



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 cm 57.15 | 22.5 57.15 | 40.0 101.6 |
| 036 - 042 | in. 26.0 cm 66.0 | 22.5 57.15 | 45.0 114.3 |
| 048 - 060 | in. 29.3 cm 74.4 | 25.5 64.7 | 50.5 128.3 |

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

MZ SERIES

GEOHERMAL RESIDENTIAL PACKAGED UNITS

2 to 5 Tons
60Hz - 454B



| 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 | | | | |

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



| 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 3/4-inch schedule 40/80 PVC.
- The optional Stainless Steel Condensate Drain Connection is 3/4-inch FPT.
- FPT = Female Pipe Thread.
- O = Optional, R = Required
- 1. Volume without water options.

UNIT MAXIMUM 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.

"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."

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.