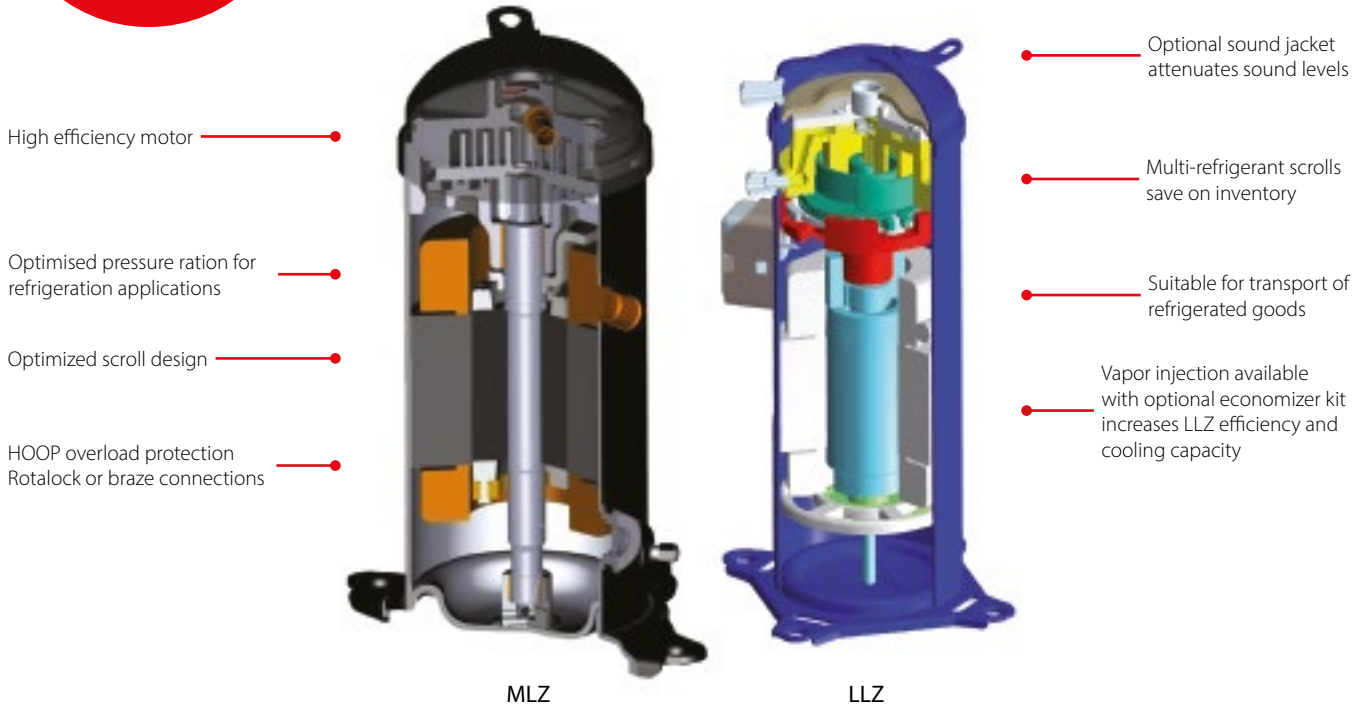


MLZ / LLZ, Scroll compressors for refrigeration

MLZ and LLZ scroll compressors are dedicated to commercial and light commercial refrigeration applications with refrigerants R134a, R404A / R507A, R22, R407A. Both brazed and rotolock connections are available for most of the compressors.

MLZ: medium-temperature scroll compressors
 R404 / R507A, R407A / F, R134a, R448A, R449A, R452A, R22
 LLZ: low-temperature scroll available with and without liquid injection and operate with R404A, R507A, R452A.



Facts

- Compact design esp. in large capacities
- Complete the existing scroll range for medium temperatures
- **Energy Savings**
Optimize your system with the scroll compressors for refrigeration. The combination of an energy efficient motor and an optimized scroll wrap for refrigeration applications delivers high efficiency in fixed-speed compressors. Optional vapor injection boosts the cooling capacity and efficiency by more than 20% on LLZ
- **Reliability**
Improve your system reliability to reduce your maintenance and warranty costs. Reliability is built into this compressor range, from the compliant scroll design and the engineered bearings to the simplified manufacturing process (30% fewer parts). The patented thermal fault protection also contributes to excellent reliability. A smart way to reduce your field service costs
- **Low sound**
Improve the sound environment with the lowest sound level in the industry. Scroll technology is quiet by design: the scroll provides smooth continuous compression, the absence of suction and discharge valves, and the unique disc check valve design ensure quiet, vibration-free operations
- **Compactness**
Footprint up to 30% smaller than alternative reduces the logistics costs and frees up space in the system

Technical data and ordering

MLZ - Scroll compressors - R404A/R134a/R22/R407A/R448A/R449A - Made in CN

Ordering - Brazed version - Single pack

Type	Model variation	Connections	Features	Voltage code 1	Voltage code 2	Voltage code 4	Voltage code 5	Voltage code 9	
Danfoss palette	MLZ015	T	P	9	121L8659	121L8669	121L8629	121L8631	121L8689
	MLZ021	T	P	9	121L8661	121L8671	121L8633	121L8635	121L8691
	MLZ026	T	P	9	121L8663	121L8673	121L8637	121L8639	121L8693
	MLZ030	T	C	9	121L8665	121L8675	121L8641	121L8643	121L8695
	MLZ038	T	C	9	121L8667	121L8677	121L8645	121L8647	121L8697
	MLZ045	T	C	9	-	121L8679	121L8649	-	121L8699
	MLZ048	T	C	9	-	121L8681	121L8651	-	121L8701
	MLZ058	T	C	9	-	121L8683	121L8653	-	121L8703
	MLZ066	T	C	9	-	121L8685	121L8657	-	121L8705
	MLZ076	T	C	9	-	121L8687	121L8655	-	121L8707

MLZ - Scroll compressors - R404A/R134a/R22/R407A/R448A/R449A - Made in CN

Ordering - Brazed version - Industrial pack

Type	Model variation	Connections	Features	Voltage code 1	Voltage code 2	Voltage code 4	Voltage code 5	Voltage code 9	
Danfoss palette	MLZ015	T	P	9	121L8658	121L8668	121L8628	121L8630	121L8688
	MLZ021	T	P	9	121L8660	121L8670	121L8632	121L8634	121L8690
	MLZ026	T	P	9	121L8662	121L8672	121L8636	121L8638	121L8692
	MLZ030	T	C	9	121L8664	121L8674	121L8640	121L8642	121L8694
	MLZ038	T	C	9	121L8666	121L8676	121L8644	121L8646	121L8696
	MLZ045	T	C	9	-	121L8678	121L8648	-	121L8698
	MLZ048	T	C	9	-	121L8680	121L8650	-	121L8700
	MLZ058	T	C	9	-	121L8682	121L8652	-	121L8702
	MLZ066	T	C	9	-	121L8684	121L8656	-	121L8704
	MLZ076	T	C	9	-	121L8686	121L8654	-	121L8706

MLZ - Scroll compressors - R404A / R407A / R407F / R134a / R22 / R448A / R449A - Made from US

Ordering - Rotolock version - Single pack

Type	Model	Connections	Features	Voltage code 1	Voltage code 2	Voltage code 4	Voltage code 5	Voltage code 7	Voltage code 9
MLZ015	T	T	9	121U8513	121U8553	121U8529	121U8521	-	121U8545
MLZ019	T	T	9	121U8515	121U8555	121U8531	121U8523	-	121U8547
MLZ021	T	T	9	121U8517	121U8557	121U8533	121U8525	121U8541	121U8549
MLZ026	T	T	9	121U8519	121U8559	121U8535	121U8527	121U8543	121U8551
MLZ030	T	Q	9	121U8561	121U8597	121U8573	121U8567	121U8581	121U8589
MLZ038	T	Q	9	121U8563	121U8599	121U8575	121U8569	121U8583	121U8591
MLZ042	T	Q	9	121U8565	-	-	121U8571	-	-
MLZ045	T	Q	9	-	121U8601	121U8577	-	121U8585	121U8593
MLZ048	T	Q	9	-	121U8603	121U8579	-	121U8587	121U8595
MLZ058	T	Q	9	-	121U8627	121U8609	-	121U8615	121U8621
MLZ066	T	Q	9	-	121U8623	121U8605	-	121U8611	121U8617
MLZ076	T	Q	9	-	121U8625	121U8607	-	121U8613	121U8619

MLZ - Scroll compressors - R404A / R407A / R407F / R134a / R22 / R448A / R449A - Made from US

Ordering - Rotolock version - Industrial pack

Type	Model	Connections	Features	Voltage code 1	Voltage code 2	Voltage code 4	Voltage code 5	Voltage code 7	Voltage code 9
MLZ015	T	T	9	121U8512	121U8552	121U8528	121U8520	-	121U8544
MLZ019	T	T	9	121U8514	121U8554	121U8530	121U8522	-	121U8546
MLZ021	T	T	9	121U8516	121U8556	121U8532	121U8524	121U8540	121U8548
MLZ026	T	T	9	121U8518	121U8558	121U8534	121U8526	121U8542	121U8550
MLZ030	T	Q	9	121U8560	121U8596	121U8572	121U8566	121U8580	121U8588
MLZ038	T	Q	9	121U8562	121U8598	121U8574	121U8568	121U8582	121U8590
MLZ042	T	Q	9	121U8564	-	-	121U8570	-	-
MLZ045	T	Q	9	-	121U8600	121U8576	-	121U8584	121U8592
MLZ048	T	Q	9	-	121U8602	121U8578	-	121U8586	121U8594
MLZ058	T	Q	9	-	121U8626	121U8608	-	121U8614	121U8620
MLZ066	T	Q	9	-	121U8622	121U8604	-	121U8610	121U8616
MLZ076	T	Q	9	-	121U8624	121U8606	-	121U8612	121U8618

Technical data and ordering

MLZ - Scroll compressors - R404A / R407A / R407F / R134a / R22

Ordering - Brazed version - Single pack

Type	Model	Connections	Features	Voltage code 1	Voltage code 2	Voltage code 4	Voltage code 5	Voltage code 7	Voltage code 9	
Danfoss pallet	MLZ015	T	P	9	–	120U8036	121U8002	121U8024	–	–
	MLZ019	T	P	9	121U8060	121U8038	121U8004	121U8026	–	–
	MLZ021	T	P	9	121U8062	121U8040	121U8006	121U8028	–	–
	MLZ026	T	P	9	121U8064	121U8042	121U8008	121U8030	–	–
	MLZ030	T	C	9	121U8066	121U8044	121U8010	121U8032	–	–
	MLZ038	T	C	9	121U8068	121U8046	121U8012	121U8034	–	–
	MLZ042	T	C	9	–	–	–	121U8419	–	–
	MLZ045	T	C	9	–	121U8048	121U8014	–	–	–
	MLZ048	T	C	9	–	121U8050	121U8016	–	–	–
	MLZ058	T	C	9	–	121U8052	121U8018	–	–	–
	MLZ066	T	C	9	–	121U8054	121U8020	–	–	–
MLZ076	T	C	9	–	121U8056	121U8022	–	–	–	
US pallet	MLZ015	T	P	9	120U8058	120U8036	120U8002	120U8024	–	120U8413
	MLZ019	T	P	9	120U8060	120U8038	120U8004	120U8026	–	120U8266
	MLZ021	T	P	9	120U8062	120U8040	120U8006	120U8028	–	120U8272
	MLZ026	T	P	9	120U8064	120U8042	120U8008	120U8030	–	120U8278
	MLZ030	T	C	9	120U8066	120U8044	120U8010	120U8032	–	120U8284
	MLZ038	T	C	9	120U8068	120U8046	120U8012	120U8034	–	120U8296
	MLZ042	T	C	9	120U8399	–	–	–	–	–
	MLZ045	T	C	9	–	120U8048	120U8014	–	120U8332	120U8302
	MLZ048	T	C	9	–	120U8050	120U8016	–	120U8338	120U8308
	MLZ058	T	C	9	–	120U8052	120U8018	–	120U8344	120U8314
	MLZ066	T	C	9	–	120U8054	120U8020	–	120U8350	–
MLZ076	T	C	9	–	120U8056	120U8022	–	120U8356	–	

MLZ - Scroll compressors - R404A / R407A / R407F / R134a / R22

Ordering - Brazed version - Industrial pack

Type	Model	Connections	Features	Voltage code 1	Voltage code 2	Voltage code 4	Voltage code 5	Voltage code 7	Voltage code 9	
Danfoss pallet	MLZ015	T	P	9	–	120U8035	121U8001	121U8023	–	–
	MLZ019	T	P	9	121U8059	121U8037	121U8003	121U8025	–	–
	MLZ021	T	P	9	121U8061	121U8039	121U8005	121U8027	–	–
	MLZ026	T	P	9	121U8063	121U8041	121U8007	121U8029	–	–
	MLZ030	T	C	9	121U8065	121U8043	121U8009	121U8031	–	–
	MLZ038	T	C	9	121U8067	121U8045	121U8011	121U8033	–	–
	MLZ042	T	C	9	–	–	–	121U8418	–	–
	MLZ045	T	C	9	–	121U8047	121U8013	–	–	–
	MLZ048	T	C	9	–	121U8049	121U8015	–	–	–
	MLZ058	T	C	9	–	121U8051	121U8017	–	–	–
	MLZ066	T	C	9	–	121U8053	121U8019	–	–	–
MLZ076	T	C	9	–	121U8055	121U8021	–	–	–	
US pallet	MLZ015	T	P	9	120U8057	120U8035	120U8001	120U8023	–	120U8412
	MLZ019	T	P	9	120U8059	120U8037	120U8003	120U8025	–	120U8265
	MLZ021	T	P	9	120U8061	120U8039	120U8005	120U8027	–	120U8271
	MLZ026	T	P	9	120U8063	120U8041	120U8007	120U8029	–	120U8277
	MLZ030	T	C	9	120U8065	120U8043	120U8009	120U8031	–	120U8283
	MLZ038	T	C	9	120U8067	120U8045	120U8011	120U8033	–	120U8295
	MLZ042	T	C	9	120U8398	–	–	–	–	–
	MLZ045	T	C	9	–	120U8047	120U8013	–	120U8331	120U8301
	MLZ048	T	C	9	–	120U8049	120U8015	–	120U8337	120U8307
	MLZ058	T	C	9	–	120U8051	120U8017	–	120U8343	120U8313
	MLZ066	T	C	9	–	120U8053	120U8019	–	120U8349	–
MLZ076	T	C	9	–	120U8055	120U8021	–	120U8355	–	

Technical data and ordering

MLZ - Scroll compressors - R404A / R134a / R22 / R448A / R449A - 50 Hz

Technical data

Type	HP	Nominal cooling capacity ¹⁾		Power input ¹⁾	Efficiency ¹⁾		Swept volume		Displacement		Oil charge		Net weight (with oil)		
		[W]	[Btu/h]		[kW]	COP	EER	[cm ³ /rev]	[cu.in/rev]	[m ³ /h]	[cu.ft/h]	[Litres]	[oz]	[kg]	[lb]
					[W/W]	[Btu/h/W]									
R404A ²⁾	MLZ015	2	3300	11300	1.75	1.89	6.45	33.8	2.06	5.9	208	1.1	37	31	68
	MLZ019	2.5	4500	15400	2.16	2.06	7.03	43.5	2.65	7.6	268	1.1	37	31	68
	MLZ021	3	4700	16000	2.27	2.08	7.1	46.2	2.82	8	283	1.1	37	31	68
	MLZ026	3.5	5800	19800	2.9	2	6.83	57.1	3.48	9.9	350	1.1	37	31	68
	MLZ030	4	7100	24200	3.35	2.11	7.2	68.8	4.2	12	424	1.6	54	41	90
	MLZ038	5	8400	28700	3.86	2.19	7.47	81	4.94	14.1	498	1.6	54	41	90
	MLZ042	5.5	9500	32400	4.72	2.02	6.89	93.1	5.68	16.2	572	1.6	54	41	90
	MLZ045	6	10200	34800	4.81	2.11	7.2	98.6	6.02	17.2	607	1.6	54	41	90
	MLZ048	7	11100	37900	5.17	2.14	7.3	107.5	6.56	18.7	660	1.6	54	41	90
	MLZ058	7.5	13000	44400	6.08	2.13	7.27	126	7.69	21.9	773	2.7	91	47	104
	MLZ066	9	15100	51500	7.01	2.15	7.34	148.8	9.08	25.9	915	2.7	91	47	104
MLZ076	10	17300	59000	7.93	2.18	7.44	162.4	9.91	28.3	999	2.7	91	47	104	
R134a ³⁾	MLZ015	2	2000	6800	1.02	1.95	6.66	33.8	2.06	5.9	208	1.1	37	31	68
	MLZ019	2.5	2500	8500	1.28	1.98	6.76	43.5	2.65	7.6	268	1.1	37	31	68
	MLZ021	3	2700	9200	1.33	2.04	6.96	46.2	2.82	8	283	1.1	37	31	68
	MLZ026	3.5	3300	11300	1.62	2.06	7.03	57.1	3.48	9.9	350	1.1	37	31	68
	MLZ030	4	4000	13700	1.93	2.09	7.13	68.8	4.2	12	424	1.6	54	41	90
	MLZ038	5	4700	16000	2.34	2.02	6.89	81	4.94	14.1	498	1.6	54	41	90
	MLZ042	5.5	5300	18100	2.74	1.95	6.66	93.1	5.68	16.2	572	1.6	54	41	90
	MLZ045	6	5900	20100	2.69	2.17	7.41	98.6	6.02	17.2	607	1.6	54	41	90
	MLZ048	7	6200	21200	2.91	2.14	7.3	107.5	6.56	18.7	660	1.6	54	41	90
	MLZ058	7.5	7400	25300	3.61	2.06	7.03	126	7.69	21.9	773	2.7	91	47	104
	MLZ066	9	8600	29400	4.1	2.1	7.17	148.8	9.08	25.9	915	2.7	91	47	104
MLZ076	10	9600	32800	4.67	2.06	7.03	162.4	9.91	28.3	999	2.7	91	47	104	
R448A ⁴⁾	MLZ015	2	3200	11000	1.68	1.91	6.52	33.8	2.06	5.9	208	1.1	37	31	68
	MLZ019	2.5	4200	14300	2.11	1.99	6.79	43.5	2.65	7.6	268	1.1	37	31	68
	MLZ021	3	4400	15000	2.23	1.97	6.73	46.2	2.82	8	283	1.1	37	31	68
	MLZ026	3.5	5500	18700	2.78	1.97	6.72	57.1	3.48	9.9	350	1.1	37	31	68
	MLZ030	4	6600	22500	3.17	2.08	7.09	68.8	4.2	12	424	1.6	54	41	90
	MLZ038	5	7800	26600	3.64	2.14	7.3	81	4.94	14.1	498	1.6	54	41	90
	MLZ042	5.5	9100	31000	4.55	1.99	6.81	93.1	5.68	16.2	572	1.6	54	41	90
	MLZ045	6	9700	33000	4.58	2.11	7.21	98.6	6.02	17.2	607	1.6	54	41	90
	MLZ048	7	10400	35500	5.06	2.06	7.02	107.5	6.56	18.7	660	1.6	54	41	90
	MLZ058	7.5	12200	41700	5.57	2.19	7.48	126	7.69	21.9	773	2.7	91	47	104
	MLZ066	9	14200	48500	6.75	2.11	7.21	148.8	9.08	25.9	915	2.7	91	47	104
MLZ076	10	15200	51700	7.61	1.99	6.8	162.4	9.91	28.3	999	2.7	91	47	104	
R22	MLZ015	2	3300	11263	1.53	2.15	7.34	33.8	2.06	5.9	208	1.1	37	31	68
	MLZ019	2.5	4300	14676	1.87	2.3	7.85	43.5	2.65	7.6	268	1.1	37	31	68
	MLZ021	3	4600	15700	2.02	2.27	7.75	46.2	2.82	8	283	1.1	37	31	68
	MLZ026	3.5	5700	19454	2.43	2.33	7.95	57.1	3.48	9.9	350	1.1	37	31	68
	MLZ030	4	6800	23208	2.93	2.33	7.95	68.8	4.2	12	424	1.6	54	41	90
	MLZ038	5	8100	27645	3.45	2.34	7.99	81	4.94	14.1	498	1.6	54	41	90
	MLZ042	5.5	9100	31058	4.23	2.15	7.34	93.1	5.68	16.2	572	1.6	54	41	90
	MLZ045	6	9300	31741	4.14	2.24	7.65	98.6	6.02	17.2	607	1.6	54	41	90
	MLZ048	7	10600	36177	4.53	2.33	7.95	107.5	6.56	18.7	660	1.6	54	41	90
	MLZ058	7.5	12300	41980	5.29	2.33	7.95	126	7.69	21.9	773	2.7	91	47	104
	MLZ066	9	14100	48123	5.94	2.38	8.12	148.8	9.08	25.9	915	2.7	91	47	104
MLZ076	10	16600	56655	6.96	2.38	8.12	162.4	9.91	28.3	999	2.7	91	47	104	

¹⁾ at EN12900 conditions: To= -10 °C / 14 °F, Tc= 45 °C / 113 °F, RGT= 20 °C / 68 °F, SC= 0 K

²⁾ R507 performance data are nearly identical to R404A performance data

³⁾ To= -10°C(14°F), Tc= 45 °C / 113 °F, SH= 10 K(18 °F), SC= 0 K

⁴⁾ R449A performance data are nearly identical to R448A performance data

All performance test data after run-in 72hrs. Motor voltage code 4: 400 V/3~/50 Hz, MLZ042: Motor voltage code 5: 220-240 V/1~/50 Hz

Technical data and ordering

MLZ - Scroll compressors - R407A / R407F/ R452A - 50 Hz

Technical data

Type	HP	Nominal cooling capacity ¹⁾		Power input ¹⁾	Efficiency ¹⁾		Swept volume		Displacement		Oil charge		Net weight (with oil)		
		[W]	[Btu/h]		COP	EER	[cm ³ /rev]	[cu.in/rev]	[m ³ /h]	[cu.ft/h]	[Litres]	[oz]	[kg]	[lb]	
		[W]	[Btu/h]	[kW]	[W/W]	[Btu/h/W]	[cm ³ /rev]	[cu.in/rev]	[m ³ /h]	[cu.ft/h]	[Litres]	[oz]	[kg]	[lb]	
R407A	MLZ015	2	3100	10580	1.55	2	6.83	33.8	2.06	5.9	208	1.1	37	31	68
	MLZ019	2.5	4000	13652	2.04	1.96	6.69	43.5	2.65	7.6	268	1.1	37	31	68
	MLZ021	3	4200	14334	2.21	1.91	6.52	46.2	2.82	8	283	1.1	37	31	68
	MLZ026	3.5	5300	18089	2.71	1.96	6.69	57.1	3.48	9.9	350	1.1	37	31	68
	MLZ030	4	6500	22184	2.99	2.17	7.41	68.8	4.2	12	424	1.6	54	41	90
	MLZ038	5	7500	25597	3.47	2.16	7.37	81	4.94	14.1	498	1.6	54	41	90
	MLZ042	5.5	8600	29352	4.53	1.9	6.48	93.1	5.68	16.2	572	1.6	54	41	90
	MLZ045	6	9100	31058	4.55	2.01	6.86	98.6	6.02	17.2	607	1.6	54	41	90
	MLZ048	7	10000	34130	5.01	2	6.83	107.5	6.56	18.7	660	1.6	54	41	90
	MLZ058	7.5	11500	39249	5.69	2.02	6.89	126	7.69	21.9	773	2.7	91	47	104
	MLZ066	9	13400	45734	6.78	1.98	6.76	148.8	9.08	25.9	915	2.7	91	47	104
MLZ076	10	14700	50171	7.51	1.96	6.69	162.4	9.91	28.3	999	2.7	91	47	104	
R407F	MLZ015	2	3300	11263	1.66	2	6.83	33.8	2.06	5.9	208	1.1	37	31	68
	MLZ019	2.5	4300	14676	2.19	1.96	6.69	43.5	2.65	7.6	268	1.1	37	31	68
	MLZ021	3	4500	15358	2.37	1.91	6.52	46.2	2.82	8	283	1.1	37	31	68
	MLZ026	3.5	5700	19454	2.9	1.96	6.69	57.1	3.48	9.9	350	1.1	37	31	68
	MLZ030	4	6900	23549	3.2	2.17	7.41	68.8	4.2	12	424	1.6	54	41	90
	MLZ038	5	8000	27304	3.72	2.16	7.37	81	4.94	14.1	498	1.6	54	41	90
	MLZ042	5.5	9200	31399	4.85	1.9	6.48	93.1	5.68	16.2	572	1.6	54	41	90
	MLZ045	6	9800	33447	4.87	2.01	6.86	98.6	6.02	17.2	607	1.6	54	41	90
	MLZ048	7	10800	36860	5.37	2.01	6.86	107.5	6.56	18.7	660	1.6	54	41	90
	MLZ058	7.5	12300	41980	6.09	2.02	6.89	126	7.69	21.9	773	2.7	91	47	104
	MLZ066	9	14400	49147	7.26	1.99	6.79	148.8	9.08	25.9	915	2.7	91	47	104
MLZ076	10	15800	53925	8.04	1.96	6.69	162.4	9.91	28.3	999	2.7	91	47	104	
R452A	MLZ015	2	3400	11500	1.71	1.97	6.72	33.8	2.06	5.9	208	1.1	37	31	68
	MLZ019	2.5	4300	14700	2.17	1.99	6.8	43.5	2.65	7.6	268	1.1	37	31	68
	MLZ021	3	4600	15700	2.27	2.02	6.89	46.2	2.82	8	283	1.1	37	31	68
	MLZ026	3.5	5700	19400	2.81	2.02	6.9	57.1	3.48	9.9	350	1.1	37	31	68
	MLZ030	4	6800	23400	3.27	2.1	7.18	68.8	4.2	12	424	1.6	54	41	90
	MLZ038	5	8000	27300	3.81	2.1	7.18	81	4.94	14.1	498	1.6	54	41	90
	MLZ042	5.5	9300	31700	4.84	1.92	6.56	93.1	5.68	16.2	572	1.6	54	41	90
	MLZ045	6	10100	34300	4.81	2.09	7.14	98.6	6.02	17.2	607	1.6	54	41	90
	MLZ048	7	11000	37500	5.17	2.12	7.25	107.5	6.56	18.7	660	1.6	54	41	90
	MLZ058	7.5	12900	44000	5.89	2.19	7.48	126	7.69	21.9	773	2.7	91	47	104
	MLZ066	9	15100	51500	7.15	2.11	7.2	148.8	9.08	25.9	915	2.7	91	47	104
MLZ076	10	16200	55200	7.94	2.04	6.95	162.4	9.91	28.3	999	2.7	91	47	104	

¹⁾ at EN12900 conditions: To= -10°C(14°F), Tc= 45°C(113°F), RGT= 20°C(68°F), SC= 0 K

Only motor code 4, code 5 of MLZ are qualified with R407A/R407F

All performance test data after run-in 72hrs

Motor voltage code 4: 400 V/3~/50 Hz

MLZ042: Motor voltage code 5: 220-240 V/1~/50 Hz

Technical data and ordering

MLZ - Scroll compressors - R404A / R134a / R22 / R448A / R449A - 60 Hz

Technical data

Type	HP	Nominal cooling capacity ¹⁾		Power input ¹⁾	Efficiency ¹⁾		Swept volume		Displacement		Oil charge		Net weight (with oil)		
		[W]	[Btu/h]		[kW]	COP	EER	[cm ³ /rev]	[cu.in/rev]	[m ³ /h]	[cu.ft/h]	[Litres]	[oz]	[kg]	[lb]
					[W/W]	[Btu/h/W]									
R404A ²⁾	MLZ015	2	4100	14000	2.1	1.94	6.62	33.8	2.06	7.1	251	1.1	37	31	68
	MLZ019	2.5	5500	18800	2.58	2.11	7.2	43.5	2.65	9.1	321	1.1	37	31	68
	MLZ021	3	5800	19800	2.74	2.13	7.27	46.2	2.82	9.7	343	1.1	37	31	68
	MLZ026	3.5	7200	24600	3.44	2.1	7.17	57.1	3.48	12	424	1.1	37	31	68
	MLZ030	4	8500	29000	3.9	2.18	7.44	68.8	4.2	14.4	509	1.6	54	41	90
	MLZ038	5	10200	34800	4.7	2.18	7.44	81	4.94	17	600	1.6	54	41	90
	MLZ042	5.5	11800	40300	5.73	2.07	7.06	93.1	5.68	19.6	692	1.6	54	41	90
	MLZ045	6	12400	42300	5.64	2.19	7.47	98.6	6.02	20.7	731	1.6	54	41	90
	MLZ048	7	13500	46100	6.15	2.2	7.51	107.5	6.56	22.6	798	1.6	54	41	90
	MLZ058	7.5	15700	53600	7.35	2.14	7.3	126	7.69	26.4	932	2.7	91	47	104
MLZ066	9	18400	62800	8.4	2.18	7.44	148.8	9.08	31.3	1105	2.7	91	47	104	
MLZ076	10	20900	71300	9.59	2.18	7.44	162.4	9.91	34.1	1204	2.7	91	47	104	
R134a ³⁾	MLZ015	2	2400	8200	1.19	2.05	7	33.8	2.06	7.1	251	1.1	37	31	68
	MLZ019	2.5	3100	10600	1.53	2.03	6.93	43.5	2.65	9.1	321	1.1	37	31	68
	MLZ021	3	3300	11300	1.58	2.1	7.17	46.2	2.82	9.7	343	1.1	37	31	68
	MLZ026	3.5	4100	14000	1.91	2.15	7.34	57.1	3.48	12	424	1.1	37	31	68
	MLZ030	4	5000	17100	2.35	2.11	7.2	68.8	4.2	14.4	509	1.6	54	41	90
	MLZ038	5	5800	19800	2.8	2.09	7.13	81	4.94	17	600	1.6	54	41	90
	MLZ042	5.5	6500	22200	3.33	1.94	6.62	93.1	5.68	19.6	692	1.6	54	41	90
	MLZ045	6	7100	24200	3.32	2.14	7.3	98.6	6.02	20.7	731	1.6	54	41	90
	MLZ048	7	7600	25900	3.54	2.14	7.3	107.5	6.56	22.6	798	1.6	54	41	90
	MLZ058	7.5	9100	31100	4.28	2.13	7.27	126	7.69	26.4	932	2.7	91	47	104
MLZ066	9	10400	35500	4.85	2.15	7.34	148.8	9.08	31.3	1105	2.7	91	47	104	
MLZ076	10	11700	39900	5.61	2.09	7.13	162.4	9.91	34.1	1204	2.7	91	47	104	
R448A ⁴⁾	MLZ015	2	3800	13100	1.96	1.96	6.69	33.8	2.06	7.1	251	1.1	37	31	68
	MLZ019	2.5	5100	17400	2.48	2.06	7.02	43.5	2.65	9.1	321	1.1	37	31	68
	MLZ021	3	5400	18400	2.62	2.06	7.03	46.2	2.82	9.7	343	1.1	37	31	68
	MLZ026	3.5	6800	23200	3.21	2.12	7.23	57.1	3.48	12	424	1.1	37	31	68
	MLZ030	4	6600	22500	3.17	2.08	7.09	68.8	4.2	14.5	512	1.6	54	41	90
	MLZ038	5	8200	28100	3.72	2.22	7.56	81	4.94	17	600	1.6	54	41	90
	MLZ042	5.5	11000	37600	5.55	1.99	6.79	94	5.74	19.6	692	1.6	54	41	90
	MLZ045	6	11600	39500	5.57	2.08	7.1	98.6	6.02	20.7	731	1.6	54	41	90
	MLZ048	7	12800	43800	5.93	2.16	7.38	107.5	6.56	22.6	798	1.6	54	41	90
	MLZ058	7.5	15100	51500	6.65	2.27	7.74	126	7.69	26.5	936	2.7	91	47	104
MLZ066	9	17400	59300	8.05	2.16	7.36	148.8	9.08	31.3	1105	2.7	91	47	104	
MLZ076	10	18700	63800	8.88	2.11	7.19	162.4	9.91	34.1	1204	2.7	91	47	104	
R22	MLZ015	2	3900	13311	1.74	2.26	7.71	33.8	2.06	7.1	251	1.1	37	31	68
	MLZ019	2.5	5200	17747	2.22	2.37	8.09	43.5	2.65	9.1	321	1.1	37	31	68
	MLZ021	3	5600	19113	2.36	2.36	8.05	46.2	2.82	9.7	343	1.1	37	31	68
	MLZ026	3.5	7000	23891	2.93	2.39	8.16	57.1	3.48	12	424	1.1	37	31	68
	MLZ030	4	8200	27986	3.46	2.36	8.05	68.8	4.2	14.5	512	1.6	54	41	90
	MLZ038	5	9600	32765	4.06	2.36	8.05	81	4.94	17	600	1.6	54	41	90
	MLZ042	5.5	10900	37201	5	2.18	7.44	94	5.74	19.6	692	1.6	54	41	90
	MLZ045	6	11700	39932	4.91	2.38	8.12	98.6	6.02	20.7	731	1.6	54	41	90
	MLZ048	7	12900	44027	5.36	2.4	8.19	107.5	6.56	22.6	798	1.6	54	41	90
	MLZ058	7.5	14900	50853	6.34	2.34	7.99	126	7.69	26.5	936	2.7	91	47	104
MLZ066	9	17000	58020	7.14	2.38	8.12	148.8	9.08	31.3	1105	2.7	91	47	104	
MLZ076	10	20100	68601	8.4	2.39	8.16	162.4	9.91	34.1	1204	2.7	91	47	104	

¹⁾ at EN12900 conditions: To= -10 °C/ 14 °F, Tc= 45 °C/ 113 °F, RGT= 20 °C/ 68 °F, SC= 0 K

²⁾ R507 performance data are nearly identical to R404A performance data

³⁾ To= -10 °C/ 14 °F, Tc= 45 °C/ 113 °F, SH= 10 K(18 °F), SC= 0 K

⁴⁾ R449A performance data are nearly identical to R448A performance data

All performance test data after run-in 72hrs

Motor voltage code 4: 460 V/3~/60 Hz

MLZ042: Motor voltage code 1: 208-230 V/1~/60 Hz



For more information and performance with other refrigerants, please refer to Coolselector *2 at coolselector.danfoss.com or contact Danfoss.

Technical data and ordering

MLZ - Scroll compressors - R407A / R407F / R452A - 60 Hz

Technical data

Type	HP	Nominal cooling capacity ¹⁾		Power input ¹⁾	Efficiency ¹⁾		Swept volume		Displacement		Oil charge		Net weight (with oil)		
		[W]	[Btu/h]		COP	EER	[cm ³ /rev]	[cu.in/rev]	[m ³ /h]	[cu.ft/h]	[Litres]	[oz]	[kg]	[lb]	
		[W]	[Btu/h]	[kW]	[W/W]	[Btu/h/W]	[cm ³ /rev]	[cu.in/rev]	[m ³ /h]	[cu.ft/h]	[Litres]	[oz]	[kg]	[lb]	
R407A	MLZ015	2	3800	12969	1.85	2.04	6.96	33.8	2.06	7.1	251	1.1	37	31	68
	MLZ019	2.5	4900	16724	2.4	2.06	7.03	43.5	2.65	9.1	321	1.1	37	31	68
	MLZ021	3	5300	18089	2.63	2.01	6.86	46.2	2.82	9.7	343	1.1	37	31	68
	MLZ026	3.5	6400	21843	3.1	2.07	7.06	57.1	3.48	12	424	1.1	37	31	68
	MLZ030	4	7900	26962	3.52	2.25	7.68	68.8	4.2	14.5	512	1.6	54	41	90
	MLZ038	5	9200	31399	4.1	2.24	7.65	81	4.94	17	600	1.6	54	41	90
	MLZ045	6	11200	38225	5.37	2.09	7.13	98.6	6.02	20.7	731	1.6	54	41	90
	MLZ048	7	12200	41638	6.01	2.03	6.93	107.5	6.56	22.6	798	1.6	54	41	90
	MLZ058	7.5	14300	48805	6.68	2.14	7.3	126	7.69	26.5	936	2.7	91	47	104
	MLZ066	9	16700	56997	7.89	2.12	7.24	148.8	9.08	31.3	1105	2.7	91	47	104
MLZ076	10	18100	61775	8.64	2.09	7.13	162.4	9.91	34.1	1204	2.7	91	47	104	
R407F	MLZ015	2	4100	13993	1.98	2.05	7	33.8	2.06	7.1	251	1.1	37	31	68
	MLZ019	2.5	5300	18089	2.57	2.06	7.03	43.5	2.65	9.1	321	1.1	37	31	68
	MLZ021	3	5700	19454	2.81	2.01	6.86	46.2	2.82	9.7	343	1.1	37	31	68
	MLZ026	3.5	6900	23549	3.32	2.08	7.1	57.1	3.48	12	424	1.1	37	31	68
	MLZ030	4	8500	29010	3.77	2.26	7.71	68.8	4.2	14.5	512	1.6	54	41	90
	MLZ038	5	9800	33447	4.38	2.24	7.65	81	4.94	17	600	1.6	54	41	90
	MLZ045	6	12000	40956	5.75	2.09	7.13	98.6	6.02	20.7	731	1.6	54	41	90
	MLZ048	7	13100	44710	6.44	2.04	6.96	107.5	6.56	22.6	798	1.6	54	41	90
	MLZ058	7.5	15300	52218	7.15	2.14	7.3	126	7.69	26.5	936	2.7	91	47	104
	MLZ066	9	18000	61433	8.45	2.13	7.27	148.8	9.08	31.3	1105	2.7	91	47	104
MLZ076	10	19400	66212	9.25	2.09	7.13	162.4	9.91	34.1	1204	2.7	91	47	104	
R452A	MLZ015	2	4100	13900	2.05	1.99	6.78	33.8	2.06	7.1	251	1.1	37	31	68
	MLZ019	2.5	5200	17900	2.57	2.03	6.94	43.5	2.65	9.1	321	1.1	37	31	68
	MLZ021	3	5500	18800	2.7	2.05	6.99	46.2	2.82	9.7	343	1.1	37	31	68
	MLZ026	3.5	6800	23300	3.34	2.04	6.97	57.1	3.48	12	424	1.1	37	31	68
	MLZ030	4	8400	28700	3.94	2.14	7.29	68.8	4.2	14.5	512	1.6	54	41	90
	MLZ038	5	9800	33300	4.55	2.15	7.34	81	4.94	17	600	1.6	54	41	90
	MLZ042	5.5	11400	38900	5.68	2.01	6.85	93.1	5.68	19.6	692	1.6	54	41	90
	MLZ045	6	12000	41000	5.71	2.11	7.18	98.6	6.02	20.7	731	1.6	54	41	90
	MLZ048	7	13300	45200	6.24	2.13	7.26	107.5	6.56	22.6	798	1.6	54	41	90
	MLZ058	7.5	15500	53000	7.09	2.19	7.48	126	7.69	26.5	936	2.7	91	47	104
MLZ066	9	18500	63100	8.42	2.2	7.5	148.8	9.08	31.3	1105	2.7	91	47	104	
MLZ076	10	19800	67600	9.26	2.14	7.3	162.4	9.91	34.1	1204	2.7	91	47	104	

¹⁾ at EN12900 conditions: To= -10°C(14°F), Tc= 45°C(113°F), RGT= 20°C(68°F), SC= 0 K

Only motor code 4, code 5 of MLZ are qualified with R407A/R407F

All performance test data after run-in 72hrs

Motor voltage code 4: 460 V/3~/60 Hz

MLZ042: Motor voltage code 1: 208-230 V/1~/60 Hz



For more information and performance with other refrigerants, please refer to Coolselector[®] 2 at coolselector.danfoss.com or contact Danfoss.

Technical data and ordering

LLZ (Evolution A) - Scroll Compressors - R404A/R507 / R452A / R448A / R449A

Ordering - Rotolock version - Single pack

Type	Model Variation	Connections	Features	Evolution	Voltage Code 2	Voltage Code 4	Voltage Code 9
LLZ013	T	Q	9	A	121L9545	121L9535	121L9555
LLZ015	T	Q	9	A	121L9547	121L9537	121L9557
LLZ018	T	Q	9	A	121L9549	121L9539	121L9559
LLZ024	T	Q	9	A	121L9551	121L9541	121L9561
LLZ034	T	Q	9	A	121L9553	121L9543	121L9563

LLZ (Evolution A) - Scroll Compressors - R404A / R507 / R452A / R448A / R449A

Ordering - Rotolock version - Single pack

Type	Model Variation	Connections	Features	Evolution	Voltage Code 2	Voltage Code 4	Voltage Code 9
LLZ013	T	Q	9	A	121L9544	121L9534	121L9554
LLZ015	T	Q	9	A	121L9546	121L9536	121L9556
LLZ018	T	Q	9	A	121L9548	121L9538	121L9558
LLZ024	T	Q	9	A	121L9550	121L9540	121L9560
LLZ034	T	Q	9	A	121L9552	121L9542	121L9562

LLZ - Scroll compressors - R404A / R507

Ordering - Rotolock version - Single pack

Type	Model variation	Connections	Features	Voltage code 2	Voltage code 4	Voltage code 9	
Danfoss pallet	LLZ013	T	Q	9	121L9519	121L9517	121L9531
	LLZ015	T	Q	9	121L9515	121L9513	121L9529
	LLZ018	T	Q	9	121L9511	121L9509	121L9527
	LLZ024	T	Q	9	121L9507	121L9505	121L9525
	LLZ034	T	Q	9	NA	121L9521	121L9533

LLZ - Scroll compressors - R404A / R507

Ordering - Rotolock version - Industrial pack

Type	Model variation	Connections	Features	Voltage code 2	Voltage code 4	Voltage code 9	
Danfoss pallet	LLZ013	T	Q	9	121L9518	121L9516	121L9530
	LLZ015	T	Q	9	121L9514	121L9512	121L9528
	LLZ018	T	Q	9	121L9510	121L9508	121L9526
	LLZ024	T	Q	9	121L9506	121L9504	121L9524
	LLZ034	T	Q	9	NA	121L9520	121L9532

Technical data and ordering

LLZ - Scroll compressors - R448A / R449A*) - 50/60 Hz

Technical data - with Liquid injection line

Type	Nominal tons 60 Hz	Nominal cooling capacity		Power input ¹⁾	COP	EER	Swept volume	Displacement ¹⁾	Oil charge	Net weight ²⁾	
		[TR]	[W]								[Btu/h]
50 Hz	LLZ013	4	2048	6990	2106	0.97	3.32	67.4	11.7	1.62	42
	LLZ015	5	2605	8890	2642	0.99	3.37	83.5	14.5	1.62	42
	LLZ018	6	3084	10525	2964	1.04	3.55	97.6	17	1.62	43
	LLZ024	8	3846	13126	3542	1.09	3.71	120.2	20.9	2.51	46
	LLZ034	10	5480	18704	4684	1.17	3.99	168.7	29.4	2.51	51
60 Hz	LLZ013	4	3314	11310	2737	1.21	4.13	67.4	14.2	1.62	42
	LLZ015	5	4097	13983	3416	1.2	4.09	83.5	17.5	1.62	42
	LLZ018	6	4900	16723	3815	1.28	4.38	97.6	20.5	1.62	43
	LLZ024	8	6046	20636	4580	1.32	4.51	120.2	25.3	2.51	46
	LLZ034	10	8531	29116	5928	1.44	4.91	168.7	35.4	2.51	51

¹⁾ Displacement at nominal speed: 2900 rpm at 50 Hz, 3500 rpm at 60 Hz

²⁾ Net weight with oil charge

TR: Ton of Refrigeration, EER: Energy Efficiency Ratio, COP: Coefficient Of Performance, Refrigerant: R448A*)

Rating condition:

50 Hz data: EN12900 LT, Evaporating temperature -35°C, Condensing temperature 40°C, Super Heat 10 K, Subcooling 5K.

60 Hz data: ARI 540 LT, Evaporating temperature -31.5°C, Condensing temperature 40.5°C, Return Gas Temperature 4.5°C, Subcooling 5K.

All of the compressor performance test after run-in 72h

*) R449A performance data are nearly identical to R448A performance data

Subject to modification without prior notification.

Data given for motor code 4 compressor, for full data details and capacity tables refer to Online Datasheet Generator: www.danfoss.com/odsg

LLZ - Scroll compressors - R404A / R507*) - 50/60 Hz

Technical data - without injection

Type	Nominal tons 60 Hz	Nominal cooling capacity		Power input ¹⁾	COP	EER	Swept volume	Displacement ¹⁾	Oil charge	Net weight ²⁾	
		[TR]	[W]								[Btu/h]
50 Hz	LLZ013	4	2417	8249	2366	1.02	3.48	67.4	11.7	1.62	42
	LLZ015	5	2937	10024	2776	1.06	3.62	83.5	14.5	1.62	42
	LLZ018	6	3453	11785	3150	1.1	3.75	97.6	17	1.62	43
	LLZ024	8	4411	15055	3957	1.11	3.79	120.2	20.9	2.51	46
	LLZ034	10	6051	20652	5458	1.11	3.79	168.7	29.4	2.51	51
60 Hz	LLZ013	4	2896	9884	2774	1.04	3.55	67.4	14.2	1.62	42
	LLZ015	5	3552	12123	3307	1.07	3.65	83.5	17.5	1.62	42
	LLZ018	6	4228	14430	3799	1.11	3.79	97.6	20.5	1.62	43
	LLZ024	8	5278	18014	4611	1.14	3.89	120.2	25.3	2.51	46
	LLZ034	10	7404	25270	6157	1.2	4.1	168.7	35.4	2.51	51

¹⁾ Displacement at nominal speed: 2900 rpm at 50 Hz, 3500 rpm at 60 Hz

²⁾ Net weight with oil charge

TR: Ton of Refrigeration, Standard rating conditions: ARI, Evaporating temperature: -31.7 °C, Superheat: 50 K

EER: Energy Efficiency Ratio, Condensing temperature: 40.6 °C, Subcooling: 0 K, COP: Coefficient Of Performance, Refrigerant: R404A*)

All of the compressor performance test after run-in 72h

*) R507 performance data are nearly identical to R404A performance data

Subject to modification without prior notification.

Data given for motor code 4 compressor, for full data details and capacity tables refer to Online Datasheet Generator: www.danfoss.com/odsg

Technical data and ordering

LLZ - Scroll compressors - R448A / R449A*) - 50/60 Hz

Technical data - without injection

Type		Nominal tons 60 Hz		Nominal cooling capacity		Power input ¹⁾	COP	EER	Swept volume	Displacement ¹⁾	Oil charge	Net weight ²⁾
		[TR]	[W]	[Btu/h]	[kW]	[W/W]	[Btu/h/W]	[cm ³ /rev]	[m ³ /h]	[dm ³]	[kg]	
50 Hz	LLZ013	4	2048	6990	2106	0.97	3.32	67.4	11.7	1.62	42	
	LLZ015	5	2605	8890	2642	0.99	3.37	83.5	14.5	1.62	42	
	LLZ018	6	3084	10525	2964	1.04	3.55	97.6	17	1.62	43	
	LLZ024	8	3846	13126	3542	1.09	3.71	120.2	20.9	2.51	46	
	LLZ034	10	5480	18704	4684	1.17	3.99	168.7	29.4	2.51	51	
60 Hz	LLZ013	4	3314	11310	2737	1.21	4.13	67.4	14.2	1.62	42	
	LLZ015	5	4097	13983	3416	1.2	4.09	83.5	17.5	1.62	42	
	LLZ018	6	4900	16723	3815	1.28	4.38	97.6	20.5	1.62	43	
	LLZ024	8	6046	20636	4580	1.32	4.51	120.2	25.3	2.51	46	
	LLZ034	10	8531	29116	5928	1.44	4.91	168.7	35.4	2.51	51	

¹⁾ Displacement at nominal speed: 2900 rpm at 50 Hz, 3500 rpm at 60 Hz

²⁾ Net weight with oil charge

TR: Ton of Refrigeration, EER: Energy Efficiency Ratio, COP: Coefficient Of Performance, Refrigerant: R448A*)

Rating condition:

50 Hz data: EN12900 LT, Evaporating temperature -35°C, Condensing temperature 40°C, Super Heat 10 K, Subcooling 5K.

60 Hz data: ARI 540 LT, Evaporating temperature -31.5°C, Condensing temperature 40.5°C, Return Gas Temperature 4.5°C, Subcooling 5K.

All of the compressor performance test after run-in 72h

*) R449A performance data are nearly identical to R448A performance data

Subject to modification without prior notification.

Data given for motor code 4 compressor, for full data details and capacity tables refer to Online Datasheet Generator: www.danfoss.com/odsg

LLZ - Scroll compressors - R404A*) - 50/60 Hz

Technical data - without injection

Type		Nominal tons 60 Hz		Nominal cooling capacity		Power input ¹⁾	COP	EER	Swept volume	Displacement ¹⁾	Oil charge	Net weight ²⁾
		[TR]	[W]	[Btu/h]	[kW]	[W/W]	[Btu/h/W]	[cm ³ /rev]	[m ³ /h]	[dm ³]	[kg]	
50 Hz	LLZ013	4	3213	10966	2507	1.28	4.37	67.4	11.7	1.62	42	
	LLZ015	5	3898	13304	2949	1.32	4.51	83.5	14.5	1.62	42	
	LLZ018	6	4583	15642	3346	1.37	4.68	97.6	17	1.62	43	
	LLZ024	8	5854	19980	4204	1.39	4.74	120.2	20.9	2.51	46	
	LLZ034	10	7991	27273	5772	1.38	4.71	168.7	29.4	2.51	51	
60 Hz	LLZ013	4	3857	13164	2938	1.31	4.47	67.4	14.2	1.62	42	
	LLZ015	5	4718	16102	3507	1.35	4.61	83.5	17.5	1.62	42	
	LLZ018	6	5616	19167	4028	1.39	4.74	97.6	20.5	1.62	43	
	LLZ024	8	7011	23928	4889	1.43	4.88	120.2	25.3	2.51	46	
	LLZ034	10	9791	33416	6616	1.48	5.05	168.7	35.4	2.51	51	

¹⁾ Displacement at nominal speed: 2900 rpm at 50 Hz, 3500 rpm at 60 Hz

²⁾ Net weight with oil charge

TR: Ton of Refrigeration, Standard rating conditions: ARI, Evaporating temperature: -31.7 °C, Superheat: 50 K

EER: Energy Efficiency Ratio, Condensing temperature: 40.6 °C, Subcooling: 0 K, COP: Coefficient Of Performance, Refrigerant: R404A*)

All of the compressor performance test after run-in 72h

*) R507 performance data are nearly identical to R404A performance data

Subject to modification without prior notification.

Data given for motor code 4 compressor, for full data details and capacity tables refer to Online Datasheet Generator: www.danfoss.com/odsg

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Technical data and ordering

LLZ - Scroll compressors - R452A - 50 Hz

Technical data - without injection

Type		Nominal	Nominal		Power	COP	EER	Swept	Displacement ¹⁾	Oil charge	Net
		tons 60 Hz	cooling capacity								
		[TR]	[W]	[Btu/h]	[kW]	[W/W]	[Btu/h/W]	[cm ³ /rev]	[m ³ /h]	[dm ³]	[kg]
50 Hz	LLZ013	4	2189	7469	1990	1.1	3.75	67.4	11.7	1.62	42
	LLZ015	5	2718	9274	2514	1.08	3.69	83.5	14.5	1.62	42
	LLZ018	6	3223	10997	2960	1.09	3.72	97.6	17	1.62	43
	LLZ024	8	4000	13648	3609	1.11	3.78	120.2	20.9	2.51	46
	LLZ034	10	5865	20011	5082	1.15	3.94	168.7	29.4	2.51	51

¹⁾ Displacement at nominal speed: 2900 rpm at 50 Hz, 3500 rpm at 60 Hz

²⁾ Net weight with oil charge

TR: Ton of Refrigeration, Standard rating conditions: EN12900, Evaporating temperature: -35 °C, Superheat: 10 K

EER: Energy Efficiency Ratio, COP: Coefficient Of Performance Condensing temperature: 40 °C, Subcooling: 0 K, Refrigerant: R452A

All of the compressor performance test after run-in 72h

Subject to modification without prior notification.

Data given for motor code 4 compressor, for full data details and capacity tables refer to Online Datasheet Generator: www.danfoss.com/odsg

LLZ - Scroll compressors - R452A - 60 Hz

Technical data - without injection

Type		Nominal	Nominal		Power	COP	EER	Swept	Displacement ¹⁾	Oil charge	Net
		tons 60 Hz	cooling capacity								
		[TR]	[W]	[Btu/h]	[kW]	[W/W]	[Btu/h/W]	[cm ³ /rev]	[m ³ /h]	[dm ³]	[kg]
50 Hz	LLZ013	4	3335	11383	2886	1.16	3.94	67.4	14.2	1.62	42
	LLZ015	5	4187	14289	3476	1.2	4.11	83.5	17.5	1.62	42
	LLZ018	6	4919	16788	3952	1.24	4.25	97.6	20.5	1.62	43
	LLZ024	8	6137	20945	4829	1.27	4.34	120.2	25.3	2.51	46
	LLZ034	10	8516	29065	6595	1.29	4.41	168.7	35.4	2.51	51

¹⁾ Displacement at nominal speed: 2900 rpm at 50 Hz, 3500 rpm at 60 Hz

²⁾ Net weight with oil charge

TR: Ton of Refrigeration, Standard rating conditions: ARI 540 LT standard, Evaporating temperature: -31.5 °C, Return Gas Temperature: 4.5 °C

EER: Energy Efficiency Ratio, Condensing temperature: 40.5 °C, Subcooling: 0 K, COP: Coefficient Of Performance, Refrigerant: R452A

All of the compressor performance test after run-in 72h

Subject to modification without prior notification.

Data given for motor code 4 compressor, for full data details and capacity tables refer to Online Datasheet Generator: www.danfoss.com/odsg

Technical data and ordering

LLZ - Scroll compressors - R404A - 50 / 60 Hz

Performance table - Without economizer

Type		To	-40			-35		-30		-25		-20		-15		-10	
		Tc	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	
50 Hz	LLZ013T4	30	2200	1,94	2900	2,10	3700	2,25	4600	2,40	5700	2,53	6900	2,62	8400	2,66	
		40	1800	2,19	2400	2,37	3100	2,55	3900	2,74	4800	2,91	6000	3,06	7300	3,17	
		50	-	-	1900	2,72	2500	2,92	3200	3,14	3900	3,35	4900	3,55	6000	3,73	
	LLZ015T4	30	2700	2,28	3500	2,48	4400	2,69	5600	2,89	7000	3,08	8600	3,25	10600	3,38	
		40	2300	2,57	2900	2,78	3800	3,01	4700	3,26	5900	3,50	7400	3,74	9000	3,96	
		50	-	-	2300	3,16	3000	3,41	3800	3,69	4800	3,98	6000	4,28	7400	4,58	
	LLZ018T4	30	3200	2,59	4100	2,81	5200	3,05	6600	3,28	8200	3,50	10200	3,69	12400	3,83	
		40	2700	2,91	3500	3,15	4400	3,42	5600	3,69	7000	3,98	8600	4,24	10600	4,49	
		50	-	-	2800	3,58	3500	3,87	4500	4,18	5600	4,52	7000	4,86	8700	5,19	
	LLZ024T4	30	4100	3,25	5200	3,54	6700	3,83	8400	4,12	10500	4,40	13000	4,63	15900	4,81	
		40	3400	3,66	4400	3,96	5600	4,29	7100	4,64	8900	5,00	11000	5,33	13600	5,64	
		50	-	-	3500	4,50	4500	4,86	5700	5,25	7200	5,68	9000	6,10	11100	6,52	
60 Hz	LLZ013T4	30	2600	2,27	3400	2,46	4400	2,65	5500	2,81	6800	2,94	8300	3,03	10100	3,06	
		40	2200	2,57	2900	2,77	3700	2,99	4700	3,20	5800	3,39	7100	3,56	8600	3,69	
		50	-	-	2300	3,15	3000	3,39	3800	3,63	4700	3,88	5800	4,11	7100	4,32	
	LLZ015T4	30	3300	2,74	4200	2,98	5300	3,22	6700	3,46	8400	3,68	10400	3,85	12800	3,96	
		40	2700	3,07	3600	3,31	4500	3,58	5700	3,86	7200	4,15	8900	4,41	10900	4,63	
		50	-	-	2900	3,76	3700	4,03	4700	4,34	5900	4,67	7300	5,00	9000	5,31	
	LLZ018T4	30	3900	3,15	5000	3,42	6400	3,70	8000	3,98	10000	4,23	12400	4,42	15200	4,55	
		40	3300	3,53	4200	3,80	5400	4,11	6800	4,44	8600	4,77	10600	5,07	13000	5,32	
		50	-	-	3400	4,32	4400	4,63	5600	4,99	7000	5,36	8700	5,74	10700	6,10	
	LLZ024T4	30	4800	3,82	6200	4,15	7900	4,49	10000	4,83	12500	5,13	15500	5,37	19000	5,53	
		40	4100	4,28	5300	4,61	6800	4,99	8500	5,39	10700	5,78	13200	6,15	16300	6,46	
		50	-	-	4200	5,24	5500	5,62	6900	6,05	8700	6,51	10900	6,97	13400	7,41	

To: Evaporating temperature in [°C]

Tc: Condensing temperature in [°C]

Qo: Cooling capacity in [W]

Pe: Power input in [kW]

Subcooling: 0 K

Superheat: 10



For more information and performance with other refrigerants, please refer to Coolselector® 2 at coolselector.danfoss.com or contact Danfoss.

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Technical data and ordering

LLZ - Scroll compressors - R404A - 50 / 60 Hz

Performance table - With economizer

Type		To	-40			-35		-30		-25		-20		-15		-10	
		Tc	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	
50 Hz	LLZ013T4	30	3300	2,44	4200	2,59	5100	2,74	6100	2,88	7300	3,01	8500	3,13	9800	3,24	
		40	3200	2,96	4000	3,13	4800	3,28	5800	3,42	6900	3,55	8000	3,68	9200	3,80	
		50	-	-	3700	3,80	4600	3,99	5500	4,18	6500	4,35	7500	4,51	8600	4,66	
	LLZ015T4	30	4000	2,90	5000	3,05	6000	3,20	7200	3,35	8600	3,49	10200	3,58	12000	3,63	
		40	3900	3,48	4700	3,66	5700	3,85	6900	4,04	8200	4,22	9700	4,36	11300	4,46	
		50	-	-	4500	4,46	5400	4,71	6500	4,95	7700	5,19	9000	5,40	10500	5,56	
	LLZ018T4	30	4800	3,34	5900	3,50	7200	3,68	8600	3,86	10300	4,01	12200	4,13	14300	4,18	
		40	4600	4,01	5600	4,21	6800	4,43	8200	4,65	9800	4,86	11500	5,02	13500	5,14	
		50	-	-	5400	5,14	6500	5,42	7700	5,70	9200	5,97	10800	6,21	12500	6,40	
	LLZ024T4	30	6000	4,13	7400	4,33	9000	4,55	10800	4,77	12900	4,96	15300	5,10	17900	5,16	
		40	5800	4,95	7100	5,20	8600	5,48	10300	5,75	12300	6,00	14500	6,21	16900	6,35	
		50	-	-	6700	6,35	8100	6,69	9700	7,04	11500	7,38	13500	7,67	15700	7,91	
60 Hz	LLZ013T4	30	3900	2,80	5000	2,99	6100	3,16	7300	3,31	8600	3,45	10100	3,57	11800	3,67	
		40	3800	3,42	4800	3,62	5800	3,80	6900	3,97	8100	4,12	9500	4,25	11000	4,36	
		50	-	-	4500	4,40	5500	4,65	6500	4,88	7600	5,10	8800	5,29	10200	5,47	
	LLZ015T4	30	4900	3,42	5900	3,64	7200	3,83	8700	3,99	10400	4,14	12300	4,28	14500	4,41	
		40	4700	4,08	5700	4,33	6900	4,57	8300	4,79	9900	5,00	11700	5,22	13600	5,44	
		50	-	-	5400	5,26	6600	5,56	7800	5,85	9300	6,14	10900	6,44	12600	6,76	
	LLZ018T4	30	5900	3,89	7100	4,15	8600	4,36	10400	4,55	12400	4,72	14700	4,88	17300	5,03	
		40	5600	4,65	6800	4,94	8200	5,21	9900	5,46	11800	5,70	13900	5,95	16300	6,20	
		50	-	-	6500	6,00	7800	6,33	9400	6,66	11100	6,99	13000	7,34	15100	7,70	
	LLZ024T4	30	7300	4,75	8800	5,06	10600	5,32	12800	5,55	15400	5,76	18200	5,95	21400	6,14	
		40	6900	5,67	8400	6,03	10200	6,36	12300	6,66	14600	6,96	17300	7,26	20200	7,57	
		50	-	-	8000	7,32	9700	7,73	11600	8,13	13800	8,54	16100	8,96	18700	9,40	

To: Evaporating temperature in [°C]

Tc: Condensing temperature in [°C]

Qo: Cooling capacity in [W]

Pe: Power input in [kW]

Subcooling: 0 K

Superheat: 10 K



For more information and performance with other refrigerants, please refer to Coolselector® 2 at coolselector.danfoss.com or contact Danfoss.

Technical data and ordering

LLZ - Scroll compressors - R452A - 50 Hz

Performance table - Without economizer

Type	To	-40			-35			-30			-25			-20			-15			-10			
	Tc	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe	Qo	Pe		
50 Hz	LLZ013T4A	30	1951	1.63	2551	1.85	3300	2.03	4220	2.18	5333	2.31	6663	2.44	8231	2.57							
		40	1684	1.66	2187	1.99	2821	2.27	3608	2.50	4570	2.70	5733	2.87	7121	3.04							
		50	1429	1.55	1826	2.03	2335	2.43	2978	2.77	3778	3.07	4762	3.32	5955	3.55							
	LLZ015T4A	30	2482	2.05	3192	2.31	4055	2.51	5095	2.68	6335	2.83	7802	2.98	9518	3.16							
		40	2097	2.12	2715	2.51	3468	2.83	4379	3.10	5474	3.32	6779	3.52	8320	3.71							
		50	1687	2.01	2197	2.60	2822	3.08	3588	3.49	4520	3.83	5645	4.12	6992	4.38							
	LLZ018T4A	30	2939	2.39	3787	2.69	4813	2.92	6045	3.12	7513	3.29	9246	3.47	11273	3.69							
		40	2478	2.51	3220	2.96	4118	3.32	5201	3.62	6497	3.87	8038	4.10	9855	4.33							
		50	1982	2.47	2601	3.13	3354	3.66	4268	4.11	5374	4.48	6705	4.81	8292	5.12							
	LLZ024T4A	30	3653	2.94	4699	3.27	5967	3.54	7492	3.78	9310	4.00	11458	4.22	13971	4.46							
		40	3084	3.11	3997	3.61	5104	4.03	6442	4.38	8046	4.70	9956	4.98	12208	5.25							
		50	2472	3.12	3230	3.85	4156	4.47	5283	5.00	6651	5.45	8297	5.85	10265	6.21							
	LLZ034T4A	30	5364	4.11	6902	4.59	8764	4.97	11002	5.30	13670	5.60	16821	5.91	20507	6.28							
		40	4519	4.36	5861	5.08	7487	5.67	9451	6.16	11805	6.58	14605	6.98	17909	7.39							
		50	3611	4.37	4726	5.42	6084	6.29	7738	7.02	9743	7.65	12158	8.21	15041	8.74							
60 Hz	LLZ013T4A	30	2361	2.22	3076	2.42	3945	2.60	4990	2.78	6236	2.94	7704	3.10	9418	3.24							
		40	1969	2.45	2601	2.70	3365	2.94	4283	3.16	5380	3.38	6681	3.58	8210	3.77							
		50	1556	2.69	2097	3.00	2747	3.30	3530	3.58	4472	3.85	5598	4.11	6935	4.35							
	LLZ015T4A	30	2997	2.62	3877	2.83	4954	3.06	6258	3.30	7821	3.53	9672	3.74	11840	3.90							
		40	2509	3.07	3279	3.28	4218	3.53	5359	3.80	6732	4.07	8371	4.33	10309	4.56							
		50	2009	3.65	2661	3.84	3455	4.09	4424	4.37	5602	4.67	7023	4.98	8723	5.27							
	LLZ018T4A	30	3490	2.96	4514	3.21	5766	3.51	7288	3.81	9122	4.10	11308	4.36	13888	4.56							
		40	2953	3.47	3856	3.72	4951	4.02	6278	4.35	7880	4.70	9801	5.04	12086	5.34							
		50	2379	4.20	3154	4.40	4083	4.68	5207	5.02	6572	5.40	8221	5.79	10205	6.17							
	LLZ024T4A	30	4300	3.56	5577	3.91	7142	4.28	9043	4.66	11327	5.01	14044	5.31	17238	5.55							
		40	3674	4.15	4807	4.51	6175	4.92	7828	5.35	9814	5.77	12185	6.17	14991	6.52							
		50	2963	4.98	3943	5.33	5109	5.75	6508	6.22	8191	6.70	10212	7.18	12627	7.63							
	LLZ034T4A	30	5832	4.79	7638	5.31	9860	5.80	12556	6.28	15785	6.74	19604	7.20	24069	7.65							
		40	5100	5.47	6660	6.11	8570	6.73	10888	7.32	13676	7.90	16996	8.45	20910	9.00							
		50	4350	6.27	5639	7.07	7211	7.84	9126	8.58	11447	9.29	14240	9.98	17575	10.66							

To: Evaporating temperature in [°C]

Tc: Condensing temperature in [°C]

Qo: Cooling capacity in [W]

Pe: Power input in [kW]

Subcooling: 0 K



Superheat: 10



For more information and performance with other refrigerants, please refer to Coolselector® 2 at coolselector.danfoss.com or contact Danfoss.

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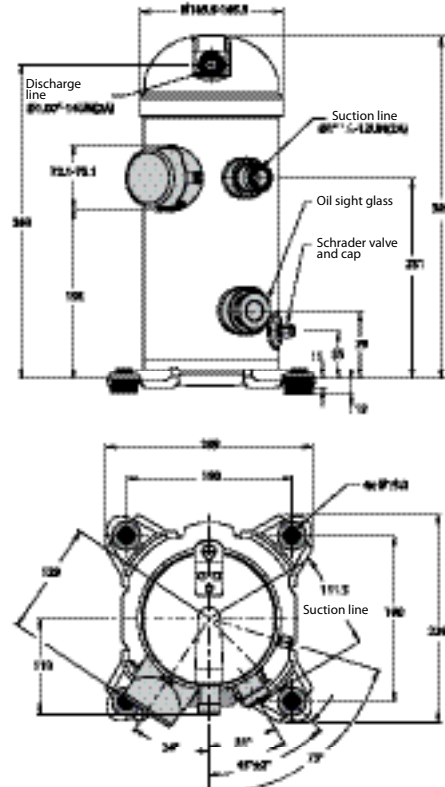
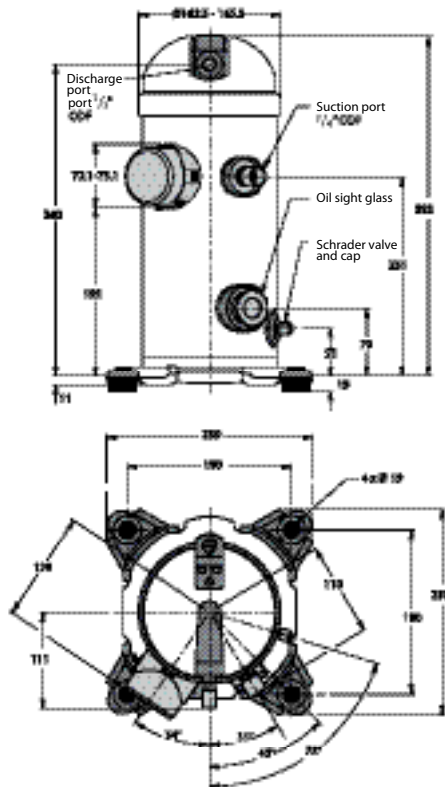
Nomenclature and Dimensions

	Type	Size	Motor	Features	Evolution										
	MLZ	021	T4L	P9	A										
Application:	M: Medium temperature refrigeration														
Family, Refrigerant:	LZ(A): R404A - R507 - R22 - R134a - R407A - R407F - R448A - R449A - R452A														
Nominal capacity:	In thousand Btu/h at 60 Hz, ARI, MBP conditions														
Model variation:	T: Design optimised for refrigeration														
				Index - with PVE oil A with POE oil											
				Other features <table border="1"> <thead> <tr> <th>Oil sight glass</th> <th>Oil equalisation</th> <th>Oil drain</th> <th>LP gauge port</th> <th>Gas equalisation port</th> </tr> </thead> <tbody> <tr> <td>9</td> <td>Threaded</td> <td>None</td> <td>Schrader</td> <td>None</td> </tr> </tbody> </table>	Oil sight glass	Oil equalisation	Oil drain	LP gauge port	Gas equalisation port	9	Threaded	None	Schrader	None	
Oil sight glass	Oil equalisation	Oil drain	LP gauge port	Gas equalisation port											
9	Threaded	None	Schrader	None											
				Tubing and electrical connections: P: Brazed connections, spade terminals C: Brazed connections, screw terminals T: Rotolock connections, spade terminals Q: Rotolock connections, screws terminals	 spade terminals  screw terminals										
				Motor protection: L: internal motor protection											
				Motor voltage code 1: 208-230 V/1~/60 Hz 2: 200-220 V/3~/50 Hz & 208-230 V/3~/60 Hz 4: 380-415V/3~/50 Hz & 460 V/3~/60 Hz 5: 220-240 V/1~/50 Hz 7: 575V/ 3~/60 Hz 9: 380 V/3~/60 Hz											

MLZ015-019-021-026

Brazed

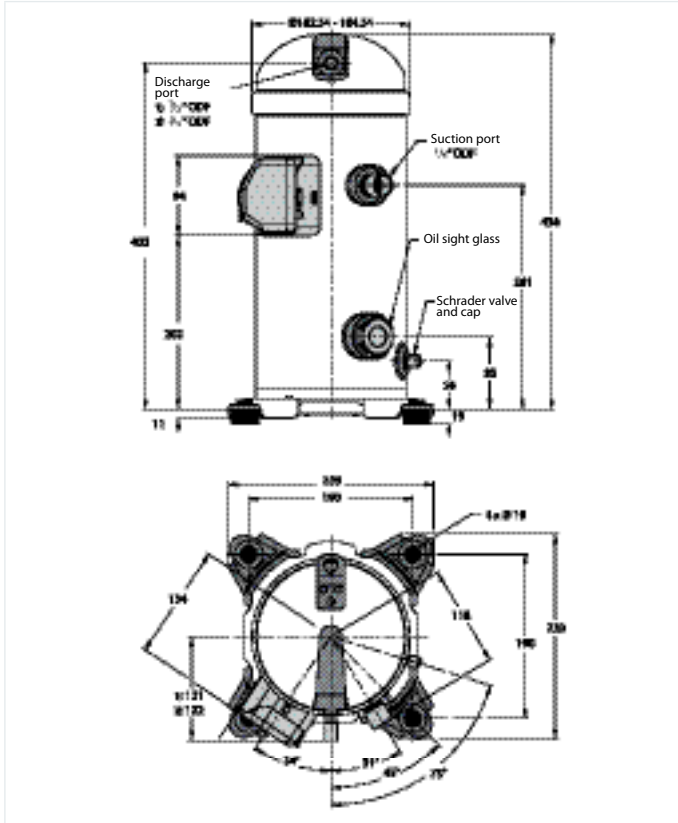
Rotolock



Dimensions

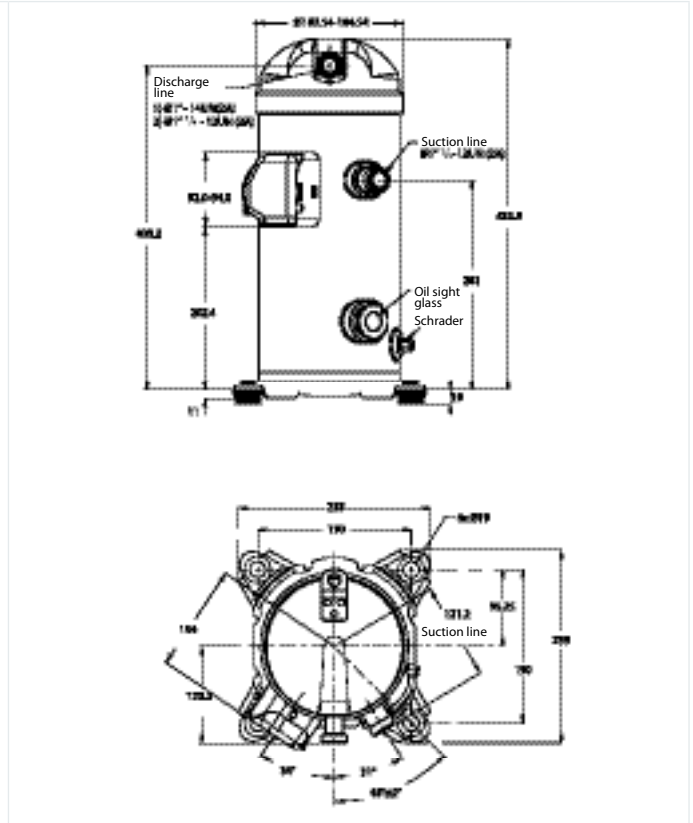
MLZ030-038-042-045-048

Brazed



1) MLZ030-038-042-045
2) MLZ048

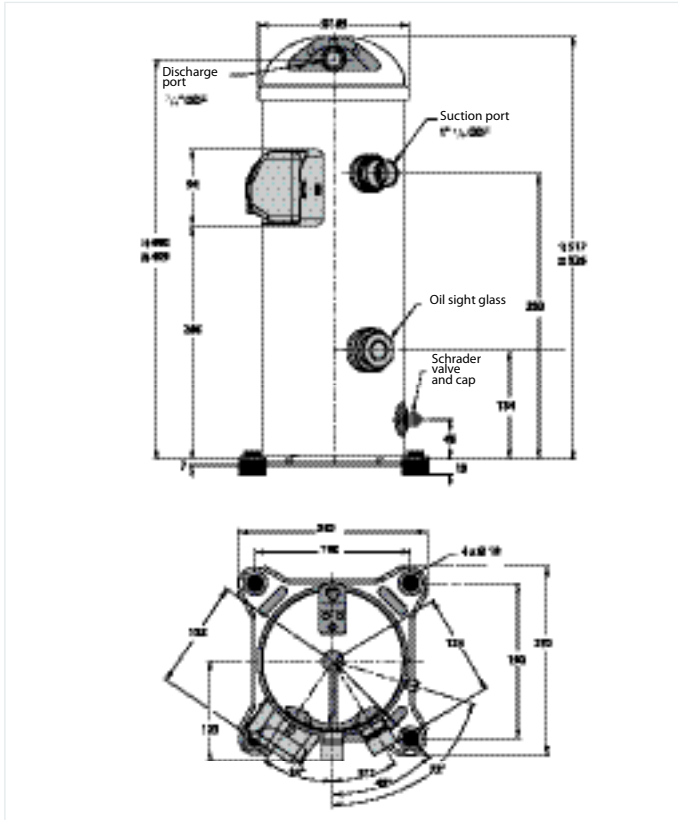
Rotolock



1) MLZ030-038-042-045
2) MLZ048

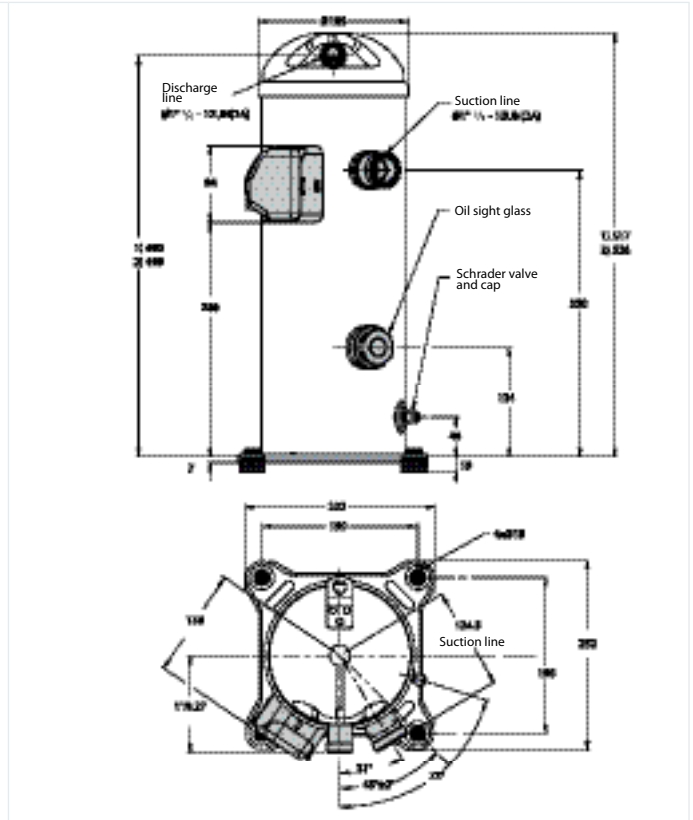
MLZ058-066-076

Brazed



1) MLZ030-038-042-045
2) MLZ048

Rotolock



1) MLZ085
2) MLZ066-076

Nomenclature and Dimensions

Type	Size	Motor	Features	Evolution
LLZ	013	T 4 L	Q 9	A

Application:
L: low temperature refrigeration

Family, Refrigerant:
LZ: R404A, R507, R452A, R448A, R449A

Nominal capacity:
In thousand Btu/h at 60 Hz, ARI, LBP conditions of R404A

Model variation:
T: design optimised for refrigeration

Evolution:
- with PVE Oil
A with POE Oil

Other features

Oil sight glass	Oil equalisation	Oil drain	LP gauge port	Gas equalis. port
9	Threaded	None	Schrader	None

Oil sight glass: 9

Oil equalisation: Threaded

Oil drain: None


LP gauge port: Schrader

Gas equalis. port: None

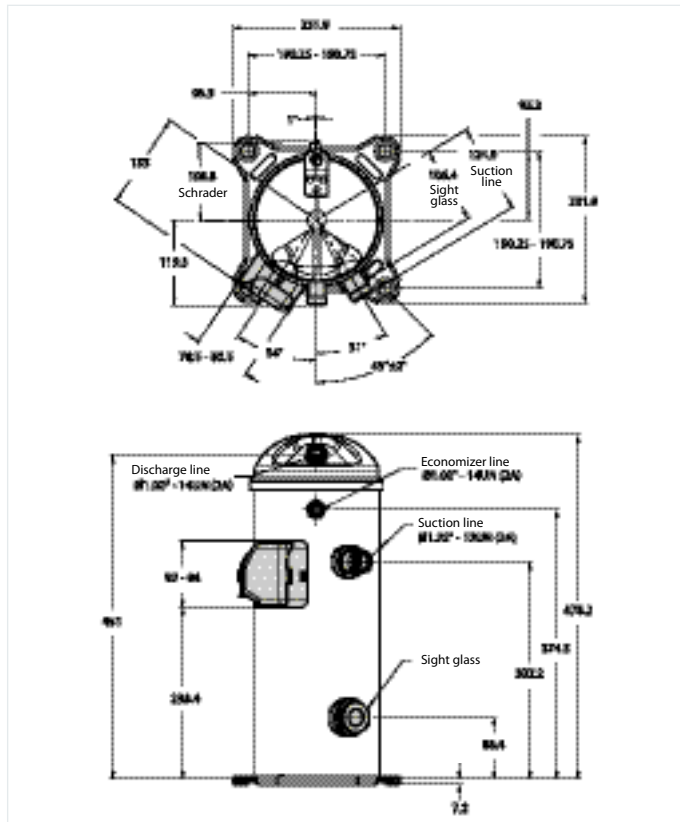
Tubing and electrical connections:
Q: Rotolock connections, screw terminals

Motor protection:
L: Internal motor protection

Motor voltage code:
2: 200-220 V/3~/50 Hz & 208-230 V/3~/60 Hz
4: 380-415V/3~/50 Hz & 460 V/3~/60 Hz
9: 380 V/3~60 Hz



LLZ013-015-018



LLZ024

