

## Performance tables – R404A

### MLZ – medium temperatures

Evap. temp °F	Model	Cooling capacity in W / 104°F condensing temperature							ARI			Sound power dB(A)	
		-10°F	+0°F	+5°F	+10°F	+20°F	+30°F	+40°F	+50°F	Cooling capacity Btu/h	Power input kW		EER Btu/h/W
60 Hz • 460 V / 3-phases	MLZ015	8 500	11 000	12 400	13 900	17 300	21 100	25 600	30 700	11 900	1.90	6.12	68
	MLZ019	11 900	15 000	16 800	18 700	22 900	27 800	33 400	39 900	15 800	2.34	6.75	68
	MLZ021	12 700	16 000	17 900	19 900	24 400	29 600	35 600	42 300	16 800	2.45	6.75	68
	MLZ026	15 800	19 900	22 200	24 700	30 300	36 900	44 300	52 600	21 000	3.07	6.82	70
	MLZ030	18 600	23 400	26 100	29 000	35 700	43 300	52 100	62 100	25 200	3.64	6.94	73
	MLZ038	22 200	28 100	31 400	34 900	42 700	51 800	62 300	74 400	30 100	4.30	6.94	74
	MLZ045	27 000	34 000	38 000	42 200	51 800	62 900	75 700	90 100	36 200	5.20	6.88	74
	MLZ048	29 500	37 100	41 400	46 200	56 700	68 900	82 800	98 300	39 400	5.60	6.98	75
	MLZ058	33 200	42 800	48 300	54 300	67 700	83 000	100 300	119 800	45 600	6.70	6.74	77
	MLZ066	39 900	50 300	56 200	62 600	76 900	93 500	112 600	134 100	54 100	7.50	7.17	77
MLZ076	46 300	58 000	64 600	71 700	87 800	106 800	128 900	154 600	60 300	8.60	6.98	77	

Available with rotolock or braze connections

### LLZ – low temperatures

R404A (preliminary data)	ARI - 60Hz Capacity (Btu/h)
LLZ013	13 150
LLZ015	16 000
LLZ018	19 000
LLZ024	23 800
LLZ033	32 600

Vapor injection - with economizer

R404A (preliminary data)	ARI - 60Hz Capacity (Btu/h)
LLZ013 - Eco	19 400
LLZ015 - Eco	22 900
LLZ018 - Eco	27 400
LLZ024 - Eco	34 000
LLZ033 - Eco	46 000

#### Rating conditions:

##### LLZ for low temperatures:

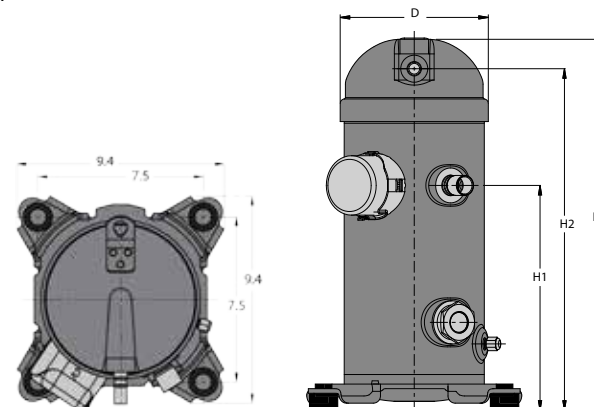
ARI LBP evap. -25°F; cond. 105°F; RGT 65°F; subcooling 0°F  
Capacity with EVI depends on the subcooling from the heat exchanger

##### MLZ for medium temperatures

50 Hz: EN12900 MBP: evap. temp 16°F; cond. temp 113°F; RGT 68°F, subcooling 0°F  
60 Hz: ARI MBP: evap. temp 20°F/-7°C; cond. temp 120°F/49°C; RGT 65°F/18°C; Subcooling: 0°F/0K

## Dimensions

Dimensions in inch	H	H1	H2	D	Weight (Lbs)
LLZ 013-018	18.8	11.9	14.8	7.2	93
LLZ 024-033	21	13.5	16.3	7.2	101
MLZ 015-026	15.5	9.1	14.2	6.5	68
MLZ 030-048	17.2	10.3	15.9	7.2	82
MLZ 058-076	20.8	13.8	19.6	9.1	99



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Danfoss scroll compressors for refrigeration

# High efficiency and reliability even in low temperatures Cooler than ever!

With MLZ and LLZ series for MBP and LBP refrigeration, take advantage of scroll compressors that are efficient by design. Cut down operating costs and meet the most demanding food standards. LLZ & MLZ: the new names in scroll technology!

**-40°C to +10°C**  
Extended compressor range.

Suits rack systems and all applications for refrigeration.





## Danfoss scroll compressors for refrigeration applications in refrigeration

The MLZ and LLZ series are purpose-engineered for applications in refrigeration with respectively medium and low temperatures. They suit all operating conditions in different cooling systems.



### 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%.



### 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

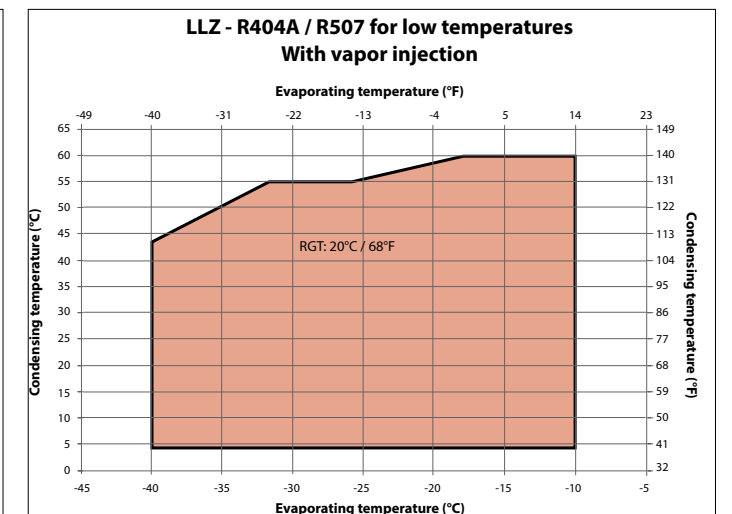
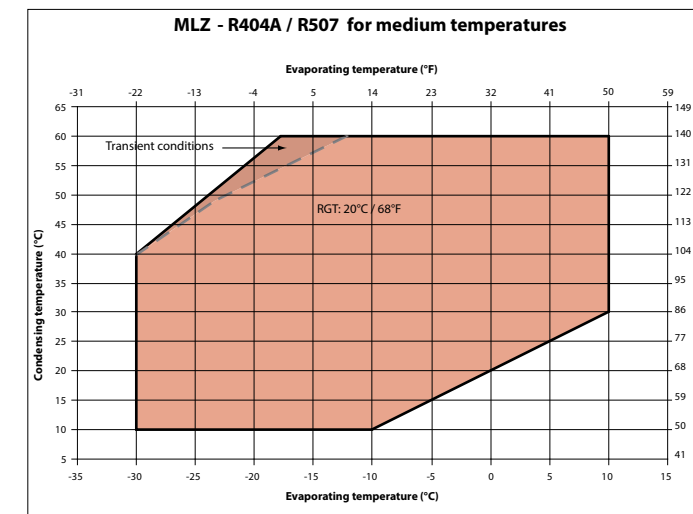
Footprint up to 30% smaller than alternative reduces the logistics costs and frees up space in the system.

## Significant

annual cost savings  
with vapor injection.

## Wide operating envelopes

comply with all applications in the refrigeration



## Boost cooling capacity and efficiency with vapor injection in low temperatures

Danfoss proposes the optional economizer kit to boost compressor efficiency and capacity with vapor injection.

The system uses a liquid subcooler circuit. During the liquid subcooler process, some liquid refrigerant evaporates in the economizer and is injected into the scroll set at intermediate pressure. This provides additional cooling capacity thanks to subcooling in the economizer and increases efficiency of the system.

The effect of vapor injection increases together with the increase of the system pressure ratio.

## Featured for other immediate benefits

- Multi-refrigerant scrolls save on inventory
- Vapor injection available with optional economizer kit increases LLZ efficiency and cooling capacity
- Optional sound jacket attenuates sound levels
- Suitable for transport of refrigerated goods



MLZ compressors may be blue or black depending on the manufacturing origin