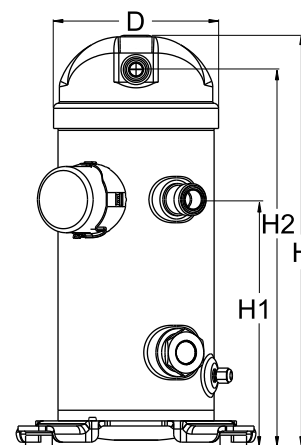


General Characteristics

Model number (on compressor nameplate)		MLZ015T2LT9
Code number for Singlepack*		121U8553
Code number for Industrial pack**		121U8552
Drawing number		0XC6290B-1
Suction and discharge connections		Rotolock
Suction connection		2-1/4 " Rotolock
Discharge connection		1-3/4 " Rotolock
Suction connection with supplied sleeve		1-5/8 " -
Discharge connection with supplied sleeve	- "	1-1/8 " -
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume		33.77 cm ³ /rev
Displacement @ Nominal speed		5.9 m ³ /h @ 2900 rpm - 7.1 m ³ /h @ 3500 rpm
Net weight		31 kg
Oil charge		1.06 litre, PVE - -
Maximum system test pressure Low Side / High side		- bar(g) / - bar(g)
Maximum differential test pressure		- bar
Maximum number of starts per hour		12
Refrigerant charge limit		3.63 kg
Approved refrigerants		R404A, R507, R134a, R407C, R22

Dimensions

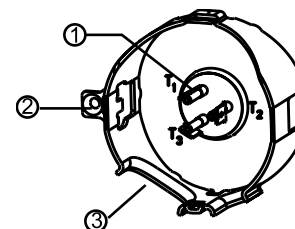


D=184 mm
H=412.1 mm
H1=249.8 mm
H2=379.4 mm
H3=- mm

Electrical Characteristics

Nominal voltage	208-230V/3/60Hz
Voltage range	188-253 V
Winding resistance between phases 1-2 +/- 7% at 25°C	1.665 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.225 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.665 Ω
Rated Load Amps (RLA)	9.3 A
Maximum Continuous Current (MCC)	14.5 A
Locked Rotor Amps (LRA)	60 A
Motor protection	Internal overload protector

Terminal box



IP22

- 1: Spade connectors 1/4"
- 2: Earth connection
- 3: Power cable passage

Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	0 Nm / 0 Nm

Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Approvals : CE certified, UL certified (file SA11565), -

*Singlepack: Compressor in cardboard box. 121U... optimised for Danfoss pallet, 120U... optimised for US pallet

**Industrial pack: 121U...: 12 unboxed compressors on Danfoss pallet. 120U...: 16 unboxed compressors on US pallet

Rotolock accessories, suction side

Code no.

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

Rotolock accessories, discharge side

Code no.

Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

Rotolock accessories, sets

Code no.

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

Oil / lubricants

Code no.

PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034
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Crankcase heaters

Code no.

Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040
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Miscellaneous accessories

Code no.

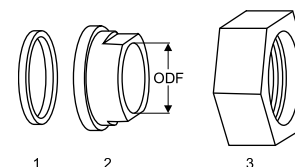
Acoustic hood	120Z5043
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0056

Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5015

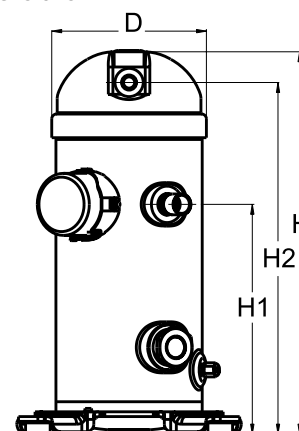
Gaskets, sleeves and nuts



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

General Characteristics

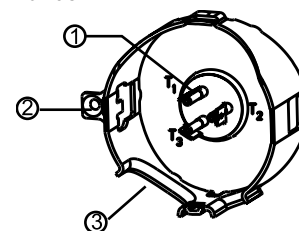
Model number (on compressor nameplate)	MLZ015T2LP9	MLZ015T2LP9
Code number for Singlepack*	121U8036	120U8036
Code number for Industrial pack**	121U8035	120U8035
Drawing number	0XC6300B-1	0XC6300B-1
Suction and discharge connections	Brazed	Brazed
Suction connection	3/4" ODF	3/4" ODF
Discharge connection	1/2" ODF	1/2" ODF
Oil sight glass	Threaded	Threaded
Oil equalisation connection	None	None
Oil drain connection	1/4" flare	1/4" flare
LP gauge port	None	None
IPR valve	32 bar	32 bar
Swept volume	33.77 cm ³ /rev	
Displacement @ Nominal speed	5.9 m ³ /h @ 2900 rpm - 7.1 m ³ /h @ 3500 rpm	
Net weight	31 kg	
Oil charge	1.06 litre, PVE --	
Maximum system test pressure Low Side / High side	- bar(g) / - bar(g)	
Maximum differential test pressure	- bar	
Maximum number of starts per hour	12	
Refrigerant charge limit	3.63 kg	
Approved refrigerants	R404A, R507, R134a, R407C, R22	

Dimensions


D=164.5 mm
H=412 mm
H1=250 mm
H2=379 mm
H3=- mm

Electrical Characteristics

Nominal voltage	208-230V/3/60Hz
Voltage range	188-253 V
Winding resistance between phases 1-2 +/- 7% at 25°C	1.665 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.225 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.665 Ω
Rated Load Amps (RLA)	9.3 A
Maximum Continuous Current (MCC)	14.5 A
Locked Rotor Amps (LRA)	60 A
Motor protection	Internal overload protector

Terminal box

IP22

- 1: Spade connectors 1/4"
- 2: Earth connection
- 3: Power cable passage

Recommended Installation torques

Suction Rotolock nut or valve	0 Nm
Discharge Rotolock nut or valve	0 Nm
Oil sight glass	52.5 Nm
Power connections / Earth connection	0 Nm / 0 Nm

Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Approvals : CE certified, UL certified (file SA11565), -

*Singlepack: Compressor in cardboard box. 121U... optimised for Danfoss pallet, 120U... optimised for US pallet

**Industrial pack: 121U...: 12 unboxed compressors on Danfoss pallet. 120U...: 16 unboxed compressors on US pallet

Rotolock accessories, suction 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

Rotolock accessories, discharge side

Code no.

Solder sleeve, P06 (1" Rotolock, 1/2" ODF)	8153007
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-1/4" Rotolock, 3/4" ODF), (1" Rotolock, 1/2" ODF)	120Z0126
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants

Code no.

PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034
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Crankcase heaters

Code no.

Belt type crankcase heater, 70 W, 240 V, CE mark, UL	120Z5040
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Miscellaneous accessories

Code no.

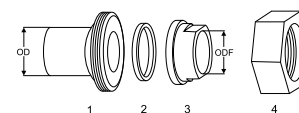
Acoustic hood	120Z5043
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0056

Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5015

Solder sleeve adapter set



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

Performance data at 50 Hz, EN 12900 rating conditions, Superheat = 10 K
R22

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

Cooling capacity in W

16	3 069	3 699	4 420	5 247	-	-	-	-	-
20	2 929	3 556	4 273	5 094	6 030	-	-	-	-
30	2 595	3 200	3 891	4 681	5 583	6 609	7 769	-	-
40	2 288	2 850	3 492	4 230	5 077	6 045	7 145	-	-
50	-	2 512	3 085	3 749	4 519	5 407	6 427	-	-
60	-	-	-	3 245	3 916	4 704	5 622	-	-
68	-	-	-	-	-	4 098	4 920	-	-

Power input in W

16	773	785	803	829	-	-	-	-	-
20	858	870	886	907	935	-	-	-	-
30	1 082	1 098	1 113	1 129	1 147	1 168	1 194	-	-
40	1 329	1 355	1 377	1 395	1 410	1 424	1 437	-	-
50	-	1 652	1 687	1 713	1 733	1 746	1 755	-	-
60	-	-	-	2 094	2 125	2 145	2 156	-	-
68	-	-	-	-	-	2 525	2 543	-	-

Current consumption in A

16	2.97	3.02	3.09	3.19	-	-	-	-	-
20	3.30	3.35	3.41	3.49	3.60	-	-	-	-
30	4.16	4.22	4.28	4.35	4.41	4.50	4.59	-	-
40	5.11	5.22	5.30	5.37	5.43	5.48	5.53	-	-
50	-	6.36	6.49	6.59	6.67	6.72	6.75	-	-
60	-	-	-	8.06	8.18	8.26	8.30	-	-
68	-	-	-	-	-	9.72	9.79	-	-

Mass flow in kg/h

16	58	69	83	98	-	-	-	-	-
20	57	69	82	97	115	-	-	-	-
30	55	67	80	96	114	133	155	-	-
40	53	65	78	94	112	132	154	-	-
50	-	62	75	91	109	129	151	-	-
60	-	-	-	86	104	124	146	-	-
68	-	-	-	-	-	117	140	-	-

Coefficient of performance (C.O.P.)

16	3.97	4.71	5.50	6.33	-	-	-	-	-
20	3.41	4.09	4.82	5.61	6.45	-	-	-	-
30	2.40	2.92	3.50	4.15	4.87	5.66	6.51	-	-
40	1.72	2.10	2.54	3.03	3.60	4.25	4.97	-	-
50	-	1.52	1.83	2.19	2.61	3.10	3.66	-	-
60	-	-	-	1.55	1.84	2.19	2.61	-	-
68	-	-	-	-	-	1.62	1.94	-	-

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

Cooling capacity	3 289	W
Power input	1 525	W
Current consumption	5.87	A
Mass flow	77	kg/h
C.O.P.	2.16	

Pressure switch settings

Maximum HP switch setting	29.8	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	0.95	bar(g)

Sound power data

Sound power level	67	dB(A)
With acoustic hood	59	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
R22

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

Cooling capacity in W

16	2 994	3 620	4 340	5 170	-	-	-	-	-
20	2 865	3 488	4 203	5 026	5 972	-	-	-	-
30	2 557	3 158	3 846	4 636	5 543	6 582	7 769	-	-
40	-	2 834	3 473	4 209	5 056	6 030	7 145	-	-
50	-	-	-	3 752	4 518	5 405	6 427	-	-
60	-	-	-	-	3 934	4 713	5 622	-	-
68	-	-	-	-	-	-	4 920	-	-

Power input in W

16	773	785	803	829	-	-	-	-	-
20	858	870	886	907	935	-	-	-	-
30	1 082	1 098	1 113	1 129	1 147	1 168	1 194	-	-
40	-	1 355	1 377	1 395	1 410	1 424	1 437	-	-
50	-	-	-	1 713	1 733	1 746	1 755	-	-
60	-	-	-	-	2 125	2 145	2 156	-	-
68	-	-	-	-	-	-	2 543	-	-

Current consumption in A

16	2.97	3.02	3.09	3.19	-	-	-	-	-
20	3.30	3.35	3.41	3.49	3.60	-	-	-	-
30	4.16	4.22	4.28	4.35	4.41	4.50	4.59	-	-
40	-	5.22	5.30	5.37	5.43	5.48	5.53	-	-
50	-	-	-	6.59	6.67	6.72	6.75	-	-
60	-	-	-	-	8.18	8.26	8.30	-	-
68	-	-	-	-	-	-	9.79	-	-

Mass flow in kg/h

16	51	62	76	91	-	-	-	-	-
20	50	62	75	91	109	-	-	-	-
30	48	60	74	90	108	130	155	-	-
40	-	58	72	88	107	129	154	-	-
50	-	-	-	85	104	126	151	-	-
60	-	-	-	-	99	121	146	-	-
68	-	-	-	-	-	-	140	-	-

Coefficient of performance (C.O.P.)

16	3.87	4.61	5.40	6.24	-	-	-	-	-
20	3.34	4.01	4.74	5.54	6.39	-	-	-	-
30	2.36	2.88	3.46	4.11	4.83	5.64	6.51	-	-
40	-	2.09	2.52	3.02	3.59	4.24	4.97	-	-
50	-	-	-	2.19	2.61	3.10	3.66	-	-
60	-	-	-	-	1.85	2.20	2.61	-	-
68	-	-	-	-	-	-	1.94	-	-

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

Cooling capacity	3 283	W
Power input	1 525	W
Current consumption	5.87	A
Mass flow	71	kg/h
C.O.P.	2.15	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.8	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	0.95	bar(g)

Sound power data

Sound power level	67	dB(A)
With acoustic hood	59	dB(A)

Tolerance according EN12900

Performance data at 60 Hz, EN 12900 rating conditions, Superheat = 10 K
R22

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

Cooling capacity in W

16	3 502	4 250	5 126	6 133	-	-	-	-	-
20	3 404	4 151	5 022	6 022	7 153	-	-	-	-
30	3 072	3 802	4 647	5 611	6 700	7 916	9 259	-	-
40	2 692	3 383	4 180	5 088	6 113	7 258	8 525	-	-
50	-	2 988	3 715	4 544	5 484	6 537	7 708	-	-
60	-	-	-	4 073	4 905	5 846	6 899	-	-
68	-	-	-	-	-	5 376	6 321	-	-

Power input in W

16	845	880	926	982	-	-	-	-	-
20	951	984	1 024	1 072	1 130	-	-	-	-
30	1 216	1 252	1 288	1 324	1 362	1 404	1 450	-	-
40	1 485	1 537	1 581	1 618	1 650	1 678	1 703	-	-
50	-	1 844	1 909	1 961	1 999	2 026	2 043	-	-
60	-	-	-	2 357	2 416	2 455	2 477	-	-
68	-	-	-	-	-	2 859	2 894	-	-

Current consumption in A

16	2.65	2.76	2.90	3.08	-	-	-	-	-
20	2.98	3.09	3.21	3.36	3.55	-	-	-	-
30	3.82	3.93	4.04	4.15	4.27	4.40	4.55	-	-
40	4.66	4.82	4.96	5.08	5.18	5.26	5.34	-	-
50	-	5.78	5.99	6.15	6.27	6.36	6.41	-	-
60	-	-	-	7.40	7.58	7.70	7.77	-	-
68	-	-	-	-	-	8.97	9.08	-	-

Mass flow in kg/h

16	68	83	100	119	-	-	-	-	-
20	68	83	100	119	141	-	-	-	-
30	66	81	99	118	140	164	189	-	-
40	63	79	96	116	139	163	189	-	-
50	-	74	92	113	136	160	186	-	-
60	-	-	-	107	131	156	183	-	-
68	-	-	-	-	-	151	178	-	-

Coefficient of performance (C.O.P.)

16	4.15	4.83	5.54	6.24	-	-	-	-	-
20	3.58	4.22	4.90	5.62	6.33	-	-	-	-
30	2.53	3.04	3.61	4.24	4.92	5.64	6.39	-	-
40	1.81	2.20	2.64	3.14	3.70	4.33	5.01	-	-
50	-	1.62	1.95	2.32	2.74	3.23	3.77	-	-
60	-	-	-	1.73	2.03	2.38	2.79	-	-
68	-	-	-	-	-	1.88	2.18	-	-

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

Cooling capacity	3 941	W
Power input	1 740	W
Current consumption	5.46	A
Mass flow	95	kg/h
C.O.P.	2.26	

Pressure switch settings

Maximum HP switch setting	29.8	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	0.95	bar(g)

Sound power data

Sound power level	71	dB(A)
With acoustic hood	63	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
R22

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

Cooling capacity in W

16	3 417	4 159	5 032	6 043	-	-	-	-	-
20	3 330	4 071	4 940	5 941	7 084	-	-	-	-
30	3 028	3 753	4 594	5 558	6 652	7 884	9 259	-	-
40	-	3 364	4 157	5 063	6 088	7 240	8 525	-	-
50	-	-	-	4 547	5 482	6 534	7 708	-	-
60	-	-	-	-	4 928	5 857	6 899	-	-
68	-	-	-	-	-	-	6 321	-	-

Power input in W

16	845	880	926	982	-	-	-	-	-
20	951	984	1 024	1 072	1 130	-	-	-	-
30	1 216	1 252	1 288	1 324	1 362	1 404	1 450	-	-
40	-	1 537	1 581	1 618	1 650	1 678	1 703	-	-
50	-	-	-	1 961	1 999	2 026	2 043	-	-
60	-	-	-	-	2 416	2 455	2 477	-	-
68	-	-	-	-	-	-	2 894	-	-

Current consumption in A

16	2.65	2.76	2.90	3.08	-	-	-	-	-
20	2.98	3.09	3.21	3.36	3.55	-	-	-	-
30	3.82	3.93	4.04	4.15	4.27	4.40	4.55	-	-
40	-	4.82	4.96	5.08	5.18	5.26	5.34	-	-
50	-	-	-	6.15	6.27	6.36	6.41	-	-
60	-	-	-	-	7.58	7.70	7.77	-	-
68	-	-	-	-	-	-	9.08	-	-

Mass flow in kg/h

16	60	74	92	111	-	-	-	-	-
20	60	74	91	111	134	-	-	-	-
30	58	73	90	111	134	160	189	-	-
40	-	71	88	109	132	159	189	-	-
50	-	-	-	105	129	156	186	-	-
60	-	-	-	-	124	152	183	-	-
68	-	-	-	-	-	-	178	-	-

Coefficient of performance (C.O.P.)

16	4.04	4.72	5.44	6.15	-	-	-	-	-
20	3.50	4.14	4.82	5.54	6.27	-	-	-	-
30	2.49	3.00	3.57	4.20	4.88	5.62	6.39	-	-
40	-	2.19	2.63	3.13	3.69	4.32	5.01	-	-
50	-	-	-	2.32	2.74	3.22	3.77	-	-
60	-	-	-	-	2.04	2.39	2.79	-	-
68	-	-	-	-	-	-	2.18	-	-

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

Cooling capacity	3 934	W
Power input	1 740	W
Current consumption	5.46	A
Mass flow	87	kg/h
C.O.P.	2.26	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.8	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	0.95	bar(g)

Sound power data

Sound power level	71	dB(A)
With acoustic hood	63	dB(A)

Tolerance according EN12900

Performance data at 50 Hz, EN 12900 rating conditions, Superheat = 10 K
R134a

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

Cooling capacity in W

22	2 020	2 554	3 186	3 924	4 778	-	-	-	-
30	1 853	2 353	2 948	3 646	4 456	5 387	-	-	-
40	1 651	2 102	2 642	3 282	4 031	4 897	5 890	-	-
50	-	1 848	2 327	2 902	3 581	4 374	5 289	-	-
60	-	-	2 001	2 503	3 105	3 816	4 646	-	-
70	-	-	-	2 083	2 600	3 223	3 960	-	-
73	-	-	-	1 953	2 443	3 038	3 746	-	-

Power input in W

22	618	625	631	639	648	-	-	-	-
30	735	742	748	754	762	773	-	-	-
40	906	916	924	930	938	948	962	-	-
50	-	1 126	1 137	1 147	1 157	1 167	1 181	-	-
60	-	-	1 396	1 411	1 425	1 439	1 455	-	-
70	-	-	-	1 729	1 749	1 769	1 789	-	-
73	-	-	-	1 836	1 858	1 880	1 902	-	-

Current consumption in A

22	2.38	2.41	2.43	2.46	2.50	-	-	-	-
30	2.83	2.86	2.88	2.90	2.93	2.98	-	-	-
40	3.49	3.53	3.55	3.58	3.61	3.65	3.70	-	-
50	-	4.33	4.38	4.42	4.45	4.49	4.55	-	-
60	-	-	5.37	5.43	5.48	5.54	5.60	-	-
70	-	-	-	6.65	6.73	6.81	6.89	-	-
73	-	-	-	7.06	7.15	7.24	7.32	-	-

Mass flow in kg/h

22	43	54	66	80	96	-	-	-	-
30	43	53	65	79	95	113	-	-	-
40	42	52	64	78	94	112	133	-	-
50	-	52	63	77	93	111	132	-	-
60	-	-	62	75	91	109	130	-	-
70	-	-	-	73	89	107	127	-	-
73	-	-	-	73	88	106	126	-	-

Coefficient of performance (C.O.P.)

22	3.27	4.09	5.05	6.15	7.37	-	-	-	-
30	2.52	3.17	3.94	4.83	5.85	6.97	-	-	-
40	1.82	2.29	2.86	3.53	4.30	5.17	6.13	-	-
50	-	1.64	2.05	2.53	3.10	3.75	4.48	-	-
60	-	-	1.43	1.77	2.18	2.65	3.19	-	-
70	-	-	-	1.20	1.49	1.82	2.21	-	-
73	-	-	-	1.06	1.31	1.62	1.97	-	-

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

Cooling capacity	1 975	W
Power input	1 016	W
Current consumption	3.91	A
Mass flow	52	kg/h
C.O.P.	1.94	

Pressure switch settings

Maximum HP switch setting	23.6	bar(g)
Minimum LP switch setting	0.45	bar(g)
LP pump down setting	0.85	bar(g)

Sound power data

Sound power level	67	dB(A)
With acoustic hood	59	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
R134a

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

Cooling capacity in W

22	2 052	2 584	3 211	3 941	4 786	-	-	-	-
30	-	2 397	2 986	3 674	4 471	5 387	-	-	-
40	-	-	2 697	3 325	4 055	4 897	5 862	-	-
50	-	-	2 398	2 958	3 614	4 374	5 247	-	-
60	-	-	-	2 572	3 146	3 816	-	-	-
70	-	-	-	-	2 650	3 223	-	-	-
73	-	-	-	-	2 496	3 038	-	-	-

Power input in W

22	618	625	631	639	648	-	-	-	-
30	-	742	748	754	762	773	-	-	-
40	-	-	924	930	938	948	962	-	-
50	-	-	1 137	1 147	1 157	1 167	1 181	-	-
60	-	-	-	1 411	1 425	1 439	-	-	-
70	-	-	-	-	1 749	1 769	-	-	-
73	-	-	-	-	1 858	1 880	-	-	-

Current consumption in A

22	2.38	2.41	2.43	2.46	2.50	-	-	-	-
30	-	2.86	2.88	2.90	2.93	2.98	-	-	-
40	-	-	3.55	3.58	3.61	3.65	3.70	-	-
50	-	-	4.38	4.42	4.45	4.49	4.55	-	-
60	-	-	-	5.43	5.48	5.54	-	-	-
70	-	-	-	-	6.73	6.81	-	-	-
73	-	-	-	-	7.15	7.24	-	-	-

Mass flow in kg/h

22	39	49	62	76	93	-	-	-	-
30	-	49	61	76	93	113	-	-	-
40	-	-	60	75	92	112	136	-	-
50	-	-	59	74	91	111	135	-	-
60	-	-	-	72	89	109	-	-	-
70	-	-	-	-	87	107	-	-	-
73	-	-	-	-	86	106	-	-	-

Coefficient of performance (C.O.P.)

22	3.32	4.13	5.09	6.17	7.38	-	-	-	-
30	-	3.23	3.99	4.87	5.86	6.97	-	-	-
40	-	-	2.92	3.57	4.32	5.17	6.10	-	-
50	-	-	2.11	2.58	3.12	3.75	4.44	-	-
60	-	-	-	1.82	2.21	2.65	-	-	-
70	-	-	-	-	1.52	1.82	-	-	-
73	-	-	-	-	1.34	1.62	-	-	-

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

Cooling capacity	-	W
Power input	-	W
Current consumption	-	A
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	23.6	bar(g)
Minimum LP switch setting	0.45	bar(g)
LP pump down setting	0.85	bar(g)

Sound power data

Sound power level	67	dB(A)
With acoustic hood	59	dB(A)

Tolerance according EN12900

Performance data at 60 Hz, EN 12900 rating conditions, Superheat = 10 K
R134a

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

Cooling capacity in W

22	2 496	3 149	3 926	4 828	5 859	-	-	-	-
30	2 277	2 904	3 650	4 517	5 506	6 621	-	-	-
40	2 003	2 591	3 290	4 104	5 035	6 085	7 256	-	-
50	-	2 258	2 903	3 656	4 520	5 496	6 586	-	-
60	-	-	2 477	3 161	3 949	4 843	5 845	-	-
70	-	-	-	2 608	3 312	4 115	5 021	-	-
73	-	-	-	2 428	3 106	3 881	4 755	-	-

Power input in W

22	739	753	768	787	810	-	-	-	-
30	872	887	903	920	940	964	-	-	-
40	1 058	1 080	1 100	1 118	1 138	1 159	1 184	-	-
50	-	1 303	1 332	1 357	1 380	1 403	1 428	-	-
60	-	-	1 604	1 640	1 672	1 701	1 729	-	-
70	-	-	-	1 972	2 017	2 057	2 094	-	-
73	-	-	-	2 082	2 132	2 176	2 216	-	-

Current consumption in A

22	2.32	2.36	2.41	2.47	2.54	-	-	-	-
30	2.74	2.78	2.83	2.89	2.95	3.02	-	-	-
40	3.32	3.39	3.45	3.51	3.57	3.64	3.71	-	-
50	-	4.09	4.18	4.26	4.33	4.40	4.48	-	-
60	-	-	5.03	5.15	5.25	5.34	5.43	-	-
70	-	-	-	6.19	6.33	6.46	6.57	-	-
73	-	-	-	6.53	6.69	6.83	6.95	-	-

Mass flow in kg/h

22	54	67	81	98	117	-	-	-	-
30	53	66	81	98	117	138	-	-	-
40	51	65	80	98	118	139	163	-	-
50	-	63	79	97	117	140	164	-	-
60	-	-	77	95	116	139	164	-	-
70	-	-	-	91	113	136	162	-	-
73	-	-	-	90	111	135	161	-	-

Coefficient of performance (C.O.P.)

22	3.38	4.18	5.11	6.14	7.23	-	-	-	-
30	2.61	3.27	4.04	4.91	5.86	6.87	-	-	-
40	1.89	2.40	2.99	3.67	4.43	5.25	6.13	-	-
50	-	1.73	2.18	2.69	3.27	3.92	4.61	-	-
60	-	-	1.54	1.93	2.36	2.85	3.38	-	-
70	-	-	-	1.32	1.64	2.00	2.40	-	-
73	-	-	-	1.17	1.46	1.78	2.15	-	-

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

Cooling capacity	2 427	W
Power input	1 188	W
Current consumption	3.73	A
Mass flow	64	kg/h
C.O.P.	2.04	

Pressure switch settings

Maximum HP switch setting	23.6	bar(g)
Minimum LP switch setting	0.45	bar(g)
LP pump down setting	0.85	bar(g)

Sound power data

Sound power level	71	dB(A)
With acoustic hood	63	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
R134a

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

Cooling capacity in W

22	2 536	3 186	3 956	4 849	5 869	-	-	-	-
30	-	2 958	3 697	4 551	5 525	6 621	-	-	-
40	-	-	3 358	4 157	5 065	6 085	7 222	-	-
50	-	-	2 991	3 727	4 561	5 496	6 534	-	-
60	-	-	-	3 249	4 002	4 843	-	-	-
70	-	-	-	-	3 376	4 115	-	-	-
73	-	-	-	-	3 173	3 881	-	-	-

Power input in W

22	739	753	768	787	810	-	-	-	-
30	-	887	903	920	940	964	-	-	-
40	-	-	1 100	1 118	1 138	1 159	1 184	-	-
50	-	-	1 332	1 357	1 380	1 403	1 428	-	-
60	-	-	-	1 640	1 672	1 701	-	-	-
70	-	-	-	-	2 017	2 057	-	-	-
73	-	-	-	-	2 132	2 176	-	-	-

Current consumption in A

22	2.32	2.36	2.41	2.47	2.54	-	-	-	-
30	-	2.78	2.83	2.89	2.95	3.02	-	-	-
40	-	-	3.45	3.51	3.57	3.64	3.71	-	-
50	-	-	4.18	4.26	4.33	4.40	4.48	-	-
60	-	-	-	5.15	5.25	5.34	-	-	-
70	-	-	-	-	6.33	6.46	-	-	-
73	-	-	-	-	6.69	6.83	-	-	-

Mass flow in kg/h

22	48	61	76	94	114	-	-	-	-
30	-	60	76	94	115	138	-	-	-
40	-	-	75	94	115	139	167	-	-
50	-	-	74	93	115	140	168	-	-
60	-	-	-	91	113	139	-	-	-
70	-	-	-	-	110	136	-	-	-
73	-	-	-	-	109	135	-	-	-

Coefficient of performance (C.O.P.)

22	3.43	4.23	5.15	6.16	7.25	-	-	-	-
30	-	3.33	4.09	4.95	5.88	6.87	-	-	-
40	-	-	3.05	3.72	4.45	5.25	6.10	-	-
50	-	-	2.25	2.75	3.30	3.92	4.58	-	-
60	-	-	-	1.98	2.39	2.85	-	-	-
70	-	-	-	-	1.67	2.00	-	-	-
73	-	-	-	-	1.49	1.78	-	-	-

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

Cooling capacity	-	W
Power input	-	W
Current consumption	-	A
Mass flow	-	kg/h
C.O.P.	-	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	23.6	bar(g)
Minimum LP switch setting	0.45	bar(g)
LP pump down setting	0.85	bar(g)

Sound power data

Sound power level	71	dB(A)
With acoustic hood	63	dB(A)

Tolerance according EN12900

Performance data at 50 Hz, EN 12900 rating conditions, Suction temp. = 20 °C
R404A

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

Cooling capacity in W

10	2 340	2 903	3 593	4 425	5 415	-	-	-	-
20	2 090	2 625	3 258	4 006	4 885	5 911	7 100	-	-
30	1 767	2 278	2 860	3 529	4 301	5 194	6 222	7 402	8 749
40	-	1 851	2 387	2 982	3 654	4 417	5 289	6 286	7 424
50	-	-	1 829	2 356	2 931	3 571	4 292	5 111	6 044
60	-	-	-	-	2 122	2 643	3 219	3 865	4 599

Power input in W

10	783	782	765	736	696	-	-	-	-
20	977	983	976	958	933	904	876	-	-
30	1 248	1 250	1 240	1 222	1 199	1 176	1 155	1 141	1 136
40	-	1 625	1 601	1 572	1 540	1 510	1 485	1 469	1 465
50	-	-	2 103	2 050	1 997	1 949	1 908	1 879	1 864
60	-	-	-	-	2 615	2 537	2 468	2 414	2 377

Current consumption in A

10	3.23	3.23	3.16	3.03	2.87	-	-	-	-
20	4.03	4.06	4.02	3.95	3.85	3.73	3.61	-	-
30	5.15	5.15	5.11	5.04	4.95	4.85	4.76	4.70	4.68
40	-	6.70	6.60	6.48	6.35	6.23	6.12	6.06	6.04
50	-	-	8.67	8.45	8.24	8.04	7.87	7.75	7.69
60	-	-	-	-	10.78	10.46	10.18	9.95	9.80

Mass flow in kg/h

10	45	58	74	91	113	-	-	-	-
20	44	57	72	90	110	135	163	-	-
30	42	55	70	87	107	131	159	191	229
40	-	51	66	83	102	126	153	184	221
50	-	-	58	75	95	117	144	175	211
60	-	-	-	-	83	105	131	161	197

Coefficient of performance (C.O.P.)

10	2.99	3.71	4.69	6.01	7.78	-	-	-	-
20	2.14	2.67	3.34	4.18	5.24	6.54	8.11	-	-
30	1.42	1.82	2.31	2.89	3.59	4.42	5.39	6.49	7.70
40	-	1.14	1.49	1.90	2.37	2.93	3.56	4.28	5.07
50	-	-	0.87	1.15	1.47	1.83	2.25	2.72	3.24
60	-	-	-	-	0.81	1.04	1.30	1.60	1.93

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

Cooling capacity	3 302	W
Power input	1 751	W
Current consumption	7.22	A
Mass flow	99	kg/h
C.O.P.	1.89	

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

Sound power level	67	dB(A)
With acoustic hood	59	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
R404A

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

Cooling capacity in W

10	2 248	2 810	3 501	4 339	5 342	-	-	-	-
20	1 966	2 493	3 124	3 876	4 767	5 814	7 032	-	-
30	1 616	2 111	2 686	3 356	4 140	5 055	6 119	7 346	8 749
40	1 197	1 661	2 180	2 771	3 451	4 239	5 152	6 209	7 424
50	-	-	1 605	2 117	2 695	3 358	4 124	5 013	6 044
60	-	-	-	-	1 867	2 405	3 024	3 748	4 599

Power input in W

10	783	782	765	736	696	-	-	-	-
20	977	983	976	958	933	904	876	-	-
30	1 248	1 250	1 240	1 222	1 199	1 176	1 155	1 141	1 136
40	1 640	1 625	1 601	1 572	1 540	1 510	1 485	1 469	1 465
50	-	-	2 103	2 050	1 997	1 949	1 908	1 879	1 864
60	-	-	-	-	2 615	2 537	2 468	2 414	2 377

Current consumption in A

10	3.23	3.23	3.16	3.03	2.87	-	-	-	-
20	4.03	4.06	4.02	3.95	3.85	3.73	3.61	-	-
30	5.15	5.15	5.11	5.04	4.95	4.85	4.76	4.70	4.68
40	6.76	6.70	6.60	6.48	6.35	6.23	6.12	6.06	6.04
50	-	-	8.67	8.45	8.24	8.04	7.87	7.75	7.69
60	-	-	-	-	10.78	10.46	10.18	9.95	9.80

Mass flow in kg/h

10	53	68	84	103	124	-	-	-	-
20	52	67	83	101	122	145	172	-	-
30	50	64	80	98	119	142	168	197	229
40	44	59	76	93	113	136	161	190	221
50	-	-	67	85	105	127	152	180	211
60	-	-	-	-	92	114	139	166	197

Coefficient of performance (C.O.P.)

10	2.87	3.59	4.57	5.90	7.67	-	-	-	-
20	2.01	2.54	3.20	4.05	5.11	6.43	8.03	-	-
30	1.29	1.69	2.17	2.75	3.45	4.30	5.30	6.44	7.70
40	0.73	1.02	1.36	1.76	2.24	2.81	3.47	4.23	5.07
50	-	-	0.76	1.03	1.35	1.72	2.16	2.67	3.24
60	-	-	-	-	0.71	0.95	1.23	1.55	1.93

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

Cooling capacity	3 082	W
Power input	1 751	W
Current consumption	7.22	A
Mass flow	109	kg/h
C.O.P.	1.76	

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

Sound power level	67	dB(A)
With acoustic hood	59	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
R404A

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

Cooling capacity in W

10	2 856	3 532	4 349	5 325	6 478	-	-	-	-
20	2 514	3 159	3 917	4 805	5 843	7 049	8 441	-	-
30	2 134	2 750	3 450	4 253	5 177	6 241	7 464	8 863	10 458
40	-	2 283	2 926	3 644	4 456	5 380	6 434	7 638	9 010
50	-	-	2 324	2 959	3 659	4 444	5 331	6 341	7 491
60	-	-	-	-	2 764	3 411	4 133	4 950	5 881

Power input in W

10	967	947	930	916	902	-	-	-	-
20	1 209	1 195	1 184	1 172	1 160	1 145	1 126	-	-
30	1 502	1 497	1 492	1 486	1 477	1 464	1 445	1 418	1 382
40	-	1 868	1 872	1 872	1 868	1 859	1 841	1 814	1 777
50	-	-	2 339	2 348	2 351	2 346	2 331	2 306	2 268
60	-	-	-	-	2 940	2 942	2 932	2 910	2 874

Current consumption in A

10	3.03	2.97	2.92	2.87	2.83	-	-	-	-
20	3.79	3.75	3.71	3.68	3.64	3.59	3.53	-	-
30	4.71	4.70	4.68	4.66	4.63	4.59	4.53	4.45	4.34
40	-	5.86	5.87	5.87	5.86	5.83	5.78	5.69	5.57
50	-	-	7.34	7.37	7.38	7.36	7.32	7.24	7.12
60	-	-	-	-	9.23	9.23	9.20	9.13	9.02

Mass flow in kg/h

10	52	70	88	110	135	-	-	-	-
20	51	69	87	108	132	161	195	-	-
30	49	67	85	105	129	157	190	230	277
40	-	62	81	102	125	152	185	224	270
50	-	-	74	95	119	146	178	217	262
60	-	-	-	-	109	137	169	207	252

Coefficient of performance (C.O.P.)

10	2.95	3.73	4.68	5.82	7.18	-	-	-	-
20	2.08	2.64	3.31	4.10	5.04	6.16	7.50	-	-
30	1.42	1.84	2.31	2.86	3.50	4.26	5.17	6.25	7.57
40	-	1.22	1.56	1.95	2.38	2.89	3.50	4.21	5.07
50	-	-	0.99	1.26	1.56	1.89	2.29	2.75	3.30
60	-	-	-	-	0.94	1.16	1.41	1.70	2.05

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

Cooling capacity	4 068	W
Power input	2 097	W
Current consumption	6.58	A
Mass flow	122	kg/h
C.O.P.	1.94	

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

Sound power level	71	dB(A)
With acoustic hood	63	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
R404A

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

Cooling capacity in W

10	2 744	3 419	4 238	5 222	6 391	-	-	-	-
20	2 364	3 000	3 755	4 649	5 702	6 934	8 361	-	-
30	1 952	2 549	3 240	4 044	4 982	6 074	7 340	8 797	10 458
40	1 493	2 048	2 672	3 386	4 209	5 163	6 268	7 544	9 010
50	-	-	2 038	2 659	3 365	4 179	5 123	6 219	7 491
60	-	-	-	-	2 432	3 103	3 884	4 800	5 881

Power input in W

10	967	947	930	916	902	-	-	-	-
20	1 209	1 195	1 184	1 172	1 160	1 145	1 126	-	-
30	1 502	1 497	1 492	1 486	1 477	1 464	1 445	1 418	1 382
40	1 863	1 868	1 872	1 872	1 868	1 859	1 841	1 814	1 777
50	-	-	2 339	2 348	2 351	2 346	2 331	2 306	2 268
60	-	-	-	-	2 940	2 942	2 932	2 910	2 874

Current consumption in A

10	3.03	2.97	2.92	2.87	2.83	-	-	-	-
20	3.79	3.75	3.71	3.68	3.64	3.59	3.53	-	-
30	4.71	4.70	4.68	4.66	4.63	4.59	4.53	4.45	4.34
40	5.85	5.86	5.87	5.87	5.86	5.83	5.78	5.69	5.57
50	-	-	7.34	7.37	7.38	7.36	7.32	7.24	7.12
60	-	-	-	-	9.23	9.23	9.20	9.13	9.02

Mass flow in kg/h

10	62	81	101	123	149	-	-	-	-
20	61	80	100	121	146	174	206	-	-
30	58	78	98	119	142	170	201	237	277
40	52	73	93	114	138	165	195	230	270
50	-	-	85	107	131	158	188	223	262
60	-	-	-	-	121	148	179	213	252

Coefficient of performance (C.O.P.)

10	2.84	3.61	4.56	5.70	7.09	-	-	-	-
20	1.96	2.51	3.17	3.97	4.91	6.05	7.43	-	-
30	1.30	1.70	2.17	2.72	3.37	4.15	5.08	6.20	7.57
40	0.80	1.10	1.43	1.81	2.25	2.78	3.40	4.16	5.07
50	-	-	0.87	1.13	1.43	1.78	2.20	2.70	3.30
60	-	-	-	-	0.83	1.05	1.32	1.65	2.05

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

Cooling capacity	3 797	W
Power input	2 097	W
Current consumption	6.58	A
Mass flow	135	kg/h
C.O.P.	1.81	

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

Sound power level	71	dB(A)
With acoustic hood	63	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, Superheat = 10 K
R407C

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

Cooling capacity in W

30	-	1 921	2 414	2 997	3 673	4 450	5 333	6 327	7 440
35	-	1 781	2 263	2 830	3 486	4 238	5 091	6 052	7 126
40	-	1 645	2 112	2 658	3 289	4 012	4 831	5 754	6 785
45	-	-	1 968	2 490	3 092	3 781	4 562	5 442	6 425
50	-	-	-	2 335	2 903	3 554	4 292	5 124	6 056
55	-	-	-	-	2 731	3 339	4 031	4 811	5 686
60	-	-	-	-	-	3 145	3 785	4 508	5 322
65	-	-	-	-	-	-	3 561	4 223	4 971

Power input in W

30	-	1 000	1 029	1 058	1 086	1 115	1 147	1 181	1 218
35	-	1 109	1 146	1 178	1 208	1 236	1 262	1 289	1 316
40	-	1 217	1 264	1 304	1 337	1 366	1 391	1 412	1 432
45	-	-	1 383	1 433	1 473	1 506	1 532	1 552	1 566
50	-	-	-	1 565	1 616	1 656	1 685	1 706	1 718
55	-	-	-	-	1 764	1 814	1 850	1 875	1 888
60	-	-	-	-	-	1 980	2 026	2 058	2 075
65	-	-	-	-	-	-	2 214	2 255	2 279

Current consumption in A

30	-	3.56	3.67	3.79	3.90	4.01	4.13	4.26	4.39
35	-	3.96	4.10	4.23	4.34	4.45	4.56	4.66	4.76
40	-	4.37	4.54	4.69	4.82	4.93	5.03	5.11	5.19
45	-	-	5.00	5.18	5.33	5.45	5.55	5.62	5.68
50	-	-	-	5.68	5.86	6.00	6.10	6.18	6.22
55	-	-	-	-	6.41	6.57	6.70	6.78	6.82
60	-	-	-	-	-	7.17	7.31	7.41	7.46
65	-	-	-	-	-	-	7.96	8.07	8.13

Mass flow in kg/h

30	-	37	47	59	73	89	108	129	153
35	-	36	46	58	72	88	107	129	153
40	-	34	45	57	71	88	107	128	152
45	-	-	43	55	70	86	106	127	151
50	-	-	-	53	68	85	104	126	150
55	-	-	-	-	66	83	103	124	149
60	-	-	-	-	-	81	100	123	147
65	-	-	-	-	-	-	98	120	145

Coefficient of performance (C.O.P.)

30	-	1.92	2.35	2.83	3.38	3.99	4.65	5.36	6.11
35	-	1.61	1.98	2.40	2.89	3.43	4.03	4.70	5.42
40	-	1.35	1.67	2.04	2.46	2.94	3.47	4.07	4.74
45	-	-	1.42	1.74	2.10	2.51	2.98	3.51	4.10
50	-	-	-	1.49	1.80	2.15	2.55	3.00	3.52
55	-	-	-	-	1.55	1.84	2.18	2.57	3.01
60	-	-	-	-	-	1.59	1.87	2.19	2.56
65	-	-	-	-	-	-	1.61	1.87	2.18

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

Cooling capacity	3 092	W
Power input	1 473	W
Current consumption	5.33	A
Mass flow	70	kg/h
C.O.P.	2.10	

Pressure switch settings

Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Performance data at 50 Hz,

R407C

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

Cooling capacity in W

30	-	-	-	-	-	-	-	-	-
35	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
65	-	-	-	-	-	-	-	-	-

Power input in W

30	-	-	-	-	-	-	-	-	-
35	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
65	-	-	-	-	-	-	-	-	-

Current consumption in A

30	-	-	-	-	-	-	-	-	-
35	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
65	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

30	-	-	-	-	-	-	-	-	-
35	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
65	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

30	-	-	-	-	-	-	-	-	-
35	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
65	-	-	-	-	-	-	-	-	-

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

Cooling capacity	-	W
Power input	-	W
Current consumption	-	A
Mass flow	-	kg/h
C.O.P.	-	

Pressure switch settings

Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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

R407C

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

Cooling capacity in W

30	-	2 305	2 897	3 596	4 408	5 340	6 399	7 593	8 928
35	-	2 137	2 716	3 396	4 183	5 085	6 109	7 262	8 552
40	-	1 974	2 534	3 189	3 947	4 814	5 798	6 905	8 142
45	-	-	2 362	2 988	3 710	4 537	5 474	6 530	7 710
50	-	-	-	2 802	3 484	4 265	5 151	6 149	7 267
55	-	-	-	-	3 278	4 007	4 837	5 773	6 823
60	-	-	-	-	-	3 774	4 541	5 410	6 386
65	-	-	-	-	-	-	4 273	5 068	5 965

Power input in W

30	-	1 183	1 220	1 255	1 290	1 326	1 364	1 405	1 451
35	-	1 307	1 354	1 396	1 433	1 468	1 501	1 533	1 567
40	-	1 431	1 491	1 542	1 585	1 622	1 653	1 681	1 706
45	-	-	1 630	1 694	1 746	1 788	1 821	1 847	1 866
50	-	-	-	1 850	1 915	1 965	2 003	2 030	2 047
55	-	-	-	-	2 090	2 153	2 199	2 230	2 248
60	-	-	-	-	-	2 350	2 408	2 447	2 468
65	-	-	-	-	-	-	2 629	2 679	2 708

Current consumption in A

30	-	3.71	3.83	3.94	4.05	4.16	4.28	4.41	4.55
35	-	4.10	4.25	4.38	4.50	4.61	4.71	4.81	4.92
40	-	4.49	4.68	4.84	4.97	5.09	5.19	5.27	5.35
45	-	-	5.12	5.32	5.48	5.61	5.71	5.79	5.85
50	-	-	-	5.81	6.01	6.17	6.29	6.37	6.42
55	-	-	-	-	6.56	6.75	6.90	7.00	7.05
60	-	-	-	-	-	7.37	7.55	7.68	7.74
65	-	-	-	-	-	-	8.25	8.40	8.50

Mass flow in kg/h

30	-	44	56	71	87	107	129	155	184
35	-	43	55	70	87	106	129	154	183
40	-	41	54	68	85	105	128	154	183
45	-	-	52	66	84	104	127	153	182
50	-	-	-	64	82	102	125	151	181
55	-	-	-	-	79	100	123	149	179
60	-	-	-	-	-	97	120	147	177
65	-	-	-	-	-	-	117	144	174

Coefficient of performance (C.O.P.)

30	-	1.95	2.37	2.86	3.42	4.03	4.69	5.40	6.15
35	-	1.63	2.01	2.43	2.92	3.46	4.07	4.74	5.46
40	-	1.38	1.70	2.07	2.49	2.97	3.51	4.11	4.77
45	-	-	1.45	1.76	2.12	2.54	3.01	3.54	4.13
50	-	-	-	1.51	1.82	2.17	2.57	3.03	3.55
55	-	-	-	-	1.57	1.86	2.20	2.59	3.04
60	-	-	-	-	-	1.61	1.89	2.21	2.59
65	-	-	-	-	-	-	1.63	1.89	2.20

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

Cooling capacity	3 710	W
Power input	1 746	W
Current consumption	5.48	A
Mass flow	84	kg/h
C.O.P.	2.12	

Pressure switch settings

Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Performance data at 60 Hz,

R407C

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

Cooling capacity in W

30	-	-	-	-	-	-	-	-	-
35	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
65	-	-	-	-	-	-	-	-	-

Power input in W

30	-	-	-	-	-	-	-	-	-
35	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
65	-	-	-	-	-	-	-	-	-

Current consumption in A

30	-	-	-	-	-	-	-	-	-
35	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
65	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

30	-	-	-	-	-	-	-	-	-
35	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
65	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

30	-	-	-	-	-	-	-	-	-
35	-	-	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-	-	-
45	-	-	-	-	-	-	-	-	-
50	-	-	-	-	-	-	-	-	-
55	-	-	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-	-	-
65	-	-	-	-	-	-	-	-	-

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

Cooling capacity	-	W
Power input	-	W
Current consumption	-	A
Mass flow	-	kg/h
C.O.P.	-	

Pressure switch settings

Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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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	1 965	2 470	3 075	3 797	4 650	-	-	-	-
20	1 766	2 255	2 834	3 519	4 324	5 264	6 355	-	-
30	-	-	2 544	3 181	3 926	4 796	5 805	6 969	8 303
40	-	-	-	2 792	3 467	4 255	5 171	6 232	7 450
50	-	-	-	-	2 956	3 651	4 463	5 408	6 501
60	-	-	-	-	-	-	3 691	4 510	5 466

Power input in W

10	775	785	796	806	811	-	-	-	-
20	955	956	965	980	996	1 009	1 018	-	-
30	-	-	1 188	1 194	1 208	1 227	1 247	1 264	1 275
40	-	-	-	1 496	1 497	1 508	1 527	1 549	1 573
50	-	-	-	-	1 908	1 900	1 905	1 921	1 944
60	-	-	-	-	-	-	2 429	2 426	2 436

Current consumption in A

10	5.06	5.06	5.05	5.03	5.02	-	-	-	-
20	5.27	5.29	5.31	5.33	5.35	5.36	5.37	-	-
30	-	-	5.69	5.72	5.75	5.79	5.82	5.85	5.87
40	-	-	-	6.33	6.36	6.39	6.43	6.46	6.49
50	-	-	-	-	7.30	7.31	7.33	7.35	7.38
60	-	-	-	-	-	-	8.67	8.65	8.65

Mass flow in kg/h

10	32	41	51	63	77	-	-	-	-
20	31	40	50	62	77	94	115	-	-
30	-	-	49	61	76	93	114	139	167
40	-	-	-	59	73	91	112	136	165
50	-	-	-	-	70	87	108	132	161
60	-	-	-	-	-	-	102	126	155

Coefficient of performance (C.O.P.)

10	2.54	3.15	3.86	4.71	5.73	-	-	-	-
20	1.85	2.36	2.94	3.59	4.34	5.22	6.24	-	-
30	-	-	2.14	2.66	3.25	3.91	4.66	5.51	6.51
40	-	-	-	1.87	2.32	2.82	3.39	4.02	4.74
50	-	-	-	-	1.55	1.92	2.34	2.82	3.34
60	-	-	-	-	-	-	1.52	1.86	2.24

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

Cooling capacity	3 217	W
Power input	1 684	W
Current consumption	6.78	A
Mass flow	72	kg/h
C.O.P.	1.91	

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : 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	1 974	2 482	3 093	3 821	4 680	-	-	-	-
20	1 750	2 241	2 823	3 512	4 323	5 270	6 367	-	-
30	1 503	1 962	2 504	3 142	3 893	4 772	5 792	6 966	8 303
40	-	-	2 147	2 723	3 403	4 200	5 132	6 211	7 450
50	-	-	-	2 267	2 862	3 567	4 398	5 372	6 501
60	-	-	-	-	2 283	2 883	3 602	4 457	5 466

Power input in W

10	775	785	796	806	811	-	-	-	-
20	955	956	965	980	996	1 009	1 018	-	-
30	1 211	1 192	1 188	1 194	1 208	1 227	1 247	1 264	1 275
40	-	-	1 510	1 496	1 497	1 508	1 527	1 549	1 573
50	-	-	-	1 933	1 908	1 900	1 905	1 921	1 944
60	-	-	-	-	2 488	2 448	2 429	2 426	2 436

Current consumption in A

10	5.06	5.06	5.05	5.03	5.02	-	-	-	-
20	5.27	5.29	5.31	5.33	5.35	5.36	5.37	-	-
30	5.63	5.66	5.69	5.72	5.75	5.79	5.82	5.85	5.87
40	-	-	6.30	6.33	6.36	6.39	6.43	6.46	6.49
50	-	-	-	7.29	7.30	7.31	7.33	7.35	7.38
60	-	-	-	-	8.71	8.68	8.67	8.65	8.65

Mass flow in kg/h

10	38	47	58	70	85	-	-	-	-
20	37	46	57	70	85	102	121	-	-
30	35	44	55	68	83	100	120	142	167
40	-	-	53	66	80	98	117	140	165
50	-	-	-	61	76	93	113	136	161
60	-	-	-	-	71	88	107	130	155

Coefficient of performance (C.O.P.)

10	2.55	3.16	3.88	4.74	5.77	-	-	-	-
20	1.83	2.34	2.92	3.58	4.34	5.22	6.26	-	-
30	1.24	1.65	2.11	2.63	3.22	3.89	4.65	5.51	6.51
40	-	-	1.42	1.82	2.27	2.79	3.36	4.01	4.74
50	-	-	-	1.17	1.50	1.88	2.31	2.80	3.34
60	-	-	-	-	0.92	1.18	1.48	1.84	2.24

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

Cooling capacity	3 138	W
Power input	1 684	W
Current consumption	6.78	A
Mass flow	79	kg/h
C.O.P.	1.86	

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	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

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

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	2 255	2 893	3 665	4 588	5 682	-	-	-	-
20	1 997	2 597	3 311	4 159	5 158	6 328	7 686	-	-
30	-	-	2 961	3 730	4 632	5 686	6 910	8 324	9 945
40	-	-	-	3 302	4 104	5 039	6 126	7 384	8 830
50	-	-	-	-	3 573	4 387	5 334	6 433	7 703
60	-	-	-	-	-	-	4 534	5 472	6 561

Power input in W

10	836	867	898	922	935	-	-	-	-
20	1 062	1 088	1 120	1 153	1 181	1 198	1 201	-	-
30	-	-	1 378	1 407	1 438	1 466	1 485	1 490	1 476
40	-	-	-	1 736	1 759	1 785	1 809	1 825	1 829
50	-	-	-	-	2 192	2 205	2 222	2 239	2 250
60	-	-	-	-	-	-	2 776	2 781	2 787

Current consumption in A

10	4.58	4.64	4.70	4.74	4.75	-	-	-	-
20	5.00	5.03	5.08	5.15	5.21	5.24	5.22	-	-
30	-	-	5.54	5.59	5.66	5.72	5.77	5.79	5.75
40	-	-	-	6.25	6.28	6.34	6.42	6.48	6.51
50	-	-	-	-	7.27	7.29	7.34	7.41	7.48
60	-	-	-	-	-	-	8.73	8.76	8.83

Mass flow in kg/h

10	37	48	60	76	94	-	-	-	-
20	35	46	59	74	92	114	139	-	-
30	-	-	57	72	89	111	136	165	200
40	-	-	-	69	87	108	132	161	195
50	-	-	-	-	84	105	129	157	191
60	-	-	-	-	-	-	125	153	186

Coefficient of performance (C.O.P.)

10	2.70	3.34	4.08	4.97	6.08	-	-	-	-
20	1.88	2.39	2.96	3.61	4.37	5.28	6.40	-	-
30	-	-	2.15	2.65	3.22	3.88	4.65	5.59	6.74
40	-	-	-	1.90	2.33	2.82	3.39	4.05	4.83
50	-	-	-	-	1.63	1.99	2.40	2.87	3.42
60	-	-	-	-	-	-	1.63	1.97	2.35

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

Cooling capacity	3 839	W
Power input	1 958	W
Current consumption	6.72	A
Mass flow	85	kg/h
C.O.P.	1.96	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

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

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	2 264	2 907	3 685	4 616	5 718	-	-	-	-
20	1 980	2 580	3 297	4 150	5 157	6 335	7 701	-	-
30	1 706	2 260	2 914	3 685	4 594	5 657	6 894	8 319	9 945
40	-	-	2 533	3 221	4 028	4 975	6 080	7 360	8 830
50	-	-	-	2 756	3 460	4 287	5 257	6 390	7 703
60	-	-	-	-	2 886	3 591	4 424	5 407	6 561

Power input in W

10	836	867	898	922	935	-	-	-	-
20	1 062	1 088	1 120	1 153	1 181	1 198	1 201	-	-
30	1 347	1 357	1 378	1 407	1 438	1 466	1 485	1 490	1 476
40	-	-	1 722	1 736	1 759	1 785	1 809	1 825	1 829
50	-	-	-	2 190	2 192	2 205	2 222	2 239	2 250
60	-	-	-	-	2 789	2 777	2 776	2 781	2 787

Current consumption in A

10	4.58	4.64	4.70	4.74	4.75	-	-	-	-
20	5.00	5.03	5.08	5.15	5.21	5.24	5.22	-	-
30	5.57	5.53	5.54	5.59	5.66	5.72	5.77	5.79	5.75
40	-	-	6.26	6.25	6.28	6.34	6.42	6.48	6.51
50	-	-	-	7.30	7.27	7.29	7.34	7.41	7.48
60	-	-	-	-	8.80	8.73	8.73	8.76	8.83

Mass flow in kg/h

10	43	55	69	85	104	-	-	-	-
20	41	53	67	83	101	122	147	-	-
30	39	51	65	80	98	119	143	170	200
40	-	-	62	78	95	116	139	166	195
50	-	-	-	75	92	112	135	161	191
60	-	-	-	-	89	109	132	157	186

Coefficient of performance (C.O.P.)

10	2.71	3.35	4.10	5.01	6.11	-	-	-	-
20	1.86	2.37	2.94	3.60	4.37	5.29	6.41	-	-
30	1.27	1.67	2.11	2.62	3.19	3.86	4.64	5.58	6.74
40	-	-	1.47	1.85	2.29	2.79	3.36	4.03	4.83
50	-	-	-	1.26	1.58	1.94	2.37	2.85	3.42
60	-	-	-	-	1.03	1.29	1.59	1.94	2.35

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

Cooling capacity	3 744	W
Power input	1 958	W
Current consumption	6.72	A
Mass flow	94	kg/h
C.O.P.	1.91	

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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	1 965	2 470	3 075	3 797	4 650	-	-	-	-
20	1 766	2 255	2 834	3 519	4 324	5 264	6 355	-	-
30	-	-	2 544	3 181	3 926	4 796	5 805	6 969	8 303
40	-	-	-	2 792	3 467	4 255	5 171	6 232	7 450
50	-	-	-	-	2 956	3 651	4 463	5 408	6 501
60	-	-	-	-	-	-	3 691	4 510	5 466

Power input in W

10	775	785	796	806	811	-	-	-	-
20	955	956	965	980	996	1 009	1 018	-	-
30	-	-	1 188	1 194	1 208	1 227	1 247	1 264	1 275
40	-	-	-	1 496	1 497	1 508	1 527	1 549	1 573
50	-	-	-	-	1 908	1 900	1 905	1 921	1 944
60	-	-	-	-	-	-	2 429	2 426	2 436

Current consumption in A

10	5.06	5.06	5.05	5.03	5.02	-	-	-	-
20	5.27	5.29	5.31	5.33	5.35	5.36	5.37	-	-
30	-	-	5.69	5.72	5.75	5.79	5.82	5.85	5.87
40	-	-	-	6.33	6.36	6.39	6.43	6.46	6.49
50	-	-	-	-	7.30	7.31	7.33	7.35	7.38
60	-	-	-	-	-	-	8.67	8.65	8.65

Mass flow in kg/h

10	32	41	51	63	77	-	-	-	-
20	31	40	50	62	77	94	115	-	-
30	-	-	49	61	76	93	114	139	167
40	-	-	-	59	73	91	112	136	165
50	-	-	-	-	70	87	108	132	161
60	-	-	-	-	-	-	102	126	155

Coefficient of performance (C.O.P.)

10	2.54	3.15	3.86	4.71	5.73	-	-	-	-
20	1.85	2.36	2.94	3.59	4.34	5.22	6.24	-	-
30	-	-	2.14	2.66	3.25	3.91	4.66	5.51	6.51
40	-	-	-	1.87	2.32	2.82	3.39	4.02	4.74
50	-	-	-	-	1.55	1.92	2.34	2.82	3.34
60	-	-	-	-	-	-	1.52	1.86	2.24

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

Cooling capacity	3 217	W
Power input	1 684	W
Current consumption	6.78	A
Mass flow	72	kg/h
C.O.P.	1.91	

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : 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	1 969	2 477	3 088	3 816	4 676	-	-	-	-
20	1 746	2 236	2 817	3 507	4 318	5 266	6 364	-	-
30	1 498	1 957	2 498	3 137	3 888	4 767	5 788	6 963	8 303
40	-	-	2 142	2 718	3 397	4 195	5 128	6 209	7 450
50	-	-	-	2 261	2 856	3 562	4 394	5 369	6 501
60	-	-	-	-	2 278	2 878	3 598	4 454	5 466

Power input in W

10	775	785	796	806	811	-	-	-	-
20	955	956	965	980	996	1 009	1 018	-	-
30	1 211	1 192	1 188	1 194	1 208	1 227	1 247	1 264	1 275
40	-	-	1 510	1 496	1 497	1 508	1 527	1 549	1 573
50	-	-	-	1 933	1 908	1 900	1 905	1 921	1 944
60	-	-	-	-	2 488	2 448	2 429	2 426	2 436

Current consumption in A

10	5.06	5.06	5.05	5.03	5.02	-	-	-	-
20	5.27	5.29	5.31	5.33	5.35	5.36	5.37	-	-
30	5.63	5.66	5.69	5.72	5.75	5.79	5.82	5.85	5.87
40	-	-	6.30	6.33	6.36	6.39	6.43	6.46	6.49
50	-	-	-	7.29	7.30	7.31	7.33	7.35	7.38
60	-	-	-	-	8.71	8.68	8.67	8.65	8.65

Mass flow in kg/h

10	38	47	58	70	85	-	-	-	-
20	37	46	57	70	85	102	121	-	-
30	35	44	55	68	83	100	120	142	167
40	-	-	53	66	80	98	117	140	165
50	-	-	-	61	76	93	113	136	161
60	-	-	-	-	71	88	107	130	155

Coefficient of performance (C.O.P.)

10	2.54	3.16	3.88	4.73	5.76	-	-	-	-
20	1.83	2.34	2.92	3.58	4.34	5.22	6.25	-	-
30	1.24	1.64	2.10	2.63	3.22	3.89	4.64	5.51	6.51
40	-	-	1.42	1.82	2.27	2.78	3.36	4.01	4.74
50	-	-	-	1.17	1.50	1.88	2.31	2.79	3.34
60	-	-	-	-	0.92	1.18	1.48	1.84	2.24

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

Cooling capacity	3 132	W
Power input	1 684	W
Current consumption	6.78	A
Mass flow	79	kg/h
C.O.P.	1.86	

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	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

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

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	2 255	2 893	3 665	4 588	5 682	-	-	-	-
20	1 997	2 597	3 311	4 159	5 158	6 328	7 686	-	-
30	-	-	2 961	3 730	4 632	5 686	6 910	8 324	9 945
40	-	-	-	3 302	4 104	5 039	6 126	7 384	8 830
50	-	-	-	-	3 573	4 387	5 334	6 433	7 703
60	-	-	-	-	-	-	4 534	5 472	6 561

Power input in W

10	836	867	898	922	935	-	-	-	-
20	1 062	1 088	1 120	1 153	1 181	1 198	1 201	-	-
30	-	-	1 378	1 407	1 438	1 466	1 485	1 490	1 476
40	-	-	-	1 736	1 759	1 785	1 809	1 825	1 829
50	-	-	-	-	2 192	2 205	2 222	2 239	2 250
60	-	-	-	-	-	-	2 776	2 781	2 787

Current consumption in A

10	4.58	4.64	4.70	4.74	4.75	-	-	-	-
20	5.00	5.03	5.08	5.15	5.21	5.24	5.22	-	-
30	-	-	5.54	5.59	5.66	5.72	5.77	5.79	5.75
40	-	-	-	6.25	6.28	6.34	6.42	6.48	6.51
50	-	-	-	-	7.27	7.29	7.34	7.41	7.48
60	-	-	-	-	-	-	8.73	8.76	8.83

Mass flow in kg/h

10	37	48	61	77	96	-	-	-	-
20	36	47	59	75	93	116	142	-	-
30	-	-	58	73	91	113	138	169	204
40	-	-	-	71	88	110	135	165	199
50	-	-	-	-	86	107	131	161	195
60	-	-	-	-	-	-	128	156	190

Coefficient of performance (C.O.P.)

10	2.70	3.34	4.08	4.97	6.08	-	-	-	-
20	1.88	2.39	2.96	3.61	4.37	5.28	6.40	-	-
30	-	-	2.15	2.65	3.22	3.88	4.65	5.59	6.74
40	-	-	-	1.90	2.33	2.82	3.39	4.05	4.83
50	-	-	-	-	1.63	1.99	2.40	2.87	3.42
60	-	-	-	-	-	-	1.63	1.97	2.35

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

Cooling capacity	3 839	W
Power input	1 958	W
Current consumption	6.72	A
Mass flow	87	kg/h
C.O.P.	1.96	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

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

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	2 259	2 902	3 680	4 611	5 713	-	-	-	-
20	1 975	2 575	3 292	4 144	5 151	6 330	7 697	-	-
30	1 700	2 254	2 908	3 679	4 587	5 652	6 890	8 316	9 945
40	-	-	2 527	3 214	4 022	4 969	6 075	7 357	8 830
50	-	-	-	2 749	3 453	4 280	5 252	6 387	7 703
60	-	-	-	-	2 879	3 584	4 419	5 404	6 561

Power input in W

10	836	867	898	922	935	-	-	-	-
20	1 062	1 088	1 120	1 153	1 181	1 198	1 201	-	-
30	1 347	1 357	1 378	1 407	1 438	1 466	1 485	1 490	1 476
40	-	-	1 722	1 736	1 759	1 785	1 809	1 825	1 829
50	-	-	-	2 190	2 192	2 205	2 222	2 239	2 250
60	-	-	-	-	2 789	2 777	2 776	2 781	2 787

Current consumption in A

10	4.58	4.64	4.70	4.74	4.75	-	-	-	-
20	5.00	5.03	5.08	5.15	5.21	5.24	5.22	-	-
30	5.57	5.53	5.54	5.59	5.66	5.72	5.77	5.79	5.75
40	-	-	6.26	6.25	6.28	6.34	6.42	6.48	6.51
50	-	-	-	7.30	7.27	7.29	7.34	7.41	7.48
60	-	-	-	-	8.80	8.73	8.73	8.76	8.83

Mass flow in kg/h

10	44	56	70	86	105	-	-	-	-
20	42	54	68	84	103	124	149	-	-
30	40	52	66	81	100	121	146	173	204
40	-	-	63	79	97	118	142	169	199
50	-	-	-	76	94	115	138	165	195
60	-	-	-	-	91	111	135	161	190

Coefficient of performance (C.O.P.)

10	2.70	3.35	4.10	5.00	6.11	-	-	-	-
20	1.86	2.37	2.94	3.59	4.36	5.28	6.41	-	-
30	1.26	1.66	2.11	2.61	3.19	3.86	4.64	5.58	6.74
40	-	-	1.47	1.85	2.29	2.78	3.36	4.03	4.83
50	-	-	-	1.26	1.57	1.94	2.36	2.85	3.42
60	-	-	-	-	1.03	1.29	1.59	1.94	2.35

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

Cooling capacity	3 738	W
Power input	1 958	W
Current consumption	6.72	A
Mass flow	96	kg/h
C.O.P.	1.91	

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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

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

Cooling capacity in W

10	2 171	2 716	3 381	4 182	5 130	-	-	-	-
20	1 941	2 447	3 057	3 785	4 645	5 650	6 816	-	-
30	-	2 185	2 732	3 380	4 144	5 036	6 072	7 265	8 629
40	-	-	2 403	2 964	3 624	4 397	5 296	6 335	7 529
50	-	-	-	-	3 083	3 729	4 484	5 362	6 379
60	-	-	-	-	-	3 028	3 633	4 344	5 176

Power input in W

10	795	815	828	832	829	-	-	-	-
20	946	974	995	1 009	1 015	1 012	1 002	-	-
30	-	1 181	1 209	1 230	1 242	1 248	1 245	1 234	1 215
40	-	-	1 488	1 513	1 532	1 542	1 545	1 540	1 527
50	-	-	-	-	1 900	1 915	1 922	1 921	1 912
60	-	-	-	-	-	2 384	2 393	2 395	2 389

Current consumption in A

10	5.08	5.13	5.16	5.17	5.18	-	-	-	-
20	5.38	5.44	5.48	5.51	5.52	5.52	5.50	-	-
30	-	5.82	5.88	5.93	5.95	5.96	5.96	5.93	5.89
40	-	-	6.45	6.52	6.57	6.59	6.60	6.59	6.56
50	-	-	-	-	7.43	7.48	7.51	7.52	7.51
60	-	-	-	-	-	8.71	8.77	8.81	8.82

Mass flow in kg/h

10	44	55	69	86	106	-	-	-	-
20	43	54	68	84	104	128	156	-	-
30	-	53	67	83	102	125	153	185	223
40	-	-	65	81	100	122	149	181	218
50	-	-	-	-	97	119	145	176	213
60	-	-	-	-	-	115	141	171	207

Coefficient of performance (C.O.P.)

10	2.73	3.33	4.09	5.02	6.19	-	-	-	-
20	2.05	2.51	3.07	3.75	4.58	5.58	6.80	-	-
30	-	1.85	2.26	2.75	3.34	4.04	4.88	5.89	7.10
40	-	-	1.61	1.96	2.37	2.85	3.43	4.11	4.93
50	-	-	-	-	1.62	1.95	2.33	2.79	3.34
60	-	-	-	-	-	1.27	1.52	1.81	2.17

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

Cooling capacity	3 357	W
Power input	1 705	W
Current consumption	6.96	A
Mass flow	98	kg/h
C.O.P.	1.97	

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

Performance data at 50 Hz, EN 12900 rating conditions, Superheat = 10 K
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Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	2 101	2 644	3 311	4 117	5 076	-	-	-	-
20	1 843	2 342	2 950	3 681	4 551	5 574	6 763	-	-
30	1 598	2 047	2 589	3 238	4 011	4 922	5 987	7 220	8 629
40	1 361	1 754	2 223	2 783	3 452	4 246	5 180	6 269	7 529
50	-	-	1 847	2 313	2 872	3 540	4 336	5 276	6 379
60	-	-	-	-	2 261	2 798	3 449	4 235	5 176

Power input in W

10	795	815	828	832	829	-	-	-	-
20	946	974	995	1 009	1 015	1 012	1 002	-	-
30	1 146	1 181	1 209	1 230	1 242	1 248	1 245	1 234	1 215
40	1 414	1 455	1 488	1 513	1 532	1 542	1 545	1 540	1 527
50	-	-	1 849	1 878	1 900	1 915	1 922	1 921	1 912
60	-	-	-	-	2 367	2 384	2 393	2 395	2 389

Current consumption in A

10	5.08	5.13	5.16	5.17	5.18	-	-	-	-
20	5.38	5.44	5.48	5.51	5.52	5.52	5.50	-	-
30	5.74	5.82	5.88	5.93	5.95	5.96	5.96	5.93	5.89
40	6.25	6.36	6.45	6.52	6.57	6.59	6.60	6.59	6.56
50	-	-	7.26	7.36	7.43	7.48	7.51	7.52	7.51
60	-	-	-	-	8.63	8.71	8.77	8.81	8.82

Mass flow in kg/h

10	52	65	79	97	117	-	-	-	-
20	51	63	78	95	115	138	164	-	-
30	50	62	76	93	112	135	161	190	223
40	49	61	74	91	110	132	157	186	218
50	-	-	73	88	107	128	153	181	213
60	-	-	-	-	103	124	148	176	207

Coefficient of performance (C.O.P.)

10	2.64	3.24	4.00	4.95	6.12	-	-	-	-
20	1.95	2.40	2.96	3.65	4.49	5.51	6.75	-	-
30	1.39	1.73	2.14	2.63	3.23	3.95	4.81	5.85	7.10
40	0.96	1.21	1.49	1.84	2.25	2.75	3.35	4.07	4.93
50	-	-	1.00	1.23	1.51	1.85	2.26	2.75	3.34
60	-	-	-	-	0.96	1.17	1.44	1.77	2.17

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

Cooling capacity	3 165	W
Power input	1 705	W
Current consumption	6.96	A
Mass flow	108	kg/h
C.O.P.	1.86	

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	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

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

Tolerance according EN12900

Performance data at 60 Hz, EN 12900 rating conditions, Suction temp. = 20 °C
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Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	2 614	3 273	4 077	5 042	6 183	-	-	-	-
20	2 343	2 956	3 696	4 579	5 621	6 837	8 243	-	-
30	-	2 648	3 311	4 099	5 028	6 113	7 371	8 817	10 466
40	-	-	2 925	3 605	4 407	5 349	6 444	7 711	9 163
50	-	-	-	-	3 762	4 546	5 467	6 540	7 782
60	-	-	-	-	-	3 710	4 442	5 309	6 328

Power input in W

10	956	989	1 009	1 020	1 022	-	-	-	-
20	1 136	1 182	1 215	1 236	1 246	1 248	1 243	-	-
30	-	1 424	1 468	1 499	1 517	1 525	1 523	1 515	1 501
40	-	-	1 788	1 827	1 852	1 865	1 867	1 860	1 845
50	-	-	-	-	2 271	2 288	2 292	2 285	2 269
60	-	-	-	-	-	2 812	2 818	2 810	2 792

Current consumption in A

10	5.05	4.99	4.95	4.94	4.96	-	-	-	-
20	5.31	5.30	5.31	5.32	5.33	5.35	5.37	-	-
30	-	5.71	5.77	5.83	5.87	5.89	5.89	5.88	5.84
40	-	-	6.37	6.49	6.57	6.62	6.64	6.61	6.54
50	-	-	-	-	7.48	7.58	7.62	7.61	7.53
60	-	-	-	-	-	8.77	8.87	8.89	8.82

Mass flow in kg/h

10	53	67	84	104	128	-	-	-	-
20	51	66	82	102	126	155	188	-	-
30	-	64	81	100	124	152	185	225	271
40	-	-	79	98	121	149	181	220	266
50	-	-	-	-	118	145	177	215	259
60	-	-	-	-	-	141	172	209	253

Coefficient of performance (C.O.P.)

10	2.73	3.31	4.04	4.94	6.05	-	-	-	-
20	2.06	2.50	3.04	3.71	4.51	5.48	6.63	-	-
30	-	1.86	2.25	2.73	3.31	4.01	4.84	5.82	6.97
40	-	-	1.64	1.97	2.38	2.87	3.45	4.15	4.97
50	-	-	-	-	1.66	1.99	2.39	2.86	3.43
60	-	-	-	-	-	1.32	1.58	1.89	2.27

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

Cooling capacity	4 088	W
Power input	2 050	W
Current consumption	7.00	A
Mass flow	120	kg/h
C.O.P.	1.99	

Pressure switch settings

Maximum HP switch setting	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

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

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

Performance data at 60 Hz, EN 12900 rating conditions, Superheat = 10 K
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Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	2 530	3 186	3 992	4 963	6 118	-	-	-	-
20	2 223	2 829	3 567	4 454	5 508	6 745	8 180	-	-
30	1 939	2 481	3 137	3 927	4 867	5 975	7 269	8 762	10 466
40	1 676	2 142	2 706	3 385	4 198	5 165	6 303	7 631	9 163
50	-	-	2 272	2 829	3 504	4 316	5 286	6 435	7 782
60	-	-	-	-	2 782	3 428	4 218	5 176	6 328

Power input in W

10	956	989	1 009	1 020	1 022	-	-	-	-
20	1 136	1 182	1 215	1 236	1 246	1 248	1 243	-	-
30	1 364	1 424	1 468	1 499	1 517	1 525	1 523	1 515	1 501
40	1 661	1 734	1 788	1 827	1 852	1 865	1 867	1 860	1 845
50	-	-	2 194	2 240	2 271	2 288	2 292	2 285	2 269
60	-	-	-	-	2 792	2 812	2 818	2 810	2 792

Current consumption in A

10	5.05	4.99	4.95	4.94	4.96	-	-	-	-
20	5.31	5.30	5.31	5.32	5.33	5.35	5.37	-	-
30	5.63	5.71	5.77	5.83	5.87	5.89	5.89	5.88	5.84
40	6.04	6.22	6.37	6.49	6.57	6.62	6.64	6.61	6.54
50	-	-	7.12	7.33	7.48	7.58	7.62	7.61	7.53
60	-	-	-	-	8.60	8.77	8.87	8.89	8.82

Mass flow in kg/h

10	62	78	96	116	141	-	-	-	-
20	61	76	94	115	139	167	199	-	-
30	60	75	92	113	136	164	195	231	271
40	60	74	91	110	133	160	191	226	266
50	-	-	89	108	130	156	186	221	259
60	-	-	-	-	127	152	181	215	253

Coefficient of performance (C.O.P.)

10	2.65	3.22	3.95	4.87	5.99	-	-	-	-
20	1.96	2.39	2.94	3.60	4.42	5.40	6.58	-	-
30	1.42	1.74	2.14	2.62	3.21	3.92	4.77	5.78	6.97
40	1.01	1.24	1.51	1.85	2.27	2.77	3.38	4.10	4.97
50	-	-	1.04	1.26	1.54	1.89	2.31	2.82	3.43
60	-	-	-	-	1.00	1.22	1.50	1.84	2.27

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

Cooling capacity	3 854	W
Power input	2 050	W
Current consumption	7.00	A
Mass flow	132	kg/h
C.O.P.	1.88	

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	29.7	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	2	bar(g)

Sound power data

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

Tolerance according EN12900