MZ Series

R454B

GEOTHERMAL RESIDENTIAL PACKAGE UNITS

2 to 5 Tons
60Hz - 454B

The High Efficiency MZ Series offers high efficient two-stage operation in a simple cabinet design. The High Efficiency Series also offers options that allow for application flexibility. Available options include hot water generator, enhanced iGate® controls, coated air coils, extended range insulation, UltraQuiet package, vFlow® internal variable water flow, and internal secondary circulator.

ADVANTAGE OF THE HIGH EFFICIENCY MZ SERIES

- Advanced Controls - iGate® communicating control provides advanced unit functionality and comprehensive configuration, monitoring and diagnostic capabilities through digital communication links with the variable-speed fan motor, variable-speed source pump (or modulating valve) and communicating thermostat or configuration/diagnostic tool
- Optional Internal Variable Water Flow - Industry-first, Built-in vFlow® replaces a traditionally inefficient, external component of the geothermal system (water circulation) with an ultra-high-efficient, variable speed, internal water flow system consisting of an internal variable speed circulator or an internal modulating motorized water valve
- Sound absorbing glass fiber insulation
- Unique double isolation compressor mounting for quiet operation
- Insulated divider and separate compressor/air handler compartments
- Field convertible discharge air arrangement for horizontal units
- Variable speed ECM fan motor
- Internally trapped condensate drain line (vertical units only)
- Eight safeties standard
- Extended range (20 to 120°F, -6.7 to 48.9°C) capable
- Tin-plated micro-channel EVAP coil
- SS drain pan

Vertical Upflow Model		A Length	B Width	C Height
024 - 030	in.	22.5	22.5	40.0
	cm	57.15	57.15	101.6
036 - 042	in.	26.0	22.5	45.0
	cm	66.0	57.15	114.3
048 - 060	in.	29.3	25.5	50.5
	cm	74.4	64.7	128.3

Horizontal Model		A Length	B Width	C Height
024 - 030	in	48.4	22.5	18.3
	cm	122.9	57.15	46.5
036 - 042	in.	53.3	22.5	21.0
	cm	135.4	57.15	53.3
048 - 060	in.	68.0	25.5	21.0
	cm	172.7	64.7	53.3

PACKAGE UNIT AUXILIARY/EMERGENCY HEATERS					
Part Number	kW @ 240 Single Phase	Number of Circuits	Used with		
			24	36	48-70
HGM05ACG	4.8	1	X		
HGM08ACG	7.6	1	X		
HGM10ACG	9.6	1	X		
HGM12ACG	11.4	2	X		
HGL10ACG	9.6	1		X	X
HGL15ACG	14.4	2		X	X
HGL20ACG	19.2	2			X
16B0002N02	Single Circuit Adapter Kit for 2 circuit heaters				

Comfort-Aire®

Warranty—10 years on compressor, 10 years on parts
(Some limitations apply; see printed warranty for details.)

www.comfort-aire.com

MZ Series

Comfort-Aire®

Model	024	030	036	042	048	060
Compressor (1 Each)	Scroll					
Number of refrigerant circuits	1	1	1	1	1	1
Factory Charge R-454B (oz)	40	36	46	56	56	69
Refrigerant Leak Detection System	0	0	0	0	0	R
Number of Sensors	2	2	2	2	2	2
Water Connection Size						
Swivel	1"	1"	1"	1"	1"	1"
System Water Volume (gal)[1]	0.323	0.323	0.738	0.890	0.890	0.939
Vertical						
Filter Standard - 1" Throwaway (inch)	20x20	20x20	24x24	24x24	28x28	28x28
Weight - Operating, (lbs)	216	224	245	260	315	330
Weight - Packaged, (lbs)	221	229	251	266	322	337
Horizontal						
Filter Standard - 1" Throwaway (inch)	18x24	18x24	2-14x20	2-14x20	1-20x24 1-14x20	1-20x24 1-14x20
Weight - Operating, (lbs)	208	208	233	244	299	314
Weight - Packaged, (lbs)	213	213	239	250	306	321
Hot Water Generator						
Swivel - Residential Class	1"	1"	1"	1"	1"	1"
Weight - HWG Adder (lbs.)	+15	+15	+15	+15	+15	+15

Notes:
- *All dimensions displayed above are in inches unless otherwise marked.*
- *The standard Condensate Drain Connection is rubber coupling that couples to ¾-inch schedule 40/80 PVC.*
- *The optional Stainless Steel Condensate Drain Connection is ¾-inch FPT.*
- *FPT = Female Pipe Thread.*
- *O = Optional, R = Required*

1. Volume without water options.

UNIT MAXIMUN WATER WORKING PRESSURE

Options	Max Pressure PSIG [kPa]
Base Unit	300 [2,068]
Internal Modulating Valve	300 [2,068]

TESTED TO ASHRAE/AHRI/ISO 13256-1 ENGLISH UNITS

Model	Water Loop Heat Pump				Ground Water Heat Pump				Ground Loop Heat Pump			
	Cooling 86°F		Heating 68°F		Cooling 59°F		Heating 50°F		Full Cool 77°F Part Cool 68°F		Full Heat 32°F Part Heat 41°F	
	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP
MZ*024 Part	17,500	17.0	19,900	5.7	20,000	29.7	16,600	4.8	19,300	25.3	14,600	4.2
MZ*024 Full	24,000	15.1	28,400	5.3	27,000	24.1	23,500	4.7	25,000	18.0	18,400	3.9
MZ*030 Part	21,200	15.2	24,000	5.1	24,700	26.4	20,800	4.4	23,400	22.00	18,700	4.0
MZ*030 Full	28,700	14.0	33,200	4.6	32,900	21.7	28,700	4.1	30,200	16.3	23,200	3.6
MZ*036 Part	26,100	16.1	31,600	5.3	29,900	26.0	25,700	4.4	28,500	22.6	22,600	4.1
MZ*036 Full	35,000	14.0	44,200	4.6	39,300	20.2	36,300	4.2	36,400	16.4	28,600	3.6
MZ*042 Part	32,500	17.0	36,000	5.0	36,000	28.5	29,800	4.5	35,000	23.5	26,400	4.0
MZ*042 Full	43,000	15.5	49,500	4.7	47,500	22.8	41,000	4.2	44,500	17.3	32,500	3.5
MZ*048 Part	34,000	16.5	39,000	5.5	38,500	28.5	31,800	4.5	37,000	24.0	28,000	4.0
MZ*048 Full	47,500	15.5	55,000	4.8	52,000	22.9	45,000	4.3	49,000	17.7	36,000	3.7
MZ*060 Part	42,000	17.5	47,300	5.5	47,000	29.0	38,500	4.7	45,500	24.9	34,000	4.2
MZ*060 Full	59,000	15.5	67,200	5.0	65,000	22.8	55,700	4.4	61,500	17.8	44,600	3.7

Notes:
- *Where dual voltages are available ratings are based on the lower voltage setting.*
- *Cooling capacities based upon 20°C DB, 15°C WB entering air temperature.*
- *Heating capacities based upon 20°C DB, 15°C WB entering air temperature*
- *Ground Loop Heat Pump ratings based on 15% antifreeze solution.*

Due to ongoing product improvements, specifications and dimensions are subject to change and correction without notice or incurring obligations. Determining the application and suitability for use of any product is the responsibility of the installer. Additionally, the installer is responsible for verifying dimensional data on the actual product prior to beginning any installation preparations.

Third party incentive and rebate programs have precise requirements as to product performance and certification. All products meet applicable regulations in effect on date of manufacture; however, certifications are not necessarily granted for the life of a product. Therefore, it is the responsibility of the applicant to determine whether a specific model qualifies for these incentive/rebate programs.

"This product complies with all California product labeling laws including, but not limited to, the Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65."

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Comfort-Aire®

MARS® Delivering Confidence