18 909	19 335	19 693	20 002	20 281	-	-
60	-	-	20 714	21 197	21 605	21 957	22 270	-	-
65	-	-	-	23 217	23 679	24 076	24 428	-	-
70	-	-	-	-	25 927	26 374	26 769	-	-
Current consumption in A									
35	22.10	22.32	22.63	22.98	23.31	23.58	23.72	-	-
40	23.19	23.47	23.84	24.24	24.61	24.91	25.07	-	-
45	24.47	24.83	25.25	25.70	26.11	26.44	26.62	-	-
50	25.97	26.39	26.88	27.37	27.83	28.18	28.38	-	-
55	-	28.18	28.73	29.27	29.77	30.15	30.38	-	-
60	-	-	30.82	31.42	31.95	32.37	32.62	-	-
65	-	-	-	33.82	34.40	34.85	35.12	-	-
70	-	-	-	-	37.11	37.60	37.90	-	-
Mass flow in kg/h									
35	652	803	978	1 182	1 418	1 688	1 996	-	-
40	646	796	971	1 175	1 410	1 680	1 988	-	-
45	640	789	963	1 167	1 402	1 671	1 979	-	-
50	633	781	955	1 157	1 392	1 661	1 969	-	-
55	-	773	946	1 147	1 381	1 649	1 956	-	-
60	-	-	936	1 136	1 369	1 636	1 943	-	-
65	-	-	-	1 124	1 356	1 622	1 927	-	-
70	-	-	-	-	1 342	1 607	1 911	-	-
Coefficient of performance (C.O.P.)									
35	2.18	2.66	3.24	3.93	4.73	5.67	6.74	-	-
40	1.87	2.28	2.78	3.37	4.07	4.88	5.80	-	-
45	1.59	1.95	2.38	2.89	3.49	4.19	4.99	-	-
50	1.36	1.66	2.03	2.46	2.98	3.58	4.28	-	-
55	-	1.41	1.72	2.10	2.54	3.06	3.66	-	-
60	-	-	1.45	1.77	2.15	2.60	3.11	-	-
65	-	-	-	1.49	1.81	2.19	2.64	-	-
70	-	-	-	-	1.51	1.84	2.22	-	-

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

Cooling capacity	53 444	W
Power input	17 930	W
Current consumption	27.83	A
Mass flow	1 392	kg/h
C.O.P.	2.98	

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Tolerance according EN12900

Performance data at 60 Hz, ARI rating conditions

R134a

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-15	-10	-5	0	5	10	15		
Cooling capacity in W									
35	29 082	36 490	45 354	55 878	68 269	82 729	99 465	-	-
40	27 493	34 589	43 080	53 170	65 065	78 967	95 084	-	-
45	25 894	32 664	40 767	50 408	61 791	75 122	90 604	-	-
50	24 293	30 722	38 422	47 599	58 456	71 199	86 033	-	-
55	-	28 769	36 052	44 750	55 067	67 208	81 377	-	-
60	-	-	33 664	41 868	51 629	63 153	76 644	-	-
65	-	-	-	38 961	48 152	59 044	71 841	-	-
70	-	-	-	-	44 641	54 886	66 976	-	-
Power input in W									
35	12 319	12 685	12 975	13 207	13 402	13 577	13 751	-	-
40	13 528	13 951	14 292	14 567	14 797	15 000	15 195	-	-
45	14 832	15 317	15 711	16 033	16 302	16 537	16 756	-	-
50	16 244	16 794	17 246	17 618	17 930	18 200	18 447	-	-
55	-	18 396	18 909	19 335	19 693	20 002	20 281	-	-
60	-	-	20 714	21 197	21 605	21 957	22 270	-	-
65	-	-	-	23 217	23 679	24 076	24 428	-	-
70	-	-	-	-	25 927	26 374	26 769	-	-
Current consumption in A									
35	22.10	22.32	22.63	22.98	23.31	23.58	23.72	-	-
40	23.19	23.47	23.84	24.24	24.61	24.91	25.07	-	-
45	24.47	24.83	25.25	25.70	26.11	26.44	26.62	-	-
50	25.97	26.39	26.88	27.37	27.83	28.18	28.38	-	-
55	-	28.18	28.73	29.27	29.77	30.15	30.38	-	-
60	-	-	30.82	31.42	31.95	32.37	32.62	-	-
65	-	-	-	33.82	34.40	34.85	35.12	-	-
70	-	-	-	-	37.11	37.60	37.90	-	-
Mass flow in kg/h									
35	649	799	973	1 176	1 410	1 679	1 985	-	-
40	643	792	966	1 169	1 403	1 671	1 977	-	-
45	636	785	959	1 161	1 394	1 662	1 968	-	-
50	630	777	950	1 151	1 384	1 652	1 958	-	-
55	-	769	941	1 141	1 373	1 640	1 946	-	-
60	-	-	931	1 130	1 361	1 628	1 932	-	-
65	-	-	-	1 118	1 348	1 613	1 917	-	-
70	-	-	-	-	1 334	1 598	1 900	-	-
Coefficient of performance (C.O.P.)									
35	2.36	2.88	3.50	4.23	5.09	6.09	7.23	-	-
40	2.03	2.48	3.01	3.65	4.40	5.26	6.26	-	-
45	1.75	2.13	2.59	3.14	3.79	4.54	5.41	-	-
50	1.50	1.83	2.23	2.70	3.26	3.91	4.66	-	-
55	-	1.56	1.91	2.31	2.80	3.36	4.01	-	-
60	-	-	1.63	1.98	2.39	2.88	3.44	-	-
65	-	-	-	1.68	2.03	2.45	2.94	-	-
70	-	-	-	-	1.72	2.08	2.50	-	-

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

Cooling capacity	60 612	W
Power input	19 613	W
Current consumption	29.71	A
Mass flow	1 488	kg/h
C.O.P.	3.09	

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Tolerance according EN12900

Performance data at 60 Hz, EN 12900 rating conditions

R134a

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-15	-10	-5	0	5	10	15		
Cooling capacity in W									
35	26 851	33 748	42 013	51 843	63 433	76 980	92 680	-	-
40	25 246	31 823	39 706	49 091	60 172	73 145	88 207	-	-
45	23 631	29 873	37 360	46 284	56 841	69 225	83 632	-	-
50	22 011	27 904	34 979	43 427	53 444	65 223	78 959	-	-
55	-	25 920	32 568	40 526	49 987	61 144	74 193	-	-
60	-	-	30 132	37 583	46 471	56 990	69 332	-	-
65	-	-	-	34 600	42 899	52 760	64 376	-	-
70	-	-	-	-	39 267	48 450	59 318	-	-
Power input in W									
35	12 319	12 685	12 975	13 207	13 402	13 577	13 751	-	-
40	13 528	13 951	14 292	14 567	14 797	15 000	15 195	-	-
45	14 832	15 317	15 711	16 033	16 302	16 537	16 756	-	-
50	16 244	16 794	17 246	17 618	17 930	18 200	18 447	-	-
55	-	18 396	18 909	19 335	19 693	20 002	20 281	-	-
60	-	-	20 714	21 197	21 605	21 957	22 270	-	-
65	-	-	-	23 217	23 679	24 076	24 428	-	-
70	-	-	-	-	25 927	26 374	26 769	-	-
Current consumption in A									
35	22.10	22.32	22.63	22.98	23.31	23.58	23.72	-	-
40	23.19	23.47	23.84	24.24	24.61	24.91	25.07	-	-
45	24.47	24.83	25.25	25.70	26.11	26.44	26.62	-	-
50	25.97	26.39	26.88	27.37	27.83	28.18	28.38	-	-
55	-	28.18	28.73	29.27	29.77	30.15	30.38	-	-
60	-	-	30.82	31.42	31.95	32.37	32.62	-	-
65	-	-	-	33.82	34.40	34.85	35.12	-	-
70	-	-	-	-	37.11	37.60	37.90	-	-
Mass flow in kg/h									
35	652	803	978	1 182	1 418	1 688	1 996	-	-
40	646	796	971	1 175	1 410	1 680	1 988	-	-
45	640	789	963	1 167	1 402	1 671	1 979	-	-
50	633	781	955	1 157	1 392	1 661	1 969	-	-
55	-	773	946	1 147	1 381	1 649	1 956	-	-
60	-	-	936	1 136	1 369	1 636	1 943	-	-
65	-	-	-	1 124	1 356	1 622	1 927	-	-
70	-	-	-	-	1 342	1 607	1 911	-	-
Coefficient of performance (C.O.P.)									
35	2.18	2.66	3.24	3.93	4.73	5.67	6.74	-	-
40	1.87	2.28	2.78	3.37	4.07	4.88	5.80	-	-
45	1.59	1.95	2.38	2.89	3.49	4.19	4.99	-	-
50	1.36	1.66	2.03	2.46	2.98	3.58	4.28	-	-
55	-	1.41	1.72	2.10	2.54	3.06	3.66	-	-
60	-	-	1.45	1.77	2.15	2.60	3.11	-	-
65	-	-	-	1.49	1.81	2.19	2.64	-	-
70	-	-	-	-	1.51	1.84	2.22	-	-

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

Cooling capacity	53 444	W
Power input	17 930	W
Current consumption	27.83	A
Mass flow	1 392	kg/h
C.O.P.	2.98	

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Tolerance according EN12900

Performance data at 60 Hz, ARI rating conditions

R134a

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-15	-10	-5	0	5	10	15		
Cooling capacity in W									
35	29 082	36 490	45 354	55 878	68 269	82 729	99 465	-	-
40	27 493	34 589	43 080	53 170	65 065	78 967	95 084	-	-
45	25 894	32 664	40 767	50 408	61 791	75 122	90 604	-	-
50	24 293	30 722	38 422	47 599	58 456	71 199	86 033	-	-
55	-	28 769	36 052	44 750	55 067	67 208	81 377	-	-
60	-	-	33 664	41 868	51 629	63 153	76 644	-	-
65	-	-	-	38 961	48 152	59 044	71 841	-	-
70	-	-	-	-	44 641	54 886	66 976	-	-
Power input in W									
35	12 319	12 685	12 975	13 207	13 402	13 577	13 751	-	-
40	13 528	13 951	14 292	14 567	14 797	15 000	15 195	-	-
45	14 832	15 317	15 711	16 033	16 302	16 537	16 756	-	-
50	16 244	16 794	17 246	17 618	17 930	18 200	18 447	-	-
55	-	18 396	18 909	19 335	19 693	20 002	20 281	-	-
60	-	-	20 714	21 197	21 605	21 957	22 270	-	-
65	-	-	-	23 217	23 679	24 076	24 428	-	-
70	-	-	-	-	25 927	26 374	26 769	-	-
Current consumption in A									
35	22.10	22.32	22.63	22.98	23.31	23.58	23.72	-	-
40	23.19	23.47	23.84	24.24	24.61	24.91	25.07	-	-
45	24.47	24.83	25.25	25.70	26.11	26.44	26.62	-	-
50	25.97	26.39	26.88	27.37	27.83	28.18	28.38	-	-
55	-	28.18	28.73	29.27	29.77	30.15	30.38	-	-
60	-	-	30.82	31.42	31.95	32.37	32.62	-	-
65	-	-	-	33.82	34.40	34.85	35.12	-	-
70	-	-	-	-	37.11	37.60	37.90	-	-
Mass flow in kg/h									
35	649	799	973	1 176	1 410	1 679	1 985	-	-
40	643	792	966	1 169	1 403	1 671	1 977	-	-
45	636	785	959	1 161	1 394	1 662	1 968	-	-
50	630	777	950	1 151	1 384	1 652	1 958	-	-
55	-	769	941	1 141	1 373	1 640	1 946	-	-
60	-	-	931	1 130	1 361	1 628	1 932	-	-
65	-	-	-	1 118	1 348	1 613	1 917	-	-
70	-	-	-	-	1 334	1 598	1 900	-	-
Coefficient of performance (C.O.P.)									
35	2.36	2.88	3.50	4.23	5.09	6.09	7.23	-	-
40	2.03	2.48	3.01	3.65	4.40	5.26	6.26	-	-
45	1.75	2.13	2.59	3.14	3.79	4.54	5.41	-	-
50	1.50	1.83	2.23	2.70	3.26	3.91	4.66	-	-
55	-	1.56	1.91	2.31	2.80	3.36	4.01	-	-
60	-	-	1.63	1.98	2.39	2.88	3.44	-	-
65	-	-	-	1.68	2.03	2.45	2.94	-	-
70	-	-	-	-	1.72	2.08	2.50	-	-

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

Cooling capacity	60 612	W
Power input	19 613	W
Current consumption	29.71	A
Mass flow	1 488	kg/h
C.O.P.	3.09	

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Tolerance according EN12900

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	35 508	44 340	54 861	67 375	82 190	99 614	119 954	143 520	-
35	33 246	41 713	51 770	63 723	77 877	94 539	114 015	136 615	-
40	30 972	39 042	48 606	59 967	73 428	89 297	107 877	129 477	-
45	28 709	36 352	45 391	56 129	68 867	83 909	101 561	122 127	-
50	-	33 665	42 149	52 232	64 215	78 399	95 087	114 584	-
55	-	31 001	38 899	48 296	59 490	72 782	88 473	106 865	-
60	-	-	35 658	44 336	54 708	67 073	81 728	98 975	-
65	-	-	-	-	49 875	61 274	74 852	90 908	-
Power input in W									
30	15 091	15 409	15 720	16 025	16 326	16 625	16 922	17 219	-
35	16 746	17 089	17 426	17 759	18 089	18 417	18 745	19 075	-
40	18 544	18 917	19 286	19 651	20 015	20 379	20 743	21 111	-
45	20 517	20 926	21 331	21 735	22 138	22 543	22 949	23 359	-
50	-	23 148	23 595	24 043	24 490	24 940	25 394	25 852	-
55	-	25 615	26 110	26 606	27 104	27 605	28 110	28 622	-
60	-	-	28 907	29 457	30 010	30 568	31 131	31 702	-
65	-	-	-	-	33 243	33 862	34 488	35 123	-
Current consumption in A									
30	24.47	24.90	25.37	25.91	26.55	27.31	28.22	29.31	-
35	26.21	26.63	27.08	27.59	28.19	28.91	29.76	30.77	-
40	28.22	28.64	29.09	29.59	30.17	30.85	31.66	32.62	-
45	30.53	30.97	31.43	31.93	32.50	33.17	33.95	34.88	-
50	-	33.65	34.13	34.65	35.23	35.90	36.67	37.58	-
55	-	36.70	37.23	37.79	38.39	39.07	39.85	40.76	-
60	-	-	40.75	41.36	42.01	42.72	43.53	44.45	-
65	-	-	-	-	46.12	46.88	47.73	48.68	-
Mass flow in kg/h									
30	746	918	1 119	1 352	1 624	1 940	2 305	2 724	-
35	734	905	1 105	1 338	1 609	1 924	2 288	2 706	-
40	721	891	1 089	1 321	1 591	1 905	2 268	2 685	-
45	707	876	1 073	1 303	1 572	1 884	2 245	2 661	-
50	-	861	1 056	1 284	1 551	1 861	2 220	2 634	-
55	-	847	1 039	1 265	1 529	1 836	2 193	2 604	-
60	-	-	1 022	1 245	1 506	1 811	2 165	2 573	-
65	-	-	-	-	1 483	1 785	2 135	2 540	-
Coefficient of performance (C.O.P.)									
30	2.35	2.88	3.49	4.20	5.03	5.99	7.09	8.34	-
35	1.99	2.44	2.97	3.59	4.31	5.13	6.08	7.16	-
40	1.67	2.06	2.52	3.05	3.67	4.38	5.20	6.13	-
45	1.40	1.74	2.13	2.58	3.11	3.72	4.43	5.23	-
50	-	1.45	1.79	2.17	2.62	3.14	3.74	4.43	-
55	-	1.21	1.49	1.82	2.19	2.64	3.15	3.73	-
60	-	-	1.23	1.51	1.82	2.19	2.63	3.12	-
65	-	-	-	-	1.50	1.81	2.17	2.59	-

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

Cooling capacity	78 399	W
Power input	24 940	W
Current consumption	35.90	A
Mass flow	1 861	kg/h
C.O.P.	3.14	

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 10 K , Subcooling = 0 K

Tolerance according EN12900

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	38 083	47 501	58 706	72 021	87 767	106 268	127 844	152 820	-
35	35 831	44 898	55 655	68 424	83 527	101 287	122 026	146 067	-
40	33 568	42 253	52 531	64 724	79 153	96 143	116 014	139 089	-
45	31 320	39 593	49 361	60 947	74 672	90 860	109 832	131 912	-
50	-	36 944	46 172	57 120	70 111	85 466	103 509	124 562	-
55	-	34 331	42 989	53 269	65 494	79 987	97 070	117 066	-
60	-	-	39 839	49 420	60 850	74 450	90 542	109 450	-
65	-	-	-	-	56 204	68 880	83 952	101 741	-
Power input in W									
30	15 091	15 409	15 720	16 025	16 326	16 625	16 922	17 219	-
35	16 746	17 089	17 426	17 759	18 089	18 417	18 745	19 075	-
40	18 544	18 917	19 286	19 651	20 015	20 379	20 743	21 111	-
45	20 517	20 926	21 331	21 735	22 138	22 543	22 949	23 359	-
50	-	23 148	23 595	24 043	24 490	24 940	25 394	25 852	-
55	-	25 615	26 110	26 606	27 104	27 605	28 110	28 622	-
60	-	-	28 907	29 457	30 010	30 568	31 131	31 702	-
65	-	-	-	-	33 243	33 862	34 488	35 123	-
Current consumption in A									
30	24.47	24.90	25.37	25.91	26.55	27.31	28.22	29.31	-
35	26.21	26.63	27.08	27.59	28.19	28.91	29.76	30.77	-
40	28.22	28.64	29.09	29.59	30.17	30.85	31.66	32.62	-
45	30.53	30.97	31.43	31.93	32.50	33.17	33.95	34.88	-
50	-	33.65	34.13	34.65	35.23	35.90	36.67	37.58	-
55	-	36.70	37.23	37.79	38.39	39.07	39.85	40.76	-
60	-	-	40.75	41.36	42.01	42.72	43.53	44.45	-
65	-	-	-	-	46.12	46.88	47.73	48.68	-
Mass flow in kg/h									
30	742	914	1 113	1 345	1 615	1 929	2 291	2 707	-
35	730	901	1 099	1 330	1 600	1 913	2 275	2 690	-
40	717	886	1 084	1 314	1 582	1 894	2 255	2 669	-
45	704	872	1 067	1 296	1 563	1 873	2 232	2 645	-
50	-	857	1 050	1 277	1 542	1 850	2 207	2 618	-
55	-	842	1 034	1 258	1 520	1 826	2 180	2 588	-
60	-	-	1 017	1 238	1 498	1 800	2 152	2 557	-
65	-	-	-	-	1 475	1 774	2 122	2 524	-
Coefficient of performance (C.O.P.)									
30	2.52	3.08	3.73	4.49	5.38	6.39	7.55	8.88	-
35	2.14	2.63	3.19	3.85	4.62	5.50	6.51	7.66	-
40	1.81	2.23	2.72	3.29	3.95	4.72	5.59	6.59	-
45	1.53	1.89	2.31	2.80	3.37	4.03	4.79	5.65	-
50	-	1.60	1.96	2.38	2.86	3.43	4.08	4.82	-
55	-	1.34	1.65	2.00	2.42	2.90	3.45	4.09	-
60	-	-	1.38	1.68	2.03	2.44	2.91	3.45	-
65	-	-	-	-	1.69	2.03	2.43	2.90	-

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

Cooling capacity	87 877	W
Power input	27 489	W
Current consumption	39.00	A
Mass flow	1 979	kg/h
C.O.P.	3.20	

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)

to: Evaporating temperature at dew point
tc: Condensing temperature at dew point
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Tolerance according EN12900