

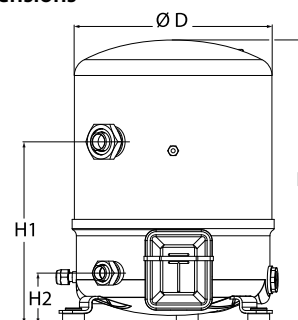
Datasheets

# Danfoss Reciprocating compressors **MT / MTZ / NTZ**

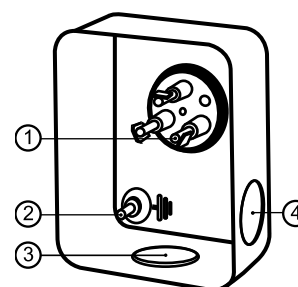


**General Characteristics**

Model number (on compressor nameplate)		<b>MTZ72HN4AVE</b>
Code number for Singlepack*		MTZ72-4VI
Code number for Industrial pack**		MTZ72-4VM
Drawing number		8502012g
Suction and discharge connections		Rotolock
Suction connection		1-3/4" Rotolock
Discharge connection		1-1/4" Rotolock
Suction connection with supplied sleeve		7/8" ODF
Discharge connection with supplied sleeve		3/4" ODF
Oil sight glass		Threaded
Oil equalisation connection		3/8" flare SAE
Oil drain connection		None
LP gauge port		Schrader
IPR valve		30 bar / 8 bar
Cylinders		2
Swept volume		120,94 cm <sup>3</sup> /rev
Displacement @ Nominal speed		21.0 m <sup>3</sup> /h @ 2900 rpm - 25.4 m <sup>3</sup> /h @ 3500 rpm
Net weight		40 kg
Oil charge		1.8 litre, POE - 175PZ
Maximum system test pressure Low Side / High side		25 bar(g) / 30 bar(g)
Maximum differential test pressure		30 bar
Maximum number of starts per hour		12
Refrigerant charge limit		5 kg
Approved refrigerants		R404A, R134a, R407A/C/F, R448A, R449A, R452A, R513A

**Dimensions**


D=288 mm  
H=413 mm  
H1=265 mm  
H2=74 mm  
H3=- mm

**Terminal box**


IP55 (with cable gland)

- 1: Spade connectors 1/4"
- 2: Earth M4-12
- 3: Knock-out Ø 21 mm (0.83")
- 4: Hole Ø 21 mm (0.83")

**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	1.9 Ω
Maximum Continuous Current (MCC)	17 A
Locked Rotor Amps (LRA)	80 A
Motor protection	Internal overload protector

**Recommended Installation torques**

Oil sight glass	50 Nm
Power connections / Earth connection	2 Nm / 2 Nm
Mounting bolts	15 Nm

**Parts shipped with compressor**

Mounting kit with grommets, bolts, nuts, sleeves and washers
Suction & Discharge solder sleeves, rotolock nuts and gaskets (shipped with rotolock version only)
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.**

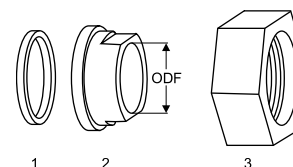
Solder sleeve, P07 (1-3/4" Rotolock, 7/8" ODF)	8153013
Rotolock valve, V07 (1-3/4" Rotolock, 7/8" ODF)	8168032
Gasket, 1-3/4"	8156132

**Gaskets, sleeves and nuts**

**Rotolock accessories, discharge side**

**Code no.**

Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029
Gasket, 1-1/4"	8156131



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

**Rotolock accessories, sets**

**Code no.**

Valve set, V07 (1-3/4"~7/8"), V04 (1-1/4"~3/4")	7703006
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

**Oil / lubricants**

**Code no.**

POE lubricant, 175PZ, 1 litre can	120Z0638
POE lubricant, 175PZ, 2.5 litre can	120Z0639

**Crankcase heaters**

**Code no.**

PTC heater 27W, CE mark, UL	120Z0459
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	7773107
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	7773117
Belt type crankcase heater, 65 W, 460 V, CE mark, UL	120Z0466

**Miscellaneous accessories**

**Code no.**

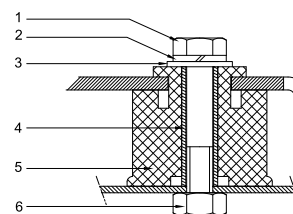
Electronic soft start kit, MCI 15 C	7705006
Acoustic hood for 2 cylinder compressor	120Z0472
Oil equalisation nut	8153127

**Spare parts**

**Code no.**

Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts	8156001
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (black chloroprene)	8156145
Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp	8156134

**Mounting kit**



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

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**Performance data at 50 Hz, EN 12900 rating conditions**
**R407C**

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

**Cooling capacity in W**

35	7 117	9 459	12 275	15 619	19 545	24 108	29 362	-	-
40	6 440	8 650	11 307	14 465	18 178	22 503	27 492	-	-
45	5 767	7 832	10 318	13 278	16 768	20 841	25 553	-	-
50	-	7 018	9 320	12 071	15 324	19 135	23 558	-	-
55	-	-	8 327	10 856	13 861	17 398	21 520	-	-
60	-	-	-	9 645	12 391	15 641	19 450	-	-
65	-	-	-	8 452	10 926	13 877	17 361	-	-

**Power input in W**

35	3 308	3 657	3 961	4 218	4 426	4 584	4 691	-	-
40	3 415	3 824	4 187	4 504	4 774	4 994	5 163	-	-
45	3 488	3 960	4 389	4 771	5 106	5 392	5 629	-	-
50	-	4 064	4 562	5 015	5 421	5 778	6 086	-	-
55	-	-	4 705	5 232	5 714	6 148	6 533	-	-
60	-	-	-	5 422	5 984	6 499	6 966	-	-
65	-	-	-	5 580	6 227	6 829	7 382	-	-

**Current consumption in A**

35	7.28	7.67	8.03	8.34	8.60	8.81	8.95	-	-
40	7.40	7.86	8.28	8.66	8.99	9.26	9.48	-	-
45	7.51	8.04	8.54	9.00	9.41	9.77	10.07	-	-
50	-	8.20	8.79	9.34	9.85	10.31	10.71	-	-
55	-	-	9.00	9.66	10.28	10.84	11.36	-	-
60	-	-	-	9.92	10.66	11.35	11.99	-	-
65	-	-	-	10.09	10.97	11.80	12.58	-	-

**Mass flow in kg/h**

35	154	202	258	323	398	484	581	-	-
40	147	194	249	313	388	473	570	-	-
45	139	185	239	303	376	461	557	-	-
50	-	176	229	291	363	446	541	-	-
55	-	-	218	278	349	431	524	-	-
60	-	-	-	265	334	414	505	-	-
65	-	-	-	251	318	396	485	-	-

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

35	2.15	2.59	3.10	3.70	4.42	5.26	6.26	-	-
40	1.89	2.26	2.70	3.21	3.81	4.51	5.33	-	-
45	1.65	1.98	2.35	2.78	3.28	3.86	4.54	-	-
50	-	1.73	2.04	2.41	2.83	3.31	3.87	-	-
55	-	-	1.77	2.07	2.43	2.83	3.29	-	-
60	-	-	-	1.78	2.07	2.41	2.79	-	-
65	-	-	-	1.51	1.75	2.03	2.35	-	-

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

Cooling capacity	15 324	W
Power input	5 421	W
Current consumption	9.85	A
Mass flow	363	kg/h
C.O.P.	2.83	



to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

**Pressure switch settings**

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	1.7	bar(g)

**Sound power data**

Sound power level	82	dB(A)
With acoustic hood	75	dB(A)

Tolerance according EN12900

**Performance data at 50 Hz, ARI rating conditions**
**R407C**

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

**Cooling capacity in W**

35	7 660	10 169	13 180	16 752	20 940	25 801	31 394	-	-
40	6 970	9 349	12 204	15 592	19 572	24 200	29 533	-	-
45	6 281	8 517	11 203	14 397	18 157	22 538	27 600	-	-
50	-	7 687	10 192	13 179	16 706	20 830	25 610	-	-
55	-	-	9 184	11 952	15 234	19 088	23 574	-	-
60	-	-	-	10 728	13 754	17 328	21 508	-	-
65	-	-	-	9 524	12 282	15 564	19 430	-	-

**Power input in W**

35	3 308	3 657	3 961	4 218	4 426	4 584	4 691	-	-
40	3 415	3 824	4 187	4 504	4 774	4 994	5 163	-	-
45	3 488	3 960	4 389	4 771	5 106	5 392	5 629	-	-
50	-	4 064	4 562	5 015	5 421	5 778	6 086	-	-
55	-	-	4 705	5 232	5 714	6 148	6 533	-	-
60	-	-	-	5 422	5 984	6 499	6 966	-	-
65	-	-	-	5 580	6 227	6 829	7 382	-	-

**Current consumption in A**

35	7.28	7.67	8.03	8.34	8.60	8.81	8.95	-	-
40	7.40	7.86	8.28	8.66	8.99	9.26	9.48	-	-
45	7.51	8.04	8.54	9.00	9.41	9.77	10.07	-	-
50	-	8.20	8.79	9.34	9.85	10.31	10.71	-	-
55	-	-	9.00	9.66	10.28	10.84	11.36	-	-
60	-	-	-	9.92	10.66	11.35	11.99	-	-
65	-	-	-	10.09	10.97	11.80	12.58	-	-

**Mass flow in kg/h**

35	153	201	256	321	395	481	578	-	-
40	146	193	248	312	385	470	567	-	-
45	138	184	238	301	374	458	553	-	-
50	-	175	228	289	361	444	538	-	-
55	-	-	216	277	347	428	521	-	-
60	-	-	-	264	332	411	502	-	-
65	-	-	-	249	316	393	482	-	-

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

35	2.32	2.78	3.33	3.97	4.73	5.63	6.69	-	-
40	2.04	2.44	2.91	3.46	4.10	4.85	5.72	-	-
45	1.80	2.15	2.55	3.02	3.56	4.18	4.90	-	-
50	-	1.89	2.23	2.63	3.08	3.60	4.21	-	-
55	-	-	1.95	2.28	2.67	3.10	3.61	-	-
60	-	-	-	1.98	2.30	2.67	3.09	-	-
65	-	-	-	1.71	1.97	2.28	2.63	-	-

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

Cooling capacity	17 047	W
Power input	5 873	W
Current consumption	10.48	A
Mass flow	383	kg/h
C.O.P.	2.90	

**Pressure switch settings**

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	1.7	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

**Performance data at 50 Hz, EN 12900 rating conditions**
**R134a**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-25	-20	-10	-5	0	5	10	15

**Cooling capacity in W**

35	2 196	3 138	5 815	7 664	9 929	12 666	15 934	19 789	24 288
40	1 903	2 807	5 352	7 106	9 258	11 864	14 981	18 666	22 977
45	1 610	2 472	4 873	6 527	8 560	11 029	13 990	17 500	21 617
50	1 325	2 137	4 384	5 933	7 842	10 167	12 966	16 296	20 214
55	-	-	3 892	5 330	7 109	9 286	11 918	15 061	18 774
60	-	-	-	4 724	6 368	8 391	10 850	13 802	17 304
65	-	-	-	-	5 625	7 488	9 769	12 524	15 810
75	-	-	-	-	-	-	7 594	9 938	12 775

**Power input in W**

35	1 468	1 800	2 356	2 587	2 791	2 971	3 130	3 270	3 396
40	1 433	1 805	2 437	2 703	2 939	3 148	3 334	3 500	3 648
45	1 367	1 786	2 503	2 808	3 081	3 325	3 544	3 739	3 916
50	1 269	1 739	2 552	2 901	3 216	3 499	3 755	3 986	4 195
55	-	-	2 579	2 977	3 339	3 667	3 965	4 236	4 483
60	-	-	-	3 035	3 449	3 827	4 172	4 487	4 777
65	-	-	-	-	3 542	3 974	4 371	4 737	5 073
75	-	-	-	-	-	-	4 738	5 218	5 665

**Current consumption in A**

35	6.21	6.28	6.54	6.72	6.91	7.10	7.28	7.43	7.55
40	6.16	6.27	6.61	6.83	7.05	7.27	7.49	7.67	7.82
45	6.09	6.24	6.67	6.93	7.20	7.46	7.71	7.94	8.13
50	5.98	6.18	6.72	7.03	7.34	7.66	7.96	8.23	8.46
55	-	-	6.75	7.11	7.49	7.85	8.21	8.54	8.82
60	-	-	-	7.18	7.62	8.05	8.47	8.86	9.20
65	-	-	-	-	7.75	8.25	8.73	9.19	9.60
75	-	-	-	-	-	-	9.26	9.87	10.44

**Mass flow in kg/h**

35	55	78	139	178	226	282	348	426	515
40	51	74	134	174	221	277	343	421	510
45	46	69	129	168	215	271	337	414	503
50	40	63	123	162	209	264	330	406	495
55	-	-	116	155	201	256	321	397	485
60	-	-	-	147	192	247	311	387	474
65	-	-	-	-	183	237	301	375	462
75	-	-	-	-	-	-	276	348	433

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

35	1.50	1.74	2.47	2.96	3.56	4.26	5.09	6.05	7.15
40	1.33	1.56	2.20	2.63	3.15	3.77	4.49	5.33	6.30
45	1.18	1.38	1.95	2.32	2.78	3.32	3.95	4.68	5.52
50	1.04	1.23	1.72	2.05	2.44	2.91	3.45	4.09	4.82
55	-	-	1.51	1.79	2.13	2.53	3.01	3.56	4.19
60	-	-	-	1.56	1.85	2.19	2.60	3.08	3.62
65	-	-	-	-	1.59	1.88	2.23	2.64	3.12
75	-	-	-	-	-	-	1.60	1.90	2.26

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

Cooling capacity	10 167	W
Power input	3 499	W
Current consumption	7.66	A
Mass flow	264	kg/h
C.O.P.	2.91	

**Pressure switch settings**

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

**Sound power data**

Sound power level	0	dB(A)
With acoustic hood	0	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)							
	-25	-20	-10	-5	0	5	10	15

Cooling capacity in W

35	2 387	3 405	6 288	8 273	10 701	13 632	17 124	21 238	26 031
40	2 081	3 063	5 817	7 710	10 027	12 828	16 173	20 122	24 732
45	1 773	2 714	5 328	7 123	9 323	11 989	15 181	18 959	23 381
50	-	2 365	4 827	6 517	8 595	11 121	14 154	17 756	21 985
55	-	-	4 320	5 900	7 850	10 229	13 099	16 520	20 550
60	-	-	-	5 278	7 094	9 322	12 023	15 257	19 085
65	-	-	-	-	-	8 405	10 932	13 976	17 597
75	-	-	-	-	-	-	8 739	11 390	14 587

Power input in W

35	1 468	1 800	2 356	2 587	2 791	2 971	3 130	3 270	3 396
40	1 433	1 805	2 437	2 703	2 939	3 148	3 334	3 500	3 648
45	1 367	1 786	2 503	2 808	3 081	3 325	3 544	3 739	3 916
50	-	1 739	2 552	2 901	3 216	3 499	3 755	3 986	4 195
55	-	-	2 579	2 977	3 339	3 667	3 965	4 236	4 483
60	-	-	-	3 035	3 449	3 827	4 172	4 487	4 777
65	-	-	-	-	-	3 974	4 371	4 737	5 073
75	-	-	-	-	-	-	4 738	5 218	5 665

Current consumption in A

35	6.21	6.28	6.54	6.72	6.91	7.10	7.28	7.43	7.55
40	6.16	6.27	6.61	6.83	7.05	7.27	7.49	7.67	7.82
45	6.09	6.24	6.67	6.93	7.20	7.46	7.71	7.94	8.13
50	-	6.18	6.72	7.03	7.34	7.66	7.96	8.23	8.46
55	-	-	6.75	7.11	7.49	7.85	8.21	8.54	8.82
60	-	-	-	7.18	7.62	8.05	8.47	8.86	9.20
65	-	-	-	-	-	8.25	8.73	9.19	9.60
75	-	-	-	-	-	-	9.26	9.87	10.44

Mass flow in kg/h

35	55	78	138	177	225	281	347	423	512
40	51	73	133	173	220	276	342	418	507
45	46	68	128	167	214	270	335	412	500
50	-	63	122	161	208	263	328	404	492
55	-	-	115	154	200	255	319	395	482
60	-	-	-	146	191	246	310	385	471
65	-	-	-	-	-	236	299	373	459
75	-	-	-	-	-	-	274	346	430

Coefficient of performance (C.O.P.)

35	1.63	1.89	2.67	3.20	3.83	4.59	5.47	6.49	7.67
40	1.45	1.70	2.39	2.85	3.41	4.07	4.85	5.75	6.78
45	1.30	1.52	2.13	2.54	3.03	3.61	4.28	5.07	5.97
50	-	1.36	1.89	2.25	2.67	3.18	3.77	4.45	5.24
55	-	-	1.67	1.98	2.35	2.79	3.30	3.90	4.58
60	-	-	-	1.74	2.06	2.44	2.88	3.40	4.00
65	-	-	-	-	-	2.12	2.50	2.95	3.47
75	-	-	-	-	-	-	1.84	2.18	2.58

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

Cooling capacity	11 545	W
Power input	3 780	W
Current consumption	7.99	A
Mass flow	283	kg/h
C.O.P.	3.05	

Pressure switch settings

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

Sound power data

Sound power level	0	dB(A)
With acoustic hood	0	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**
**R404A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-30	-25	-20	-15	-10	-5	0	5

**Cooling capacity in W**

30	4 049	5 567	7 457	9 763	12 535	15 819	19 661	24 109	29 209
35	3 504	4 891	6 619	8 735	11 286	14 319	17 881	22 019	26 781
40	3 007	4 262	5 828	7 752	10 082	12 864	16 146	19 974	24 395
45	2 552	3 674	5 078	6 810	8 918	11 449	14 449	17 966	22 046
50	2 135	3 123	4 364	5 903	7 789	10 067	12 785	15 991	19 730
55	-	2 604	3 681	5 027	6 689	8 715	11 150	14 043	17 441
60	-	2 111	3 023	4 175	5 614	7 386	9 538	12 119	15 173

**Power input in W**

30	2 764	3 166	3 541	3 886	4 196	4 469	4 701	4 887	5 025
35	2 767	3 206	3 623	4 012	4 371	4 695	4 981	5 226	5 425
40	2 756	3 234	3 692	4 126	4 533	4 909	5 250	5 552	5 813
45	2 736	3 253	3 752	4 231	4 686	5 113	5 509	5 870	6 192
50	2 710	3 265	3 806	4 330	4 833	5 312	5 763	6 182	6 565
55	-	3 274	3 857	4 426	4 977	5 508	6 014	6 491	6 936
60	-	3 284	3 908	4 522	5 122	5 704	6 265	6 801	7 308

**Current consumption in A**

30	6.79	7.16	7.56	7.99	8.42	8.84	9.23	9.57	9.86
35	6.81	7.22	7.66	8.13	8.60	9.06	9.50	9.90	10.24
40	6.80	7.25	7.74	8.25	8.78	9.29	9.78	10.23	10.63
45	6.77	7.27	7.81	8.37	8.95	9.52	10.07	10.59	11.05
50	6.73	7.28	7.87	8.50	9.14	9.77	10.39	10.97	11.50
55	-	7.29	7.95	8.64	9.34	10.04	10.73	11.39	11.99
60	-	7.32	8.04	8.80	9.57	10.35	11.12	11.85	12.54

**Mass flow in kg/h**

30	127	171	224	286	358	441	536	644	767
35	119	161	213	273	343	425	519	626	746
40	110	152	202	261	330	410	502	607	726
45	103	143	191	248	316	394	485	588	706
50	96	134	181	237	303	380	468	570	686
55	-	126	171	226	290	365	452	552	666
60	-	119	162	215	277	351	436	534	646

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

30	1.46	1.76	2.11	2.51	2.99	3.54	4.18	4.93	5.81
35	1.27	1.53	1.83	2.18	2.58	3.05	3.59	4.21	4.94
40	1.09	1.32	1.58	1.88	2.22	2.62	3.08	3.60	4.20
45	0.93	1.13	1.35	1.61	1.90	2.24	2.62	3.06	3.56
50	0.79	0.96	1.15	1.36	1.61	1.90	2.22	2.59	3.01
55	-	0.80	0.95	1.14	1.34	1.58	1.85	2.16	2.51
60	-	0.64	0.77	0.92	1.10	1.29	1.52	1.78	2.08

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	8 918	W
Power input	4 686	W
Current consumption	8.95	A
Mass flow	316	kg/h
C.O.P.	1.90	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

**Sound power data**

Sound power level	79	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

Tolerance according EN12900



**Performance data at 50 Hz, ARI rating conditions**
**R404A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-30	-25	-20	-15	-10	-5	0	5

**Cooling capacity in W**

30	4 507	6 181	8 257	10 785	13 814	17 395	21 575	26 404	31 931
35	3 943	5 486	7 402	9 740	12 551	15 884	19 789	24 314	29 509
40	3 428	4 840	6 595	8 744	11 336	14 422	18 051	22 272	27 136
45	2 958	4 239	5 833	7 792	10 166	13 005	16 359	20 279	24 813
50	2 529	3 678	5 112	6 881	9 037	11 631	14 713	18 333	22 542
55	-	3 155	4 429	6 010	7 951	10 302	13 116	16 443	20 334
60	-	2 668	3 786	5 183	6 913	9 030	11 585	14 629	18 214

**Power input in W**

30	2 764	3 166	3 541	3 886	4 196	4 469	4 701	4 887	5 025
35	2 767	3 206	3 623	4 012	4 371	4 695	4 981	5 226	5 425
40	2 756	3 234	3 692	4 126	4 533	4 909	5 250	5 552	5 813
45	2 736	3 253	3 752	4 231	4 686	5 113	5 509	5 870	6 192
50	2 710	3 265	3 806	4 330	4 833	5 312	5 763	6 182	6 565
55	-	3 274	3 857	4 426	4 977	5 508	6 014	6 491	6 936
60	-	3 284	3 908	4 522	5 122	5 704	6 265	6 801	7 308

**Current consumption in A**

30	6.79	7.16	7.56	7.99	8.42	8.84	9.23	9.57	9.86
35	6.81	7.22	7.66	8.13	8.60	9.06	9.50	9.90	10.24
40	6.80	7.25	7.74	8.25	8.78	9.29	9.78	10.23	10.63
45	6.77	7.27	7.81	8.37	8.95	9.52	10.07	10.59	11.05
50	6.73	7.28	7.87	8.50	9.14	9.77	10.39	10.97	11.50
55	-	7.29	7.95	8.64	9.34	10.04	10.73	11.39	11.99
60	-	7.32	8.04	8.80	9.57	10.35	11.12	11.85	12.54

**Mass flow in kg/h**

30	126	170	223	284	355	438	533	640	762
35	118	161	211	271	341	422	516	622	741
40	110	151	201	259	328	407	499	603	721
45	102	142	190	247	314	392	482	585	701
50	95	133	180	235	301	377	465	566	681
55	-	125	170	224	288	363	449	548	661
60	-	118	161	214	276	349	433	531	642

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

30	1.63	1.95	2.33	2.78	3.29	3.89	4.59	5.40	6.35
35	1.43	1.71	2.04	2.43	2.87	3.38	3.97	4.65	5.44
40	1.24	1.50	1.79	2.12	2.50	2.94	3.44	4.01	4.67
45	1.08	1.30	1.55	1.84	2.17	2.54	2.97	3.45	4.01
50	0.93	1.13	1.34	1.59	1.87	2.19	2.55	2.97	3.43
55	-	0.96	1.15	1.36	1.60	1.87	2.18	2.53	2.93
60	-	0.81	0.97	1.15	1.35	1.58	1.85	2.15	2.49

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	10 166	W
Power input	4 686	W
Current consumption	8.95	A
Mass flow	314	kg/h
C.O.P.	2.17	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

**Sound power data**

Sound power level	79	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

Tolerance according EN12900

**Performance data at 50 Hz, EN 12900 rating conditions**
**R407A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-30	-25	-20	-15	-10	-5	0	5

**Cooling capacity in W**

30	3 001	4 425	6 193	8 349	10 941	14 012	17 607	21 773	26 554
35	2 550	3 882	5 538	7 562	10 001	12 899	16 301	20 254	24 802
40	2 118	3 354	4 893	6 781	9 062	11 783	14 989	18 724	23 034
45	1 712	2 846	4 265	6 011	8 132	10 671	13 675	17 189	21 257
50	-	2 367	3 660	5 261	7 216	9 570	12 368	15 655	19 477
55	-	-	3 084	4 536	6 321	8 485	11 073	14 130	17 702
60	-	-	-	3 843	5 454	7 424	9 797	12 620	15 937

**Power input in W**

30	2 096	2 511	2 909	3 281	3 621	3 920	4 171	4 367	4 500
35	2 058	2 508	2 946	3 362	3 751	4 104	4 415	4 674	4 876
40	2 003	2 490	2 968	3 431	3 870	4 279	4 649	4 974	5 245
45	1 933	2 457	2 977	3 487	3 978	4 443	4 875	5 266	5 608
50	-	2 412	2 975	3 533	4 077	4 600	5 094	5 552	5 967
55	-	-	2 963	3 570	4 168	4 750	5 308	5 834	6 322
60	-	-	-	3 600	4 253	4 895	5 518	6 114	6 676

**Current consumption in A**

30	6.07	6.44	6.84	7.27	7.70	8.12	8.52	8.87	9.16
35	6.08	6.46	6.89	7.34	7.82	8.28	8.73	9.15	9.50
40	6.07	6.47	6.92	7.41	7.93	8.45	8.96	9.44	9.87
45	6.03	6.46	6.95	7.48	8.04	8.62	9.19	9.75	10.26
50	-	6.44	6.97	7.55	8.17	8.81	9.45	10.08	10.68
55	-	-	6.99	7.62	8.30	9.01	9.72	10.44	11.12
60	-	-	-	7.70	8.45	9.23	10.02	10.82	11.61

**Mass flow in kg/h**

30	71	104	142	188	242	304	376	458	552
35	64	96	134	179	232	294	365	447	540
40	56	87	125	169	222	283	354	435	527
45	49	79	115	159	211	272	342	422	514
50	-	70	106	149	200	260	329	409	499
55	-	-	96	138	188	247	315	394	484
60	-	-	-	127	176	234	301	379	468

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

30	1.43	1.76	2.13	2.54	3.02	3.57	4.22	4.99	5.90
35	1.24	1.55	1.88	2.25	2.67	3.14	3.69	4.33	5.09
40	1.06	1.35	1.65	1.98	2.34	2.75	3.22	3.76	4.39
45	0.89	1.16	1.43	1.72	2.04	2.40	2.81	3.26	3.79
50	-	0.98	1.23	1.49	1.77	2.08	2.43	2.82	3.26
55	-	-	1.04	1.27	1.52	1.79	2.09	2.42	2.80
60	-	-	-	1.07	1.28	1.52	1.78	2.06	2.39

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	8 132	W
Power input	3 978	W
Current consumption	8.04	A
Mass flow	211	kg/h
C.O.P.	2.04	

**Pressure switch settings**

Maximum HP switch setting	25.8	bar(g)
Minimum LP switch setting	0.9	bar(g)
LP pump down setting	1.2	bar(g)

**Sound power data**

Sound power level	78	dB(A)
With acoustic hood	71	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**
**R407A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-30	-25	-20	-15	-10	-5	0	5

**Cooling capacity in W**

30	3 245	4 778	6 678	8 992	11 768	15 052	18 892	23 336	28 429
35	2 774	4 217	6 005	8 188	10 813	13 928	17 578	21 813	26 679
40	2 321	3 667	5 340	7 388	9 858	12 798	16 256	20 279	24 913
45	1 891	3 137	4 690	6 599	8 910	11 672	14 932	18 739	23 139
50	-	2 634	4 063	5 827	7 975	10 555	13 615	17 203	21 366
55	-	-	3 464	5 080	7 062	9 457	12 314	15 680	19 605
60	-	-	-	4 367	6 179	8 386	11 038	14 182	17 867

**Power input in W**

30	2 096	2 511	2 909	3 281	3 621	3 920	4 171	4 367	4 500
35	2 058	2 508	2 946	3 362	3 751	4 104	4 415	4 674	4 876
40	2 003	2 490	2 968	3 431	3 870	4 279	4 649	4 974	5 245
45	1 933	2 457	2 977	3 487	3 978	4 443	4 875	5 266	5 608
50	-	2 412	2 975	3 533	4 077	4 600	5 094	5 552	5 967
55	-	-	2 963	3 570	4 168	4 750	5 308	5 834	6 322
60	-	-	-	3 600	4 253	4 895	5 518	6 114	6 676

**Current consumption in A**

30	6.07	6.44	6.84	7.27	7.70	8.12	8.52	8.87	9.16
35	6.08	6.46	6.89	7.34	7.82	8.28	8.73	9.15	9.50
40	6.07	6.47	6.92	7.41	7.93	8.45	8.96	9.44	9.87
45	6.03	6.46	6.95	7.48	8.04	8.62	9.19	9.75	10.26
50	-	6.44	6.97	7.55	8.17	8.81	9.45	10.08	10.68
55	-	-	6.99	7.62	8.30	9.01	9.72	10.44	11.12
60	-	-	-	7.70	8.45	9.23	10.02	10.82	11.61

**Mass flow in kg/h**

30	71	103	141	187	240	302	374	456	548
35	64	95	133	178	231	292	363	445	537
40	56	87	124	168	221	282	352	433	524
45	48	78	115	158	210	270	340	420	511
50	-	70	105	148	199	258	327	406	496
55	-	-	96	137	187	246	314	392	481
60	-	-	-	126	175	233	299	377	465

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

30	1.55	1.90	2.30	2.74	3.25	3.84	4.53	5.34	6.32
35	1.35	1.68	2.04	2.44	2.88	3.39	3.98	4.67	5.47
40	1.16	1.47	1.80	2.15	2.55	2.99	3.50	4.08	4.75
45	0.98	1.28	1.58	1.89	2.24	2.63	3.06	3.56	4.13
50	-	1.09	1.37	1.65	1.96	2.29	2.67	3.10	3.58
55	-	-	1.17	1.42	1.69	1.99	2.32	2.69	3.10
60	-	-	-	1.21	1.45	1.71	2.00	2.32	2.68

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	8 910	W
Power input	3 978	W
Current consumption	8.04	A
Mass flow	210	kg/h
C.O.P.	2.24	

**Pressure switch settings**

Maximum HP switch setting	25.8	bar(g)
Minimum LP switch setting	0.9	bar(g)
LP pump down setting	1.2	bar(g)

**Sound power data**

Sound power level	78	dB(A)
With acoustic hood	71	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**
**R407F**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

30	-	4 802	6 791	9 220	12 146	15 622	19 705	24 449	29 909
35	-	4 107	5 906	8 109	10 772	13 950	17 698	22 070	27 123
40	-	3 536	5 174	7 181	9 611	12 520	15 962	19 994	24 669
45	-	3 065	4 572	6 412	8 639	11 308	14 475	18 195	22 522
50	-	-	4 076	5 778	7 832	10 291	13 213	16 650	20 659
55	-	-	-	5 256	7 165	9 445	12 150	15 335	19 055
60	-	-	-	-	-	-	-	-	-

**Power input in W**

30	-	2 669	3 075	3 461	3 810	4 102	4 319	4 440	4 449
35	-	2 678	3 115	3 547	3 955	4 319	4 621	4 841	4 961
40	-	2 695	3 156	3 625	4 083	4 511	4 889	5 200	5 424
45	-	2 736	3 212	3 710	4 210	4 693	5 140	5 533	5 852
50	-	-	3 300	3 817	4 351	4 881	5 388	5 855	6 261
55	-	-	-	3 963	4 522	5 090	5 650	6 182	6 667
60	-	-	-	-	-	-	-	-	-

**Current consumption in A**

30	-	6.45	6.89	7.35	7.82	8.26	8.65	8.96	9.17
35	-	6.54	7.00	7.50	8.00	8.50	8.95	9.34	9.64
40	-	6.58	7.06	7.59	8.14	8.69	9.22	9.69	10.08
45	-	6.58	7.09	7.66	8.27	8.89	9.49	10.05	10.54
50	-	-	7.15	7.77	8.43	9.12	9.81	10.46	11.06
55	-	-	-	7.94	8.67	9.44	10.21	10.97	11.68
60	-	-	-	-	-	-	-	-	-

**Mass flow in kg/h**

30	-	99	138	185	240	305	379	465	563
35	-	89	126	170	223	284	356	438	532
40	-	81	116	158	209	268	337	416	507
45	-	74	108	149	198	255	321	398	486
50	-	-	102	142	190	245	310	385	471
55	-	-	-	138	185	240	303	377	460
60	-	-	-	-	-	-	-	-	-

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

30	-	1.80	2.21	2.66	3.19	3.81	4.56	5.51	6.72
35	-	1.53	1.90	2.29	2.72	3.23	3.83	4.56	5.47
40	-	1.31	1.64	1.98	2.35	2.78	3.26	3.84	4.55
45	-	1.12	1.42	1.73	2.05	2.41	2.82	3.29	3.85
50	-	-	1.24	1.51	1.80	2.11	2.45	2.84	3.30
55	-	-	-	1.33	1.58	1.86	2.15	2.48	2.86
60	-	-	-	-	-	-	-	-	-

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	8 639	W
Power input	4 210	W
Current consumption	8.27	A
Mass flow	198	kg/h
C.O.P.	2.05	

**Pressure switch settings**

Maximum HP switch setting	24	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.26	bar(g)

**Sound power data**

Sound power level	78	dB(A)
With acoustic hood	71	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**
**R407F**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

30	-	5 147	7 271	9 862	12 978	16 678	21 018	26 055	31 848
35	-	4 423	6 352	8 712	11 560	14 956	18 955	23 616	28 997
40	-	3 828	5 594	7 754	10 366	13 488	17 179	21 495	26 495
45	-	3 339	4 974	6 966	9 373	12 254	15 667	19 670	24 321
50	-	-	4 468	6 324	8 559	11 231	14 398	18 121	22 456
55	-	-	-	5 806	7 902	10 399	13 356	16 831	20 885
60	-	-	-	-	-	-	-	-	-

**Power input in W**

30	-	2 669	3 075	3 461	3 810	4 102	4 319	4 440	4 449
35	-	2 678	3 115	3 547	3 955	4 319	4 621	4 841	4 961
40	-	2 695	3 156	3 625	4 083	4 511	4 889	5 200	5 424
45	-	2 736	3 212	3 710	4 210	4 693	5 140	5 533	5 852
50	-	-	3 300	3 817	4 351	4 881	5 388	5 855	6 261
55	-	-	-	3 963	4 522	5 090	5 650	6 182	6 667
60	-	-	-	-	-	-	-	-	-

**Current consumption in A**

30	-	6.45	6.89	7.35	7.82	8.26	8.65	8.96	9.17
35	-	6.54	7.00	7.50	8.00	8.50	8.95	9.34	9.64
40	-	6.58	7.06	7.59	8.14	8.69	9.22	9.69	10.08
45	-	6.58	7.09	7.66	8.27	8.89	9.49	10.05	10.54
50	-	-	7.15	7.77	8.43	9.12	9.81	10.46	11.06
55	-	-	-	7.94	8.67	9.44	10.21	10.97	11.68
60	-	-	-	-	-	-	-	-	-

**Mass flow in kg/h**

30	-	99	137	184	239	303	377	462	559
35	-	89	125	169	222	283	354	435	529
40	-	80	115	157	207	266	334	413	503
45	-	73	107	148	197	253	319	396	483
50	-	-	102	142	189	244	308	383	468
55	-	-	-	138	184	238	301	374	457
60	-	-	-	-	-	-	-	-	-

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

30	-	1.93	2.36	2.85	3.41	4.07	4.87	5.87	7.16
35	-	1.65	2.04	2.46	2.92	3.46	4.10	4.88	5.84
40	-	1.42	1.77	2.14	2.54	2.99	3.51	4.13	4.88
45	-	1.22	1.55	1.88	2.23	2.61	3.05	3.56	4.16
50	-	-	1.35	1.66	1.97	2.30	2.67	3.10	3.59
55	-	-	-	1.47	1.75	2.04	2.36	2.72	3.13
60	-	-	-	-	-	-	-	-	-

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	9 373	W
Power input	4 210	W
Current consumption	8.27	A
Mass flow	197	kg/h
C.O.P.	2.23	

**Pressure switch settings**

Maximum HP switch setting	24	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.26	bar(g)

**Sound power data**

Sound power level	78	dB(A)
With acoustic hood	71	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)							
	-25	-20	-10	-5	0	5	10	15

**Cooling capacity in W**

35	2 196	3 138	5 815	7 664	9 929	12 666	15 934	19 789	24 288
40	1 903	2 807	5 352	7 106	9 258	11 864	14 981	18 666	22 977
45	1 610	2 472	4 873	6 527	8 560	11 029	13 990	17 500	21 617
50	1 325	2 137	4 384	5 933	7 842	10 167	12 966	16 296	20 214
55	-	-	3 892	5 330	7 109	9 286	11 918	15 061	18 774
60	-	-	-	4 724	6 368	8 391	10 850	13 802	17 304
65	-	-	-	-	5 625	7 488	9 769	12 524	15 810
75	-	-	-	-	-	-	7 594	9 938	12 775

**Power input in W**

35	1 468	1 800	2 356	2 587	2 791	2 971	3 130	3 270	3 396
40	1 433	1 805	2 437	2 703	2 939	3 148	3 334	3 500	3 648
45	1 367	1 786	2 503	2 808	3 081	3 325	3 544	3 739	3 916
50	1 269	1 739	2 552	2 901	3 216	3 499	3 755	3 986	4 195
55	-	-	2 579	2 977	3 339	3 667	3 965	4 236	4 483
60	-	-	-	3 035	3 449	3 827	4 172	4 487	4 777
65	-	-	-	-	3 542	3 974	4 371	4 737	5 073
75	-	-	-	-	-	-	4 738	5 218	5 665

**Current consumption in A**

35	6.21	6.28	6.54	6.72	6.91	7.10	7.28	7.43	7.55
40	6.16	6.27	6.61	6.83	7.05	7.27	7.49	7.67	7.82
45	6.09	6.24	6.67	6.93	7.20	7.46	7.71	7.94	8.13
50	5.98	6.18	6.72	7.03	7.34	7.66	7.96	8.23	8.46
55	-	-	6.75	7.11	7.49	7.85	8.21	8.54	8.82
60	-	-	-	7.18	7.62	8.05	8.47	8.86	9.20
65	-	-	-	-	7.75	8.25	8.73	9.19	9.60
75	-	-	-	-	-	-	9.26	9.87	10.44

**Mass flow in kg/h**

35	55	78	139	178	226	282	348	426	515
40	51	74	134	174	221	277	343	421	510
45	46	69	129	168	215	271	337	414	503
50	40	63	123	162	209	264	330	406	495
55	-	-	116	155	201	256	321	397	485
60	-	-	-	147	192	247	311	387	474
65	-	-	-	-	183	237	301	375	462
75	-	-	-	-	-	-	276	348	433

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

35	1.50	1.74	2.47	2.96	3.56	4.26	5.09	6.05	7.15
40	1.33	1.56	2.20	2.63	3.15	3.77	4.49	5.33	6.30
45	1.18	1.38	1.95	2.32	2.78	3.32	3.95	4.68	5.52
50	1.04	1.23	1.72	2.05	2.44	2.91	3.45	4.09	4.82
55	-	-	1.51	1.79	2.13	2.53	3.01	3.56	4.19
60	-	-	-	1.56	1.85	2.19	2.60	3.08	3.62
65	-	-	-	-	1.59	1.88	2.23	2.64	3.12
75	-	-	-	-	-	-	1.60	1.90	2.26

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

Cooling capacity	10 167	W
Power input	3 499	W
Current consumption	7.66	A
Mass flow	264	kg/h
C.O.P.	2.91	

**Pressure switch settings**

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

**Sound power data**

Sound power level	0	dB(A)
With acoustic hood	0	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)							
	-25	-20	-10	-5	0	5	10	15

Cooling capacity in W

35	2 387	3 405	6 288	8 273	10 701	13 632	17 124	21 238	26 031
40	2 081	3 063	5 817	7 710	10 027	12 828	16 173	20 122	24 732
45	1 773	2 714	5 328	7 123	9 323	11 989	15 181	18 959	23 381
50	-	2 365	4 827	6 517	8 595	11 121	14 154	17 756	21 985
55	-	-	4 320	5 900	7 850	10 229	13 099	16 520	20 550
60	-	-	-	5 278	7 094	9 322	12 023	15 257	19 085
65	-	-	-	-	-	8 405	10 932	13 976	17 597
75	-	-	-	-	-	-	8 739	11 390	14 587

Power input in W

35	1 468	1 800	2 356	2 587	2 791	2 971	3 130	3 270	3 396
40	1 433	1 805	2 437	2 703	2 939	3 148	3 334	3 500	3 648
45	1 367	1 786	2 503	2 808	3 081	3 325	3 544	3 739	3 916
50	-	1 739	2 552	2 901	3 216	3 499	3 755	3 986	4 195
55	-	-	2 579	2 977	3 339	3 667	3 965	4 236	4 483
60	-	-	-	3 035	3 449	3 827	4 172	4 487	4 777
65	-	-	-	-	-	3 974	4 371	4 737	5 073
75	-	-	-	-	-	-	4 738	5 218	5 665

Current consumption in A

35	6.21	6.28	6.54	6.72	6.91	7.10	7.28	7.43	7.55
40	6.16	6.27	6.61	6.83	7.05	7.27	7.49	7.67	7.82
45	6.09	6.24	6.67	6.93	7.20	7.46	7.71	7.94	8.13
50	-	6.18	6.72	7.03	7.34	7.66	7.96	8.23	8.46
55	-	-	6.75	7.11	7.49	7.85	8.21	8.54	8.82
60	-	-	-	7.18	7.62	8.05	8.47	8.86	9.20
65	-	-	-	-	-	8.25	8.73	9.19	9.60
75	-	-	-	-	-	-	9.26	9.87	10.44

Mass flow in kg/h

35	55	78	138	177	225	281	347	423	512
40	51	73	133	173	220	276	342	418	507
45	46	68	128	167	214	270	335	412	500
50	-	63	122	161	208	263	328	404	492
55	-	-	115	154	200	255	319	395	482
60	-	-	-	146	191	246	310	385	471
65	-	-	-	-	-	236	299	373	459
75	-	-	-	-	-	-	274	346	430

Coefficient of performance (C.O.P.)

35	1.63	1.89	2.67	3.20	3.83	4.59	5.47	6.49	7.67
40	1.45	1.70	2.39	2.85	3.41	4.07	4.85	5.75	6.78
45	1.30	1.52	2.13	2.54	3.03	3.61	4.28	5.07	5.97
50	-	1.36	1.89	2.25	2.67	3.18	3.77	4.45	5.24
55	-	-	1.67	1.98	2.35	2.79	3.30	3.90	4.58
60	-	-	-	1.74	2.06	2.44	2.88	3.40	4.00
65	-	-	-	-	-	2.12	2.50	2.95	3.47
75	-	-	-	-	-	-	1.84	2.18	2.58

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

Cooling capacity	11 545	W
Power input	3 780	W
Current consumption	7.99	A
Mass flow	283	kg/h
C.O.P.	3.05	

Pressure switch settings

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

Sound power data

Sound power level	0	dB(A)
With acoustic hood	0	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)							
	-15	-10	-5	0	5	10	15	

**Cooling capacity in W**

35	7 117	9 459	12 275	15 619	19 545	24 108	29 362	-	-
40	6 440	8 650	11 307	14 465	18 178	22 503	27 492	-	-
45	5 767	7 832	10 318	13 278	16 768	20 841	25 553	-	-
50	-	7 018	9 320	12 071	15 324	19 135	23 558	-	-
55	-	-	8 327	10 856	13 861	17 398	21 520	-	-
60	-	-	-	9 645	12 391	15 641	19 450	-	-
65	-	-	-	8 452	10 926	13 877	17 361	-	-

**Power input in W**

35	3 308	3 657	3 961	4 218	4 426	4 584	4 691	-	-
40	3 415	3 824	4 187	4 504	4 774	4 994	5 163	-	-
45	3 488	3 960	4 389	4 771	5 106	5 392	5 629	-	-
50	-	4 064	4 562	5 015	5 421	5 778	6 086	-	-
55	-	-	4 705	5 232	5 714	6 148	6 533	-	-
60	-	-	-	5 422	5 984	6 499	6 966	-	-
65	-	-	-	5 580	6 227	6 829	7 382	-	-

**Current consumption in A**

35	7.28	7.67	8.03	8.34	8.60	8.81	8.95	-	-
40	7.40	7.86	8.28	8.66	8.99	9.26	9.48	-	-
45	7.51	8.04	8.54	9.00	9.41	9.77	10.07	-	-
50	-	8.20	8.79	9.34	9.85	10.31	10.71	-	-
55	-	-	9.00	9.66	10.28	10.84	11.36	-	-
60	-	-	-	9.92	10.66	11.35	11.99	-	-
65	-	-	-	10.09	10.97	11.80	12.58	-	-

**Mass flow in kg/h**

35	154	202	258	323	398	484	581	-	-
40	147	194	249	313	388	473	570	-	-
45	139	185	239	303	376	461	557	-	-
50	-	176	229	291	363	446	541	-	-
55	-	-	218	278	349	431	524	-	-
60	-	-	-	265	334	414	505	-	-
65	-	-	-	251	318	396	485	-	-

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

35	2.15	2.59	3.10	3.70	4.42	5.26	6.26	-	-
40	1.89	2.26	2.70	3.21	3.81	4.51	5.33	-	-
45	1.65	1.98	2.35	2.78	3.28	3.86	4.54	-	-
50	-	1.73	2.04	2.41	2.83	3.31	3.87	-	-
55	-	-	1.77	2.07	2.43	2.83	3.29	-	-
60	-	-	-	1.78	2.07	2.41	2.79	-	-
65	-	-	-	1.51	1.75	2.03	2.35	-	-

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

Cooling capacity	15 324	W
Power input	5 421	W
Current consumption	9.85	A
Mass flow	363	kg/h
C.O.P.	2.83	



to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

**Pressure switch settings**

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	1.7	bar(g)

**Sound power data**

Sound power level	82	dB(A)
With acoustic hood	75	dB(A)

Tolerance according EN12900



**Performance data at 50 Hz, ARI rating conditions**
**R407C**

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

**Cooling capacity in W**

35	7 660	10 169	13 180	16 752	20 940	25 801	31 394	-	-
40	6 970	9 349	12 204	15 592	19 572	24 200	29 533	-	-
45	6 281	8 517	11 203	14 397	18 157	22 538	27 600	-	-
50	-	7 687	10 192	13 179	16 706	20 830	25 610	-	-
55	-	-	9 184	11 952	15 234	19 088	23 574	-	-
60	-	-	-	10 728	13 754	17 328	21 508	-	-
65	-	-	-	9 524	12 282	15 564	19 430	-	-

**Power input in W**

35	3 308	3 657	3 961	4 218	4 426	4 584	4 691	-	-
40	3 415	3 824	4 187	4 504	4 774	4 994	5 163	-	-
45	3 488	3 960	4 389	4 771	5 106	5 392	5 629	-	-
50	-	4 064	4 562	5 015	5 421	5 778	6 086	-	-
55	-	-	4 705	5 232	5 714	6 148	6 533	-	-
60	-	-	-	5 422	5 984	6 499	6 966	-	-
65	-	-	-	5 580	6 227	6 829	7 382	-	-

**Current consumption in A**

35	7.28	7.67	8.03	8.34	8.60	8.81	8.95	-	-
40	7.40	7.86	8.28	8.66	8.99	9.26	9.48	-	-
45	7.51	8.04	8.54	9.00	9.41	9.77	10.07	-	-
50	-	8.20	8.79	9.34	9.85	10.31	10.71	-	-
55	-	-	9.00	9.66	10.28	10.84	11.36	-	-
60	-	-	-	9.92	10.66	11.35	11.99	-	-
65	-	-	-	10.09	10.97	11.80	12.58	-	-

**Mass flow in kg/h**

35	153	201	256	321	395	481	578	-	-
40	146	193	248	312	385	470	567	-	-
45	138	184	238	301	374	458	553	-	-
50	-	175	228	289	361	444	538	-	-
55	-	-	216	277	347	428	521	-	-
60	-	-	-	264	332	411	502	-	-
65	-	-	-	249	316	393	482	-	-

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

35	2.32	2.78	3.33	3.97	4.73	5.63	6.69	-	-
40	2.04	2.44	2.91	3.46	4.10	4.85	5.72	-	-
45	1.80	2.15	2.55	3.02	3.56	4.18	4.90	-	-
50	-	1.89	2.23	2.63	3.08	3.60	4.21	-	-
55	-	-	1.95	2.28	2.67	3.10	3.61	-	-
60	-	-	-	1.98	2.30	2.67	3.09	-	-
65	-	-	-	1.71	1.97	2.28	2.63	-	-

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

Cooling capacity	17 047	W
Power input	5 873	W
Current consumption	10.48	A
Mass flow	383	kg/h
C.O.P.	2.90	

**Pressure switch settings**

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	1.7	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

**Performance data at 50 Hz, EN 12900 rating conditions, Suction temp. = 20 °C**
**R448A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

10	-	6 948	9 203	11 946	15 225	-	-	-	-
20	-	5 839	7 873	10 347	13 306	16 796	20 871	-	-
30	-	4 775	6 583	8 781	11 412	14 521	18 157	22 372	27 232
40	-	-	5 346	7 261	9 558	12 279	15 470	19 177	23 455
50	-	-	-	5 801	7 758	10 086	12 826	16 019	19 712
60	-	-	-	-	6 028	7 957	10 241	12 916	16 019

**Power input in W**

10	-	2 259	2 432	2 535	2 557	-	-	-	-
20	-	2 492	2 766	2 984	3 135	3 209	3 194	-	-
30	-	2 634	3 009	3 341	3 619	3 833	3 973	4 026	3 983
40	-	-	3 172	3 618	4 023	4 377	4 669	4 889	5 025
50	-	-	-	3 827	4 358	4 851	5 295	5 680	5 995
60	-	-	-	-	4 637	5 268	5 863	6 413	6 905

**Current consumption in A**

10	-	9.90	10.10	10.15	10.01	-	-	-	-
20	-	7.98	8.34	8.61	8.75	8.74	8.51	-	-
30	-	7.11	7.57	8.00	8.38	8.65	8.79	8.74	8.48
40	-	-	7.49	8.03	8.58	9.09	9.53	9.84	10.00
50	-	-	-	8.39	9.05	9.74	10.42	11.04	11.58
60	-	-	-	-	9.48	10.30	11.16	12.04	12.89

**Mass flow in kg/h**

10	-	114	151	197	251	-	-	-	-
20	-	103	139	183	237	301	377	-	-
30	-	91	126	169	220	282	356	444	548
40	-	-	112	153	202	262	333	419	520
50	-	-	-	136	183	240	309	391	489
60	-	-	-	-	163	217	282	361	455

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

10	-	3.08	3.78	4.71	5.95	-	-	-	-
20	-	2.34	2.85	3.47	4.24	5.23	6.53	-	-
30	-	1.81	2.19	2.63	3.15	3.79	4.57	5.56	6.84
40	-	-	1.69	2.01	2.38	2.81	3.31	3.92	4.67
50	-	-	-	1.52	1.78	2.08	2.42	2.82	3.29
60	-	-	-	-	1.30	1.51	1.75	2.01	2.32

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	8 650	W
Power input	4 198	W
Current consumption	8.80	A
Mass flow	193	kg/h
C.O.P.	2.06	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

**Sound power data**

Sound power level	79	dB(A)
With acoustic hood	72	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Tolerance according EN12900

**Performance data at 50 Hz, EN 12900 rating conditions, Superheat = 10 K**
**R448A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

10	5 158	6 982	9 255	12 020	15 323	-	-	-	-
20	4 162	5 801	7 840	10 326	13 303	16 816	20 910	-	-
30	3 234	4 679	6 477	8 675	11 317	14 448	18 114	22 360	27 232
40	2 389	3 632	5 181	7 082	9 381	12 123	15 352	19 114	23 455
50	-	2 676	3 968	5 565	7 512	9 855	12 640	15 910	19 712
60	-	-	2 853	4 138	5 726	7 662	9 993	12 764	16 019

**Power input in W**

10	2 028	2 259	2 432	2 535	2 557	-	-	-	-
20	2 172	2 492	2 766	2 984	3 135	3 209	3 194	-	-
30	2 227	2 634	3 009	3 341	3 619	3 833	3 973	4 026	3 983
40	2 204	2 698	3 172	3 618	4 023	4 377	4 669	4 889	5 025
50	-	2 696	3 270	3 827	4 358	4 851	5 295	5 680	5 995
60	-	-	3 314	3 982	4 637	5 268	5 863	6 413	6 905

**Current consumption in A**

10	9.59	9.90	10.10	10.15	10.01	-	-	-	-
20	7.57	7.98	8.34	8.61	8.75	8.74	8.51	-	-
30	6.67	7.11	7.57	8.00	8.38	8.65	8.79	8.74	8.48
40	6.56	6.98	7.49	8.03	8.58	9.09	9.53	9.84	10.00
50	-	7.29	7.79	8.39	9.05	9.74	10.42	11.04	11.58
60	-	-	8.16	8.76	9.48	10.30	11.16	12.04	12.89

**Mass flow in kg/h**

10	99	132	172	220	276	-	-	-	-
20	87	120	159	205	260	323	396	-	-
30	74	106	144	189	242	303	375	456	548
40	61	91	128	171	222	282	351	430	520
50	-	76	111	152	201	258	325	401	489
60	-	-	93	132	179	233	297	371	455

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

10	2.54	3.09	3.81	4.74	5.99	-	-	-	-
20	1.92	2.33	2.83	3.46	4.24	5.24	6.55	-	-
30	1.45	1.78	2.15	2.60	3.13	3.77	4.56	5.55	6.84
40	1.08	1.35	1.63	1.96	2.33	2.77	3.29	3.91	4.67
50	-	0.99	1.21	1.45	1.72	2.03	2.39	2.80	3.29
60	-	-	0.86	1.04	1.23	1.45	1.70	1.99	2.32

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	8 437	W
Power input	4 198	W
Current consumption	8.80	A
Mass flow	212	kg/h
C.O.P.	2.01	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

**Sound power data**

Sound power level	79	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

Tolerance according EN12900

**Performance data at 50 Hz, EN 12900 rating conditions, Suction temp. = 20 °C**
**R449A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

10	-	6 961	9 217	11 961	15 239	-	-	-	-
20	-	5 851	7 888	10 362	13 320	16 810	20 882	-	-
30	-	4 788	6 597	8 796	11 427	14 535	18 168	22 379	27 232
40	-	-	5 360	7 276	9 573	12 294	15 482	19 184	23 455
50	-	-	-	5 817	7 774	10 101	12 838	16 027	19 712
60	-	-	-	-	6 043	7 971	10 253	12 924	16 019

**Power input in W**

10	-	2 259	2 432	2 535	2 557	-	-	-	-
20	-	2 492	2 766	2 984	3 135	3 209	3 194	-	-
30	-	2 634	3 009	3 341	3 619	3 833	3 973	4 026	3 983
40	-	-	3 172	3 618	4 023	4 377	4 669	4 889	5 025
50	-	-	-	3 827	4 358	4 851	5 295	5 680	5 995
60	-	-	-	-	4 637	5 268	5 863	6 413	6 905

**Current consumption in A**

10	-	9.90	10.10	10.15	10.01	-	-	-	-
20	-	7.98	8.34	8.61	8.75	8.74	8.51	-	-
30	-	7.11	7.57	8.00	8.38	8.65	8.79	8.74	8.48
40	-	-	7.49	8.03	8.58	9.09	9.53	9.84	10.00
50	-	-	-	8.39	9.05	9.74	10.42	11.04	11.58
60	-	-	-	-	9.48	10.30	11.16	12.04	12.89

**Mass flow in kg/h**

10	-	115	154	201	257	-	-	-	-
20	-	104	142	187	242	307	384	-	-
30	-	93	128	172	225	288	363	452	558
40	-	-	114	156	207	267	340	427	530
50	-	-	-	139	187	245	316	399	499
60	-	-	-	-	167	222	289	370	466

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

10	-	3.08	3.79	4.72	5.96	-	-	-	-
20	-	2.35	2.85	3.47	4.25	5.24	6.54	-	-
30	-	1.82	2.19	2.63	3.16	3.79	4.57	5.56	6.84
40	-	-	1.69	2.01	2.38	2.81	3.32	3.92	4.67
50	-	-	-	1.52	1.78	2.08	2.42	2.82	3.29
60	-	-	-	-	1.30	1.51	1.75	2.02	2.32

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	8 666	W
Power input	4 198	W
Current consumption	8.80	A
Mass flow	197	kg/h
C.O.P.	2.06	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

**Sound power data**

Sound power level	79	dB(A)
With acoustic hood	72	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Tolerance according EN12900

**Performance data at 50 Hz, EN 12900 rating conditions, Superheat = 10 K**
**R449A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

10	5 158	6 982	9 255	12 020	15 323	-	-	-	-
20	4 162	5 801	7 840	10 326	13 303	16 816	20 910	-	-
30	3 234	4 679	6 477	8 675	11 317	14 448	18 114	22 360	27 232
40	2 389	3 632	5 181	7 082	9 381	12 123	15 352	19 114	23 455
50	-	2 676	3 968	5 565	7 512	9 855	12 640	15 910	19 712
60	-	-	2 853	4 138	5 726	7 662	9 993	12 764	16 019

**Power input in W**

10	2 028	2 259	2 432	2 535	2 557	-	-	-	-
20	2 172	2 492	2 766	2 984	3 135	3 209	3 194	-	-
30	2 227	2 634	3 009	3 341	3 619	3 833	3 973	4 026	3 983
40	2 204	2 698	3 172	3 618	4 023	4 377	4 669	4 889	5 025
50	-	2 696	3 270	3 827	4 358	4 851	5 295	5 680	5 995
60	-	-	3 314	3 982	4 637	5 268	5 863	6 413	6 905

**Current consumption in A**

10	9.59	9.90	10.10	10.15	10.01	-	-	-	-
20	7.57	7.98	8.34	8.61	8.75	8.74	8.51	-	-
30	6.67	7.11	7.57	8.00	8.38	8.65	8.79	8.74	8.48
40	6.56	6.98	7.49	8.03	8.58	9.09	9.53	9.84	10.00
50	-	7.29	7.79	8.39	9.05	9.74	10.42	11.04	11.58
60	-	-	8.16	8.76	9.48	10.30	11.16	12.04	12.89

**Mass flow in kg/h**

10	99	134	176	225	282	-	-	-	-
20	87	121	162	210	265	330	404	-	-
30	75	108	147	193	247	310	382	465	558
40	63	93	130	175	227	288	358	438	530
50	-	78	113	155	205	264	332	410	499
60	-	-	96	135	183	239	304	380	466

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

10	2.54	3.09	3.81	4.74	5.99	-	-	-	-
20	1.92	2.33	2.83	3.46	4.24	5.24	6.55	-	-
30	1.45	1.78	2.15	2.60	3.13	3.77	4.56	5.55	6.84
40	1.08	1.35	1.63	1.96	2.33	2.77	3.29	3.91	4.67
50	-	0.99	1.21	1.45	1.72	2.03	2.39	2.80	3.29
60	-	-	0.86	1.04	1.23	1.45	1.70	1.99	2.32

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	8 437	W
Power input	4 198	W
Current consumption	8.80	A
Mass flow	216	kg/h
C.O.P.	2.01	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

**Sound power data**

Sound power level	79	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

Tolerance according EN12900

**Performance data at 50 Hz, EN 12900 rating conditions, Suction temp. = 20 °C**
**R452A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

10	-	8 172	10 468	13 242	16 537	-	-	-	-
20	-	6 979	9 091	11 624	14 617	18 113	22 159	-	-
30	-	5 797	7 702	9 970	12 638	15 746	19 337	23 458	28 167
40	-	4 634	6 308	8 286	10 605	13 302	16 415	19 984	24 057
50	-	-	4 912	6 578	8 526	10 790	13 403	16 398	19 813
60	-	-	-	4 854	6 410	8 220	10 313	12 713	15 444

**Power input in W**

10	-	3 051	3 343	3 617	3 880	-	-	-	-
20	-	3 038	3 356	3 644	3 909	4 160	4 404	-	-
30	-	3 077	3 459	3 797	4 101	4 377	4 635	4 883	5 128
40	-	3 129	3 611	4 038	4 416	4 756	5 064	5 349	5 619
50	-	-	3 775	4 326	4 817	5 256	5 651	6 010	6 342
60	-	-	-	4 623	5 263	5 838	6 357	6 828	7 258

**Current consumption in A**

10	-	10.85	11.41	11.90	12.34	-	-	-	-
20	-	8.48	9.02	9.50	9.92	10.31	10.68	-	-
30	-	7.50	8.05	8.55	9.01	9.43	9.85	10.27	10.70
40	-	7.39	8.00	8.56	9.08	9.59	10.09	10.59	11.12
50	-	-	8.36	9.02	9.65	10.27	10.89	11.53	12.19
60	-	-	-	9.43	10.21	10.98	11.76	12.57	13.41

**Mass flow in kg/h**

10	-	165	213	271	341	-	-	-	-
20	-	154	202	259	328	409	506	-	-
30	-	141	188	244	312	391	486	597	729
40	-	125	171	226	292	369	461	570	698
50	-	-	152	205	268	343	432	537	662
60	-	-	-	181	241	313	399	500	620

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

10	-	2.68	3.13	3.66	4.26	-	-	-	-
20	-	2.30	2.71	3.19	3.74	4.35	5.03	-	-
30	-	1.88	2.23	2.63	3.08	3.60	4.17	4.80	5.49
40	-	1.48	1.75	2.05	2.40	2.80	3.24	3.74	4.28
50	-	-	1.30	1.52	1.77	2.05	2.37	2.73	3.12
60	-	-	-	1.05	1.22	1.41	1.62	1.86	2.13

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	9 571	W
Power input	4 609	W
Current consumption	9.34	A
Mass flow	280	kg/h
C.O.P.	2.08	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

**Sound power data**

Sound power level	79	dB(A)
With acoustic hood	72	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Tolerance according EN12900

**Performance data at 50 Hz, EN 12900 rating conditions, Superheat = 10 K**
**R452A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

10	6 108	7 955	10 250	13 037	16 362	-	-	-	-
20	4 979	6 680	8 773	11 306	14 322	17 868	21 988	-	-
30	3 905	5 432	7 298	9 550	12 232	15 390	19 068	23 312	28 167
40	2 893	4 221	5 835	7 780	10 102	12 845	16 055	19 777	24 057
50	1 954	3 057	4 393	6 005	7 941	10 244	12 960	16 135	19 813
60	-	1 950	2 981	4 236	5 759	7 596	9 793	12 393	15 444

**Power input in W**

10	2 733	3 051	3 343	3 617	3 880	-	-	-	-
20	2 680	3 038	3 356	3 644	3 909	4 160	4 404	-	-
30	2 643	3 077	3 459	3 797	4 101	4 377	4 635	4 883	5 128
40	2 582	3 129	3 611	4 038	4 416	4 756	5 064	5 349	5 619
50	2 458	3 155	3 775	4 326	4 817	5 256	5 651	6 010	6 342
60	-	3 116	3 910	4 623	5 263	5 838	6 357	6 828	7 258

**Current consumption in A**

10	10.21	10.85	11.41	11.90	12.34	-	-	-	-
20	7.87	8.48	9.02	9.50	9.92	10.31	10.68	-	-
30	6.87	7.50	8.05	8.55	9.01	9.43	9.85	10.27	10.70
40	6.72	7.39	8.00	8.56	9.08	9.59	10.09	10.59	11.12
50	6.90	7.65	8.36	9.02	9.65	10.27	10.89	11.53	12.19
60	-	7.80	8.63	9.43	10.21	10.98	11.76	12.57	13.41

**Mass flow in kg/h**

10	149	192	244	305	375	-	-	-	-
20	136	180	231	291	361	441	533	-	-
30	120	164	215	274	343	422	512	614	729
40	103	146	196	254	321	398	486	586	698
50	83	125	174	230	295	370	455	552	662
60	-	101	148	203	265	338	420	514	620

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

10	2.23	2.61	3.07	3.60	4.22	-	-	-	-
20	1.86	2.20	2.61	3.10	3.66	4.30	4.99	-	-
30	1.48	1.77	2.11	2.51	2.98	3.52	4.11	4.77	5.49
40	1.12	1.35	1.62	1.93	2.29	2.70	3.17	3.70	4.28
50	0.79	0.97	1.16	1.39	1.65	1.95	2.29	2.68	3.12
60	-	0.63	0.76	0.92	1.09	1.30	1.54	1.82	2.13

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	9 024	W
Power input	4 609	W
Current consumption	9.34	A
Mass flow	309	kg/h
C.O.P.	1.96	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

**Sound power data**

Sound power level	79	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

Tolerance according EN12900

**Performance data at 60 Hz, EN 12900 rating conditions**
**R407C**

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

**Cooling capacity in W**

35	8 709	11 444	14 675	18 466	22 881	27 983	33 837	-	-
40	7 977	10 610	13 710	17 341	21 565	26 448	32 052	-	-
45	7 197	9 712	12 664	16 117	20 134	24 779	30 115	-	-
50	-	8 766	11 552	14 811	18 603	22 993	28 043	-	-
55	-	-	10 393	13 439	16 988	21 105	25 851	-	-
60	-	-	-	12 017	15 306	19 131	23 555	-	-
65	-	-	-	10 560	13 570	17 084	21 165	-	-

**Power input in W**

35	4 021	4 471	4 862	5 205	5 512	5 795	6 066	-	-
40	4 161	4 695	5 157	5 560	5 915	6 233	6 528	-	-
45	4 247	4 880	5 430	5 908	6 326	6 697	7 030	-	-
50	-	5 009	5 662	6 232	6 730	7 168	7 557	-	-
55	-	-	5 838	6 515	7 108	7 629	8 090	-	-
60	-	-	-	6 740	7 445	8 065	8 613	-	-
65	-	-	-	6 890	7 722	8 457	9 108	-	-

**Current consumption in A**

35	6.87	7.33	7.76	8.15	8.48	8.75	8.95	-	-
40	7.03	7.57	8.09	8.56	8.98	9.33	9.62	-	-
45	7.14	7.78	8.38	8.95	9.46	9.91	10.29	-	-
50	-	7.94	8.65	9.31	9.93	10.48	10.97	-	-
55	-	-	8.87	9.65	10.37	11.04	11.64	-	-
60	-	-	-	9.94	10.79	11.58	12.29	-	-
65	-	-	-	10.20	11.17	12.09	12.94	-	-

**Mass flow in kg/h**

35	189	244	308	382	466	561	670	-	-
40	182	238	302	376	460	556	664	-	-
45	174	230	294	368	452	548	656	-	-
50	-	220	284	358	441	537	644	-	-
55	-	-	272	345	428	523	630	-	-
60	-	-	-	331	413	506	612	-	-
65	-	-	-	314	395	487	592	-	-

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

35	2.17	2.56	3.02	3.55	4.15	4.83	5.58	-	-
40	1.92	2.26	2.66	3.12	3.65	4.24	4.91	-	-
45	1.69	1.99	2.33	2.73	3.18	3.70	4.28	-	-
50	-	1.75	2.04	2.38	2.76	3.21	3.71	-	-
55	-	-	1.78	2.06	2.39	2.77	3.20	-	-
60	-	-	-	1.78	2.06	2.37	2.73	-	-
65	-	-	-	1.53	1.76	2.02	2.32	-	-

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

Cooling capacity	18 603	W
Power input	6 730	W
Current consumption	9.93	A
Mass flow	441	kg/h
C.O.P.	2.76	

**Pressure switch settings**

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	1.7	bar(g)

**Sound power data**

Sound power level	85	dB(A)
With acoustic hood	78	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)							
	-15	-10	-5	0	5	10	15	

**Cooling capacity in W**

35	9 374	12 303	15 758	19 806	24 514	29 949	36 178	-	-
40	8 633	11 467	14 798	18 693	23 219	28 443	34 431	-	-
45	7 839	10 561	13 751	17 475	21 802	26 797	32 528	-	-
50	-	9 602	12 634	16 170	20 280	25 029	30 485	-	-
55	-	-	11 463	14 795	18 670	23 156	28 319	-	-
60	-	-	-	13 366	16 989	21 194	26 048	-	-
65	-	-	-	11 900	15 254	19 161	23 687	-	-

**Power input in W**

35	4 021	4 471	4 862	5 205	5 512	5 795	6 066	-	-
40	4 161	4 695	5 157	5 560	5 915	6 233	6 528	-	-
45	4 247	4 880	5 430	5 908	6 326	6 697	7 030	-	-
50	-	5 009	5 662	6 232	6 730	7 168	7 557	-	-
55	-	-	5 838	6 515	7 108	7 629	8 090	-	-
60	-	-	-	6 740	7 445	8 065	8 613	-	-
65	-	-	-	6 890	7 722	8 457	9 108	-	-

**Current consumption in A**

35	6.87	7.33	7.76	8.15	8.48	8.75	8.95	-	-
40	7.03	7.57	8.09	8.56	8.98	9.33	9.62	-	-
45	7.14	7.78	8.38	8.95	9.46	9.91	10.29	-	-
50	-	7.94	8.65	9.31	9.93	10.48	10.97	-	-
55	-	-	8.87	9.65	10.37	11.04	11.64	-	-
60	-	-	-	9.94	10.79	11.58	12.29	-	-
65	-	-	-	10.20	11.17	12.09	12.94	-	-

**Mass flow in kg/h**

35	188	243	307	379	463	558	666	-	-
40	181	237	300	374	457	553	660	-	-
45	173	228	292	366	449	544	652	-	-
50	-	219	282	356	439	533	640	-	-
55	-	-	271	343	426	520	626	-	-
60	-	-	-	329	411	503	609	-	-
65	-	-	-	312	393	484	588	-	-

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

35	2.33	2.75	3.24	3.81	4.45	5.17	5.96	-	-
40	2.07	2.44	2.87	3.36	3.93	4.56	5.27	-	-
45	1.85	2.16	2.53	2.96	3.45	4.00	4.63	-	-
50	-	1.92	2.23	2.59	3.01	3.49	4.03	-	-
55	-	-	1.96	2.27	2.63	3.04	3.50	-	-
60	-	-	-	1.98	2.28	2.63	3.02	-	-
65	-	-	-	1.73	1.98	2.27	2.60	-	-

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

Cooling capacity	20 776	W
Power input	7 297	W
Current consumption	10.62	A
Mass flow	467	kg/h
C.O.P.	2.85	

**Pressure switch settings**

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	1.7	bar(g)

**Sound power data**

Sound power level	85	dB(A)
With acoustic hood	78	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)							
	-25	-20	-10	-5	0	5	10	15

**Cooling capacity in W**

35	2 635	3 766	6 979	9 197	11 914	15 200	19 121	23 747	29 145
40	2 283	3 369	6 423	8 528	11 110	14 237	17 977	22 400	27 572
45	1 933	2 966	5 848	7 833	10 272	13 234	16 787	21 000	25 940
50	1 590	2 565	5 261	7 120	9 410	12 201	15 560	19 555	24 256
55	-	-	4 670	6 396	8 531	11 143	14 301	18 073	22 529
60	-	-	-	5 669	7 642	10 069	13 020	16 562	20 764
65	-	-	-	-	6 750	8 986	11 723	15 028	18 972
75	-	-	-	-	-	-	9 113	11 925	15 330

**Power input in W**

35	1 762	2 160	2 827	3 105	3 350	3 565	3 756	3 924	4 075
40	1 719	2 166	2 925	3 243	3 527	3 778	4 001	4 200	4 378
45	1 641	2 143	3 004	3 370	3 697	3 990	4 252	4 487	4 699
50	1 523	2 087	3 062	3 481	3 859	4 199	4 506	4 783	5 034
55	-	-	3 095	3 573	4 007	4 401	4 758	5 083	5 379
60	-	-	-	3 642	4 138	4 592	5 006	5 385	5 732
65	-	-	-	-	4 250	4 769	5 245	5 684	6 088
75	-	-	-	-	-	-	5 686	6 262	6 798

**Current consumption in A**

35	6.48	6.54	6.82	7.01	7.21	7.40	7.59	7.75	7.88
40	6.43	6.54	6.90	7.12	7.35	7.59	7.81	8.00	8.16
45	6.35	6.51	6.96	7.23	7.50	7.78	8.05	8.28	8.48
50	6.23	6.44	7.01	7.33	7.66	7.99	8.30	8.58	8.83
55	-	-	7.03	7.42	7.81	8.19	8.56	8.91	9.21
60	-	-	-	7.49	7.95	8.40	8.84	9.24	9.60
65	-	-	-	-	8.08	8.60	9.11	9.59	10.02
75	-	-	-	-	-	-	9.66	10.30	10.89

**Mass flow in kg/h**

35	66	94	166	214	271	339	418	511	618
40	61	88	161	208	265	333	412	505	612
45	55	82	154	202	258	326	405	497	603
50	48	76	147	194	250	317	396	487	594
55	-	-	139	185	241	308	386	477	582
60	-	-	-	176	231	297	374	464	569
65	-	-	-	-	220	284	361	450	554
75	-	-	-	-	-	-	331	418	520

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

35	1.50	1.74	2.47	2.96	3.56	4.26	5.09	6.05	7.15
40	1.33	1.56	2.20	2.63	3.15	3.77	4.49	5.33	6.30
45	1.18	1.38	1.95	2.32	2.78	3.32	3.95	4.68	5.52
50	1.04	1.23	1.72	2.05	2.44	2.91	3.45	4.09	4.82
55	-	-	1.51	1.79	2.13	2.53	3.01	3.56	4.19
60	-	-	-	1.56	1.85	2.19	2.60	3.08	3.62
65	-	-	-	-	1.59	1.88	2.23	2.64	3.12
75	-	-	-	-	-	-	1.60	1.90	2.26

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

Cooling capacity	12 201	W
Power input	4 199	W
Current consumption	7.99	A
Mass flow	317	kg/h
C.O.P.	2.91	

**Pressure switch settings**

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

**Sound power data**

Sound power level	0	dB(A)
With acoustic hood	0	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 60 Hz, ARI rating conditions**
**R134a**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-25	-20	-10	-5	0	5	10	15	20

**Cooling capacity in W**

35	2 865	4 086	7 546	9 928	12 842	16 358	20 549	25 485	31 237
40	2 497	3 676	6 981	9 252	12 033	15 394	19 408	24 146	29 679
45	2 127	3 257	6 394	8 547	11 188	14 387	18 218	22 751	28 057
50	-	2 838	5 792	7 821	10 314	13 345	16 985	21 307	26 382
55	-	-	5 184	7 080	9 420	12 275	15 719	19 824	24 660
60	-	-	-	6 334	8 513	11 187	14 428	18 309	22 902
65	-	-	-	-	-	10 087	13 119	16 771	21 116
75	-	-	-	-	-	-	10 486	13 668	17 504

**Power input in W**

35	1 762	2 160	2 827	3 105	3 350	3 565	3 756	3 924	4 075
40	1 719	2 166	2 925	3 243	3 527	3 778	4 001	4 200	4 378
45	1 641	2 143	3 004	3 370	3 697	3 990	4 252	4 487	4 699
50	-	2 087	3 062	3 481	3 859	4 199	4 506	4 783	5 034
55	-	-	3 095	3 573	4 007	4 401	4 758	5 083	5 379
60	-	-	-	3 642	4 138	4 592	5 006	5 385	5 732
65	-	-	-	-	-	4 769	5 245	5 684	6 088
75	-	-	-	-	-	-	5 686	6 262	6 798

**Current consumption in A**

35	6.48	6.54	6.82	7.01	7.21	7.40	7.59	7.75	7.88
40	6.43	6.54	6.90	7.12	7.35	7.59	7.81	8.00	8.16
45	6.35	6.51	6.96	7.23	7.50	7.78	8.05	8.28	8.48
50	-	6.44	7.01	7.33	7.66	7.99	8.30	8.58	8.83
55	-	-	7.03	7.42	7.81	8.19	8.56	8.91	9.21
60	-	-	-	7.49	7.95	8.40	8.84	9.24	9.60
65	-	-	-	-	-	8.60	9.11	9.59	10.02
75	-	-	-	-	-	-	9.66	10.30	10.89

**Mass flow in kg/h**

35	66	93	166	213	270	337	416	508	615
40	61	88	160	207	264	331	410	502	608
45	55	82	154	201	257	324	403	494	600
50	-	75	146	193	249	316	394	485	590
55	-	-	138	185	240	306	383	474	579
60	-	-	-	175	230	295	372	462	566
65	-	-	-	-	-	283	359	448	551
75	-	-	-	-	-	-	329	416	517

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

35	1.63	1.89	2.67	3.20	3.83	4.59	5.47	6.49	7.67
40	1.45	1.70	2.39	2.85	3.41	4.07	4.85	5.75	6.78
45	1.30	1.52	2.13	2.54	3.03	3.61	4.28	5.07	5.97
50	-	1.36	1.89	2.25	2.67	3.18	3.77	4.45	5.24
55	-	-	1.67	1.98	2.35	2.79	3.30	3.90	4.58
60	-	-	-	1.74	2.06	2.44	2.88	3.40	4.00
65	-	-	-	-	-	2.12	2.50	2.95	3.47
75	-	-	-	-	-	-	1.84	2.18	2.58

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

Cooling capacity	13 854	W
Power input	4 536	W
Current consumption	8.33	A
Mass flow	340	kg/h
C.O.P.	3.05	

**Pressure switch settings**

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

**Sound power data**

Sound power level	0	dB(A)
With acoustic hood	0	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 60 Hz, EN 12900 rating conditions**
**R404A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-30	-25	-20	-15	-10	-5	0	5

**Cooling capacity in W**

30	5 163	7 053	9 363	12 146	15 456	19 348	23 874	29 090	35 049
35	4 481	6 243	8 392	10 981	14 063	17 694	21 926	26 813	32 410
40	3 812	5 437	7 415	9 800	12 645	16 004	19 931	24 480	29 705
45	3 165	4 642	6 439	8 609	11 207	14 284	17 897	22 097	26 940
50	2 544	3 864	5 469	7 415	9 755	12 541	15 828	19 670	24 120
55	-	3 108	4 513	6 224	8 295	10 780	13 732	17 204	21 252
60	-	2 381	3 574	5 041	6 834	9 007	11 613	14 707	18 341

**Power input in W**

30	3 549	4 065	4 529	4 940	5 300	5 607	5 862	6 066	6 218
35	3 555	4 137	4 666	5 144	5 571	5 945	6 268	6 540	6 761
40	3 519	4 169	4 767	5 314	5 810	6 254	6 647	6 989	7 281
45	3 438	4 158	4 827	5 446	6 013	6 529	6 995	7 410	7 775
50	3 306	4 100	4 843	5 535	6 176	6 767	7 308	7 798	8 239
55	-	3 990	4 809	5 577	6 295	6 963	7 582	8 150	8 668
60	-	3 826	4 723	5 570	6 367	7 114	7 812	8 461	9 060

**Current consumption in A**

30	6.31	6.94	7.53	8.06	8.51	8.89	9.17	9.35	9.41
35	6.32	6.97	7.60	8.17	8.69	9.13	9.50	9.77	9.94
40	6.31	7.00	7.67	8.31	8.89	9.42	9.88	10.26	10.55
45	6.27	7.01	7.73	8.44	9.11	9.73	10.30	10.80	11.21
50	6.16	6.96	7.76	8.54	9.31	10.04	10.72	11.35	11.91
55	-	6.83	7.72	8.60	9.47	10.32	11.13	11.90	12.61
60	-	6.61	7.59	8.57	9.56	10.54	11.50	12.42	13.30

**Mass flow in kg/h**

30	162	217	281	355	441	539	651	777	920
35	151	206	269	343	428	525	636	762	903
40	140	194	256	329	413	510	619	744	884
45	127	180	242	314	397	492	600	723	862
50	114	166	227	297	379	473	579	701	838
55	-	150	210	279	359	451	556	676	811
60	-	134	192	259	337	428	531	648	781

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

30	1.45	1.74	2.07	2.46	2.92	3.45	4.07	4.80	5.64
35	1.26	1.51	1.80	2.13	2.52	2.98	3.50	4.10	4.79
40	1.08	1.30	1.56	1.84	2.18	2.56	3.00	3.50	4.08
45	0.92	1.12	1.33	1.58	1.86	2.19	2.56	2.98	3.46
50	0.77	0.94	1.13	1.34	1.58	1.85	2.17	2.52	2.93
55	-	0.78	0.94	1.12	1.32	1.55	1.81	2.11	2.45
60	-	0.62	0.76	0.91	1.07	1.27	1.49	1.74	2.02

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	11 207	W
Power input	6 013	W
Current consumption	9.11	A
Mass flow	397	kg/h
C.O.P.	1.86	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	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

**Performance data at 60 Hz, ARI rating conditions**
**R404A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-30	-25	-20	-15	-10	-5	0	5

**Cooling capacity in W**

30	5 748	7 830	10 367	13 416	17 034	21 276	26 199	31 860	38 315
35	5 041	7 002	9 384	12 244	15 640	19 628	24 265	29 607	35 712
40	4 346	6 175	8 391	11 053	14 218	17 942	22 283	27 298	33 043
45	3 668	5 356	7 397	9 850	12 774	16 226	20 262	24 942	30 321
50	3 014	4 550	6 407	8 643	11 318	14 489	18 214	22 551	27 558
55	-	3 766	5 430	7 441	9 860	12 744	16 152	20 144	24 777
60	-	3 010	4 476	6 257	8 416	11 012	14 104	17 753	22 017

**Power input in W**

30	3 549	4 065	4 529	4 940	5 300	5 607	5 862	6 066	6 218
35	3 555	4 137	4 666	5 144	5 571	5 945	6 268	6 540	6 761
40	3 519	4 169	4 767	5 314	5 810	6 254	6 647	6 989	7 281
45	3 438	4 158	4 827	5 446	6 013	6 529	6 995	7 410	7 775
50	3 306	4 100	4 843	5 535	6 176	6 767	7 308	7 798	8 239
55	-	3 990	4 809	5 577	6 295	6 963	7 582	8 150	8 668
60	-	3 826	4 723	5 570	6 367	7 114	7 812	8 461	9 060

**Current consumption in A**

30	6.31	6.94	7.53	8.06	8.51	8.89	9.17	9.35	9.41
35	6.32	6.97	7.60	8.17	8.69	9.13	9.50	9.77	9.94
40	6.31	7.00	7.67	8.31	8.89	9.42	9.88	10.26	10.55
45	6.27	7.01	7.73	8.44	9.11	9.73	10.30	10.80	11.21
50	6.16	6.96	7.76	8.54	9.31	10.04	10.72	11.35	11.91
55	-	6.83	7.72	8.60	9.47	10.32	11.13	11.90	12.61
60	-	6.61	7.59	8.57	9.56	10.54	11.50	12.42	13.30

**Mass flow in kg/h**

30	161	216	279	353	438	536	647	772	914
35	151	205	268	341	425	522	632	757	897
40	139	193	255	327	411	506	615	739	878
45	127	179	241	312	395	489	597	719	856
50	113	165	225	296	377	470	576	696	832
55	-	150	209	277	357	448	553	671	805
60	-	133	191	258	335	425	528	644	776

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

30	1.62	1.93	2.29	2.72	3.21	3.79	4.47	5.25	6.16
35	1.42	1.69	2.01	2.38	2.81	3.30	3.87	4.53	5.28
40	1.24	1.48	1.76	2.08	2.45	2.87	3.35	3.91	4.54
45	1.07	1.29	1.53	1.81	2.12	2.49	2.90	3.37	3.90
50	0.91	1.11	1.32	1.56	1.83	2.14	2.49	2.89	3.34
55	-	0.94	1.13	1.33	1.57	1.83	2.13	2.47	2.86
60	-	0.79	0.95	1.12	1.32	1.55	1.81	2.10	2.43

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	12 774	W
Power input	6 013	W
Current consumption	9.11	A
Mass flow	395	kg/h
C.O.P.	2.12	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	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

**Performance data at 60 Hz, EN 12900 rating conditions**
**R407A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-30	-25	-20	-15	-10	-5	0	5

**Cooling capacity in W**

30	3 601	5 310	7 431	10 019	13 129	16 814	21 129	26 128	31 865
35	3 060	4 658	6 645	9 075	12 001	15 479	19 562	24 305	29 762
40	2 542	4 025	5 871	8 137	10 875	14 140	17 986	22 469	27 641
45	2 054	3 416	5 117	7 213	9 758	12 806	16 410	20 626	25 508
50	-	2 840	4 391	6 313	8 659	11 484	14 841	18 786	23 373
55	-	-	3 701	5 443	7 585	10 182	13 288	16 956	21 242
60	-	-	-	4 612	6 545	8 909	11 757	15 144	19 124

**Power input in W**

30	2 515	3 014	3 491	3 937	4 345	4 703	5 005	5 240	5 400
35	2 470	3 010	3 535	4 035	4 502	4 925	5 298	5 609	5 852
40	2 404	2 988	3 562	4 117	4 644	5 134	5 579	5 968	6 294
45	2 320	2 948	3 573	4 184	4 774	5 332	5 850	6 319	6 730
50	-	2 894	3 570	4 240	4 892	5 520	6 113	6 662	7 160
55	-	-	3 556	4 284	5 002	5 700	6 369	7 001	7 586
60	-	-	-	4 320	5 104	5 874	6 621	7 337	8 011

**Current consumption in A**

30	6.34	6.71	7.14	7.58	8.03	8.47	8.88	9.25	9.55
35	6.34	6.74	7.18	7.66	8.15	8.64	9.11	9.54	9.91
40	6.33	6.74	7.22	7.73	8.27	8.81	9.34	9.84	10.29
45	6.29	6.73	7.24	7.80	8.39	8.99	9.59	10.16	10.70
50	-	6.72	7.27	7.87	8.52	9.19	9.86	10.51	11.13
55	-	-	7.29	7.95	8.66	9.39	10.14	10.88	11.60
60	-	-	-	8.04	8.81	9.62	10.46	11.29	12.11

**Mass flow in kg/h**

30	85	124	171	226	290	365	451	550	662
35	77	115	160	215	278	353	439	537	648
40	68	105	150	203	266	340	425	522	633
45	58	95	138	191	253	326	410	507	617
50	-	84	127	179	240	311	395	490	599
55	-	-	115	166	226	296	378	473	581
60	-	-	-	152	211	280	361	455	561

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

30	1.43	1.76	2.13	2.54	3.02	3.57	4.22	4.99	5.90
35	1.24	1.55	1.88	2.25	2.67	3.14	3.69	4.33	5.09
40	1.06	1.35	1.65	1.98	2.34	2.75	3.22	3.76	4.39
45	0.89	1.16	1.43	1.72	2.04	2.40	2.81	3.26	3.79
50	-	0.98	1.23	1.49	1.77	2.08	2.43	2.82	3.26
55	-	-	1.04	1.27	1.52	1.79	2.09	2.42	2.80
60	-	-	-	1.07	1.28	1.52	1.78	2.06	2.39

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	9 758	W
Power input	4 774	W
Current consumption	8.39	A
Mass flow	253	kg/h
C.O.P.	2.04	

**Pressure switch settings**

Maximum HP switch setting	25.8	bar(g)
Minimum LP switch setting	0.9	bar(g)
LP pump down setting	1.2	bar(g)

**Sound power data**

Sound power level	81	dB(A)
With acoustic hood	74	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**
**R407A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-30	-25	-20	-15	-10	-5	0	5

**Cooling capacity in W**

30	3 894	5 734	8 014	10 791	14 121	18 062	22 671	28 003	34 114
35	3 329	5 060	7 206	9 826	12 976	16 713	21 094	26 176	32 015
40	2 785	4 401	6 408	8 866	11 830	15 358	19 507	24 334	29 896
45	2 269	3 765	5 629	7 918	10 692	14 006	17 919	22 487	27 767
50	-	3 160	4 875	6 992	9 570	12 666	16 338	20 644	25 640
55	-	-	4 157	6 097	8 474	11 348	14 776	18 816	23 525
60	-	-	-	5 241	7 415	10 064	13 245	17 018	21 440

**Power input in W**

30	2 515	3 014	3 491	3 937	4 345	4 703	5 005	5 240	5 400
35	2 470	3 010	3 535	4 035	4 502	4 925	5 298	5 609	5 852
40	2 404	2 988	3 562	4 117	4 644	5 134	5 579	5 968	6 294
45	2 320	2 948	3 573	4 184	4 774	5 332	5 850	6 319	6 730
50	-	2 894	3 570	4 240	4 892	5 520	6 113	6 662	7 160
55	-	-	3 556	4 284	5 002	5 700	6 369	7 001	7 586
60	-	-	-	4 320	5 104	5 874	6 621	7 337	8 011

**Current consumption in A**

30	6.34	6.71	7.14	7.58	8.03	8.47	8.88	9.25	9.55
35	6.34	6.74	7.18	7.66	8.15	8.64	9.11	9.54	9.91
40	6.33	6.74	7.22	7.73	8.27	8.81	9.34	9.84	10.29
45	6.29	6.73	7.24	7.80	8.39	8.99	9.59	10.16	10.70
50	-	6.72	7.27	7.87	8.52	9.19	9.86	10.51	11.13
55	-	-	7.29	7.95	8.66	9.39	10.14	10.88	11.60
60	-	-	-	8.04	8.81	9.62	10.46	11.29	12.11

**Mass flow in kg/h**

30	85	124	170	224	288	363	449	547	658
35	76	114	159	213	277	351	436	533	644
40	67	104	149	202	265	338	422	519	629
45	58	94	138	190	252	324	408	504	613
50	-	84	126	178	238	310	392	487	596
55	-	-	115	165	224	295	376	470	577
60	-	-	-	152	210	279	359	452	558

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

30	1.55	1.90	2.30	2.74	3.25	3.84	4.53	5.34	6.32
35	1.35	1.68	2.04	2.44	2.88	3.39	3.98	4.67	5.47
40	1.16	1.47	1.80	2.15	2.55	2.99	3.50	4.08	4.75
45	0.98	1.28	1.58	1.89	2.24	2.63	3.06	3.56	4.13
50	-	1.09	1.37	1.65	1.96	2.29	2.67	3.10	3.58
55	-	-	1.17	1.42	1.69	1.99	2.32	2.69	3.10
60	-	-	-	1.21	1.45	1.71	2.00	2.32	2.68

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	10 692	W
Power input	4 774	W
Current consumption	8.39	A
Mass flow	252	kg/h
C.O.P.	2.24	

**Pressure switch settings**

Maximum HP switch setting	25.8	bar(g)
Minimum LP switch setting	0.9	bar(g)
LP pump down setting	1.2	bar(g)

**Sound power data**

Sound power level	81	dB(A)
With acoustic hood	74	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**
**R407F**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

30	-	5 763	8 149	11 064	14 575	18 747	23 646	29 338	35 890
35	-	4 929	7 087	9 731	12 926	16 740	21 237	26 484	32 548
40	-	4 243	6 209	8 617	11 533	15 024	19 155	23 992	29 602
45	-	3 678	5 486	7 694	10 367	13 570	17 370	21 834	27 026
50	-	-	4 891	6 934	9 398	12 350	15 855	19 980	24 791
55	-	-	-	6 307	8 598	11 334	14 580	18 402	22 866
60	-	-	-	-	-	-	-	-	-

**Power input in W**

30	-	3 203	3 690	4 154	4 572	4 923	5 182	5 329	5 338
35	-	3 213	3 738	4 257	4 746	5 183	5 545	5 809	5 954
40	-	3 234	3 787	4 350	4 899	5 413	5 867	6 240	6 509
45	-	3 283	3 855	4 452	5 052	5 631	6 168	6 639	7 023
50	-	-	3 960	4 581	5 221	5 857	6 466	7 026	7 513
55	-	-	-	4 756	5 426	6 108	6 780	7 418	8 000
60	-	-	-	-	-	-	-	-	-

**Current consumption in A**

30	-	6.72	7.18	7.67	8.16	8.62	9.02	9.35	9.57
35	-	6.83	7.31	7.82	8.35	8.86	9.34	9.74	10.05
40	-	6.86	7.36	7.92	8.49	9.07	9.62	10.11	10.51
45	-	6.87	7.40	8.00	8.63	9.27	9.90	10.48	10.99
50	-	-	7.46	8.10	8.80	9.52	10.23	10.91	11.53
55	-	-	-	8.28	9.05	9.85	10.65	11.44	12.18
60	-	-	-	-	-	-	-	-	-

**Mass flow in kg/h**

30	-	119	166	222	288	365	455	558	675
35	-	107	151	204	267	341	427	526	638
40	-	97	139	190	250	321	404	499	608
45	-	88	130	179	237	306	385	478	583
50	-	-	123	171	228	294	372	462	565
55	-	-	-	166	222	287	364	452	552
60	-	-	-	-	-	-	-	-	-

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

30	-	1.80	2.21	2.66	3.19	3.81	4.56	5.51	6.72
35	-	1.53	1.90	2.29	2.72	3.23	3.83	4.56	5.47
40	-	1.31	1.64	1.98	2.35	2.78	3.26	3.84	4.55
45	-	1.12	1.42	1.73	2.05	2.41	2.82	3.29	3.85
50	-	-	1.24	1.51	1.80	2.11	2.45	2.84	3.30
55	-	-	-	1.33	1.58	1.86	2.15	2.48	2.86
60	-	-	-	-	-	-	-	-	-

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	10 367	W
Power input	5 052	W
Current consumption	8.63	A
Mass flow	237	kg/h
C.O.P.	2.05	

**Pressure switch settings**

Maximum HP switch setting	24	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.26	bar(g)

**Sound power data**

Sound power level	81	dB(A)
With acoustic hood	74	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**
**R407F**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

30	-	6 176	8 725	11 834	15 574	20 013	25 221	31 266	38 217
35	-	5 307	7 622	10 454	13 872	17 947	22 746	28 340	34 796
40	-	4 594	6 713	9 305	12 439	16 186	20 615	25 794	31 794
45	-	4 007	5 969	8 359	11 248	14 705	18 800	23 604	29 185
50	-	-	5 362	7 589	10 270	13 477	17 278	21 745	26 947
55	-	-	-	6 968	9 482	12 479	16 027	20 198	25 062
60	-	-	-	-	-	-	-	-	-

**Power input in W**

30	-	3 203	3 690	4 154	4 572	4 923	5 182	5 329	5 338
35	-	3 213	3 738	4 257	4 746	5 183	5 545	5 809	5 954
40	-	3 234	3 787	4 350	4 899	5 413	5 867	6 240	6 509
45	-	3 283	3 855	4 452	5 052	5 631	6 168	6 639	7 023
50	-	-	3 960	4 581	5 221	5 857	6 466	7 026	7 513
55	-	-	-	4 756	5 426	6 108	6 780	7 418	8 000
60	-	-	-	-	-	-	-	-	-

**Current consumption in A**

30	-	6.72	7.18	7.67	8.16	8.62	9.02	9.35	9.57
35	-	6.83	7.31	7.82	8.35	8.86	9.34	9.74	10.05
40	-	6.86	7.36	7.92	8.49	9.07	9.62	10.11	10.51
45	-	6.87	7.40	8.00	8.63	9.27	9.90	10.48	10.99
50	-	-	7.46	8.10	8.80	9.52	10.23	10.91	11.53
55	-	-	-	8.28	9.05	9.85	10.65	11.44	12.18
60	-	-	-	-	-	-	-	-	-

**Mass flow in kg/h**

30	-	118	165	221	286	363	452	555	671
35	-	106	150	203	266	339	424	522	634
40	-	96	138	189	249	319	401	496	604
45	-	88	129	178	236	304	383	475	579
50	-	-	122	170	226	293	370	459	561
55	-	-	-	165	221	286	361	449	549
60	-	-	-	-	-	-	-	-	-

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

30	-	1.93	2.36	2.85	3.41	4.07	4.87	5.87	7.16
35	-	1.65	2.04	2.46	2.92	3.46	4.10	4.88	5.84
40	-	1.42	1.77	2.14	2.54	2.99	3.51	4.13	4.88
45	-	1.22	1.55	1.88	2.23	2.61	3.05	3.56	4.16
50	-	-	1.35	1.66	1.97	2.30	2.67	3.10	3.59
55	-	-	-	1.47	1.75	2.04	2.36	2.72	3.13
60	-	-	-	-	-	-	-	-	-

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	11 248	W
Power input	5 052	W
Current consumption	8.63	A
Mass flow	236	kg/h
C.O.P.	2.23	

**Pressure switch settings**

Maximum HP switch setting	24	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.26	bar(g)

**Sound power data**

Sound power level	81	dB(A)
With acoustic hood	74	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)							
	-25	-20	-10	-5	0	5	10	15

**Cooling capacity in W**

35	2 635	3 766	6 979	9 197	11 914	15 200	19 121	23 747	29 145
40	2 283	3 369	6 423	8 528	11 110	14 237	17 977	22 400	27 572
45	1 933	2 966	5 848	7 833	10 272	13 234	16 787	21 000	25 940
50	1 590	2 565	5 261	7 120	9 410	12 201	15 560	19 555	24 256
55	-	-	4 670	6 396	8 531	11 143	14 301	18 073	22 529
60	-	-	-	5 669	7 642	10 069	13 020	16 562	20 764
65	-	-	-	-	6 750	8 986	11 723	15 028	18 972
75	-	-	-	-	-	-	9 113	11 925	15 330

**Power input in W**

35	1 762	2 160	2 827	3 105	3 350	3 565	3 756	3 924	4 075
40	1 719	2 166	2 925	3 243	3 527	3 778	4 001	4 200	4 378
45	1 641	2 143	3 004	3 370	3 697	3 990	4 252	4 487	4 699
50	1 523	2 087	3 062	3 481	3 859	4 199	4 506	4 783	5 034
55	-	-	3 095	3 573	4 007	4 401	4 758	5 083	5 379
60	-	-	-	3 642	4 138	4 592	5 006	5 385	5 732
65	-	-	-	-	4 250	4 769	5 245	5 684	6 088
75	-	-	-	-	-	-	5 686	6 262	6 798

**Current consumption in A**

35	6.48	6.54	6.82	7.01	7.21	7.40	7.59	7.75	7.88
40	6.43	6.54	6.90	7.12	7.35	7.59	7.81	8.00	8.16
45	6.35	6.51	6.96	7.23	7.50	7.78	8.05	8.28	8.48
50	6.23	6.44	7.01	7.33	7.66	7.99	8.30	8.58	8.83
55	-	-	7.03	7.42	7.81	8.19	8.56	8.91	9.21
60	-	-	-	7.49	7.95	8.40	8.84	9.24	9.60
65	-	-	-	-	8.08	8.60	9.11	9.59	10.02
75	-	-	-	-	-	-	9.66	10.30	10.89

**Mass flow in kg/h**

35	66	94	166	214	271	339	418	511	618
40	61	88	161	208	265	333	412	505	612
45	55	82	154	202	258	326	405	497	603
50	48	76	147	194	250	317	396	487	594
55	-	-	139	185	241	308	386	477	582
60	-	-	-	176	231	297	374	464	569
65	-	-	-	-	220	284	361	450	554
75	-	-	-	-	-	-	331	418	520

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

35	1.50	1.74	2.47	2.96	3.56	4.26	5.09	6.05	7.15
40	1.33	1.56	2.20	2.63	3.15	3.77	4.49	5.33	6.30
45	1.18	1.38	1.95	2.32	2.78	3.32	3.95	4.68	5.52
50	1.04	1.23	1.72	2.05	2.44	2.91	3.45	4.09	4.82
55	-	-	1.51	1.79	2.13	2.53	3.01	3.56	4.19
60	-	-	-	1.56	1.85	2.19	2.60	3.08	3.62
65	-	-	-	-	1.59	1.88	2.23	2.64	3.12
75	-	-	-	-	-	-	1.60	1.90	2.26

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

Cooling capacity	12 201	W
Power input	4 199	W
Current consumption	7.99	A
Mass flow	317	kg/h
C.O.P.	2.91	

**Pressure switch settings**

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

**Sound power data**

Sound power level	0	dB(A)
With acoustic hood	0	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 60 Hz, ARI rating conditions**
**R134a**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-25	-20	-10	-5	0	5	10	15	20

**Cooling capacity in W**

35	2 865	4 086	7 546	9 928	12 842	16 358	20 549	25 485	31 237
40	2 497	3 676	6 981	9 252	12 033	15 394	19 408	24 146	29 679
45	2 127	3 257	6 394	8 547	11 188	14 387	18 218	22 751	28 057
50	-	2 838	5 792	7 821	10 314	13 345	16 985	21 307	26 382
55	-	-	5 184	7 080	9 420	12 275	15 719	19 824	24 660
60	-	-	-	6 334	8 513	11 187	14 428	18 309	22 902
65	-	-	-	-	-	10 087	13 119	16 771	21 116
75	-	-	-	-	-	-	10 486	13 668	17 504

**Power input in W**

35	1 762	2 160	2 827	3 105	3 350	3 565	3 756	3 924	4 075
40	1 719	2 166	2 925	3 243	3 527	3 778	4 001	4 200	4 378
45	1 641	2 143	3 004	3 370	3 697	3 990	4 252	4 487	4 699
50	-	2 087	3 062	3 481	3 859	4 199	4 506	4 783	5 034
55	-	-	3 095	3 573	4 007	4 401	4 758	5 083	5 379
60	-	-	-	3 642	4 138	4 592	5 006	5 385	5 732
65	-	-	-	-	-	4 769	5 245	5 684	6 088
75	-	-	-	-	-	-	5 686	6 262	6 798

**Current consumption in A**

35	6.48	6.54	6.82	7.01	7.21	7.40	7.59	7.75	7.88
40	6.43	6.54	6.90	7.12	7.35	7.59	7.81	8.00	8.16
45	6.35	6.51	6.96	7.23	7.50	7.78	8.05	8.28	8.48
50	-	6.44	7.01	7.33	7.66	7.99	8.30	8.58	8.83
55	-	-	7.03	7.42	7.81	8.19	8.56	8.91	9.21
60	-	-	-	7.49	7.95	8.40	8.84	9.24	9.60
65	-	-	-	-	-	8.60	9.11	9.59	10.02
75	-	-	-	-	-	-	9.66	10.30	10.89

**Mass flow in kg/h**

35	66	93	166	213	270	337	416	508	615
40	61	88	160	207	264	331	410	502	608
45	55	82	154	201	257	324	403	494	600
50	-	75	146	193	249	316	394	485	590
55	-	-	138	185	240	306	383	474	579
60	-	-	-	175	230	295	372	462	566
65	-	-	-	-	-	283	359	448	551
75	-	-	-	-	-	-	329	416	517

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

35	1.63	1.89	2.67	3.20	3.83	4.59	5.47	6.49	7.67
40	1.45	1.70	2.39	2.85	3.41	4.07	4.85	5.75	6.78
45	1.30	1.52	2.13	2.54	3.03	3.61	4.28	5.07	5.97
50	-	1.36	1.89	2.25	2.67	3.18	3.77	4.45	5.24
55	-	-	1.67	1.98	2.35	2.79	3.30	3.90	4.58
60	-	-	-	1.74	2.06	2.44	2.88	3.40	4.00
65	-	-	-	-	-	2.12	2.50	2.95	3.47
75	-	-	-	-	-	-	1.84	2.18	2.58

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

Cooling capacity	13 854	W
Power input	4 536	W
Current consumption	8.33	A
Mass flow	340	kg/h
C.O.P.	3.05	

**Pressure switch settings**

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

**Sound power data**

Sound power level	0	dB(A)
With acoustic hood	0	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 60 Hz, EN 12900 rating conditions**
**R407C**

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

**Cooling capacity in W**

35	8 709	11 444	14 675	18 466	22 881	27 983	33 837	-	-
40	7 977	10 610	13 710	17 341	21 565	26 448	32 052	-	-
45	7 197	9 712	12 664	16 117	20 134	24 779	30 115	-	-
50	-	8 766	11 552	14 811	18 603	22 993	28 043	-	-
55	-	-	10 393	13 439	16 988	21 105	25 851	-	-
60	-	-	-	12 017	15 306	19 131	23 555	-	-
65	-	-	-	10 560	13 570	17 084	21 165	-	-

**Power input in W**

35	4 021	4 471	4 862	5 205	5 512	5 795	6 066	-	-
40	4 161	4 695	5 157	5 560	5 915	6 233	6 528	-	-
45	4 247	4 880	5 430	5 908	6 326	6 697	7 030	-	-
50	-	5 009	5 662	6 232	6 730	7 168	7 557	-	-
55	-	-	5 838	6 515	7 108	7 629	8 090	-	-
60	-	-	-	6 740	7 445	8 065	8 613	-	-
65	-	-	-	6 890	7 722	8 457	9 108	-	-

**Current consumption in A**

35	6.87	7.33	7.76	8.15	8.48	8.75	8.95	-	-
40	7.03	7.57	8.09	8.56	8.98	9.33	9.62	-	-
45	7.14	7.78	8.38	8.95	9.46	9.91	10.29	-	-
50	-	7.94	8.65	9.31	9.93	10.48	10.97	-	-
55	-	-	8.87	9.65	10.37	11.04	11.64	-	-
60	-	-	-	9.94	10.79	11.58	12.29	-	-
65	-	-	-	10.20	11.17	12.09	12.94	-	-

**Mass flow in kg/h**

35	189	244	308	382	466	561	670	-	-
40	182	238	302	376	460	556	664	-	-
45	174	230	294	368	452	548	656	-	-
50	-	220	284	358	441	537	644	-	-
55	-	-	272	345	428	523	630	-	-
60	-	-	-	331	413	506	612	-	-
65	-	-	-	314	395	487	592	-	-

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

35	2.17	2.56	3.02	3.55	4.15	4.83	5.58	-	-
40	1.92	2.26	2.66	3.12	3.65	4.24	4.91	-	-
45	1.69	1.99	2.33	2.73	3.18	3.70	4.28	-	-
50	-	1.75	2.04	2.38	2.76	3.21	3.71	-	-
55	-	-	1.78	2.06	2.39	2.77	3.20	-	-
60	-	-	-	1.78	2.06	2.37	2.73	-	-
65	-	-	-	1.53	1.76	2.02	2.32	-	-

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

Cooling capacity	18 603	W
Power input	6 730	W
Current consumption	9.93	A
Mass flow	441	kg/h
C.O.P.	2.76	

**Pressure switch settings**

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	1.7	bar(g)

**Sound power data**

Sound power level	85	dB(A)
With acoustic hood	78	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)							
	-15	-10	-5	0	5	10	15	

Cooling capacity in W

35	9 374	12 303	15 758	19 806	24 514	29 949	36 178	-	-
40	8 633	11 467	14 798	18 693	23 219	28 443	34 431	-	-
45	7 839	10 561	13 751	17 475	21 802	26 797	32 528	-	-
50	-	9 602	12 634	16 170	20 280	25 029	30 485	-	-
55	-	-	11 463	14 795	18 670	23 156	28 319	-	-
60	-	-	-	13 366	16 989	21 194	26 048	-	-
65	-	-	-	11 900	15 254	19 161	23 687	-	-

Power input in W

35	4 021	4 471	4 862	5 205	5 512	5 795	6 066	-	-
40	4 161	4 695	5 157	5 560	5 915	6 233	6 528	-	-
45	4 247	4 880	5 430	5 908	6 326	6 697	7 030	-	-
50	-	5 009	5 662	6 232	6 730	7 168	7 557	-	-
55	-	-	5 838	6 515	7 108	7 629	8 090	-	-
60	-	-	-	6 740	7 445	8 065	8 613	-	-
65	-	-	-	6 890	7 722	8 457	9 108	-	-

Current consumption in A

35	6.87	7.33	7.76	8.15	8.48	8.75	8.95	-	-
40	7.03	7.57	8.09	8.56	8.98	9.33	9.62	-	-
45	7.14	7.78	8.38	8.95	9.46	9.91	10.29	-	-
50	-	7.94	8.65	9.31	9.93	10.48	10.97	-	-
55	-	-	8.87	9.65	10.37	11.04	11.64	-	-
60	-	-	-	9.94	10.79	11.58	12.29	-	-
65	-	-	-	10.20	11.17	12.09	12.94	-	-

Mass flow in kg/h

35	188	243	307	379	463	558	666	-	-
40	181	237	300	374	457	553	660	-	-
45	173	228	292	366	449	544	652	-	-
50	-	219	282	356	439	533	640	-	-
55	-	-	271	343	426	520	626	-	-
60	-	-	-	329	411	503	609	-	-
65	-	-	-	312	393	484	588	-	-

Coefficient of performance (C.O.P.)

35	2.33	2.75	3.24	3.81	4.45	5.17	5.96	-	-
40	2.07	2.44	2.87	3.36	3.93	4.56	5.27	-	-
45	1.85	2.16	2.53	2.96	3.45	4.00	4.63	-	-
50	-	1.92	2.23	2.59	3.01	3.49	4.03	-	-
55	-	-	1.96	2.27	2.63	3.04	3.50	-	-
60	-	-	-	1.98	2.28	2.63	3.02	-	-
65	-	-	-	1.73	1.98	2.27	2.60	-	-

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

Cooling capacity	20 776	W
Power input	7 297	W
Current consumption	10.62	A
Mass flow	467	kg/h
C.O.P.	2.85	

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	1.7	bar(g)

Sound power data

Sound power level	85	dB(A)
With acoustic hood	78	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, Suction temp. = 20 °C

**R448A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

10	-	8 338	11 044	14 335	18 270	-	-	-	-
20	-	7 006	9 448	12 417	15 967	20 156	25 046	-	-
30	-	5 730	7 900	10 537	13 694	17 425	21 788	26 847	32 678
40	-	-	6 415	8 713	11 469	14 735	18 564	23 012	28 146
50	-	-	-	6 962	9 310	12 104	15 391	19 223	23 655
60	-	-	-	-	7 233	9 548	12 290	15 500	19 222

**Power input in W**

10	-	2 711	2 918	3 041	3 069	-	-	-	-
20	-	2 990	3 319	3 580	3 762	3 850	3 833	-	-
30	-	3 160	3 610	4 009	4 343	4 600	4 767	4 832	4 780
40	-	-	3 807	4 341	4 827	5 252	5 603	5 866	6 030
50	-	-	-	4 593	5 229	5 821	6 354	6 816	7 194
60	-	-	-	-	5 565	6 321	7 036	7 695	8 286

**Current consumption in A**

10	-	10.32	10.53	10.58	10.44	-	-	-	-
20	-	8.32	8.69	8.98	9.13	9.11	8.88	-	-
30	-	7.41	7.89	8.35	8.74	9.03	9.17	9.12	8.84
40	-	-	7.81	8.38	8.95	9.48	9.94	10.27	10.44
50	-	-	-	8.75	9.44	10.16	10.87	11.52	12.07
60	-	-	-	-	9.89	10.74	11.64	12.55	13.44

**Mass flow in kg/h**

10	-	137	181	236	302	-	-	-	-
20	-	123	167	220	284	361	452	-	-
30	-	109	151	202	264	339	427	533	658
40	-	-	134	183	243	314	400	502	624
50	-	-	-	163	220	288	371	469	587
60	-	-	-	-	195	260	339	433	546

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

10	-	3.08	3.78	4.71	5.95	-	-	-	-
20	-	2.34	2.85	3.47	4.24	5.23	6.53	-	-
30	-	1.81	2.19	2.63	3.15	3.79	4.57	5.56	6.84
40	-	-	1.69	2.01	2.38	2.81	3.31	3.92	4.67
50	-	-	-	1.52	1.78	2.08	2.42	2.82	3.29
60	-	-	-	-	1.30	1.51	1.75	2.01	2.32

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	10 380	W
Power input	5 038	W
Current consumption	9.18	A
Mass flow	231	kg/h
C.O.P.	2.06	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	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 : Suction gas temp. = 20 °C , Subcooling = 0 K

Tolerance according EN12900

**Performance data at 60 Hz, EN 12900 rating conditions, Superheat = 10 K**
**R448A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

10	6 189	8 379	11 106	14 424	18 388	-	-	-	-
20	4 994	6 961	9 409	12 391	15 963	20 179	25 092	-	-
30	3 881	5 614	7 773	10 410	13 580	17 337	21 737	26 832	32 678
40	2 867	4 358	6 217	8 499	11 257	14 547	18 422	22 937	28 146
50	-	3 211	4 761	6 678	9 015	11 827	15 168	19 092	23 655
60	-	-	3 424	4 965	6 871	9 195	11 992	15 317	19 222

**Power input in W**

10	2 434	2 711	2 918	3 041	3 069	-	-	-	-
20	2 607	2 990	3 319	3 580	3 762	3 850	3 833	-	-
30	2 672	3 160	3 610	4 009	4 343	4 600	4 767	4 832	4 780
40	2 645	3 237	3 807	4 341	4 827	5 252	5 603	5 866	6 030
50	-	3 236	3 924	4 593	5 229	5 821	6 354	6 816	7 194
60	-	-	3 976	4 779	5 565	6 321	7 036	7 695	8 286

**Current consumption in A**

10	10.00	10.32	10.53	10.58	10.44	-	-	-	-
20	7.90	8.32	8.69	8.98	9.13	9.11	8.88	-	-
30	6.95	7.41	7.89	8.35	8.74	9.03	9.17	9.12	8.84
40	6.84	7.28	7.81	8.38	8.95	9.48	9.94	10.27	10.44
50	-	7.61	8.12	8.75	9.44	10.16	10.87	11.52	12.07
60	-	-	8.51	9.13	9.89	10.74	11.64	12.55	13.44

**Mass flow in kg/h**

10	118	159	207	264	331	-	-	-	-
20	104	143	191	246	312	388	475	-	-
30	89	127	172	227	290	364	450	547	658
40	73	110	153	205	266	338	421	516	624
50	-	92	133	182	241	310	390	482	587
60	-	-	112	159	214	280	356	445	546

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

10	2.54	3.09	3.81	4.74	5.99	-	-	-	-
20	1.92	2.33	2.83	3.46	4.24	5.24	6.55	-	-
30	1.45	1.78	2.15	2.60	3.13	3.77	4.56	5.55	6.84
40	1.08	1.35	1.63	1.96	2.33	2.77	3.29	3.91	4.67
50	-	0.99	1.21	1.45	1.72	2.03	2.39	2.80	3.29
60	-	-	0.86	1.04	1.23	1.45	1.70	1.99	2.32

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	10 125	W
Power input	5 038	W
Current consumption	9.18	A
Mass flow	254	kg/h
C.O.P.	2.01	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	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

**Performance data at 60 Hz, EN 12900 rating conditions, Suction temp. = 20 °C**
**R449A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

10	-	8 354	11 061	14 353	18 287	-	-	-	-
20	-	7 022	9 465	12 435	15 985	20 172	25 059	-	-
30	-	5 745	7 917	10 555	13 712	17 442	21 802	26 855	32 678
40	-	-	6 432	8 731	11 488	14 753	18 578	23 021	28 146
50	-	-	-	6 980	9 328	12 121	15 406	19 232	23 655
60	-	-	-	-	7 251	9 566	12 304	15 509	19 222

**Power input in W**

10	-	2 711	2 918	3 041	3 069	-	-	-	-
20	-	2 990	3 319	3 580	3 762	3 850	3 833	-	-
30	-	3 160	3 610	4 009	4 343	4 600	4 767	4 832	4 780
40	-	-	3 807	4 341	4 827	5 252	5 603	5 866	6 030
50	-	-	-	4 593	5 229	5 821	6 354	6 816	7 194
60	-	-	-	-	5 565	6 321	7 036	7 695	8 286

**Current consumption in A**

10	-	10.32	10.53	10.58	10.44	-	-	-	-
20	-	8.32	8.69	8.98	9.13	9.11	8.88	-	-
30	-	7.41	7.89	8.35	8.74	9.03	9.17	9.12	8.84
40	-	-	7.81	8.38	8.95	9.48	9.94	10.27	10.44
50	-	-	-	8.75	9.44	10.16	10.87	11.52	12.07
60	-	-	-	-	9.89	10.74	11.64	12.55	13.44

**Mass flow in kg/h**

10	-	136	184	241	309	-	-	-	-
20	-	124	170	225	290	369	462	-	-
30	-	110	154	207	270	346	436	543	670
40	-	-	137	187	248	321	408	512	636
50	-	-	-	167	224	295	379	479	599
60	-	-	-	-	200	266	347	444	559

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

10	-	3.08	3.79	4.72	5.96	-	-	-	-
20	-	2.35	2.85	3.47	4.25	5.24	6.54	-	-
30	-	1.82	2.19	2.63	3.16	3.79	4.57	5.56	6.84
40	-	-	1.69	2.01	2.38	2.81	3.32	3.92	4.67
50	-	-	-	1.52	1.78	2.08	2.42	2.82	3.29
60	-	-	-	-	1.30	1.51	1.75	2.02	2.32

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	10 399	W
Power input	5 038	W
Current consumption	9.18	A
Mass flow	236	kg/h
C.O.P.	2.06	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	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 : Suction gas temp. = 20 °C , Subcooling = 0 K

Tolerance according EN12900



**Performance data at 60 Hz, EN 12900 rating conditions, Superheat = 10 K**
**R449A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

10	6 189	8 379	11 106	14 424	18 388	-	-	-	-
20	4 994	6 961	9 409	12 391	15 963	20 179	25 092	-	-
30	3 881	5 614	7 773	10 410	13 580	17 337	21 737	26 832	32 678
40	2 867	4 358	6 217	8 499	11 257	14 547	18 422	22 937	28 146
50	-	3 211	4 761	6 678	9 015	11 827	15 168	19 092	23 655
60	-	-	3 424	4 965	6 871	9 195	11 992	15 317	19 222

**Power input in W**

10	2 434	2 711	2 918	3 041	3 069	-	-	-	-
20	2 607	2 990	3 319	3 580	3 762	3 850	3 833	-	-
30	2 672	3 160	3 610	4 009	4 343	4 600	4 767	4 832	4 780
40	2 645	3 237	3 807	4 341	4 827	5 252	5 603	5 866	6 030
50	-	3 236	3 924	4 593	5 229	5 821	6 354	6 816	7 194
60	-	-	3 976	4 779	5 565	6 321	7 036	7 695	8 286

**Current consumption in A**

10	10.00	10.32	10.53	10.58	10.44	-	-	-	-
20	7.90	8.32	8.69	8.98	9.13	9.11	8.88	-	-
30	6.95	7.41	7.89	8.35	8.74	9.03	9.17	9.12	8.84
40	6.84	7.28	7.81	8.38	8.95	9.48	9.94	10.27	10.44
50	-	7.61	8.12	8.75	9.44	10.16	10.87	11.52	12.07
60	-	-	8.51	9.13	9.89	10.74	11.64	12.55	13.44

**Mass flow in kg/h**

10	115	158	210	270	339	-	-	-	-
20	102	144	193	251	319	397	486	-	-
30	89	128	176	231	296	372	459	558	670
40	75	112	156	210	272	345	430	526	636
50	-	94	136	187	246	317	398	492	599
60	-	-	115	162	219	286	365	456	559

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

10	2.54	3.09	3.81	4.74	5.99	-	-	-	-
20	1.92	2.33	2.83	3.46	4.24	5.24	6.55	-	-
30	1.45	1.78	2.15	2.60	3.13	3.77	4.56	5.55	6.84
40	1.08	1.35	1.63	1.96	2.33	2.77	3.29	3.91	4.67
50	-	0.99	1.21	1.45	1.72	2.03	2.39	2.80	3.29
60	-	-	0.86	1.04	1.23	1.45	1.70	1.99	2.32

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	10 125	W
Power input	5 038	W
Current consumption	9.18	A
Mass flow	259	kg/h
C.O.P.	2.01	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	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

**Performance data at 60 Hz, EN 12900 rating conditions, Suction temp. = 20 °C**
**R452A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

10	-	9 806	12 562	15 891	19 844	-	-	-	-
20	-	8 374	10 909	13 949	17 540	21 736	26 591	-	-
30	-	6 957	9 243	11 964	15 165	18 895	23 204	28 149	33 800
40	-	5 561	7 569	9 943	12 726	15 963	19 698	23 981	28 868
50	-	-	5 894	7 893	10 231	12 948	16 083	19 678	23 775
60	-	-	-	5 825	7 692	9 864	12 375	15 255	18 533

**Power input in W**

10	-	3 662	4 012	4 340	4 656	-	-	-	-
20	-	3 645	4 028	4 373	4 691	4 992	5 285	-	-
30	-	3 692	4 151	4 557	4 921	5 253	5 562	5 859	6 154
40	-	3 754	4 333	4 845	5 300	5 707	6 076	6 418	6 743
50	-	-	4 530	5 191	5 780	6 307	6 781	7 212	7 610
60	-	-	-	5 548	6 316	7 006	7 628	8 193	8 710

**Current consumption in A**

10	-	11.32	11.91	12.42	12.87	-	-	-	-
20	-	8.85	9.41	9.91	10.35	10.76	11.14	-	-
30	-	7.82	8.40	8.92	9.39	9.84	10.27	10.71	11.16
40	-	7.70	8.34	8.92	9.47	10.00	10.52	11.05	11.60
50	-	-	8.72	9.40	10.06	10.71	11.36	12.02	12.72
60	-	-	-	9.83	10.64	11.45	12.27	13.11	13.98

**Mass flow in kg/h**

10	-	198	256	326	409	-	-	-	-
20	-	185	242	311	394	491	607	-	-
30	-	169	226	293	374	470	583	716	875
40	-	150	205	272	350	443	553	684	838
50	-	-	182	246	322	412	519	645	794
60	-	-	-	217	289	376	479	600	744

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

10	-	2.68	3.13	3.66	4.26	-	-	-	-
20	-	2.30	2.71	3.19	3.74	4.35	5.03	-	-
30	-	1.88	2.23	2.63	3.08	3.60	4.17	4.80	5.49
40	-	1.48	1.75	2.05	2.40	2.80	3.24	3.74	4.28
50	-	-	1.30	1.52	1.77	2.05	2.37	2.73	3.12
60	-	-	-	1.05	1.22	1.41	1.62	1.86	2.13

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	11 485	W
Power input	5 530	W
Current consumption	9.74	A
Mass flow	337	kg/h
C.O.P.	2.08	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	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 : Suction gas temp. = 20 °C , Subcooling = 0 K

Tolerance according EN12900

**Performance data at 60 Hz, EN 12900 rating conditions, Superheat = 10 K**
**R452A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

**Cooling capacity in W**

10	7 329	9 546	12 300	15 644	19 635	-	-	-	-
20	5 975	8 015	10 528	13 567	17 187	21 441	26 386	-	-
30	4 685	6 518	8 758	11 460	14 679	18 467	22 881	27 974	33 800
40	3 471	5 065	7 002	9 336	12 122	15 414	19 266	23 733	28 868
50	2 345	3 669	5 271	7 207	9 529	12 293	15 552	19 362	23 775
60	-	2 340	3 577	5 083	6 911	9 115	11 751	14 872	18 533

**Power input in W**

10	3 280	3 662	4 012	4 340	4 656	-	-	-	-
20	3 216	3 645	4 028	4 373	4 691	4 992	5 285	-	-
30	3 171	3 692	4 151	4 557	4 921	5 253	5 562	5 859	6 154
40	3 098	3 754	4 333	4 845	5 300	5 707	6 076	6 418	6 743
50	2 950	3 786	4 530	5 191	5 780	6 307	6 781	7 212	7 610
60	-	3 739	4 692	5 548	6 316	7 006	7 628	8 193	8 710

**Current consumption in A**

10	10.65	11.32	11.91	12.42	12.87	-	-	-	-
20	8.21	8.85	9.41	9.91	10.35	10.76	11.14	-	-
30	7.17	7.82	8.40	8.92	9.39	9.84	10.27	10.71	11.16
40	7.00	7.70	8.34	8.92	9.47	10.00	10.52	11.05	11.60
50	7.20	7.98	8.72	9.40	10.06	10.71	11.36	12.02	12.72
60	-	8.13	9.00	9.83	10.64	11.45	12.27	13.11	13.98

**Mass flow in kg/h**

10	178	231	293	366	450	-	-	-	-
20	163	215	277	350	433	529	639	-	-
30	144	197	258	329	411	506	614	736	875
40	123	175	235	305	385	478	583	703	838
50	100	150	208	276	354	444	546	663	794
60	-	122	178	243	319	405	504	617	744

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

10	2.23	2.61	3.07	3.60	4.22	-	-	-	-
20	1.86	2.20	2.61	3.10	3.66	4.30	4.99	-	-
30	1.48	1.77	2.11	2.51	2.98	3.52	4.11	4.77	5.49
40	1.12	1.35	1.62	1.93	2.29	2.70	3.17	3.70	4.28
50	0.79	0.97	1.16	1.39	1.65	1.95	2.29	2.68	3.12
60	-	0.63	0.76	0.92	1.09	1.30	1.54	1.82	2.13

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	10 829	W
Power input	5 530	W
Current consumption	9.74	A
Mass flow	370	kg/h
C.O.P.	1.96	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

**Sound power data**

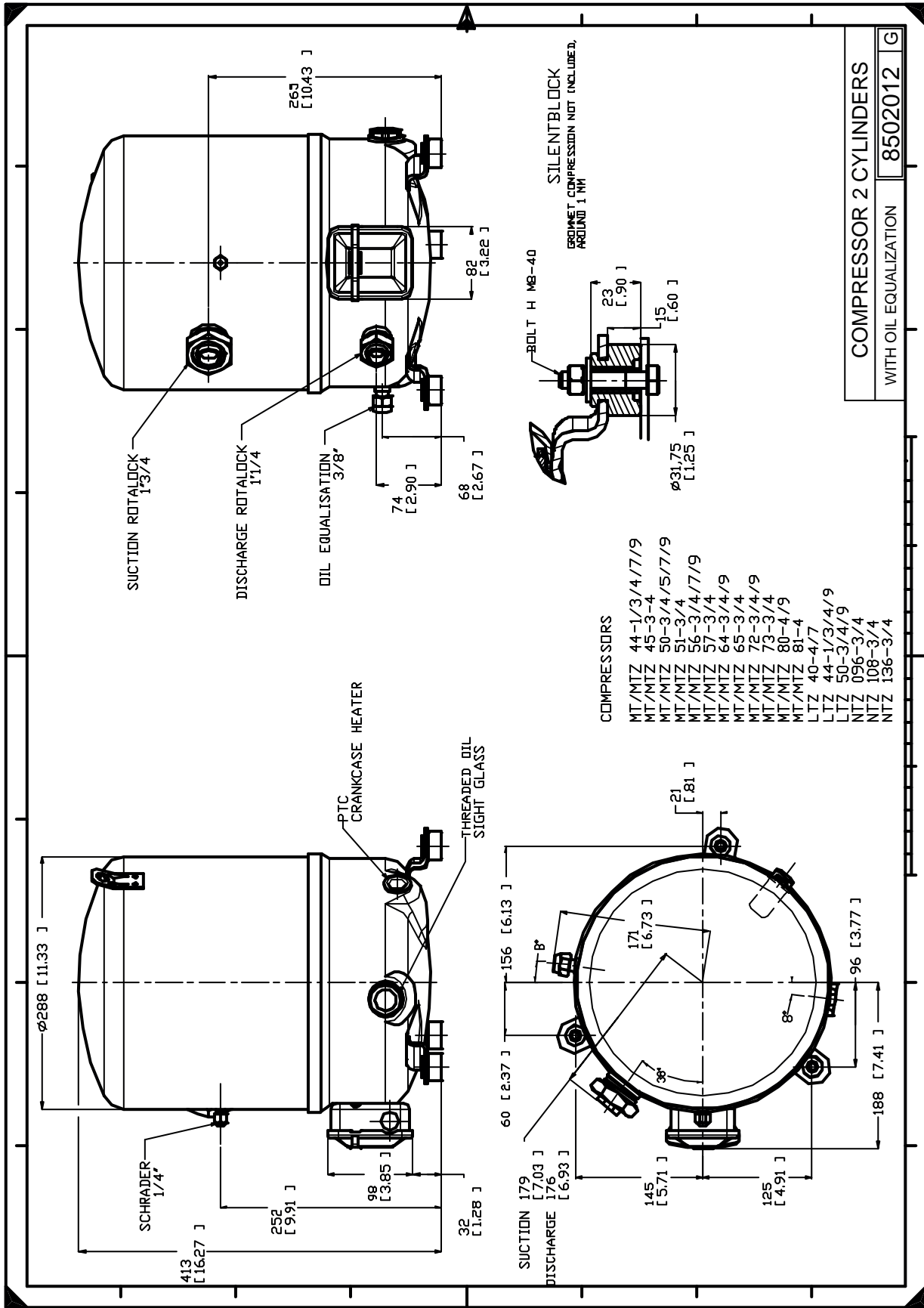
Sound power level	82	dB(A)
With acoustic hood	75	dB(A)

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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