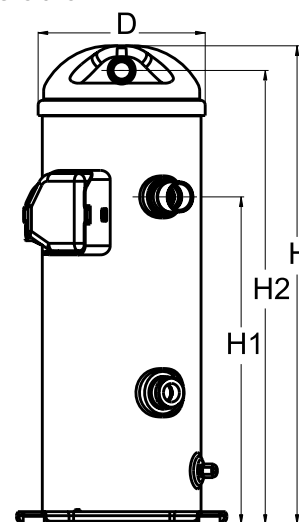


**General Characteristics**

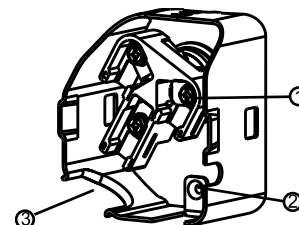
Model number (on compressor nameplate)	MLZ076T4LC9	MLZ076T4LC9
Code number for Singlepack*	121U8022	120U8022
Code number for Industrial pack**	121U8021	120U8021
Drawing number	0SR6167B-3	0SR6167B-3
Suction and discharge connections	Brazed	Brazed
Suction connection	1-1/8" ODF	1-1/8" ODF
Discharge connection	7/8" ODF	7/8" 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	None	None
Swept volume	162,43 cm <sup>3</sup> /rev	
Displacement @ Nominal speed	28.3 m <sup>3</sup> /h @ 2900 rpm - 34.1 m <sup>3</sup> /h @ 3500 rpm	
Net weight	47 kg	
Oil charge	2,66 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	7,26 kg	
Approved refrigerants	R404A, R507, R134a, R407A, R407C, R407F, R22	

**Dimensions**


D=185 mm  
H=545 mm  
H1=369 mm  
H2=509 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	1.125 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.11 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.1 Ω
Rated Load Amps (RLA)	19.2 A
Maximum Continuous Current (MCC)	25 A
Locked Rotor Amps (LRA)	140 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.**

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

**Rotolock accessories, discharge side**

**Code no.**

Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-3/4"	8156132

**Rotolock accessories, sets**

**Code no.**

Solder sleeve adapter set (1-3/4" Rotolock, 1-1/8" ODF), (1-1/4" Rotolock, 7/8" ODF)	120Z0125
Valve set, V02(1"3/4~1"1/8), V05(1"1/4~7/8")	120Z0403
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
--	----------

**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.**

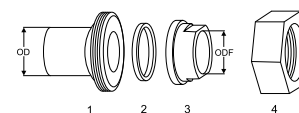
Acoustic hood	120Z5045
Discharge thermostat kit	7750009

**Spare parts**

**Code no.**

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
--	----------

**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	14 172	17 580	21 594	26 236	-	-	-	-	-
20	13 688	16 996	20 888	25 387	30 508	-	-	-	-
30	12 551	15 624	19 225	23 379	28 107	33 423	39 332	-	-
40	11 341	14 199	17 529	21 359	25 715	30 614	36 069	-	-
50	-	12 506	15 584	19 111	23 114	27 617	32 639	-	-
60	-	-	-	16 420	20 088	24 216	28 826	-	-
68	-	-	-	-	-	21 059	25 352	-	-

**Power input in W**

16	3 212	3 135	3 016	2 915	-	-	-	-	-
20	3 940	3 884	3 778	3 679	3 647	-	-	-	-
30	5 259	5 265	5 195	5 108	5 064	5 121	5 340	-	-
40	6 281	6 357	6 333	6 268	6 221	6 251	6 418	-	-
50	-	7 684	7 716	7 682	7 641	7 653	7 777	-	-
60	-	-	-	9 870	9 845	9 849	9 940	-	-
68	-	-	-	-	-	12 528	12 599	-	-

**Current consumption in A**

16	6.18	6.03	5.80	5.61	-	-	-	-	-
20	7.58	7.48	7.27	7.08	7.02	-	-	-	-
30	10.12	10.13	10.00	9.83	9.75	9.86	10.28	-	-
40	12.09	12.23	12.19	12.06	11.97	12.03	12.35	-	-
50	-	14.79	14.85	14.78	14.71	14.73	14.97	-	-
60	-	-	-	19.00	18.95	18.95	19.13	-	-
68	-	-	-	-	-	24.11	24.25	-	-

**Mass flow in kg/h**

16	268	334	409	494	-	-	-	-	-
20	270	334	408	491	584	-	-	-	-
30	271	333	404	485	576	676	785	-	-
40	263	325	397	478	568	668	776	-	-
50	-	305	379	463	555	657	766	-	-
60	-	-	-	435	532	637	751	-	-
68	-	-	-	-	-	612	731	-	-

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

16	4.41	5.61	7.16	9.00	-	-	-	-	-
20	3.47	4.38	5.53	6.90	8.37	-	-	-	-
30	2.39	2.97	3.70	4.58	5.55	6.53	7.37	-	-
40	1.81	2.23	2.77	3.41	4.13	4.90	5.62	-	-
50	-	1.63	2.02	2.49	3.02	3.61	4.20	-	-
60	-	-	-	1.66	2.04	2.46	2.90	-	-
68	-	-	-	-	-	1.68	2.01	-	-

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

Cooling capacity	16 601	W
Power input	6 962	W
Current consumption	13.40	A
Mass flow	390	kg/h
C.O.P.	2.38	

**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	74	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

**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	13 826	17 204	21 201	25 850	-	-	-	-	-
20	13 390	16 670	20 545	25 048	30 211	-	-	-	-
30	12 369	15 420	19 005	23 156	27 906	33 288	39 332	-	-
40	-	14 119	17 434	21 253	25 611	30 539	36 069	-	-
50	-	-	-	19 123	23 108	27 603	32 639	-	-
60	-	-	-	-	20 181	24 263	28 826	-	-
68	-	-	-	-	-	-	25 352	-	-

**Power input in W**

16	3 212	3 135	3 016	2 915	-	-	-	-	-
20	3 940	3 884	3 778	3 679	3 647	-	-	-	-
30	5 259	5 265	5 195	5 108	5 064	5 121	5 340	-	-
40	-	6 357	6 333	6 268	6 221	6 251	6 418	-	-
50	-	-	-	7 682	7 641	7 653	7 777	-	-
60	-	-	-	-	9 845	9 849	9 940	-	-
68	-	-	-	-	-	-	12 599	-	-

**Current consumption in A**

16	6.18	6.03	5.80	5.61	-	-	-	-	-
20	7.58	7.48	7.27	7.08	7.02	-	-	-	-
30	10.12	10.13	10.00	9.83	9.75	9.86	10.28	-	-
40	-	12.23	12.19	12.06	11.97	12.03	12.35	-	-
50	-	-	-	14.78	14.71	14.73	14.97	-	-
60	-	-	-	-	18.95	18.95	19.13	-	-
68	-	-	-	-	-	-	24.25	-	-

**Mass flow in kg/h**

16	236	300	374	462	-	-	-	-	-
20	238	300	373	459	557	-	-	-	-
30	238	299	370	453	549	660	785	-	-
40	-	292	363	446	542	651	776	-	-
50	-	-	-	432	530	641	766	-	-
60	-	-	-	-	507	622	751	-	-
68	-	-	-	-	-	-	731	-	-

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

16	4.30	5.49	7.03	8.87	-	-	-	-	-
20	3.40	4.29	5.44	6.81	8.28	-	-	-	-
30	2.35	2.93	3.66	4.53	5.51	6.50	7.37	-	-
40	-	2.22	2.75	3.39	4.12	4.89	5.62	-	-
50	-	-	-	2.49	3.02	3.61	4.20	-	-
60	-	-	-	-	2.05	2.46	2.90	-	-
68	-	-	-	-	-	-	2.01	-	-

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

Cooling capacity	16 569	W
Power input	6 962	W
Current consumption	13.40	A
Mass flow	357	kg/h
C.O.P.	2.38	

**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	74	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

**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	9 992	12 574	15 588	19 065	23 038	-	-	-	-
30	9 118	11 555	14 413	17 726	21 525	25 842	-	-	-
40	8 041	10 252	12 873	15 936	19 473	23 516	28 098	-	-
50	-	8 940	11 274	14 039	17 265	20 985	25 232	-	-
60	-	-	9 642	12 059	14 926	18 274	22 137	-	-
70	-	-	-	10 022	12 479	15 407	18 836	-	-
73	-	-	-	9 403	11 728	14 520	17 809	-	-

**Power input in W**

22	2 812	2 864	2 955	3 065	3 172	-	-	-	-
30	3 366	3 412	3 490	3 577	3 651	3 690	-	-	-
40	4 160	4 224	4 306	4 386	4 440	4 447	4 385	-	-
50	-	5 149	5 261	5 357	5 417	5 417	5 336	-	-
60	-	-	6 329	6 467	6 556	6 574	6 498	-	-
70	-	-	-	7 688	7 831	7 891	7 845	-	-
73	-	-	-	8 072	8 236	8 313	8 282	-	-

**Current consumption in A**

22	5.41	5.51	5.69	5.90	6.11	-	-	-	-
30	6.48	6.57	6.72	6.88	7.03	7.10	-	-	-
40	8.01	8.13	8.29	8.44	8.54	8.56	8.44	-	-
50	-	9.91	10.12	10.31	10.42	10.43	10.27	-	-
60	-	-	12.18	12.45	12.62	12.65	12.51	-	-
70	-	-	-	14.80	15.07	15.19	15.10	-	-
73	-	-	-	15.53	15.85	16.00	15.94	-	-

**Mass flow in kg/h**

22	214	265	323	388	461	-	-	-	-
30	210	262	320	386	460	542	-	-	-
40	205	256	315	381	456	540	633	-	-
50	-	250	308	374	449	534	629	-	-
60	-	-	299	365	440	525	620	-	-
70	-	-	-	353	427	512	607	-	-
73	-	-	-	349	423	507	603	-	-

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

22	3.55	4.39	5.27	6.22	7.26	-	-	-	-
30	2.71	3.39	4.13	4.96	5.90	7.00	-	-	-
40	1.93	2.43	2.99	3.63	4.39	5.29	6.41	-	-
50	-	1.74	2.14	2.62	3.19	3.87	4.73	-	-
60	-	-	1.52	1.86	2.28	2.78	3.41	-	-
70	-	-	-	1.30	1.59	1.95	2.40	-	-
73	-	-	-	1.16	1.42	1.75	2.15	-	-

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

Cooling capacity	9 595	W
Power input	4 674	W
Current consumption	8.99	A
Mass flow	253	kg/h
C.O.P.	2.05	

**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	74	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

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	10 152	12 721	15 708	19 147	23 076	-	-	-	-
30	-	11 768	14 598	17 863	21 598	25 842	-	-	-
40	-	-	13 138	16 141	19 589	23 516	27 966	-	-
50	-	-	11 617	14 311	17 424	20 985	25 031	-	-
60	-	-	-	12 396	15 126	18 274	-	-	-
70	-	-	-	-	12 720	15 407	-	-	-
73	-	-	-	-	11 981	14 520	-	-	-

Power input in W

22	2 812	2 864	2 955	3 065	3 172	-	-	-	-
30	-	3 412	3 490	3 577	3 651	3 690	-	-	-
40	-	-	4 306	4 386	4 440	4 447	4 385	-	-
50	-	-	5 261	5 357	5 417	5 417	5 336	-	-
60	-	-	-	6 467	6 556	6 574	-	-	-
70	-	-	-	-	7 831	7 891	-	-	-
73	-	-	-	-	8 236	8 313	-	-	-

Current consumption in A

22	5.41	5.51	5.69	5.90	6.11	-	-	-	-
30	-	6.57	6.72	6.88	7.03	7.10	-	-	-
40	-	-	8.29	8.44	8.54	8.56	8.44	-	-
50	-	-	10.12	10.31	10.42	10.43	10.27	-	-
60	-	-	-	12.45	12.62	12.65	-	-	-
70	-	-	-	-	15.07	15.19	-	-	-
73	-	-	-	-	15.85	16.00	-	-	-

Mass flow in kg/h

22	193	243	302	371	450	-	-	-	-
30	-	240	300	369	449	542	-	-	-
40	-	-	295	364	446	540	650	-	-
50	-	-	288	358	439	534	645	-	-
60	-	-	-	348	429	525	-	-	-
70	-	-	-	-	417	512	-	-	-
73	-	-	-	-	413	507	-	-	-

Coefficient of performance (C.O.P.)

22	3.61	4.44	5.32	6.25	7.27	-	-	-	-
30	-	3.45	4.18	4.99	5.92	7.00	-	-	-
40	-	-	3.05	3.68	4.41	5.29	6.38	-	-
50	-	-	2.21	2.67	3.22	3.87	4.69	-	-
60	-	-	-	1.92	2.31	2.78	-	-	-
70	-	-	-	-	1.62	1.95	-	-	-
73	-	-	-	-	1.45	1.75	-	-	-

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	74	dB(A)
With acoustic hood	66	dB(A)

All performance data +/- 5%

**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	12 063	15 148	18 622	22 589	27 152	-	-	-	-
20	10 762	13 743	17 056	20 803	25 088	30 013	35 680	-	-
30	9 498	12 204	15 182	18 537	22 372	26 789	31 892	37 782	44 559
40	-	10 641	13 113	15 902	19 114	22 852	27 218	32 315	38 246
50	-	-	10 959	13 010	15 425	18 309	21 765	25 897	30 809
60	-	-	-	-	11 414	13 270	15 641	18 635	22 355

**Power input in W**

10	3 899	3 818	3 817	3 884	4 009	-	-	-	-
20	4 733	4 655	4 648	4 699	4 800	4 939	5 105	-	-
30	5 783	5 714	5 706	5 748	5 829	5 940	6 069	6 205	6 338
40	-	7 044	7 041	7 078	7 146	7 234	7 330	7 426	7 509
50	-	-	8 700	8 738	8 798	8 869	8 939	8 999	9 037
60	-	-	-	-	10 835	10 893	10 943	10 972	10 971

**Current consumption in A**

10	8.04	7.87	7.87	8.01	8.27	-	-	-	-
20	9.76	9.60	9.58	9.69	9.90	10.18	10.53	-	-
30	11.93	11.78	11.77	11.85	12.02	12.25	12.51	12.79	13.07
40	-	14.52	14.52	14.59	14.73	14.92	15.12	15.31	15.48
50	-	-	17.94	18.02	18.14	18.29	18.43	18.55	18.63
60	-	-	-	-	22.34	22.46	22.56	22.62	22.62

**Mass flow in kg/h**

10	238	312	387	470	566	-	-	-	-
20	214	295	375	462	561	679	820	-	-
30	208	291	374	462	561	676	814	980	1 180
40	-	289	370	456	551	661	792	950	1 141
50	-	-	350	430	517	619	740	887	1 065
60	-	-	-	-	447	537	646	778	941

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

10	3.09	3.97	4.88	5.82	6.77	-	-	-	-
20	2.27	2.95	3.67	4.43	5.23	6.08	6.99	-	-
30	1.64	2.14	2.66	3.23	3.84	4.51	5.26	6.09	7.03
40	-	1.51	1.86	2.25	2.67	3.16	3.71	4.35	5.09
50	-	-	1.26	1.49	1.75	2.06	2.43	2.88	3.41
60	-	-	-	-	1.05	1.22	1.43	1.70	2.04

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

Cooling capacity	17 317	W
Power input	7 927	W
Current consumption	16.35	A
Mass flow	538	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	74	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

**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	11 592	14 659	18 145	22 154	26 788	-	-	-	-
20	10 120	13 051	16 352	20 127	24 483	29 521	35 340	-	-
30	8 687	11 312	14 257	17 627	21 530	26 073	31 363	37 498	44 559
40	7 386	9 547	11 975	14 775	18 055	21 929	26 512	31 916	38 246
50	-	-	9 613	11 690	14 186	17 218	20 913	25 400	30 809
60	-	-	-	-	10 044	12 072	14 698	18 070	22 355

**Power input in W**

10	3 899	3 818	3 817	3 884	4 009	-	-	-	-
20	4 733	4 655	4 648	4 699	4 800	4 939	5 105	-	-
30	5 783	5 714	5 706	5 748	5 829	5 940	6 069	6 205	6 338
40	7 099	7 044	7 041	7 078	7 146	7 234	7 330	7 426	7 509
50	-	-	8 700	8 738	8 798	8 869	8 939	8 999	9 037
60	-	-	-	-	10 835	10 893	10 943	10 972	10 971

**Current consumption in A**

10	8.04	7.87	7.87	8.01	8.27	-	-	-	-
20	9.76	9.60	9.58	9.69	9.90	10.18	10.53	-	-
30	11.93	11.78	11.77	11.85	12.02	12.25	12.51	12.79	13.07
40	14.64	14.52	14.52	14.59	14.73	14.92	15.12	15.31	15.48
50	-	-	17.94	18.02	18.14	18.29	18.43	18.55	18.63
60	-	-	-	-	22.34	22.46	22.56	22.62	22.62

**Mass flow in kg/h**

10	284	364	444	529	625	-	-	-	-
20	255	344	431	520	620	733	866	-	-
30	247	341	430	520	619	731	859	1 009	1 180
40	243	338	425	513	608	714	836	978	1 141
50	-	-	402	484	571	669	782	913	1 065
60	-	-	-	-	494	581	682	801	941

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

10	2.97	3.84	4.75	5.70	6.68	-	-	-	-
20	2.14	2.80	3.52	4.28	5.10	5.98	6.92	-	-
30	1.50	1.98	2.50	3.07	3.69	4.39	5.17	6.04	7.03
40	1.04	1.36	1.70	2.09	2.53	3.03	3.62	4.30	5.09
50	-	-	1.11	1.34	1.61	1.94	2.34	2.82	3.41
60	-	-	-	-	0.93	1.11	1.34	1.65	2.04

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

Cooling capacity	16 162	W
Power input	7 927	W
Current consumption	16.35	A
Mass flow	594	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	74	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%



**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	13 839	15 901	19 845	24 493	-	-	-	-	-
20	12 196	14 137	17 837	22 188	27 270	33 160	-	-	-
30	10 426	12 228	15 656	19 681	24 382	29 839	36 130	43 335	-
40	-	10 192	13 318	16 988	21 280	26 275	32 050	38 686	-
45	-	-	12 095	15 577	19 654	24 407	29 914	36 254	-
50	-	-	-	14 125	17 981	22 484	27 715	33 753	-
55	-	-	-	-	16 262	20 509	25 457	31 185	-
60	-	-	-	-	-	-	-	-	-

**Power input in W**

10	3 503	3 536	3 582	3 630	-	-	-	-	-
20	4 553	4 590	4 641	4 695	4 767	4 873	-	-	-
30	5 674	5 701	5 737	5 774	5 829	5 919	6 059	6 267	-
40	-	7 156	7 154	7 153	7 170	7 221	7 323	7 491	-
45	-	-	8 072	8 044	8 034	8 057	8 131	8 272	-
50	-	-	-	9 117	9 074	9 065	9 106	9 213	-
55	-	-	-	-	10 327	10 279	10 281	10 350	-
60	-	-	-	-	-	-	-	-	-

**Current consumption in A**

10	14.09	14.12	14.17	14.21	-	-	-	-	-
20	14.58	14.61	14.67	14.72	14.76	14.80	-	-	-
30	15.19	15.23	15.28	15.32	15.37	15.41	15.45	15.50	-
40	-	16.32	16.35	16.37	16.40	16.43	16.46	16.50	-
45	-	-	17.17	17.18	17.19	17.21	17.23	17.26	-
50	-	-	-	18.23	18.22	18.22	18.23	18.24	-
55	-	-	-	-	19.54	19.52	19.50	19.50	-
60	-	-	-	-	-	-	-	-	-

**Mass flow in kg/h**

10	242	276	340	414	-	-	-	-	-
20	230	265	329	404	490	589	-	-	-
30	214	249	314	389	475	574	687	815	-
40	-	228	294	369	455	554	667	795	-
45	-	-	281	356	443	542	655	783	-
50	-	-	-	343	429	528	641	769	-
55	-	-	-	-	413	512	625	753	-
60	-	-	-	-	-	-	-	-	-

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

10	3.95	4.50	5.54	6.75	-	-	-	-	-
20	2.68	3.08	3.84	4.73	5.72	6.80	-	-	-
30	1.84	2.14	2.73	3.41	4.18	5.04	5.96	6.91	-
40	-	1.42	1.86	2.37	2.97	3.64	4.38	5.16	-
45	-	-	1.50	1.94	2.45	3.03	3.68	4.38	-
50	-	-	-	1.55	1.98	2.48	3.04	3.66	-
55	-	-	-	-	1.57	2.00	2.48	3.01	-
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	15 577	W
Power input	8 044	W
Current consumption	17.18	A
Mass flow	356	kg/h
C.O.P.	1.94	

**Pressure switch settings**

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

**Sound power data**

Sound power level	74	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

**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	14 626	16 797	20 949	25 838	-	-	-	-	-
20	12 968	15 023	18 940	23 541	28 909	35 126	-	-	-
30	11 170	13 093	16 746	21 030	26 030	31 827	38 504	46 144	-
40	-	11 019	14 381	18 323	22 927	28 277	34 457	41 550	-
45	-	-	13 141	16 901	21 298	26 416	32 339	39 150	-
50	-	-	-	15 437	19 621	24 502	30 164	36 689	-
55	-	-	-	-	-	22 544	27 941	34 179	-
60	-	-	-	-	-	-	-	-	-

**Power input in W**

10	3 503	3 536	3 582	3 630	-	-	-	-	-
20	4 553	4 590	4 641	4 695	4 767	4 873	-	-	-
30	5 674	5 701	5 737	5 774	5 829	5 919	6 059	6 267	-
40	-	7 156	7 154	7 153	7 170	7 221	7 323	7 491	-
45	-	-	8 072	8 044	8 034	8 057	8 131	8 272	-
50	-	-	-	9 117	9 074	9 065	9 106	9 213	-
55	-	-	-	-	-	10 279	10 281	10 350	-
60	-	-	-	-	-	-	-	-	-

**Current consumption in A**

10	14.09	14.12	14.17	14.21	-	-	-	-	-
20	14.58	14.61	14.67	14.72	14.76	14.80	-	-	-
30	15.19	15.23	15.28	15.32	15.37	15.41	15.45	15.50	-
40	-	16.32	16.35	16.37	16.40	16.43	16.46	16.50	-
45	-	-	17.17	17.18	17.19	17.21	17.23	17.26	-
50	-	-	-	18.23	18.22	18.22	18.23	18.24	-
55	-	-	-	-	-	19.52	19.50	19.50	-
60	-	-	-	-	-	-	-	-	-

**Mass flow in kg/h**

10	240	274	338	412	-	-	-	-	-
20	229	263	327	402	487	585	-	-	-
30	213	248	312	387	473	571	683	810	-
40	-	227	292	367	453	551	663	790	-
45	-	-	280	354	440	539	651	778	-
50	-	-	-	341	426	525	637	764	-
55	-	-	-	-	-	509	621	748	-
60	-	-	-	-	-	-	-	-	-

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

10	4.18	4.75	5.85	7.12	-	-	-	-	-
20	2.85	3.27	4.08	5.01	6.06	7.21	-	-	-
30	1.97	2.30	2.92	3.64	4.47	5.38	6.35	7.36	-
40	-	1.54	2.01	2.56	3.20	3.92	4.71	5.55	-
45	-	-	1.63	2.10	2.65	3.28	3.98	4.73	-
50	-	-	-	1.69	2.16	2.70	3.31	3.98	-
55	-	-	-	-	-	2.19	2.72	3.30	-
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	16 901	W
Power input	8 044	W
Current consumption	17.18	A
Mass flow	354	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	74	dB(A)
With acoustic hood	66	dB(A)

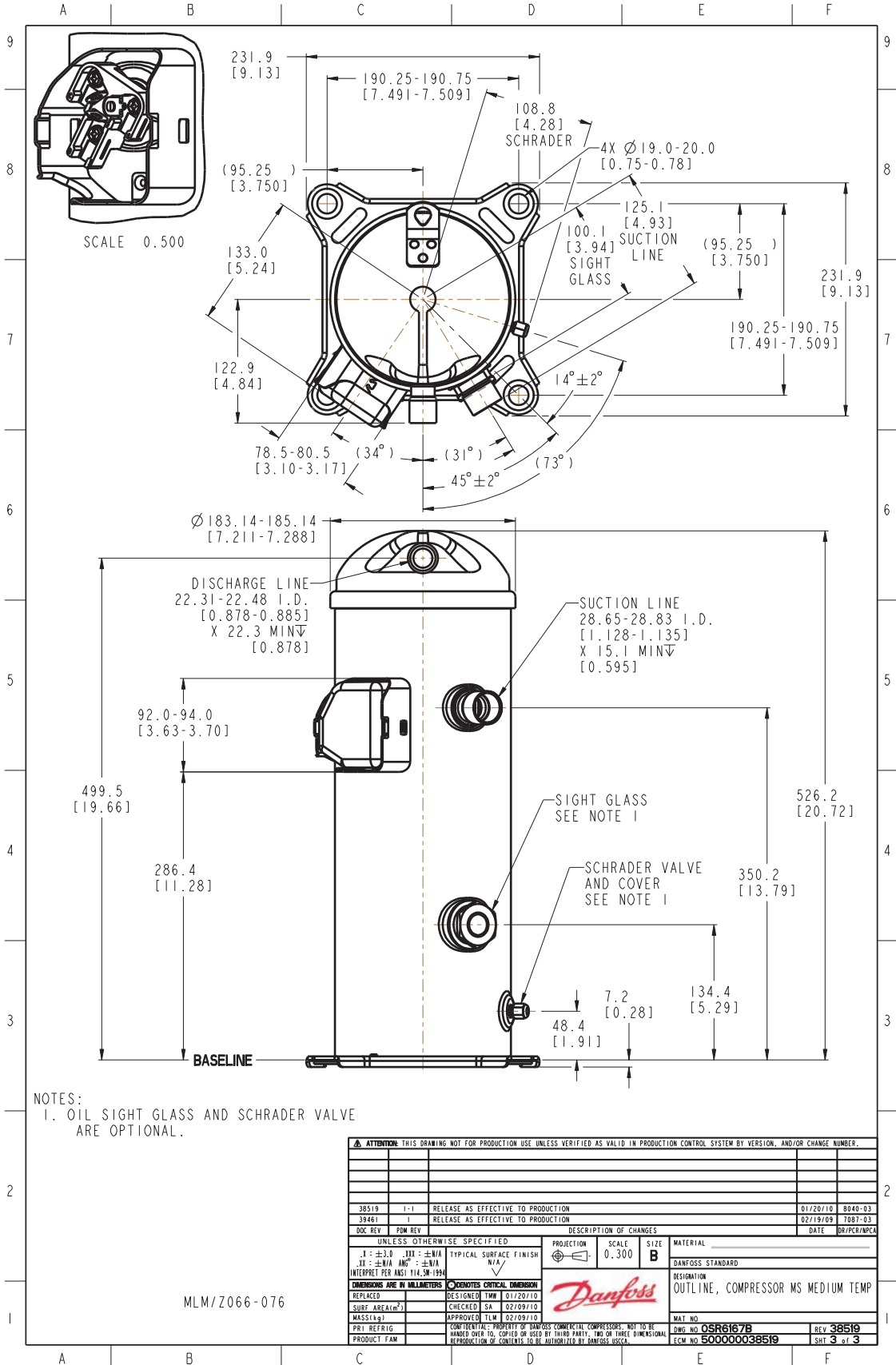
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

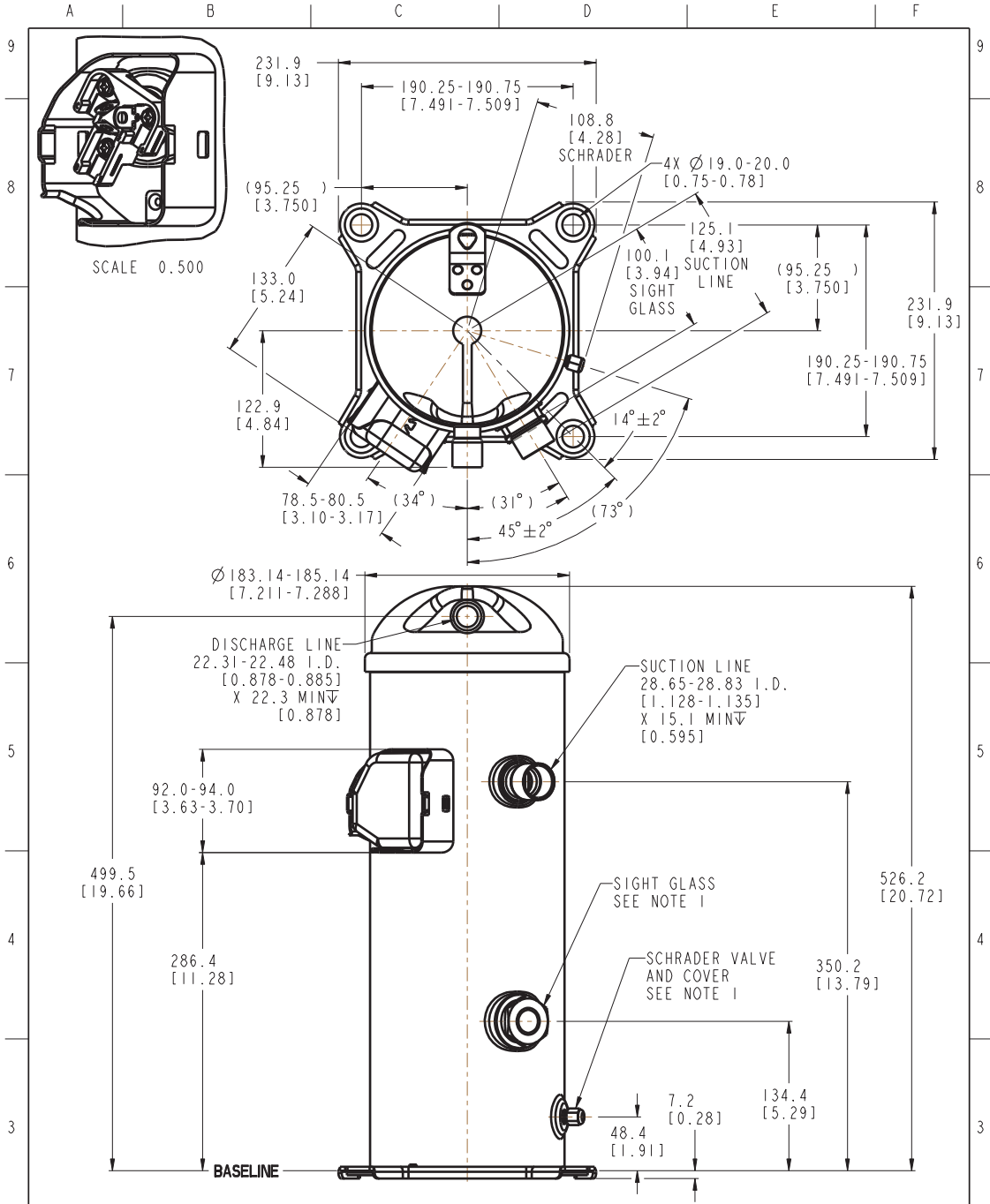
Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.



Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without consequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss, the Danfoss logotype and Maneurop are trademarks of Danfoss A/S. All rights reserved.



NOTES:  
1. OIL SIGHT GLASS AND SCHRADER VALVE ARE OPTIONAL.

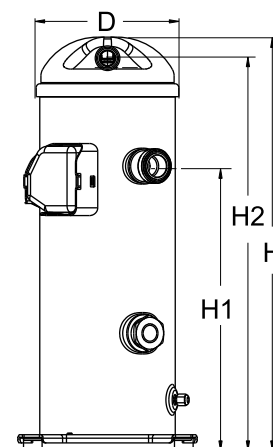
MLM/Z066-076

<b>ATTENTION:</b> THIS DRAWING NOT FOR PRODUCTION USE UNLESS VERIFIED AS VALID IN PRODUCTION CONTROL SYSTEM BY VERSION, AND/OR CHANGE NUMBER.			
38519	I-1	RELEASE AS EFFECTIVE TO PRODUCTION	01/20/10 8040-03
39461	I	RELEASE AS EFFECTIVE TO PRODUCTION	02/19/09 7087-03
DOC REV	FORM REV	DESCRIPTION OF CHANGES	DATE DR/PCR/PCA
UNLESS OTHERWISE SPECIFIED:		PROJECTION	MATERIAL
1: ±0.10	IT1 - ±0.075	SCALE	DANFOSS STANDARD
IT1: ±0.04	IT1: ±0.04	0.300	
INTERPRET PER ANSI Y14.5M-1994	TYPICAL SURFACE FINISH	SIZE	
	N/A	B	
DIMENSIONS ARE IN MILLIMETERS		DESIGNATION	
REPLACED	DESIGNED TMM	OUTLINE, COMPRESSOR MS MEDIUM TEMP	
SURF AREA (m <sup>2</sup> )	CHECKED SA	MAT NO	
MASS (kg)	APPROVED TELM	OSR6167B	
PROF REFRIG	APPROVED TELM	REV 38519	
PRODUCT FAM	APPROVED TELM	ECM NO 500000038519	
CONFIDENTIAL - PROPERTY OF DANFOSS COMMERCIAL COMPRESSORS, NOT TO BE HANDED OVER TO, COPIED OR USED BY THIRD PARTY. TWO OR THREE DIMENSIONAL REPRODUCTION OF CONTENTS TO BE AUTHORIZED BY DANFOSS US/CA.		SHT 3 of 3	

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without consequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss, the Danfoss logotype and Maneurop are trademarks of Danfoss A/S. All rights reserved.

**General Characteristics**

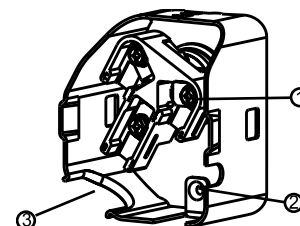
Model number (on compressor nameplate)		<b>MLZ076T4LQ9</b>
Code number for Singlepack*		121U8607
Code number for Industrial pack**		121U8606
Drawing number		0SR6307B-3
Suction and discharge connections		Rotolock
Suction connection		1-3/4 " Rotolock
Discharge connection		1-1/4 " Rotolock
Suction connection with supplied sleeve		1-1/8 " -
Discharge connection with supplied sleeve	- "	7/8 " -
Oil sight glass		Threaded
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		None
IPR valve		None
Swept volume		162,43 cm <sup>3</sup> /rev
Displacement @ Nominal speed		28.3 m <sup>3</sup> /h @ 2900 rpm - 34.1 m <sup>3</sup> /h @ 3500 rpm
Net weight		47 kg
Oil charge		2,66 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		7,26 kg
Approved refrigerants		R404A, R507, R134a, R407A, R407C, R407F, R22

**Dimensions**


D=184 mm  
H=545,2 mm  
H1=369,2 mm  
H2=518 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	1.125 Ω
Winding resistance between phases 1-3 +/- 7% at 25°C	1.11 Ω
Winding resistance between phases 2-3 +/- 7% at 25°C	1.1 Ω
Rated Load Amps (RLA)	19.2 A
Maximum Continuous Current (MCC)	25 A
Locked Rotor Amps (LRA)	140 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.**

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

**Rotolock accessories, discharge side**

**Code no.**

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

**Rotolock accessories, sets**

**Code no.**

Teflon seals, sleeves, nuts for discharge and suction (1"1/4 and 1"1/4)	120Z5076
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
--	----------

**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.**

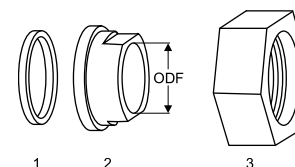
Acoustic hood	120Z5045
Discharge thermostat kit	7750009

**Spare parts**

**Code no.**

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
--	----------

**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	14 172	17 580	21 594	26 236	-	-	-	-	-
20	13 688	16 996	20 888	25 387	30 508	-	-	-	-
30	12 551	15 624	19 225	23 379	28 107	33 423	39 332	-	-
40	11 341	14 199	17 529	21 359	25 715	30 614	36 069	-	-
50	-	12 506	15 584	19 111	23 114	27 617	32 639	-	-
60	-	-	-	16 420	20 088	24 216	28 826	-	-
68	-	-	-	-	-	21 059	25 352	-	-

**Power input in W**

16	3 212	3 135	3 016	2 915	-	-	-	-	-
20	3 940	3 884	3 778	3 679	3 647	-	-	-	-
30	5 259	5 265	5 195	5 108	5 064	5 121	5 340	-	-
40	6 281	6 357	6 333	6 268	6 221	6 251	6 418	-	-
50	-	7 684	7 716	7 682	7 641	7 653	7 777	-	-
60	-	-	-	9 870	9 845	9 849	9 940	-	-
68	-	-	-	-	-	12 528	12 599	-	-

**Current consumption in A**

16	6.18	6.03	5.80	5.61	-	-	-	-	-
20	7.58	7.48	7.27	7.08	7.02	-	-	-	-
30	10.12	10.13	10.00	9.83	9.75	9.86	10.28	-	-
40	12.09	12.23	12.19	12.06	11.97	12.03	12.35	-	-
50	-	14.79	14.85	14.78	14.71	14.73	14.97	-	-
60	-	-	-	19.00	18.95	18.95	19.13	-	-
68	-	-	-	-	-	24.11	24.25	-	-

**Mass flow in kg/h**

16	268	334	409	494	-	-	-	-	-
20	270	334	408	491	584	-	-	-	-
30	271	333	404	485	576	676	785	-	-
40	263	325	397	478	568	668	776	-	-
50	-	305	379	463	555	657	766	-	-
60	-	-	-	435	532	637	751	-	-
68	-	-	-	-	-	612	731	-	-

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

16	4.41	5.61	7.16	9.00	-	-	-	-	-
20	3.47	4.38	5.53	6.90	8.37	-	-	-	-
30	2.39	2.97	3.70	4.58	5.55	6.53	7.37	-	-
40	1.81	2.23	2.77	3.41	4.13	4.90	5.62	-	-
50	-	1.63	2.02	2.49	3.02	3.61	4.20	-	-
60	-	-	-	1.66	2.04	2.46	2.90	-	-
68	-	-	-	-	-	1.68	2.01	-	-

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

Cooling capacity	16 601	W
Power input	6 962	W
Current consumption	13.40	A
Mass flow	390	kg/h
C.O.P.	2.38	

**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	74	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

**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	13 826	17 204	21 201	25 850	-	-	-	-	-
20	13 390	16 670	20 545	25 048	30 211	-	-	-	-
30	12 369	15 420	19 005	23 156	27 906	33 288	39 332	-	-
40	-	14 119	17 434	21 253	25 611	30 539	36 069	-	-
50	-	-	-	19 123	23 108	27 603	32 639	-	-
60	-	-	-	-	20 181	24 263	28 826	-	-
68	-	-	-	-	-	-	25 352	-	-

**Power input in W**

16	3 212	3 135	3 016	2 915	-	-	-	-	-
20	3 940	3 884	3 778	3 679	3 647	-	-	-	-
30	5 259	5 265	5 195	5 108	5 064	5 121	5 340	-	-
40	-	6 357	6 333	6 268	6 221	6 251	6 418	-	-
50	-	-	-	7 682	7 641	7 653	7 777	-	-
60	-	-	-	-	9 845	9 849	9 940	-	-
68	-	-	-	-	-	-	12 599	-	-

**Current consumption in A**

16	6.18	6.03	5.80	5.61	-	-	-	-	-
20	7.58	7.48	7.27	7.08	7.02	-	-	-	-
30	10.12	10.13	10.00	9.83	9.75	9.86	10.28	-	-
40	-	12.23	12.19	12.06	11.97	12.03	12.35	-	-
50	-	-	-	14.78	14.71	14.73	14.97	-	-
60	-	-	-	-	18.95	18.95	19.13	-	-
68	-	-	-	-	-	-	24.25	-	-

**Mass flow in kg/h**

16	236	300	374	462	-	-	-	-	-
20	238	300	373	459	557	-	-	-	-
30	238	299	370	453	549	660	785	-	-
40	-	292	363	446	542	651	776	-	-
50	-	-	-	432	530	641	766	-	-
60	-	-	-	-	507	622	751	-	-
68	-	-	-	-	-	-	731	-	-

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

16	4.30	5.49	7.03	8.87	-	-	-	-	-
20	3.40	4.29	5.44	6.81	8.28	-	-	-	-
30	2.35	2.93	3.66	4.53	5.51	6.50	7.37	-	-
40	-	2.22	2.75	3.39	4.12	4.89	5.62	-	-
50	-	-	-	2.49	3.02	3.61	4.20	-	-
60	-	-	-	-	2.05	2.46	2.90	-	-
68	-	-	-	-	-	-	2.01	-	-

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

Cooling capacity	16 569	W
Power input	6 962	W
Current consumption	13.40	A
Mass flow	357	kg/h
C.O.P.	2.38	

**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	74	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%



**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	9 992	12 574	15 588	19 065	23 038	-	-	-	-
30	9 118	11 555	14 413	17 726	21 525	25 842	-	-	-
40	8 041	10 252	12 873	15 936	19 473	23 516	28 098	-	-
50	-	8 940	11 274	14 039	17 265	20 985	25 232	-	-
60	-	-	9 642	12 059	14 926	18 274	22 137	-	-
70	-	-	-	10 022	12 479	15 407	18 836	-	-
73	-	-	-	9 403	11 728	14 520	17 809	-	-

**Power input in W**

22	2 812	2 864	2 955	3 065	3 172	-	-	-	-
30	3 366	3 412	3 490	3 577	3 651	3 690	-	-	-
40	4 160	4 224	4 306	4 386	4 440	4 447	4 385	-	-
50	-	5 149	5 261	5 357	5 417	5 417	5 336	-	-
60	-	-	6 329	6 467	6 556	6 574	6 498	-	-
70	-	-	-	7 688	7 831	7 891	7 845	-	-
73	-	-	-	8 072	8 236	8 313	8 282	-	-

**Current consumption in A**

22	5.41	5.51	5.69	5.90	6.11	-	-	-	-
30	6.48	6.57	6.72	6.88	7.03	7.10	-	-	-
40	8.01	8.13	8.29	8.44	8.54	8.56	8.44	-	-
50	-	9.91	10.12	10.31	10.42	10.43	10.27	-	-
60	-	-	12.18	12.45	12.62	12.65	12.51	-	-
70	-	-	-	14.80	15.07	15.19	15.10	-	-
73	-	-	-	15.53	15.85	16.00	15.94	-	-

**Mass flow in kg/h**

22	214	265	323	388	461	-	-	-	-
30	210	262	320	386	460	542	-	-	-
40	205	256	315	381	456	540	633	-	-
50	-	250	308	374	449	534	629	-	-
60	-	-	299	365	440	525	620	-	-
70	-	-	-	353	427	512	607	-	-
73	-	-	-	349	423	507	603	-	-

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

22	3.55	4.39	5.27	6.22	7.26	-	-	-	-
30	2.71	3.39	4.13	4.96	5.90	7.00	-	-	-
40	1.93	2.43	2.99	3.63	4.39	5.29	6.41	-	-
50	-	1.74	2.14	2.62	3.19	3.87	4.73	-	-
60	-	-	1.52	1.86	2.28	2.78	3.41	-	-
70	-	-	-	1.30	1.59	1.95	2.40	-	-
73	-	-	-	1.16	1.42	1.75	2.15	-	-

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

Cooling capacity	9 595	W
Power input	4 674	W
Current consumption	8.99	A
Mass flow	253	kg/h
C.O.P.	2.05	

**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	74	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

**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	10 152	12 721	15 708	19 147	23 076	-	-	-	-
30	-	11 768	14 598	17 863	21 598	25 842	-	-	-
40	-	-	13 138	16 141	19 589	23 516	27 966	-	-
50	-	-	11 617	14 311	17 424	20 985	25 031	-	-
60	-	-	-	12 396	15 126	18 274	-	-	-
70	-	-	-	-	12 720	15 407	-	-	-
73	-	-	-	-	11 981	14 520	-	-	-

**Power input in W**

22	2 812	2 864	2 955	3 065	3 172	-	-	-	-
30	-	3 412	3 490	3 577	3 651	3 690	-	-	-
40	-	-	4 306	4 386	4 440	4 447	4 385	-	-
50	-	-	5 261	5 357	5 417	5 417	5 336	-	-
60	-	-	-	6 467	6 556	6 574	-	-	-
70	-	-	-	-	7 831	7 891	-	-	-
73	-	-	-	-	8 236	8 313	-	-	-

**Current consumption in A**

22	5.41	5.51	5.69	5.90	6.11	-	-	-	-
30	-	6.57	6.72	6.88	7.03	7.10	-	-	-
40	-	-	8.29	8.44	8.54	8.56	8.44	-	-
50	-	-	10.12	10.31	10.42	10.43	10.27	-	-
60	-	-	-	12.45	12.62	12.65	-	-	-
70	-	-	-	-	15.07	15.19	-	-	-
73	-	-	-	-	15.85	16.00	-	-	-

**Mass flow in kg/h**

22	193	243	302	371	450	-	-	-	-
30	-	240	300	369	449	542	-	-	-
40	-	-	295	364	446	540	650	-	-
50	-	-	288	358	439	534	645	-	-
60	-	-	-	348	429	525	-	-	-
70	-	-	-	-	417	512	-	-	-
73	-	-	-	-	413	507	-	-	-

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

22	3.61	4.44	5.32	6.25	7.27	-	-	-	-
30	-	3.45	4.18	4.99	5.92	7.00	-	-	-
40	-	-	3.05	3.68	4.41	5.29	6.38	-	-
50	-	-	2.21	2.67	3.22	3.87	4.69	-	-
60	-	-	-	1.92	2.31	2.78	-	-	-
70	-	-	-	-	1.62	1.95	-	-	-
73	-	-	-	-	1.45	1.75	-	-	-

**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	74	dB(A)
With acoustic hood	66	dB(A)

All performance data +/- 5%

**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	12 063	15 148	18 622	22 589	27 152	-	-	-	-
20	10 762	13 743	17 056	20 803	25 088	30 013	35 680	-	-
30	9 498	12 204	15 182	18 537	22 372	26 789	31 892	37 782	44 559
40	-	10 641	13 113	15 902	19 114	22 852	27 218	32 315	38 246
50	-	-	10 959	13 010	15 425	18 309	21 765	25 897	30 809
60	-	-	-	-	11 414	13 270	15 641	18 635	22 355

**Power input in W**

10	3 899	3 818	3 817	3 884	4 009	-	-	-	-
20	4 733	4 655	4 648	4 699	4 800	4 939	5 105	-	-
30	5 783	5 714	5 706	5 748	5 829	5 940	6 069	6 205	6 338
40	-	7 044	7 041	7 078	7 146	7 234	7 330	7 426	7 509
50	-	-	8 700	8 738	8 798	8 869	8 939	8 999	9 037
60	-	-	-	-	10 835	10 893	10 943	10 972	10 971

**Current consumption in A**

10	8.04	7.87	7.87	8.01	8.27	-	-	-	-
20	9.76	9.60	9.58	9.69	9.90	10.18	10.53	-	-
30	11.93	11.78	11.77	11.85	12.02	12.25	12.51	12.79	13.07
40	-	14.52	14.52	14.59	14.73	14.92	15.12	15.31	15.48
50	-	-	17.94	18.02	18.14	18.29	18.43	18.55	18.63
60	-	-	-	-	22.34	22.46	22.56	22.62	22.62

**Mass flow in kg/h**

10	238	312	387	470	566	-	-	-	-
20	214	295	375	462	561	679	820	-	-
30	208	291	374	462	561	676	814	980	1 180
40	-	289	370	456	551	661	792	950	1 141
50	-	-	350	430	517	619	740	887	1 065
60	-	-	-	-	447	537	646	778	941

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

10	3.09	3.97	4.88	5.82	6.77	-	-	-	-
20	2.27	2.95	3.67	4.43	5.23	6.08	6.99	-	-
30	1.64	2.14	2.66	3.23	3.84	4.51	5.26	6.09	7.03
40	-	1.51	1.86	2.25	2.67	3.16	3.71	4.35	5.09
50	-	-	1.26	1.49	1.75	2.06	2.43	2.88	3.41
60	-	-	-	-	1.05	1.22	1.43	1.70	2.04

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

Cooling capacity	17 317	W
Power input	7 927	W
Current consumption	16.35	A
Mass flow	538	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	74	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

**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	11 592	14 659	18 145	22 154	26 788	-	-	-	-
20	10 120	13 051	16 352	20 127	24 483	29 521	35 340	-	-
30	8 687	11 312	14 257	17 627	21 530	26 073	31 363	37 498	44 559
40	7 386	9 547	11 975	14 775	18 055	21 929	26 512	31 916	38 246
50	-	-	9 613	11 690	14 186	17 218	20 913	25 400	30 809
60	-	-	-	-	10 044	12 072	14 698	18 070	22 355

**Power input in W**

10	3 899	3 818	3 817	3 884	4 009	-	-	-	-
20	4 733	4 655	4 648	4 699	4 800	4 939	5 105	-	-
30	5 783	5 714	5 706	5 748	5 829	5 940	6 069	6 205	6 338
40	7 099	7 044	7 041	7 078	7 146	7 234	7 330	7 426	7 509
50	-	-	8 700	8 738	8 798	8 869	8 939	8 999	9 037
60	-	-	-	-	10 835	10 893	10 943	10 972	10 971

**Current consumption in A**

10	8.04	7.87	7.87	8.01	8.27	-	-	-	-
20	9.76	9.60	9.58	9.69	9.90	10.18	10.53	-	-
30	11.93	11.78	11.77	11.85	12.02	12.25	12.51	12.79	13.07
40	14.64	14.52	14.52	14.59	14.73	14.92	15.12	15.31	15.48
50	-	-	17.94	18.02	18.14	18.29	18.43	18.55	18.63
60	-	-	-	-	22.34	22.46	22.56	22.62	22.62

**Mass flow in kg/h**

10	284	364	444	529	625	-	-	-	-
20	255	344	431	520	620	733	866	-	-
30	247	341	430	520	619	731	859	1 009	1 180
40	243	338	425	513	608	714	836	978	1 141
50	-	-	402	484	571	669	782	913	1 065
60	-	-	-	-	494	581	682	801	941

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

10	2.97	3.84	4.75	5.70	6.68	-	-	-	-
20	2.14	2.80	3.52	4.28	5.10	5.98	6.92	-	-
30	1.50	1.98	2.50	3.07	3.69	4.39	5.17	6.04	7.03
40	1.04	1.36	1.70	2.09	2.53	3.03	3.62	4.30	5.09
50	-	-	1.11	1.34	1.61	1.94	2.34	2.82	3.41
60	-	-	-	-	0.93	1.11	1.34	1.65	2.04

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

Cooling capacity	16 162	W
Power input	7 927	W
Current consumption	16.35	A
Mass flow	594	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	74	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

**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	13 839	15 901	19 845	24 493	-	-	-	-	-
20	12 196	14 137	17 837	22 188	27 270	33 160	-	-	-
30	10 426	12 228	15 656	19 681	24 382	29 839	36 130	43 335	-
40	-	10 192	13 318	16 988	21 280	26 275	32 050	38 686	-
45	-	-	12 095	15 577	19 654	24 407	29 914	36 254	-
50	-	-	-	14 125	17 981	22 484	27 715	33 753	-
55	-	-	-	-	16 262	20 509	25 457	31 185	-
60	-	-	-	-	-	-	-	-	-

**Power input in W**

10	3 503	3 536	3 582	3 630	-	-	-	-	-
20	4 553	4 590	4 641	4 695	4 767	4 873	-	-	-
30	5 674	5 701	5 737	5 774	5 829	5 919	6 059	6 267	-
40	-	7 156	7 154	7 153	7 170	7 221	7 323	7 491	-
45	-	-	8 072	8 044	8 034	8 057	8 131	8 272	-
50	-	-	-	9 117	9 074	9 065	9 106	9 213	-
55	-	-	-	-	10 327	10 279	10 281	10 350	-
60	-	-	-	-	-	-	-	-	-

**Current consumption in A**

10	14.09	14.12	14.17	14.21	-	-	-	-	-
20	14.58	14.61	14.67	14.72	14.76	14.80	-	-	-
30	15.19	15.23	15.28	15.32	15.37	15.41	15.45	15.50	-
40	-	16.32	16.35	16.37	16.40	16.43	16.46	16.50	-
45	-	-	17.17	17.18	17.19	17.21	17.23	17.26	-
50	-	-	-	18.23	18.22	18.22	18.23	18.24	-
55	-	-	-	-	19.54	19.52	19.50	19.50	-
60	-	-	-	-	-	-	-	-	-

**Mass flow in kg/h**

10	242	276	340	414	-	-	-	-	-
20	230	265	329	404	490	589	-	-	-
30	214	249	314	389	475	574	687	815	-
40	-	228	294	369	455	554	667	795	-
45	-	-	281	356	443	542	655	783	-
50	-	-	-	343	429	528	641	769	-
55	-	-	-	-	413	512	625	753	-
60	-	-	-	-	-	-	-	-	-

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

10	3.95	4.50	5.54	6.75	-	-	-	-	-
20	2.68	3.08	3.84	4.73	5.72	6.80	-	-	-
30	1.84	2.14	2.73	3.41	4.18	5.04	5.96	6.91	-
40	-	1.42	1.86	2.37	2.97	3.64	4.38	5.16	-
45	-	-	1.50	1.94	2.45	3.03	3.68	4.38	-
50	-	-	-	1.55	1.98	2.48	3.04	3.66	-
55	-	-	-	-	1.57	2.00	2.48	3.01	-
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	15 577	W
Power input	8 044	W
Current consumption	17.18	A
Mass flow	356	kg/h
C.O.P.	1.94	

**Pressure switch settings**

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

**Sound power data**

Sound power level	74	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.

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	14 626	16 797	20 949	25 838	-	-	-	-	-
20	12 968	15 023	18 940	23 541	28 909	35 126	-	-	-
30	11 170	13 093	16 746	21 030	26 030	31 827	38 504	46 144	-
40	-	11 019	14 381	18 323	22 927	28 277	34 457	41 550	-
45	-	-	13 141	16 901	21 298	26 416	32 339	39 150	-
50	-	-	-	15 437	19 621	24 502	30 164	36 689	-
55	-	-	-	-	-	22 544	27 941	34 179	-
60	-	-	-	-	-	-	-	-	-

Power input in W

10	3 503	3 536	3 582	3 630	-	-	-	-	-
20	4 553	4 590	4 641	4 695	4 767	4 873	-	-	-
30	5 674	5 701	5 737	5 774	5 829	5 919	6 059	6 267	-
40	-	7 156	7 154	7 153	7 170	7 221	7 323	7 491	-
45	-	-	8 072	8 044	8 034	8 057	8 131	8 272	-
50	-	-	-	9 117	9 074	9 065	9 106	9 213	-
55	-	-	-	-	-	10 279	10 281	10 350	-
60	-	-	-	-	-	-	-	-	-

Current consumption in A

10	14.09	14.12	14.17	14.21	-	-	-	-	-
20	14.58	14.61	14.67	14.72	14.76	14.80	-	-	-
30	15.19	15.23	15.28	15.32	15.37	15.41	15.45	15.50	-
40	-	16.32	16.35	16.37	16.40	16.43	16.46	16.50	-
45	-	-	17.17	17.18	17.19	17.21	17.23	17.26	-
50	-	-	-	18.23	18.22	18.22	18.23	18.24	-
55	-	-	-	-	-	19.52	19.50	19.50	-
60	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

10	240	274	338	412	-	-	-	-	-
20	229	263	327	402	487	585	-	-	-
30	213	248	312	387	473	571	683	810	-
40	-	227	292	367	453	551	663	790	-
45	-	-	280	354	440	539	651	778	-
50	-	-	-	341	426	525	637	764	-
55	-	-	-	-	-	509	621	748	-
60	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

10	4.18	4.75	5.85	7.12	-	-	-	-	-
20	2.85	3.27	4.08	5.01	6.06	7.21	-	-	-
30	1.97	2.30	2.92	3.64	4.47	5.38	6.35	7.36	-
40	-	1.54	2.01	2.56	3.20	3.92	4.71	5.55	-
45	-	-	1.63	2.10	2.65	3.28	3.98	4.73	-
50	-	-	-	1.69	2.16	2.70	3.31	3.98	-
55	-	-	-	-	-	2.19	2.72	3.30	-
60	-	-	-	-	-	-	-	-	-

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

Cooling capacity	16 901	W
Power input	8 044	W
Current consumption	17.18	A
Mass flow	354	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	74	dB(A)
With acoustic hood	66	dB(A)

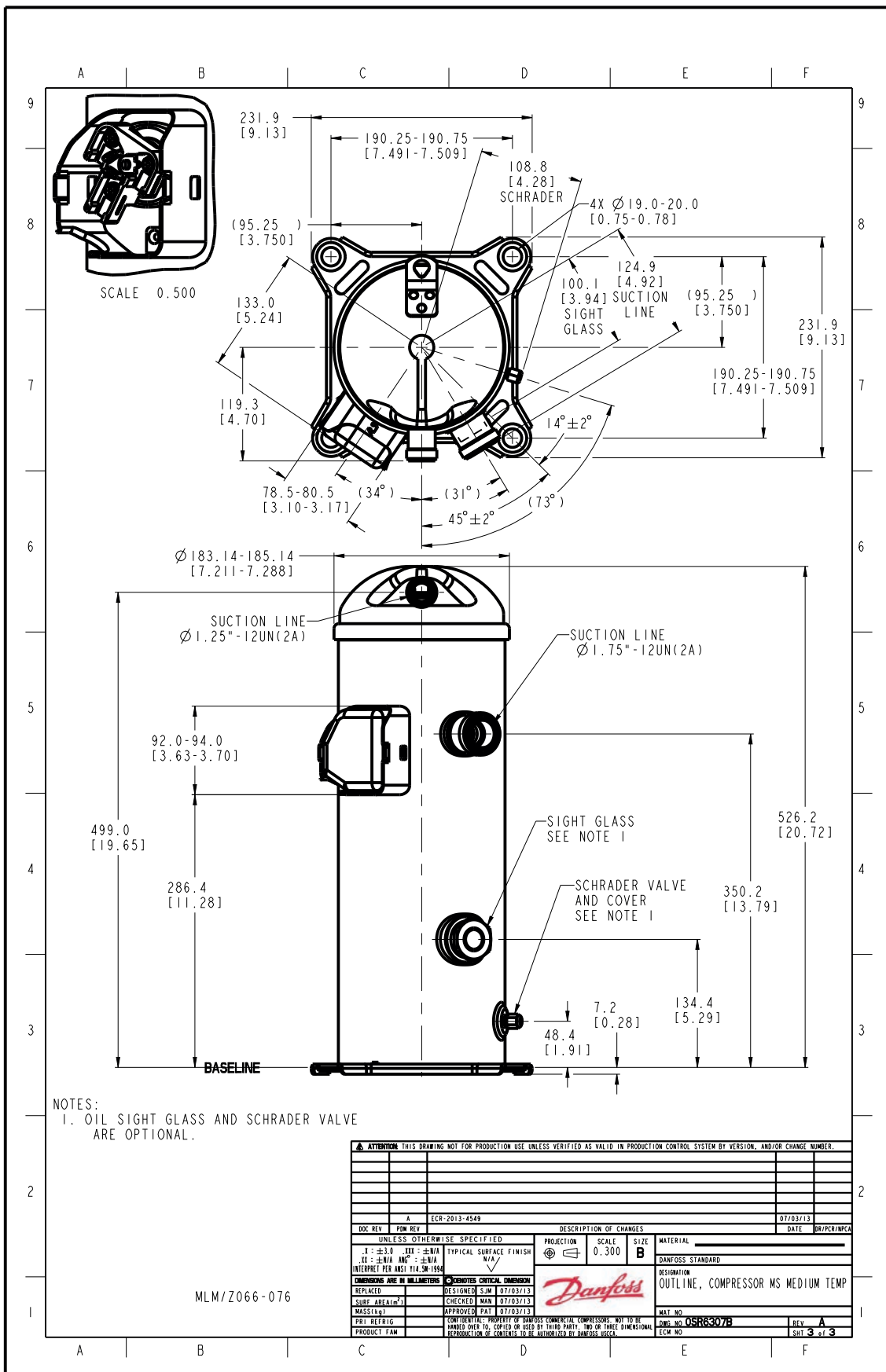
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.



NOTES:  
1. OIL SIGHT GLASS AND SCHRADER VALVE ARE OPTIONAL.

MLM/Z066-076

<p><b>ATTENTION</b> THIS DRAWING NOT FOR PRODUCTION USE UNLESS VERIFIED AS VALID IN PRODUCTION CONTROL SYSTEM BY VERSION, AND/OR CHANGE NUMBER.</p>											
<table border="1"> <tr> <td>DOC REV</td> <td>REV</td> <td>DESCRIPTION OF CHANGES</td> <td>DATE</td> </tr> <tr> <td>A</td> <td>ECR-2013-4549</td> <td></td> <td>07/03/13</td> </tr> </table>				DOC REV	REV	DESCRIPTION OF CHANGES	DATE	A	ECR-2013-4549		07/03/13
DOC REV	REV	DESCRIPTION OF CHANGES	DATE								
A	ECR-2013-4549		07/03/13								
<p>UNLESS OTHERWISE SPECIFIED</p>		<p>PRODUCTION SCALE</p>	<p>MATERIAL</p>								
<p>.1 - ±0.3    .13 - ±0.14    .15 - ±0.15</p> <p>TYPICAL SURFACE FINISH</p>		<p>0.300</p>	<p>DANFOSS STANDARD</p>								
<p>REPLACED</p>		<p>DESIGNED SJM 07/03/13</p>	<p>RESIGNATION</p>								
<p>CHECKED MAN 07/03/13</p>		<p>APPROVED PAT 07/03/13</p>	<p>OUTLINE, COMPRESSOR MS MEDIUM TEMP</p>								
<p>MASS(kg)</p>		<p>CONFIDENTIAL: PROPERTY OF DANFOSS COMMERCIAL COMPRESSORS. NOT TO BE LOANED, REPRODUCED, COPIED OR USED BY THIRD PARTY, IN WHOLE OR IN PART, WITHOUT THE WRITTEN PERMISSION OF DANFOSS A/S.</p>	<p>MAT NO</p>								
<p>PRODUCT FAM</p>		<p>DANFOSS</p>	<p>REV A</p>								
		<p>SHT 3 of 3</p>									