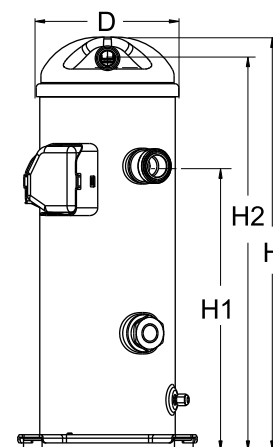


General Characteristics

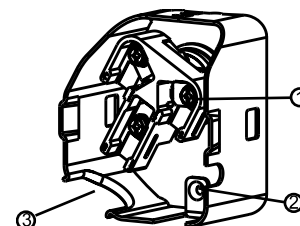
Model number (on compressor nameplate)		MLZ030T5LQ9
Code number for Singlepack*		121U8567
Code number for Industrial pack**		121U8566
Drawing number		0XR6298B-2
Suction and discharge connections		Rotolock
Suction connection		1-1/4 " Rotolock
Discharge connection		1 " Rotolock
Suction connection with 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.

Angle adapter, C01 (1" Rotolock, 3/8" ODF)	8168004
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.

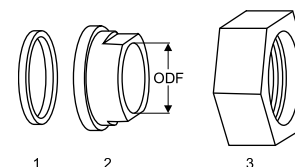
Belt type crankcase heater, 70 W, 230 V, UL	120Z5011
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0059
Belt type crankcase heater, 70 W, 575 V, UL	120Z5013

Miscellaneous accessories
Code no.

Acoustic hood	120Z5044
Discharge thermostat kit	7750009

Spare parts
Code no.

Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005
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Gaskets, sleeves and nuts


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

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

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	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)

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	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

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	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	

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

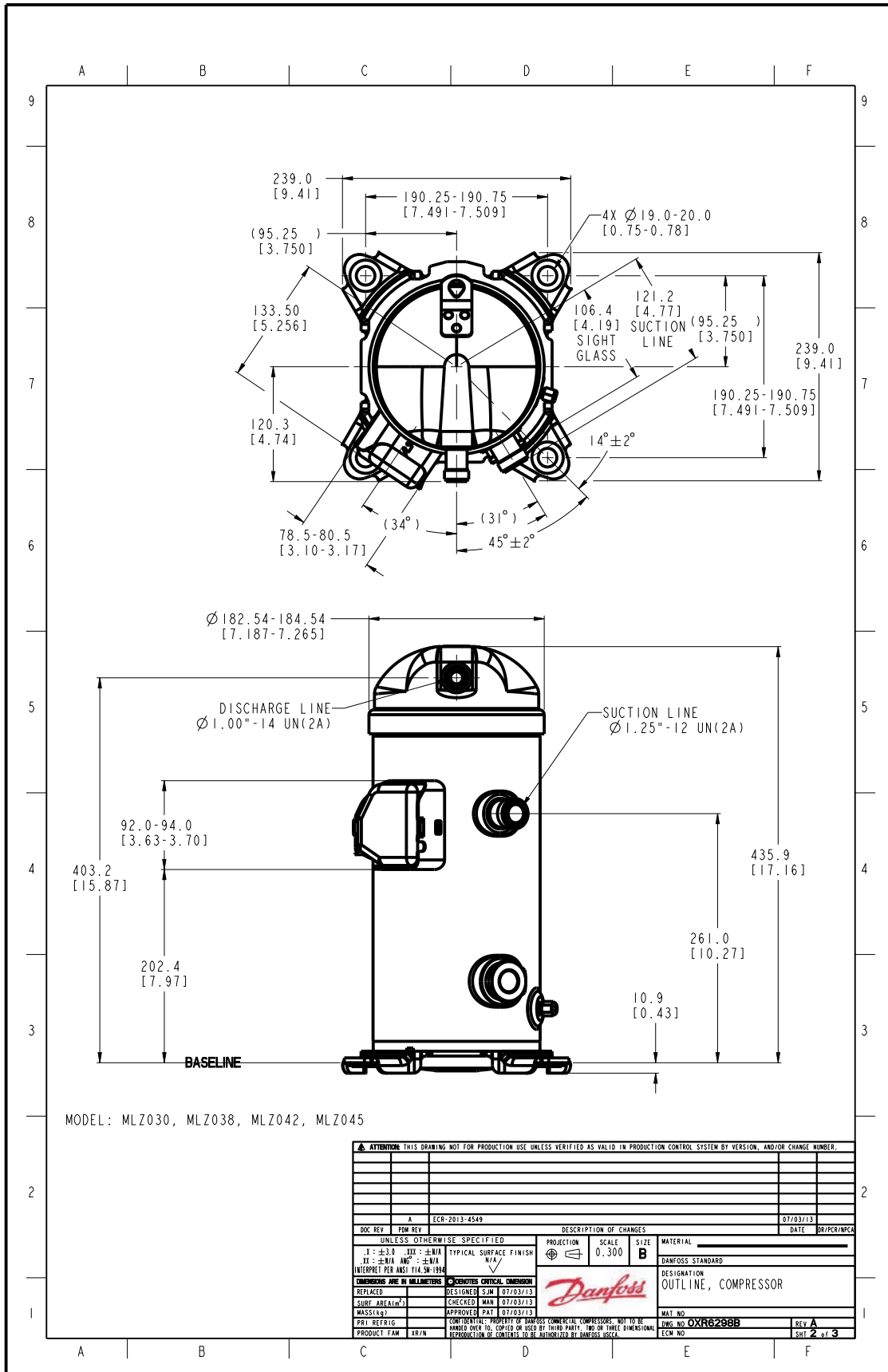
Sound power level	69	dB(A)
With acoustic hood	61	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%



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