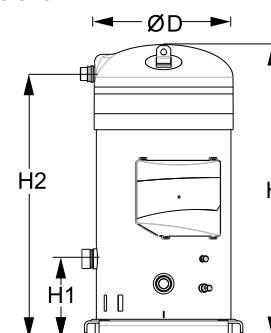


General Characteristics

Model number (on compressor nameplate)	SY240A4PBE	SY240A4CBE
Code number for Singlepack*	SY240A4PBI	SY240A4CBI
Code number for Industrial pack**	SY240A4PBM	SY240A4CBM
Drawing number	8556098b	8556092b
Suction and discharge connections	Rotolock	Brazed
Suction connection	2-1/4" Rotolock	1-5/8" ODF
Discharge connection	1-3/4" Rotolock	1-1/8" ODF
Suction connection with supplied sleeve	1-5/8" ODF	
Discharge connection with supplied sleeve	1-1/8" ODF	
Oil sight glass	Threaded	Threaded
Oil equalisation connection	1/2" flare	1/2" flare
Oil drain connection	1/4" flare	1/4" flare
LP gauge port	Schrader	Schrader
IPR valve	Yes	Yes
Reverse rotation protection	Electronic module	Electronic module
Swept volume	347.8 cm ³ /rev	
Displacement @ Nominal speed	60.5 m ³ /h @ 2900 rpm - 73.0 m ³ /h @ 3500 rpm	
Net weight	150 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	16 kg	
Approved refrigerants	R22, R407C, R134a	

Dimensions

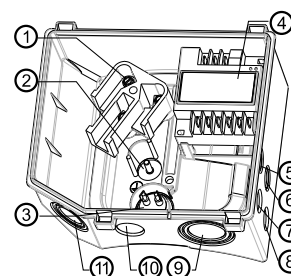


D=344 mm
H=726.9 mm
H1=195.7 mm
H2=654 mm
H3=- mm

Electrical Characteristics

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

Terminal box



IP54 (with cable gland)

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

Recommended Installation torques

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)

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	24 826	30 969	38 151	46 483	56 075	67 035	79 474	93 502	-
35	23 591	29 536	36 476	44 520	53 777	64 358	76 371	89 928	-
40	22 285	28 012	34 687	42 421	51 323	61 502	73 069	86 133	-
45	-	26 410	32 800	40 202	48 727	58 484	69 583	82 133	-
50	-	-	30 830	37 880	46 007	55 320	65 929	77 943	-
55	-	-	-	35 469	43 176	52 024	62 122	73 580	-
60	-	-	-	-	40 252	48 613	58 178	69 058	-
65	-	-	-	-	-	45 101	54 113	64 394	-

Power input in W

30	10 588	10 704	10 846	11 020	11 237	11 504	11 830	12 226	-
35	11 668	11 805	11 961	12 145	12 365	12 630	12 950	13 333	-
40	12 835	12 991	13 161	13 353	13 576	13 838	14 150	14 519	-
45	-	14 298	14 480	14 678	14 903	15 162	15 464	15 818	-
50	-	-	15 952	16 156	16 381	16 634	16 926	17 264	-
55	-	-	-	17 819	18 043	18 290	18 570	18 891	-
60	-	-	-	-	19 924	20 163	20 430	20 732	-
65	-	-	-	-	-	22 288	22 540	22 823	-

Current consumption in A

30	21.65	21.83	21.98	22.13	22.31	22.55	22.88	23.33	-
35	22.77	22.99	23.19	23.38	23.62	23.91	24.31	24.83	-
40	24.09	24.33	24.54	24.77	25.04	25.38	25.82	26.39	-
45	-	25.89	26.11	26.35	26.64	27.00	27.47	28.07	-
50	-	-	27.96	28.19	28.47	28.84	29.32	29.94	-
55	-	-	-	30.35	30.61	30.97	31.44	32.05	-
60	-	-	-	-	33.12	33.44	33.88	34.48	-
65	-	-	-	-	-	36.32	36.72	37.28	-

Mass flow in kg/h

30	534	657	799	961	1 145	1 353	1 588	1 850	-
35	527	651	793	955	1 140	1 348	1 583	1 845	-
40	519	643	785	947	1 131	1 339	1 574	1 835	-
45	-	633	775	936	1 120	1 328	1 561	1 822	-
50	-	-	762	923	1 106	1 313	1 545	1 805	-
55	-	-	-	908	1 089	1 295	1 525	1 784	-
60	-	-	-	-	1 070	1 274	1 503	1 759	-
65	-	-	-	-	-	1 250	1 477	1 731	-

Coefficient of performance (C.O.P.)

30	2.34	2.89	3.52	4.22	4.99	5.83	6.72	7.65	-
35	2.02	2.50	3.05	3.67	4.35	5.10	5.90	6.74	-
40	1.74	2.16	2.64	3.18	3.78	4.44	5.16	5.93	-
45	-	1.85	2.27	2.74	3.27	3.86	4.50	5.19	-
50	-	-	1.93	2.34	2.81	3.33	3.90	4.51	-
55	-	-	-	1.99	2.39	2.84	3.35	3.90	-
60	-	-	-	-	2.02	2.41	2.85	3.33	-
65	-	-	-	-	-	2.02	2.40	2.82	-

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

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

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 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

Tolerance according EN12900

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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	26 346	32 838	40 423	49 216	59 329	70 878	83 975	98 734	-
35	25 123	31 427	38 778	47 292	57 082	68 263	80 948	95 252	-
40	23 826	29 920	37 016	45 230	54 675	65 467	77 720	91 547	-
45	-	28 333	35 153	43 045	52 125	62 507	74 306	87 637	-
50	-	-	33 205	40 755	49 448	59 399	70 725	83 540	-
55	-	-	-	38 377	46 662	56 163	66 996	79 275	-
60	-	-	-	-	43 788	52 819	63 138	74 864	-
65	-	-	-	-	-	49 387	59 177	70 332	-

Power input in W

30	10 588	10 704	10 846	11 020	11 237	11 504	11 830	12 226	-
35	11 668	11 805	11 961	12 145	12 365	12 630	12 950	13 333	-
40	12 835	12 991	13 161	13 353	13 576	13 838	14 150	14 519	-
45	-	14 298	14 480	14 678	14 903	15 162	15 464	15 818	-
50	-	-	15 952	16 156	16 381	16 634	16 926	17 264	-
55	-	-	-	17 819	18 043	18 290	18 570	18 891	-
60	-	-	-	-	19 924	20 163	20 430	20 732	-
65	-	-	-	-	-	22 288	22 540	22 823	-

Current consumption in A

30	21.65	21.83	21.98	22.13	22.31	22.55	22.88	23.33	-
35	22.77	22.99	23.19	23.38	23.62	23.91	24.31	24.83	-
40	24.09	24.33	24.54	24.77	25.04	25.38	25.82	26.39	-
45	-	25.89	26.11	26.35	26.64	27.00	27.47	28.07	-
50	-	-	27.96	28.19	28.47	28.84	29.32	29.94	-
55	-	-	-	30.35	30.61	30.97	31.44	32.05	-
60	-	-	-	-	33.12	33.44	33.88	34.48	-
65	-	-	-	-	-	36.32	36.72	37.28	-

Mass flow in kg/h

30	531	654	795	956	1 139	1 346	1 579	1 840	-
35	524	647	789	950	1 134	1 341	1 574	1 834	-
40	516	639	781	942	1 125	1 332	1 565	1 825	-
45	-	630	771	931	1 114	1 320	1 552	1 811	-
50	-	-	758	918	1 100	1 305	1 536	1 794	-
55	-	-	-	903	1 083	1 287	1 517	1 773	-
60	-	-	-	-	1 064	1 267	1 494	1 749	-
65	-	-	-	-	-	1 243	1 468	1 721	-

Coefficient of performance (C.O.P.)

30	2.49	3.07	3.73	4.47	5.28	6.16	7.10	8.08	-
35	2.15	2.66	3.24	3.89	4.62	5.40	6.25	7.14	-
40	1.86	2.30	2.81	3.39	4.03	4.73	5.49	6.31	-
45	-	1.98	2.43	2.93	3.50	4.12	4.81	5.54	-
50	-	-	2.08	2.52	3.02	3.57	4.18	4.84	-
55	-	-	-	2.15	2.59	3.07	3.61	4.20	-
60	-	-	-	-	2.20	2.62	3.09	3.61	-
65	-	-	-	-	-	2.22	2.63	3.08	-

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

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

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 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

Tolerance according EN12900

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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	22 179	28 382	35 758	44 467	54 671	66 532	80 209	95 865	-
35	20 769	26 758	33 849	42 203	51 982	63 346	76 456	91 475	-
40	19 313	25 061	31 840	39 811	49 137	59 977	72 493	86 846	-
45	17 825	23 304	29 744	37 305	46 150	56 439	68 333	81 993	-
50	-	21 504	27 576	34 700	43 036	52 746	63 991	76 931	-
55	-	19 673	25 351	32 010	39 810	48 914	59 481	71 674	-
60	-	-	23 084	29 249	36 486	44 956	54 819	66 237	-
65	-	-	-	-	33 079	40 887	50 018	60 633	-

Power input in W

30	10 577	10 687	10 818	10 958	11 096	11 220	11 320	11 385	-
35	11 690	11 798	11 934	12 086	12 244	12 395	12 530	12 636	-
40	12 937	13 041	13 180	13 343	13 520	13 697	13 865	14 013	-
45	14 347	14 446	14 588	14 761	14 955	15 157	15 358	15 544	-
50	-	16 046	16 189	16 371	16 581	16 807	17 038	17 263	-
55	-	17 872	18 015	18 205	18 429	18 678	18 939	19 201	-
60	-	-	20 097	20 293	20 531	20 801	21 090	21 389	-
65	-	-	-	-	22 918	23 208	23 525	23 858	-

Current consumption in A

30	20.74	21.18	21.53	21.81	22.06	22.31	22.58	22.91	-
35	22.08	22.51	22.84	23.10	23.32	23.54	23.78	24.07	-
40	23.56	24.00	24.33	24.59	24.81	25.01	25.23	25.51	-
45	25.24	25.71	26.06	26.34	26.57	26.78	27.00	27.28	-
50	-	27.67	28.07	28.38	28.64	28.88	29.13	29.42	-
55	-	29.94	30.40	30.76	31.08	31.36	31.66	31.98	-
60	-	-	33.09	33.54	33.92	34.27	34.63	35.01	-
65	-	-	-	-	37.21	37.65	38.09	38.55	-

Mass flow in kg/h

30	466	588	729	892	1 081	1 296	1 542	1 821	-
35	459	581	722	886	1 074	1 289	1 534	1 812	-
40	449	572	714	877	1 065	1 279	1 523	1 800	-
45	439	562	703	866	1 053	1 267	1 510	1 785	-
50	-	549	691	853	1 040	1 252	1 494	1 767	-
55	-	535	676	838	1 023	1 235	1 475	1 746	-
60	-	-	659	820	1 004	1 214	1 453	1 722	-
65	-	-	-	-	983	1 191	1 428	1 695	-

Coefficient of performance (C.O.P.)

30	2.10	2.66	3.31	4.06	4.93	5.93	7.09	8.42	-
35	1.78	2.27	2.84	3.49	4.25	5.11	6.10	7.24	-
40	1.49	1.92	2.42	2.98	3.63	4.38	5.23	6.20	-
45	1.24	1.61	2.04	2.53	3.09	3.72	4.45	5.27	-
50	-	1.34	1.70	2.12	2.60	3.14	3.76	4.46	-
55	-	1.10	1.41	1.76	2.16	2.62	3.14	3.73	-
60	-	-	1.15	1.44	1.78	2.16	2.60	3.10	-
65	-	-	-	-	1.44	1.76	2.13	2.54	-

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

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

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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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	23 788	30 405	38 264	47 533	58 381	70 976	85 485	102 077	-
35	22 384	28 801	36 389	45 316	55 753	67 868	81 828	97 804	-
40	20 931	27 122	34 411	42 969	52 968	64 575	77 961	93 293	-
45	19 447	25 382	32 345	40 508	50 040	61 114	73 898	88 563	-
50	-	23 598	30 208	37 947	46 988	57 501	69 659	83 630	-
55	-	21 787	28 017	35 306	43 828	53 756	65 262	78 516	-
60	-	-	25 790	32 604	40 582	49 900	60 731	73 247	-
65	-	-	-	-	37 277	45 963	56 098	67 858	-

Power input in W

30	10 577	10 687	10 818	10 958	11 096	11 220	11 320	11 385	-
35	11 690	11 798	11 934	12 086	12 244	12 395	12 530	12 636	-
40	12 937	13 041	13 180	13 343	13 520	13 697	13 865	14 013	-
45	14 347	14 446	14 588	14 761	14 955	15 157	15 358	15 544	-
50	-	16 046	16 189	16 371	16 581	16 807	17 038	17 263	-
55	-	17 872	18 015	18 205	18 429	18 678	18 939	19 201	-
60	-	-	20 097	20 293	20 531	20 801	21 090	21 389	-
65	-	-	-	-	22 918	23 208	23 525	23 858	-

Current consumption in A

30	20.74	21.18	21.53	21.81	22.06	22.31	22.58	22.91	-
35	22.08	22.51	22.84	23.10	23.32	23.54	23.78	24.07	-
40	23.56	24.00	24.33	24.59	24.81	25.01	25.23	25.51	-
45	25.24	25.71	26.06	26.34	26.57	26.78	27.00	27.28	-
50	-	27.67	28.07	28.38	28.64	28.88	29.13	29.42	-
55	-	29.94	30.40	30.76	31.08	31.36	31.66	31.98	-
60	-	-	33.09	33.54	33.92	34.27	34.63	35.01	-
65	-	-	-	-	37.21	37.65	38.09	38.55	-

Mass flow in kg/h

30	464	585	725	887	1 075	1 289	1 533	1 810	-
35	456	578	718	881	1 068	1 282	1 525	1 801	-
40	447	569	710	872	1 059	1 272	1 514	1 789	-
45	436	559	699	862	1 047	1 260	1 501	1 774	-
50	-	546	687	849	1 034	1 245	1 485	1 756	-
55	-	532	672	833	1 018	1 228	1 466	1 736	-
60	-	-	656	816	999	1 207	1 444	1 712	-
65	-	-	-	-	977	1 184	1 419	1 685	-

Coefficient of performance (C.O.P.)

30	2.25	2.85	3.54	4.34	5.26	6.33	7.55	8.97	-
35	1.91	2.44	3.05	3.75	4.55	5.48	6.53	7.74	-
40	1.62	2.08	2.61	3.22	3.92	4.71	5.62	6.66	-
45	1.36	1.76	2.22	2.74	3.35	4.03	4.81	5.70	-
50	-	1.47	1.87	2.32	2.83	3.42	4.09	4.84	-
55	-	1.22	1.56	1.94	2.38	2.88	3.45	4.09	-
60	-	-	1.28	1.61	1.98	2.40	2.88	3.42	-
65	-	-	-	-	1.63	1.98	2.38	2.84	-

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

Cooling capacity	59 104	W
Power input	18 553	W
Current consumption	31.17	A
Mass flow	1 331	kg/h
C.O.P.	3.19	

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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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	17 486	22 107	27 687	34 422	42 505	52 133	63 500	-	-
40	16 457	20 891	26 197	32 573	40 211	49 309	60 060	-	-
45	15 377	19 637	24 685	30 716	37 925	46 506	56 655	-	-
50	14 227	18 329	23 133	28 834	35 628	43 708	53 270	-	-
55	-	16 949	21 524	26 911	33 303	40 897	49 887	-	-
60	-	-	19 841	24 927	30 933	38 055	46 488	-	-
65	-	-	-	22 867	28 502	35 167	43 056	-	-
70	-	-	-	-	25 990	32 213	39 575	-	-

Power input in W

35	8 409	8 510	8 596	8 671	8 738	8 799	8 856	-	-
40	9 210	9 328	9 431	9 523	9 607	9 684	9 758	-	-
45	10 089	10 224	10 345	10 455	10 557	10 652	10 744	-	-
50	11 056	11 211	11 351	11 479	11 599	11 713	11 823	-	-
55	-	12 299	12 459	12 607	12 746	12 880	13 009	-	-
60	-	-	13 682	13 850	14 010	14 163	14 313	-	-
65	-	-	-	15 220	15 401	15 576	15 746	-	-
70	-	-	-	-	16 932	17 129	17 321	-	-

Current consumption in A

35	19.07	19.08	19.16	19.26	19.36	19.43	19.44	-	-
40	19.82	19.86	19.95	20.08	20.21	20.31	20.35	-	-
45	20.70	20.76	20.88	21.03	21.18	21.31	21.38	-	-
50	21.73	21.81	21.95	22.12	22.30	22.46	22.56	-	-
55	-	23.03	23.19	23.39	23.60	23.78	23.92	-	-
60	-	-	24.64	24.86	25.09	25.30	25.46	-	-
65	-	-	-	26.55	26.80	27.04	27.23	-	-
70	-	-	-	-	28.76	29.03	29.25	-	-

Mass flow in kg/h

35	425	526	645	785	949	1 143	1 368	-	-
40	421	523	641	780	942	1 132	1 354	-	-
45	416	519	637	775	935	1 123	1 340	-	-
50	409	513	632	769	928	1 113	1 328	-	-
55	-	505	625	762	920	1 104	1 316	-	-
60	-	-	616	753	911	1 093	1 303	-	-
65	-	-	-	743	901	1 082	1 289	-	-
70	-	-	-	-	888	1 068	1 275	-	-

Coefficient of performance (C.O.P.)

35	2.08	2.60	3.22	3.97	4.86	5.93	7.17	-	-
40	1.79	2.24	2.78	3.42	4.19	5.09	6.15	-	-
45	1.52	1.92	2.39	2.94	3.59	4.37	5.27	-	-
50	1.29	1.63	2.04	2.51	3.07	3.73	4.51	-	-
55	-	1.38	1.73	2.13	2.61	3.18	3.83	-	-
60	-	-	1.45	1.80	2.21	2.69	3.25	-	-
65	-	-	-	1.50	1.85	2.26	2.73	-	-
70	-	-	-	-	1.53	1.88	2.28	-	-

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

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

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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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	18 939	23 904	29 889	37 101	45 745	56 027	68 149	-	-
40	17 922	22 707	28 423	35 279	43 481	53 234	64 742	-	-
45	16 849	21 472	26 937	33 453	41 228	50 468	61 378	-	-
50	15 701	20 180	25 411	31 604	38 969	47 713	58 042	-	-
55	-	18 812	23 827	29 715	36 687	44 952	54 718	-	-
60	-	-	22 167	27 769	34 367	42 171	51 391	-	-
65	-	-	-	25 748	31 992	39 355	48 050	-	-
70	-	-	-	-	29 548	36 493	44 684	-	-

Power input in W

35	8 409	8 510	8 596	8 671	8 738	8 799	8 856	-	-
40	9 210	9 328	9 431	9 523	9 607	9 684	9 758	-	-
45	10 089	10 224	10 345	10 455	10 557	10 652	10 744	-	-
50	11 056	11 211	11 351	11 479	11 599	11 713	11 823	-	-
55	-	12 299	12 459	12 607	12 746	12 880	13 009	-	-
60	-	-	13 682	13 850	14 010	14 163	14 313	-	-
65	-	-	-	15 220	15 401	15 576	15 746	-	-
70	-	-	-	-	16 932	17 129	17 321	-	-

Current consumption in A

35	19.07	19.08	19.16	19.26	19.36	19.43	19.44	-	-
40	19.82	19.86	19.95	20.08	20.21	20.31	20.35	-	-
45	20.70	20.76	20.88	21.03	21.18	21.31	21.38	-	-
50	21.73	21.81	21.95	22.12	22.30	22.46	22.56	-	-
55	-	23.03	23.19	23.39	23.60	23.78	23.92	-	-
60	-	-	24.64	24.86	25.09	25.30	25.46	-	-
65	-	-	-	26.55	26.80	27.04	27.23	-	-
70	-	-	-	-	28.76	29.03	29.25	-	-

Mass flow in kg/h

35	423	523	641	781	944	1 137	1 360	-	-
40	419	520	638	776	937	1 126	1 346	-	-
45	414	516	634	771	930	1 117	1 333	-	-
50	407	510	628	765	923	1 107	1 321	-	-
55	-	503	622	758	915	1 098	1 308	-	-
60	-	-	613	750	907	1 087	1 296	-	-
65	-	-	-	739	896	1 076	1 282	-	-
70	-	-	-	-	883	1 063	1 268	-	-

Coefficient of performance (C.O.P.)

35	2.25	2.81	3.48	4.28	5.24	6.37	7.70	-	-
40	1.95	2.43	3.01	3.70	4.53	5.50	6.63	-	-
45	1.67	2.10	2.60	3.20	3.91	4.74	5.71	-	-
50	1.42	1.80	2.24	2.75	3.36	4.07	4.91	-	-
55	-	1.53	1.91	2.36	2.88	3.49	4.21	-	-
60	-	-	1.62	2.00	2.45	2.98	3.59	-	-
65	-	-	-	1.69	2.08	2.53	3.05	-	-
70	-	-	-	-	1.75	2.13	2.58	-	-

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

Cooling capacity	40 452	W
Power input	12 661	W
Current consumption	23.52	A
Mass flow	993	kg/h
C.O.P.	3.19	

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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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	17 486	22 107	27 687	34 422	42 505	52 133	63 500	-	-
40	16 457	20 891	26 197	32 573	40 211	49 309	60 060	-	-
45	15 377	19 637	24 685	30 716	37 925	46 506	56 655	-	-
50	14 227	18 329	23 133	28 834	35 628	43 708	53 270	-	-
55	-	16 949	21 524	26 911	33 303	40 897	49 887	-	-
60	-	-	19 841	24 927	30 933	38 055	46 488	-	-
65	-	-	-	22 867	28 502	35 167	43 056	-	-
70	-	-	-	-	25 990	32 213	39 575	-	-

Power input in W

35	8 409	8 510	8 596	8 671	8 738	8 799	8 856	-	-
40	9 210	9 328	9 431	9 523	9 607	9 684	9 758	-	-
45	10 089	10 224	10 345	10 455	10 557	10 652	10 744	-	-
50	11 056	11 211	11 351	11 479	11 599	11 713	11 823	-	-
55	-	12 299	12 459	12 607	12 746	12 880	13 009	-	-
60	-	-	13 682	13 850	14 010	14 163	14 313	-	-
65	-	-	-	15 220	15 401	15 576	15 746	-	-
70	-	-	-	-	16 932	17 129	17 321	-	-

Current consumption in A

35	19.07	19.08	19.16	19.26	19.36	19.43	19.44	-	-
40	19.82	19.86	19.95	20.08	20.21	20.31	20.35	-	-
45	20.70	20.76	20.88	21.03	21.18	21.31	21.38	-	-
50	21.73	21.81	21.95	22.12	22.30	22.46	22.56	-	-
55	-	23.03	23.19	23.39	23.60	23.78	23.92	-	-
60	-	-	24.64	24.86	25.09	25.30	25.46	-	-
65	-	-	-	26.55	26.80	27.04	27.23	-	-
70	-	-	-	-	28.76	29.03	29.25	-	-

Mass flow in kg/h

35	425	526	645	785	949	1 143	1 368	-	-
40	421	523	641	780	942	1 132	1 354	-	-
45	416	519	637	775	935	1 123	1 340	-	-
50	409	513	632	769	928	1 113	1 328	-	-
55	-	505	625	762	920	1 104	1 316	-	-
60	-	-	616	753	911	1 093	1 303	-	-
65	-	-	-	743	901	1 082	1 289	-	-
70	-	-	-	-	888	1 068	1 275	-	-

Coefficient of performance (C.O.P.)

35	2.08	2.60	3.22	3.97	4.86	5.93	7.17	-	-
40	1.79	2.24	2.78	3.42	4.19	5.09	6.15	-	-
45	1.52	1.92	2.39	2.94	3.59	4.37	5.27	-	-
50	1.29	1.63	2.04	2.51	3.07	3.73	4.51	-	-
55	-	1.38	1.73	2.13	2.61	3.18	3.83	-	-
60	-	-	1.45	1.80	2.21	2.69	3.25	-	-
65	-	-	-	1.50	1.85	2.26	2.73	-	-
70	-	-	-	-	1.53	1.88	2.28	-	-

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

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

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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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	18 939	23 904	29 889	37 101	45 745	56 027	68 149	-	-
40	17 922	22 707	28 423	35 279	43 481	53 234	64 742	-	-
45	16 849	21 472	26 937	33 453	41 228	50 468	61 378	-	-
50	15 701	20 180	25 411	31 604	38 969	47 713	58 042	-	-
55	-	18 812	23 827	29 715	36 687	44 952	54 718	-	-
60	-	-	22 167	27 769	34 367	42 171	51 391	-	-
65	-	-	-	25 748	31 992	39 355	48 050	-	-
70	-	-	-	-	29 548	36 493	44 684	-	-

Power input in W

35	8 409	8 510	8 596	8 671	8 738	8 799	8 856	-	-
40	9 210	9 328	9 431	9 523	9 607	9 684	9 758	-	-
45	10 089	10 224	10 345	10 455	10 557	10 652	10 744	-	-
50	11 056	11 211	11 351	11 479	11 599	11 713	11 823	-	-
55	-	12 299	12 459	12 607	12 746	12 880	13 009	-	-
60	-	-	13 682	13 850	14 010	14 163	14 313	-	-
65	-	-	-	15 220	15 401	15 576	15 746	-	-
70	-	-	-	-	16 932	17 129	17 321	-	-

Current consumption in A

35	19.07	19.08	19.16	19.26	19.36	19.43	19.44	-	-
40	19.82	19.86	19.95	20.08	20.21	20.31	20.35	-	-
45	20.70	20.76	20.88	21.03	21.18	21.31	21.38	-	-
50	21.73	21.81	21.95	22.12	22.30	22.46	22.56	-	-
55	-	23.03	23.19	23.39	23.60	23.78	23.92	-	-
60	-	-	24.64	24.86	25.09	25.30	25.46	-	-
65	-	-	-	26.55	26.80	27.04	27.23	-	-
70	-	-	-	-	28.76	29.03	29.25	-	-

Mass flow in kg/h

35	423	523	641	781	944	1 137	1 360	-	-
40	419	520	638	776	937	1 126	1 346	-	-
45	414	516	634	771	930	1 117	1 333	-	-
50	407	510	628	765	923	1 107	1 321	-	-
55	-	503	622	758	915	1 098	1 308	-	-
60	-	-	613	750	907	1 087	1 296	-	-
65	-	-	-	739	896	1 076	1 282	-	-
70	-	-	-	-	883	1 063	1 268	-	-

Coefficient of performance (C.O.P.)

35	2.25	2.81	3.48	4.28	5.24	6.37	7.70	-	-
40	1.95	2.43	3.01	3.70	4.53	5.50	6.63	-	-
45	1.67	2.10	2.60	3.20	3.91	4.74	5.71	-	-
50	1.42	1.80	2.24	2.75	3.36	4.07	4.91	-	-
55	-	1.53	1.91	2.36	2.88	3.49	4.21	-	-
60	-	-	1.62	2.00	2.45	2.98	3.59	-	-
65	-	-	-	1.69	2.08	2.53	3.05	-	-
70	-	-	-	-	1.75	2.13	2.58	-	-

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

Cooling capacity	40 452	W
Power input	12 661	W
Current consumption	23.52	A
Mass flow	993	kg/h
C.O.P.	3.19	

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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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	22 179	28 382	35 758	44 467	54 671	66 532	80 209	95 865	-
35	20 769	26 758	33 849	42 203	51 982	63 346	76 456	91 475	-
40	19 313	25 061	31 840	39 811	49 137	59 977	72 493	86 846	-
45	17 825	23 304	29 744	37 305	46 150	56 439	68 333	81 993	-
50	-	21 504	27 576	34 700	43 036	52 746	63 991	76 931	-
55	-	19 673	25 351	32 010	39 810	48 914	59 481	71 674	-
60	-	-	23 084	29 249	36 486	44 956	54 819	66 237	-
65	-	-	-	-	33 079	40 887	50 018	60 633	-

Power input in W

30	10 577	10 687	10 818	10 958	11 096	11 220	11 320	11 385	-
35	11 690	11 798	11 934	12 086	12 244	12 395	12 530	12 636	-
40	12 937	13 041	13 180	13 343	13 520	13 697	13 865	14 013	-
45	14 347	14 446	14 588	14 761	14 955	15 157	15 358	15 544	-
50	-	16 046	16 189	16 371	16 581	16 807	17 038	17 263	-
55	-	17 872	18 015	18 205	18 429	18 678	18 939	19 201	-
60	-	-	20 097	20 293	20 531	20 801	21 090	21 389	-
65	-	-	-	-	22 918	23 208	23 525	23 858	-

Current consumption in A

30	20.74	21.18	21.53	21.81	22.06	22.31	22.58	22.91	-
35	22.08	22.51	22.84	23.10	23.32	23.54	23.78	24.07	-
40	23.56	24.00	24.33	24.59	24.81	25.01	25.23	25.51	-
45	25.24	25.71	26.06	26.34	26.57	26.78	27.00	27.28	-
50	-	27.67	28.07	28.38	28.64	28.88	29.13	29.42	-
55	-	29.94	30.40	30.76	31.08	31.36	31.66	31.98	-
60	-	-	33.09	33.54	33.92	34.27	34.63	35.01	-
65	-	-	-	-	37.21	37.65	38.09	38.55	-

Mass flow in kg/h

30	466	588	729	892	1 081	1 296	1 542	1 821	-
35	459	581	722	886	1 074	1 289	1 534	1 812	-
40	449	572	714	877	1 065	1 279	1 523	1 800	-
45	439	562	703	866	1 053	1 267	1 510	1 785	-
50	-	549	691	853	1 040	1 252	1 494	1 767	-
55	-	535	676	838	1 023	1 235	1 475	1 746	-
60	-	-	659	820	1 004	1 214	1 453	1 722	-
65	-	-	-	-	983	1 191	1 428	1 695	-

Coefficient of performance (C.O.P.)

30	2.10	2.66	3.31	4.06	4.93	5.93	7.09	8.42	-
35	1.78	2.27	2.84	3.49	4.25	5.11	6.10	7.24	-
40	1.49	1.92	2.42	2.98	3.63	4.38	5.23	6.20	-
45	1.24	1.61	2.04	2.53	3.09	3.72	4.45	5.27	-
50	-	1.34	1.70	2.12	2.60	3.14	3.76	4.46	-
55	-	1.10	1.41	1.76	2.16	2.62	3.14	3.73	-
60	-	-	1.15	1.44	1.78	2.16	2.60	3.10	-
65	-	-	-	-	1.44	1.76	2.13	2.54	-

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

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

Pressure switch settings

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

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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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	23 788	30 405	38 264	47 533	58 381	70 976	85 485	102 077	-
35	22 384	28 801	36 389	45 316	55 753	67 868	81 828	97 804	-
40	20 931	27 122	34 411	42 969	52 968	64 575	77 961	93 293	-
45	19 447	25 382	32 345	40 508	50 040	61 114	73 898	88 563	-
50	-	23 598	30 208	37 947	46 988	57 501	69 659	83 630	-
55	-	21 787	28 017	35 306	43 828	53 756	65 262	78 516	-
60	-	-	25 790	32 604	40 582	49 900	60 731	73 247	-
65	-	-	-	-	37 277	45 963	56 098	67 858	-

Power input in W

30	10 577	10 687	10 818	10 958	11 096	11 220	11 320	11 385	-
35	11 690	11 798	11 934	12 086	12 244	12 395	12 530	12 636	-
40	12 937	13 041	13 180	13 343	13 520	13 697	13 865	14 013	-
45	14 347	14 446	14 588	14 761	14 955	15 157	15 358	15 544	-
50	-	16 046	16 189	16 371	16 581	16 807	17 038	17 263	-
55	-	17 872	18 015	18 205	18 429	18 678	18 939	19 201	-
60	-	-	20 097	20 293	20 531	20 801	21 090	21 389	-
65	-	-	-	-	22 918	23 208	23 525	23 858	-

Current consumption in A

30	20.74	21.18	21.53	21.81	22.06	22.31	22.58	22.91	-
35	22.08	22.51	22.84	23.10	23.32	23.54	23.78	24.07	-
40	23.56	24.00	24.33	24.59	24.81	25.01	25.23	25.51	-
45	25.24	25.71	26.06	26.34	26.57	26.78	27.00	27.28	-
50	-	27.67	28.07	28.38	28.64	28.88	29.13	29.42	-
55	-	29.94	30.40	30.76	31.08	31.36	31.66	31.98	-
60	-	-	33.09	33.54	33.92	34.27	34.63	35.01	-
65	-	-	-	-	37.21	37.65	38.09	38.55	-

Mass flow in kg/h

30	464	585	725	887	1 075	1 289	1 533	1 810	-
35	456	578	718	881	1 068	1 282	1 525	1 801	-
40	447	569	710	872	1 059	1 272	1 514	1 789	-
45	436	559	699	862	1 047	1 260	1 501	1 774	-
50	-	546	687	849	1 034	1 245	1 485	1 756	-
55	-	532	672	833	1 018	1 228	1 466	1 736	-
60	-	-	656	816	999	1 207	1 444	1 712	-
65	-	-	-	-	977	1 184	1 419	1 685	-

Coefficient of performance (C.O.P.)

30	2.25	2.85	3.54	4.34	5.26	6.33	7.55	8.97	-
35	1.91	2.44	3.05	3.75	4.55	5.48	6.53	7.74	-
40	1.62	2.08	2.61	3.22	3.92	4.71	5.62	6.66	-
45	1.36	1.76	2.22	2.74	3.35	4.03	4.81	5.70	-
50	-	1.47	1.87	2.32	2.83	3.42	4.09	4.84	-
55	-	1.22	1.56	1.94	2.38	2.88	3.45	4.09	-
60	-	-	1.28	1.61	1.98	2.40	2.88	3.42	-
65	-	-	-	-	1.63	1.98	2.38	2.84	-

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

Cooling capacity	59 104	W
Power input	18 553	W
Current consumption	31.17	A
Mass flow	1 331	kg/h
C.O.P.	3.19	

Pressure switch settings

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

Sound power data

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

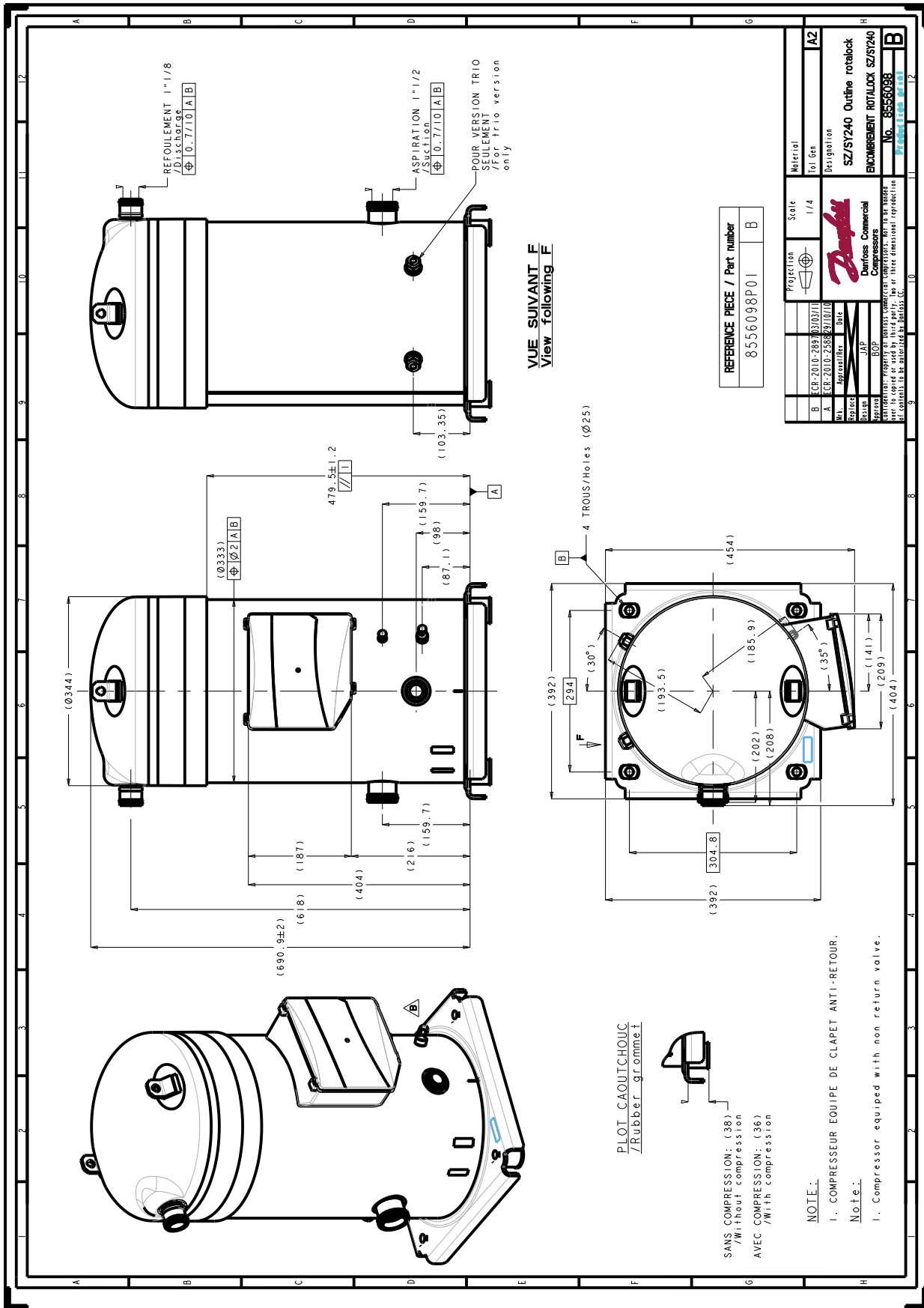
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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