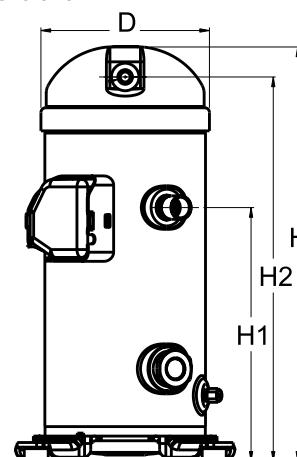


General Characteristics

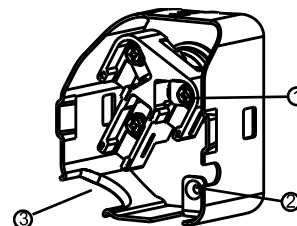
Model number (on compressor nameplate)	MLZ030T1LC9A	MLZ030T1LC9A
Code number for Singlepack*	121U8665	121L8665
Code number for Industrial pack**	121U8664	121L8664
Drawing number	0XR6025B-2	0XR6025B-2
Suction and discharge connections	Brazed	Brazed
Suction connection	7/8" ODF	7/8" ODF
Discharge connection	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	68.79 cm ³ /rev	
Displacement @ Nominal speed	14.4 m ³ /h @ 3500 rpm	
Net weight	41 kg	
Oil charge	1.57 litre, POE --	
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	5.44 kg	
Approved refrigerants	R404A,R507,R134a,R407A,R407F,R448A,R449A,R452A,R22	

Dimensions


D=184 mm
H=455 mm
H1=280 mm
H2=422 mm
H3=- mm

Electrical Characteristics

Nominal voltage	208-230V/1/60Hz
Voltage range	187-253 V
Winding resistance (main / start) at 25°C	0.336 Ω / 0.901 Ω
Run capacitors A + C	60 μF + - μF
Start capacitor B	161-193 μF
Rated Load Amps (RLA)	24.4 A
Maximum Continuous Current (MCC)	38 A
Locked Rotor Amps (LRA)	150 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 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	3 Nm / 2 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.

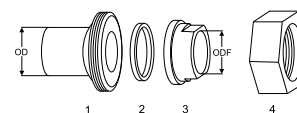
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

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

Solder sleeve adapter set



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

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants

Code no.

POE lubricant, 215PZ(PL46HB), 1 litre can	120Z0648
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Crankcase heaters

Code no.

Belt type crankcase heater, 70 W, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059

Miscellaneous accessories

Code no.

Acoustic hood	120Z5084
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

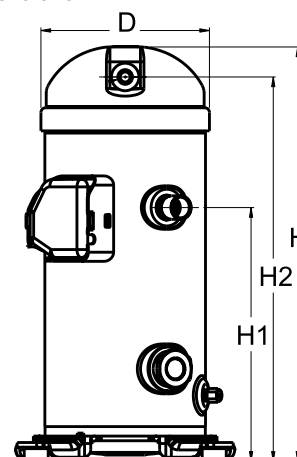
Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

General Characteristics

Model number (on compressor nameplate)	MLZ030T1LC9	MLZ030T1LC9
Code number for Singlepack*	121U8066	120U8066
Code number for Industrial pack**	121U8065	120U8065
Drawing number	0XR6025B-2	0XR6025B-2
Suction and discharge connections	Brazed	Brazed
Suction connection	7/8" ODF	7/8" 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	68.79 cm ³ /rev	
Displacement @ Nominal speed	14.4 m ³ /h @ 3500 rpm	
Net weight	41 kg	
Oil charge	1.57 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	5.44 kg	
Approved refrigerants	R404A, R507, R134a, R407C, R22	

Dimensions


D=184 mm

H=455 mm

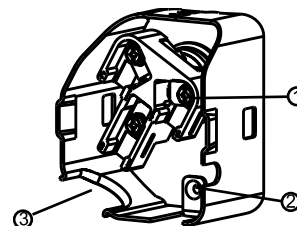
H1=280 mm

H2=422 mm

H3=- mm

Electrical Characteristics

Nominal voltage	208-230V/1/60Hz
Voltage range	187-253 V
Winding resistance (main / start) at 25°C	0.336 Ω / 0.901 Ω
Run capacitors A + C	60 μF + - μF
Start capacitor B	161-193 μF
Rated Load Amps (RLA)	24.4 A
Maximum Continuous Current (MCC)	38 A
Locked Rotor Amps (LRA)	150 A
Motor protection	Internal overload protector

Terminal box


IP22

1: Screw connectors 10-32 UNF x 9.5

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	3 Nm / 2 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.

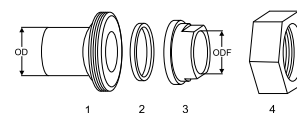
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

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

Solder sleeve adapter set



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

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
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, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059

Miscellaneous accessories

Code no.

Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

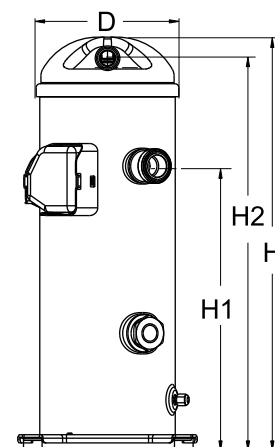
Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

General Characteristics

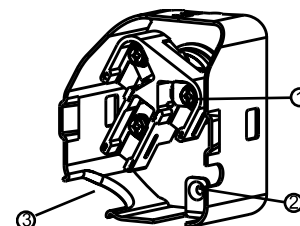
Model number (on compressor nameplate)		MLZ030T1LQ9
Code number for Singlepack*		121U8561
Code number for Industrial pack**		121U8560
Drawing number		0XR6298B-2
Suction and discharge connections		Rotolock
Suction connection		1-1/4 " Rotolock
Discharge connection		1 " Rotolock
Suction connection with supplied sleeve		7/8 " -
Discharge connection with supplied sleeve	- "	1/2 " -
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume		68.79 cm ³ /rev
Displacement @ Nominal speed		14.4 m ³ /h @ 3500 rpm
Net weight		41 kg
Oil charge		1.57 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		5.44 kg
Approved refrigerants		R404A, R507, R134a, R407C, R22

Dimensions


D=184 mm
H=454.9 mm
H1=280 mm
H2=422.2 mm
H3=- mm

Electrical Characteristics

Nominal voltage	208-230V/1/60Hz
Voltage range	187-253 V
Winding resistance (main / start) at 25°C	0.336 Ω / 0.901 Ω
Run capacitors A + C	60 μF + - μF
Start capacitor B	161-193 μF
Rated Load Amps (RLA)	24.4 A
Maximum Continuous Current (MCC)	38 A
Locked Rotor Amps (LRA)	150 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 2: Earth connection
- 3: Power cable passage

Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	3 Nm / 2 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.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

Rotolock accessories, discharge side
Code no.

Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

Rotolock accessories, sets
Code no.

Teflon seals, sleeves, nuts for discharge and suction (1" and 1"1/4)	120Z5074
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.

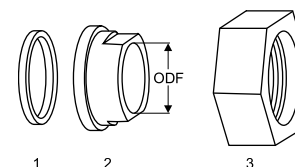
Belt type crankcase heater, 70 W, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059

Miscellaneous accessories
Code no.

Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts
Code no.

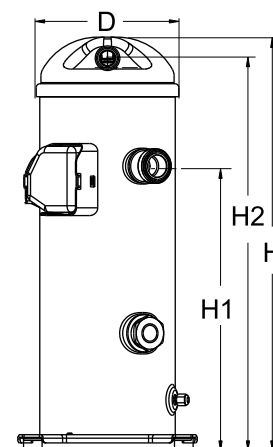
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

Gaskets, sleeves and nuts


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

General Characteristics

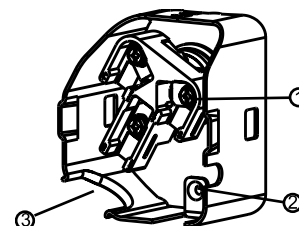
Model number (on compressor nameplate)	MLZ030T1LC9A	MLZ030T1LQ9A
Code number for Singlepack*	120U8665	121U8763
Code number for Industrial pack**	120U8664	121U8762
Drawing number	0XR6025B-2	0XR6298B-2
Suction and discharge connections	Brazed	Rotolock
Suction connection	7/8" ODF	1-1/4" Rotolock
Discharge connection	1/2" ODF	1" Rotolock
Suction connection with supplied sleeve		7/8" -
Discharge connection with supplied sleeve	- "	1/2" -
Oil sight glass	Threaded	Threaded
Oil equalisation connection	None	None
Oil drain connection	1/4" flare	None
LP gauge port	None	None
IPR valve	32 bar	None
Swept volume	68.79 cm ³ /rev	
Displacement @ Nominal speed	14.4 m ³ /h @ 3500 rpm	
Net weight	41 kg	
Oil charge	1.57 litre, POE - -	
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	5.44 kg	
Approved refrigerants	R404A, R507, R134a, R407A, R407F, R448A, R449A, R452A, R22	

Dimensions


D=184 mm
H=454.9 mm
H1=280 mm
H2=422.2 mm
H3=- mm

Electrical Characteristics

Nominal voltage	208-230V/1/60Hz
Voltage range	187-253 V
Winding resistance (main / start) at 25°C	0.336 Ω / 0.901 Ω
Run capacitors A + C	60 μF + - μF
Start capacitor B	161-193 μF
Rated Load Amps (RLA)	24.4 A
Maximum Continuous Current (MCC)	38 A
Locked Rotor Amps (LRA)	150 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 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	3 Nm / 2 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.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

Rotolock accessories, discharge side

Code no.

Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

Rotolock accessories, sets

Code no.

Teflon seals, sleeves, nuts for discharge and suction (1" and 1"1/4)	120Z5074
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants

Code no.

POE lubricant, 215PZ(PL46HB), 1 litre can	120Z0648
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Crankcase heaters

Code no.

Belt type crankcase heater, 70 W, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059

Miscellaneous accessories

Code no.

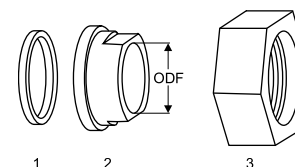
Acoustic hood	120Z5084
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

Gaskets, sleeves and nuts



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

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	7 753	9 224	10 924	12 882	-	-	-	-	-
20	7 344	8 836	10 553	12 523	14 771	-	-	-	-
30	6 413	7 909	9 620	11 574	13 798	16 314	19 140	-	-
40	5 611	7 045	8 682	10 553	12 686	15 105	17 833	-	-
50	-	6 239	7 736	9 458	11 434	13 693	16 259	-	-
60	-	-	-	8 289	10 044	12 076	14 415	-	-
68	-	-	-	-	-	10 635	12 745	-	-

Power input in W

16	1 833	1 975	2 132	2 283	-	-	-	-	-
20	2 005	2 140	2 291	2 439	2 560	-	-	-	-
30	2 452	2 570	2 710	2 851	2 970	3 047	3 060	-	-
40	2 973	3 077	3 209	3 346	3 466	3 549	3 573	-	-
50	-	3 723	3 849	3 985	4 110	4 202	4 239	-	-
60	-	-	-	4 830	4 962	5 066	5 120	-	-
68	-	-	-	-	-	5 951	6 021	-	-

Current consumption in A

16	8.86	9.54	10.30	11.03	-	-	-	-	-
20	9.69	10.34	11.07	11.78	12.37	-	-	-	-
30	11.84	12.41	13.09	13.77	14.35	14.72	14.78	-	-
40	14.36	14.86	15.50	16.16	16.75	17.15	17.26	-	-
50	-	17.99	18.59	19.25	19.85	20.30	20.48	-	-
60	-	-	-	23.34	23.97	24.47	24.73	-	-
68	-	-	-	-	-	28.75	29.09	-	-

Mass flow in kg/h

16	159	184	211	243	-	-	-	-	-
20	155	181	210	244	282	-	-	-	-
30	144	173	206	243	284	331	383	-	-
40	131	164	199	237	281	330	385	-	-
50	-	153	190	230	275	325	381	-	-
60	-	-	-	222	268	318	375	-	-
68	-	-	-	-	-	312	368	-	-

Coefficient of performance (C.O.P.)

16	4.23	4.67	5.12	5.64	-	-	-	-	-
20	3.66	4.13	4.61	5.14	5.77	-	-	-	-
30	2.62	3.08	3.55	4.06	4.65	5.35	6.26	-	-
40	1.89	2.29	2.71	3.15	3.66	4.26	4.99	-	-
50	-	1.68	2.01	2.37	2.78	3.26	3.84	-	-
60	-	-	-	1.72	2.02	2.38	2.82	-	-
68	-	-	-	-	-	1.79	2.12	-	-

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

Cooling capacity	8 210	W
Power input	3 507	W
Current consumption	16.94	A
Mass flow	194	kg/h
C.O.P.	2.34	

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	73	dB(A)
With acoustic hood	65	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	7 564	9 026	10 725	12 692	-	-	-	-	-
20	7 184	8 666	10 379	12 356	14 627	-	-	-	-
30	6 320	7 806	9 510	11 464	13 699	16 247	19 140	-	-
40	-	7 005	8 635	10 500	12 634	15 068	17 833	-	-
50	-	-	-	9 464	11 432	13 686	16 259	-	-
60	-	-	-	-	10 090	12 100	14 415	-	-
68	-	-	-	-	-	-	12 745	-	-

Power input in W

16	1 833	1 975	2 132	2 283	-	-	-	-	-
20	2 005	2 140	2 291	2 439	2 560	-	-	-	-
30	2 452	2 570	2 710	2 851	2 970	3 047	3 060	-	-
40	-	3 077	3 209	3 346	3 466	3 549	3 573	-	-
50	-	-	-	3 985	4 110	4 202	4 239	-	-
60	-	-	-	-	4 962	5 066	5 120	-	-
68	-	-	-	-	-	-	6 021	-	-

Current consumption in A

16	8.86	9.54	10.30	11.03	-	-	-	-	-
20	9.69	10.34	11.07	11.78	12.37	-	-	-	-
30	11.84	12.41	13.09	13.77	14.35	14.72	14.78	-	-
40	-	14.86	15.50	16.16	16.75	17.15	17.26	-	-
50	-	-	-	19.25	19.85	20.30	20.48	-	-
60	-	-	-	-	23.97	24.47	24.73	-	-
68	-	-	-	-	-	-	29.09	-	-

Mass flow in kg/h

16	140	165	193	227	-	-	-	-	-
20	137	163	193	228	269	-	-	-	-
30	127	156	189	226	271	323	383	-	-
40	-	147	182	222	268	322	385	-	-
50	-	-	-	215	262	317	381	-	-
60	-	-	-	-	255	311	375	-	-
68	-	-	-	-	-	-	368	-	-

Coefficient of performance (C.O.P.)

16	4.13	4.57	5.03	5.56	-	-	-	-	-
20	3.58	4.05	4.53	5.07	5.71	-	-	-	-
30	2.58	3.04	3.51	4.02	4.61	5.33	6.26	-	-
40	-	2.28	2.69	3.14	3.64	4.25	4.99	-	-
50	-	-	-	2.38	2.78	3.26	3.84	-	-
60	-	-	-	-	2.03	2.39	2.82	-	-
68	-	-	-	-	-	-	2.12	-	-

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

Cooling capacity	8 194	W
Power input	3 507	W
Current consumption	16.94	A
Mass flow	178	kg/h
C.O.P.	2.34	

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	73	dB(A)
With acoustic hood	65	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
R134a

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

Cooling capacity in W

22	5 005	6 361	7 879	9 581	11 487	-	-	-	-
30	4 568	5 880	7 361	9 034	10 918	13 036	-	-	-
40	4 004	5 213	6 601	8 189	9 999	12 052	14 369	-	-
50	-	4 521	5 763	7 215	8 898	10 833	13 042	-	-
60	-	-	4 900	6 163	7 666	9 432	11 480	-	-
70	-	-	-	5 085	6 357	7 900	9 735	-	-
73	-	-	-	4 765	5 957	7 423	9 184	-	-

Power input in W

22	1 764	1 785	1 824	1 880	1 949	-	-	-	-
30	2 012	2 036	2 074	2 123	2 181	2 249	-	-	-
40	2 375	2 413	2 458	2 509	2 564	2 621	2 680	-	-
50	-	2 860	2 923	2 987	3 049	3 108	3 162	-	-
60	-	-	3 471	3 558	3 638	3 710	3 770	-	-
70	-	-	-	4 224	4 333	4 427	4 505	-	-
73	-	-	-	4 442	4 562	4 665	4 750	-	-

Current consumption in A

22	8.52	8.62	8.81	9.08	9.42	-	-	-	-
30	9.72	9.84	10.02	10.25	10.54	10.86	-	-	-
40	11.47	11.66	11.87	12.12	12.39	12.66	12.95	-	-
50	-	13.82	14.12	14.43	14.73	15.01	15.28	-	-
60	-	-	16.77	17.19	17.58	17.92	18.21	-	-
70	-	-	-	20.41	20.93	21.39	21.76	-	-
73	-	-	-	21.46	22.04	22.54	22.95	-	-

Mass flow in kg/h

22	107	133	163	195	230	-	-	-	-
30	106	133	163	196	233	273	-	-	-
40	103	130	161	195	234	276	323	-	-
50	-	126	157	191	231	275	324	-	-
60	-	-	151	186	225	270	321	-	-
70	-	-	-	179	218	263	315	-	-
73	-	-	-	176	215	261	312	-	-

Coefficient of performance (C.O.P.)

22	2.84	3.56	4.32	5.10	5.89	-	-	-	-
30	2.27	2.89	3.55	4.26	5.00	5.80	-	-	-
40	1.69	2.16	2.69	3.26	3.90	4.60	5.36	-	-
50	-	1.58	1.97	2.42	2.92	3.49	4.12	-	-
60	-	-	1.41	1.73	2.11	2.54	3.04	-	-
70	-	-	-	1.20	1.47	1.78	2.16	-	-
73	-	-	-	1.07	1.31	1.59	1.93	-	-

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

Cooling capacity	4 867	W
Power input	2 627	W
Current consumption	12.69	A
Mass flow	128	kg/h
C.O.P.	1.85	

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	73	dB(A)
With acoustic hood	65	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	5 085	6 435	7 940	9 622	11 506	-	-	-	-
30	-	5 989	7 456	9 104	10 955	13 036	-	-	-
40	-	-	6 737	8 294	10 058	12 052	14 302	-	-
50	-	-	5 938	7 354	8 979	10 833	12 938	-	-
60	-	-	-	6 335	7 769	9 432	-	-	-
70	-	-	-	-	6 480	7 900	-	-	-
73	-	-	-	-	6 086	7 423	-	-	-

Power input in W

22	1 764	1 785	1 824	1 880	1 949	-	-	-	-
30	-	2 036	2 074	2 123	2 181	2 249	-	-	-
40	-	-	2 458	2 509	2 564	2 621	2 680	-	-
50	-	-	2 923	2 987	3 049	3 108	3 162	-	-
60	-	-	-	3 558	3 638	3 710	-	-	-
70	-	-	-	-	4 333	4 427	-	-	-
73	-	-	-	-	4 562	4 665	-	-	-

Current consumption in A

22	8.52	8.62	8.81	9.08	9.42	-	-	-	-
30	-	9.84	10.02	10.25	10.54	10.86	-	-	-
40	-	-	11.87	12.12	12.39	12.66	12.95	-	-
50	-	-	14.12	14.43	14.73	15.01	15.28	-	-
60	-	-	-	17.19	17.58	17.92	-	-	-
70	-	-	-	-	20.93	21.39	-	-	-
73	-	-	-	-	22.04	22.54	-	-	-

Mass flow in kg/h

22	96	122	152	186	224	-	-	-	-
30	-	122	152	188	228	273	-	-	-
40	-	-	151	187	228	276	332	-	-
50	-	-	147	183	225	275	333	-	-
60	-	-	-	177	220	270	-	-	-
70	-	-	-	-	213	263	-	-	-
73	-	-	-	-	210	261	-	-	-

Coefficient of performance (C.O.P.)

22	2.88	3.60	4.35	5.12	5.90	-	-	-	-
30	-	2.94	3.60	4.29	5.02	5.80	-	-	-
40	-	-	2.74	3.31	3.92	4.60	5.34	-	-
50	-	-	2.03	2.46	2.94	3.49	4.09	-	-
60	-	-	-	1.78	2.14	2.54	-	-	-
70	-	-	-	-	1.50	1.78	-	-	-
73	-	-	-	-	1.33	1.59	-	-	-

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	73	dB(A)
With acoustic hood	65	dB(A)

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	5 696	7 130	8 862	10 907	13 278	-	-	-	-
20	5 140	6 461	8 043	9 901	12 049	14 500	17 269	-	-
30	4 506	5 707	7 132	8 795	10 712	12 895	15 360	18 119	21 185
40	-	4 858	6 118	7 580	9 258	11 166	13 319	15 730	18 413
50	-	-	4 992	6 245	7 677	9 302	11 136	13 193	15 486
60	-	-	-	-	5 959	7 295	8 803	10 499	12 396

Power input in W

10	2 140	2 140	2 161	2 204	2 268	-	-	-	-
20	2 554	2 557	2 573	2 603	2 649	2 710	2 789	-	-
30	3 039	3 056	3 080	3 111	3 150	3 198	3 256	3 325	3 405
40	-	3 641	3 685	3 729	3 774	3 821	3 871	3 925	3 982
50	-	-	4 389	4 459	4 522	4 581	4 635	4 686	4 734
60	-	-	-	-	5 397	5 479	5 550	5 611	5 661

Current consumption in A

10	10.34	10.34	10.44	10.65	10.96	-	-	-	-
20	12.34	12.35	12.43	12.58	12.80	13.09	13.47	-	-
30	14.68	14.76	14.88	15.03	15.22	15.45	15.73	16.06	16.45
40	-	17.59	17.80	18.02	18.23	18.46	18.70	18.96	19.24
50	-	-	21.20	21.54	21.85	22.13	22.39	22.64	22.87
60	-	-	-	-	26.07	26.47	26.81	27.10	27.35

Mass flow in kg/h

10	107	143	181	225	274	-	-	-	-
20	107	142	180	223	272	329	396	-	-
30	103	139	176	219	267	324	391	469	561
40	-	132	169	212	260	317	383	461	552
50	-	-	159	201	250	306	372	450	541
60	-	-	-	-	236	293	359	437	528

Coefficient of performance (C.O.P.)

10	2.66	3.33	4.10	4.95	5.85	-	-	-	-
20	2.01	2.53	3.13	3.80	4.55	5.35	6.19	-	-
30	1.48	1.87	2.32	2.83	3.40	4.03	4.72	5.45	6.22
40	-	1.33	1.66	2.03	2.45	2.92	3.44	4.01	4.62
50	-	-	1.14	1.40	1.70	2.03	2.40	2.82	3.27
60	-	-	-	-	1.10	1.33	1.59	1.87	2.19

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

Cooling capacity	8 484	W
Power input	4 133	W
Current consumption	19.97	A
Mass flow	255	kg/h
C.O.P.	2.05	

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	73	dB(A)
With acoustic hood	65	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	5 473	6 900	8 635	10 697	13 100	-	-	-	-
20	4 833	6 135	7 711	9 579	11 758	14 263	17 105	-	-
30	4 121	5 290	6 697	8 363	10 309	12 551	15 105	17 983	21 185
40	3 334	4 358	5 587	7 042	8 745	10 715	12 974	15 536	18 413
50	-	-	4 379	5 611	7 060	8 748	10 701	12 939	15 486
60	-	-	-	-	5 244	6 637	8 272	10 181	12 396

Power input in W

10	2 140	2 140	2 161	2 204	2 268	-	-	-	-
20	2 554	2 557	2 573	2 603	2 649	2 710	2 789	-	-
30	3 039	3 056	3 080	3 111	3 150	3 198	3 256	3 325	3 405
40	3 596	3 641	3 685	3 729	3 774	3 821	3 871	3 925	3 982
50	-	-	4 389	4 459	4 522	4 581	4 635	4 686	4 734
60	-	-	-	-	5 397	5 479	5 550	5 611	5 661

Current consumption in A

10	10.34	10.34	10.44	10.65	10.96	-	-	-	-
20	12.34	12.35	12.43	12.58	12.80	13.09	13.47	-	-
30	14.68	14.76	14.88	15.03	15.22	15.45	15.73	16.06	16.45
40	17.37	17.59	17.80	18.02	18.23	18.46	18.70	18.96	19.24
50	-	-	21.20	21.54	21.85	22.13	22.39	22.64	22.87
60	-	-	-	-	26.07	26.47	26.81	27.10	27.35

Mass flow in kg/h

10	128	167	208	253	303	-	-	-	-
20	127	166	207	251	300	356	419	-	-
30	123	162	202	246	295	350	413	483	561
40	115	154	195	238	287	342	404	475	552
50	-	-	182	227	276	331	393	463	541
60	-	-	-	-	260	316	379	449	528

Coefficient of performance (C.O.P.)

10	2.56	3.22	4.00	4.85	5.78	-	-	-	-
20	1.89	2.40	3.00	3.68	4.44	5.26	6.13	-	-
30	1.36	1.73	2.17	2.69	3.27	3.92	4.64	5.41	6.22
40	0.93	1.20	1.52	1.89	2.32	2.80	3.35	3.96	4.62
50	-	-	1.00	1.26	1.56	1.91	2.31	2.76	3.27
60	-	-	-	-	0.97	1.21	1.49	1.81	2.19

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

Cooling capacity	7 918	W
Power input	4 133	W
Current consumption	19.97	A
Mass flow	282	kg/h
C.O.P.	1.92	

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	73	dB(A)
With acoustic hood	65	dB(A)

Tolerance according EN12900

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	-	4 131	5 458	6 998	8 795	10 898	13 352	16 205	19 502
35	-	3 828	5 108	6 588	8 315	10 334	12 692	15 437	18 613
40	-	3 527	4 751	6 164	7 811	9 739	11 993	14 621	17 668
45	-	-	4 384	5 722	7 282	9 109	11 252	13 754	16 664
50	-	-	-	5 257	6 722	8 442	10 464	12 833	15 596
55	-	-	-	-	6 129	7 733	9 626	11 853	14 461
60	-	-	-	-	-	6 979	8 734	10 811	13 254
65	-	-	-	-	-	-	7 786	9 701	11 970

Power input in W

30	-	2 859	2 804	2 769	2 743	2 714	2 672	2 604	2 501
35	-	3 194	3 136	3 100	3 076	3 053	3 018	2 962	2 872
40	-	3 569	3 503	3 462	3 435	3 412	3 380	3 329	3 247
45	-	-	3 929	3 877	3 843	3 814	3 780	3 729	3 651
50	-	-	-	4 369	4 322	4 283	4 241	4 185	4 105
55	-	-	-	-	4 895	4 840	4 786	4 721	4 633
60	-	-	-	-	-	5 511	5 438	5 358	5 257
65	-	-	-	-	-	-	6 221	6 120	6 002

Current consumption in A

30	-	12.08	12.16	12.18	12.11	11.95	11.70	11.35	10.88
35	-	13.53	13.56	13.55	13.48	13.35	13.15	12.87	12.50
40	-	15.16	15.13	15.07	14.98	14.85	14.68	14.45	14.16
45	-	-	16.96	16.83	16.70	16.56	16.39	16.19	15.96
50	-	-	-	18.95	18.75	18.57	18.39	18.20	18.00
55	-	-	-	-	21.23	20.98	20.76	20.57	20.38
60	-	-	-	-	-	23.90	23.63	23.40	23.20
65	-	-	-	-	-	-	27.08	26.79	26.57

Mass flow in kg/h

30	-	92	120	151	187	228	275	328	390
35	-	90	118	150	185	226	273	327	389
40	-	88	116	147	183	224	271	326	387
45	-	-	113	145	180	221	269	323	384
50	-	-	-	141	177	217	264	318	380
55	-	-	-	-	172	212	259	313	374
60	-	-	-	-	-	206	252	305	366
65	-	-	-	-	-	-	243	296	356

Coefficient of performance (C.O.P.)

30	-	1.44	1.95	2.53	3.21	4.02	5.00	6.22	7.80
35	-	1.20	1.63	2.13	2.70	3.38	4.20	5.21	6.48
40	-	0.99	1.36	1.78	2.27	2.85	3.55	4.39	5.44
45	-	-	1.12	1.48	1.89	2.39	2.98	3.69	4.56
50	-	-	-	1.20	1.56	1.97	2.47	3.07	3.80
55	-	-	-	-	1.25	1.60	2.01	2.51	3.12
60	-	-	-	-	-	1.27	1.61	2.02	2.52
65	-	-	-	-	-	-	1.25	1.59	1.99

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

Cooling capacity	7 282	W
Power input	3 843	W
Current consumption	16.70	A
Mass flow	180	kg/h
C.O.P.	1.89	

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 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	5 012	6 231	7 686	9 415	11 454	-	-	-	-
20	4 525	5 704	7 099	8 747	10 683	12 945	15 568	-	-
30	-	-	6 395	7 926	9 725	11 828	14 272	17 092	20 325
40	-	-	-	6 989	8 616	10 525	12 754	15 339	18 316
50	-	-	-	-	7 392	9 073	11 052	13 366	16 051
60	-	-	-	-	-	-	9 202	11 209	13 567

Power input in W

10	1 725	1 771	1 815	1 859	1 908	-	-	-	-
20	2 113	2 169	2 220	2 270	2 321	2 378	2 444	-	-
30	-	-	2 712	2 766	2 820	2 878	2 942	3 015	3 103
40	-	-	-	3 404	3 461	3 518	3 580	3 649	3 729
50	-	-	-	-	4 297	4 354	4 413	4 478	4 551
60	-	-	-	-	-	-	5 499	5 558	5 624

Current consumption in A

10	8.39	8.48	8.62	8.84	9.16	-	-	-	-
20	10.08	10.26	10.43	10.62	10.86	11.17	11.57	-	-
30	-	-	12.54	12.77	13.00	13.25	13.54	13.90	14.35
40	-	-	-	15.48	15.77	16.02	16.27	16.53	16.83
50	-	-	-	-	19.33	19.67	19.94	20.18	20.40
60	-	-	-	-	-	-	24.74	25.02	25.23

Mass flow in kg/h

10	81	102	127	156	190	-	-	-	-
20	79	101	125	155	190	232	282	-	-
30	-	-	122	152	188	230	281	340	409
40	-	-	-	147	182	225	275	335	405
50	-	-	-	-	174	216	267	327	397
60	-	-	-	-	-	-	254	314	384

Coefficient of performance (C.O.P.)

10	2.91	3.52	4.24	5.06	6.00	-	-	-	-
20	2.14	2.63	3.20	3.85	4.60	5.44	6.37	-	-
30	-	-	2.36	2.87	3.45	4.11	4.85	5.67	6.55
40	-	-	-	2.05	2.49	2.99	3.56	4.20	4.91
50	-	-	-	-	1.72	2.08	2.50	2.98	3.53
60	-	-	-	-	-	-	1.67	2.02	2.41

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

Cooling capacity	8 016	W
Power input	3 851	W
Current consumption	17.44	A
Mass flow	178	kg/h
C.O.P.	2.08	

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

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	5 033	6 261	7 729	9 473	11 528	-	-	-	-
20	4 485	5 667	7 069	8 729	10 681	12 960	15 597	-	-
30	3 894	4 992	6 292	7 830	9 644	11 769	14 238	17 083	20 325
40	-	-	5 437	6 818	8 457	10 391	12 657	15 289	18 316
50	-	-	-	5 731	7 158	8 865	10 891	13 275	16 051
60	-	-	-	-	5 787	7 230	8 979	11 077	13 567

Power input in W

10	1 725	1 771	1 815	1 859	1 908	-	-	-	-
20	2 113	2 169	2 220	2 270	2 321	2 378	2 444	-	-
30	2 589	2 654	2 712	2 766	2 820	2 878	2 942	3 015	3 103
40	-	-	3 345	3 404	3 461	3 518	3 580	3 649	3 729
50	-	-	-	4 239	4 297	4 354	4 413	4 478	4 551
60	-	-	-	-	5 386	5 443	5 499	5 558	5 624

Current consumption in A

10	8.39	8.48	8.62	8.84	9.16	-	-	-	-
20	10.08	10.26	10.43	10.62	10.86	11.17	11.57	-	-
30	11.94	12.27	12.54	12.77	13.00	13.25	13.54	13.90	14.35
40	-	-	15.12	15.48	15.77	16.02	16.27	16.53	16.83
50	-	-	-	18.90	19.33	19.67	19.94	20.18	20.40
60	-	-	-	-	23.88	24.37	24.74	25.02	25.23

Mass flow in kg/h

10	96	119	145	174	209	-	-	-	-
20	94	117	143	174	209	250	297	-	-
30	90	113	139	170	206	247	295	349	409
40	-	-	134	164	200	242	290	344	405
50	-	-	-	155	191	232	281	335	397
60	-	-	-	-	179	220	267	322	384

Coefficient of performance (C.O.P.)

10	2.92	3.53	4.26	5.09	6.04	-	-	-	-
20	2.12	2.61	3.18	3.85	4.60	5.45	6.38	-	-
30	1.50	1.88	2.32	2.83	3.42	4.09	4.84	5.67	6.55
40	-	-	1.63	2.00	2.44	2.95	3.54	4.19	4.91
50	-	-	-	1.35	1.67	2.04	2.47	2.96	3.53
60	-	-	-	-	1.07	1.33	1.63	1.99	2.41

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

Cooling capacity	7 819	W
Power input	3 851	W
Current consumption	17.44	A
Mass flow	196	kg/h
C.O.P.	2.03	

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 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	5 012	6 231	7 686	9 415	11 454	-	-	-	-
20	4 525	5 704	7 099	8 747	10 683	12 945	15 568	-	-
30	-	-	6 395	7 926	9 725	11 828	14 272	17 092	20 325
40	-	-	-	6 989	8 616	10 525	12 754	15 339	18 316
50	-	-	-	-	7 392	9 073	11 052	13 366	16 051
60	-	-	-	-	-	-	9 202	11 209	13 567

Power input in W

10	1 725	1 771	1 815	1 859	1 908	-	-	-	-
20	2 113	2 169	2 220	2 270	2 321	2 378	2 444	-	-
30	-	-	2 712	2 766	2 820	2 878	2 942	3 015	3 103
40	-	-	-	3 404	3 461	3 518	3 580	3 649	3 729
50	-	-	-	-	4 297	4 354	4 413	4 478	4 551
60	-	-	-	-	-	-	5 499	5 558	5 624

Current consumption in A

10	8.39	8.48	8.62	8.84	9.16	-	-	-	-
20	10.08	10.26	10.43	10.62	10.86	11.17	11.57	-	-
30	-	-	12.54	12.77	13.00	13.25	13.54	13.90	14.35
40	-	-	-	15.48	15.77	16.02	16.27	16.53	16.83
50	-	-	-	-	19.33	19.67	19.94	20.18	20.40
60	-	-	-	-	-	-	24.74	25.02	25.23

Mass flow in kg/h

10	83	104	129	158	193	-	-	-	-
20	81	102	128	158	194	236	287	-	-
30	-	-	124	155	191	234	286	346	417
40	-	-	-	149	186	229	281	342	413
50	-	-	-	-	177	221	272	334	405
60	-	-	-	-	-	-	260	321	392

Coefficient of performance (C.O.P.)

10	2.91	3.52	4.24	5.06	6.00	-	-	-	-
20	2.14	2.63	3.20	3.85	4.60	5.44	6.37	-	-
30	-	-	2.36	2.87	3.45	4.11	4.85	5.67	6.55
40	-	-	-	2.05	2.49	2.99	3.56	4.20	4.91
50	-	-	-	-	1.72	2.08	2.50	2.98	3.53
60	-	-	-	-	-	-	1.67	2.02	2.41

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

Cooling capacity	8 016	W
Power input	3 851	W
Current consumption	17.44	A
Mass flow	182	kg/h
C.O.P.	2.08	

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
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	5 022	6 250	7 717	9 462	11 517	-	-	-	-
20	4 473	5 654	7 056	8 716	10 669	12 949	15 589	-	-
30	3 882	4 979	6 278	7 817	9 631	11 757	14 229	17 078	20 325
40	-	-	5 423	6 803	8 443	10 378	12 647	15 283	18 316
50	-	-	-	5 716	7 144	8 852	10 881	13 268	16 051
60	-	-	-	-	5 773	7 217	8 968	11 070	13 567

Power input in W

10	1 725	1 771	1 815	1 859	1 908	-	-	-	-
20	2 113	2 169	2 220	2 270	2 321	2 378	2 444	-	-
30	2 589	2 654	2 712	2 766	2 820	2 878	2 942	3 015	3 103
40	-	-	3 345	3 404	3 461	3 518	3 580	3 649	3 729
50	-	-	-	4 239	4 297	4 354	4 413	4 478	4 551
60	-	-	-	-	5 386	5 443	5 499	5 558	5 624

Current consumption in A

10	8.39	8.48	8.62	8.84	9.16	-	-	-	-
20	10.08	10.26	10.43	10.62	10.86	11.17	11.57	-	-
30	11.94	12.27	12.54	12.77	13.00	13.25	13.54	13.90	14.35
40	-	-	15.12	15.48	15.77	16.02	16.27	16.53	16.83
50	-	-	-	18.90	19.33	19.67	19.94	20.18	20.40
60	-	-	-	-	23.88	24.37	24.74	25.02	25.23

Mass flow in kg/h

10	98	121	147	177	212	-	-	-	-
20	96	119	145	176	212	254	302	-	-
30	92	115	142	173	210	252	301	356	417
40	-	-	136	167	204	247	296	351	413
50	-	-	-	158	195	237	287	343	405
60	-	-	-	-	182	224	273	329	392

Coefficient of performance (C.O.P.)

10	2.91	3.53	4.25	5.09	6.04	-	-	-	-
20	2.12	2.61	3.18	3.84	4.60	5.44	6.38	-	-
30	1.50	1.88	2.32	2.83	3.41	4.09	4.84	5.66	6.55
40	-	-	1.62	2.00	2.44	2.95	3.53	4.19	4.91
50	-	-	-	1.35	1.66	2.03	2.47	2.96	3.53
60	-	-	-	-	1.07	1.33	1.63	1.99	2.41

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

Cooling capacity	7 805	W
Power input	3 851	W
Current consumption	17.44	A
Mass flow	200	kg/h
C.O.P.	2.03	

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
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	5 192	6 467	8 021	9 883	12 084	-	-	-	-
20	4 706	5 924	7 384	9 117	11 152	13 520	16 249	-	-
30	-	5 330	6 674	8 254	10 101	12 243	14 712	17 536	20 744
40	-	-	5 886	7 290	8 924	10 818	13 003	15 507	18 361
50	-	-	-	-	7 617	9 240	11 118	13 280	15 756
60	-	-	-	-	-	7 504	9 052	10 848	12 925

Power input in W

10	1 838	1 900	1 956	2 013	2 075	-	-	-	-
20	2 186	2 262	2 326	2 382	2 438	2 497	2 565	-	-
30	-	2 736	2 814	2 877	2 930	2 981	3 033	3 093	3 166
40	-	-	3 455	3 531	3 589	3 637	3 679	3 721	3 769
50	-	-	-	-	4 450	4 501	4 539	4 570	4 598
60	-	-	-	-	-	5 609	5 649	5 674	5 690

Current consumption in A

10	9.62	9.22	9.12	9.28	9.68	-	-	-	-
20	11.54	11.22	11.11	11.17	11.40	11.75	12.22	-	-
30	-	13.40	13.42	13.53	13.72	13.95	14.21	14.47	14.71
40	-	-	16.09	16.40	16.69	16.95	17.14	17.25	17.25
50	-	-	-	-	20.37	20.79	21.06	21.17	21.07
60	-	-	-	-	-	25.53	26.02	26.26	26.22

Mass flow in kg/h

10	104	132	165	203	250	-	-	-	-
20	103	131	164	203	250	306	371	-	-
30	-	130	163	202	249	304	370	447	537
40	-	-	159	199	245	301	366	443	533
50	-	-	-	-	240	295	360	436	525
60	-	-	-	-	-	287	351	427	515

Coefficient of performance (C.O.P.)

10	2.82	3.40	4.10	4.91	5.82	-	-	-	-
20	2.15	2.62	3.17	3.83	4.58	5.42	6.33	-	-
30	-	1.95	2.37	2.87	3.45	4.11	4.85	5.67	6.55
40	-	-	1.70	2.06	2.49	2.97	3.53	4.17	4.87
50	-	-	-	-	1.71	2.05	2.45	2.91	3.43
60	-	-	-	-	-	1.34	1.60	1.91	2.27

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

Cooling capacity	8 287	W
Power input	3 992	W
Current consumption	18.44	A
Mass flow	243	kg/h
C.O.P.	2.08	

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

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	5 024	6 295	7 853	9 730	11 957	-	-	-	-
20	4 466	5 670	7 126	8 867	10 928	13 337	16 124	-	-
30	3 883	4 994	6 324	7 907	9 777	11 966	14 507	17 427	20 744
40	3 270	4 265	5 445	6 845	8 500	10 446	12 718	15 347	18 361
50	-	-	4 483	5 677	7 094	8 773	10 751	13 066	15 756
60	-	-	-	-	5 548	6 934	8 595	10 576	12 925

Power input in W

10	1 838	1 900	1 956	2 013	2 075	-	-	-	-
20	2 186	2 262	2 326	2 382	2 438	2 497	2 565	-	-
30	2 638	2 736	2 814	2 877	2 930	2 981	3 033	3 093	3 166
40	3 232	3 358	3 455	3 531	3 589	3 637	3 679	3 721	3 769
50	-	-	4 286	4 380	4 450	4 501	4 539	4 570	4 598
60	-	-	-	-	5 548	5 609	5 649	5 674	5 690

Current consumption in A

10	9.62	9.22	9.12	9.28	9.68	-	-	-	-
20	11.54	11.22	11.11	11.17	11.40	11.75	12.22	-	-
30	13.50	13.40	13.42	13.53	13.72	13.95	14.21	14.47	14.71
40	15.54	15.80	16.09	16.40	16.69	16.95	17.14	17.25	17.25
50	-	-	19.19	19.83	20.37	20.79	21.06	21.17	21.07
60	-	-	-	-	24.81	25.53	26.02	26.26	26.22

Mass flow in kg/h

10	124	154	188	228	275	-	-	-	-
20	123	153	188	228	275	329	391	-	-
30	120	151	186	227	274	328	390	460	537
40	117	147	182	223	270	324	386	455	533
50	-	-	177	217	264	318	379	449	525
60	-	-	-	-	256	309	370	439	515

Coefficient of performance (C.O.P.)

10	2.73	3.31	4.01	4.83	5.76	-	-	-	-
20	2.04	2.51	3.06	3.72	4.48	5.34	6.29	-	-
30	1.47	1.83	2.25	2.75	3.34	4.01	4.78	5.63	6.55
40	1.01	1.27	1.58	1.94	2.37	2.87	3.46	4.12	4.87
50	-	-	1.05	1.30	1.59	1.95	2.37	2.86	3.43
60	-	-	-	-	1.00	1.24	1.52	1.86	2.27

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

Cooling capacity	7 814	W
Power input	3 992	W
Current consumption	18.44	A
Mass flow	267	kg/h
C.O.P.	1.96	

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

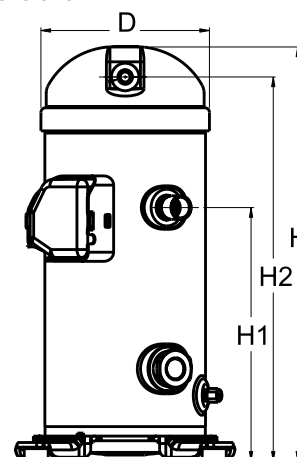
tc: Condensing temperature at dew point

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

Tolerance according EN12900

General Characteristics

	MLZ030T2LC9A	MLZ030T2LC9A
Model number (on compressor nameplate)	121U8675	121L8675
Code number for Singlepack*	121U8674	121L8674
Code number for Industrial pack**	0XR6025B-2	0XR6025B-2
Drawing number	Brazed	Brazed
Suction and discharge connections	7/8" ODF	7/8" ODF
Suction connection	1/2" ODF	1/2" ODF
Discharge connection	Threaded	Threaded
Oil sight glass	None	None
Oil equalisation connection	1/4" flare	1/4" flare
Oil drain connection	None	None
LP gauge port	32 bar	32 bar
IPR valve	68.79 cm ³ /rev	
Swept volume	12.0 m ³ /h @ 2900 rpm - 14.4 m ³ /h @ 3500 rpm	
Displacement @ Nominal speed	41 kg	
Net weight	1.57 litre, POE --	
Oil charge	- bar(g) / - bar(g)	
Maximum system test pressure Low Side / High side	- bar	
Maximum differential test pressure	12	
Maximum number of starts per hour	5.44 kg	
Refrigerant charge limit	R404A,R507,R134a,R407A,R407F,R448A,R449A,R452A,R22	
Approved refrigerants		

Dimensions


D=184 mm

H=455 mm

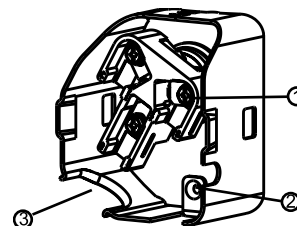
H1=280 mm

H2=422 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	0.667 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	0.67 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	0.68 Ω
Rated Load Amps (RLA)	16.7 A
Maximum Continuous Current (MCC)	26 A
Locked Rotor Amps (LRA)	120 A
Motor protection	Internal overload protector

Terminal box


IP22

1: Screw connectors 10-32 UNF x 9.5

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	3 Nm / 2 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.

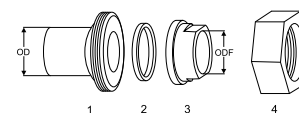
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

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

Solder sleeve adapter set



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

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants

Code no.

POE lubricant, 215PZ(PL46HB), 1 litre can	120Z0648
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Crankcase heaters

Code no.

Belt type crankcase heater, 70 W, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059

Miscellaneous accessories

Code no.

Acoustic hood	120Z5084
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

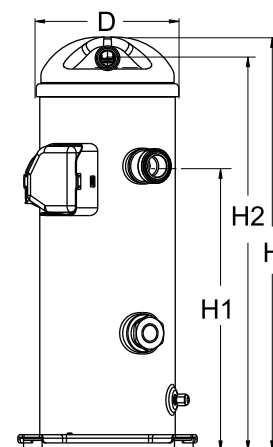
Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

General Characteristics

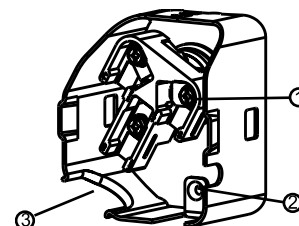
Model number (on compressor nameplate)		MLZ030T2LQ9
Code number for Singlepack*		121U8597
Code number for Industrial pack**		121U8596
Drawing number		0XR6298B-2
Suction and discharge connections		Rotolock
Suction connection		1-1/4 " Rotolock
Discharge connection		1 " Rotolock
Suction connection with supplied sleeve		7/8 " -
Discharge connection with supplied sleeve	- "	1/2 " -
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume		68.79 cm ³ /rev
Displacement @ Nominal speed		12.0 m ³ /h @ 2900 rpm - 14.4 m ³ /h @ 3500 rpm
Net weight		41 kg
Oil charge		1.57 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		5.44 kg
Approved refrigerants		R404A, R507, R134a, R407C, R22

Dimensions


D=184 mm
H=454.9 mm
H1=280 mm
H2=422.2 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	0.667 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	0.67 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	0.68 Ω
Rated Load Amps (RLA)	16.7 A
Maximum Continuous Current (MCC)	26 A
Locked Rotor Amps (LRA)	120 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 2: Earth connection
- 3: Power cable passage

Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	3 Nm / 2 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.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

Rotolock accessories, discharge side
Code no.

Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

Rotolock accessories, sets
Code no.

Teflon seals, sleeves, nuts for discharge and suction (1" and 1"1/4)	120Z5074
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.

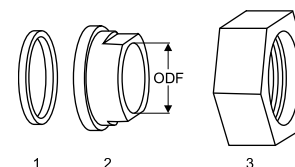
Belt type crankcase heater, 70 W, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059

Miscellaneous accessories
Code no.

Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts
Code no.

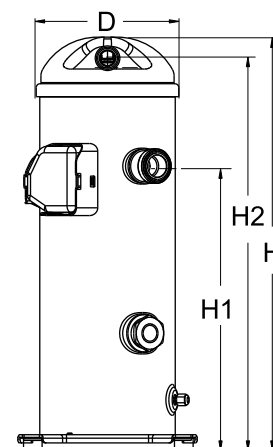
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

Gaskets, sleeves and nuts


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

General Characteristics

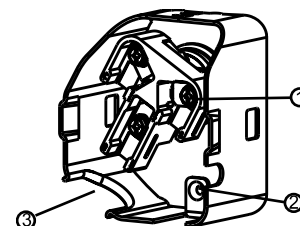
Model number (on compressor nameplate)	MLZ030T2LC9A	MLZ030T2LQ9A
Code number for Singlepack*	120U8675	121U8765
Code number for Industrial pack**	120U8674	121U8764
Drawing number	0XR6025B-2	0XR6298B-2
Suction and discharge connections	Brazed	Rotolock
Suction connection	7/8" ODF	1-1/4" Rotolock
Discharge connection	1/2" ODF	1" Rotolock
Suction connection with supplied sleeve		7/8" -
Discharge connection with supplied sleeve	- "	1/2" -
Oil sight glass	Threaded	Threaded
Oil equalisation connection	None	None
Oil drain connection	1/4" flare	None
LP gauge port	None	None
IPR valve	32 bar	None
Swept volume	68.79 cm ³ /rev	
Displacement @ Nominal speed	12.0 m ³ /h @ 2900 rpm - 14.4 m ³ /h @ 3500 rpm	
Net weight	41 kg	
Oil charge	1.57 litre, POE - -	
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	5.44 kg	
Approved refrigerants	R404A,R507,R134a,R407A,R407F,R448A,R449A,R452A,R22	

Dimensions


D=184 mm
H=454.9 mm
H1=280 mm
H2=422.2 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	0.667 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	0.67 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	0.68 Ω
Rated Load Amps (RLA)	16.7 A
Maximum Continuous Current (MCC)	26 A
Locked Rotor Amps (LRA)	120 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 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	3 Nm / 2 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.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

Rotolock accessories, discharge side

Code no.

Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

Rotolock accessories, sets

Code no.

Teflon seals, sleeves, nuts for discharge and suction (1" and 1"1/4)	120Z5074
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants

Code no.

POE lubricant, 215PZ(PL46HB), 1 litre can	120Z0648
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Crankcase heaters

Code no.

Belt type crankcase heater, 70 W, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059

Miscellaneous accessories

Code no.

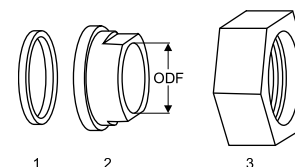
Acoustic hood	120Z5084
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

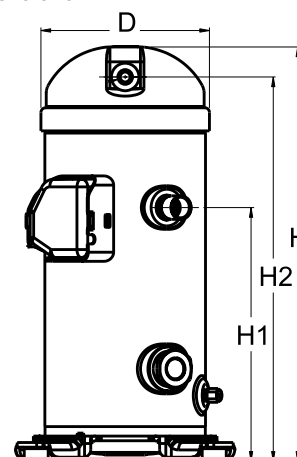
Gaskets, sleeves and nuts



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

General Characteristics

Model number (on compressor nameplate)	MLZ030T2LC9	MLZ030T2LC9
Code number for Singlepack*	121U8044	120U8044
Code number for Industrial pack**	121U8043	120U8043
Drawing number	0XR6025B-2	0XR6025B-2
Suction and discharge connections	Brazed	Brazed
Suction connection	7/8" ODF	7/8" 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	68.79 cm ³ /rev	
Displacement @ Nominal speed	12.0 m ³ /h @ 2900 rpm - 14.4 m ³ /h @ 3500 rpm	
Net weight	41 kg	
Oil charge	1.57 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	5.44 kg	
Approved refrigerants	R404A, R507, R134a, R407C, R22	

Dimensions


D=184 mm

H=455 mm

H1=280 mm

H2=422 mm

H3=- mm

Electrical Characteristics

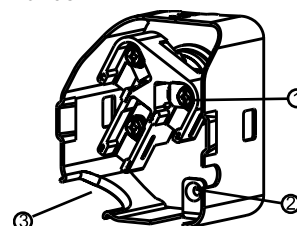
Nominal voltage	208-230V/3/60Hz
Voltage range	188-253 V
Winding resistance between phases 1-2 +/- 7% at 25°C	0.667 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	0.67 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	0.68 Ω
Rated Load Amps (RLA)	16.7 A
Maximum Continuous Current (MCC)	26 A
Locked Rotor Amps (LRA)	120 A
Motor protection	Internal overload protector

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	3 Nm / 2 Nm

Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Terminal box


IP22

1: Screw connectors 10-32 UNF x 9.5

2: Earth connection

3: Power cable passage

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.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
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, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
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, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059

Miscellaneous accessories

Code no.

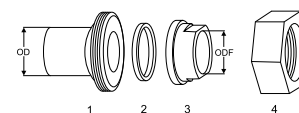
Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

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	5 960	7 400	9 075	10 978	-	-	-	-	-
20	5 722	7 124	8 756	10 614	12 688	-	-	-	-
30	5 174	6 479	8 005	9 746	11 696	13 844	16 176	-	-
40	4 635	5 841	7 258	8 880	10 703	12 718	14 914	-	-
50	-	5 137	6 441	7 942	9 635	11 516	13 574	-	-
60	-	-	-	6 860	8 422	10 165	12 084	-	-
68	-	-	-	-	-	8 928	10 735	-	-

Power input in W

16	1 466	1 517	1 579	1 652	-	-	-	-	-
20	1 647	1 698	1 757	1 825	1 902	-	-	-	-
30	2 081	2 136	2 193	2 253	2 316	2 384	2 456	-	-
40	2 539	2 604	2 665	2 723	2 779	2 834	2 888	-	-
50	-	3 164	3 236	3 299	3 355	3 403	3 444	-	-
60	-	-	-	4 043	4 104	4 152	4 188	-	-
68	-	-	-	-	-	4 924	4 960	-	-

Current consumption in A

16	5.64	5.84	6.08	6.36	-	-	-	-	-
20	6.34	6.54	6.76	7.02	7.32	-	-	-	-
30	8.01	8.22	8.44	8.67	8.91	9.17	9.45	-	-
40	9.77	10.02	10.26	10.48	10.70	10.91	11.12	-	-
50	-	12.18	12.46	12.70	12.91	13.10	13.26	-	-
60	-	-	-	15.56	15.80	15.98	16.12	-	-
68	-	-	-	-	-	18.95	19.09	-	-

Mass flow in kg/h

16	137	159	183	212	-	-	-	-	-
20	129	152	177	206	239	-	-	-	-
30	116	140	167	197	232	271	316	-	-
40	108	133	161	192	227	267	313	-	-
50	-	126	153	185	221	261	308	-	-
60	-	-	-	173	208	249	296	-	-
68	-	-	-	-	-	233	279	-	-

Coefficient of performance (C.O.P.)

16	4.07	4.88	5.75	6.65	-	-	-	-	-
20	3.47	4.20	4.98	5.82	6.67	-	-	-	-
30	2.49	3.03	3.65	4.33	5.05	5.81	6.59	-	-
40	1.83	2.24	2.72	3.26	3.85	4.49	5.16	-	-
50	-	1.62	1.99	2.41	2.87	3.38	3.94	-	-
60	-	-	-	1.70	2.05	2.45	2.89	-	-
68	-	-	-	-	-	1.81	2.16	-	-

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

Cooling capacity	6 862	W
Power input	2 934	W
Current consumption	11.29	A
Mass flow	157	kg/h
C.O.P.	2.34	

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	69	dB(A)
With acoustic hood	61	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	5 815	7 241	8 909	10 817	-	-	-	-	-
20	5 597	6 987	8 612	10 472	12 564	-	-	-	-
30	5 099	6 395	7 914	9 654	11 612	13 787	16 176	-	-
40	-	5 809	7 218	8 836	10 659	12 686	14 914	-	-
50	-	-	-	7 947	9 633	11 510	13 574	-	-
60	-	-	-	-	8 460	10 185	12 084	-	-
68	-	-	-	-	-	-	10 735	-	-

Power input in W

16	1 466	1 517	1 579	1 652	-	-	-	-	-
20	1 647	1 698	1 757	1 825	1 902	-	-	-	-
30	2 081	2 136	2 193	2 253	2 316	2 384	2 456	-	-
40	-	2 604	2 665	2 723	2 779	2 834	2 888	-	-
50	-	-	-	3 299	3 355	3 403	3 444	-	-
60	-	-	-	-	4 104	4 152	4 188	-	-
68	-	-	-	-	-	-	4 960	-	-

Current consumption in A

16	5.64	5.84	6.08	6.36	-	-	-	-	-
20	6.34	6.54	6.76	7.02	7.32	-	-	-	-
30	8.01	8.22	8.44	8.67	8.91	9.17	9.45	-	-
40	-	10.02	10.26	10.48	10.70	10.91	11.12	-	-
50	-	-	-	12.70	12.91	13.10	13.26	-	-
60	-	-	-	-	15.80	15.98	16.12	-	-
68	-	-	-	-	-	-	19.09	-	-

Mass flow in kg/h

16	120	143	168	197	-	-	-	-	-
20	114	136	162	192	228	-	-	-	-
30	102	126	153	184	221	265	316	-	-
40	-	119	147	179	217	261	313	-	-
50	-	-	-	173	210	255	308	-	-
60	-	-	-	-	199	243	296	-	-
68	-	-	-	-	-	-	279	-	-

Coefficient of performance (C.O.P.)

16	3.97	4.77	5.64	6.55	-	-	-	-	-
20	3.40	4.11	4.90	5.74	6.61	-	-	-	-
30	2.45	2.99	3.61	4.29	5.01	5.78	6.59	-	-
40	-	2.23	2.71	3.24	3.84	4.48	5.16	-	-
50	-	-	-	2.41	2.87	3.38	3.94	-	-
60	-	-	-	-	2.06	2.45	2.89	-	-
68	-	-	-	-	-	-	2.16	-	-

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

Cooling capacity	6 849	W
Power input	2 934	W
Current consumption	11.29	A
Mass flow	144	kg/h
C.O.P.	2.33	

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	69	dB(A)
With acoustic hood	61	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
R22

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

Cooling capacity in W

16	7 041	8 786	10 829	13 155	-	-	-	-	-
20	6 726	8 416	10 398	12 658	15 180	-	-	-	-
30	6 084	7 638	9 470	11 570	13 921	16 506	19 304	-	-
40	5 510	6 934	8 624	10 569	12 755	15 169	17 790	-	-
50	-	6 138	7 692	9 488	11 517	13 765	16 216	-	-
60	-	-	-	8 164	10 040	12 130	14 419	-	-
68	-	-	-	-	-	10 544	12 707	-	-

Power input in W

16	1 722	1 785	1 862	1 954	-	-	-	-	-
20	1 931	1 992	2 065	2 149	2 246	-	-	-	-
30	2 443	2 507	2 574	2 646	2 723	2 805	2 893	-	-
40	2 990	3 065	3 137	3 206	3 272	3 337	3 400	-	-
50	-	3 729	3 815	3 890	3 955	4 012	4 059	-	-
60	-	-	-	4 759	4 833	4 891	4 932	-	-
68	-	-	-	-	-	5 782	5 826	-	-

Current consumption in A

16	5.40	5.60	5.84	6.13	-	-	-	-	-
20	6.06	6.25	6.48	6.74	7.05	-	-	-	-
30	7.67	7.87	8.08	8.30	8.54	8.80	9.08	-	-
40	9.38	9.62	9.84	10.06	10.27	10.47	10.67	-	-
50	-	11.70	11.97	12.21	12.41	12.59	12.74	-	-
60	-	-	-	14.93	15.17	15.35	15.48	-	-
68	-	-	-	-	-	18.14	18.28	-	-

Mass flow in kg/h

16	142	173	208	247	-	-	-	-	-
20	141	172	207	246	290	-	-	-	-
30	136	168	203	243	287	335	387	-	-
40	129	161	198	238	283	332	384	-	-
50	-	151	189	230	277	326	380	-	-
60	-	-	-	219	266	318	372	-	-
68	-	-	-	-	-	307	364	-	-

Coefficient of performance (C.O.P.)

16	4.09	4.92	5.81	6.73	-	-	-	-	-
20	3.48	4.22	5.04	5.89	6.76	-	-	-	-
30	2.49	3.05	3.68	4.37	5.11	5.88	6.67	-	-
40	1.84	2.26	2.75	3.30	3.90	4.55	5.23	-	-
50	-	1.65	2.02	2.44	2.91	3.43	3.99	-	-
60	-	-	-	1.72	2.08	2.48	2.92	-	-
68	-	-	-	-	-	1.82	2.18	-	-

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

Cooling capacity	8 179	W
Power input	3 458	W
Current consumption	10.85	A
Mass flow	194	kg/h
C.O.P.	2.37	

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	73	dB(A)
With acoustic hood	65	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	6 869	8 598	10 632	12 962	-	-	-	-	-
20	6 580	8 254	10 227	12 489	15 032	-	-	-	-
30	5 996	7 538	9 362	11 459	13 821	16 439	19 304	-	-
40	-	6 895	8 577	10 516	12 704	15 131	17 790	-	-
50	-	-	-	9 494	11 514	13 758	16 216	-	-
60	-	-	-	-	10 087	12 153	14 419	-	-
68	-	-	-	-	-	-	12 707	-	-

Power input in W

16	1 722	1 785	1 862	1 954	-	-	-	-	-
20	1 931	1 992	2 065	2 149	2 246	-	-	-	-
30	2 443	2 507	2 574	2 646	2 723	2 805	2 893	-	-
40	-	3 065	3 137	3 206	3 272	3 337	3 400	-	-
50	-	-	-	3 890	3 955	4 012	4 059	-	-
60	-	-	-	-	4 833	4 891	4 932	-	-
68	-	-	-	-	-	-	5 826	-	-

Current consumption in A

16	5.40	5.60	5.84	6.13	-	-	-	-	-
20	6.06	6.25	6.48	6.74	7.05	-	-	-	-
30	7.67	7.87	8.08	8.30	8.54	8.80	9.08	-	-
40	-	9.62	9.84	10.06	10.27	10.47	10.67	-	-
50	-	-	-	12.21	12.41	12.59	12.74	-	-
60	-	-	-	-	15.17	15.35	15.48	-	-
68	-	-	-	-	-	-	18.28	-	-

Mass flow in kg/h

16	125	155	190	231	-	-	-	-	-
20	124	154	189	230	277	-	-	-	-
30	120	150	186	227	274	327	387	-	-
40	-	145	181	222	270	324	384	-	-
50	-	-	-	215	264	318	380	-	-
60	-	-	-	-	254	310	372	-	-
68	-	-	-	-	-	-	364	-	-

Coefficient of performance (C.O.P.)

16	3.99	4.82	5.71	6.63	-	-	-	-	-
20	3.41	4.14	4.95	5.81	6.69	-	-	-	-
30	2.45	3.01	3.64	4.33	5.08	5.86	6.67	-	-
40	-	2.25	2.73	3.28	3.88	4.53	5.23	-	-
50	-	-	-	2.44	2.91	3.43	3.99	-	-
60	-	-	-	-	2.09	2.48	2.92	-	-
68	-	-	-	-	-	-	2.18	-	-

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

Cooling capacity	8 163	W
Power input	3 458	W
Current consumption	10.85	A
Mass flow	177	kg/h
C.O.P.	2.36	

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	73	dB(A)
With acoustic hood	65	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
R134a

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

Cooling capacity in W

22	4 101	5 183	6 469	7 977	9 727	-	-	-	-
30	3 774	4 788	5 999	7 423	9 080	10 988	-	-	-
40	3 365	4 282	5 385	6 691	8 220	9 988	12 015	-	-
50	-	3 762	4 742	5 916	7 302	8 917	10 780	-	-
60	-	-	4 072	5 099	6 327	7 774	9 459	-	-
70	-	-	-	4 240	5 296	6 561	8 053	-	-
73	-	-	-	3 974	4 976	6 183	7 614	-	-

Power input in W

22	1 179	1 196	1 209	1 223	1 242	-	-	-	-
30	1 396	1 417	1 432	1 446	1 462	1 484	-	-	-
40	1 711	1 741	1 763	1 780	1 797	1 817	1 844	-	-
50	-	2 130	2 164	2 189	2 211	2 234	2 260	-	-
60	-	-	2 647	2 685	2 717	2 747	2 777	-	-
70	-	-	-	3 282	3 328	3 369	3 408	-	-
73	-	-	-	3 482	3 534	3 579	3 622	-	-

Current consumption in A

22	4.54	4.60	4.65	4.71	4.78	-	-	-	-
30	5.37	5.45	5.51	5.57	5.63	5.71	-	-	-
40	6.59	6.70	6.79	6.85	6.92	6.99	7.10	-	-
50	-	8.20	8.33	8.43	8.51	8.60	8.70	-	-
60	-	-	10.19	10.34	10.46	10.57	10.69	-	-
70	-	-	-	12.63	12.81	12.97	13.12	-	-
73	-	-	-	13.40	13.60	13.78	13.94	-	-

Mass flow in kg/h

22	88	109	134	162	194	-	-	-	-
30	87	108	133	162	194	230	-	-	-
40	86	107	131	160	193	230	271	-	-
50	-	105	129	157	190	227	269	-	-
60	-	-	126	154	186	223	265	-	-
70	-	-	-	149	181	218	259	-	-
73	-	-	-	148	179	216	257	-	-

Coefficient of performance (C.O.P.)

22	3.48	4.33	5.35	6.52	7.83	-	-	-	-
30	2.70	3.38	4.19	5.13	6.21	7.40	-	-	-
40	1.97	2.46	3.05	3.76	4.57	5.50	6.52	-	-
50	-	1.77	2.19	2.70	3.30	3.99	4.77	-	-
60	-	-	1.54	1.90	2.33	2.83	3.41	-	-
70	-	-	-	1.29	1.59	1.95	2.36	-	-
73	-	-	-	1.14	1.41	1.73	2.10	-	-

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

Cooling capacity	4 024	W
Power input	1 927	W
Current consumption	7.42	A
Mass flow	106	kg/h
C.O.P.	2.09	

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	69	dB(A)
With acoustic hood	61	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	4 166	5 243	6 519	8 012	9 743	-	-	-	-
30	-	4 877	6 076	7 481	9 111	10 988	-	-	-
40	-	-	5 496	6 777	8 269	9 988	11 959	-	-
50	-	-	4 887	6 031	7 369	8 917	10 694	-	-
60	-	-	-	5 241	6 412	7 774	-	-	-
70	-	-	-	-	5 398	6 561	-	-	-
73	-	-	-	-	5 083	6 183	-	-	-

Power input in W

22	1 179	1 196	1 209	1 223	1 242	-	-	-	-
30	-	1 417	1 432	1 446	1 462	1 484	-	-	-
40	-	-	1 763	1 780	1 797	1 817	1 844	-	-
50	-	-	2 164	2 189	2 211	2 234	2 260	-	-
60	-	-	-	2 685	2 717	2 747	-	-	-
70	-	-	-	-	3 328	3 369	-	-	-
73	-	-	-	-	3 534	3 579	-	-	-

Current consumption in A

22	4.54	4.60	4.65	4.71	4.78	-	-	-	-
30	-	5.45	5.51	5.57	5.63	5.71	-	-	-
40	-	-	6.79	6.85	6.92	6.99	7.10	-	-
50	-	-	8.33	8.43	8.51	8.60	8.70	-	-
60	-	-	-	10.34	10.46	10.57	-	-	-
70	-	-	-	-	12.81	12.97	-	-	-
73	-	-	-	-	13.60	13.78	-	-	-

Mass flow in kg/h

22	79	100	126	155	190	-	-	-	-
30	-	100	125	154	190	230	-	-	-
40	-	-	123	153	188	230	278	-	-
50	-	-	121	150	186	227	276	-	-
60	-	-	-	147	182	223	-	-	-
70	-	-	-	-	177	218	-	-	-
73	-	-	-	-	175	216	-	-	-

Coefficient of performance (C.O.P.)

22	3.53	4.39	5.39	6.55	7.85	-	-	-	-
30	-	3.44	4.24	5.17	6.23	7.40	-	-	-
40	-	-	3.12	3.81	4.60	5.50	6.49	-	-
50	-	-	2.26	2.75	3.33	3.99	4.73	-	-
60	-	-	-	1.95	2.36	2.83	-	-	-
70	-	-	-	-	1.62	1.95	-	-	-
73	-	-	-	-	1.44	1.73	-	-	-

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	69	dB(A)
With acoustic hood	61	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	5 085	6 417	8 001	9 845	11 954	-	-	-	-
30	4 641	5 920	7 438	9 202	11 217	13 491	-	-	-
40	4 076	5 280	6 705	8 359	10 247	12 377	14 755	-	-
50	-	4 592	5 914	7 447	9 197	11 172	13 378	-	-
60	-	-	5 036	6 437	8 039	9 848	11 871	-	-
70	-	-	-	5 303	6 745	8 378	10 206	-	-
73	-	-	-	4 934	6 327	7 904	9 672	-	-

Power input in W

22	1 449	1 483	1 515	1 553	1 603	-	-	-	-
30	1 716	1 754	1 784	1 813	1 849	1 900	-	-	-
40	2 084	2 139	2 178	2 209	2 240	2 278	2 331	-	-
50	-	2 575	2 637	2 684	2 723	2 762	2 808	-	-
60	-	-	3 161	3 237	3 298	3 351	3 404	-	-
70	-	-	-	3 866	3 962	4 044	4 118	-	-
73	-	-	-	4 069	4 179	4 272	4 355	-	-

Current consumption in A

22	4.55	4.65	4.76	4.87	5.03	-	-	-	-
30	5.38	5.50	5.60	5.69	5.80	5.96	-	-	-
40	6.54	6.71	6.84	6.93	7.03	7.15	7.31	-	-
50	-	8.08	8.28	8.42	8.54	8.67	8.81	-	-
60	-	-	9.92	10.16	10.35	10.51	10.68	-	-
70	-	-	-	12.13	12.43	12.69	12.92	-	-
73	-	-	-	12.77	13.11	13.40	13.66	-	-

Mass flow in kg/h

22	109	134	165	200	240	-	-	-	-
30	108	134	165	201	240	283	-	-	-
40	106	132	164	200	240	283	328	-	-
50	-	128	161	198	238	282	327	-	-
60	-	-	155	193	235	279	325	-	-
70	-	-	-	186	229	274	321	-	-
73	-	-	-	184	227	272	320	-	-

Coefficient of performance (C.O.P.)

22	3.51	4.33	5.28	6.34	7.46	-	-	-	-
30	2.70	3.38	4.17	5.08	6.07	7.10	-	-	-
40	1.96	2.47	3.08	3.78	4.57	5.43	6.33	-	-
50	-	1.78	2.24	2.77	3.38	4.04	4.76	-	-
60	-	-	1.59	1.99	2.44	2.94	3.49	-	-
70	-	-	-	1.37	1.70	2.07	2.48	-	-
73	-	-	-	1.21	1.51	1.85	2.22	-	-

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

Cooling capacity	4 944	W
Power input	2 351	W
Current consumption	7.38	A
Mass flow	130	kg/h
C.O.P.	2.10	

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	73	dB(A)
With acoustic hood	65	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	5 166	6 492	8 063	9 887	11 974	-	-	-	-
30	-	6 030	7 534	9 273	11 255	13 491	-	-	-
40	-	-	6 844	8 467	10 308	12 377	14 686	-	-
50	-	-	6 094	7 591	9 282	11 172	13 271	-	-
60	-	-	-	6 617	8 147	9 848	-	-	-
70	-	-	-	-	6 876	8 378	-	-	-
73	-	-	-	-	6 463	7 904	-	-	-

Power input in W

22	1 449	1 483	1 515	1 553	1 603	-	-	-	-
30	-	1 754	1 784	1 813	1 849	1 900	-	-	-
40	-	-	2 178	2 209	2 240	2 278	2 331	-	-
50	-	-	2 637	2 684	2 723	2 762	2 808	-	-
60	-	-	-	3 237	3 298	3 351	-	-	-
70	-	-	-	-	3 962	4 044	-	-	-
73	-	-	-	-	4 179	4 272	-	-	-

Current consumption in A

22	4.55	4.65	4.76	4.87	5.03	-	-	-	-
30	-	5.50	5.60	5.69	5.80	5.96	-	-	-
40	-	-	6.84	6.93	7.03	7.15	7.31	-	-
50	-	-	8.28	8.42	8.54	8.67	8.81	-	-
60	-	-	-	10.16	10.35	10.51	-	-	-
70	-	-	-	-	12.43	12.69	-	-	-
73	-	-	-	-	13.11	13.40	-	-	-

Mass flow in kg/h

22	98	123	154	192	235	-	-	-	-
30	-	123	154	192	235	283	-	-	-
40	-	-	153	191	234	283	337	-	-
50	-	-	150	189	233	282	336	-	-
60	-	-	-	185	229	279	-	-	-
70	-	-	-	-	224	274	-	-	-
73	-	-	-	-	222	272	-	-	-

Coefficient of performance (C.O.P.)

22	3.57	4.38	5.32	6.37	7.47	-	-	-	-
30	-	3.44	4.22	5.11	6.09	7.10	-	-	-
40	-	-	3.14	3.83	4.60	5.43	6.30	-	-
50	-	-	2.31	2.83	3.41	4.04	4.73	-	-
60	-	-	-	2.04	2.47	2.94	-	-	-
70	-	-	-	-	1.74	2.07	-	-	-
73	-	-	-	-	1.55	1.85	-	-	-

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	73	dB(A)
With acoustic hood	65	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	4 782	5 939	7 332	8 980	10 902	-	-	-	-
20	4 373	5 438	6 712	8 213	9 960	11 969	14 259	-	-
30	3 911	4 870	6 009	7 348	8 903	10 694	12 738	15 052	17 654
40	-	4 227	5 216	6 376	7 725	9 282	11 064	13 090	15 376
50	-	-	4 324	5 290	6 418	7 725	9 230	10 951	12 907
60	-	-	-	-	4 972	6 014	7 227	8 630	10 240

Power input in W

10	1 410	1 465	1 501	1 521	1 523	-	-	-	-
20	1 794	1 845	1 882	1 904	1 912	1 908	1 893	-	-
30	2 284	2 328	2 359	2 379	2 388	2 388	2 379	2 363	2 340
40	-	2 945	2 965	2 978	2 983	2 982	2 975	2 964	2 948
50	-	-	3 735	3 735	3 731	3 723	3 713	3 701	3 689
60	-	-	-	-	4 663	4 644	4 626	4 609	4 594

Current consumption in A

10	5.81	6.04	6.19	6.27	6.28	-	-	-	-
20	7.40	7.61	7.76	7.85	7.89	7.87	7.81	-	-
30	9.42	9.60	9.73	9.81	9.85	9.85	9.81	9.74	9.65
40	-	12.14	12.23	12.28	12.30	12.30	12.27	12.22	12.16
50	-	-	15.40	15.40	15.38	15.35	15.31	15.26	15.21
60	-	-	-	-	19.23	19.15	19.08	19.01	18.95

Mass flow in kg/h

10	89	116	147	183	225	-	-	-	-
20	94	119	148	184	225	273	329	-	-
30	95	118	147	181	221	269	325	390	464
40	-	116	142	175	215	262	318	383	457
50	-	-	137	168	206	253	308	373	448
60	-	-	-	-	197	242	297	361	436

Coefficient of performance (C.O.P.)

10	3.39	4.05	4.88	5.91	7.16	-	-	-	-
20	2.44	2.95	3.57	4.31	5.21	6.27	7.53	-	-
30	1.71	2.09	2.55	3.09	3.73	4.48	5.35	6.37	7.55
40	-	1.44	1.76	2.14	2.59	3.11	3.72	4.42	5.22
50	-	-	1.16	1.42	1.72	2.07	2.49	2.96	3.50
60	-	-	-	-	1.07	1.30	1.56	1.87	2.23

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

Cooling capacity	7 088	W
Power input	3 336	W
Current consumption	13.76	A
Mass flow	211	kg/h
C.O.P.	2.12	

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	69	dB(A)
With acoustic hood	61	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	4 596	5 747	7 144	8 808	10 756	-	-	-	-
20	4 112	5 164	6 435	7 947	9 719	11 773	14 123	-	-
30	3 577	4 514	5 643	6 987	8 568	10 408	12 527	14 939	17 654
40	2 987	3 792	4 764	5 924	7 297	8 908	10 778	12 928	15 376
50	-	-	3 794	4 754	5 902	7 265	8 869	10 741	12 907
60	-	-	-	-	4 376	5 472	6 791	8 368	10 240

Power input in W

10	1 410	1 465	1 501	1 521	1 523	-	-	-	-
20	1 794	1 845	1 882	1 904	1 912	1 908	1 893	-	-
30	2 284	2 328	2 359	2 379	2 388	2 388	2 379	2 363	2 340
40	2 915	2 945	2 965	2 978	2 983	2 982	2 975	2 964	2 948
50	-	-	3 735	3 735	3 731	3 723	3 713	3 701	3 689
60	-	-	-	-	4 663	4 644	4 626	4 609	4 594

Current consumption in A

10	5.81	6.04	6.19	6.27	6.28	-	-	-	-
20	7.40	7.61	7.76	7.85	7.89	7.87	7.81	-	-
30	9.42	9.60	9.73	9.81	9.85	9.85	9.81	9.74	9.65
40	12.02	12.14	12.23	12.28	12.30	12.30	12.27	12.22	12.16
50	-	-	15.40	15.40	15.38	15.35	15.31	15.26	15.21
60	-	-	-	-	19.23	19.15	19.08	19.01	18.95

Mass flow in kg/h

10	106	136	169	206	248	-	-	-	-
20	112	139	170	207	248	295	348	-	-
30	114	139	168	203	244	291	343	401	464
40	113	136	164	197	237	283	336	394	457
50	-	-	157	189	228	273	325	384	448
60	-	-	-	-	217	262	313	372	436

Coefficient of performance (C.O.P.)

10	3.26	3.92	4.76	5.79	7.06	-	-	-	-
20	2.29	2.80	3.42	4.17	5.08	6.17	7.46	-	-
30	1.57	1.94	2.39	2.94	3.59	4.36	5.26	6.32	7.55
40	1.02	1.29	1.61	1.99	2.45	2.99	3.62	4.36	5.22
50	-	-	1.02	1.27	1.58	1.95	2.39	2.90	3.50
60	-	-	-	-	0.94	1.18	1.47	1.82	2.23

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

Cooling capacity	6 616	W
Power input	3 336	W
Current consumption	13.76	A
Mass flow	232	kg/h
C.O.P.	1.98	

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	69	dB(A)
With acoustic hood	61	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	5 801	7 250	8 974	10 986	13 301	-	-	-	-
20	5 255	6 560	8 111	9 923	12 010	14 385	17 063	-	-
30	4 690	5 844	7 215	8 820	10 671	12 783	15 171	17 846	20 822
40	-	5 069	6 254	7 644	9 253	11 095	13 185	15 536	18 161
50	-	-	5 195	6 363	7 723	9 289	11 074	13 094	15 362
60	-	-	-	-	6 050	7 332	8 807	10 490	12 396

Power input in W

10	1 725	1 760	1 793	1 816	1 820	-	-	-	-
20	2 175	2 205	2 241	2 276	2 301	2 306	2 284	-	-
30	2 736	2 747	2 774	2 808	2 840	2 862	2 864	2 840	2 780
40	-	3 451	3 455	3 474	3 500	3 525	3 539	3 534	3 503
50	-	-	4 347	4 339	4 345	4 359	4 371	4 373	4 357
60	-	-	-	-	5 438	5 428	5 424	5 420	5 405

Current consumption in A

10	5.41	5.52	5.63	5.70	5.71	-	-	-	-
20	6.82	6.92	7.03	7.14	7.22	7.24	7.17	-	-
30	8.58	8.62	8.70	8.81	8.91	8.98	8.99	8.91	8.72
40	-	10.83	10.84	10.90	10.98	11.06	11.10	11.09	10.99
50	-	-	13.64	13.61	13.63	13.68	13.72	13.72	13.67
60	-	-	-	-	17.06	17.03	17.02	17.01	16.96

Mass flow in kg/h

10	104	138	177	222	273	-	-	-	-
20	111	143	180	222	271	328	394	-	-
30	113	143	178	219	267	322	387	462	548
40	-	139	173	213	260	315	379	454	540
50	-	-	165	205	251	306	370	445	531
60	-	-	-	-	241	296	361	436	524

Coefficient of performance (C.O.P.)

10	3.36	4.12	5.00	6.05	7.31	-	-	-	-
20	2.42	2.98	3.62	4.36	5.22	6.24	7.47	-	-
30	1.71	2.13	2.60	3.14	3.76	4.47	5.30	6.28	7.49
40	-	1.47	1.81	2.20	2.64	3.15	3.73	4.40	5.19
50	-	-	1.19	1.47	1.78	2.13	2.53	2.99	3.53
60	-	-	-	-	1.11	1.35	1.62	1.94	2.29

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

Cooling capacity	8 504	W
Power input	3 896	W
Current consumption	12.22	A
Mass flow	256	kg/h
C.O.P.	2.18	

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	73	dB(A)
With acoustic hood	65	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	5 574	7 016	8 744	10 774	13 123	-	-	-	-
20	4 942	6 230	7 777	9 601	11 720	14 150	16 900	-	-
30	4 290	5 417	6 776	8 387	10 270	12 442	14 919	17 712	20 822
40	3 588	4 547	5 711	7 102	8 740	10 647	12 843	15 344	18 161
50	-	-	4 557	5 718	7 103	8 735	10 641	12 843	15 362
60	-	-	-	-	5 324	6 671	8 276	10 172	12 396

Power input in W

10	1 725	1 760	1 793	1 816	1 820	-	-	-	-
20	2 175	2 205	2 241	2 276	2 301	2 306	2 284	-	-
30	2 736	2 747	2 774	2 808	2 840	2 862	2 864	2 840	2 780
40	3 472	3 451	3 455	3 474	3 500	3 525	3 539	3 534	3 503
50	-	-	4 347	4 339	4 345	4 359	4 371	4 373	4 357
60	-	-	-	-	5 438	5 428	5 424	5 420	5 405

Current consumption in A

10	5.41	5.52	5.63	5.70	5.71	-	-	-	-
20	6.82	6.92	7.03	7.14	7.22	7.24	7.17	-	-
30	8.58	8.62	8.70	8.81	8.91	8.98	8.99	8.91	8.72
40	10.89	10.83	10.84	10.90	10.98	11.06	11.10	11.09	10.99
50	-	-	13.64	13.61	13.63	13.68	13.72	13.72	13.67
60	-	-	-	-	17.06	17.03	17.02	17.01	16.96

Mass flow in kg/h

10	124	162	204	250	301	-	-	-	-
20	132	167	207	250	299	354	416	-	-
30	134	167	205	247	295	348	409	475	548
40	131	163	199	240	287	340	401	467	540
50	-	-	190	230	277	331	391	458	531
60	-	-	-	-	266	320	381	449	524

Coefficient of performance (C.O.P.)

10	3.23	3.99	4.88	5.93	7.21	-	-	-	-
20	2.27	2.83	3.47	4.22	5.09	6.14	7.40	-	-
30	1.57	1.97	2.44	2.99	3.62	4.35	5.21	6.24	7.49
40	1.03	1.32	1.65	2.04	2.50	3.02	3.63	4.34	5.19
50	-	-	1.05	1.32	1.63	2.00	2.43	2.94	3.53
60	-	-	-	-	0.98	1.23	1.53	1.88	2.29

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

Cooling capacity	7 937	W
Power input	3 896	W
Current consumption	12.22	A
Mass flow	282	kg/h
C.O.P.	2.04	

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	73	dB(A)
With acoustic hood	65	dB(A)

Tolerance according EN12900

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

Cooling capacity in W

30	-	4 342	5 572	7 067	8 857	10 970	13 436	16 283	19 542
35	-	4 086	5 253	6 673	8 374	10 385	12 735	15 454	18 569
40	-	3 816	4 921	6 266	7 878	9 787	12 022	14 611	17 584
45	-	-	4 567	5 836	7 360	9 167	11 286	13 745	16 575
50	-	-	-	5 376	6 811	8 516	10 518	12 848	15 534
55	-	-	-	-	6 223	7 824	9 710	11 909	14 450
60	-	-	-	-	-	7 084	8 852	10 919	13 313
65	-	-	-	-	-	-	7 934	9 867	12 112

Power input in W

30	-	2 647	2 632	2 623	2 612	2 594	2 563	2 512	2 434
35	-	2 981	2 959	2 944	2 931	2 912	2 882	2 834	2 761
40	-	3 344	3 316	3 298	3 282	3 264	3 235	3 191	3 125
45	-	-	3 711	3 690	3 673	3 655	3 630	3 590	3 531
50	-	-	-	4 126	4 109	4 093	4 071	4 038	3 986
55	-	-	-	-	4 597	4 583	4 566	4 539	4 496
60	-	-	-	-	-	5 132	5 120	5 101	5 068
65	-	-	-	-	-	-	5 740	5 729	5 706

Current consumption in A

30	-	9.29	9.12	9.09	9.14	9.19	9.21	9.11	8.86
35	-	9.93	9.76	9.72	9.75	9.79	9.77	9.65	9.37
40	-	10.65	10.49	10.44	10.46	10.49	10.46	10.32	10.01
45	-	-	11.29	11.26	11.28	11.31	11.27	11.12	10.79
50	-	-	-	12.16	12.19	12.22	12.19	12.04	11.71
55	-	-	-	-	13.19	13.24	13.22	13.08	12.75
60	-	-	-	-	-	14.36	14.36	14.23	13.91
65	-	-	-	-	-	-	15.59	15.49	15.19

Mass flow in kg/h

30	-	97	123	153	188	229	277	330	391
35	-	96	121	151	187	228	274	328	388
40	-	95	120	150	185	225	272	325	385
45	-	-	118	147	182	223	269	322	382
50	-	-	-	144	179	219	266	319	379
55	-	-	-	-	174	215	261	314	374
60	-	-	-	-	-	209	255	308	368
65	-	-	-	-	-	-	248	301	361

Coefficient of performance (C.O.P.)

30	-	1.64	2.12	2.69	3.39	4.23	5.24	6.48	8.03
35	-	1.37	1.78	2.27	2.86	3.57	4.42	5.45	6.72
40	-	1.14	1.48	1.90	2.40	3.00	3.72	4.58	5.63
45	-	-	1.23	1.58	2.00	2.51	3.11	3.83	4.69
50	-	-	-	1.30	1.66	2.08	2.58	3.18	3.90
55	-	-	-	-	1.35	1.71	2.13	2.62	3.21
60	-	-	-	-	-	1.38	1.73	2.14	2.63
65	-	-	-	-	-	-	1.38	1.72	2.12

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

Cooling capacity	7 360	W
Power input	3 673	W
Current consumption	11.28	A
Mass flow	182	kg/h
C.O.P.	2.00	

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	4 103	5 132	6 362	7 824	9 549	-	-	-	-
20	3 684	4 682	5 859	7 248	8 878	10 780	12 984	-	-
30	-	-	5 253	6 542	8 052	9 812	11 853	14 206	16 900
40	-	-	-	5 733	7 097	8 690	10 543	12 686	15 150
50	-	-	-	-	6 041	7 442	9 081	10 989	13 197
60	-	-	-	-	-	-	7 493	9 141	11 066

Power input in W

10	1 356	1 408	1 456	1 490	1 496	-	-	-	-
20	1 666	1 691	1 736	1 788	1 835	1 864	1 864	-	-
30	-	-	2 154	2 183	2 228	2 278	2 321	2 344	2 335
40	-	-	-	2 786	2 789	2 818	2 863	2 909	2 946
50	-	-	-	-	3 630	3 597	3 602	3 630	3 671
60	-	-	-	-	-	-	4 651	4 620	4 624

Current consumption in A

10	7.78	7.83	7.87	7.90	7.93	-	-	-	-
20	8.27	8.35	8.42	8.48	8.54	8.60	8.65	-	-
30	-	-	9.21	9.28	9.35	9.42	9.49	9.57	9.65
40	-	-	-	10.55	10.60	10.66	10.73	10.80	10.88
50	-	-	-	-	12.57	12.58	12.62	12.66	12.72
60	-	-	-	-	-	-	15.42	15.40	15.41

Mass flow in kg/h

10	67	84	105	130	159	-	-	-	-
20	65	82	104	128	158	193	235	-	-
30	-	-	100	125	155	191	233	283	340
40	-	-	-	120	150	186	228	277	335
50	-	-	-	-	142	177	219	269	326
60	-	-	-	-	-	-	207	256	313

Coefficient of performance (C.O.P.)

10	3.03	3.65	4.37	5.25	6.38	-	-	-	-
20	2.21	2.77	3.37	4.05	4.84	5.78	6.97	-	-
30	-	-	2.44	3.00	3.61	4.31	5.11	6.06	7.24
40	-	-	-	2.06	2.54	3.08	3.68	4.36	5.14
50	-	-	-	-	1.66	2.07	2.52	3.03	3.59
60	-	-	-	-	-	-	1.61	1.98	2.39

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

Cooling capacity	6 580	W
Power input	3 167	W
Current consumption	11.48	A
Mass flow	146	kg/h
C.O.P.	2.08	

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	4 120	5 157	6 398	7 873	9 611	-	-	-	-
20	3 652	4 651	5 835	7 233	8 876	10 792	13 008	-	-
30	3 134	4 069	5 168	6 463	7 985	9 763	11 825	14 198	16 900
40	-	-	4 427	5 593	6 966	8 579	10 463	12 645	15 150
50	-	-	-	4 651	5 849	7 271	8 949	10 914	13 197
60	-	-	-	-	4 664	5 867	7 311	9 033	11 066

Power input in W

10	1 356	1 408	1 456	1 490	1 496	-	-	-	-
20	1 666	1 691	1 736	1 788	1 835	1 864	1 864	-	-
30	2 197	2 155	2 154	2 183	2 228	2 278	2 321	2 344	2 335
40	-	-	2 822	2 786	2 789	2 818	2 863	2 909	2 946
50	-	-	-	3 711	3 630	3 597	3 602	3 630	3 671
60	-	-	-	-	4 864	4 728	4 651	4 620	4 624

Current consumption in A

10	7.78	7.83	7.87	7.90	7.93	-	-	-	-
20	8.27	8.35	8.42	8.48	8.54	8.60	8.65	-	-
30	9.07	9.14	9.21	9.28	9.35	9.42	9.49	9.57	9.65
40	-	-	10.51	10.55	10.60	10.66	10.73	10.80	10.88
50	-	-	-	12.56	12.57	12.58	12.62	12.66	12.72
60	-	-	-	-	15.49	15.45	15.42	15.40	15.41

Mass flow in kg/h

10	79	98	120	145	174	-	-	-	-
20	76	96	118	144	174	208	247	-	-
30	73	92	115	140	170	205	245	290	340
40	-	-	109	135	165	200	240	285	335
50	-	-	-	126	156	191	230	276	326
60	-	-	-	-	144	178	218	263	313

Coefficient of performance (C.O.P.)

10	3.04	3.66	4.39	5.28	6.42	-	-	-	-
20	2.19	2.75	3.36	4.04	4.84	5.79	6.98	-	-
30	1.43	1.89	2.40	2.96	3.58	4.28	5.09	6.06	7.24
40	-	-	1.57	2.01	2.50	3.04	3.65	4.35	5.14
50	-	-	-	1.25	1.61	2.02	2.48	3.01	3.59
60	-	-	-	-	0.96	1.24	1.57	1.96	2.39

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

Cooling capacity	6 418	W
Power input	3 167	W
Current consumption	11.48	A
Mass flow	161	kg/h
C.O.P.	2.03	

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	4 712	5 944	7 430	9 208	11 315	-	-	-	-
20	4 339	5 544	6 973	8 664	10 654	12 981	15 683	-	-
30	-	-	6 391	7 961	9 801	11 948	14 439	17 312	20 604
40	-	-	-	7 132	8 788	10 721	12 969	15 568	18 556
50	-	-	-	-	7 647	9 333	11 304	13 596	16 247
60	-	-	-	-	-	-	9 476	11 428	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	-	-	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	-	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	-	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	-	-	5 246	5 261	5 295

Current consumption in A

10	7.13	7.24	7.32	7.38	7.43	-	-	-	-
20	7.97	8.11	8.20	8.26	8.32	8.39	8.49	-	-
30	-	-	9.16	9.24	9.30	9.37	9.46	9.60	9.79
40	-	-	-	10.54	10.61	10.67	10.76	10.89	11.06
50	-	-	-	-	12.48	12.55	12.63	12.75	12.91
60	-	-	-	-	-	-	15.31	15.42	15.57

Mass flow in kg/h

10	77	98	123	152	188	-	-	-	-
20	76	98	123	154	190	233	284	-	-
30	-	-	122	153	189	233	284	344	415
40	-	-	-	150	186	229	280	340	410
50	-	-	-	-	180	222	273	332	402
60	-	-	-	-	-	-	262	320	388

Coefficient of performance (C.O.P.)

10	2.98	3.68	4.48	5.42	6.55	-	-	-	-
20	2.16	2.71	3.34	4.04	4.84	5.77	6.86	-	-
30	-	-	2.46	3.01	3.62	4.31	5.10	6.00	7.05
40	-	-	-	2.17	2.64	3.17	3.76	4.43	5.19
50	-	-	-	-	1.84	2.23	2.68	3.18	3.75
60	-	-	-	-	-	-	1.81	2.17	2.59

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

Cooling capacity	8 232	W
Power input	3 715	W
Current consumption	11.46	A
Mass flow	183	kg/h
C.O.P.	2.22	

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	4 731	5 973	7 472	9 265	11 388	-	-	-	-
20	4 301	5 508	6 944	8 646	10 652	12 996	15 712	-	-
30	3 813	4 950	6 288	7 865	9 719	11 888	14 405	17 303	20 604
40	-	-	5 539	6 957	8 626	10 584	12 870	15 517	18 556
50	-	-	-	5 956	7 405	9 120	11 139	13 503	16 247
60	-	-	-	-	6 091	7 528	9 247	11 293	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	2 575	2 574	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	3 280	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	4 175	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	5 299	5 256	5 246	5 261	5 295

Current consumption in A

10	7.13	7.24	7.32	7.38	7.43	-	-	-	-
20	7.97	8.11	8.20	8.26	8.32	8.39	8.49	-	-
30	8.90	9.05	9.16	9.24	9.30	9.37	9.46	9.60	9.79
40	-	-	10.45	10.54	10.61	10.67	10.76	10.89	11.06
50	-	-	-	12.40	12.48	12.55	12.63	12.75	12.91
60	-	-	-	-	15.15	15.23	15.31	15.42	15.57

Mass flow in kg/h

10	91	114	140	171	206	-	-	-	-
20	90	113	141	172	208	251	299	-	-
30	89	112	139	171	208	250	299	354	415
40	-	-	136	168	204	246	295	349	410
50	-	-	-	162	197	239	287	341	402
60	-	-	-	-	188	229	275	329	388

Coefficient of performance (C.O.P.)

10	3.00	3.69	4.50	5.46	6.60	-	-	-	-
20	2.14	2.70	3.32	4.03	4.84	5.77	6.87	-	-
30	1.48	1.92	2.42	2.97	3.59	4.29	5.09	6.00	7.05
40	-	-	1.69	2.11	2.59	3.13	3.73	4.42	5.19
50	-	-	-	1.43	1.78	2.18	2.64	3.16	3.75
60	-	-	-	-	1.15	1.43	1.76	2.15	2.59

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

Cooling capacity	8 029	W
Power input	3 715	W
Current consumption	11.46	A
Mass flow	201	kg/h
C.O.P.	2.16	

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 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	4 103	5 132	6 362	7 824	9 549	-	-	-	-
20	3 684	4 682	5 859	7 248	8 878	10 780	12 984	-	-
30	-	-	5 253	6 542	8 052	9 812	11 853	14 206	16 900
40	-	-	-	5 733	7 097	8 690	10 543	12 686	15 150
50	-	-	-	-	6 041	7 442	9 081	10 989	13 197
60	-	-	-	-	-	-	7 493	9 141	11 066

Power input in W

10	1 356	1 408	1 456	1 490	1 496	-	-	-	-
20	1 666	1 691	1 736	1 788	1 835	1 864	1 864	-	-
30	-	-	2 154	2 183	2 228	2 278	2 321	2 344	2 335
40	-	-	-	2 786	2 789	2 818	2 863	2 909	2 946
50	-	-	-	-	3 630	3 597	3 602	3 630	3 671
60	-	-	-	-	-	-	4 651	4 620	4 624

Current consumption in A

10	7.78	7.83	7.87	7.90	7.93	-	-	-	-
20	8.27	8.35	8.42	8.48	8.54	8.60	8.65	-	-
30	-	-	9.21	9.28	9.35	9.42	9.49	9.57	9.65
40	-	-	-	10.55	10.60	10.66	10.73	10.80	10.88
50	-	-	-	-	12.57	12.58	12.62	12.66	12.72
60	-	-	-	-	-	-	15.42	15.40	15.41

Mass flow in kg/h

10	67	84	105	130	159	-	-	-	-
20	65	82	104	128	158	193	235	-	-
30	-	-	100	125	155	191	233	283	340
40	-	-	-	120	150	186	228	277	335
50	-	-	-	-	142	177	219	269	326
60	-	-	-	-	-	-	207	256	313

Coefficient of performance (C.O.P.)

10	3.03	3.65	4.37	5.25	6.38	-	-	-	-
20	2.21	2.77	3.37	4.05	4.84	5.78	6.97	-	-
30	-	-	2.44	3.00	3.61	4.31	5.11	6.06	7.24
40	-	-	-	2.06	2.54	3.08	3.68	4.36	5.14
50	-	-	-	-	1.66	2.07	2.52	3.03	3.59
60	-	-	-	-	-	-	1.61	1.98	2.39

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

Cooling capacity	6 580	W
Power input	3 167	W
Current consumption	11.48	A
Mass flow	146	kg/h
C.O.P.	2.08	

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 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	4 111	5 148	6 388	7 863	9 602	-	-	-	-
20	3 643	4 641	5 824	7 223	8 866	10 784	13 001	-	-
30	3 124	4 058	5 157	6 452	7 974	9 753	11 818	14 194	16 900
40	-	-	4 416	5 581	6 955	8 569	10 455	12 640	15 150
50	-	-	-	4 638	5 838	7 261	8 940	10 909	13 197
60	-	-	-	-	4 652	5 857	7 303	9 027	11 066

Power input in W

10	1 356	1 408	1 456	1 490	1 496	-	-	-	-
20	1 666	1 691	1 736	1 788	1 835	1 864	1 864	-	-
30	2 197	2 155	2 154	2 183	2 228	2 278	2 321	2 344	2 335
40	-	-	2 822	2 786	2 789	2 818	2 863	2 909	2 946
50	-	-	-	3 711	3 630	3 597	3 602	3 630	3 671
60	-	-	-	-	4 864	4 728	4 651	4 620	4 624

Current consumption in A

10	7.78	7.83	7.87	7.90	7.93	-	-	-	-
20	8.27	8.35	8.42	8.48	8.54	8.60	8.65	-	-
30	9.07	9.14	9.21	9.28	9.35	9.42	9.49	9.57	9.65
40	-	-	10.51	10.55	10.60	10.66	10.73	10.80	10.88
50	-	-	-	12.56	12.57	12.58	12.62	12.66	12.72
60	-	-	-	-	15.49	15.45	15.42	15.40	15.41

Mass flow in kg/h

10	79	98	120	145	174	-	-	-	-
20	76	96	118	144	174	208	247	-	-
30	73	92	115	140	170	205	245	290	340
40	-	-	109	135	165	200	240	285	335
50	-	-	-	126	156	191	230	276	326
60	-	-	-	-	144	178	218	263	313

Coefficient of performance (C.O.P.)

10	3.03	3.66	4.39	5.28	6.42	-	-	-	-
20	2.19	2.74	3.35	4.04	4.83	5.78	6.98	-	-
30	1.42	1.88	2.39	2.96	3.58	4.28	5.09	6.06	7.24
40	-	-	1.56	2.00	2.49	3.04	3.65	4.34	5.14
50	-	-	-	1.25	1.61	2.02	2.48	3.01	3.59
60	-	-	-	-	0.96	1.24	1.57	1.95	2.39

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

Cooling capacity	6 407	W
Power input	3 167	W
Current consumption	11.48	A
Mass flow	161	kg/h
C.O.P.	2.02	

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	4 712	5 944	7 430	9 208	11 315	-	-	-	-
20	4 339	5 544	6 973	8 664	10 654	12 981	15 683	-	-
30	-	-	6 391	7 961	9 801	11 948	14 439	17 312	20 604
40	-	-	-	7 132	8 788	10 721	12 969	15 568	18 556
50	-	-	-	-	7 647	9 333	11 304	13 596	16 247
60	-	-	-	-	-	-	9 476	11 428	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	-	-	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	-	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	-	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	-	-	5 246	5 261	5 295

Current consumption in A

10	7.13	7.24	7.32	7.38	7.43	-	-	-	-
20	7.97	8.11	8.20	8.26	8.32	8.39	8.49	-	-
30	-	-	9.16	9.24	9.30	9.37	9.46	9.60	9.79
40	-	-	-	10.54	10.61	10.67	10.76	10.89	11.06
50	-	-	-	-	12.48	12.55	12.63	12.75	12.91
60	-	-	-	-	-	-	15.31	15.42	15.57

Mass flow in kg/h

10	78	99	125	155	191	-	-	-	-
20	77	99	125	156	193	237	289	-	-
30	-	-	124	155	193	237	289	351	422
40	-	-	-	153	189	234	286	347	419
50	-	-	-	-	184	227	279	339	410
60	-	-	-	-	-	-	268	327	397

Coefficient of performance (C.O.P.)

10	2.98	3.68	4.48	5.42	6.55	-	-	-	-
20	2.16	2.71	3.34	4.04	4.84	5.77	6.86	-	-
30	-	-	2.46	3.01	3.62	4.31	5.10	6.00	7.05
40	-	-	-	2.17	2.64	3.17	3.76	4.43	5.19
50	-	-	-	-	1.84	2.23	2.68	3.18	3.75
60	-	-	-	-	-	-	1.81	2.17	2.59

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

Cooling capacity	8 232	W
Power input	3 715	W
Current consumption	11.46	A
Mass flow	187	kg/h
C.O.P.	2.22	

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
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	4 721	5 962	7 460	9 253	11 377	-	-	-	-
20	4 290	5 496	6 931	8 634	10 640	12 986	15 704	-	-
30	3 801	4 937	6 274	7 852	9 706	11 876	14 396	17 297	20 604
40	-	-	5 525	6 942	8 612	10 572	12 860	15 511	18 556
50	-	-	-	5 940	7 390	9 106	11 129	13 497	16 247
60	-	-	-	-	6 076	7 514	9 236	11 286	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	2 575	2 574	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	3 280	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	4 175	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	5 299	5 256	5 246	5 261	5 295

Current consumption in A

10	7.13	7.24	7.32	7.38	7.43	-	-	-	-
20	7.97	8.11	8.20	8.26	8.32	8.39	8.49	-	-
30	8.90	9.05	9.16	9.24	9.30	9.37	9.46	9.60	9.79
40	-	-	10.45	10.54	10.61	10.67	10.76	10.89	11.06
50	-	-	-	12.40	12.48	12.55	12.63	12.75	12.91
60	-	-	-	-	15.15	15.23	15.31	15.42	15.57

Mass flow in kg/h

10	92	115	142	173	210	-	-	-	-
20	92	115	143	175	212	255	304	-	-
30	90	114	142	174	211	255	304	360	422
40	-	-	139	171	208	251	300	356	419
50	-	-	-	165	202	244	293	348	410
60	-	-	-	-	192	234	281	336	397

Coefficient of performance (C.O.P.)

10	2.99	3.69	4.50	5.45	6.59	-	-	-	-
20	2.13	2.69	3.32	4.03	4.83	5.77	6.86	-	-
30	1.48	1.92	2.41	2.97	3.59	4.29	5.08	5.99	7.05
40	-	-	1.68	2.11	2.59	3.12	3.73	4.42	5.19
50	-	-	-	1.42	1.77	2.18	2.64	3.16	3.75
60	-	-	-	-	1.15	1.43	1.76	2.15	2.59

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

Cooling capacity	8 015	W
Power input	3 715	W
Current consumption	11.46	A
Mass flow	205	kg/h
C.O.P.	2.16	

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 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	4 474	5 574	6 921	8 545	10 475	-	-	-	-
20	4 005	5 031	6 271	7 754	9 512	11 575	13 972	-	-
30	-	4 491	5 604	6 929	8 496	10 334	12 476	14 950	17 786
40	-	-	4 922	6 069	7 426	9 022	10 888	13 054	15 551
50	-	-	-	-	6 304	7 638	9 210	11 050	13 188
60	-	-	-	-	-	6 185	7 444	8 938	10 697

Power input in W

10	1 429	1 457	1 483	1 510	1 541	-	-	-	-
20	1 783	1 815	1 841	1 865	1 888	1 913	1 944	-	-
30	-	2 269	2 299	2 323	2 342	2 359	2 377	2 400	2 428
40	-	-	2 876	2 903	2 922	2 935	2 945	2 955	2 967
50	-	-	-	-	3 647	3 659	3 665	3 666	3 666
60	-	-	-	-	-	4 552	4 557	4 553	4 544

Current consumption in A

10	7.88	7.95	8.02	8.09	8.18	-	-	-	-
20	8.54	8.60	8.65	8.71	8.77	8.83	8.90	-	-
30	-	9.56	9.61	9.66	9.71	9.75	9.79	9.83	9.87
40	-	-	10.95	11.01	11.06	11.09	11.12	11.14	11.16
50	-	-	-	-	12.87	12.91	12.95	12.97	12.97
60	-	-	-	-	-	15.27	15.32	15.35	15.36

Mass flow in kg/h

10	90	114	142	176	217	-	-	-	-
20	88	112	140	173	213	262	319	-	-
30	-	109	137	169	209	257	314	381	460
40	-	-	133	165	204	251	307	373	451
50	-	-	-	-	198	244	298	363	440
60	-	-	-	-	-	235	289	352	427

Coefficient of performance (C.O.P.)

10	3.13	3.83	4.67	5.66	6.80	-	-	-	-
20	2.25	2.77	3.41	4.16	5.04	6.05	7.19	-	-
30	-	1.98	2.44	2.98	3.63	4.38	5.25	6.23	7.33
40	-	-	1.71	2.09	2.54	3.07	3.70	4.42	5.24
50	-	-	-	-	1.73	2.09	2.51	3.01	3.60
60	-	-	-	-	-	1.36	1.63	1.96	2.35

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

Cooling capacity	6 871	W
Power input	3 265	W
Current consumption	11.90	A
Mass flow	201	kg/h
C.O.P.	2.10	

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 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	4 329	5 427	6 777	8 412	10 364	-	-	-	-
20	3 801	4 815	6 051	7 542	9 321	11 418	13 864	-	-
30	3 295	4 207	5 310	6 637	8 223	10 101	12 302	14 857	17 786
40	2 811	3 602	4 553	5 699	7 073	8 712	10 649	12 919	15 551
50	-	-	3 780	4 727	5 872	7 252	8 906	10 872	13 188
60	-	-	-	-	4 611	5 716	7 068	8 713	10 697

Power input in W

10	1 429	1 457	1 483	1 510	1 541	-	-	-	-
20	1 783	1 815	1 841	1 865	1 888	1 913	1 944	-	-
30	2 230	2 269	2 299	2 323	2 342	2 359	2 377	2 400	2 428
40	2 788	2 839	2 876	2 903	2 922	2 935	2 945	2 955	2 967
50	-	-	3 591	3 625	3 647	3 659	3 665	3 666	3 666
60	-	-	-	-	4 537	4 552	4 557	4 553	4 544

Current consumption in A

10	7.88	7.95	8.02	8.09	8.18	-	-	-	-
20	8.54	8.60	8.65	8.71	8.77	8.83	8.90	-	-
30	9.50	9.56	9.61	9.66	9.71	9.75	9.79	9.83	9.87
40	10.79	10.88	10.95	11.01	11.06	11.09	11.12	11.14	11.16
50	-	-	12.72	12.80	12.87	12.91	12.95	12.97	12.97
60	-	-	-	-	15.20	15.27	15.32	15.35	15.36

Mass flow in kg/h

10	107	133	162	197	238	-	-	-	-
20	104	130	160	194	235	282	336	-	-
30	102	127	156	190	230	277	330	392	460
40	100	124	152	185	224	270	323	383	451
50	-	-	148	180	218	262	314	373	440
60	-	-	-	-	211	254	304	362	427

Coefficient of performance (C.O.P.)

10	3.03	3.73	4.57	5.57	6.72	-	-	-	-
20	2.13	2.65	3.29	4.04	4.94	5.97	7.13	-	-
30	1.48	1.85	2.31	2.86	3.51	4.28	5.17	6.19	7.33
40	1.01	1.27	1.58	1.96	2.42	2.97	3.62	4.37	5.24
50	-	-	1.05	1.30	1.61	1.98	2.43	2.97	3.60
60	-	-	-	-	1.02	1.26	1.55	1.91	2.35

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

Cooling capacity	6 479	W
Power input	3 265	W
Current consumption	11.90	A
Mass flow	221	kg/h
C.O.P.	1.98	

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
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	5 553	6 890	8 509	10 443	12 723	-	-	-	-
20	4 951	6 215	7 727	9 520	11 626	14 078	16 909	-	-
30	-	5 523	6 899	8 522	10 425	12 641	15 202	18 140	21 488
40	-	-	6 031	7 455	9 125	11 075	13 338	15 944	18 928
50	-	-	-	-	7 733	9 387	11 322	13 568	16 159
60	-	-	-	-	-	7 584	9 161	11 018	13 188

Power input in W

10	1 739	1 777	1 812	1 852	1 904	-	-	-	-
20	2 153	2 210	2 253	2 288	2 322	2 361	2 413	-	-
30	-	2 722	2 790	2 838	2 872	2 900	2 928	2 963	3 012
40	-	-	3 418	3 497	3 550	3 585	3 607	3 624	3 642
50	-	-	-	-	4 352	4 411	4 446	4 463	4 469
60	-	-	-	-	-	5 374	5 440	5 475	5 487

Current consumption in A

10	7.47	7.47	7.50	7.56	7.65	-	-	-	-
20	8.23	8.29	8.35	8.42	8.50	8.59	8.69	-	-
30	-	9.29	9.41	9.52	9.62	9.70	9.78	9.84	9.90
40	-	-	10.75	10.93	11.08	11.19	11.26	11.31	11.32
50	-	-	-	-	12.93	13.10	13.21	13.26	13.26
60	-	-	-	-	-	15.50	15.67	15.77	15.79

Mass flow in kg/h

10	112	141	175	215	263	-	-	-	-
20	109	138	172	212	261	318	386	-	-
30	-	134	168	208	257	314	382	462	556
40	-	-	163	203	251	308	375	455	549
50	-	-	-	-	243	299	367	446	539
60	-	-	-	-	-	289	355	434	526

Coefficient of performance (C.O.P.)

10	3.19	3.88	4.70	5.64	6.68	-	-	-	-
20	2.30	2.81	3.43	4.16	5.01	5.96	7.01	-	-
30	-	2.03	2.47	3.00	3.63	4.36	5.19	6.12	7.13
40	-	-	1.76	2.13	2.57	3.09	3.70	4.40	5.20
50	-	-	-	-	1.78	2.13	2.55	3.04	3.62
60	-	-	-	-	-	1.41	1.68	2.01	2.40

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

Cooling capacity	8 440	W
Power input	3 936	W
Current consumption	11.95	A
Mass flow	247	kg/h
C.O.P.	2.14	

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
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	5 374	6 708	8 332	10 281	12 588	-	-	-	-
20	4 699	5 949	7 457	9 260	11 392	13 888	16 779	-	-
30	4 039	5 175	6 537	8 164	10 091	12 355	14 991	18 028	21 488
40	3 398	4 391	5 579	7 000	8 692	10 695	13 045	15 779	18 928
50	-	-	4 586	5 773	7 202	8 913	10 948	13 350	16 159
60	-	-	-	-	5 618	7 008	8 699	10 742	13 188

Power input in W

10	1 739	1 777	1 812	1 852	1 904	-	-	-	-
20	2 153	2 210	2 253	2 288	2 322	2 361	2 413	-	-
30	2 627	2 722	2 790	2 838	2 872	2 900	2 928	2 963	3 012
40	3 156	3 307	3 418	3 497	3 550	3 585	3 607	3 624	3 642
50	-	-	4 133	4 261	4 352	4 411	4 446	4 463	4 469
60	-	-	-	-	5 272	5 374	5 440	5 475	5 487

Current consumption in A

10	7.47	7.47	7.50	7.56	7.65	-	-	-	-
20	8.23	8.29	8.35	8.42	8.50	8.59	8.69	-	-
30	9.14	9.29	9.41	9.52	9.62	9.70	9.78	9.84	9.90
40	10.27	10.53	10.75	10.93	11.08	11.19	11.26	11.31	11.32
50	-	-	12.43	12.71	12.93	13.10	13.21	13.26	13.26
60	-	-	-	-	15.25	15.50	15.67	15.77	15.79

Mass flow in kg/h

10	132	164	200	241	290	-	-	-	-
20	129	161	197	238	287	343	407	-	-
30	125	157	192	234	282	338	403	475	556
40	121	151	187	228	276	332	396	468	549
50	-	-	179	220	267	323	386	458	539
60	-	-	-	-	257	311	374	446	526

Coefficient of performance (C.O.P.)

10	3.09	3.78	4.60	5.55	6.61	-	-	-	-
20	2.18	2.69	3.31	4.05	4.91	5.88	6.95	-	-
30	1.54	1.90	2.34	2.88	3.51	4.26	5.12	6.08	7.13
40	1.08	1.33	1.63	2.00	2.45	2.98	3.62	4.35	5.20
50	-	-	1.11	1.35	1.65	2.02	2.46	2.99	3.62
60	-	-	-	-	1.07	1.30	1.60	1.96	2.40

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

Cooling capacity	7 958	W
Power input	3 936	W
Current consumption	11.95	A
Mass flow	272	kg/h
C.O.P.	2.02	

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)

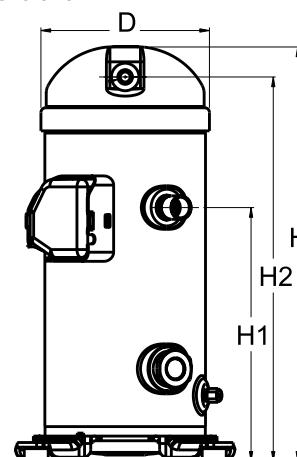
Sound power data

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

Tolerance according EN12900

General Characteristics

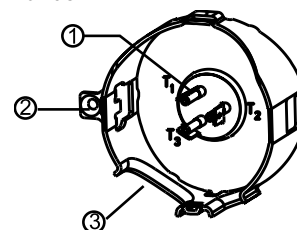
Model number (on compressor nameplate)	MLZ030T4LC9A	MLZ030T4LC9A
Code number for Singlepack*	121U8641	121L8641
Code number for Industrial pack**	121U8640	121L8640
Drawing number	0XR6025B-2	0XR6025B-2
Suction and discharge connections	Brazed	Brazed
Suction connection	7/8" ODF	7/8" ODF
Discharge connection	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	68.79 cm ³ /rev	
Displacement @ Nominal speed	12.0 m ³ /h @ 2900 rpm - 14.4 m ³ /h @ 3500 rpm	
Net weight	41 kg	
Oil charge	1.57 litre, POE --	
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	5.44 kg	
Approved refrigerants	R404A,R507,R134a,R407A,R407F,R448A,R449A,R452A,R22	

Dimensions


D=184 mm
H=455 mm
H1=280 mm
H2=422 mm
H3=- mm

Electrical Characteristics

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-460 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	2.6 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	2.611 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	2.649 Ω
Rated Load Amps (RLA)	8.3 A
Maximum Continuous Current (MCC)	13 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, -, -

*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.

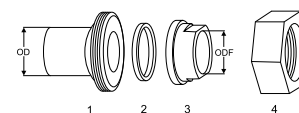
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

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

Solder sleeve adapter set



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

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants

Code no.

POE lubricant, 215PZ(PL46HB), 1 litre can	120Z0648
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Crankcase heaters

Code no.

Belt type crankcase heater, 70 W, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
Belt type crankcase heater, 70 W, 460 V, UL	120Z5012

Miscellaneous accessories

Code no.

Acoustic hood	120Z5084
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

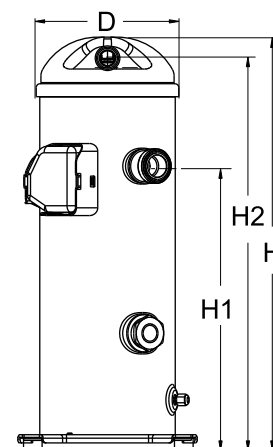
Spare parts

Code no.

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

General Characteristics

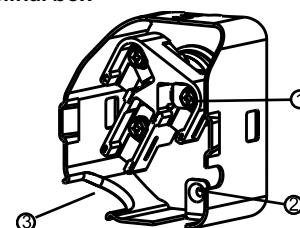
Model number (on compressor nameplate)		MLZ030T4LQ9
Code number for Singlepack*		121U8573
Code number for Industrial pack**		121U8572
Drawing number		0XR6298B-2
Suction and discharge connections		Rotolock
Suction connection		1-1/4 " Rotolock
Discharge connection		1 " Rotolock
Suction connection with supplied sleeve		7/8 " -
Discharge connection with supplied sleeve	- "	1/2 " -
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume		68.79 cm ³ /rev
Displacement @ Nominal speed		12.0 m ³ /h @ 2900 rpm - 14.4 m ³ /h @ 3500 rpm
Net weight		41 kg
Oil charge		1.57 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		5.44 kg
Approved refrigerants		R404A, R507, R134a, R407A, R407C, R407F, R22

Dimensions


D=184 mm
H=454.9 mm
H1=280 mm
H2=422.2 mm
H3=- mm

Electrical Characteristics

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-460 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	2.6 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	2.611 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	2.649 Ω
Rated Load Amps (RLA)	8.3 A
Maximum Continuous Current (MCC)	13 A
Locked Rotor Amps (LRA)	60 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 2: Earth connection
- 3: Power cable passage

Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	3 Nm / 2 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.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

Rotolock accessories, discharge side

Code no.

Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

Rotolock accessories, sets

Code no.

Teflon seals, sleeves, nuts for discharge and suction (1" and 1"1/4)	120Z5074
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, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
Belt type crankcase heater, 70 W, 460 V, UL	120Z5012

Miscellaneous accessories

Code no.

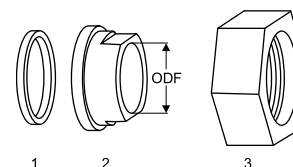
Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

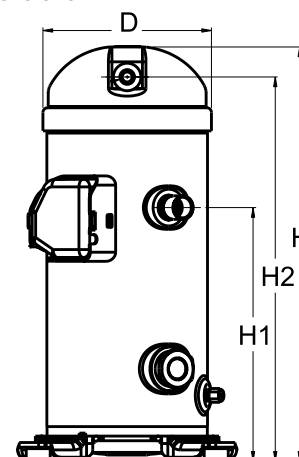
Gaskets, sleeves and nuts



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

General Characteristics

Model number (on compressor nameplate)	MLZ030T4LC9	MLZ030T4LC9
Code number for Singlepack*	121U8010	120U8010
Code number for Industrial pack**	121U8009	120U8009
Drawing number	0XR6025B-2	0XR6025B-2
Suction and discharge connections	Brazed	Brazed
Suction connection	7/8" ODF	7/8" 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	68.79 cm ³ /rev	
Displacement @ Nominal speed	12.0 m ³ /h @ 2900 rpm - 14.4 m ³ /h @ 3500 rpm	
Net weight	41 kg	
Oil charge	1.57 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	5.44 kg	
Approved refrigerants	R404A, R507, R134a, R407A, R407C, R407F, R22	

Dimensions


D=184 mm

H=455 mm

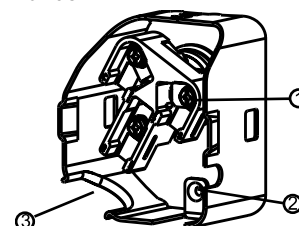
H1=280 mm

H2=422 mm

H3=- mm

Electrical Characteristics

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-460 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	2.6 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	2.611 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	2.649 Ω
Rated Load Amps (RLA)	8.3 A
Maximum Continuous Current (MCC)	13 A
Locked Rotor Amps (LRA)	60 A
Motor protection	Internal overload protector

Terminal box


IP22

1: Screw connectors 10-32 UNF x 9.5

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	3 Nm / 2 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.

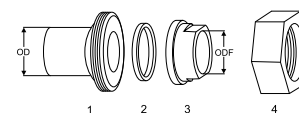
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

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

Solder sleeve adapter set



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

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
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, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
Belt type crankcase heater, 70 W, 460 V, UL	120Z5012

Miscellaneous accessories

Code no.

Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

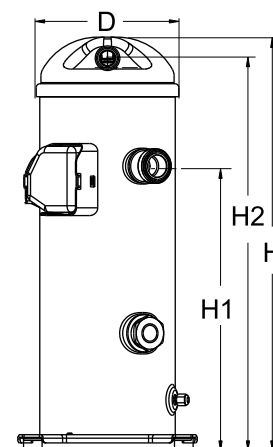
Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

General Characteristics

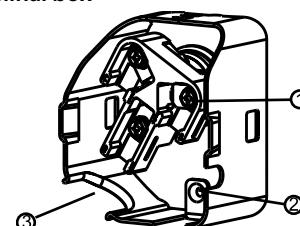
Model number (on compressor nameplate)	MLZ030T4LC9A	MLZ030T4LQ9A
Code number for Singlepack*	120U8641	121U8767
Code number for Industrial pack**	120U8640	121U8766
Drawing number	0XR6025B-2	0XR6298B-2
Suction and discharge connections	Brazed	Rotolock
Suction connection	7/8" ODF	1-1/4" Rotolock
Discharge connection	1/2" ODF	1" Rotolock
Suction connection with supplied sleeve		7/8" -
Discharge connection with supplied sleeve	- "	1/2" -
Oil sight glass	Threaded	Threaded
Oil equalisation connection	None	None
Oil drain connection	1/4" flare	None
LP gauge port	None	None
IPR valve	32 bar	None
Swept volume	68.79 cm ³ /rev	
Displacement @ Nominal speed	12.0 m ³ /h @ 2900 rpm - 14.4 m ³ /h @ 3500 rpm	
Net weight	41 kg	
Oil charge	1.57 litre, POE - -	
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	5.44 kg	
Approved refrigerants	R404A, R507, R134a, R407A, R407F, R448A, R449A, R452A, R22	

Dimensions


D=184 mm
H=454.9 mm
H1=280 mm
H2=422.2 mm
H3=- mm

Electrical Characteristics

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz
Voltage range	340-460 V @ 50Hz - 414-506 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	2.6 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	2.611 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	2.649 Ω
Rated Load Amps (RLA)	8.3 A
Maximum Continuous Current (MCC)	13 A
Locked Rotor Amps (LRA)	60 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 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	3 Nm / 2 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.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

Rotolock accessories, discharge side

Code no.

Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

Rotolock accessories, sets

Code no.

Teflon seals, sleeves, nuts for discharge and suction (1" and 1"1/4)	120Z5074
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants

Code no.

POE lubricant, 215PZ(PL46HB), 1 litre can	120Z0648
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Crankcase heaters

Code no.

Belt type crankcase heater, 70 W, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
Belt type crankcase heater, 70 W, 460 V, UL	120Z5012

Miscellaneous accessories

Code no.

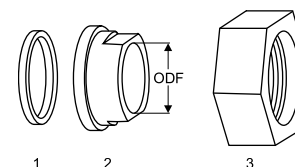
Acoustic hood	120Z5084
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

Gaskets, sleeves and nuts



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

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	5 960	7 400	9 075	10 978	-	-	-	-	-
20	5 722	7 124	8 756	10 614	12 688	-	-	-	-
30	5 174	6 479	8 005	9 746	11 696	13 844	16 176	-	-
40	4 635	5 841	7 258	8 880	10 703	12 718	14 914	-	-
50	-	5 137	6 441	7 942	9 635	11 516	13 574	-	-
60	-	-	-	6 860	8 422	10 165	12 084	-	-
68	-	-	-	-	-	8 928	10 735	-	-

Power input in W

16	1 466	1 517	1 579	1 652	-	-	-	-	-
20	1 647	1 698	1 757	1 825	1 902	-	-	-	-
30	2 081	2 136	2 193	2 253	2 316	2 384	2 456	-	-
40	2 539	2 604	2 665	2 723	2 779	2 834	2 888	-	-
50	-	3 164	3 236	3 299	3 355	3 403	3 444	-	-
60	-	-	-	4 043	4 104	4 152	4 188	-	-
68	-	-	-	-	-	4 924	4 960	-	-

Current consumption in A

16	2.82	2.92	3.04	3.18	-	-	-	-	-
20	3.17	3.27	3.38	3.51	3.66	-	-	-	-
30	4.01	4.11	4.22	4.34	4.46	4.59	4.73	-	-
40	4.89	5.01	5.13	5.24	5.35	5.45	5.56	-	-
50	-	6.09	6.23	6.35	6.46	6.55	6.63	-	-
60	-	-	-	7.78	7.90	7.99	8.06	-	-
68	-	-	-	-	-	9.48	9.55	-	-

Mass flow in kg/h

16	137	159	183	212	-	-	-	-	-
20	129	152	177	206	239	-	-	-	-
30	116	140	167	197	232	271	316	-	-
40	108	133	161	192	227	267	313	-	-
50	-	126	153	185	221	261	308	-	-
60	-	-	-	173	208	249	296	-	-
68	-	-	-	-	-	233	279	-	-

Coefficient of performance (C.O.P.)

16	4.07	4.88	5.75	6.65	-	-	-	-	-
20	3.47	4.20	4.98	5.82	6.67	-	-	-	-
30	2.49	3.03	3.65	4.33	5.05	5.81	6.59	-	-
40	1.83	2.24	2.72	3.26	3.85	4.49	5.16	-	-
50	-	1.62	1.99	2.41	2.87	3.38	3.94	-	-
60	-	-	-	1.70	2.05	2.45	2.89	-	-
68	-	-	-	-	-	1.81	2.16	-	-

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

Cooling capacity	6 862	W
Power input	2 934	W
Current consumption	5.65	A
Mass flow	157	kg/h
C.O.P.	2.34	

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	69	dB(A)
With acoustic hood	61	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	5 815	7 241	8 909	10 817	-	-	-	-	-
20	5 597	6 987	8 612	10 472	12 564	-	-	-	-
30	5 099	6 395	7 914	9 654	11 612	13 787	16 176	-	-
40	-	5 809	7 218	8 836	10 659	12 686	14 914	-	-
50	-	-	-	7 947	9 633	11 510	13 574	-	-
60	-	-	-	-	8 460	10 185	12 084	-	-
68	-	-	-	-	-	-	10 735	-	-

Power input in W

16	1 466	1 517	1 579	1 652	-	-	-	-	-
20	1 647	1 698	1 757	1 825	1 902	-	-	-	-
30	2 081	2 136	2 193	2 253	2 316	2 384	2 456	-	-
40	-	2 604	2 665	2 723	2 779	2 834	2 888	-	-
50	-	-	-	3 299	3 355	3 403	3 444	-	-
60	-	-	-	-	4 104	4 152	4 188	-	-
68	-	-	-	-	-	-	4 960	-	-

Current consumption in A

16	2.82	2.92	3.04	3.18	-	-	-	-	-
20	3.17	3.27	3.38	3.51	3.66	-	-	-	-
30	4.01	4.11	4.22	4.34	4.46	4.59	4.73	-	-
40	-	5.01	5.13	5.24	5.35	5.45	5.56	-	-
50	-	-	-	6.35	6.46	6.55	6.63	-	-
60	-	-	-	-	7.90	7.99	8.06	-	-
68	-	-	-	-	-	-	9.55	-	-

Mass flow in kg/h

16	120	143	168	197	-	-	-	-	-
20	114	136	162	192	228	-	-	-	-
30	102	126	153	184	221	265	316	-	-
40	-	119	147	179	217	261	313	-	-
50	-	-	-	173	210	255	308	-	-
60	-	-	-	-	199	243	296	-	-
68	-	-	-	-	-	-	279	-	-

Coefficient of performance (C.O.P.)

16	3.97	4.77	5.64	6.55	-	-	-	-	-
20	3.40	4.11	4.90	5.74	6.61	-	-	-	-
30	2.45	2.99	3.61	4.29	5.01	5.78	6.59	-	-
40	-	2.23	2.71	3.24	3.84	4.48	5.16	-	-
50	-	-	-	2.41	2.87	3.38	3.94	-	-
60	-	-	-	-	2.06	2.45	2.89	-	-
68	-	-	-	-	-	-	2.16	-	-

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

Cooling capacity	6 849	W
Power input	2 934	W
Current consumption	5.65	A
Mass flow	144	kg/h
C.O.P.	2.33	

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	69	dB(A)
With acoustic hood	61	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	7 041	8 786	10 829	13 155	-	-	-	-	-
20	6 726	8 416	10 398	12 658	15 180	-	-	-	-
30	6 084	7 638	9 470	11 570	13 921	16 506	19 304	-	-
40	5 510	6 934	8 624	10 569	12 755	15 169	17 790	-	-
50	-	6 138	7 692	9 488	11 517	13 765	16 216	-	-
60	-	-	-	8 164	10 040	12 130	14 419	-	-
68	-	-	-	-	-	10 544	12 707	-	-

Power input in W

16	1 722	1 785	1 862	1 954	-	-	-	-	-
20	1 931	1 992	2 065	2 149	2 246	-	-	-	-
30	2 443	2 507	2 574	2 646	2 723	2 805	2 893	-	-
40	2 990	3 065	3 137	3 206	3 272	3 337	3 400	-	-
50	-	3 729	3 815	3 890	3 955	4 012	4 059	-	-
60	-	-	-	4 759	4 833	4 891	4 932	-	-
68	-	-	-	-	-	5 782	5 826	-	-

Current consumption in A

16	2.70	2.80	2.92	3.07	-	-	-	-	-
20	3.03	3.13	3.24	3.37	3.52	-	-	-	-
30	3.83	3.93	4.04	4.15	4.27	4.40	4.54	-	-
40	4.69	4.81	4.92	5.03	5.13	5.24	5.33	-	-
50	-	5.85	5.98	6.10	6.21	6.29	6.37	-	-
60	-	-	-	7.47	7.58	7.67	7.74	-	-
68	-	-	-	-	-	9.07	9.14	-	-

Mass flow in kg/h

16	142	173	208	247	-	-	-	-	-
20	141	172	207	246	290	-	-	-	-
30	136	168	203	243	287	335	387	-	-
40	129	161	198	238	283	332	384	-	-
50	-	151	189	230	277	326	380	-	-
60	-	-	-	219	266	318	372	-	-
68	-	-	-	-	-	307	364	-	-

Coefficient of performance (C.O.P.)

16	4.09	4.92	5.81	6.73	-	-	-	-	-
20	3.48	4.22	5.04	5.89	6.76	-	-	-	-
30	2.49	3.05	3.68	4.37	5.11	5.88	6.67	-	-
40	1.84	2.26	2.75	3.30	3.90	4.55	5.23	-	-
50	-	1.65	2.02	2.44	2.91	3.43	3.99	-	-
60	-	-	-	1.72	2.08	2.48	2.92	-	-
68	-	-	-	-	-	1.82	2.18	-	-

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

Cooling capacity	8 179	W
Power input	3 458	W
Current consumption	5.42	A
Mass flow	194	kg/h
C.O.P.	2.37	

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	73	dB(A)
With acoustic hood	65	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	6 869	8 598	10 632	12 962	-	-	-	-	-
20	6 580	8 254	10 227	12 489	15 032	-	-	-	-
30	5 996	7 538	9 362	11 459	13 821	16 439	19 304	-	-
40	-	6 895	8 577	10 516	12 704	15 131	17 790	-	-
50	-	-	-	9 494	11 514	13 758	16 216	-	-
60	-	-	-	-	10 087	12 153	14 419	-	-
68	-	-	-	-	-	-	12 707	-	-

Power input in W

16	1 722	1 785	1 862	1 954	-	-	-	-	-
20	1 931	1 992	2 065	2 149	2 246	-	-	-	-
30	2 443	2 507	2 574	2 646	2 723	2 805	2 893	-	-
40	-	3 065	3 137	3 206	3 272	3 337	3 400	-	-
50	-	-	-	3 890	3 955	4 012	4 059	-	-
60	-	-	-	-	4 833	4 891	4 932	-	-
68	-	-	-	-	-	-	5 826	-	-

Current consumption in A

16	2.70	2.80	2.92	3.07	-	-	-	-	-
20	3.03	3.13	3.24	3.37	3.52	-	-	-	-
30	3.83	3.93	4.04	4.15	4.27	4.40	4.54	-	-
40	-	4.81	4.92	5.03	5.13	5.24	5.33	-	-
50	-	-	-	6.10	6.21	6.29	6.37	-	-
60	-	-	-	-	7.58	7.67	7.74	-	-
68	-	-	-	-	-	-	9.14	-	-

Mass flow in kg/h

16	125	155	190	231	-	-	-	-	-
20	124	154	189	230	277	-	-	-	-
30	120	150	186	227	274	327	387	-	-
40	-	145	181	222	270	324	384	-	-
50	-	-	-	215	264	318	380	-	-
60	-	-	-	-	254	310	372	-	-
68	-	-	-	-	-	-	364	-	-

Coefficient of performance (C.O.P.)

16	3.99	4.82	5.71	6.63	-	-	-	-	-
20	3.41	4.14	4.95	5.81	6.69	-	-	-	-
30	2.45	3.01	3.64	4.33	5.08	5.86	6.67	-	-
40	-	2.25	2.73	3.28	3.88	4.53	5.23	-	-
50	-	-	-	2.44	2.91	3.43	3.99	-	-
60	-	-	-	-	2.09	2.48	2.92	-	-
68	-	-	-	-	-	-	2.18	-	-

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

Cooling capacity	8 163	W
Power input	3 458	W
Current consumption	5.42	A
Mass flow	177	kg/h
C.O.P.	2.36	

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	73	dB(A)
With acoustic hood	65	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
R134a

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

Cooling capacity in W

22	4 101	5 183	6 469	7 977	9 727	-	-	-	-
30	3 774	4 788	5 999	7 423	9 080	10 988	-	-	-
40	3 365	4 282	5 385	6 691	8 220	9 988	12 015	-	-
50	-	3 762	4 742	5 916	7 302	8 917	10 780	-	-
60	-	-	4 072	5 099	6 327	7 774	9 459	-	-
70	-	-	-	4 240	5 296	6 561	8 053	-	-
73	-	-	-	3 974	4 976	6 183	7 614	-	-

Power input in W

22	1 179	1 196	1 209	1 223	1 242	-	-	-	-
30	1 396	1 417	1 432	1 446	1 462	1 484	-	-	-
40	1 711	1 741	1 763	1 780	1 797	1 817	1 844	-	-
50	-	2 130	2 164	2 189	2 211	2 234	2 260	-	-
60	-	-	2 647	2 685	2 717	2 747	2 777	-	-
70	-	-	-	3 282	3 328	3 369	3 408	-	-
73	-	-	-	3 482	3 534	3 579	3 622	-	-

Current consumption in A

22	2.99	2.99	2.99	3.00	3.02	-	-	-	-
30	3.45	3.47	3.49	3.50	3.53	3.60	-	-	-
40	4.02	4.05	4.07	4.08	4.11	4.16	4.25	-	-
50	-	4.88	4.88	4.87	4.87	4.89	4.95	-	-
60	-	-	6.20	6.16	6.11	6.09	6.09	-	-
70	-	-	-	8.23	8.13	8.04	7.97	-	-
73	-	-	-	9.05	8.93	8.81	8.72	-	-

Mass flow in kg/h

22	88	109	134	162	194	-	-	-	-
30	87	108	133	162	194	230	-	-	-
40	86	107	131	160	193	230	271	-	-
50	-	105	129	157	190	227	269	-	-
60	-	-	126	154	186	223	265	-	-
70	-	-	-	149	181	218	259	-	-
73	-	-	-	148	179	216	257	-	-

Coefficient of performance (C.O.P.)

22	3.48	4.33	5.35	6.52	7.83	-	-	-	-
30	2.70	3.38	4.19	5.13	6.21	7.40	-	-	-
40	1.97	2.46	3.05	3.76	4.57	5.50	6.52	-	-
50	-	1.77	2.19	2.70	3.30	3.99	4.77	-	-
60	-	-	1.54	1.90	2.33	2.83	3.41	-	-
70	-	-	-	1.29	1.59	1.95	2.36	-	-
73	-	-	-	1.14	1.41	1.73	2.10	-	-

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

Cooling capacity	4 024	W
Power input	1 927	W
Current consumption	4.42	A
Mass flow	106	kg/h
C.O.P.	2.09	

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	69	dB(A)
With acoustic hood	61	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	4 166	5 243	6 519	8 012	9 743	-	-	-	-
30	-	4 877	6 076	7 481	9 111	10 988	-	-	-
40	-	-	5 496	6 777	8 269	9 988	11 959	-	-
50	-	-	4 887	6 031	7 369	8 917	10 694	-	-
60	-	-	-	5 241	6 412	7 774	-	-	-
70	-	-	-	-	5 398	6 561	-	-	-
73	-	-	-	-	5 083	6 183	-	-	-

Power input in W

22	1 179	1 196	1 209	1 223	1 242	-	-	-	-
30	-	1 417	1 432	1 446	1 462	1 484	-	-	-
40	-	-	1 763	1 780	1 797	1 817	1 844	-	-
50	-	-	2 164	2 189	2 211	2 234	2 260	-	-
60	-	-	-	2 685	2 717	2 747	-	-	-
70	-	-	-	-	3 328	3 369	-	-	-
73	-	-	-	-	3 534	3 579	-	-	-

Current consumption in A

22	2.99	2.99	2.99	3.00	3.02	-	-	-	-
30	-	3.47	3.49	3.50	3.53	3.60	-	-	-
40	-	-	4.07	4.08	4.11	4.16	4.25	-	-
50	-	-	4.88	4.87	4.87	4.89	4.95	-	-
60	-	-	-	6.16	6.11	6.09	-	-	-
70	-	-	-	-	8.13	8.04	-	-	-
73	-	-	-	-	8.93	8.81	-	-	-

Mass flow in kg/h

22	79	100	126	155	190	-	-	-	-
30	-	100	125	154	190	230	-	-	-
40	-	-	123	153	188	230	278	-	-
50	-	-	121	150	186	227	276	-	-
60	-	-	-	147	182	223	-	-	-
70	-	-	-	-	177	218	-	-	-
73	-	-	-	-	175	216	-	-	-

Coefficient of performance (C.O.P.)

22	3.53	4.39	5.39	6.55	7.85	-	-	-	-
30	-	3.44	4.24	5.17	6.23	7.40	-	-	-
40	-	-	3.12	3.81	4.60	5.50	6.49	-	-
50	-	-	2.26	2.75	3.33	3.99	4.73	-	-
60	-	-	-	1.95	2.36	2.83	-	-	-
70	-	-	-	-	1.62	1.95	-	-	-
73	-	-	-	-	1.44	1.73	-	-	-

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	69	dB(A)
With acoustic hood	61	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	5 085	6 417	8 001	9 845	11 954	-	-	-	-
30	4 641	5 920	7 438	9 202	11 217	13 491	-	-	-
40	4 076	5 280	6 705	8 359	10 247	12 377	14 755	-	-
50	-	4 592	5 914	7 447	9 197	11 172	13 378	-	-
60	-	-	5 036	6 437	8 039	9 848	11 871	-	-
70	-	-	-	5 303	6 745	8 378	10 206	-	-
73	-	-	-	4 934	6 327	7 904	9 672	-	-

Power input in W

22	1 449	1 483	1 515	1 553	1 603	-	-	-	-
30	1 716	1 754	1 784	1 813	1 849	1 900	-	-	-
40	2 084	2 139	2 178	2 209	2 240	2 278	2 331	-	-
50	-	2 575	2 637	2 684	2 723	2 762	2 808	-	-
60	-	-	3 161	3 237	3 298	3 351	3 404	-	-
70	-	-	-	3 866	3 962	4 044	4 118	-	-
73	-	-	-	4 069	4 179	4 272	4 355	-	-

Current consumption in A

22	2.98	2.99	3.01	3.04	3.07	-	-	-	-
30	3.44	3.46	3.48	3.51	3.53	3.56	-	-	-
40	4.01	4.04	4.07	4.09	4.11	4.13	4.16	-	-
50	-	4.83	4.87	4.90	4.92	4.94	4.96	-	-
60	-	-	6.12	6.16	6.20	6.22	6.24	-	-
70	-	-	-	8.13	8.18	8.21	8.24	-	-
73	-	-	-	8.89	8.95	8.99	9.02	-	-

Mass flow in kg/h

22	109	134	165	200	240	-	-	-	-
30	108	134	165	201	240	283	-	-	-
40	106	132	164	200	240	283	328	-	-
50	-	128	161	198	238	282	327	-	-
60	-	-	155	193	235	279	325	-	-
70	-	-	-	186	229	274	321	-	-
73	-	-	-	184	227	272	320	-	-

Coefficient of performance (C.O.P.)

22	3.51	4.33	5.28	6.34	7.46	-	-	-	-
30	2.70	3.38	4.17	5.08	6.07	7.10	-	-	-
40	1.96	2.47	3.08	3.78	4.57	5.43	6.33	-	-
50	-	1.78	2.24	2.77	3.38	4.04	4.76	-	-
60	-	-	1.59	1.99	2.44	2.94	3.49	-	-
70	-	-	-	1.37	1.70	2.07	2.48	-	-
73	-	-	-	1.21	1.51	1.85	2.22	-	-

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

Cooling capacity	4 944	W
Power input	2 351	W
Current consumption	4.39	A
Mass flow	130	kg/h
C.O.P.	2.10	

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	73	dB(A)
With acoustic hood	65	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	5 166	6 492	8 063	9 887	11 974	-	-	-	-
30	-	6 030	7 534	9 273	11 255	13 491	-	-	-
40	-	-	6 844	8 467	10 308	12 377	14 686	-	-
50	-	-	6 094	7 591	9 282	11 172	13 271	-	-
60	-	-	-	6 617	8 147	9 848	-	-	-
70	-	-	-	-	6 876	8 378	-	-	-
73	-	-	-	-	6 463	7 904	-	-	-

Power input in W

22	1 449	1 483	1 515	1 553	1 603	-	-	-	-
30	-	1 754	1 784	1 813	1 849	1 900	-	-	-
40	-	-	2 178	2 209	2 240	2 278	2 331	-	-
50	-	-	2 637	2 684	2 723	2 762	2 808	-	-
60	-	-	-	3 237	3 298	3 351	-	-	-
70	-	-	-	-	3 962	4 044	-	-	-
73	-	-	-	-	4 179	4 272	-	-	-

Current consumption in A

22	2.98	2.99	3.01	3.04	3.07	-	-	-	-
30	-	3.46	3.48	3.51	3.53	3.56	-	-	-
40	-	-	4.07	4.09	4.11	4.13	4.16	-	-
50	-	-	4.87	4.90	4.92	4.94	4.96	-	-
60	-	-	-	6.16	6.20	6.22	-	-	-
70	-	-	-	-	8.18	8.21	-	-	-
73	-	-	-	-	8.95	8.99	-	-	-

Mass flow in kg/h

22	98	123	154	192	235	-	-	-	-
30	-	123	154	192	235	283	-	-	-
40	-	-	153	191	234	283	337	-	-
50	-	-	150	189	233	282	336	-	-
60	-	-	-	185	229	279	-	-	-
70	-	-	-	-	224	274	-	-	-
73	-	-	-	-	222	272	-	-	-

Coefficient of performance (C.O.P.)

22	3.57	4.38	5.32	6.37	7.47	-	-	-	-
30	-	3.44	4.22	5.11	6.09	7.10	-	-	-
40	-	-	3.14	3.83	4.60	5.43	6.30	-	-
50	-	-	2.31	2.83	3.41	4.04	4.73	-	-
60	-	-	-	2.04	2.47	2.94	-	-	-
70	-	-	-	-	1.74	2.07	-	-	-
73	-	-	-	-	1.55	1.85	-	-	-

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.	-	

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	73	dB(A)
With acoustic hood	65	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, 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	4 945	6 061	7 408	9 010	10 890	-	-	-	-
20	4 399	5 451	6 705	8 183	9 909	11 906	14 197	-	-
30	3 837	4 809	5 951	7 289	8 843	10 638	12 697	15 043	17 699
40	-	4 127	5 142	6 321	7 687	9 264	11 073	13 140	15 486
50	-	-	4 273	5 276	6 437	7 777	9 320	11 090	13 109
60	-	-	-	-	5 086	6 174	7 434	8 889	10 564

Power input in W

10	1 470	1 496	1 519	1 539	1 558	-	-	-	-
20	1 831	1 861	1 887	1 909	1 928	1 945	1 962	-	-
30	2 303	2 332	2 356	2 375	2 391	2 404	2 416	2 427	2 438
40	-	2 953	2 970	2 982	2 990	2 995	2 997	2 998	2 998
50	-	-	3 771	3 771	3 767	3 758	3 747	3 733	3 717
60	-	-	-	-	4 764	4 738	4 708	4 675	4 640

Current consumption in A

10	4.10	4.09	4.09	4.10	4.10	-	-	-	-
20	4.36	4.37	4.40	4.43	4.46	4.49	4.49	-	-
30	4.79	4.80	4.83	4.87	4.92	4.95	4.97	4.97	4.94
40	-	5.50	5.51	5.54	5.58	5.61	5.62	5.62	5.59
50	-	-	6.55	6.55	6.56	6.56	6.56	6.53	6.48
60	-	-	-	-	7.98	7.94	7.89	7.83	7.74

Mass flow in kg/h

10	99	123	151	185	224	-	-	-	-
20	96	121	149	183	222	270	325	-	-
30	93	117	146	179	219	267	323	388	465
40	-	113	141	175	215	262	318	384	461
50	-	-	135	169	208	256	312	378	455
60	-	-	-	-	200	247	303	369	446

Coefficient of performance (C.O.P.)

10	3.36	4.05	4.88	5.85	6.99	-	-	-	-
20	2.40	2.93	3.55	4.29	5.14	6.12	7.24	-	-
30	1.67	2.06	2.53	3.07	3.70	4.42	5.26	6.20	7.26
40	-	1.40	1.73	2.12	2.57	3.09	3.70	4.38	5.17
50	-	-	1.13	1.40	1.71	2.07	2.49	2.97	3.53
60	-	-	-	-	1.07	1.30	1.58	1.90	2.28

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

Cooling capacity	7 074	W
Power input	3 353	W
Current consumption	6.02	A
Mass flow	212	kg/h
C.O.P.	2.11	


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	69	dB(A)
With acoustic hood	61	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	4 752	5 865	7 218	8 837	10 744	-	-	-	-
20	4 137	5 177	6 428	7 917	9 670	11 711	14 062	-	-
30	3 509	4 457	5 589	6 931	8 510	10 354	12 486	14 930	17 699
40	2 866	3 703	4 696	5 873	7 261	8 890	10 786	12 977	15 486
50	-	-	3 748	4 741	5 920	7 314	8 956	10 877	13 109
60	-	-	-	-	4 476	5 617	6 985	8 620	10 564

Power input in W

10	1 470	1 496	1 519	1 539	1 558	-	-	-	-
20	1 831	1 861	1 887	1 909	1 928	1 945	1 962	-	-
30	2 303	2 332	2 356	2 375	2 391	2 404	2 416	2 427	2 438
40	2 929	2 953	2 970	2 982	2 990	2 995	2 997	2 998	2 998
50	-	-	3 771	3 771	3 767	3 758	3 747	3 733	3 717
60	-	-	-	-	4 764	4 738	4 708	4 675	4 640

Current consumption in A

10	4.10	4.09	4.09	4.10	4.10	-	-	-	-
20	4.36	4.37	4.40	4.43	4.46	4.49	4.49	-	-
30	4.79	4.80	4.83	4.87	4.92	4.95	4.97	4.97	4.94
40	5.50	5.50	5.51	5.54	5.58	5.61	5.62	5.62	5.59
50	-	-	6.55	6.55	6.56	6.56	6.56	6.53	6.48
60	-	-	-	-	7.98	7.94	7.89	7.83	7.74

Mass flow in kg/h

10	118	144	174	208	247	-	-	-	-
20	115	141	171	206	245	291	344	-	-
30	111	137	167	202	242	288	341	400	465
40	106	132	162	197	237	283	336	395	461
50	-	-	155	190	230	276	329	389	455
60	-	-	-	-	221	267	320	380	446

Coefficient of performance (C.O.P.)

10	3.23	3.92	4.75	5.74	6.90	-	-	-	-
20	2.26	2.78	3.41	4.15	5.02	6.02	7.17	-	-
30	1.52	1.91	2.37	2.92	3.56	4.31	5.17	6.15	7.26
40	0.98	1.25	1.58	1.97	2.43	2.97	3.60	4.33	5.17
50	-	-	0.99	1.26	1.57	1.95	2.39	2.91	3.53
60	-	-	-	-	0.94	1.19	1.48	1.84	2.28

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

Cooling capacity	6 602	W
Power input	3 353	W
Current consumption	6.02	A
Mass flow	234	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	69	dB(A)
With acoustic hood	61	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	5 801	7 250	8 974	10 986	13 301	-	-	-	-
20	5 255	6 560	8 111	9 923	12 010	14 385	17 063	-	-
30	4 690	5 844	7 215	8 820	10 671	12 783	15 171	17 846	20 822
40	-	5 069	6 254	7 644	9 253	11 095	13 185	15 536	18 161
50	-	-	5 195	6 363	7 723	9 289	11 074	13 094	15 362
60	-	-	-	-	6 050	7 332	8 807	10 490	12 396

Power input in W

10	1 725	1 760	1 793	1 816	1 820	-	-	-	-
20	2 175	2 205	2 241	2 276	2 301	2 306	2 284	-	-
30	2 736	2 747	2 774	2 808	2 840	2 862	2 864	2 840	2 780
40	-	3 451	3 455	3 474	3 500	3 525	3 539	3 534	3 503
50	-	-	4 347	4 339	4 345	4 359	4 371	4 373	4 357
60	-	-	-	-	5 438	5 428	5 424	5 420	5 405

Current consumption in A

10	2.71	2.76	2.81	2.85	2.85	-	-	-	-
20	3.41	3.46	3.52	3.57	3.61	3.62	3.58	-	-
30	4.29	4.31	4.35	4.41	4.46	4.49	4.49	4.46	4.36
40	-	5.41	5.42	5.45	5.49	5.53	5.55	5.55	5.50
50	-	-	6.82	6.81	6.82	6.84	6.86	6.86	6.83
60	-	-	-	-	8.53	8.52	8.51	8.50	8.48

Mass flow in kg/h

10	104	138	177	222	273	-	-	-	-
20	111	143	180	222	271	328	394	-	-
30	113	143	178	219	267	322	387	462	548
40	-	139	173	213	260	315	379	454	540
50	-	-	165	205	251	306	370	445	531
60	-	-	-	-	241	296	361	436	524

Coefficient of performance (C.O.P.)

10	3.36	4.12	5.00	6.05	7.31	-	-	-	-
20	2.42	2.98	3.62	4.36	5.22	6.24	7.47	-	-
30	1.71	2.13	2.60	3.14	3.76	4.47	5.30	6.28	7.49
40	-	1.47	1.81	2.20	2.64	3.15	3.73	4.40	5.19
50	-	-	1.19	1.47	1.78	2.13	2.53	2.99	3.53
60	-	-	-	-	1.11	1.35	1.62	1.94	2.29

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

Cooling capacity	8 504	W
Power input	3 896	W
Current consumption	6.11	A
Mass flow	256	kg/h
C.O.P.	2.18	

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	73	dB(A)
With acoustic hood	65	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	5 574	7 016	8 744	10 774	13 123	-	-	-	-
20	4 942	6 230	7 777	9 601	11 720	14 150	16 900	-	-
30	4 290	5 417	6 776	8 387	10 270	12 442	14 919	17 712	20 822
40	3 588	4 547	5 711	7 102	8 740	10 647	12 843	15 344	18 161
50	-	-	4 557	5 718	7 103	8 735	10 641	12 843	15 362
60	-	-	-	-	5 324	6 671	8 276	10 172	12 396

Power input in W

10	1 725	1 760	1 793	1 816	1 820	-	-	-	-
20	2 175	2 205	2 241	2 276	2 301	2 306	2 284	-	-
30	2 736	2 747	2 774	2 808	2 840	2 862	2 864	2 840	2 780
40	3 472	3 451	3 455	3 474	3 500	3 525	3 539	3 534	3 503
50	-	-	4 347	4 339	4 345	4 359	4 371	4 373	4 357
60	-	-	-	-	5 438	5 428	5 424	5 420	5 405

Current consumption in A

10	2.71	2.76	2.81	2.85	2.85	-	-	-	-
20	3.41	3.46	3.52	3.57	3.61	3.62	3.58	-	-
30	4.29	4.31	4.35	4.41	4.46	4.49	4.49	4.46	4.36
40	5.45	5.41	5.42	5.45	5.49	5.53	5.55	5.55	5.50
50	-	-	6.82	6.81	6.82	6.84	6.86	6.86	6.83
60	-	-	-	-	8.53	8.52	8.51	8.50	8.48

Mass flow in kg/h

10	124	162	204	250	301	-	-	-	-
20	132	167	207	250	299	354	416	-	-
30	134	167	205	247	295	348	409	475	548
40	131	163	199	240	287	340	401	467	540
50	-	-	190	230	277	331	391	458	531
60	-	-	-	-	266	320	381	449	524

Coefficient of performance (C.O.P.)

10	3.23	3.99	4.88	5.93	7.21	-	-	-	-
20	2.27	2.83	3.47	4.22	5.09	6.14	7.40	-	-
30	1.57	1.97	2.44	2.99	3.62	4.35	5.21	6.24	7.49
40	1.03	1.32	1.65	2.04	2.50	3.02	3.63	4.34	5.19
50	-	-	1.05	1.32	1.63	2.00	2.43	2.94	3.53
60	-	-	-	-	0.98	1.23	1.53	1.88	2.29

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

Cooling capacity	7 937	W
Power input	3 896	W
Current consumption	6.11	A
Mass flow	282	kg/h
C.O.P.	2.04	

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	73	dB(A)
With acoustic hood	65	dB(A)

Tolerance according EN12900

Performance data at 50 Hz, EN 12900 rating conditions
R407A

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

Cooling capacity in W

10	4 985	6 293	7 883	9 787	-	-	-	-	-
20	4 419	5 598	7 038	8 771	10 828	13 240	-	-	-
30	3 904	4 940	6 216	7 765	9 616	11 802	14 354	17 303	-
40	3 451	4 330	5 428	6 778	8 410	10 356	12 647	15 315	-
45	-	4 045	5 050	6 295	7 812	9 633	11 789	14 310	-
50	-	-	4 684	5 821	7 220	8 912	10 928	13 300	-
55	-	-	-	5 356	6 633	8 193	10 066	12 286	-
60	-	-	-	-	6 054	7 478	9 206	11 268	-

Power input in W

10	1 310	1 336	1 361	1 394	-	-	-	-	-
20	1 629	1 671	1 698	1 720	1 744	1 781	-	-	-
30	1 996	2 072	2 119	2 147	2 164	2 180	2 202	2 240	-
40	2 417	2 543	2 628	2 679	2 706	2 717	2 722	2 729	-
45	-	2 806	2 916	2 985	3 023	3 039	3 042	3 039	-
50	-	-	3 226	3 318	3 372	3 397	3 401	3 394	-
55	-	-	-	3 680	3 753	3 791	3 802	3 794	-
60	-	-	-	-	4 167	4 222	4 244	4 240	-

Current consumption in A

10	2.39	2.40	2.38	2.32	-	-	-	-	-
20	3.38	3.46	3.49	3.49	3.48	3.48	-	-	-
30	4.02	4.15	4.22	4.25	4.27	4.29	4.33	4.41	-
40	4.68	4.83	4.92	4.96	4.98	5.00	5.03	5.09	-
45	-	5.28	5.37	5.41	5.42	5.43	5.44	5.49	-
50	-	-	5.94	5.97	5.97	5.96	5.96	5.99	-
55	-	-	-	6.70	6.68	6.65	6.63	6.63	-
60	-	-	-	-	7.59	7.54	7.48	7.45	-

Mass flow in kg/h

10	97	121	149	183	-	-	-	-	-
20	94	117	145	177	215	259	-	-	-
30	91	113	140	171	209	252	302	359	-
40	90	110	135	166	202	244	294	350	-
45	-	109	134	163	199	241	289	345	-
50	-	-	132	161	196	237	285	340	-
55	-	-	-	159	193	233	281	335	-
60	-	-	-	-	190	230	276	330	-

Coefficient of performance (C.O.P.)

10	3.80	4.71	5.79	7.02	-	-	-	-	-
20	2.71	3.35	4.14	5.10	6.21	7.43	-	-	-
30	1.96	2.38	2.93	3.62	4.44	5.41	6.52	7.72	-
40	1.43	1.70	2.07	2.53	3.11	3.81	4.65	5.61	-
45	-	1.44	1.73	2.11	2.58	3.17	3.88	4.71	-
50	-	-	1.45	1.75	2.14	2.62	3.21	3.92	-
55	-	-	-	1.46	1.77	2.16	2.65	3.24	-
60	-	-	-	-	1.45	1.77	2.17	2.66	-

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

Cooling capacity	6 295	W
Power input	2 985	W
Current consumption	5.41	A
Mass flow	163	kg/h
C.O.P.	2.11	

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	69	dB(A)
With acoustic hood	61	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
R407A

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

Cooling capacity in W

10	5 294	6 677	8 356	10 365	-	-	-	-	-
20	4 727	5 982	7 513	9 353	11 534	14 090	-	-	-
30	4 216	5 327	6 695	8 352	10 330	12 663	15 384	18 525	-
40	3 773	4 726	5 915	7 373	9 135	11 232	13 697	16 565	-
45	-	4 449	5 543	6 897	8 545	10 519	12 852	15 578	-
50	-	-	5 187	6 433	7 963	9 810	12 008	14 590	-
55	-	-	-	5 984	7 393	9 111	11 171	13 606	-
60	-	-	-	-	-	8 425	10 345	12 633	-

Power input in W

10	1 310	1 336	1 361	1 394	-	-	-	-	-
20	1 629	1 671	1 698	1 720	1 744	1 781	-	-	-
30	1 996	2 072	2 119	2 147	2 164	2 180	2 202	2 240	-
40	2 417	2 543	2 628	2 679	2 706	2 717	2 722	2 729	-
45	-	2 806	2 916	2 985	3 023	3 039	3 042	3 039	-
50	-	-	3 226	3 318	3 372	3 397	3 401	3 394	-
55	-	-	-	3 680	3 753	3 791	3 802	3 794	-
60	-	-	-	-	-	4 222	4 244	4 240	-

Current consumption in A

10	2.39	2.40	2.38	2.32	-	-	-	-	-
20	3.38	3.46	3.49	3.49	3.48	3.48	-	-	-
30	4.02	4.15	4.22	4.25	4.27	4.29	4.33	4.41	-
40	4.68	4.83	4.92	4.96	4.98	5.00	5.03	5.09	-
45	-	5.28	5.37	5.41	5.42	5.43	5.44	5.49	-
50	-	-	5.94	5.97	5.97	5.96	5.96	5.99	-
55	-	-	-	6.70	6.68	6.65	6.63	6.63	-
60	-	-	-	-	-	7.54	7.48	7.45	-

Mass flow in kg/h

10	97	121	149	182	-	-	-	-	-
20	93	116	144	176	214	258	-	-	-
30	91	113	139	170	208	251	300	357	-
40	89	110	135	165	201	243	292	348	-
45	-	109	133	162	198	239	288	343	-
50	-	-	132	160	195	235	283	338	-
55	-	-	-	158	192	232	279	333	-
60	-	-	-	-	-	228	275	328	-

Coefficient of performance (C.O.P.)

10	4.04	5.00	6.14	7.44	-	-	-	-	-
20	2.90	3.58	4.42	5.44	6.61	7.91	-	-	-
30	2.11	2.57	3.16	3.89	4.77	5.81	6.99	8.27	-
40	1.56	1.86	2.25	2.75	3.38	4.13	5.03	6.07	-
45	-	1.59	1.90	2.31	2.83	3.46	4.23	5.13	-
50	-	-	1.61	1.94	2.36	2.89	3.53	4.30	-
55	-	-	-	1.63	1.97	2.40	2.94	3.59	-
60	-	-	-	-	-	2.00	2.44	2.98	-

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

Cooling capacity	6 897	W
Power input	2 985	W
Current consumption	5.41	A
Mass flow	162	kg/h
C.O.P.	2.31	

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	69	dB(A)
With acoustic hood	61	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
R407A

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

Cooling capacity in W

10	6 137	7 718	9 647	11 963	-	-	-	-	-
20	5 457	6 872	8 617	10 730	13 250	16 212	-	-	-
30	4 859	6 083	7 619	9 505	11 778	14 478	17 640	21 304	-
40	4 362	5 369	6 671	8 305	10 308	12 719	15 575	18 913	-
45	-	5 047	6 222	7 720	9 579	11 836	14 530	17 697	-
50	-	-	5 793	7 149	8 857	10 955	13 479	16 468	-
55	-	-	-	6 595	8 146	10 077	12 426	15 231	-
60	-	-	-	-	7 446	9 205	11 372	13 987	-

Power input in W

10	1 550	1 573	1 606	1 667	-	-	-	-	-
20	1 939	1 979	2 003	2 030	2 080	2 174	-	-	-
30	2 365	2 456	2 505	2 532	2 557	2 599	2 678	2 814	-
40	2 815	2 992	3 100	3 161	3 194	3 218	3 255	3 323	-
45	-	3 277	3 428	3 519	3 569	3 598	3 625	3 672	-
50	-	-	3 775	3 904	3 979	4 021	4 049	4 082	-
55	-	-	-	4 314	4 424	4 487	4 523	4 552	-
60	-	-	-	-	4 900	4 993	5 046	5 080	-

Current consumption in A

10	2.38	2.39	2.41	2.43	-	-	-	-	-
20	3.44	3.46	3.48	3.50	3.53	3.56	-	-	-
30	4.16	4.19	4.22	4.24	4.27	4.29	4.32	4.36	-
40	4.81	4.87	4.91	4.95	4.98	5.01	5.03	5.06	-
45	-	5.28	5.33	5.38	5.42	5.45	5.48	5.50	-
50	-	-	5.85	5.91	5.96	5.99	6.02	6.05	-
55	-	-	-	6.58	6.64	6.68	6.72	6.74	-
60	-	-	-	-	7.49	7.55	7.59	7.62	-

Mass flow in kg/h

10	120	149	183	223	-	-	-	-	-
20	116	144	177	217	263	317	-	-	-
30	113	139	171	210	256	309	371	443	-
40	114	137	166	203	248	300	362	433	-
45	-	137	165	200	244	296	357	427	-
50	-	-	164	198	240	291	351	422	-
55	-	-	-	196	237	287	346	416	-
60	-	-	-	-	234	283	341	410	-

Coefficient of performance (C.O.P.)

10	3.96	4.90	6.01	7.17	-	-	-	-	-
20	2.81	3.47	4.30	5.29	6.37	7.46	-	-	-
30	2.05	2.48	3.04	3.75	4.61	5.57	6.59	7.57	-
40	1.55	1.79	2.15	2.63	3.23	3.95	4.79	5.69	-
45	-	1.54	1.81	2.19	2.68	3.29	4.01	4.82	-
50	-	-	1.53	1.83	2.23	2.72	3.33	4.03	-
55	-	-	-	1.53	1.84	2.25	2.75	3.35	-
60	-	-	-	-	1.52	1.84	2.25	2.75	-

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

Cooling capacity	7 720	W
Power input	3 519	W
Current consumption	5.38	A
Mass flow	200	kg/h
C.O.P.	2.19	

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	73	dB(A)
With acoustic hood	65	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
R407A

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

Cooling capacity in W

10	6 517	8 188	10 226	12 669	-	-	-	-	-
20	5 839	7 344	9 198	11 442	14 114	17 253	-	-	-
30	5 248	6 560	8 205	10 223	12 653	15 534	18 906	22 808	-
40	4 770	5 861	7 269	9 034	11 196	13 794	16 868	20 457	-
45	-	5 551	6 830	8 459	10 477	12 924	15 840	19 264	-
50	-	-	6 416	7 902	9 770	12 060	14 812	18 065	-
55	-	-	-	7 368	9 079	11 206	13 789	16 868	-
60	-	-	-	-	-	10 370	12 780	15 681	-

Power input in W

10	1 550	1 573	1 606	1 667	-	-	-	-	-
20	1 939	1 979	2 003	2 030	2 080	2 174	-	-	-
30	2 365	2 456	2 505	2 532	2 557	2 599	2 678	2 814	-
40	2 815	2 992	3 100	3 161	3 194	3 218	3 255	3 323	-
45	-	3 277	3 428	3 519	3 569	3 598	3 625	3 672	-
50	-	-	3 775	3 904	3 979	4 021	4 049	4 082	-
55	-	-	-	4 314	4 424	4 487	4 523	4 552	-
60	-	-	-	-	-	4 993	5 046	5 080	-

Current consumption in A

10	2.38	2.39	2.41	2.43	-	-	-	-	-
20	3.44	3.46	3.48	3.50	3.53	3.56	-	-	-
30	4.16	4.19	4.22	4.24	4.27	4.29	4.32	4.36	-
40	4.81	4.87	4.91	4.95	4.98	5.01	5.03	5.06	-
45	-	5.28	5.33	5.38	5.42	5.45	5.48	5.50	-
50	-	-	5.85	5.91	5.96	5.99	6.02	6.05	-
55	-	-	-	6.58	6.64	6.68	6.72	6.74	-
60	-	-	-	-	-	7.55	7.59	7.62	-

Mass flow in kg/h

10	119	148	182	222	-	-	-	-	-
20	115	143	176	216	262	315	-	-	-
30	113	139	170	209	254	308	369	440	-
40	113	136	166	202	246	299	360	430	-
45	-	136	164	199	242	294	355	425	-
50	-	-	163	197	239	289	349	419	-
55	-	-	-	195	236	285	344	413	-
60	-	-	-	-	-	281	339	407	-

Coefficient of performance (C.O.P.)

10	4.20	5.20	6.37	7.60	-	-	-	-	-
20	3.01	3.71	4.59	5.64	6.78	7.94	-	-	-
30	2.22	2.67	3.28	4.04	4.95	5.98	7.06	8.10	-
40	1.69	1.96	2.34	2.86	3.51	4.29	5.18	6.16	-
45	-	1.69	1.99	2.40	2.94	3.59	4.37	5.25	-
50	-	-	1.70	2.02	2.46	3.00	3.66	4.43	-
55	-	-	-	1.71	2.05	2.50	3.05	3.71	-
60	-	-	-	-	-	2.08	2.53	3.09	-

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

Cooling capacity	8 459	W
Power input	3 519	W
Current consumption	5.38	A
Mass flow	199	kg/h
C.O.P.	2.40	

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	73	dB(A)
With acoustic hood	65	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, 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	-	3 731	4 750	5 999	7 503	9 285	11 369	13 780	16 541
35	-	3 472	4 448	5 641	7 075	8 775	10 764	13 067	15 707
40	-	3 219	4 149	5 284	6 646	8 262	10 153	12 345	14 861
45	-	-	3 846	4 919	6 208	7 737	9 528	11 606	13 996
50	-	-	-	4 540	5 753	7 191	8 880	10 842	13 102
55	-	-	-	-	5 271	6 618	8 201	10 044	12 171
60	-	-	-	-	-	6 007	7 482	9 202	11 193
65	-	-	-	-	-	-	6 714	8 308	10 159

Power input in W

30	-	1 911	1 974	2 038	2 103	2 172	2 243	2 318	2 397
35	-	2 329	2 356	2 386	2 419	2 455	2 497	2 543	2 596
40	-	2 761	2 756	2 755	2 759	2 768	2 784	2 806	2 836
45	-	-	3 179	3 152	3 131	3 117	3 111	3 113	3 124
50	-	-	-	3 584	3 542	3 509	3 485	3 471	3 468
55	-	-	-	-	3 998	3 950	3 913	3 887	3 873
60	-	-	-	-	-	4 448	4 401	4 367	4 346
65	-	-	-	-	-	-	4 955	4 917	4 894

Current consumption in A

30	-	4.44	4.49	4.53	4.57	4.61	4.63	4.64	4.63
35	-	4.70	4.72	4.75	4.78	4.82	4.85	4.87	4.88
40	-	5.06	5.05	5.06	5.08	5.10	5.13	5.16	5.19
45	-	-	5.49	5.46	5.46	5.47	5.50	5.53	5.56
50	-	-	-	5.96	5.93	5.93	5.94	5.96	6.00
55	-	-	-	-	6.50	6.47	6.46	6.48	6.52
60	-	-	-	-	-	7.11	7.08	7.08	7.10
65	-	-	-	-	-	-	7.78	7.76	7.77

Mass flow in kg/h

30	-	85	106	131	160	194	234	279	331
35	-	84	105	129	159	193	232	277	329
40	-	82	102	127	156	190	229	275	327
45	-	-	99	124	153	187	226	272	324
50	-	-	-	120	149	183	222	268	320
55	-	-	-	-	143	178	217	263	316
60	-	-	-	-	-	171	211	257	311
65	-	-	-	-	-	-	203	250	303

Coefficient of performance (C.O.P.)

30	-	1.95	2.41	2.94	3.57	4.28	5.07	5.95	6.90
35	-	1.49	1.89	2.36	2.93	3.57	4.31	5.14	6.05
40	-	1.17	1.51	1.92	2.41	2.98	3.65	4.40	5.24
45	-	-	1.21	1.56	1.98	2.48	3.06	3.73	4.48
50	-	-	-	1.27	1.62	2.05	2.55	3.12	3.78
55	-	-	-	-	1.32	1.68	2.10	2.58	3.14
60	-	-	-	-	-	1.35	1.70	2.11	2.58
65	-	-	-	-	-	-	1.35	1.69	2.08

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

Cooling capacity	6 208	W
Power input	3 131	W
Current consumption	5.46	A
Mass flow	153	kg/h
C.O.P.	1.98	

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	-	4 342	5 572	7 067	8 857	10 970	13 436	16 283	19 542
35	-	4 086	5 253	6 673	8 374	10 385	12 735	15 454	18 569
40	-	3 816	4 921	6 266	7 878	9 787	12 022	14 611	17 584
45	-	-	4 567	5 836	7 360	9 167	11 286	13 745	16 575
50	-	-	-	5 376	6 811	8 516	10 518	12 848	15 534
55	-	-	-	-	6 223	7 824	9 710	11 909	14 450
60	-	-	-	-	-	7 084	8 852	10 919	13 313
65	-	-	-	-	-	-	7 934	9 867	12 112

Power input in W

30	-	2 647	2 632	2 623	2 612	2 594	2 563	2 512	2 434
35	-	2 981	2 959	2 944	2 931	2 912	2 882	2 834	2 761
40	-	3 344	3 316	3 298	3 282	3 264	3 235	3 191	3 125
45	-	-	3 711	3 690	3 673	3 655	3 630	3 590	3 531
50	-	-	-	4 126	4 109	4 093	4 071	4 038	3 986
55	-	-	-	-	4 597	4 583	4 566	4 539	4 496
60	-	-	-	-	-	5 132	5 120	5 101	5 068
65	-	-	-	-	-	-	5 740	5 729	5 706

Current consumption in A

30	-	4.03	3.96	3.95	3.97	3.99	4.00	3.96	3.85
35	-	4.31	4.24	4.22	4.23	4.25	4.25	4.19	4.07
40	-	4.63	4.55	4.54	4.55	4.56	4.55	4.48	4.35
45	-	-	4.90	4.89	4.90	4.91	4.90	4.83	4.69
50	-	-	-	5.28	5.30	5.31	5.30	5.23	5.09
55	-	-	-	-	5.73	5.75	5.74	5.68	5.54
60	-	-	-	-	-	6.24	6.24	6.18	6.04
65	-	-	-	-	-	-	6.77	6.73	6.60

Mass flow in kg/h

30	-	97	123	153	188	229	277	330	391
35	-	96	121	151	187	228	274	328	388
40	-	95	120	150	185	225	272	325	385
45	-	-	118	147	182	223	269	322	382
50	-	-	-	144	179	219	266	319	379
55	-	-	-	-	174	215	261	314	374
60	-	-	-	-	-	209	255	308	368
65	-	-	-	-	-	-	248	301	361

Coefficient of performance (C.O.P.)

30	-	1.64	2.12	2.69	3.39	4.23	5.24	6.48	8.03
35	-	1.37	1.78	2.27	2.86	3.57	4.42	5.45	6.72
40	-	1.14	1.48	1.90	2.40	3.00	3.72	4.58	5.63
45	-	-	1.23	1.58	2.00	2.51	3.11	3.83	4.69
50	-	-	-	1.30	1.66	2.08	2.58	3.18	3.90
55	-	-	-	-	1.35	1.71	2.13	2.62	3.21
60	-	-	-	-	-	1.38	1.73	2.14	2.63
65	-	-	-	-	-	-	1.38	1.72	2.12

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

Cooling capacity	7 360	W
Power input	3 673	W
Current consumption	4.90	A
Mass flow	182	kg/h
C.O.P.	2.00	

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
R407F

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-23	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	5 829	6 687	8 347	10 324	-	-	-	-	-
20	5 213	5 992	7 506	9 317	11 459	13 961	-	-	-
30	4 641	5 331	6 682	8 312	10 252	12 534	15 192	18 255	-
40	4 125	4 717	5 889	7 321	9 043	11 089	13 491	16 280	-
45	-	-	5 509	6 835	8 443	10 365	12 632	15 277	-
50	-	-	-	6 358	7 847	9 640	11 770	14 267	-
55	-	-	-	-	7 258	8 919	10 906	13 252	-
60	-	-	-	-	-	-	-	-	-

Power input in W

10	1 396	1 410	1 434	1 471	-	-	-	-	-
20	1 750	1 772	1 796	1 815	1 842	1 889	-	-	-
30	2 166	2 209	2 255	2 278	2 292	2 308	2 340	2 400	-
40	2 645	2 723	2 811	2 860	2 882	2 890	2 895	2 911	-
45	-	-	3 126	3 196	3 230	3 241	3 242	3 244	-
50	-	-	-	3 561	3 613	3 633	3 634	3 628	-
55	-	-	-	-	4 031	4 065	4 072	4 064	-
60	-	-	-	-	-	-	-	-	-

Current consumption in A

10	2.54	2.54	2.50	2.44	-	-	-	-	-
20	3.62	3.66	3.69	3.69	3.68	3.67	-	-	-
30	4.35	4.42	4.49	4.52	4.53	4.54	4.58	4.66	-
40	5.09	5.17	5.26	5.30	5.31	5.32	5.35	5.41	-
45	-	-	5.75	5.79	5.80	5.79	5.81	5.85	-
50	-	-	-	6.41	6.40	6.39	6.38	6.40	-
55	-	-	-	-	7.18	7.14	7.11	7.10	-
60	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

10	102	116	143	175	-	-	-	-	-
20	98	112	139	170	206	248	-	-	-
30	95	109	134	164	200	241	289	343	-
40	94	106	130	159	193	234	281	335	-
45	-	-	128	156	190	230	277	330	-
50	-	-	-	154	187	226	272	325	-
55	-	-	-	-	184	223	268	320	-
60	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

10	4.18	4.74	5.82	7.02	-	-	-	-	-
20	2.98	3.38	4.18	5.13	6.22	7.39	-	-	-
30	2.14	2.41	2.96	3.65	4.47	5.43	6.49	7.61	-
40	1.56	1.73	2.09	2.56	3.14	3.84	4.66	5.59	-
45	-	-	1.76	2.14	2.61	3.20	3.90	4.71	-
50	-	-	-	1.79	2.17	2.65	3.24	3.93	-
55	-	-	-	-	1.80	2.19	2.68	3.26	-
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	6 835	W
Power input	3 196	W
Current consumption	5.79	A
Mass flow	156	kg/h
C.O.P.	2.14	

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	69	dB(A)
With acoustic hood	61	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
R407F

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-23	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	6 161	7 064	8 811	10 891	-	-	-	-	-
20	5 543	6 368	7 970	9 885	12 147	14 789	-	-	-
30	4 972	5 708	7 147	8 882	10 944	13 369	16 190	19 439	-
40	-	5 100	6 360	7 896	9 743	11 934	14 504	17 485	-
45	-	-	5 985	7 416	9 149	11 218	13 656	16 497	-
50	-	-	-	6 949	8 563	10 506	12 809	15 508	-
55	-	-	-	-	-	9 804	11 970	14 524	-
60	-	-	-	-	-	-	-	-	-

Power input in W

10	1 396	1 410	1 434	1 471	-	-	-	-	-
20	1 750	1 772	1 796	1 815	1 842	1 889	-	-	-
30	2 166	2 209	2 255	2 278	2 292	2 308	2 340	2 400	-
40	-	2 723	2 811	2 860	2 882	2 890	2 895	2 911	-
45	-	-	3 126	3 196	3 230	3 241	3 242	3 244	-
50	-	-	-	3 561	3 613	3 633	3 634	3 628	-
55	-	-	-	-	-	4 065	4 072	4 064	-
60	-	-	-	-	-	-	-	-	-

Current consumption in A

10	2.54	2.54	2.50	2.44	-	-	-	-	-
20	3.62	3.66	3.69	3.69	3.68	3.67	-	-	-
30	4.35	4.42	4.49	4.52	4.53	4.54	4.58	4.66	-
40	-	5.17	5.26	5.30	5.31	5.32	5.35	5.41	-
45	-	-	5.75	5.79	5.80	5.79	5.81	5.85	-
50	-	-	-	6.41	6.40	6.39	6.38	6.40	-
55	-	-	-	-	-	7.14	7.11	7.10	-
60	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

10	101	115	142	174	-	-	-	-	-
20	98	112	138	169	205	246	-	-	-
30	95	108	133	163	199	240	287	341	-
40	-	105	129	158	192	233	279	332	-
45	-	-	127	156	189	229	275	328	-
50	-	-	-	153	186	225	270	323	-
55	-	-	-	-	-	221	266	318	-
60	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

10	4.41	5.01	6.14	7.40	-	-	-	-	-
20	3.17	3.59	4.44	5.45	6.60	7.83	-	-	-
30	2.30	2.58	3.17	3.90	4.78	5.79	6.92	8.10	-
40	-	1.87	2.26	2.76	3.38	4.13	5.01	6.01	-
45	-	-	1.91	2.32	2.83	3.46	4.21	5.09	-
50	-	-	-	1.95	2.37	2.89	3.52	4.27	-
55	-	-	-	-	-	2.41	2.94	3.57	-
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	7 416	W
Power input	3 196	W
Current consumption	5.79	A
Mass flow	156	kg/h
C.O.P.	2.32	

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	69	dB(A)
With acoustic hood	61	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
R407F

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-23	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	7 162	8 202	10 218	12 620	-	-	-	-	-
20	6 417	7 355	9 192	11 403	14 023	17 086	-	-	-
30	5 743	6 562	8 190	10 178	12 562	15 377	18 660	22 445	-
40	5 169	5 849	7 236	8 971	11 088	13 624	16 615	20 095	-
45	-	-	6 787	8 382	10 355	12 740	15 572	18 889	-
50	-	-	-	7 809	9 629	11 855	14 522	17 666	-
55	-	-	-	-	8 914	10 972	13 466	16 431	-
60	-	-	-	-	-	-	-	-	-

Power input in W

10	1 649	1 661	1 690	1 749	-	-	-	-	-
20	2 083	2 102	2 123	2 146	2 195	2 290	-	-	-
30	2 572	2 621	2 668	2 692	2 714	2 755	2 838	2 984	-
40	3 107	3 207	3 317	3 376	3 407	3 430	3 468	3 542	-
45	-	-	3 677	3 768	3 816	3 844	3 873	3 924	-
50	-	-	-	4 190	4 265	4 306	4 335	4 372	-
55	-	-	-	-	4 754	4 817	4 854	4 887	-
60	-	-	-	-	-	-	-	-	-

Current consumption in A

10	2.52	2.52	2.53	2.56	-	-	-	-	-
20	3.67	3.67	3.68	3.70	3.72	3.75	-	-	-
30	4.45	4.46	4.49	4.51	4.53	4.55	4.58	4.61	-
40	5.18	5.21	5.25	5.28	5.31	5.33	5.36	5.38	-
45	-	-	5.72	5.76	5.79	5.82	5.84	5.86	-
50	-	-	-	6.34	6.39	6.42	6.45	6.47	-
55	-	-	-	-	7.13	7.17	7.20	7.23	-
60	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

10	125	142	175	213	-	-	-	-	-
20	121	138	170	208	252	303	-	-	-
30	118	134	164	201	245	296	355	422	-
40	117	131	160	195	237	287	346	413	-
45	-	-	158	192	233	283	341	408	-
50	-	-	-	189	230	278	336	402	-
55	-	-	-	-	227	274	331	397	-
60	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

10	4.34	4.94	6.05	7.22	-	-	-	-	-
20	3.08	3.50	4.33	5.31	6.39	7.46	-	-	-
30	2.23	2.50	3.07	3.78	4.63	5.58	6.57	7.52	-
40	1.66	1.82	2.18	2.66	3.25	3.97	4.79	5.67	-
45	-	-	1.85	2.22	2.71	3.31	4.02	4.81	-
50	-	-	-	1.86	2.26	2.75	3.35	4.04	-
55	-	-	-	-	1.88	2.28	2.77	3.36	-
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	8 382	W
Power input	3 768	W
Current consumption	5.76	A
Mass flow	192	kg/h
C.O.P.	2.22	

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	73	dB(A)
With acoustic hood	65	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

R407F

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-23	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	7 569	8 664	10 786	13 313	-	-	-	-	-
20	6 822	7 816	9 761	12 098	14 865	18 100	-	-	-
30	6 153	7 025	8 759	10 875	13 410	16 402	19 886	23 900	-
40	-	6 324	7 814	9 676	11 946	14 662	17 862	21 583	-
45	-	-	7 373	9 095	11 221	13 788	16 835	20 397	-
50	-	-	-	8 534	10 508	12 919	15 805	19 203	-
55	-	-	-	-	-	12 061	14 780	18 008	-
60	-	-	-	-	-	-	-	-	-

Power input in W

10	1 649	1 661	1 690	1 749	-	-	-	-	-
20	2 083	2 102	2 123	2 146	2 195	2 290	-	-	-
30	2 572	2 621	2 668	2 692	2 714	2 755	2 838	2 984	-
40	-	3 207	3 317	3 376	3 407	3 430	3 468	3 542	-
45	-	-	3 677	3 768	3 816	3 844	3 873	3 924	-
50	-	-	-	4 190	4 265	4 306	4 335	4 372	-
55	-	-	-	-	-	4 817	4 854	4 887	-
60	-	-	-	-	-	-	-	-	-

Current consumption in A

10	2.52	2.52	2.53	2.56	-	-	-	-	-
20	3.67	3.67	3.68	3.70	3.72	3.75	-	-	-
30	4.45	4.46	4.49	4.51	4.53	4.55	4.58	4.61	-
40	-	5.21	5.25	5.28	5.31	5.33	5.36	5.38	-
45	-	-	5.72	5.76	5.79	5.82	5.84	5.86	-
50	-	-	-	6.34	6.39	6.42	6.45	6.47	-
55	-	-	-	-	-	7.17	7.20	7.23	-
60	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

10	124	141	174	212	-	-	-	-	-
20	120	137	169	206	251	301	-	-	-
30	117	133	163	200	243	294	353	419	-
40	-	130	159	194	236	286	344	411	-
45	-	-	157	191	232	281	339	405	-
50	-	-	-	188	228	277	334	400	-
55	-	-	-	-	-	272	329	394	-
60	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

10	4.59	5.22	6.38	7.61	-	-	-	-	-
20	3.28	3.72	4.60	5.64	6.77	7.90	-	-	-
30	2.39	2.68	3.28	4.04	4.94	5.95	7.01	8.01	-
40	-	1.97	2.36	2.87	3.51	4.27	5.15	6.09	-
45	-	-	2.01	2.41	2.94	3.59	4.35	5.20	-
50	-	-	-	2.04	2.46	3.00	3.65	4.39	-
55	-	-	-	-	-	2.50	3.05	3.69	-
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	9 095	W
Power input	3 768	W
Current consumption	5.76	A
Mass flow	191	kg/h
C.O.P.	2.41	

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	73	dB(A)
With acoustic hood	65	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, 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	4 103	5 132	6 362	7 824	9 549	-	-	-	-
20	3 684	4 682	5 859	7 248	8 878	10 780	12 984	-	-
30	-	-	5 253	6 542	8 052	9 812	11 853	14 206	16 900
40	-	-	-	5 733	7 097	8 690	10 543	12 686	15 150
50	-	-	-	-	6 041	7 442	9 081	10 989	13 197
60	-	-	-	-	-	-	7 493	9 141	11 066

Power input in W

10	1 356	1 408	1 456	1 490	1 496	-	-	-	-
20	1 666	1 691	1 736	1 788	1 835	1 864	1 864	-	-
30	-	-	2 154	2 183	2 228	2 278	2 321	2 344	2 335
40	-	-	-	2 786	2 789	2 818	2 863	2 909	2 946
50	-	-	-	-	3 630	3 597	3 602	3 630	3 671
60	-	-	-	-	-	-	4 651	4 620	4 624

Current consumption in A

10	3.89	3.92	3.94	3.95	3.97	-	-	-	-
20	4.14	4.18	4.21	4.24	4.27	4.30	4.33	-	-
30	-	-	4.61	4.64	4.68	4.71	4.75	4.79	4.83
40	-	-	-	5.28	5.30	5.33	5.37	5.40	5.45
50	-	-	-	-	6.29	6.30	6.31	6.33	6.36
60	-	-	-	-	-	-	7.71	7.71	7.71

Mass flow in kg/h

10	67	84	105	130	159	-	-	-	-
20	65	82	104	128	158	193	235	-	-
30	-	-	100	125	155	191	233	283	340
40	-	-	-	120	150	186	228	277	335
50	-	-	-	-	142	177	219	269	326
60	-	-	-	-	-	-	207	256	313

Coefficient of performance (C.O.P.)

10	3.03	3.65	4.37	5.25	6.38	-	-	-	-
20	2.21	2.77	3.37	4.05	4.84	5.78	6.97	-	-
30	-	-	2.44	3.00	3.61	4.31	5.11	6.06	7.24
40	-	-	-	2.06	2.54	3.08	3.68	4.36	5.14
50	-	-	-	-	1.66	2.07	2.52	3.03	3.59
60	-	-	-	-	-	-	1.61	1.98	2.39

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

Cooling capacity	6 580	W
Power input	3 167	W
Current consumption	5.74	A
Mass flow	146	kg/h
C.O.P.	2.08	

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 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	4 120	5 157	6 398	7 873	9 611	-	-	-	-
20	3 652	4 651	5 835	7 233	8 876	10 792	13 008	-	-
30	3 134	4 069	5 168	6 463	7 985	9 763	11 825	14 198	16 900
40	-	-	4 427	5 593	6 966	8 579	10 463	12 645	15 150
50	-	-	-	4 651	5 849	7 271	8 949	10 914	13 197
60	-	-	-	-	4 664	5 867	7 311	9 033	11 066

Power input in W

10	1 356	1 408	1 456	1 490	1 496	-	-	-	-
20	1 666	1 691	1 736	1 788	1 835	1 864	1 864	-	-
30	2 197	2 155	2 154	2 183	2 228	2 278	2 321	2 344	2 335
40	-	-	2 822	2 786	2 789	2 818	2 863	2 909	2 946
50	-	-	-	3 711	3 630	3 597	3 602	3 630	3 671
60	-	-	-	-	4 864	4 728	4 651	4 620	4 624

Current consumption in A

10	3.89	3.92	3.94	3.95	3.97	-	-	-	-
20	4.14	4.18	4.21	4.24	4.27	4.30	4.33	-	-
30	4.54	4.57	4.61	4.64	4.68	4.71	4.75	4.79	4.83
40	-	-	5.26	5.28	5.30	5.33	5.37	5.40	5.45
50	-	-	-	6.28	6.29	6.30	6.31	6.33	6.36
60	-	-	-	-	7.75	7.73	7.71	7.71	7.71

Mass flow in kg/h

10	79	98	120	145	174	-	-	-	-
20	76	96	118	144	174	208	247	-	-
30	73	92	115	140	170	205	245	290	340
40	-	-	109	135	165	200	240	285	335
50	-	-	-	126	156	191	230	276	326
60	-	-	-	-	144	178	218	263	313

Coefficient of performance (C.O.P.)

10	3.04	3.66	4.39	5.28	6.42	-	-	-	-
20	2.19	2.75	3.36	4.04	4.84	5.79	6.98	-	-
30	1.43	1.89	2.40	2.96	3.58	4.28	5.09	6.06	7.24
40	-	-	1.57	2.01	2.50	3.04	3.65	4.35	5.14
50	-	-	-	1.25	1.61	2.02	2.48	3.01	3.59
60	-	-	-	-	0.96	1.24	1.57	1.96	2.39

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

Cooling capacity	6 418	W
Power input	3 167	W
Current consumption	5.74	A
Mass flow	161	kg/h
C.O.P.	2.03	

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	4 712	5 944	7 430	9 208	11 315	-	-	-	-
20	4 339	5 544	6 973	8 664	10 654	12 981	15 683	-	-
30	-	-	6 391	7 961	9 801	11 948	14 439	17 312	20 604
40	-	-	-	7 132	8 788	10 721	12 969	15 568	18 556
50	-	-	-	-	7 647	9 333	11 304	13 596	16 247
60	-	-	-	-	-	-	9 476	11 428	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	-	-	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	-	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	-	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	-	-	5 246	5 261	5 295

Current consumption in A

10	3.51	3.57	3.60	3.63	3.66	-	-	-	-
20	3.93	3.99	4.04	4.07	4.10	4.13	4.18	-	-
30	-	-	4.51	4.55	4.58	4.61	4.66	4.73	4.82
40	-	-	-	5.19	5.22	5.26	5.30	5.36	5.45
50	-	-	-	-	6.15	6.18	6.22	6.28	6.36
60	-	-	-	-	-	-	7.54	7.60	7.67

Mass flow in kg/h

10	77	98	123	152	188	-	-	-	-
20	76	98	123	154	190	233	284	-	-
30	-	-	122	153	189	233	284	344	415
40	-	-	-	150	186	229	280	340	410
50	-	-	-	-	180	222	273	332	402
60	-	-	-	-	-	-	262	320	388

Coefficient of performance (C.O.P.)

10	2.98	3.68	4.48	5.42	6.55	-	-	-	-
20	2.16	2.71	3.34	4.04	4.84	5.77	6.86	-	-
30	-	-	2.46	3.01	3.62	4.31	5.10	6.00	7.05
40	-	-	-	2.17	2.64	3.17	3.76	4.43	5.19
50	-	-	-	-	1.84	2.23	2.68	3.18	3.75
60	-	-	-	-	-	-	1.81	2.17	2.59

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

Cooling capacity	8 232	W
Power input	3 715	W
Current consumption	5.64	A
Mass flow	183	kg/h
C.O.P.	2.22	

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
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	4 731	5 973	7 472	9 265	11 388	-	-	-	-
20	4 301	5 508	6 944	8 646	10 652	12 996	15 712	-	-
30	3 813	4 950	6 288	7 865	9 719	11 888	14 405	17 303	20 604
40	-	-	5 539	6 957	8 626	10 584	12 870	15 517	18 556
50	-	-	-	5 956	7 405	9 120	11 139	13 503	16 247
60	-	-	-	-	6 091	7 528	9 247	11 293	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	2 575	2 574	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	3 280	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	4 175	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	5 299	5 256	5 246	5 261	5 295

Current consumption in A

10	3.51	3.57	3.60	3.63	3.66	-	-	-	-
20	3.93	3.99	4.04	4.07	4.10	4.13	4.18	-	-
30	4.38	4.46	4.51	4.55	4.58	4.61	4.66	4.73	4.82
40	-	-	5.15	5.19	5.22	5.26	5.30	5.36	5.45
50	-	-	-	6.11	6.15	6.18	6.22	6.28	6.36
60	-	-	-	-	7.46	7.50	7.54	7.60	7.67

Mass flow in kg/h

10	91	114	140	171	206	-	-	-	-
20	90	113	141	172	208	251	299	-	-
30	89	112	139	171	208	250	299	354	415
40	-	-	136	168	204	246	295	349	410
50	-	-	-	162	197	239	287	341	402
60	-	-	-	-	188	229	275	329	388

Coefficient of performance (C.O.P.)

10	3.00	3.69	4.50	5.46	6.60	-	-	-	-
20	2.14	2.70	3.32	4.03	4.84	5.77	6.87	-	-
30	1.48	1.92	2.42	2.97	3.59	4.29	5.09	6.00	7.05
40	-	-	1.69	2.11	2.59	3.13	3.73	4.42	5.19
50	-	-	-	1.43	1.78	2.18	2.64	3.16	3.75
60	-	-	-	-	1.15	1.43	1.76	2.15	2.59

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

Cooling capacity	8 029	W
Power input	3 715	W
Current consumption	5.64	A
Mass flow	201	kg/h
C.O.P.	2.16	

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	4 103	5 132	6 362	7 824	9 549	-	-	-	-
20	3 684	4 682	5 859	7 248	8 878	10 780	12 984	-	-
30	-	-	5 253	6 542	8 052	9 812	11 853	14 206	16 900
40	-	-	-	5 733	7 097	8 690	10 543	12 686	15 150
50	-	-	-	-	6 041	7 442	9 081	10 989	13 197
60	-	-	-	-	-	-	7 493	9 141	11 066

Power input in W

10	1 356	1 408	1 456	1 490	1 496	-	-	-	-
20	1 666	1 691	1 736	1 788	1 835	1 864	1 864	-	-
30	-	-	2 154	2 183	2 228	2 278	2 321	2 344	2 335
40	-	-	-	2 786	2 789	2 818	2 863	2 909	2 946
50	-	-	-	-	3 630	3 597	3 602	3 630	3 671
60	-	-	-	-	-	-	4 651	4 620	4 624

Current consumption in A

10	3.89	3.92	3.94	3.95	3.97	-	-	-	-
20	4.14	4.18	4.21	4.24	4.27	4.30	4.33	-	-
30	-	-	4.61	4.64	4.68	4.71	4.75	4.79	4.83
40	-	-	-	5.28	5.30	5.33	5.37	5.40	5.45
50	-	-	-	-	6.29	6.30	6.31	6.33	6.36
60	-	-	-	-	-	-	7.71	7.71	7.71

Mass flow in kg/h

10	67	84	105	130	159	-	-	-	-
20	65	82	104	128	158	193	235	-	-
30	-	-	100	125	155	191	233	283	340
40	-	-	-	120	150	186	228	277	335
50	-	-	-	-	142	177	219	269	326
60	-	-	-	-	-	-	207	256	313

Coefficient of performance (C.O.P.)

10	3.03	3.65	4.37	5.25	6.38	-	-	-	-
20	2.21	2.77	3.37	4.05	4.84	5.78	6.97	-	-
30	-	-	2.44	3.00	3.61	4.31	5.11	6.06	7.24
40	-	-	-	2.06	2.54	3.08	3.68	4.36	5.14
50	-	-	-	-	1.66	2.07	2.52	3.03	3.59
60	-	-	-	-	-	-	1.61	1.98	2.39

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

Cooling capacity	6 580	W
Power input	3 167	W
Current consumption	5.74	A
Mass flow	146	kg/h
C.O.P.	2.08	

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	4 111	5 148	6 388	7 863	9 602	-	-	-	-
20	3 643	4 641	5 824	7 223	8 866	10 784	13 001	-	-
30	3 124	4 058	5 157	6 452	7 974	9 753	11 818	14 194	16 900
40	-	-	4 416	5 581	6 955	8 569	10 455	12 640	15 150
50	-	-	-	4 638	5 838	7 261	8 940	10 909	13 197
60	-	-	-	-	4 652	5 857	7 303	9 027	11 066

Power input in W

10	1 356	1 408	1 456	1 490	1 496	-	-	-	-
20	1 666	1 691	1 736	1 788	1 835	1 864	1 864	-	-
30	2 197	2 155	2 154	2 183	2 228	2 278	2 321	2 344	2 335
40	-	-	2 822	2 786	2 789	2 818	2 863	2 909	2 946
50	-	-	-	3 711	3 630	3 597	3 602	3 630	3 671
60	-	-	-	-	4 864	4 728	4 651	4 620	4 624

Current consumption in A

10	3.89	3.92	3.94	3.95	3.97	-	-	-	-
20	4.14	4.18	4.21	4.24	4.27	4.30	4.33	-	-
30	4.54	4.57	4.61	4.64	4.68	4.71	4.75	4.79	4.83
40	-	-	5.26	5.28	5.30	5.33	5.37	5.40	5.45
50	-	-	-	6.28	6.29	6.30	6.31	6.33	6.36
60	-	-	-	-	7.75	7.73	7.71	7.71	7.71

Mass flow in kg/h

10	79	98	120	145	174	-	-	-	-
20	76	96	118	144	174	208	247	-	-
30	73	92	115	140	170	205	245	290	340
40	-	-	109	135	165	200	240	285	335
50	-	-	-	126	156	191	230	276	326
60	-	-	-	-	144	178	218	263	313

Coefficient of performance (C.O.P.)

10	3.03	3.66	4.39	5.28	6.42	-	-	-	-
20	2.19	2.74	3.35	4.04	4.83	5.78	6.98	-	-
30	1.42	1.88	2.39	2.96	3.58	4.28	5.09	6.06	7.24
40	-	-	1.56	2.00	2.49	3.04	3.65	4.34	5.14
50	-	-	-	1.25	1.61	2.02	2.48	3.01	3.59
60	-	-	-	-	0.96	1.24	1.57	1.95	2.39

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

Cooling capacity	6 407	W
Power input	3 167	W
Current consumption	5.74	A
Mass flow	161	kg/h
C.O.P.	2.02	

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 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	4 712	5 944	7 430	9 208	11 315	-	-	-	-
20	4 339	5 544	6 973	8 664	10 654	12 981	15 683	-	-
30	-	-	6 391	7 961	9 801	11 948	14 439	17 312	20 604
40	-	-	-	7 132	8 788	10 721	12 969	15 568	18 556
50	-	-	-	-	7 647	9 333	11 304	13 596	16 247
60	-	-	-	-	-	-	9 476	11 428	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	-	-	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	-	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	-	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	-	-	5 246	5 261	5 295

Current consumption in A

10	3.51	3.57	3.60	3.63	3.66	-	-	-	-
20	3.93	3.99	4.04	4.07	4.10	4.13	4.18	-	-
30	-	-	4.51	4.55	4.58	4.61	4.66	4.73	4.82
40	-	-	-	5.19	5.22	5.26	5.30	5.36	5.45
50	-	-	-	-	6.15	6.18	6.22	6.28	6.36
60	-	-	-	-	-	-	7.54	7.60	7.67

Mass flow in kg/h

10	78	99	125	155	191	-	-	-	-
20	77	99	125	156	193	237	289	-	-
30	-	-	124	155	193	237	289	351	422
40	-	-	-	153	189	234	286	347	419
50	-	-	-	-	184	227	279	339	410
60	-	-	-	-	-	-	268	327	397

Coefficient of performance (C.O.P.)

10	2.98	3.68	4.48	5.42	6.55	-	-	-	-
20	2.16	2.71	3.34	4.04	4.84	5.77	6.86	-	-
30	-	-	2.46	3.01	3.62	4.31	5.10	6.00	7.05
40	-	-	-	2.17	2.64	3.17	3.76	4.43	5.19
50	-	-	-	-	1.84	2.23	2.68	3.18	3.75
60	-	-	-	-	-	-	1.81	2.17	2.59

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

Cooling capacity	8 232	W
Power input	3 715	W
Current consumption	5.64	A
Mass flow	187	kg/h
C.O.P.	2.22	

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	4 721	5 962	7 460	9 253	11 377	-	-	-	-
20	4 290	5 496	6 931	8 634	10 640	12 986	15 704	-	-
30	3 801	4 937	6 274	7 852	9 706	11 876	14 396	17 297	20 604
40	-	-	5 525	6 942	8 612	10 572	12 860	15 511	18 556
50	-	-	-	5 940	7 390	9 106	11 129	13 497	16 247
60	-	-	-	-	6 076	7 514	9 236	11 286	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	2 575	2 574	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	3 280	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	4 175	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	5 299	5 256	5 246	5 261	5 295

Current consumption in A

10	3.51	3.57	3.60	3.63	3.66	-	-	-	-
20	3.93	3.99	4.04	4.07	4.10	4.13	4.18	-	-
30	4.38	4.46	4.51	4.55	4.58	4.61	4.66	4.73	4.82
40	-	-	5.15	5.19	5.22	5.26	5.30	5.36	5.45
50	-	-	-	6.11	6.15	6.18	6.22	6.28	6.36
60	-	-	-	-	7.46	7.50	7.54	7.60	7.67

Mass flow in kg/h

10	92	115	142	173	210	-	-	-	-
20	92	115	143	175	212	255	304	-	-
30	90	114	142	174	211	255	304	360	422
40	-	-	139	171	208	251	300	356	419
50	-	-	-	165	202	244	293	348	410
60	-	-	-	-	192	234	281	336	397

Coefficient of performance (C.O.P.)

10	2.99	3.69	4.50	5.45	6.59	-	-	-	-
20	2.13	2.69	3.32	4.03	4.83	5.77	6.86	-	-
30	1.48	1.92	2.41	2.97	3.59	4.29	5.08	5.99	7.05
40	-	-	1.68	2.11	2.59	3.12	3.73	4.42	5.19
50	-	-	-	1.42	1.77	2.18	2.64	3.16	3.75
60	-	-	-	-	1.15	1.43	1.76	2.15	2.59

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

Cooling capacity	8 015	W
Power input	3 715	W
Current consumption	5.64	A
Mass flow	205	kg/h
C.O.P.	2.16	

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	4 474	5 574	6 921	8 545	10 475	-	-	-	-
20	4 005	5 031	6 271	7 754	9 512	11 575	13 972	-	-
30	-	4 491	5 604	6 929	8 496	10 334	12 476	14 950	17 786
40	-	-	4 922	6 069	7 426	9 022	10 888	13 054	15 551
50	-	-	-	-	6 304	7 638	9 210	11 050	13 188
60	-	-	-	-	-	6 185	7 444	8 938	10 697

Power input in W

10	1 429	1 457	1 483	1 510	1 541	-	-	-	-
20	1 783	1 815	1 841	1 865	1 888	1 913	1 944	-	-
30	-	2 269	2 299	2 323	2 342	2 359	2 377	2 400	2 428
40	-	-	2 876	2 903	2 922	2 935	2 945	2 955	2 967
50	-	-	-	-	3 647	3 659	3 665	3 666	3 666
60	-	-	-	-	-	4 552	4 557	4 553	4 544

Current consumption in A

10	3.91	3.94	3.98	4.02	4.06	-	-	-	-
20	4.24	4.27	4.30	4.32	4.35	4.38	4.42	-	-
30	-	4.74	4.77	4.80	4.82	4.84	4.86	4.88	4.90
40	-	-	5.43	5.46	5.49	5.51	5.52	5.53	5.54
50	-	-	-	-	6.39	6.41	6.43	6.44	6.44
60	-	-	-	-	-	7.58	7.61	7.62	7.63

Mass flow in kg/h

10	90	114	142	176	217	-	-	-	-
20	88	112	140	173	213	262	319	-	-
30	-	109	137	169	209	257	314	381	460
40	-	-	133	165	204	251	307	373	451
50	-	-	-	-	198	244	298	363	440
60	-	-	-	-	-	235	289	352	427

Coefficient of performance (C.O.P.)

10	3.13	3.83	4.67	5.66	6.80	-	-	-	-
20	2.25	2.77	3.41	4.16	5.04	6.05	7.19	-	-
30	-	1.98	2.44	2.98	3.63	4.38	5.25	6.23	7.33
40	-	-	1.71	2.09	2.54	3.07	3.70	4.42	5.24
50	-	-	-	-	1.73	2.09	2.51	3.01	3.60
60	-	-	-	-	-	1.36	1.63	1.96	2.35

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

Cooling capacity	6 871	W
Power input	3 265	W
Current consumption	5.91	A
Mass flow	201	kg/h
C.O.P.	2.10	

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	4 329	5 427	6 777	8 412	10 364	-	-	-	-
20	3 801	4 815	6 051	7 542	9 321	11 418	13 864	-	-
30	3 295	4 207	5 310	6 637	8 223	10 101	12 302	14 857	17 786
40	2 811	3 602	4 553	5 699	7 073	8 712	10 649	12 919	15 551
50	-	-	3 780	4 727	5 872	7 252	8 906	10 872	13 188
60	-	-	-	-	4 611	5 716	7 068	8 713	10 697

Power input in W

10	1 429	1 457	1 483	1 510	1 541	-	-	-	-
20	1 783	1 815	1 841	1 865	1 888	1 913	1 944	-	-
30	2 230	2 269	2 299	2 323	2 342	2 359	2 377	2 400	2 428
40	2 788	2 839	2 876	2 903	2 922	2 935	2 945	2 955	2 967
50	-	-	3 591	3 625	3 647	3 659	3 665	3 666	3 666
60	-	-	-	-	4 537	4 552	4 557	4 553	4 544

Current consumption in A

10	3.91	3.94	3.98	4.02	4.06	-	-	-	-
20	4.24	4.27	4.30	4.32	4.35	4.38	4.42	-	-
30	4.71	4.74	4.77	4.80	4.82	4.84	4.86	4.88	4.90
40	5.36	5.40	5.43	5.46	5.49	5.51	5.52	5.53	5.54
50	-	-	6.31	6.35	6.39	6.41	6.43	6.44	6.44
60	-	-	-	-	7.54	7.58	7.61	7.62	7.63

Mass flow in kg/h

10	107	133	162	197	238	-	-	-	-
20	104	130	160	194	235	282	336	-	-
30	102	127	156	190	230	277	330	392	460
40	100	124	152	185	224	270	323	383	451
50	-	-	148	180	218	262	314	373	440
60	-	-	-	-	211	254	304	362	427

Coefficient of performance (C.O.P.)

10	3.03	3.73	4.57	5.57	6.72	-	-	-	-
20	2.13	2.65	3.29	4.04	4.94	5.97	7.13	-	-
30	1.48	1.85	2.31	2.86	3.51	4.28	5.17	6.19	7.33
40	1.01	1.27	1.58	1.96	2.42	2.97	3.62	4.37	5.24
50	-	-	1.05	1.30	1.61	1.98	2.43	2.97	3.60
60	-	-	-	-	1.02	1.26	1.55	1.91	2.35

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

Cooling capacity	6 479	W
Power input	3 265	W
Current consumption	5.91	A
Mass flow	221	kg/h
C.O.P.	1.98	

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 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	5 553	6 890	8 509	10 443	12 723	-	-	-	-
20	4 951	6 215	7 727	9 520	11 626	14 078	16 909	-	-
30	-	5 523	6 899	8 522	10 425	12 641	15 202	18 140	21 488
40	-	-	6 031	7 455	9 125	11 075	13 338	15 944	18 928
50	-	-	-	-	7 733	9 387	11 322	13 568	16 159
60	-	-	-	-	-	7 584	9 161	11 018	13 188

Power input in W

10	1 739	1 777	1 812	1 852	1 904	-	-	-	-
20	2 153	2 210	2 253	2 288	2 322	2 361	2 413	-	-
30	-	2 722	2 790	2 838	2 872	2 900	2 928	2 963	3 012
40	-	-	3 418	3 497	3 550	3 585	3 607	3 624	3 642
50	-	-	-	-	4 352	4 411	4 446	4 463	4 469
60	-	-	-	-	-	5 374	5 440	5 475	5 487

Current consumption in A

10	3.72	3.72	3.74	3.77	3.81	-	-	-	-
20	4.10	4.13	4.16	4.20	4.24	4.28	4.33	-	-
30	-	4.63	4.69	4.75	4.79	4.84	4.87	4.91	4.94
40	-	-	5.36	5.45	5.52	5.58	5.61	5.64	5.64
50	-	-	-	-	6.45	6.53	6.58	6.61	6.61
60	-	-	-	-	-	7.73	7.81	7.86	7.87

Mass flow in kg/h

10	112	141	175	215	263	-	-	-	-
20	109	138	172	212	261	318	386	-	-
30	-	134	168	208	257	314	382	462	556
40	-	-	163	203	251	308	375	455	549
50	-	-	-	-	243	299	367	446	539
60	-	-	-	-	-	289	355	434	526

Coefficient of performance (C.O.P.)

10	3.19	3.88	4.70	5.64	6.68	-	-	-	-
20	2.30	2.81	3.43	4.16	5.01	5.96	7.01	-	-
30	-	2.03	2.47	3.00	3.63	4.36	5.19	6.12	7.13
40	-	-	1.76	2.13	2.57	3.09	3.70	4.40	5.20
50	-	-	-	-	1.78	2.13	2.55	3.04	3.62
60	-	-	-	-	-	1.41	1.68	2.01	2.40

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

Cooling capacity	8 440	W
Power input	3 936	W
Current consumption	5.96	A
Mass flow	247	kg/h
C.O.P.	2.14	

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
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	5 374	6 708	8 332	10 281	12 588	-	-	-	-
20	4 699	5 949	7 457	9 260	11 392	13 888	16 779	-	-
30	4 039	5 175	6 537	8 164	10 091	12 355	14 991	18 028	21 488
40	3 398	4 391	5 579	7 000	8 692	10 695	13 045	15 779	18 928
50	-	-	4 586	5 773	7 202	8 913	10 948	13 350	16 159
60	-	-	-	-	5 618	7 008	8 699	10 742	13 188

Power input in W

10	1 739	1 777	1 812	1 852	1 904	-	-	-	-
20	2 153	2 210	2 253	2 288	2 322	2 361	2 413	-	-
30	2 627	2 722	2 790	2 838	2 872	2 900	2 928	2 963	3 012
40	3 156	3 307	3 418	3 497	3 550	3 585	3 607	3 624	3 642
50	-	-	4 133	4 261	4 352	4 411	4 446	4 463	4 469
60	-	-	-	-	5 272	5 374	5 440	5 475	5 487

Current consumption in A

10	3.72	3.72	3.74	3.77	3.81	-	-	-	-
20	4.10	4.13	4.16	4.20	4.24	4.28	4.33	-	-
30	4.56	4.63	4.69	4.75	4.79	4.84	4.87	4.91	4.94
40	5.12	5.25	5.36	5.45	5.52	5.58	5.61	5.64	5.64
50	-	-	6.20	6.34	6.45	6.53	6.58	6.61	6.61
60	-	-	-	-	7.60	7.73	7.81	7.86	7.87

Mass flow in kg/h

10	132	164	200	241	290	-	-	-	-
20	129	161	197	238	287	343	407	-	-
30	125	157	192	234	282	338	403	475	556
40	121	151	187	228	276	332	396	468	549
50	-	-	179	220	267	323	386	458	539
60	-	-	-	-	257	311	374	446	526

Coefficient of performance (C.O.P.)

10	3.09	3.78	4.60	5.55	6.61	-	-	-	-
20	2.18	2.69	3.31	4.05	4.91	5.88	6.95	-	-
30	1.54	1.90	2.34	2.88	3.51	4.26	5.12	6.08	7.13
40	1.08	1.33	1.63	2.00	2.45	2.98	3.62	4.35	5.20
50	-	-	1.11	1.35	1.65	2.02	2.46	2.99	3.62
60	-	-	-	-	1.07	1.30	1.60	1.96	2.40

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

Cooling capacity	7 958	W
Power input	3 936	W
Current consumption	5.96	A
Mass flow	272	kg/h
C.O.P.	2.02	

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)

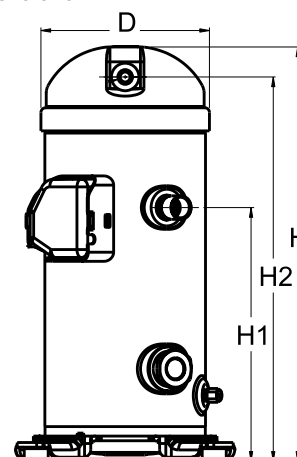
Sound power data

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

Tolerance according EN12900

General Characteristics

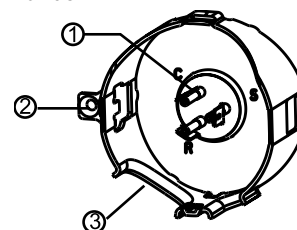
Model number (on compressor nameplate)	MLZ030T5LC9A	MLZ030T5LC9A
Code number for Singlepack*	121U8643	121L8643
Code number for Industrial pack**	121U8642	121L8642
Drawing number	0XR6025B-2	0XR6025B-2
Suction and discharge connections	Brazed	Brazed
Suction connection	7/8" ODF	7/8" ODF
Discharge connection	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	68.79 cm ³ /rev	
Displacement @ Nominal speed	12.0 m ³ /h @ 2900 rpm	
Net weight	41 kg	
Oil charge	1.57 litre, POE --	
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	5.44 kg	
Approved refrigerants	R404A,R507,R134a,R407A,R407F,R448A,R449A,R452A,R22	

Dimensions


D=184 mm
H=455 mm
H1=280 mm
H2=422 mm
H3=- mm

Electrical Characteristics

Nominal voltage	230V/1/50Hz
Voltage range	207-253 V
Winding resistance (main / start) at 25°C	0.42 Ω / 1.309 Ω
Run capacitors A + C	50 μF + - μF
Start capacitor B	161-193 μF
Start relay	RVA3EKL
Rated Load Amps (RLA)	20.5 A
Maximum Continuous Current (MCC)	32 A
Locked Rotor Amps (LRA)	127 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, -, -

*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.

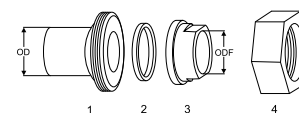
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

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

Solder sleeve adapter set



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

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants

Code no.

POE lubricant, 215PZ(PL46HB), 1 litre can	120Z0648
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Crankcase heaters

Code no.

Belt type crankcase heater, 70 W, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 70 W, 575 V, UL	120Z5013

Miscellaneous accessories

Code no.

Acoustic hood	120Z5084
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

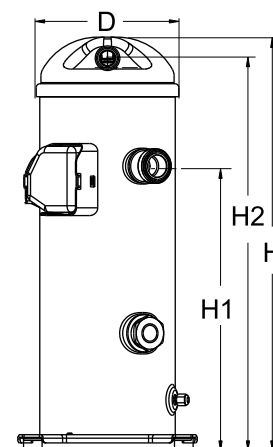
Spare parts

Code no.

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

General Characteristics

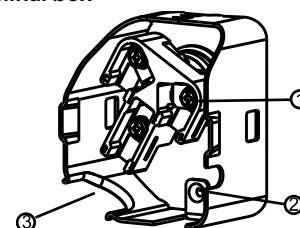
Model number (on compressor nameplate)		MLZ030T5LQ9
Code number for Singlepack*		121U8567
Code number for Industrial pack**		121U8566
Drawing number		0XR6298B-2
Suction and discharge connections		Rotolock
Suction connection		1-1/4 " Rotolock
Discharge connection		1 " Rotolock
Suction connection with supplied sleeve		7/8 " -
Discharge connection with supplied sleeve	- "	1/2 " -
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume		68.79 cm ³ /rev
Displacement @ Nominal speed		12.0 m ³ /h @ 2900 rpm
Net weight		41 kg
Oil charge		1.57 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		5.44 kg
Approved refrigerants		R404A, R507, R134a, R407A, R407C, R407F, R22

Dimensions


D=184 mm
H=454.9 mm
H1=280 mm
H2=422.2 mm
H3=- mm

Electrical Characteristics

Nominal voltage	230V/1/50Hz
Voltage range	207-253 V
Winding resistance (main / start) at 25°C	0.42 Ω / 1.309 Ω
Run capacitors A + C	50 μF + - μF
Start capacitor B	161-193 μF
Start relay	RVA3EKL
Rated Load Amps (RLA)	20.5 A
Maximum Continuous Current (MCC)	32 A
Locked Rotor Amps (LRA)	127 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 2: Earth connection
- 3: Power cable passage

Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	3 Nm / 2 Nm

Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Approvals : CE certified, -, -

*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.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

Rotolock accessories, discharge side
Code no.

Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

Rotolock accessories, sets
Code no.

Teflon seals, sleeves, nuts for discharge and suction (1" and 1"1/4)	120Z5074
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.

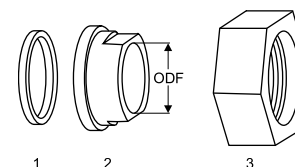
Belt type crankcase heater, 70 W, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 70 W, 575 V, UL	120Z5013

Miscellaneous accessories
Code no.

Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts
Code no.

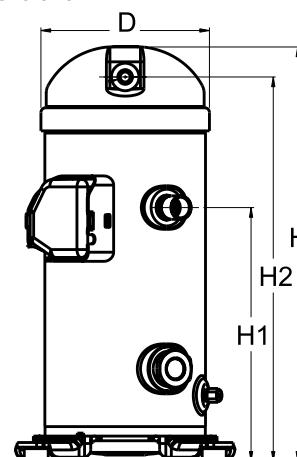
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

Gaskets, sleeves and nuts


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

General Characteristics

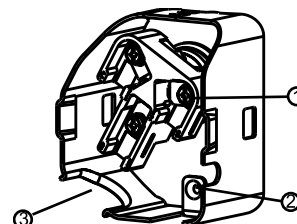
Model number (on compressor nameplate)	MLZ030T5LC9	MLZ030T5LC9
Code number for Singlepack*	121U8032	120U8032
Code number for Industrial pack**	121U8031	120U8031
Drawing number	0XR6025B-2	0XR6025B-2
Suction and discharge connections	Brazed	Brazed
Suction connection	7/8" ODF	7/8" ODF
Discharge connection	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	68.79 cm ³ /rev	
Displacement @ Nominal speed	12.0 m ³ /h @ 2900 rpm	
Net weight	41 kg	
Oil charge	1.57 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	5.44 kg	
Approved refrigerants	R404A, R507, R134a, R407A, R407C, R407F, R22	

Dimensions


D=184 mm
H=455 mm
H1=280 mm
H2=422 mm
H3=- mm

Electrical Characteristics

Nominal voltage	230V/1/50Hz
Voltage range	207-253 V
Winding resistance (main / start) at 25°C	0.42 Ω / 1.309 Ω
Run capacitors A + C	50 μF + - μF
Start capacitor B	161-193 μF
Start relay	RVA3EKL
Rated Load Amps (RLA)	20.5 A
Maximum Continuous Current (MCC)	32 A
Locked Rotor Amps (LRA)	127 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 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	3 Nm / 2 Nm

Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Approvals : CE certified, -, -

*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.

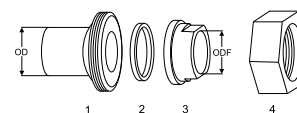
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

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

Solder sleeve adapter set



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

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
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, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 70 W, 575 V, UL	120Z5013

Miscellaneous accessories

Code no.

Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

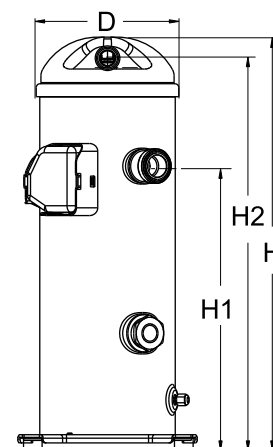
Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

General Characteristics

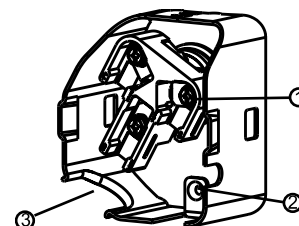
Model number (on compressor nameplate)	MLZ030T5LC9A	MLZ030T5LQ9A
Code number for Singlepack*	120U8643	121U8769
Code number for Industrial pack**	120U8642	121U8768
Drawing number	0XR6025B-2	0XR6298B-2
Suction and discharge connections	Brazed	Rotolock
Suction connection	7/8" ODF	1-1/4" Rotolock
Discharge connection	1/2" ODF	1" Rotolock
Suction connection with supplied sleeve		7/8" -
Discharge connection with supplied sleeve	- "	1/2" -
Oil sight glass	Threaded	Threaded
Oil equalisation connection	None	None
Oil drain connection	1/4" flare	None
LP gauge port	None	None
IPR valve	32 bar	None
Swept volume	68.79 cm ³ /rev	
Displacement @ Nominal speed	12.0 m ³ /h @ 2900 rpm	
Net weight	41 kg	
Oil charge	1.57 litre, POE - -	
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	5.44 kg	
Approved refrigerants	R404A, R507, R134a, R407A, R407F, R448A, R449A, R452A, R22	

Dimensions


D=184 mm
H=454.9 mm
H1=280 mm
H2=422.2 mm
H3=- mm

Electrical Characteristics

Nominal voltage	230V/1/50Hz
Voltage range	207-253 V
Winding resistance (main / start) at 25°C	0.42 Ω / 1.309 Ω
Run capacitors A + C	50 μF + - μF
Start capacitor B	161-193 μF
Start relay	RVA3EKL
Rated Load Amps (RLA)	20.5 A
Maximum Continuous Current (MCC)	32 A
Locked Rotor Amps (LRA)	127 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 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	3 Nm / 2 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.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

Rotolock accessories, discharge side
Code no.

Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

Rotolock accessories, sets
Code no.

Teflon seals, sleeves, nuts for discharge and suction (1" and 1"1/4)	120Z5074
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants
Code no.

POE lubricant, 215PZ(PL46HB), 1 litre can	120Z0648
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Crankcase heaters
Code no.

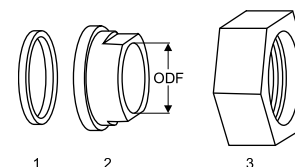
Belt type crankcase heater, 70 W, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 70 W, 575 V, UL	120Z5013

Miscellaneous accessories
Code no.

Acoustic hood	120Z5084
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts
Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

Gaskets, sleeves and nuts


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

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	6 681	7 874	9 235	10 797	-	-	-	-	-
20	6 326	7 547	8 932	10 515	12 329	-	-	-	-
30	5 479	6 724	8 125	9 717	11 532	13 601	15 948	-	-
40	4 729	5 934	7 288	8 825	10 579	12 583	14 864	-	-
50	-	5 225	6 468	7 887	9 518	11 395	13 549	-	-
60	-	-	-	6 951	8 398	10 087	12 052	-	-
68	-	-	-	-	-	8 985	10 756	-	-

Power input in W

16	1 670	1 766	1 871	1 976	-	-	-	-	-
20	1 799	1 889	1 988	2 086	2 173	-	-	-	-
30	2 176	2 254	2 342	2 431	2 509	2 566	2 591	-	-
40	2 634	2 708	2 793	2 879	2 955	3 011	3 037	-	-
50	-	3 260	3 348	3 439	3 521	3 584	3 617	-	-
60	-	-	-	4 121	4 216	4 293	4 341	-	-
68	-	-	-	-	-	4 964	5 030	-	-

Current consumption in A

16	8.93	9.44	10.01	10.56	-	-	-	-	-
20	9.62	10.10	10.63	11.16	11.62	-	-	-	-
30	11.64	12.05	12.53	13.00	13.42	13.72	13.86	-	-
40	14.09	14.48	14.93	15.39	15.80	16.10	16.24	-	-
50	-	17.43	17.91	18.39	18.83	19.17	19.34	-	-
60	-	-	-	22.04	22.55	22.96	23.22	-	-
68	-	-	-	-	-	26.55	26.90	-	-

Mass flow in kg/h

16	118	142	170	201	-	-	-	-	-
20	114	138	166	198	234	-	-	-	-
30	107	132	161	195	232	274	319	-	-
40	106	130	160	194	232	275	321	-	-
50	-	128	157	191	230	273	320	-	-
60	-	-	-	183	221	264	311	-	-
68	-	-	-	-	-	250	297	-	-

Coefficient of performance (C.O.P.)

16	4.00	4.46	4.93	5.47	-	-	-	-	-
20	3.52	4.00	4.49	5.04	5.67	-	-	-	-
30	2.52	2.98	3.47	4.00	4.60	5.30	6.16	-	-
40	1.80	2.19	2.61	3.07	3.58	4.18	4.89	-	-
50	-	1.60	1.93	2.29	2.70	3.18	3.75	-	-
60	-	-	-	1.69	1.99	2.35	2.78	-	-
68	-	-	-	-	-	1.81	2.14	-	-

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

Cooling capacity	6 872	W
Power input	3 057	W
Current consumption	16.35	A
Mass flow	159	kg/h
C.O.P.	2.25	

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	69	dB(A)
With acoustic hood	61	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	6 518	7 705	9 066	10 638	-	-	-	-	-
20	6 188	7 402	8 785	10 375	12 209	-	-	-	-
30	5 400	6 636	8 032	9 624	11 450	13 546	15 948	-	-
40	-	5 901	7 248	8 781	10 536	12 552	14 864	-	-
50	-	-	-	7 892	9 516	11 389	13 549	-	-
60	-	-	-	-	8 436	10 106	12 052	-	-
68	-	-	-	-	-	-	10 756	-	-

Power input in W

16	1 670	1 766	1 871	1 976	-	-	-	-	-
20	1 799	1 889	1 988	2 086	2 173	-	-	-	-
30	2 176	2 254	2 342	2 431	2 509	2 566	2 591	-	-
40	-	2 708	2 793	2 879	2 955	3 011	3 037	-	-
50	-	-	-	3 439	3 521	3 584	3 617	-	-
60	-	-	-	-	4 216	4 293	4 341	-	-
68	-	-	-	-	-	-	5 030	-	-

Current consumption in A

16	8.93	9.44	10.01	10.56	-	-	-	-	-
20	9.62	10.10	10.63	11.16	11.62	-	-	-	-
30	11.64	12.05	12.53	13.00	13.42	13.72	13.86	-	-
40	-	14.48	14.93	15.39	15.80	16.10	16.24	-	-
50	-	-	-	18.39	18.83	19.17	19.34	-	-
60	-	-	-	-	22.55	22.96	23.22	-	-
68	-	-	-	-	-	-	26.90	-	-

Mass flow in kg/h

16	104	127	155	188	-	-	-	-	-
20	100	123	152	185	224	-	-	-	-
30	94	118	147	182	221	267	319	-	-
40	-	117	146	181	221	268	321	-	-
50	-	-	-	179	219	266	320	-	-
60	-	-	-	-	211	258	311	-	-
68	-	-	-	-	-	-	297	-	-

Coefficient of performance (C.O.P.)

16	3.90	4.36	4.84	5.38	-	-	-	-	-
20	3.44	3.92	4.42	4.97	5.62	-	-	-	-
30	2.48	2.94	3.43	3.96	4.56	5.28	6.16	-	-
40	-	2.18	2.60	3.05	3.57	4.17	4.89	-	-
50	-	-	-	2.29	2.70	3.18	3.75	-	-
60	-	-	-	-	2.00	2.35	2.78	-	-
68	-	-	-	-	-	-	2.14	-	-

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

Cooling capacity	6 859	W
Power input	3 057	W
Current consumption	16.35	A
Mass flow	145	kg/h
C.O.P.	2.24	

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	69	dB(A)
With acoustic hood	61	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
R22

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

Cooling capacity in W

16	6 055	8 549	10 777	12 906	-	-	-	-	-
20	5 775	8 257	10 480	12 611	14 812	-	-	-	-
30	5 091	7 482	9 635	11 715	13 883	16 299	19 113	-	-
40	4 503	6 721	8 722	10 668	12 723	15 046	17 790	-	-
50	-	6 068	7 835	9 568	11 429	13 578	16 173	-	-
60	-	-	-	8 509	10 095	11 991	14 357	-	-
68	-	-	-	-	-	10 698	12 824	-	-

Power input in W

16	1 997	2 119	2 218	2 303	-	-	-	-	-
20	2 168	2 289	2 384	2 462	2 531	-	-	-	-
30	2 599	2 735	2 833	2 904	2 955	2 998	3 040	-	-
40	3 061	3 230	3 351	3 434	3 487	3 521	3 544	-	-
50	-	3 803	3 967	4 081	4 156	4 201	4 224	-	-
60	-	-	-	4 875	4 991	5 066	5 109	-	-
68	-	-	-	-	-	5 911	5 984	-	-

Current consumption in A

16	8.87	9.41	9.84	10.22	-	-	-	-	-
20	9.62	10.16	10.59	10.93	11.24	-	-	-	-
30	11.54	12.14	12.58	12.89	13.12	13.31	13.50	-	-
40	13.59	14.34	14.88	15.24	15.48	15.63	15.74	-	-
50	-	16.88	17.61	18.12	18.45	18.65	18.75	-	-
60	-	-	-	21.64	22.16	22.49	22.68	-	-
68	-	-	-	-	-	26.24	26.57	-	-

Mass flow in kg/h

16	99	156	203	244	-	-	-	-	-
20	98	155	202	244	284	-	-	-	-
30	98	152	198	241	284	331	383	-	-
40	104	152	196	237	281	329	385	-	-
50	-	158	195	233	275	323	381	-	-
60	-	-	-	231	268	314	371	-	-
68	-	-	-	-	-	307	362	-	-

Coefficient of performance (C.O.P.)

16	3.03	4.04	4.86	5.60	-	-	-	-	-
20	2.66	3.61	4.40	5.12	5.85	-	-	-	-
30	1.96	2.74	3.40	4.03	4.70	5.44	6.29	-	-
40	1.47	2.08	2.60	3.11	3.65	4.27	5.02	-	-
50	-	1.60	1.98	2.34	2.75	3.23	3.83	-	-
60	-	-	-	1.75	2.02	2.37	2.81	-	-
68	-	-	-	-	-	1.81	2.14	-	-

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

Cooling capacity	8 269	W
Power input	3 645	W
Current consumption	16.18	A
Mass flow	195	kg/h
C.O.P.	2.27	

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		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 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	5 907	8 366	10 580	12 716	-	-	-	-	-
20	5 650	8 098	10 307	12 442	14 668	-	-	-	-
30	5 017	7 384	9 525	11 603	13 784	16 233	19 113	-	-
40	-	6 683	8 674	10 615	12 672	15 009	17 790	-	-
50	-	-	-	9 575	11 427	13 571	16 173	-	-
60	-	-	-	-	10 142	12 014	14 357	-	-
68	-	-	-	-	-	-	12 824	-	-

Power input in W

16	1 997	2 119	2 218	2 303	-	-	-	-	-
20	2 168	2 289	2 384	2 462	2 531	-	-	-	-
30	2 599	2 735	2 833	2 904	2 955	2 998	3 040	-	-
40	-	3 230	3 351	3 434	3 487	3 521	3 544	-	-
50	-	-	-	4 081	4 156	4 201	4 224	-	-
60	-	-	-	-	4 991	5 066	5 109	-	-
68	-	-	-	-	-	-	5 984	-	-

Current consumption in A

16	8.87	9.41	9.84	10.22	-	-	-	-	-
20	9.62	10.16	10.59	10.93	11.24	-	-	-	-
30	11.54	12.14	12.58	12.89	13.12	13.31	13.50	-	-
40	-	14.34	14.88	15.24	15.48	15.63	15.74	-	-
50	-	-	-	18.12	18.45	18.65	18.75	-	-
60	-	-	-	-	22.16	22.49	22.68	-	-
68	-	-	-	-	-	-	26.57	-	-

Mass flow in kg/h

16	87	140	186	228	-	-	-	-	-
20	86	139	185	228	271	-	-	-	-
30	86	136	182	225	271	323	383	-	-
40	-	137	179	221	268	321	385	-	-
50	-	-	-	218	262	315	381	-	-
60	-	-	-	-	256	307	371	-	-
68	-	-	-	-	-	-	362	-	-

Coefficient of performance (C.O.P.)

16	2.96	3.95	4.77	5.52	-	-	-	-	-
20	2.61	3.54	4.32	5.05	5.80	-	-	-	-
30	1.93	2.70	3.36	4.00	4.66	5.41	6.29	-	-
40	-	2.07	2.59	3.09	3.63	4.26	5.02	-	-
50	-	-	-	2.35	2.75	3.23	3.83	-	-
60	-	-	-	-	2.03	2.37	2.81	-	-
68	-	-	-	-	-	-	2.14	-	-

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

Cooling capacity	8 253	W
Power input	3 645	W
Current consumption	16.18	A
Mass flow	178	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		dB(A)
With acoustic hood		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	4 094	5 167	6 471	7 964	9 608	-	-	-	-
30	3 860	4 815	6 028	7 457	9 064	10 807	-	-	-
40	3 576	4 350	5 415	6 731	8 258	9 955	11 782	-	-
50	-	3 883	4 764	5 929	7 339	8 953	10 730	-	-
60	-	-	4 101	5 079	6 335	7 828	9 518	-	-
70	-	-	-	4 209	5 273	6 608	8 175	-	-
73	-	-	-	3 948	4 948	6 228	7 750	-	-

Power input in W

22	1 449	1 458	1 499	1 560	1 631	-	-	-	-
30	1 690	1 683	1 708	1 754	1 811	1 866	-	-	-
40	2 035	2 018	2 033	2 070	2 118	2 165	2 202	-	-
50	-	2 412	2 428	2 467	2 517	2 568	2 608	-	-
60	-	-	2 895	2 946	3 010	3 075	3 129	-	-
70	-	-	-	3 509	3 597	3 686	3 767	-	-
73	-	-	-	3 694	3 791	3 890	3 980	-	-

Current consumption in A

22	7.75	7.80	8.01	8.34	8.72	-	-	-	-
30	9.04	9.00	9.13	9.38	9.68	9.98	-	-	-
40	10.88	10.79	10.87	11.07	11.33	11.58	11.77	-	-
50	-	12.90	12.98	13.19	13.46	13.73	13.95	-	-
60	-	-	15.48	15.76	16.10	16.44	16.74	-	-
70	-	-	-	18.76	19.23	19.71	20.14	-	-
73	-	-	-	19.75	20.27	20.80	21.29	-	-

Mass flow in kg/h

22	95	112	134	161	191	-	-	-	-
30	94	111	134	162	193	227	-	-	-
40	93	109	132	161	193	228	265	-	-
50	-	106	129	158	191	227	266	-	-
60	-	-	125	154	187	225	265	-	-
70	-	-	-	148	183	221	263	-	-
73	-	-	-	147	181	220	262	-	-

Coefficient of performance (C.O.P.)

22	2.83	3.54	4.32	5.11	5.89	-	-	-	-
30	2.28	2.86	3.53	4.25	5.01	5.79	-	-	-
40	1.76	2.16	2.66	3.25	3.90	4.60	5.35	-	-
50	-	1.61	1.96	2.40	2.92	3.49	4.11	-	-
60	-	-	1.42	1.72	2.10	2.55	3.04	-	-
70	-	-	-	1.20	1.47	1.79	2.17	-	-
73	-	-	-	1.07	1.31	1.60	1.95	-	-

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

Cooling capacity	4 115	W
Power input	2 207	W
Current consumption	11.80	A
Mass flow	108	kg/h
C.O.P.	1.86	

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	69	dB(A)
With acoustic hood	61	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	4 160	5 228	6 521	7 999	9 624	-	-	-	-
30	-	4 904	6 105	7 515	9 094	10 807	-	-	-
40	-	-	5 526	6 818	8 307	9 955	11 727	-	-
50	-	-	4 908	6 044	7 406	8 953	10 645	-	-
60	-	-	-	5 221	6 420	7 828	-	-	-
70	-	-	-	-	5 375	6 608	-	-	-
73	-	-	-	-	5 054	6 228	-	-	-

Power input in W

22	1 449	1 458	1 499	1 560	1 631	-	-	-	-
30	-	1 683	1 708	1 754	1 811	1 866	-	-	-
40	-	-	2 033	2 070	2 118	2 165	2 202	-	-
50	-	-	2 428	2 467	2 517	2 568	2 608	-	-
60	-	-	-	2 946	3 010	3 075	-	-	-
70	-	-	-	-	3 597	3 686	-	-	-
73	-	-	-	-	3 791	3 890	-	-	-

Current consumption in A

22	7.75	7.80	8.01	8.34	8.72	-	-	-	-
30	-	9.00	9.13	9.38	9.68	9.98	-	-	-
40	-	-	10.87	11.07	11.33	11.58	11.77	-	-
50	-	-	12.98	13.19	13.46	13.73	13.95	-	-
60	-	-	-	15.76	16.10	16.44	-	-	-
70	-	-	-	-	19.23	19.71	-	-	-
73	-	-	-	-	20.27	20.80	-	-	-

Mass flow in kg/h

22	85	102	125	154	187	-	-	-	-
30	-	102	125	154	188	227	-	-	-
40	-	-	124	153	188	228	272	-	-
50	-	-	121	151	186	227	273	-	-
60	-	-	-	147	183	225	-	-	-
70	-	-	-	-	179	221	-	-	-
73	-	-	-	-	177	220	-	-	-

Coefficient of performance (C.O.P.)

22	2.87	3.59	4.35	5.13	5.90	-	-	-	-
30	-	2.91	3.57	4.28	5.02	5.79	-	-	-
40	-	-	2.72	3.29	3.92	4.60	5.33	-	-
50	-	-	2.02	2.45	2.94	3.49	4.08	-	-
60	-	-	-	1.77	2.13	2.55	-	-	-
70	-	-	-	-	1.49	1.79	-	-	-
73	-	-	-	-	1.33	1.60	-	-	-

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	69	dB(A)
With acoustic hood	61	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	4 996	6 342	7 857	9 559	11 464	-	-	-	-
30	4 576	5 870	7 345	9 016	10 901	13 016	-	-	-
40	4 027	5 208	6 584	8 170	9 983	12 038	14 354	-	-
50	-	4 521	5 745	7 193	8 880	10 824	13 040	-	-
60	-	-	4 887	6 143	7 653	9 432	11 496	-	-
70	-	-	-	5 081	6 359	7 920	9 780	-	-
73	-	-	-	4 768	5 967	7 453	9 241	-	-

Power input in W

22	1 767	1 787	1 823	1 875	1 944	-	-	-	-
30	2 011	2 039	2 076	2 123	2 180	2 248	-	-	-
40	2 361	2 410	2 460	2 511	2 564	2 619	2 678	-	-
50	-	2 849	2 922	2 989	3 049	3 104	3 154	-	-
60	-	-	3 468	3 562	3 641	3 707	3 759	-	-
70	-	-	-	4 234	4 344	4 432	4 498	-	-
73	-	-	-	4 456	4 578	4 674	4 747	-	-

Current consumption in A

22	7.84	7.93	8.09	8.32	8.63	-	-	-	-
30	8.93	9.05	9.22	9.42	9.68	9.98	-	-	-
40	10.48	10.70	10.92	11.15	11.38	11.63	11.89	-	-
50	-	12.65	12.97	13.27	13.54	13.78	14.00	-	-
60	-	-	15.40	15.81	16.17	16.46	16.69	-	-
70	-	-	-	18.80	19.29	19.68	19.97	-	-
73	-	-	-	19.78	20.32	20.75	21.07	-	-

Mass flow in kg/h

22	107	133	163	195	230	-	-	-	-
30	106	133	163	196	233	273	-	-	-
40	103	130	161	195	234	276	323	-	-
50	-	126	157	191	231	275	324	-	-
60	-	-	151	186	225	270	321	-	-
70	-	-	-	179	218	263	315	-	-
73	-	-	-	176	215	261	312	-	-

Coefficient of performance (C.O.P.)

22	2.83	3.55	4.31	5.10	5.90	-	-	-	-
30	2.28	2.88	3.54	4.25	5.00	5.79	-	-	-
40	1.71	2.16	2.68	3.25	3.89	4.60	5.36	-	-
50	-	1.59	1.97	2.41	2.91	3.49	4.13	-	-
60	-	-	1.41	1.72	2.10	2.54	3.06	-	-
70	-	-	-	1.20	1.46	1.79	2.17	-	-
73	-	-	-	1.07	1.30	1.59	1.95	-	-

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

Cooling capacity	4 864	W
Power input	2 621	W
Current consumption	11.64	A
Mass flow	128	kg/h
C.O.P.	1.86	

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		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 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	5 076	6 416	7 918	9 600	11 483	-	-	-	-
30	-	5 979	7 439	9 086	10 938	13 016	-	-	-
40	-	-	6 720	8 275	10 042	12 038	14 286	-	-
50	-	-	5 920	7 332	8 962	10 824	12 937	-	-
60	-	-	-	6 315	7 755	9 432	-	-	-
70	-	-	-	-	6 482	7 920	-	-	-
73	-	-	-	-	6 096	7 453	-	-	-

Power input in W

22	1 767	1 787	1 823	1 875	1 944	-	-	-	-
30	-	2 039	2 076	2 123	2 180	2 248	-	-	-
40	-	-	2 460	2 511	2 564	2 619	2 678	-	-
50	-	-	2 922	2 989	3 049	3 104	3 154	-	-
60	-	-	-	3 562	3 641	3 707	-	-	-
70	-	-	-	-	4 344	4 432	-	-	-
73	-	-	-	-	4 578	4 674	-	-	-

Current consumption in A

22	7.84	7.93	8.09	8.32	8.63	-	-	-	-
30	-	9.05	9.22	9.42	9.68	9.98	-	-	-
40	-	-	10.92	11.15	11.38	11.63	11.89	-	-
50	-	-	12.97	13.27	13.54	13.78	14.00	-	-
60	-	-	-	15.81	16.17	16.46	-	-	-
70	-	-	-	-	19.29	19.68	-	-	-
73	-	-	-	-	20.32	20.75	-	-	-

Mass flow in kg/h

22	96	122	152	186	224	-	-	-	-
30	-	122	152	188	228	273	-	-	-
40	-	-	151	187	228	276	332	-	-
50	-	-	147	183	225	275	333	-	-
60	-	-	-	177	220	270	-	-	-
70	-	-	-	-	213	263	-	-	-
73	-	-	-	-	210	261	-	-	-

Coefficient of performance (C.O.P.)

22	2.87	3.59	4.34	5.12	5.91	-	-	-	-
30	-	2.93	3.58	4.28	5.02	5.79	-	-	-
40	-	-	2.73	3.30	3.92	4.60	5.33	-	-
50	-	-	2.03	2.45	2.94	3.49	4.10	-	-
60	-	-	-	1.77	2.13	2.54	-	-	-
70	-	-	-	-	1.49	1.79	-	-	-
73	-	-	-	-	1.33	1.59	-	-	-

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	dB(A)
With acoustic hood	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	4 954	6 073	7 423	9 027	10 909	-	-	-	-
20	4 405	5 460	6 716	8 196	9 923	11 921	14 212	-	-
30	3 839	4 814	5 960	7 299	8 854	10 650	12 709	15 054	17 708
40	-	4 131	5 149	6 330	7 697	9 274	11 083	13 148	15 492
50	-	-	4 277	5 284	6 446	7 787	9 330	11 098	13 114
60	-	-	-	-	5 095	6 183	7 443	8 898	10 570

Power input in W

10	1 503	1 530	1 554	1 574	1 593	-	-	-	-
20	1 872	1 903	1 929	1 952	1 971	1 989	2 006	-	-
30	2 355	2 385	2 409	2 429	2 445	2 459	2 471	2 482	2 493
40	-	3 019	3 037	3 049	3 057	3 062	3 064	3 065	3 065
50	-	-	3 856	3 856	3 852	3 843	3 831	3 817	3 801
60	-	-	-	-	4 872	4 845	4 814	4 780	4 744

Current consumption in A

10	11.52	11.49	11.49	11.51	11.52	-	-	-	-
20	12.25	12.28	12.36	12.45	12.54	12.61	12.62	-	-
30	13.46	13.49	13.58	13.70	13.82	13.92	13.98	13.97	13.87
40	-	15.44	15.49	15.57	15.67	15.75	15.80	15.79	15.70
50	-	-	18.42	18.41	18.42	18.44	18.42	18.36	18.22
60	-	-	-	-	22.42	22.30	22.17	21.99	21.76

Mass flow in kg/h

10	99	123	152	185	225	-	-	-	-
20	96	121	149	183	223	270	326	-	-
30	93	118	146	180	220	267	323	389	465
40	-	113	141	175	215	262	318	384	461
50	-	-	135	169	209	256	312	378	455
60	-	-	-	-	201	248	304	370	446

Coefficient of performance (C.O.P.)

10	3.30	3.97	4.78	5.73	6.85	-	-	-	-
20	2.35	2.87	3.48	4.20	5.03	5.99	7.08	-	-
30	1.63	2.02	2.47	3.01	3.62	4.33	5.14	6.07	7.10
40	-	1.37	1.70	2.08	2.52	3.03	3.62	4.29	5.05
50	-	-	1.11	1.37	1.67	2.03	2.44	2.91	3.45
60	-	-	-	-	1.05	1.28	1.55	1.86	2.23

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

Cooling capacity	7 083	W
Power input	3 429	W
Current consumption	16.91	A
Mass flow	212	kg/h
C.O.P.	2.07	



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	69	dB(A)
With acoustic hood	61	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	4 761	5 877	7 233	8 853	10 763	-	-	-	-
20	4 142	5 185	6 439	7 930	9 684	11 726	14 077	-	-
30	3 511	4 463	5 597	6 940	8 521	10 365	12 498	14 940	17 708
40	2 865	3 706	4 702	5 881	7 271	8 899	10 796	12 985	15 492
50	-	-	3 752	4 748	5 928	7 323	8 964	10 885	13 114
60	-	-	-	-	4 484	5 626	6 994	8 628	10 570

Power input in W

10	1 503	1 530	1 554	1 574	1 593	-	-	-	-
20	1 872	1 903	1 929	1 952	1 971	1 989	2 006	-	-
30	2 355	2 385	2 409	2 429	2 445	2 459	2 471	2 482	2 493
40	2 996	3 019	3 037	3 049	3 057	3 062	3 064	3 065	3 065
50	-	-	3 856	3 856	3 852	3 843	3 831	3 817	3 801
60	-	-	-	-	4 872	4 845	4 814	4 780	4 744

Current consumption in A

10	11.52	11.49	11.49	11.51	11.52	-	-	-	-
20	12.25	12.28	12.36	12.45	12.54	12.61	12.62	-	-
30	13.46	13.49	13.58	13.70	13.82	13.92	13.98	13.97	13.87
40	15.46	15.44	15.49	15.57	15.67	15.75	15.80	15.79	15.70
50	-	-	18.42	18.41	18.42	18.44	18.42	18.36	18.22
60	-	-	-	-	22.42	22.30	22.17	21.99	21.76

Mass flow in kg/h

10	118	144	174	208	248	-	-	-	-
20	115	141	172	206	246	292	344	-	-
30	111	138	168	202	242	288	341	400	465
40	106	132	162	197	237	283	336	396	461
50	-	-	155	190	230	277	330	389	455
60	-	-	-	-	221	268	321	380	446

Coefficient of performance (C.O.P.)

10	3.17	3.84	4.66	5.62	6.76	-	-	-	-
20	2.21	2.72	3.34	4.06	4.91	5.89	7.02	-	-
30	1.49	1.87	2.32	2.86	3.49	4.22	5.06	6.02	7.10
40	0.96	1.23	1.55	1.93	2.38	2.91	3.52	4.24	5.05
50	-	-	0.97	1.23	1.54	1.91	2.34	2.85	3.45
60	-	-	-	-	0.92	1.16	1.45	1.81	2.23

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

Cooling capacity	6 611	W
Power input	3 429	W
Current consumption	16.91	A
Mass flow	234	kg/h
C.O.P.	1.93	

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	69	dB(A)
With accoustic hood	61	dB(A)

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	5 763	7 164	8 864	10 885	13 248	-	-	-	-
20	5 188	6 488	8 044	9 877	12 009	14 460	17 251	-	-
30	4 544	5 741	7 150	8 792	10 690	12 864	15 335	18 123	21 250
40	-	4 894	6 152	7 601	9 261	11 155	13 303	15 726	18 446
50	-	-	5 022	6 274	7 695	9 305	11 128	13 183	15 492
60	-	-	-	-	5 961	7 286	8 780	10 465	12 363

Power input in W

10	2 100	2 122	2 159	2 212	2 281	-	-	-	-
20	2 525	2 542	2 569	2 607	2 656	2 718	2 793	-	-
30	3 020	3 043	3 071	3 106	3 148	3 197	3 255	3 321	3 397
40	-	3 638	3 679	3 723	3 769	3 817	3 869	3 925	3 986
50	-	-	4 405	4 468	4 530	4 590	4 648	4 706	4 764
60	-	-	-	-	5 444	5 527	5 603	5 674	5 741

Current consumption in A

10	9.32	9.42	9.59	9.82	10.13	-	-	-	-
20	11.21	11.28	11.40	11.57	11.79	12.07	12.40	-	-
30	13.41	13.51	13.64	13.79	13.98	14.19	14.45	14.74	15.08
40	-	16.15	16.33	16.53	16.73	16.95	17.18	17.43	17.70
50	-	-	19.55	19.84	20.11	20.38	20.64	20.89	21.15
60	-	-	-	-	24.17	24.54	24.88	25.19	25.49

Mass flow in kg/h

10	107	143	181	225	274	-	-	-	-
20	107	142	180	223	272	329	396	-	-
30	103	139	176	219	267	324	391	469	561
40	-	132	169	212	260	317	383	461	552
50	-	-	159	201	250	306	372	450	541
60	-	-	-	-	236	293	359	437	528

Coefficient of performance (C.O.P.)

10	2.74	3.38	4.11	4.92	5.81	-	-	-	-
20	2.05	2.55	3.13	3.79	4.52	5.32	6.18	-	-
30	1.50	1.89	2.33	2.83	3.40	4.02	4.71	5.46	6.26
40	-	1.35	1.67	2.04	2.46	2.92	3.44	4.01	4.63
50	-	-	1.14	1.40	1.70	2.03	2.39	2.80	3.25
60	-	-	-	-	1.10	1.32	1.57	1.84	2.15

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

Cooling capacity	8 497	W
Power input	4 131	W
Current consumption	18.34	A
Mass flow	255	kg/h
C.O.P.	2.06	

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
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	5 538	6 933	8 638	10 676	13 070	-	-	-	-
20	4 878	6 161	7 712	9 557	11 719	14 223	17 087	-	-
30	4 156	5 321	6 714	8 360	10 287	12 520	15 080	17 987	21 250
40	3 351	4 390	5 618	7 062	8 748	10 705	12 958	15 532	18 446
50	-	-	4 406	5 638	7 076	8 751	10 692	12 930	15 492
60	-	-	-	-	5 246	6 629	8 250	10 148	12 363

Power input in W

10	2 100	2 122	2 159	2 212	2 281	-	-	-	-
20	2 525	2 542	2 569	2 607	2 656	2 718	2 793	-	-
30	3 020	3 043	3 071	3 106	3 148	3 197	3 255	3 321	3 397
40	3 597	3 638	3 679	3 723	3 769	3 817	3 869	3 925	3 986
50	-	-	4 405	4 468	4 530	4 590	4 648	4 706	4 764
60	-	-	-	-	5 444	5 527	5 603	5 674	5 741

Current consumption in A

10	9.32	9.42	9.59	9.82	10.13	-	-	-	-
20	11.21	11.28	11.40	11.57	11.79	12.07	12.40	-	-
30	13.41	13.51	13.64	13.79	13.98	14.19	14.45	14.74	15.08
40	15.97	16.15	16.33	16.53	16.73	16.95	17.18	17.43	17.70
50	-	-	19.55	19.84	20.11	20.38	20.64	20.89	21.15
60	-	-	-	-	24.17	24.54	24.88	25.19	25.49

Mass flow in kg/h

10	128	167	208	253	303	-	-	-	-
20	127	166	207	251	300	356	419	-	-
30	123	162	202	246	295	350	413	483	561
40	115	154	195	238	287	342	404	475	552
50	-	-	182	227	276	331	393	463	541
60	-	-	-	-	260	316	379	449	528

Coefficient of performance (C.O.P.)

10	2.64	3.27	4.00	4.83	5.73	-	-	-	-
20	1.93	2.42	3.00	3.67	4.41	5.23	6.12	-	-
30	1.38	1.75	2.19	2.69	3.27	3.92	4.63	5.42	6.26
40	0.93	1.21	1.53	1.90	2.32	2.80	3.35	3.96	4.63
50	-	-	1.00	1.26	1.56	1.91	2.30	2.75	3.25
60	-	-	-	-	0.96	1.20	1.47	1.79	2.15

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

Cooling capacity	7 930	W
Power input	4 131	W
Current consumption	18.34	A
Mass flow	282	kg/h
C.O.P.	1.92	

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 50 Hz, EN 12900 rating conditions
R407A

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

Cooling capacity in W

10	4 951	6 250	7 830	9 720	-	-	-	-	-
20	4 388	5 560	6 990	8 711	10 754	13 149	-	-	-
30	3 877	4 906	6 174	7 712	9 551	11 722	14 256	17 186	-
40	3 427	4 300	5 391	6 732	8 353	10 286	12 561	15 211	-
45	-	4 018	5 016	6 252	7 759	9 568	11 708	14 213	-
50	-	-	4 652	5 781	7 170	8 851	10 854	13 210	-
55	-	-	-	5 320	6 588	8 137	9 998	12 202	-
60	-	-	-	-	6 013	7 427	9 143	11 192	-

Power input in W

10	1 368	1 395	1 421	1 455	-	-	-	-	-
20	1 700	1 744	1 773	1 795	1 821	1 859	-	-	-
30	2 084	2 163	2 212	2 241	2 259	2 275	2 299	2 339	-
40	2 523	2 655	2 743	2 796	2 824	2 836	2 841	2 849	-
45	-	2 929	3 043	3 116	3 156	3 172	3 175	3 173	-
50	-	-	3 368	3 464	3 520	3 546	3 551	3 543	-
55	-	-	-	3 841	3 918	3 957	3 969	3 961	-
60	-	-	-	-	4 350	4 408	4 430	4 426	-

Current consumption in A

10	6.78	6.83	6.75	6.60	-	-	-	-	-
20	9.59	9.82	9.91	9.92	9.89	9.89	-	-	-
30	11.42	11.79	11.99	12.08	12.13	12.18	12.29	12.52	-
40	13.29	13.72	13.97	14.09	14.15	14.19	14.28	14.46	-
45	-	14.99	15.24	15.36	15.39	15.41	15.46	15.59	-
50	-	-	16.87	16.96	16.96	16.94	16.93	17.01	-
55	-	-	-	19.02	18.98	18.90	18.82	18.82	-
60	-	-	-	-	21.57	21.41	21.26	21.17	-

Mass flow in kg/h

10	96	120	148	181	-	-	-	-	-
20	93	116	144	176	214	257	-	-	-
30	91	112	139	170	207	250	300	357	-
40	89	110	135	165	201	243	292	348	-
45	-	109	133	162	197	239	287	343	-
50	-	-	131	160	194	235	283	338	-
55	-	-	-	158	192	232	279	333	-
60	-	-	-	-	189	228	274	328	-

Coefficient of performance (C.O.P.)

10	3.62	4.48	5.51	6.68	-	-	-	-	-
20	2.58	3.19	3.94	4.85	5.91	7.07	-	-	-
30	1.86	2.27	2.79	3.44	4.23	5.15	6.20	7.35	-
40	1.36	1.62	1.97	2.41	2.96	3.63	4.42	5.34	-
45	-	1.37	1.65	2.01	2.46	3.02	3.69	4.48	-
50	-	-	1.38	1.67	2.04	2.50	3.06	3.73	-
55	-	-	-	1.38	1.68	2.06	2.52	3.08	-
60	-	-	-	-	1.38	1.69	2.06	2.53	-

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

Cooling capacity	6 252	W
Power input	3 116	W
Current consumption	15.36	A
Mass flow	162	kg/h
C.O.P.	2.01	

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	69	dB(A)
With acoustic hood	61	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
R407A

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

Cooling capacity in W

10	5 258	6 631	8 299	10 294	-	-	-	-	-
20	4 695	5 941	7 462	9 289	11 456	13 994	-	-	-
30	4 187	5 291	6 649	8 295	10 260	12 577	15 279	18 399	-
40	3 747	4 694	5 875	7 323	9 073	11 155	13 604	16 452	-
45	-	4 419	5 506	6 851	8 487	10 447	12 764	15 472	-
50	-	-	5 152	6 389	7 909	9 744	11 927	14 491	-
55	-	-	-	5 943	7 342	9 049	11 095	13 514	-
60	-	-	-	-	-	8 367	10 274	12 547	-

Power input in W

10	1 368	1 395	1 421	1 455	-	-	-	-	-
20	1 700	1 744	1 773	1 795	1 821	1 859	-	-	-
30	2 084	2 163	2 212	2 241	2 259	2 275	2 299	2 339	-
40	2 523	2 655	2 743	2 796	2 824	2 836	2 841	2 849	-
45	-	2 929	3 043	3 116	3 156	3 172	3 175	3 173	-
50	-	-	3 368	3 464	3 520	3 546	3 551	3 543	-
55	-	-	-	3 841	3 918	3 957	3 969	3 961	-
60	-	-	-	-	-	4 408	4 430	4 426	-

Current consumption in A

10	6.78	6.83	6.75	6.60	-	-	-	-	-
20	9.59	9.82	9.91	9.92	9.89	9.89	-	-	-
30	11.42	11.79	11.99	12.08	12.13	12.18	12.29	12.52	-
40	13.29	13.72	13.97	14.09	14.15	14.19	14.28	14.46	-
45	-	14.99	15.24	15.36	15.39	15.41	15.46	15.59	-
50	-	-	16.87	16.96	16.96	16.94	16.93	17.01	-
55	-	-	-	19.02	18.98	18.90	18.82	18.82	-
60	-	-	-	-	-	21.41	21.26	21.17	-

Mass flow in kg/h

10	96	120	148	180	-	-	-	-	-
20	93	116	143	175	213	256	-	-	-
30	90	112	138	169	206	249	298	355	-
40	89	109	134	164	200	241	290	346	-
45	-	108	132	161	196	238	286	341	-
50	-	-	131	159	193	234	281	336	-
55	-	-	-	157	191	230	277	331	-
60	-	-	-	-	-	227	273	326	-

Coefficient of performance (C.O.P.)

10	3.84	4.75	5.84	7.08	-	-	-	-	-
20	2.76	3.41	4.21	5.17	6.29	7.53	-	-	-
30	2.01	2.45	3.01	3.70	4.54	5.53	6.65	7.87	-
40	1.49	1.77	2.14	2.62	3.21	3.93	4.79	5.78	-
45	-	1.51	1.81	2.20	2.69	3.29	4.02	4.88	-
50	-	-	1.53	1.84	2.25	2.75	3.36	4.09	-
55	-	-	-	1.55	1.87	2.29	2.80	3.41	-
60	-	-	-	-	-	1.90	2.32	2.84	-

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

Cooling capacity	6 851	W
Power input	3 116	W
Current consumption	15.36	A
Mass flow	161	kg/h
C.O.P.	2.20	

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	69	dB(A)
With acoustic hood	61	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, 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	-	3 236	4 264	5 466	6 871	8 511	10 418	12 624	15 159
35	-	3 049	4 039	5 202	6 567	8 166	10 030	12 192	14 681
40	-	2 887	3 831	4 945	6 261	7 809	9 621	11 729	14 163
45	-	-	3 625	4 682	5 939	7 427	9 177	11 221	13 590
50	-	-	-	4 398	5 587	7 005	8 684	10 654	12 947
55	-	-	-	-	5 191	6 530	8 127	10 014	12 221
60	-	-	-	-	-	5 988	7 494	9 286	11 396
65	-	-	-	-	-	-	6 770	8 457	10 457

Power input in W

30	-	2 431	2 387	2 358	2 334	2 308	2 271	2 216	2 133
35	-	2 688	2 645	2 617	2 597	2 577	2 547	2 500	2 427
40	-	2 968	2 921	2 891	2 871	2 851	2 824	2 781	2 715
45	-	-	3 233	3 197	3 172	3 149	3 121	3 079	3 014
50	-	-	-	3 553	3 519	3 490	3 456	3 410	3 343
55	-	-	-	-	3 931	3 890	3 847	3 793	3 720
60	-	-	-	-	-	4 368	4 311	4 245	4 162
65	-	-	-	-	-	-	4 867	4 785	4 688

Current consumption in A

30	-	11.01	11.09	11.10	11.04	10.90	10.67	10.34	9.92
35	-	12.33	12.37	12.36	12.29	12.17	11.99	11.73	11.40
40	-	13.82	13.79	13.74	13.66	13.54	13.38	13.18	12.91
45	-	-	15.46	15.35	15.23	15.10	14.95	14.77	14.55
50	-	-	-	17.27	17.10	16.93	16.76	16.59	16.41
55	-	-	-	-	19.35	19.13	18.93	18.75	18.58
60	-	-	-	-	-	21.79	21.54	21.33	21.16
65	-	-	-	-	-	-	24.69	24.43	24.22

Mass flow in kg/h

30	-	72	94	118	146	178	214	256	303
35	-	72	93	118	146	179	216	259	307
40	-	72	93	118	147	180	218	261	311
45	-	-	94	118	147	181	219	263	314
50	-	-	-	118	147	180	219	264	316
55	-	-	-	-	145	179	219	264	316
60	-	-	-	-	-	177	216	262	315
65	-	-	-	-	-	-	212	258	311

Coefficient of performance (C.O.P.)

30	-	1.33	1.79	2.32	2.94	3.69	4.59	5.70	7.11
35	-	1.13	1.53	1.99	2.53	3.17	3.94	4.88	6.05
40	-	0.97	1.31	1.71	2.18	2.74	3.41	4.22	5.22
45	-	-	1.12	1.46	1.87	2.36	2.94	3.64	4.51
50	-	-	-	1.24	1.59	2.01	2.51	3.12	3.87
55	-	-	-	-	1.32	1.68	2.11	2.64	3.29
60	-	-	-	-	-	1.37	1.74	2.19	2.74
65	-	-	-	-	-	-	1.39	1.77	2.23

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

Cooling capacity	5 939	W
Power input	3 172	W
Current consumption	15.23	A
Mass flow	147	kg/h
C.O.P.	1.87	

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 50 Hz, EN 12900 rating conditions

R407F

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-23	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	5 790	6 641	8 290	10 253	-	-	-	-	-
20	5 178	5 951	7 455	9 254	11 381	13 866	-	-	-
30	4 609	5 295	6 637	8 255	10 182	12 449	15 088	18 131	-
40	4 097	4 685	5 849	7 271	8 982	11 014	13 399	16 169	-
45	-	-	5 472	6 789	8 385	10 294	12 546	15 173	-
50	-	-	-	6 315	7 794	9 575	11 690	14 170	-
55	-	-	-	-	7 209	8 858	10 832	13 161	-
60	-	-	-	-	-	-	-	-	-

Power input in W

10	1 457	1 471	1 497	1 535	-	-	-	-	-
20	1 826	1 849	1 874	1 894	1 922	1 972	-	-	-
30	2 261	2 306	2 354	2 378	2 392	2 409	2 443	2 505	-
40	2 761	2 842	2 935	2 986	3 009	3 016	3 022	3 039	-
45	-	-	3 263	3 336	3 372	3 383	3 384	3 386	-
50	-	-	-	3 717	3 771	3 792	3 793	3 787	-
55	-	-	-	-	4 207	4 244	4 251	4 242	-
60	-	-	-	-	-	-	-	-	-

Current consumption in A

10	7.20	7.20	7.11	6.94	-	-	-	-	-
20	10.29	10.41	10.49	10.48	10.44	10.43	-	-	-
30	12.36	12.55	12.75	12.83	12.86	12.90	13.00	13.24	-
40	14.46	14.69	14.94	15.05	15.09	15.11	15.19	15.37	-
45	-	-	16.34	16.44	16.46	16.46	16.49	16.62	-
50	-	-	-	18.20	18.19	18.14	18.12	18.18	-
55	-	-	-	-	20.39	20.28	20.19	20.17	-
60	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

10	101	115	142	173	-	-	-	-	-
20	98	111	138	169	205	246	-	-	-
30	95	108	133	163	199	240	287	341	-
40	93	105	129	158	192	232	279	332	-
45	-	-	127	155	189	229	275	328	-
50	-	-	-	153	186	225	270	323	-
55	-	-	-	-	183	221	266	318	-
60	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

10	3.97	4.51	5.54	6.68	-	-	-	-	-
20	2.84	3.22	3.98	4.89	5.92	7.03	-	-	-
30	2.04	2.30	2.82	3.47	4.26	5.17	6.18	7.24	-
40	1.48	1.65	1.99	2.44	2.99	3.65	4.43	5.32	-
45	-	-	1.68	2.03	2.49	3.04	3.71	4.48	-
50	-	-	-	1.70	2.07	2.52	3.08	3.74	-
55	-	-	-	-	1.71	2.09	2.55	3.10	-
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	6 789	W
Power input	3 336	W
Current consumption	16.44	A
Mass flow	155	kg/h
C.O.P.	2.03	

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	69	dB(A)
With acoustic hood	61	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

R407F

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-23	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	6 119	7 016	8 751	10 816	-	-	-	-	-
20	5 505	6 324	7 916	9 818	12 065	14 689	-	-	-
30	4 938	5 669	7 099	8 821	10 870	13 278	16 080	19 307	-
40	-	5 066	6 317	7 842	9 677	11 853	14 405	17 366	-
45	-	-	5 945	7 366	9 087	11 141	13 563	16 385	-
50	-	-	-	6 901	8 505	10 434	12 722	15 403	-
55	-	-	-	-	-	9 737	11 888	14 425	-
60	-	-	-	-	-	-	-	-	-

Power input in W

10	1 457	1 471	1 497	1 535	-	-	-	-	-
20	1 826	1 849	1 874	1 894	1 922	1 972	-	-	-
30	2 261	2 306	2 354	2 378	2 392	2 409	2 443	2 505	-
40	-	2 842	2 935	2 986	3 009	3 016	3 022	3 039	-
45	-	-	3 263	3 336	3 372	3 383	3 384	3 386	-
50	-	-	-	3 717	3 771	3 792	3 793	3 787	-
55	-	-	-	-	-	4 244	4 251	4 242	-
60	-	-	-	-	-	-	-	-	-

Current consumption in A

10	7.20	7.20	7.11	6.94	-	-	-	-	-
20	10.29	10.41	10.49	10.48	10.44	10.43	-	-	-
30	12.36	12.55	12.75	12.83	12.86	12.90	13.00	13.24	-
40	-	14.69	14.94	15.05	15.09	15.11	15.19	15.37	-
45	-	-	16.34	16.44	16.46	16.46	16.49	16.62	-
50	-	-	-	18.20	18.19	18.14	18.12	18.18	-
55	-	-	-	-	-	20.28	20.19	20.17	-
60	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

10	100	115	141	172	-	-	-	-	-
20	97	111	137	168	203	245	-	-	-
30	94	107	132	162	197	238	285	339	-
40	-	104	128	157	191	231	277	330	-
45	-	-	127	155	188	227	273	326	-
50	-	-	-	152	185	224	269	321	-
55	-	-	-	-	-	220	264	316	-
60	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

10	4.20	4.77	5.85	7.04	-	-	-	-	-
20	3.01	3.42	4.22	5.18	6.28	7.45	-	-	-
30	2.18	2.46	3.02	3.71	4.54	5.51	6.58	7.71	-
40	-	1.78	2.15	2.63	3.22	3.93	4.77	5.71	-
45	-	-	1.82	2.21	2.69	3.29	4.01	4.84	-
50	-	-	-	1.86	2.26	2.75	3.35	4.07	-
55	-	-	-	-	-	2.29	2.80	3.40	-
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	7 366	W
Power input	3 336	W
Current consumption	16.44	A
Mass flow	155	kg/h
C.O.P.	2.21	

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	69	dB(A)
With acoustic hood	61	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, 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	4 063	5 113	6 369	7 862	9 623	-	-	-	-
20	3 622	4 632	5 826	7 233	8 885	10 812	13 044	-	-
30	-	-	5 208	6 509	8 032	9 806	11 863	14 233	16 946
40	-	-	-	5 709	7 083	8 685	10 546	12 697	15 169
50	-	-	-	-	6 058	7 468	9 113	11 026	13 235
60	-	-	-	-	-	-	7 584	9 238	11 165

Power input in W

10	1 461	1 490	1 527	1 565	1 599	-	-	-	-
20	1 812	1 825	1 854	1 893	1 936	1 978	2 012	-	-
30	-	-	2 290	2 317	2 356	2 402	2 450	2 492	2 524
40	-	-	-	2 894	2 916	2 954	3 002	3 054	3 103
50	-	-	-	-	3 674	3 691	3 725	3 773	3 827
60	-	-	-	-	-	-	4 678	4 708	4 753

Current consumption in A

10	10.17	10.23	10.28	10.33	10.40	-	-	-	-
20	11.04	11.16	11.25	11.33	11.41	11.51	11.64	-	-
30	-	-	12.66	12.77	12.88	12.99	13.12	13.29	13.51
40	-	-	-	14.84	14.98	15.11	15.25	15.41	15.61
50	-	-	-	-	17.90	18.06	18.21	18.37	18.56
60	-	-	-	-	-	-	22.19	22.36	22.54

Mass flow in kg/h

10	66	84	105	130	160	-	-	-	-
20	63	82	103	128	158	194	236	-	-
30	-	-	100	125	155	191	233	283	341
40	-	-	-	120	150	185	228	278	336
50	-	-	-	-	143	178	220	269	327
60	-	-	-	-	-	-	209	259	316

Coefficient of performance (C.O.P.)

10	2.78	3.43	4.17	5.02	6.02	-	-	-	-
20	2.00	2.54	3.14	3.82	4.59	5.47	6.48	-	-
30	-	-	2.27	2.81	3.41	4.08	4.84	5.71	6.71
40	-	-	-	1.97	2.43	2.94	3.51	4.16	4.89
50	-	-	-	-	1.65	2.02	2.45	2.92	3.46
60	-	-	-	-	-	-	1.62	1.96	2.35

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

Cooling capacity	6 579	W
Power input	3 267	W
Current consumption	16.32	A
Mass flow	146	kg/h
C.O.P.	2.01	

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	4 080	5 138	6 405	7 911	9 685	-	-	-	-
20	3 590	4 602	5 802	7 218	8 883	10 824	13 068	-	-
30	3 068	4 014	5 124	6 430	7 965	9 757	11 835	14 225	16 946
40	-	-	4 394	5 569	6 952	8 574	10 466	12 656	15 169
50	-	-	-	4 656	5 866	7 297	8 981	10 950	13 235
60	-	-	-	-	4 728	5 946	7 401	9 129	11 165

Power input in W

10	1 461	1 490	1 527	1 565	1 599	-	-	-	-
20	1 812	1 825	1 854	1 893	1 936	1 978	2 012	-	-
30	2 299	2 282	2 290	2 317	2 356	2 402	2 450	2 492	2 524
40	-	-	2 893	2 894	2 916	2 954	3 002	3 054	3 103
50	-	-	-	3 681	3 674	3 691	3 725	3 773	3 827
60	-	-	-	-	4 686	4 668	4 678	4 708	4 753

Current consumption in A

10	10.17	10.23	10.28	10.33	10.40	-	-	-	-
20	11.04	11.16	11.25	11.33	11.41	11.51	11.64	-	-
30	12.33	12.52	12.66	12.77	12.88	12.99	13.12	13.29	13.51
40	-	-	14.68	14.84	14.98	15.11	15.25	15.41	15.61
50	-	-	-	17.72	17.90	18.06	18.21	18.37	18.56
60	-	-	-	-	21.83	22.02	22.19	22.36	22.54

Mass flow in kg/h

10	78	98	120	146	176	-	-	-	-
20	75	95	117	143	174	209	249	-	-
30	71	91	114	140	170	205	245	291	341
40	-	-	108	134	164	199	240	285	336
50	-	-	-	126	156	191	231	277	327
60	-	-	-	-	146	181	220	266	316

Coefficient of performance (C.O.P.)

10	2.79	3.45	4.19	5.05	6.06	-	-	-	-
20	1.98	2.52	3.13	3.81	4.59	5.47	6.50	-	-
30	1.33	1.76	2.24	2.78	3.38	4.06	4.83	5.71	6.71
40	-	-	1.52	1.92	2.38	2.90	3.49	4.14	4.89
50	-	-	-	1.26	1.60	1.98	2.41	2.90	3.46
60	-	-	-	-	1.01	1.27	1.58	1.94	2.35

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

Cooling capacity	6 417	W
Power input	3 267	W
Current consumption	16.32	A
Mass flow	161	kg/h
C.O.P.	1.96	

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 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	4 063	5 113	6 369	7 862	9 623	-	-	-	-
20	3 622	4 632	5 826	7 233	8 885	10 812	13 044	-	-
30	-	-	5 208	6 509	8 032	9 806	11 863	14 233	16 946
40	-	-	-	5 709	7 083	8 685	10 546	12 697	15 169
50	-	-	-	-	6 058	7 468	9 113	11 026	13 235
60	-	-	-	-	-	-	7 584	9 238	11 165

Power input in W

10	1 461	1 490	1 527	1 565	1 599	-	-	-	-
20	1 812	1 825	1 854	1 893	1 936	1 978	2 012	-	-
30	-	-	2 290	2 317	2 356	2 402	2 450	2 492	2 524
40	-	-	-	2 894	2 916	2 954	3 002	3 054	3 103
50	-	-	-	-	3 674	3 691	3 725	3 773	3 827
60	-	-	-	-	-	-	4 678	4 708	4 753

Current consumption in A

10	10.17	10.23	10.28	10.33	10.40	-	-	-	-
20	11.04	11.16	11.25	11.33	11.41	11.51	11.64	-	-
30	-	-	12.66	12.77	12.88	12.99	13.12	13.29	13.51
40	-	-	-	14.84	14.98	15.11	15.25	15.41	15.61
50	-	-	-	-	17.90	18.06	18.21	18.37	18.56
60	-	-	-	-	-	-	22.19	22.36	22.54

Mass flow in kg/h

10	66	84	105	130	160	-	-	-	-
20	63	82	103	128	158	194	236	-	-
30	-	-	100	125	155	191	233	283	341
40	-	-	-	120	150	185	228	278	336
50	-	-	-	-	143	178	220	269	327
60	-	-	-	-	-	-	209	259	316

Coefficient of performance (C.O.P.)

10	2.78	3.43	4.17	5.02	6.02	-	-	-	-
20	2.00	2.54	3.14	3.82	4.59	5.47	6.48	-	-
30	-	-	2.27	2.81	3.41	4.08	4.84	5.71	6.71
40	-	-	-	1.97	2.43	2.94	3.51	4.16	4.89
50	-	-	-	-	1.65	2.02	2.45	2.92	3.46
60	-	-	-	-	-	-	1.62	1.96	2.35

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

Cooling capacity	6 579	W
Power input	3 267	W
Current consumption	16.32	A
Mass flow	146	kg/h
C.O.P.	2.01	

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 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	4 071	5 128	6 395	7 901	9 676	-	-	-	-
20	3 580	4 592	5 791	7 208	8 873	10 815	13 061	-	-
30	3 059	4 003	5 113	6 419	7 954	9 747	11 828	14 221	16 946
40	-	-	4 382	5 557	6 940	8 564	10 457	12 651	15 169
50	-	-	-	4 643	5 854	7 286	8 972	10 945	13 235
60	-	-	-	-	4 716	5 935	7 392	9 123	11 165

Power input in W

10	1 461	1 490	1 527	1 565	1 599	-	-	-	-
20	1 812	1 825	1 854	1 893	1 936	1 978	2 012	-	-
30	2 299	2 282	2 290	2 317	2 356	2 402	2 450	2 492	2 524
40	-	-	2 893	2 894	2 916	2 954	3 002	3 054	3 103
50	-	-	-	3 681	3 674	3 691	3 725	3 773	3 827
60	-	-	-	-	4 686	4 668	4 678	4 708	4 753

Current consumption in A

10	10.17	10.23	10.28	10.33	10.40	-	-	-	-
20	11.04	11.16	11.25	11.33	11.41	11.51	11.64	-	-
30	12.33	12.52	12.66	12.77	12.88	12.99	13.12	13.29	13.51
40	-	-	14.68	14.84	14.98	15.11	15.25	15.41	15.61
50	-	-	-	17.72	17.90	18.06	18.21	18.37	18.56
60	-	-	-	-	21.83	22.02	22.19	22.36	22.54

Mass flow in kg/h

10	78	98	120	146	176	-	-	-	-
20	75	95	117	144	174	209	249	-	-
30	71	91	114	140	170	205	245	291	341
40	-	-	108	134	164	199	240	285	336
50	-	-	-	126	156	191	231	277	327
60	-	-	-	-	146	181	220	265	316

Coefficient of performance (C.O.P.)

10	2.79	3.44	4.19	5.05	6.05	-	-	-	-
20	1.98	2.52	3.12	3.81	4.58	5.47	6.49	-	-
30	1.33	1.75	2.23	2.77	3.38	4.06	4.83	5.71	6.71
40	-	-	1.51	1.92	2.38	2.90	3.48	4.14	4.89
50	-	-	-	1.26	1.59	1.97	2.41	2.90	3.46
60	-	-	-	-	1.01	1.27	1.58	1.94	2.35

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

Cooling capacity	6 405	W
Power input	3 267	W
Current consumption	16.32	A
Mass flow	161	kg/h
C.O.P.	1.96	

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

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	4 475	5 569	6 903	8 504	10 403	-	-	-	-
20	4 026	5 052	6 285	7 755	9 491	11 519	13 870	-	-
30	-	4 523	5 636	6 954	8 505	10 318	12 421	14 843	17 611
40	-	-	4 959	6 103	7 450	9 026	10 861	12 983	15 420
50	-	-	-	-	6 328	7 647	9 192	10 994	13 078
60	-	-	-	-	-	6 183	7 419	8 879	10 591

Power input in W

10	1 549	1 573	1 594	1 615	1 639	-	-	-	-
20	1 894	1 930	1 960	1 985	2 010	2 038	2 072	-	-
30	-	2 367	2 407	2 439	2 466	2 493	2 522	2 556	2 600
40	-	-	2 974	3 014	3 046	3 073	3 099	3 126	3 158
50	-	-	-	-	3 789	3 818	3 842	3 864	3 887
60	-	-	-	-	-	4 766	4 790	4 808	4 823

Current consumption in A

10	11.28	11.74	12.12	12.42	12.60	-	-	-	-
20	11.34	11.70	12.02	12.28	12.47	12.57	12.55	-	-
30	-	12.77	13.02	13.25	13.44	13.56	13.61	13.57	13.41
40	-	-	15.08	15.26	15.44	15.59	15.70	15.74	15.71
50	-	-	-	-	18.42	18.59	18.75	18.88	18.97
60	-	-	-	-	-	22.52	22.72	22.92	23.12

Mass flow in kg/h

10	90	114	142	175	215	-	-	-	-
20	88	112	140	173	213	260	317	-	-
30	-	110	137	170	209	256	312	378	455
40	-	-	134	166	205	251	306	371	447
50	-	-	-	-	199	244	297	361	436
60	-	-	-	-	-	235	288	350	423

Coefficient of performance (C.O.P.)

10	2.89	3.54	4.33	5.27	6.35	-	-	-	-
20	2.13	2.62	3.21	3.91	4.72	5.65	6.69	-	-
30	-	1.91	2.34	2.85	3.45	4.14	4.93	5.81	6.77
40	-	-	1.67	2.02	2.45	2.94	3.50	4.15	4.88
50	-	-	-	-	1.67	2.00	2.39	2.85	3.37
60	-	-	-	-	-	1.30	1.55	1.85	2.20

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

Cooling capacity	6 897	W
Power input	3 395	W
Current consumption	16.81	A
Mass flow	202	kg/h
C.O.P.	2.03	

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 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	4 331	5 421	6 758	8 372	10 293	-	-	-	-
20	3 821	4 835	6 065	7 543	9 299	11 363	13 763	-	-
30	3 322	4 238	5 341	6 661	8 232	10 085	12 248	14 750	17 611
40	2 834	3 632	4 587	5 731	7 096	8 716	10 623	12 848	15 420
50	-	-	3 807	4 754	5 893	7 260	8 889	10 817	13 078
60	-	-	-	-	4 620	5 714	7 045	8 656	10 591

Power input in W

10	1 549	1 573	1 594	1 615	1 639	-	-	-	-
20	1 894	1 930	1 960	1 985	2 010	2 038	2 072	-	-
30	2 316	2 367	2 407	2 439	2 466	2 493	2 522	2 556	2 600
40	2 854	2 922	2 974	3 014	3 046	3 073	3 099	3 126	3 158
50	-	-	3 700	3 750	3 789	3 818	3 842	3 864	3 887
60	-	-	-	-	4 732	4 766	4 790	4 808	4 823

Current consumption in A

10	11.28	11.74	12.12	12.42	12.60	-	-	-	-
20	11.34	11.70	12.02	12.28	12.47	12.57	12.55	-	-
30	12.52	12.77	13.02	13.25	13.44	13.56	13.61	13.57	13.41
40	14.77	14.91	15.08	15.26	15.44	15.59	15.70	15.74	15.71
50	-	-	18.14	18.27	18.42	18.59	18.75	18.88	18.97
60	-	-	-	-	22.35	22.52	22.72	22.92	23.12

Mass flow in kg/h

10	107	132	162	196	237	-	-	-	-
20	105	131	160	194	234	281	334	-	-
30	103	128	157	191	230	276	329	389	455
40	101	125	154	187	225	270	322	381	447
50	-	-	149	181	219	263	313	371	436
60	-	-	-	-	211	254	303	359	423

Coefficient of performance (C.O.P.)

10	2.80	3.45	4.24	5.19	6.28	-	-	-	-
20	2.02	2.50	3.09	3.80	4.63	5.58	6.64	-	-
30	1.43	1.79	2.22	2.73	3.34	4.05	4.86	5.77	6.77
40	0.99	1.24	1.54	1.90	2.33	2.84	3.43	4.11	4.88
50	-	-	1.03	1.27	1.56	1.90	2.31	2.80	3.37
60	-	-	-	-	0.98	1.20	1.47	1.80	2.20

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

Cooling capacity	6 503	W
Power input	3 395	W
Current consumption	16.81	A
Mass flow	222	kg/h
C.O.P.	1.92	

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)

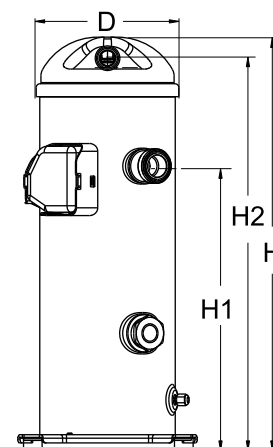
Sound power data

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

Tolerance according EN12900

General Characteristics

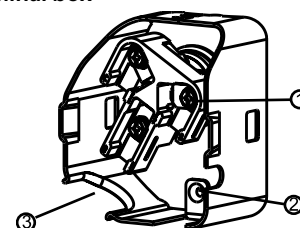
Model number (on compressor nameplate)		MLZ030T7LQ9A
Code number for Singlepack*		121U8773
Code number for Industrial pack**		121U8772
Drawing number		0XR6298B-2
Suction and discharge connections		Rotolock
Suction connection		1-1/4 " Rotolock
Discharge connection		1 " Rotolock
Suction connection with supplied sleeve		7/8 " -
Discharge connection with supplied sleeve	- "	1/2 " -
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume		68.79 cm ³ /rev
Displacement @ Nominal speed		12.0 m ³ /h @ 2900 rpm - 14.4 m ³ /h @ 3500 rpm
Net weight		41 kg
Oil charge		1.57 litre, POE - -
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		5.44 kg
Approved refrigerants		R404A,R507,R134a,R407A,R407F,R448A,R449A,R452A,R22

Dimensions


D=184 mm
H=454.9 mm
H1=280 mm
H2=422.2 mm
H3=- mm

Electrical Characteristics

Nominal voltage	500V/3/50Hz - 575V/3/60Hz
Voltage range	450-550 V @ 50Hz - 517-632 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	4.4 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	4.5 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	4.4 Ω
Rated Load Amps (RLA)	6.4 A
Maximum Continuous Current (MCC)	9 A
Locked Rotor Amps (LRA)	42 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 2: Earth connection
- 3: Power cable passage

Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	3 Nm / 2 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.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

Rotolock accessories, discharge side
Code no.

Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

Rotolock accessories, sets
Code no.

Teflon seals, sleeves, nuts for discharge and suction (1" and 1"1/4)	120Z5074
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants
Code no.

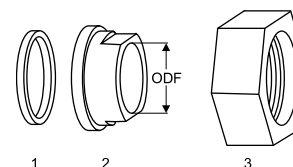
POE lubricant, 215PZ(PL46HB), 1 litre can	120Z0648
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Crankcase heaters
Code no.
Miscellaneous accessories
Code no.

Acoustic hood	120Z5083
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts
Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

Gaskets, sleeves and nuts


1

2

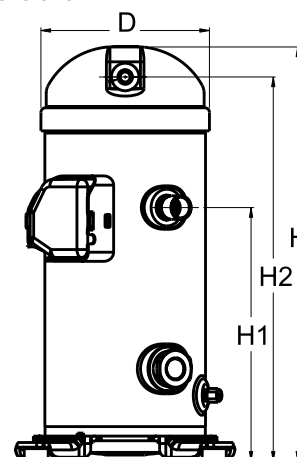
3

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

General Characteristics

Model number (on compressor nameplate)		MLZ030T7LC9A
Code number for Singlepack*		120U8771
Code number for Industrial pack**		120U8770
Drawing number		0XR6025B-2
Suction and discharge connections		Brazed
Suction connection		7/8 " ODF
Discharge connection		1/2 " ODF
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		1/4" flare
LP gauge port		None
IPR valve		32 bar
Swept volume		68.79 cm ³ /rev
Displacement @ Nominal speed		12.0 m ³ /h @ 2900 rpm - 14.4 m ³ /h @ 3500 rpm
Net weight		41 kg
Oil charge		1.57 litre, POE --
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		5.44 kg
Approved refrigerants		R404A,R507,R134a,R407A,R407F,R448A,R449A,R452A,R22

Dimensions

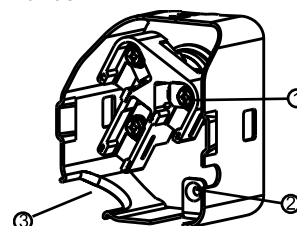


D=184 mm
H=455 mm
H1=280 mm
H2=422 mm
H3=- mm

Electrical Characteristics

Nominal voltage	500V/3/50Hz - 575V/3/60Hz
Voltage range	450-550 V @ 50Hz - 517-632 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	4.4 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	4.5 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	4.4 Ω
Rated Load Amps (RLA)	6.4 A
Maximum Continuous Current (MCC)	9 A
Locked Rotor Amps (LRA)	42 A
Motor protection	Internal overload protector

Terminal box



IP22
1: Screw connectors 10-32 UNF x 9.5
2: Earth connection
3: Power cable passage

Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	3 Nm / 2 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.

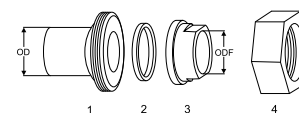
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	81568030
Gasket, 1-1/4"	8156131

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

Solder sleeve adapter set



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

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	12020127
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants

Code no.

POE lubricant, 215PZ(PL46HB), 1 litre can	120Z0648
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Crankcase heaters

Code no.

Miscellaneous accessories

Code no.

Acoustic hood	120Z5084
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

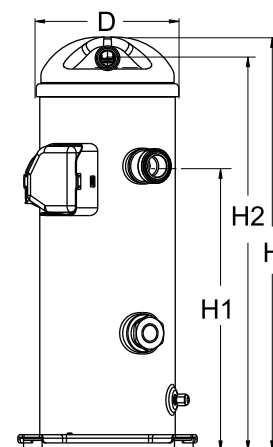
Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

General Characteristics

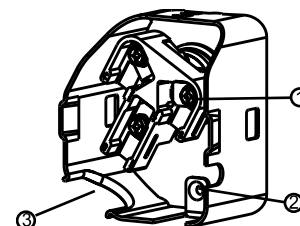
Model number (on compressor nameplate)		MLZ030T7LQ9
Code number for Singlepack*		121U8581
Code number for Industrial pack**		121U8580
Drawing number		0XR6298B-2
Suction and discharge connections		Rotolock
Suction connection		1-1/4 " Rotolock
Discharge connection		1 " Rotolock
Suction connection with supplied sleeve		7/8 " -
Discharge connection with supplied sleeve	- "	1/2 " -
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume		68.79 cm ³ /rev
Displacement @ Nominal speed		12.0 m ³ /h @ 2900 rpm - 14.4 m ³ /h @ 3500 rpm
Net weight		41 kg
Oil charge		1.57 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		5.44 kg
Approved refrigerants		R404A, R507, R134a, R407C, R22

Dimensions


D=184 mm
H=454.9 mm
H1=280 mm
H2=422.2 mm
H3=- mm

Electrical Characteristics

Nominal voltage	500V/3/50Hz - 575V/3/60Hz
Voltage range	450-550 V @ 50Hz - 517-632 V @ 60Hz
Winding resistance between phases 1-2 +/- 7% at 25°C	4.4 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	4.5 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	4.4 Ω
Rated Load Amps (RLA)	6.4 A
Maximum Continuous Current (MCC)	9 A
Locked Rotor Amps (LRA)	42 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 2: Earth connection
- 3: Power cable passage

Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	3 Nm / 2 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.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

Rotolock accessories, discharge side
Code no.

Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

Rotolock accessories, sets
Code no.

Teflon seals, sleeves, nuts for discharge and suction (1" and 1"1/4)	120Z5074
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants
Code no.

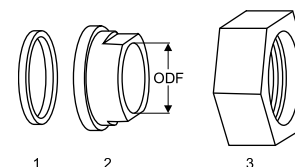
PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034
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Crankcase heaters
Code no.
Miscellaneous accessories
Code no.

Acoustic hood	120Z5043
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts
Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

Gaskets, sleeves and nuts


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

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	7 041	8 786	10 829	13 155	-	-	-	-	-
20	6 726	8 416	10 398	12 658	15 180	-	-	-	-
30	6 084	7 638	9 470	11 570	13 921	16 506	19 304	-	-
40	5 510	6 934	8 624	10 569	12 755	15 169	17 790	-	-
50	-	6 138	7 692	9 488	11 517	13 765	16 216	-	-
60	-	-	-	8 164	10 040	12 130	14 419	-	-
68	-	-	-	-	-	10 544	12 707	-	-

Power input in W

16	1 722	1 785	1 862	1 954	-	-	-	-	-
20	1 931	1 992	2 065	2 149	2 246	-	-	-	-
30	2 443	2 507	2 574	2 646	2 723	2 805	2 893	-	-
40	2 990	3 065	3 137	3 206	3 272	3 337	3 400	-	-
50	-	3 729	3 815	3 890	3 955	4 012	4 059	-	-
60	-	-	-	4 759	4 833	4 891	4 932	-	-
68	-	-	-	-	-	5 782	5 826	-	-

Current consumption in A

16	2.16	2.24	2.34	2.45	-	-	-	-	-
20	2.42	2.50	2.59	2.70	2.82	-	-	-	-
30	3.07	3.15	3.23	3.32	3.42	3.52	3.63	-	-
40	3.75	3.85	3.94	4.02	4.11	4.19	4.27	-	-
50	-	4.68	4.79	4.88	4.96	5.04	5.10	-	-
60	-	-	-	5.97	6.07	6.14	6.19	-	-
68	-	-	-	-	-	7.26	7.31	-	-

Mass flow in kg/h

16	142	173	208	247	-	-	-	-	-
20	141	172	207	246	290	-	-	-	-
30	136	168	203	243	287	335	387	-	-
40	129	161	198	238	283	332	384	-	-
50	-	151	189	230	277	326	380	-	-
60	-	-	-	219	266	318	372	-	-
68	-	-	-	-	-	307	364	-	-

Coefficient of performance (C.O.P.)

16	4.09	4.92	5.81	6.73	-	-	-	-	-
20	3.48	4.22	5.04	5.89	6.76	-	-	-	-
30	2.49	3.05	3.68	4.37	5.11	5.88	6.67	-	-
40	1.84	2.26	2.75	3.30	3.90	4.55	5.23	-	-
50	-	1.65	2.02	2.44	2.91	3.43	3.99	-	-
60	-	-	-	1.72	2.08	2.48	2.92	-	-
68	-	-	-	-	-	1.82	2.18	-	-

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

Cooling capacity	8 179	W
Power input	3 458	W
Current consumption	4.34	A
Mass flow	194	kg/h
C.O.P.	2.37	

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		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 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	6 869	8 598	10 632	12 962	-	-	-	-	-
20	6 580	8 254	10 227	12 489	15 032	-	-	-	-
30	5 996	7 538	9 362	11 459	13 821	16 439	19 304	-	-
40	-	6 895	8 577	10 516	12 704	15 131	17 790	-	-
50	-	-	-	9 494	11 514	13 758	16 216	-	-
60	-	-	-	-	10 087	12 153	14 419	-	-
68	-	-	-	-	-	-	12 707	-	-

Power input in W

16	1 722	1 785	1 862	1 954	-	-	-	-	-
20	1 931	1 992	2 065	2 149	2 246	-	-	-	-
30	2 443	2 507	2 574	2 646	2 723	2 805	2 893	-	-
40	-	3 065	3 137	3 206	3 272	3 337	3 400	-	-
50	-	-	-	3 890	3 955	4 012	4 059	-	-
60	-	-	-	-	4 833	4 891	4 932	-	-
68	-	-	-	-	-	-	5 826	-	-

Current consumption in A

16	2.16	2.24	2.34	2.45	-	-	-	-	-
20	2.42	2.50	2.59	2.70	2.82	-	-	-	-
30	3.07	3.15	3.23	3.32	3.42	3.52	3.63	-	-
40	-	3.85	3.94	4.02	4.11	4.19	4.27	-	-
50	-	-	-	4.88	4.96	5.04	5.10	-	-
60	-	-	-	-	6.07	6.14	6.19	-	-
68	-	-	-	-	-	-	7.31	-	-

Mass flow in kg/h

16	125	155	190	231	-	-	-	-	-
20	124	154	189	230	277	-	-	-	-
30	120	150	186	227	274	327	387	-	-
40	-	145	181	222	270	324	384	-	-
50	-	-	-	215	264	318	380	-	-
60	-	-	-	-	254	310	372	-	-
68	-	-	-	-	-	-	364	-	-

Coefficient of performance (C.O.P.)

16	3.99	4.82	5.71	6.63	-	-	-	-	-
20	3.41	4.14	4.95	5.81	6.69	-	-	-	-
30	2.45	3.01	3.64	4.33	5.08	5.86	6.67	-	-
40	-	2.25	2.73	3.28	3.88	4.53	5.23	-	-
50	-	-	-	2.44	2.91	3.43	3.99	-	-
60	-	-	-	-	2.09	2.48	2.92	-	-
68	-	-	-	-	-	-	2.18	-	-

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

Cooling capacity	8 163	W
Power input	3 458	W
Current consumption	4.34	A
Mass flow	177	kg/h
C.O.P.	2.36	

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		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
R134a

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

Cooling capacity in W

22	5 085	6 417	8 001	9 845	11 954	-	-	-	-
30	4 641	5 920	7 438	9 202	11 217	13 491	-	-	-
40	4 076	5 280	6 705	8 359	10 247	12 377	14 755	-	-
50	-	4 592	5 914	7 447	9 197	11 172	13 378	-	-
60	-	-	5 036	6 437	8 039	9 848	11 871	-	-
70	-	-	-	5 303	6 745	8 378	10 206	-	-
73	-	-	-	4 934	6 327	7 904	9 672	-	-

Power input in W

22	1 449	1 483	1 515	1 553	1 603	-	-	-	-
30	1 716	1 754	1 784	1 813	1 849	1 900	-	-	-
40	2 084	2 139	2 178	2 209	2 240	2 278	2 331	-	-
50	-	2 575	2 637	2 684	2 723	2 762	2 808	-	-
60	-	-	3 161	3 237	3 298	3 351	3 404	-	-
70	-	-	-	3 866	3 962	4 044	4 118	-	-
73	-	-	-	4 069	4 179	4 272	4 355	-	-

Current consumption in A

22	1.82	1.86	1.90	1.95	2.01	-	-	-	-
30	2.15	2.20	2.24	2.28	2.32	2.38	-	-	-
40	2.62	2.68	2.73	2.77	2.81	2.86	2.93	-	-
50	-	3.23	3.31	3.37	3.42	3.47	3.52	-	-
60	-	-	3.97	4.06	4.14	4.21	4.27	-	-
70	-	-	-	4.85	4.97	5.08	5.17	-	-
73	-	-	-	5.11	5.25	5.36	5.47	-	-

Mass flow in kg/h

22	109	134	165	200	240	-	-	-	-
30	108	134	165	201	240	283	-	-	-
40	106	132	164	200	240	283	328	-	-
50	-	128	161	198	238	282	327	-	-
60	-	-	155	193	235	279	325	-	-
70	-	-	-	186	229	274	321	-	-
73	-	-	-	184	227	272	320	-	-

Coefficient of performance (C.O.P.)

22	3.51	4.33	5.28	6.34	7.46	-	-	-	-
30	2.70	3.38	4.17	5.08	6.07	7.10	-	-	-
40	1.96	2.47	3.08	3.78	4.57	5.43	6.33	-	-
50	-	1.78	2.24	2.77	3.38	4.04	4.76	-	-
60	-	-	1.59	1.99	2.44	2.94	3.49	-	-
70	-	-	-	1.37	1.70	2.07	2.48	-	-
73	-	-	-	1.21	1.51	1.85	2.22	-	-

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

Cooling capacity	4 944	W
Power input	2 351	W
Current consumption	2.95	A
Mass flow	130	kg/h
C.O.P.	2.10	

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		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 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	5 166	6 492	8 063	9 887	11 974	-	-	-	-
30	-	6 030	7 534	9 273	11 255	13 491	-	-	-
40	-	-	6 844	8 467	10 308	12 377	14 686	-	-
50	-	-	6 094	7 591	9 282	11 172	13 271	-	-
60	-	-	-	6 617	8 147	9 848	-	-	-
70	-	-	-	-	6 876	8 378	-	-	-
73	-	-	-	-	6 463	7 904	-	-	-

Power input in W

22	1 449	1 483	1 515	1 553	1 603	-	-	-	-
30	-	1 754	1 784	1 813	1 849	1 900	-	-	-
40	-	-	2 178	2 209	2 240	2 278	2 331	-	-
50	-	-	2 637	2 684	2 723	2 762	2 808	-	-
60	-	-	-	3 237	3 298	3 351	-	-	-
70	-	-	-	-	3 962	4 044	-	-	-
73	-	-	-	-	4 179	4 272	-	-	-

Current consumption in A

22	1.82	1.86	1.90	1.95	2.01	-	-	-	-
30	-	2.20	2.24	2.28	2.32	2.38	-	-	-
40	-	-	2.73	2.77	2.81	2.86	2.93	-	-
50	-	-	3.31	3.37	3.42	3.47	3.52	-	-
60	-	-	-	4.06	4.14	4.21	-	-	-
70	-	-	-	-	4.97	5.08	-	-	-
73	-	-	-	-	5.25	5.36	-	-	-

Mass flow in kg/h

22	98	123	154	192	235	-	-	-	-
30	-	123	154	192	235	283	-	-	-
40	-	-	153	191	234	283	337	-	-
50	-	-	150	189	233	282	336	-	-
60	-	-	-	185	229	279	-	-	-
70	-	-	-	-	224	274	-	-	-
73	-	-	-	-	222	272	-	-	-

Coefficient of performance (C.O.P.)

22	3.57	4.38	5.32	6.37	7.47	-	-	-	-
30	-	3.44	4.22	5.11	6.09	7.10	-	-	-
40	-	-	3.14	3.83	4.60	5.43	6.30	-	-
50	-	-	2.31	2.83	3.41	4.04	4.73	-	-
60	-	-	-	2.04	2.47	2.94	-	-	-
70	-	-	-	-	1.74	2.07	-	-	-
73	-	-	-	-	1.55	1.85	-	-	-

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	dB(A)
With acoustic hood	dB(A)

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	5 801	7 250	8 974	10 986	13 301	-	-	-	-
20	5 255	6 560	8 111	9 923	12 010	14 385	17 063	-	-
30	4 690	5 844	7 215	8 820	10 671	12 783	15 171	17 846	20 822
40	-	5 069	6 254	7 644	9 253	11 095	13 185	15 536	18 161
50	-	-	5 195	6 363	7 723	9 289	11 074	13 094	15 362
60	-	-	-	-	6 050	7 332	8 807	10 490	12 396

Power input in W

10	1 725	1 760	1 793	1 816	1 820	-	-	-	-
20	2 175	2 205	2 241	2 276	2 301	2 306	2 284	-	-
30	2 736	2 747	2 774	2 808	2 840	2 862	2 864	2 840	2 780
40	-	3 451	3 455	3 474	3 500	3 525	3 539	3 534	3 503
50	-	-	4 347	4 339	4 345	4 359	4 371	4 373	4 357
60	-	-	-	-	5 438	5 428	5 424	5 420	5 405

Current consumption in A

10	2.17	2.21	2.25	2.28	2.28	-	-	-	-
20	2.73	2.77	2.81	2.86	2.89	2.89	2.87	-	-
30	3.43	3.45	3.48	3.52	3.56	3.59	3.60	3.56	3.49
40	-	4.33	4.34	4.36	4.39	4.42	4.44	4.44	4.40
50	-	-	5.46	5.45	5.45	5.47	5.49	5.49	5.47
60	-	-	-	-	6.83	6.81	6.81	6.80	6.78

Mass flow in kg/h

10	104	138	177	222	273	-	-	-	-
20	111	143	180	222	271	328	394	-	-
30	113	143	178	219	267	322	387	462	548
40	-	139	173	213	260	315	379	454	540
50	-	-	165	205	251	306	370	445	531
60	-	-	-	-	241	296	361	436	524

Coefficient of performance (C.O.P.)

10	3.36	4.12	5.00	6.05	7.31	-	-	-	-
20	2.42	2.98	3.62	4.36	5.22	6.24	7.47	-	-
30	1.71	2.13	2.60	3.14	3.76	4.47	5.30	6.28	7.49
40	-	1.47	1.81	2.20	2.64	3.15	3.73	4.40	5.19
50	-	-	1.19	1.47	1.78	2.13	2.53	2.99	3.53
60	-	-	-	-	1.11	1.35	1.62	1.94	2.29

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

Cooling capacity	8 504	W
Power input	3 896	W
Current consumption	4.89	A
Mass flow	256	kg/h
C.O.P.	2.18	

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
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	5 574	7 016	8 744	10 774	13 123	-	-	-	-
20	4 942	6 230	7 777	9 601	11 720	14 150	16 900	-	-
30	4 290	5 417	6 776	8 387	10 270	12 442	14 919	17 712	20 822
40	3 588	4 547	5 711	7 102	8 740	10 647	12 843	15 344	18 161
50	-	-	4 557	5 718	7 103	8 735	10 641	12 843	15 362
60	-	-	-	-	5 324	6 671	8 276	10 172	12 396

Power input in W

10	1 725	1 760	1 793	1 816	1 820	-	-	-	-
20	2 175	2 205	2 241	2 276	2 301	2 306	2 284	-	-
30	2 736	2 747	2 774	2 808	2 840	2 862	2 864	2 840	2 780
40	3 472	3 451	3 455	3 474	3 500	3 525	3 539	3 534	3 503
50	-	-	4 347	4 339	4 345	4 359	4 371	4 373	4 357
60	-	-	-	-	5 438	5 428	5 424	5 420	5 405

Current consumption in A

10	2.17	2.21	2.25	2.28	2.28	-	-	-	-
20	2.73	2.77	2.81	2.86	2.89	2.89	2.87	-	-
30	3.43	3.45	3.48	3.52	3.56	3.59	3.60	3.56	3.49
40	4.36	4.33	4.34	4.36	4.39	4.42	4.44	4.44	4.40
50	-	-	5.46	5.45	5.45	5.47	5.49	5.49	5.47
60	-	-	-	-	6.83	6.81	6.81	6.80	6.78

Mass flow in kg/h

10	124	162	204	250	301	-	-	-	-
20	132	167	207	250	299	354	416	-	-
30	134	167	205	247	295	348	409	475	548
40	131	163	199	240	287	340	401	467	540
50	-	-	190	230	277	331	391	458	531
60	-	-	-	-	266	320	381	449	524

Coefficient of performance (C.O.P.)

10	3.23	3.99	4.88	5.93	7.21	-	-	-	-
20	2.27	2.83	3.47	4.22	5.09	6.14	7.40	-	-
30	1.57	1.97	2.44	2.99	3.62	4.35	5.21	6.24	7.49
40	1.03	1.32	1.65	2.04	2.50	3.02	3.63	4.34	5.19
50	-	-	1.05	1.32	1.63	2.00	2.43	2.94	3.53
60	-	-	-	-	0.98	1.23	1.53	1.88	2.29

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

Cooling capacity	7 937	W
Power input	3 896	W
Current consumption	4.89	A
Mass flow	282	kg/h
C.O.P.	2.04	

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 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	-	3 731	4 750	5 999	7 503	9 285	11 369	13 780	16 541
35	-	3 472	4 448	5 641	7 075	8 775	10 764	13 067	15 707
40	-	3 219	4 149	5 284	6 646	8 262	10 153	12 345	14 861
45	-	-	3 846	4 919	6 208	7 737	9 528	11 606	13 996
50	-	-	-	4 540	5 753	7 191	8 880	10 842	13 102
55	-	-	-	-	5 271	6 618	8 201	10 044	12 171
60	-	-	-	-	-	6 007	7 482	9 202	11 193
65	-	-	-	-	-	-	6 714	8 308	10 159

Power input in W

30	-	1 911	1 974	2 038	2 103	2 172	2 243	2 318	2 397
35	-	2 329	2 356	2 386	2 419	2 455	2 497	2 543	2 596
40	-	2 761	2 756	2 755	2 759	2 768	2 784	2 806	2 836
45	-	-	3 179	3 152	3 131	3 117	3 111	3 113	3 124
50	-	-	-	3 584	3 542	3 509	3 485	3 471	3 468
55	-	-	-	-	3 998	3 950	3 913	3 887	3 873
60	-	-	-	-	-	4 448	4 401	4 367	4 346
65	-	-	-	-	-	-	4 955	4 917	4 894

Current consumption in A

30	-	2.80	2.76	2.81	2.92	3.06	3.18	3.25	3.24
35	-	3.53	3.41	3.40	3.46	3.54	3.62	3.66	3.61
40	-	4.04	3.86	3.80	3.81	3.86	3.90	3.92	3.86
45	-	-	4.20	4.09	4.07	4.09	4.13	4.13	4.07
50	-	-	-	4.37	4.33	4.34	4.37	4.38	4.33
55	-	-	-	-	4.69	4.70	4.74	4.76	4.74
60	-	-	-	-	-	5.25	5.31	5.37	5.38
65	-	-	-	-	-	-	6.19	6.29	6.35

Mass flow in kg/h

30	-	85	106	131	160	194	234	279	331
35	-	84	105	129	159	193	232	277	329
40	-	82	102	127	156	190	229	275	327
45	-	-	99	124	153	187	226	272	324
50	-	-	-	120	149	183	222	268	320
55	-	-	-	-	143	178	217	263	316
60	-	-	-	-	-	171	211	257	311
65	-	-	-	-	-	-	203	250	303

Coefficient of performance (C.O.P.)

30	-	1.95	2.41	2.94	3.57	4.28	5.07	5.95	6.90
35	-	1.49	1.89	2.36	2.93	3.57	4.31	5.14	6.05
40	-	1.17	1.51	1.92	2.41	2.98	3.65	4.40	5.24
45	-	-	1.21	1.56	1.98	2.48	3.06	3.73	4.48
50	-	-	-	1.27	1.62	2.05	2.55	3.12	3.78
55	-	-	-	-	1.32	1.68	2.10	2.58	3.14
60	-	-	-	-	-	1.35	1.70	2.11	2.58
65	-	-	-	-	-	-	1.35	1.69	2.08

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

Cooling capacity	6 208	W
Power input	3 131	W
Current consumption	4.07	A
Mass flow	153	kg/h
C.O.P.	1.98	

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, 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	4 712	5 944	7 430	9 208	11 315	-	-	-	-
20	4 339	5 544	6 973	8 664	10 654	12 981	15 683	-	-
30	-	-	6 391	7 961	9 801	11 948	14 439	17 312	20 604
40	-	-	-	7 132	8 788	10 721	12 969	15 568	18 556
50	-	-	-	-	7 647	9 333	11 304	13 596	16 247
60	-	-	-	-	-	-	9 476	11 428	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	-	-	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	-	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	-	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	-	-	5 246	5 261	5 295

Current consumption in A

10	2.73	2.77	2.80	2.82	2.85	-	-	-	-
20	3.05	3.10	3.14	3.16	3.19	3.21	3.25	-	-
30	-	-	3.51	3.54	3.56	3.59	3.62	3.67	3.75
40	-	-	-	4.03	4.06	4.09	4.12	4.17	4.24
50	-	-	-	-	4.78	4.81	4.84	4.88	4.94
60	-	-	-	-	-	-	5.86	5.90	5.96

Mass flow in kg/h

10	77	98	123	152	188	-	-	-	-
20	76	98	123	154	190	233	284	-	-
30	-	-	122	153	189	233	284	344	415
40	-	-	-	150	186	229	280	340	410
50	-	-	-	-	180	222	273	332	402
60	-	-	-	-	-	-	262	320	388

Coefficient of performance (C.O.P.)

10	2.98	3.68	4.48	5.42	6.55	-	-	-	-
20	2.16	2.71	3.34	4.04	4.84	5.77	6.86	-	-
30	-	-	2.46	3.01	3.62	4.31	5.10	6.00	7.05
40	-	-	-	2.17	2.64	3.17	3.76	4.43	5.19
50	-	-	-	-	1.84	2.23	2.68	3.18	3.75
60	-	-	-	-	-	-	1.81	2.17	2.59

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

Cooling capacity	8 232	W
Power input	3 715	W
Current consumption	4.39	A
Mass flow	183	kg/h
C.O.P.	2.22	

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

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	4 731	5 973	7 472	9 265	11 388	-	-	-	-
20	4 301	5 508	6 944	8 646	10 652	12 996	15 712	-	-
30	3 813	4 950	6 288	7 865	9 719	11 888	14 405	17 303	20 604
40	-	-	5 539	6 957	8 626	10 584	12 870	15 517	18 556
50	-	-	-	5 956	7 405	9 120	11 139	13 503	16 247
60	-	-	-	-	6 091	7 528	9 247	11 293	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	2 575	2 574	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	3 280	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	4 175	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	5 299	5 256	5 246	5 261	5 295

Current consumption in A

10	2.73	2.77	2.80	2.82	2.85	-	-	-	-
20	3.05	3.10	3.14	3.16	3.19	3.21	3.25	-	-
30	3.41	3.47	3.51	3.54	3.56	3.59	3.62	3.67	3.75
40	-	-	4.00	4.03	4.06	4.09	4.12	4.17	4.24
50	-	-	-	4.75	4.78	4.81	4.84	4.88	4.94
60	-	-	-	-	5.80	5.83	5.86	5.90	5.96

Mass flow in kg/h

10	91	114	140	171	206	-	-	-	-
20	90	113	141	172	208	251	299	-	-
30	89	112	139	171	208	250	299	354	415
40	-	-	136	168	204	246	295	349	410
50	-	-	-	162	197	239	287	341	402
60	-	-	-	-	188	229	275	329	388

Coefficient of performance (C.O.P.)

10	3.00	3.69	4.50	5.46	6.60	-	-	-	-
20	2.14	2.70	3.32	4.03	4.84	5.77	6.87	-	-
30	1.48	1.92	2.42	2.97	3.59	4.29	5.09	6.00	7.05
40	-	-	1.69	2.11	2.59	3.13	3.73	4.42	5.19
50	-	-	-	1.43	1.78	2.18	2.64	3.16	3.75
60	-	-	-	-	1.15	1.43	1.76	2.15	2.59

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

Cooling capacity	8 029	W
Power input	3 715	W
Current consumption	4.39	A
Mass flow	201	kg/h
C.O.P.	2.16	

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 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	4 712	5 944	7 430	9 208	11 315	-	-	-	-
20	4 339	5 544	6 973	8 664	10 654	12 981	15 683	-	-
30	-	-	6 391	7 961	9 801	11 948	14 439	17 312	20 604
40	-	-	-	7 132	8 788	10 721	12 969	15 568	18 556
50	-	-	-	-	7 647	9 333	11 304	13 596	16 247
60	-	-	-	-	-	-	9 476	11 428	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	-	-	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	-	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	-	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	-	-	5 246	5 261	5 295

Current consumption in A

10	2.73	2.77	2.80	2.82	2.85	-	-	-	-
20	3.05	3.10	3.14	3.16	3.19	3.21	3.25	-	-
30	-	-	3.51	3.54	3.56	3.59	3.62	3.67	3.75
40	-	-	-	4.03	4.06	4.09	4.12	4.17	4.24
50	-	-	-	-	4.78	4.81	4.84	4.88	4.94
60	-	-	-	-	-	-	5.86	5.90	5.96

Mass flow in kg/h

10	78	99	125	155	191	-	-	-	-
20	77	99	125	156	193	237	289	-	-
30	-	-	124	155	193	237	289	351	422
40	-	-	-	153	189	234	286	347	419
50	-	-	-	-	184	227	279	339	410
60	-	-	-	-	-	-	268	327	397

Coefficient of performance (C.O.P.)

10	2.98	3.68	4.48	5.42	6.55	-	-	-	-
20	2.16	2.71	3.34	4.04	4.84	5.77	6.86	-	-
30	-	-	2.46	3.01	3.62	4.31	5.10	6.00	7.05
40	-	-	-	2.17	2.64	3.17	3.76	4.43	5.19
50	-	-	-	-	1.84	2.23	2.68	3.18	3.75
60	-	-	-	-	-	-	1.81	2.17	2.59

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

Cooling capacity	8 232	W
Power input	3 715	W
Current consumption	4.39	A
Mass flow	187	kg/h
C.O.P.	2.22	

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
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	4 721	5 962	7 460	9 253	11 377	-	-	-	-
20	4 290	5 496	6 931	8 634	10 640	12 986	15 704	-	-
30	3 801	4 937	6 274	7 852	9 706	11 876	14 396	17 297	20 604
40	-	-	5 525	6 942	8 612	10 572	12 860	15 511	18 556
50	-	-	-	5 940	7 390	9 106	11 129	13 497	16 247
60	-	-	-	-	6 076	7 514	9 236	11 286	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	2 575	2 574	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	3 280	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	4 175	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	5 299	5 256	5 246	5 261	5 295

Current consumption in A

10	2.73	2.77	2.80	2.82	2.85	-	-	-	-
20	3.05	3.10	3.14	3.16	3.19	3.21	3.25	-	-
30	3.41	3.47	3.51	3.54	3.56	3.59	3.62	3.67	3.75
40	-	-	4.00	4.03	4.06	4.09	4.12	4.17	4.24
50	-	-	-	4.75	4.78	4.81	4.84	4.88	4.94
60	-	-	-	-	5.80	5.83	5.86	5.90	5.96

Mass flow in kg/h

10	92	115	142	173	210	-	-	-	-
20	92	115	143	175	212	255	304	-	-
30	90	114	142	174	211	255	304	360	422
40	-	-	139	171	208	251	300	356	419
50	-	-	-	165	202	244	293	348	410
60	-	-	-	-	192	234	281	336	397

Coefficient of performance (C.O.P.)

10	2.99	3.69	4.50	5.45	6.59	-	-	-	-
20	2.13	2.69	3.32	4.03	4.83	5.77	6.86	-	-
30	1.48	1.92	2.41	2.97	3.59	4.29	5.08	5.99	7.05
40	-	-	1.68	2.11	2.59	3.12	3.73	4.42	5.19
50	-	-	-	1.42	1.77	2.18	2.64	3.16	3.75
60	-	-	-	-	1.15	1.43	1.76	2.15	2.59

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

Cooling capacity	8 015	W
Power input	3 715	W
Current consumption	4.39	A
Mass flow	205	kg/h
C.O.P.	2.16	

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

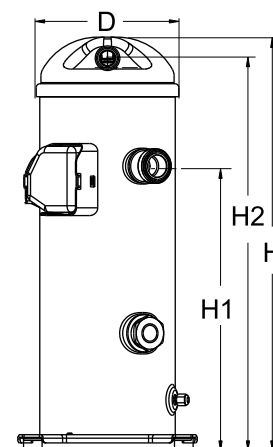
tc: Condensing temperature at dew point

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

Tolerance according EN12900

General Characteristics

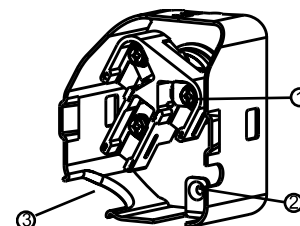
Model number (on compressor nameplate)		MLZ030T9LQ9A
Code number for Singlepack*		121U8695
Code number for Industrial pack**		121U8694
Drawing number		0XR6298B-2
Suction and discharge connections		Rotolock
Suction connection		1-1/4 " Rotolock
Discharge connection		1 " Rotolock
Suction connection with supplied sleeve		7/8 " -
Discharge connection with supplied sleeve	- "	1/2 " -
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume		68.79 cm ³ /rev
Displacement @ Nominal speed		14.4 m ³ /h @ 3500 rpm
Net weight		41 kg
Oil charge		1.57 litre, POE - -
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		5.44 kg
Approved refrigerants	R404A,R507,R134a,R407A,R407F,R448A,R449A,R452A,R22	

Dimensions


D=184 mm
H=454.9 mm
H1=280 mm
H2=422.2 mm
H3=- mm

Electrical Characteristics

Nominal voltage	380V/3/60Hz
Voltage range	342-418 V
Winding resistance between phases 1-2 +/- 7% at 25°C	1.476 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.455 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.487 Ω
Rated Load Amps (RLA)	9 A
Maximum Continuous Current (MCC)	14 A
Locked Rotor Amps (LRA)	81 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 2: Earth connection
- 3: Power cable passage

Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	3 Nm / 2 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.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

Rotolock accessories, discharge side

Code no.

Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

Rotolock accessories, sets

Code no.

Teflon seals, sleeves, nuts for discharge and suction (1" and 1"1/4)	120Z5074
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants

Code no.

POE lubricant, 215PZ(PL46HB), 1 litre can	120Z0648
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Crankcase heaters

Code no.

Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
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Miscellaneous accessories

Code no.

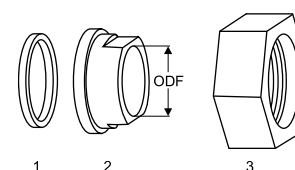
Acoustic hood	120Z5084
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

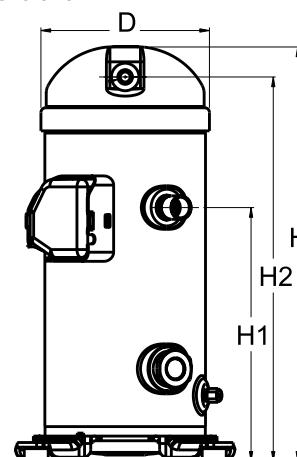
Gaskets, sleeves and nuts



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

General Characteristics

Model number (on compressor nameplate)	MLZ030T9LC9A	MLZ030T9LC9A
Code number for Singlepack*	120U8695	121L8695
Code number for Industrial pack**	120U8694	121L8694
Drawing number	0XR6025B-2	0XR6025B-2
Suction and discharge connections	Brazed	Brazed
Suction connection	7/8" ODF	7/8" 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	68.79 cm ³ /rev	
Displacement @ Nominal speed	14.4 m ³ /h @ 3500 rpm	
Net weight	41 kg	
Oil charge	1.57 litre, POE --	
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	5.44 kg	
Approved refrigerants	R404A,R507,R134a,R407A,R407F,R448A,R449A,R452A,R22	

Dimensions


D=184 mm
H=455 mm
H1=280 mm
H2=422 mm
H3=- mm

Electrical Characteristics

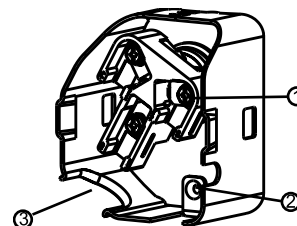
Nominal voltage	380V/3/60Hz
Voltage range	342-418 V
Winding resistance between phases 1-2 +/- 7% at 25°C	1.476 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.455 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.487 Ω
Rated Load Amps (RLA)	9 A
Maximum Continuous Current (MCC)	14 A
Locked Rotor Amps (LRA)	81 A
Motor protection	Internal overload protector

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	3 Nm / 2 Nm

Parts shipped with compressor

Mounting kit with grommets and sleeves
Initial oil charge
Installation instructions

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 2: Earth connection
- 3: Power cable passage

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.

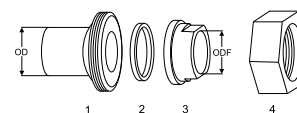
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

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

Solder sleeve adapter set



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

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

Oil / lubricants

Code no.

POE lubricant, 215PZ(PL46HB), 1 litre can	120Z0648
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Crankcase heaters

Code no.

Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
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Miscellaneous accessories

Code no.

Acoustic hood	120Z5084
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

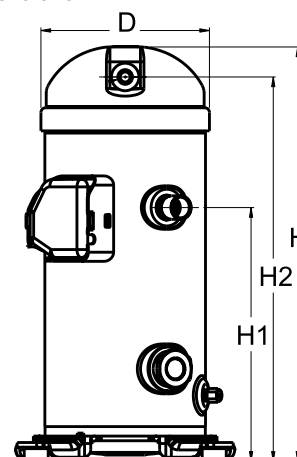
Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

General Characteristics

Model number (on compressor nameplate)		MLZ030T9LC9
Code number for Singlepack*		120U8284
Code number for Industrial pack**		120U8283
Drawing number		0XR6025B-2
Suction and discharge connections		Brazed
Suction connection		7/8 " ODF
Discharge connection		1/2 " ODF
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		1/4" flare
LP gauge port		None
IPR valve		32 bar
Swept volume		68.79 cm ³ /rev
Displacement @ Nominal speed		14.4 m ³ /h @ 3500 rpm
Net weight		41 kg
Oil charge		1.57 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		5.44 kg
Approved refrigerants		R404A, R507, R134a, R407C, R22

Dimensions


D=184 mm

H=455 mm

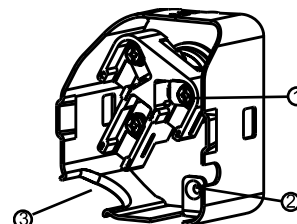
H1=280 mm

H2=422 mm

H3=- mm

Electrical Characteristics

Nominal voltage		380V/3/60Hz
Voltage range		342-418 V
Winding resistance between phases 1-2 +/- 7% at 25°C		1.476 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C		1.455 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C		1.487 Ω
Rated Load Amps (RLA)		9 A
Maximum Continuous Current (MCC)		14 A
Locked Rotor Amps (LRA)		81 A
Motor protection		Internal overload protector

Terminal box


IP22

1: Screw connectors 10-32 UNF x 9.5

2: Earth connection

3: Power cable passage

Recommended Installation torques

Oil sight glass		52.5 Nm
Power connections / Earth connection		3 Nm / 2 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.

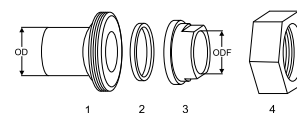
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

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

Solder sleeve adapter set



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

Rotolock accessories, sets

Code no.

Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127
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, 65 W, 400 V, CE mark, UL	120Z0060
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Miscellaneous accessories

Code no.

Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

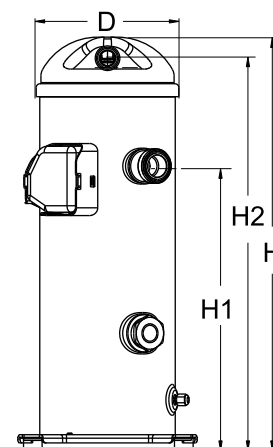
Spare parts

Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

General Characteristics

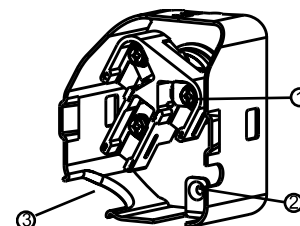
Model number (on compressor nameplate)		MLZ030T9LQ9
Code number for Singlepack*		121U8589
Code number for Industrial pack**		121U8588
Drawing number		0XR6298B-2
Suction and discharge connections		Rotolock
Suction connection		1-1/4 " Rotolock
Discharge connection		1 " Rotolock
Suction connection with supplied sleeve		7/8 " -
Discharge connection with supplied sleeve	- "	1/2 " -
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume		68.79 cm ³ /rev
Displacement @ Nominal speed		14.4 m ³ /h @ 3500 rpm
Net weight		41 kg
Oil charge		1.57 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		5.44 kg
Approved refrigerants		R404A, R507, R134a, R407C, R22

Dimensions


D=184 mm
H=454.9 mm
H1=280 mm
H2=422.2 mm
H3=- mm

Electrical Characteristics

Nominal voltage	380V/3/60Hz
Voltage range	342-418 V
Winding resistance between phases 1-2 +/- 7% at 25°C	1.476 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.455 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.487 Ω
Rated Load Amps (RLA)	9 A
Maximum Continuous Current (MCC)	14 A
Locked Rotor Amps (LRA)	81 A
Motor protection	Internal overload protector

Terminal box


IP22

- 1: Screw connectors 10-32 UNF x 9.5
- 2: Earth connection
- 3: Power cable passage

Recommended Installation torques

Oil sight glass	52.5 Nm
Power connections / Earth connection	3 Nm / 2 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.

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-1/4"	8156131

Rotolock accessories, discharge side
Code no.

Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

Rotolock accessories, sets
Code no.

Teflon seals, sleeves, nuts for discharge and suction (1" and 1"1/4)	120Z5074
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.

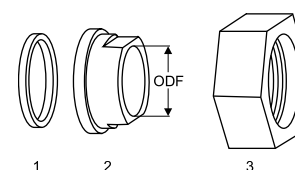
Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0060
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Miscellaneous accessories
Code no.

Acoustic hood	120Z5044
Discharge thermostat kit	7750009
IP54 upgrade kit	118U0057

Spare parts
Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
Terminal box cover	120Z5018

Gaskets, sleeves and nuts


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

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	7 041	8 786	10 829	13 155	-	-	-	-	-
20	6 726	8 416	10 398	12 658	15 180	-	-	-	-
30	6 084	7 638	9 470	11 570	13 921	16 506	19 304	-	-
40	5 510	6 934	8 624	10 569	12 755	15 169	17 790	-	-
50	-	6 138	7 692	9 488	11 517	13 765	16 216	-	-
60	-	-	-	8 164	10 040	12 130	14 419	-	-
68	-	-	-	-	-	10 544	12 707	-	-

Power input in W

16	1 722	1 785	1 862	1 954	-	-	-	-	-
20	1 931	1 992	2 065	2 149	2 246	-	-	-	-
30	2 443	2 507	2 574	2 646	2 723	2 805	2 893	-	-
40	2 990	3 065	3 137	3 206	3 272	3 337	3 400	-	-
50	-	3 729	3 815	3 890	3 955	4 012	4 059	-	-
60	-	-	-	4 759	4 833	4 891	4 932	-	-
68	-	-	-	-	-	5 782	5 826	-	-

Current consumption in A

16	3.27	3.39	3.54	3.71	-	-	-	-	-
20	3.67	3.78	3.92	4.08	4.26	-	-	-	-
30	4.64	4.76	4.89	5.03	5.17	5.33	5.49	-	-
40	5.68	5.82	5.96	6.09	6.22	6.34	6.46	-	-
50	-	7.08	7.24	7.39	7.51	7.62	7.71	-	-
60	-	-	-	9.04	9.18	9.29	9.37	-	-
68	-	-	-	-	-	10.98	11.06	-	-

Mass flow in kg/h

16	142	173	208	247	-	-	-	-	-
20	141	172	207	246	290	-	-	-	-
30	136	168	203	243	287	335	387	-	-
40	129	161	198	238	283	332	384	-	-
50	-	151	189	230	277	326	380	-	-
60	-	-	-	219	266	318	372	-	-
68	-	-	-	-	-	307	364	-	-

Coefficient of performance (C.O.P.)

16	4.09	4.92	5.81	6.73	-	-	-	-	-
20	3.48	4.22	5.04	5.89	6.76	-	-	-	-
30	2.49	3.05	3.68	4.37	5.11	5.88	6.67	-	-
40	1.84	2.26	2.75	3.30	3.90	4.55	5.23	-	-
50	-	1.65	2.02	2.44	2.91	3.43	3.99	-	-
60	-	-	-	1.72	2.08	2.48	2.92	-	-
68	-	-	-	-	-	1.82	2.18	-	-

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

Cooling capacity	8 179	W
Power input	3 458	W
Current consumption	6.57	A
Mass flow	194	kg/h
C.O.P.	2.37	

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	73	dB(A)
With acoustic hood	65	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	6 869	8 598	10 632	12 962	-	-	-	-	-
20	6 580	8 254	10 227	12 489	15 032	-	-	-	-
30	5 996	7 538	9 362	11 459	13 821	16 439	19 304	-	-
40	-	6 895	8 577	10 516	12 704	15 131	17 790	-	-
50	-	-	-	9 494	11 514	13 758	16 216	-	-
60	-	-	-	-	10 087	12 153	14 419	-	-
68	-	-	-	-	-	-	12 707	-	-

Power input in W

16	1 722	1 785	1 862	1 954	-	-	-	-	-
20	1 931	1 992	2 065	2 149	2 246	-	-	-	-
30	2 443	2 507	2 574	2 646	2 723	2 805	2 893	-	-
40	-	3 065	3 137	3 206	3 272	3 337	3 400	-	-
50	-	-	-	3 890	3 955	4 012	4 059	-	-
60	-	-	-	-	4 833	4 891	4 932	-	-
68	-	-	-	-	-	-	5 826	-	-

Current consumption in A

16	3.27	3.39	3.54	3.71	-	-	-	-	-
20	3.67	3.78	3.92	4.08	4.26	-	-	-	-
30	4.64	4.76	4.89	5.03	5.17	5.33	5.49	-	-
40	-	5.82	5.96	6.09	6.22	6.34	6.46	-	-
50	-	-	-	7.39	7.51	7.62	7.71	-	-
60	-	-	-	-	9.18	9.29	9.37	-	-
68	-	-	-	-	-	-	11.06	-	-

Mass flow in kg/h

16	125	155	190	231	-	-	-	-	-
20	124	154	189	230	277	-	-	-	-
30	120	150	186	227	274	327	387	-	-
40	-	145	181	222	270	324	384	-	-
50	-	-	-	215	264	318	380	-	-
60	-	-	-	-	254	310	372	-	-
68	-	-	-	-	-	-	364	-	-

Coefficient of performance (C.O.P.)

16	3.99	4.82	5.71	6.63	-	-	-	-	-
20	3.41	4.14	4.95	5.81	6.69	-	-	-	-
30	2.45	3.01	3.64	4.33	5.08	5.86	6.67	-	-
40	-	2.25	2.73	3.28	3.88	4.53	5.23	-	-
50	-	-	-	2.44	2.91	3.43	3.99	-	-
60	-	-	-	-	2.09	2.48	2.92	-	-
68	-	-	-	-	-	-	2.18	-	-

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

Cooling capacity	8 163	W
Power input	3 458	W
Current consumption	6.57	A
Mass flow	177	kg/h
C.O.P.	2.36	

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	73	dB(A)
With acoustic hood	65	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
R134a

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

Cooling capacity in W

22	5 085	6 417	8 001	9 845	11 954	-	-	-	-
30	4 641	5 920	7 438	9 202	11 217	13 491	-	-	-
40	4 076	5 280	6 705	8 359	10 247	12 377	14 755	-	-
50	-	4 592	5 914	7 447	9 197	11 172	13 378	-	-
60	-	-	5 036	6 437	8 039	9 848	11 871	-	-
70	-	-	-	5 303	6 745	8 378	10 206	-	-
73	-	-	-	4 934	6 327	7 904	9 672	-	-

Power input in W

22	1 449	1 483	1 515	1 553	1 603	-	-	-	-
30	1 716	1 754	1 784	1 813	1 849	1 900	-	-	-
40	2 084	2 139	2 178	2 209	2 240	2 278	2 331	-	-
50	-	2 575	2 637	2 684	2 723	2 762	2 808	-	-
60	-	-	3 161	3 237	3 298	3 351	3 404	-	-
70	-	-	-	3 866	3 962	4 044	4 118	-	-
73	-	-	-	4 069	4 179	4 272	4 355	-	-

Current consumption in A

22	2.75	2.82	2.88	2.95	3.04	-	-	-	-
30	3.26	3.33	3.39	3.44	3.51	3.61	-	-	-
40	3.96	4.06	4.14	4.20	4.25	4.33	4.43	-	-
50	-	4.89	5.01	5.10	5.17	5.25	5.33	-	-
60	-	-	6.00	6.15	6.26	6.36	6.47	-	-
70	-	-	-	7.34	7.53	7.68	7.82	-	-
73	-	-	-	7.73	7.94	8.11	8.27	-	-

Mass flow in kg/h

22	109	134	165	200	240	-	-	-	-
30	108	134	165	201	240	283	-	-	-
40	106	132	164	200	240	283	328	-	-
50	-	128	161	198	238	282	327	-	-
60	-	-	155	193	235	279	325	-	-
70	-	-	-	186	229	274	321	-	-
73	-	-	-	184	227	272	320	-	-

Coefficient of performance (C.O.P.)

22	3.51	4.33	5.28	6.34	7.46	-	-	-	-
30	2.70	3.38	4.17	5.08	6.07	7.10	-	-	-
40	1.96	2.47	3.08	3.78	4.57	5.43	6.33	-	-
50	-	1.78	2.24	2.77	3.38	4.04	4.76	-	-
60	-	-	1.59	1.99	2.44	2.94	3.49	-	-
70	-	-	-	1.37	1.70	2.07	2.48	-	-
73	-	-	-	1.21	1.51	1.85	2.22	-	-

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

Cooling capacity	4 944	W
Power input	2 351	W
Current consumption	4.46	A
Mass flow	130	kg/h
C.O.P.	2.10	

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	73	dB(A)
With acoustic hood	65	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	5 166	6 492	8 063	9 887	11 974	-	-	-	-
30	-	6 030	7 534	9 273	11 255	13 491	-	-	-
40	-	-	6 844	8 467	10 308	12 377	14 686	-	-
50	-	-	6 094	7 591	9 282	11 172	13 271	-	-
60	-	-	-	6 617	8 147	9 848	-	-	-
70	-	-	-	-	6 876	8 378	-	-	-
73	-	-	-	-	6 463	7 904	-	-	-

Power input in W

22	1 449	1 483	1 515	1 553	1 603	-	-	-	-
30	-	1 754	1 784	1 813	1 849	1 900	-	-	-
40	-	-	2 178	2 209	2 240	2 278	2 331	-	-
50	-	-	2 637	2 684	2 723	2 762	2 808	-	-
60	-	-	-	3 237	3 298	3 351	-	-	-
70	-	-	-	-	3 962	4 044	-	-	-
73	-	-	-	-	4 179	4 272	-	-	-

Current consumption in A

22	2.75	2.82	2.88	2.95	3.04	-	-	-	-
30	-	3.33	3.39	3.44	3.51	3.61	-	-	-
40	-	-	4.14	4.20	4.25	4.33	4.43	-	-
50	-	-	5.01	5.10	5.17	5.25	5.33	-	-
60	-	-	-	6.15	6.26	6.36	-	-	-
70	-	-	-	-	7.53	7.68	-	-	-
73	-	-	-	-	7.94	8.11	-	-	-

Mass flow in kg/h

22	98	123	154	192	235	-	-	-	-
30	-	123	154	192	235	283	-	-	-
40	-	-	153	191	234	283	337	-	-
50	-	-	150	189	233	282	336	-	-
60	-	-	-	185	229	279	-	-	-
70	-	-	-	-	224	274	-	-	-
73	-	-	-	-	222	272	-	-	-

Coefficient of performance (C.O.P.)

22	3.57	4.38	5.32	6.37	7.47	-	-	-	-
30	-	3.44	4.22	5.11	6.09	7.10	-	-	-
40	-	-	3.14	3.83	4.60	5.43	6.30	-	-
50	-	-	2.31	2.83	3.41	4.04	4.73	-	-
60	-	-	-	2.04	2.47	2.94	-	-	-
70	-	-	-	-	1.74	2.07	-	-	-
73	-	-	-	-	1.55	1.85	-	-	-

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.	-	

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	73	dB(A)
With acoustic hood	65	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, 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	5 801	7 250	8 974	10 986	13 301	-	-	-	-
20	5 255	6 560	8 111	9 923	12 010	14 385	17 063	-	-
30	4 690	5 844	7 215	8 820	10 671	12 783	15 171	17 846	20 822
40	-	5 069	6 254	7 644	9 253	11 095	13 185	15 536	18 161
50	-	-	5 195	6 363	7 723	9 289	11 074	13 094	15 362
60	-	-	-	-	6 050	7 332	8 807	10 490	12 396

Power input in W

10	1 725	1 760	1 793	1 816	1 820	-	-	-	-
20	2 175	2 205	2 241	2 276	2 301	2 306	2 284	-	-
30	2 736	2 747	2 774	2 808	2 840	2 862	2 864	2 840	2 780
40	-	3 451	3 455	3 474	3 500	3 525	3 539	3 534	3 503
50	-	-	4 347	4 339	4 345	4 359	4 371	4 373	4 357
60	-	-	-	-	5 438	5 428	5 424	5 420	5 405

Current consumption in A

10	3.28	3.34	3.41	3.45	3.46	-	-	-	-
20	4.13	4.19	4.26	4.32	4.37	4.38	4.34	-	-
30	5.20	5.22	5.27	5.33	5.39	5.43	5.44	5.39	5.28
40	-	6.55	6.56	6.60	6.65	6.69	6.72	6.71	6.65
50	-	-	8.26	8.24	8.25	8.28	8.30	8.31	8.27
60	-	-	-	-	10.33	10.31	10.30	10.29	10.26

Mass flow in kg/h

10	104	138	177	222	273	-	-	-	-
20	111	143	180	222	271	328	394	-	-
30	113	143	178	219	267	322	387	462	548
40	-	139	173	213	260	315	379	454	540
50	-	-	165	205	251	306	370	445	531
60	-	-	-	-	241	296	361	436	524

Coefficient of performance (C.O.P.)

10	3.36	4.12	5.00	6.05	7.31	-	-	-	-
20	2.42	2.98	3.62	4.36	5.22	6.24	7.47	-	-
30	1.71	2.13	2.60	3.14	3.76	4.47	5.30	6.28	7.49
40	-	1.47	1.81	2.20	2.64	3.15	3.73	4.40	5.19
50	-	-	1.19	1.47	1.78	2.13	2.53	2.99	3.53
60	-	-	-	-	1.11	1.35	1.62	1.94	2.29

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

Cooling capacity	8 504	W
Power input	3 896	W
Current consumption	7.40	A
Mass flow	256	kg/h
C.O.P.	2.18	

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	73	dB(A)
With acoustic hood	65	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	5 574	7 016	8 744	10 774	13 123	-	-	-	-
20	4 942	6 230	7 777	9 601	11 720	14 150	16 900	-	-
30	4 290	5 417	6 776	8 387	10 270	12 442	14 919	17 712	20 822
40	3 588	4 547	5 711	7 102	8 740	10 647	12 843	15 344	18 161
50	-	-	4 557	5 718	7 103	8 735	10 641	12 843	15 362
60	-	-	-	-	5 324	6 671	8 276	10 172	12 396

Power input in W

10	1 725	1 760	1 793	1 816	1 820	-	-	-	-
20	2 175	2 205	2 241	2 276	2 301	2 306	2 284	-	-
30	2 736	2 747	2 774	2 808	2 840	2 862	2 864	2 840	2 780
40	3 472	3 451	3 455	3 474	3 500	3 525	3 539	3 534	3 503
50	-	-	4 347	4 339	4 345	4 359	4 371	4 373	4 357
60	-	-	-	-	5 438	5 428	5 424	5 420	5 405

Current consumption in A

10	3.28	3.34	3.41	3.45	3.46	-	-	-	-
20	4.13	4.19	4.26	4.32	4.37	4.38	4.34	-	-
30	5.20	5.22	5.27	5.33	5.39	5.43	5.44	5.39	5.28
40	6.59	6.55	6.56	6.60	6.65	6.69	6.72	6.71	6.65
50	-	-	8.26	8.24	8.25	8.28	8.30	8.31	8.27
60	-	-	-	-	10.33	10.31	10.30	10.29	10.26

Mass flow in kg/h

10	124	162	204	250	301	-	-	-	-
20	132	167	207	250	299	354	416	-	-
30	134	167	205	247	295	348	409	475	548
40	131	163	199	240	287	340	401	467	540
50	-	-	190	230	277	331	391	458	531
60	-	-	-	-	266	320	381	449	524

Coefficient of performance (C.O.P.)

10	3.23	3.99	4.88	5.93	7.21	-	-	-	-
20	2.27	2.83	3.47	4.22	5.09	6.14	7.40	-	-
30	1.57	1.97	2.44	2.99	3.62	4.35	5.21	6.24	7.49
40	1.03	1.32	1.65	2.04	2.50	3.02	3.63	4.34	5.19
50	-	-	1.05	1.32	1.63	2.00	2.43	2.94	3.53
60	-	-	-	-	0.98	1.23	1.53	1.88	2.29

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

Cooling capacity	7 937	W
Power input	3 896	W
Current consumption	7.40	A
Mass flow	282	kg/h
C.O.P.	2.04	

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	73	dB(A)
With acoustic hood	65	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
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	4 712	5 944	7 430	9 208	11 315	-	-	-	-
20	4 339	5 544	6 973	8 664	10 654	12 981	15 683	-	-
30	-	-	6 391	7 961	9 801	11 948	14 439	17 312	20 604
40	-	-	-	7 132	8 788	10 721	12 969	15 568	18 556
50	-	-	-	-	7 647	9 333	11 304	13 596	16 247
60	-	-	-	-	-	-	9 476	11 428	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	-	-	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	-	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	-	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	-	-	5 246	5 261	5 295

Current consumption in A

10	4.36	4.43	4.47	4.51	4.54	-	-	-	-
20	4.87	4.95	5.01	5.05	5.08	5.13	5.19	-	-
30	-	-	5.60	5.64	5.68	5.72	5.78	5.86	5.98
40	-	-	-	6.44	6.48	6.52	6.58	6.65	6.76
50	-	-	-	-	7.62	7.67	7.72	7.79	7.89
60	-	-	-	-	-	-	9.36	9.42	9.51

Mass flow in kg/h

10	77	98	123	152	188	-	-	-	-
20	76	98	123	154	190	233	284	-	-
30	-	-	122	153	189	233	284	344	415
40	-	-	-	150	186	229	280	340	410
50	-	-	-	-	180	222	273	332	402
60	-	-	-	-	-	-	262	320	388

Coefficient of performance (C.O.P.)

10	2.98	3.68	4.48	5.42	6.55	-	-	-	-
20	2.16	2.71	3.34	4.04	4.84	5.77	6.86	-	-
30	-	-	2.46	3.01	3.62	4.31	5.10	6.00	7.05
40	-	-	-	2.17	2.64	3.17	3.76	4.43	5.19
50	-	-	-	-	1.84	2.23	2.68	3.18	3.75
60	-	-	-	-	-	-	1.81	2.17	2.59

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

Cooling capacity	8 232	W
Power input	3 715	W
Current consumption	7.00	A
Mass flow	183	kg/h
C.O.P.	2.22	

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
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	4 731	5 973	7 472	9 265	11 388	-	-	-	-
20	4 301	5 508	6 944	8 646	10 652	12 996	15 712	-	-
30	3 813	4 950	6 288	7 865	9 719	11 888	14 405	17 303	20 604
40	-	-	5 539	6 957	8 626	10 584	12 870	15 517	18 556
50	-	-	-	5 956	7 405	9 120	11 139	13 503	16 247
60	-	-	-	-	6 091	7 528	9 247	11 293	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	2 575	2 574	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	3 280	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	4 175	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	5 299	5 256	5 246	5 261	5 295

Current consumption in A

10	4.36	4.43	4.47	4.51	4.54	-	-	-	-
20	4.87	4.95	5.01	5.05	5.08	5.13	5.19	-	-
30	5.44	5.53	5.60	5.64	5.68	5.72	5.78	5.86	5.98
40	-	-	6.38	6.44	6.48	6.52	6.58	6.65	6.76
50	-	-	-	7.58	7.62	7.67	7.72	7.79	7.89
60	-	-	-	-	9.26	9.31	9.36	9.42	9.51

Mass flow in kg/h

10	91	114	140	171	206	-	-	-	-
20	90	113	141	172	208	251	299	-	-
30	89	112	139	171	208	250	299	354	415
40	-	-	136	168	204	246	295	349	410
50	-	-	-	162	197	239	287	341	402
60	-	-	-	-	188	229	275	329	388

Coefficient of performance (C.O.P.)

10	3.00	3.69	4.50	5.46	6.60	-	-	-	-
20	2.14	2.70	3.32	4.03	4.84	5.77	6.87	-	-
30	1.48	1.92	2.42	2.97	3.59	4.29	5.09	6.00	7.05
40	-	-	1.69	2.11	2.59	3.13	3.73	4.42	5.19
50	-	-	-	1.43	1.78	2.18	2.64	3.16	3.75
60	-	-	-	-	1.15	1.43	1.76	2.15	2.59

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

Cooling capacity	8 029	W
Power input	3 715	W
Current consumption	7.00	A
Mass flow	201	kg/h
C.O.P.	2.16	

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 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	4 712	5 944	7 430	9 208	11 315	-	-	-	-
20	4 339	5 544	6 973	8 664	10 654	12 981	15 683	-	-
30	-	-	6 391	7 961	9 801	11 948	14 439	17 312	20 604
40	-	-	-	7 132	8 788	10 721	12 969	15 568	18 556
50	-	-	-	-	7 647	9 333	11 304	13 596	16 247
60	-	-	-	-	-	-	9 476	11 428	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	-	-	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	-	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	-	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	-	-	5 246	5 261	5 295

Current consumption in A

10	4.36	4.43	4.47	4.51	4.54	-	-	-	-
20	4.87	4.95	5.01	5.05	5.08	5.13	5.19	-	-
30	-	-	5.60	5.64	5.68	5.72	5.78	5.86	5.98
40	-	-	-	6.44	6.48	6.52	6.58	6.65	6.76
50	-	-	-	-	7.62	7.67	7.72	7.79	7.89
60	-	-	-	-	-	-	9.36	9.42	9.51

Mass flow in kg/h

10	78	99	125	155	191	-	-	-	-
20	77	99	125	156	193	237	289	-	-
30	-	-	124	155	193	237	289	351	422
40	-	-	-	153	189	234	286	347	419
50	-	-	-	-	184	227	279	339	410
60	-	-	-	-	-	-	268	327	397

Coefficient of performance (C.O.P.)

10	2.98	3.68	4.48	5.42	6.55	-	-	-	-
20	2.16	2.71	3.34	4.04	4.84	5.77	6.86	-	-
30	-	-	2.46	3.01	3.62	4.31	5.10	6.00	7.05
40	-	-	-	2.17	2.64	3.17	3.76	4.43	5.19
50	-	-	-	-	1.84	2.23	2.68	3.18	3.75
60	-	-	-	-	-	-	1.81	2.17	2.59

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

Cooling capacity	8 232	W
Power input	3 715	W
Current consumption	7.00	A
Mass flow	187	kg/h
C.O.P.	2.22	

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
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	4 721	5 962	7 460	9 253	11 377	-	-	-	-
20	4 290	5 496	6 931	8 634	10 640	12 986	15 704	-	-
30	3 801	4 937	6 274	7 852	9 706	11 876	14 396	17 297	20 604
40	-	-	5 525	6 942	8 612	10 572	12 860	15 511	18 556
50	-	-	-	5 940	7 390	9 106	11 129	13 497	16 247
60	-	-	-	-	6 076	7 514	9 236	11 286	13 709

Power input in W

10	1 579	1 616	1 659	1 698	1 726	-	-	-	-
20	2 012	2 042	2 089	2 144	2 201	2 251	2 288	-	-
30	2 575	2 574	2 600	2 646	2 705	2 770	2 832	2 886	2 922
40	-	-	3 280	3 293	3 329	3 383	3 447	3 513	3 574
50	-	-	-	4 175	4 164	4 182	4 221	4 275	4 335
60	-	-	-	-	5 299	5 256	5 246	5 261	5 295

Current consumption in A

10	4.36	4.43	4.47	4.51	4.54	-	-	-	-
20	4.87	4.95	5.01	5.05	5.08	5.13	5.19	-	-
30	5.44	5.53	5.60	5.64	5.68	5.72	5.78	5.86	5.98
40	-	-	6.38	6.44	6.48	6.52	6.58	6.65	6.76
50	-	-	-	7.58	7.62	7.67	7.72	7.79	7.89
60	-	-	-	-	9.26	9.31	9.36	9.42	9.51

Mass flow in kg/h

10	92	115	142	173	210	-	-	-	-
20	92	115	143	175	212	255	304	-	-
30	90	114	142	174	211	255	304	360	422
40	-	-	139	171	208	251	300	356	419
50	-	-	-	165	202	244	293	348	410
60	-	-	-	-	192	234	281	336	397

Coefficient of performance (C.O.P.)

10	2.99	3.69	4.50	5.45	6.59	-	-	-	-
20	2.13	2.69	3.32	4.03	4.83	5.77	6.86	-	-
30	1.48	1.92	2.41	2.97	3.59	4.29	5.08	5.99	7.05
40	-	-	1.68	2.11	2.59	3.12	3.73	4.42	5.19
50	-	-	-	1.42	1.77	2.18	2.64	3.16	3.75
60	-	-	-	-	1.15	1.43	1.76	2.15	2.59

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

Cooling capacity	8 015	W
Power input	3 715	W
Current consumption	7.00	A
Mass flow	205	kg/h
C.O.P.	2.16	

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 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	5 553	6 890	8 509	10 443	12 723	-	-	-	-
20	4 951	6 215	7 727	9 520	11 626	14 078	16 909	-	-
30	-	5 523	6 899	8 522	10 425	12 641	15 202	18 140	21 488
40	-	-	6 031	7 455	9 125	11 075	13 338	15 944	18 928
50	-	-	-	-	7 733	9 387	11 322	13 568	16 159
60	-	-	-	-	-	7 584	9 161	11 018	13 188

Power input in W

10	1 739	1 777	1 812	1 852	1 904	-	-	-	-
20	2 153	2 210	2 253	2 288	2 322	2 361	2 413	-	-
30	-	2 722	2 790	2 838	2 872	2 900	2 928	2 963	3 012
40	-	-	3 418	3 497	3 550	3 585	3 607	3 624	3 642
50	-	-	-	-	4 352	4 411	4 446	4 463	4 469
60	-	-	-	-	-	5 374	5 440	5 475	5 487

Current consumption in A

10	4.49	4.49	4.51	4.54	4.60	-	-	-	-
20	4.95	4.98	5.02	5.06	5.11	5.16	5.22	-	-
30	-	5.58	5.66	5.72	5.78	5.83	5.88	5.92	5.95
40	-	-	6.46	6.57	6.66	6.72	6.77	6.80	6.81
50	-	-	-	-	7.77	7.87	7.94	7.97	7.97
60	-	-	-	-	-	9.32	9.42	9.48	9.49

Mass flow in kg/h

10	112	141	175	215	263	-	-	-	-
20	109	138	172	212	261	318	386	-	-
30	-	134	168	208	257	314	382	462	556
40	-	-	163	203	251	308	375	455	549
50	-	-	-	-	243	299	367	446	539
60	-	-	-	-	-	289	355	434	526

Coefficient of performance (C.O.P.)

10	3.19	3.88	4.70	5.64	6.68	-	-	-	-
20	2.30	2.81	3.43	4.16	5.01	5.96	7.01	-	-
30	-	2.03	2.47	3.00	3.63	4.36	5.19	6.12	7.13
40	-	-	1.76	2.13	2.57	3.09	3.70	4.40	5.20
50	-	-	-	-	1.78	2.13	2.55	3.04	3.62
60	-	-	-	-	-	1.41	1.68	2.01	2.40

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

Cooling capacity	8 440	W
Power input	3 936	W
Current consumption	7.18	A
Mass flow	247	kg/h
C.O.P.	2.14	

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	5 374	6 708	8 332	10 281	12 588	-	-	-	-
20	4 699	5 949	7 457	9 260	11 392	13 888	16 779	-	-
30	4 039	5 175	6 537	8 164	10 091	12 355	14 991	18 028	21 488
40	3 398	4 391	5 579	7 000	8 692	10 695	13 045	15 779	18 928
50	-	-	4 586	5 773	7 202	8 913	10 948	13 350	16 159
60	-	-	-	-	5 618	7 008	8 699	10 742	13 188

Power input in W

10	1 739	1 777	1 812	1 852	1 904	-	-	-	-
20	2 153	2 210	2 253	2 288	2 322	2 361	2 413	-	-
30	2 627	2 722	2 790	2 838	2 872	2 900	2 928	2 963	3 012
40	3 156	3 307	3 418	3 497	3 550	3 585	3 607	3 624	3 642
50	-	-	4 133	4 261	4 352	4 411	4 446	4 463	4 469
60	-	-	-	-	5 272	5 374	5 440	5 475	5 487

Current consumption in A

10	4.49	4.49	4.51	4.54	4.60	-	-	-	-
20	4.95	4.98	5.02	5.06	5.11	5.16	5.22	-	-
30	5.49	5.58	5.66	5.72	5.78	5.83	5.88	5.92	5.95
40	6.17	6.33	6.46	6.57	6.66	6.72	6.77	6.80	6.81
50	-	-	7.47	7.64	7.77	7.87	7.94	7.97	7.97
60	-	-	-	-	9.17	9.32	9.42	9.48	9.49

Mass flow in kg/h

10	132	164	200	241	290	-	-	-	-
20	129	161	197	238	287	343	407	-	-
30	125	157	192	234	282	338	403	475	556
40	121	151	187	228	276	332	396	468	549
50	-	-	179	220	267	323	386	458	539
60	-	-	-	-	257	311	374	446	526

Coefficient of performance (C.O.P.)

10	3.09	3.78	4.60	5.55	6.61	-	-	-	-
20	2.18	2.69	3.31	4.05	4.91	5.88	6.95	-	-
30	1.54	1.90	2.34	2.88	3.51	4.26	5.12	6.08	7.13
40	1.08	1.33	1.63	2.00	2.45	2.98	3.62	4.35	5.20
50	-	-	1.11	1.35	1.65	2.02	2.46	2.99	3.62
60	-	-	-	-	1.07	1.30	1.60	1.96	2.40

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

Cooling capacity	7 958	W
Power input	3 936	W
Current consumption	7.18	A
Mass flow	272	kg/h
C.O.P.	2.02	

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