



Single and 2-Stage Compact Horizontal Packaged Unit

GEOTHERMAL HEAT PUMP TECHNICAL OVERVIEW



The GeoComfort Compact Horizontal Packaged System provides efficient comfort in all conditions. These versatile models are smaller than previous GeoComfort horizontal models, making them better suited for installations where space for mechanical equipment is limited. The narrow width easily fits between 24" trussing.

Horizontal models deliver ducted heating and cooling and can provide a portion of needed domestic hot water. The rugged, galvanized steel cabinet is designed to be installed on a flat surface, suspended above the ceiling, or a similar application. The versatile cabinet can be converted in the field for side or end discharge, with left or right return air.

Unit Performance

Ground Loop Heat Pump (See the Commercial Product Catalog for Water Loop Heat Pump AHRI performance ratings)

| Single Stage Models | | Blower | Cooling | | | | Heating | | | | Dimensional Data | | |
|---------------------|---------------------|--------|-----------|------|-----------|------|-----------|-----|-----------|-----|------------------|--------|-------|
| | | | Full Load | EER | Part Load | EER | Full Load | COP | Part Load | COP | Height | Width | Depth |
| ZS006 | COAX (208/230V 1PH) | PSC | 6,900 | 17.1 | — | — | 5,200 | 3.5 | — | — | 12" | 20" | 40" |
| | COAX (265/115V 1PH) | PSC | 6,500 | 16.2 | — | — | 5,000 | 3.3 | — | — | 12" | 20" | 40" |
| ZS009 | COAX (208/230V 1PH) | PSC | 9,600 | 16.7 | — | — | 7,500 | 3.5 | — | — | 12" | 20" | 40" |
| | COAX (265/115V 1PH) | PSC | 9,200 | 15.9 | — | — | 7,100 | 3.3 | — | — | 12" | 20" | 40" |
| ZS012 | COAX (208/230V 1PH) | PSC | 11,300 | 14.1 | — | — | 9,500 | 3.2 | — | — | 12" | 20" | 40" |
| ZS015 | BPHE (208/230V 1PH) | PSC | 15,300 | 19.2 | — | — | 11,100 | 3.8 | — | — | 17" | 21" | 40" |
| | BPHE (208/230V 1PH) | ECM | 15,200 | 20.3 | — | — | 10,900 | 3.9 | — | — | 17" | 21" | 40" |
| | COAX (208/230V 1PH) | PSC | 14,500 | 17.1 | — | — | 11,300 | 3.9 | — | — | 17" | 21" | 40" |
| | COAX (208/230V 1PH) | ECM | 14,200 | 17.6 | — | — | 11,200 | 3.9 | — | — | 17" | 21" | 40" |
| ZS017 | BPHE (208/230V 1PH) | PSC | 18,300 | 18.6 | — | — | 13,400 | 3.7 | — | — | 17" | 21" | 40" |
| | BPHE (208/230V 1PH) | ECM | 18,100 | 20.5 | — | — | 13,000 | 3.8 | — | — | 17" | 21" | 40" |
| | COAX (208/230V 1PH) | PSC | 17,900 | 17.1 | — | — | 13,700 | 3.7 | — | — | 17" | 21" | 40" |
| | COAX (208/230V 1PH) | ECM | 17,800 | 18.2 | — | — | 13,500 | 3.9 | — | — | 17" | 21" | 40" |
| ZS018 | BPHE (208/230V 1PH) | PSC | 20,500 | 18.2 | — | — | 14,400 | 3.6 | — | — | 19.25" | 21.75" | 52" |
| | BPHE (208/230V 1PH) | ECM | 20,800 | 20.5 | — | — | 14,200 | 3.8 | — | — | 19.25" | 21.75" | 52" |
| | COAX (208/230V 1PH) | PSC | 19,400 | 15.5 | — | — | 14,800 | 3.5 | — | — | 19.25" | 21.75" | 52" |
| | COAX (208/230V 1PH) | ECM | 20,100 | 18.7 | — | — | 14,100 | 3.7 | — | — | 19.25" | 21.75" | 52" |
| ZS024 | BPHE (208/230V 1PH) | PSC | 25,200 | 18.7 | — | — | 18,600 | 3.7 | — | — | 19.25" | 21.75" | 52" |
| | BPHE (208/230V 1PH) | ECM | 26,100 | 21.5 | — | — | 18,600 | 3.9 | — | — | 19.25" | 21.75" | 52" |
| | COAX (208/230V 1PH) | PSC | 25,700 | 17.4 | — | — | 18,500 | 3.6 | — | — | 19.25" | 21.75" | 52" |
| | COAX (208/230V 1PH) | ECM | 26,200 | 19.6 | — | — | 18,000 | 3.9 | — | — | 19.25" | 21.75" | 52" |
| ZS030 | BPHE (208/230V 1PH) | PSC | 30,300 | 19.1 | — | — | 21,900 | 3.7 | — | — | 19.25" | 21.75" | 52" |
| ZS030 | BPHE (208/230V 1PH) | ECM | 30,700 | 20.7 | — | — | 21,500 | 4.0 | — | — | 19.25" | 21.75" | 52" |
| ZS030 | COAX (208/230V 1PH) | PSC | 29,700 | 17.7 | — | — | 22,900 | 3.6 | — | — | 19.25" | 21.75" | 52" |
| ZS030 | COAX (208/230V 1PH) | ECM | 29,000 | 18.8 | — | — | 21,700 | 3.8 | — | — | 19.25" | 21.75" | 52" |
| ZS036 | BPHE (208/230V 1PH) | PSC | 37,600 | 18.1 | — | — | 27,800 | 3.7 | — | — | 21.25" | 21.75" | 56" |
| ZS036 | BPHE (208/230V 1PH) | ECM | 38,400 | 19.5 | — | — | 27,600 | 4.0 | — | — | 21.25" | 21.75" | 56" |
| ZS036 | COAX (208/230V 1PH) | PSC | 36,600 | 17.9 | — | — | 28,300 | 3.7 | — | — | 21.25" | 21.75" | 56" |
| ZS036 | COAX (208/230V 1PH) | ECM | 37,200 | 18.8 | — | — | 27,500 | 3.9 | — | — | 21.25" | 21.75" | 56" |
| ZS042 | BPHE (208/230V 1PH) | PSC | 43,400 | 19.8 | — | — | 32,800 | 3.9 | — | — | 21.25" | 21.75" | 56" |
| ZS042 | BPHE (208/230V 1PH) | ECM | 44,100 | 21.1 | — | — | 32,200 | 4.1 | — | — | 21.25" | 21.75" | 56" |
| ZS042 | COAX (208/230V 1PH) | PSC | 41,100 | 17.9 | — | — | 31,700 | 3.7 | — | — | 21.25" | 21.75" | 56" |
| ZS042 | COAX (208/230V 1PH) | ECM | 40,700 | 19.2 | — | — | 30,200 | 3.8 | — | — | 21.25" | 21.75" | 56" |
| ZS048 | BPHE (208/230V 1PH) | PSC | 48,500 | 17.8 | — | — | 38,500 | 3.6 | — | — | 21.25" | 21.75" | 56" |
| ZS048 | BPHE (208/230V 1PH) | ECM | 50,400 | 19.1 | — | — | 37,800 | 3.8 | — | — | 21.25" | 21.75" | 56" |
| ZS048 | COAX (208/230V 1PH) | PSC | 48,600 | 17.0 | — | — | 37,800 | 3.5 | — | — | 21.25" | 21.75" | 56" |
| ZS048 | COAX (208/230V 1PH) | ECM | 49,300 | 17.4 | — | — | 36,200 | 3.6 | — | — | 21.25" | 21.75" | 56" |
| ZS060 | BPHE (208/230V 1PH) | PSC | 60,500 | 17.8 | — | — | 49,200 | 3.8 | — | — | 21.25" | 24" | 61" |
| ZS060 | BPHE (208/230V 1PH) | ECM | 60,700 | 19.5 | — | — | 48,200 | 4.0 | — | — | 21.25" | 24" | 61" |
| ZS060 | COAX (208/230V 1PH) | PSC | 57,000 | 16.1 | — | — | 48,400 | 3.5 | — | — | 21.25" | 24" | 61" |
| ZS060 | COAX (208/230V 1PH) | ECM | 57,000 | 17.5 | — | — | 46,200 | 3.6 | — | — | 21.25" | 24" | 61" |
| ZS072 | BPHE (208/230V 1PH) | PSC | 70,600 | 17.2 | — | — | 57,400 | 3.5 | — | — | 21.25" | 24" | 61" |
| ZS072 | BPHE (208/230V 1PH) | ECM | 72,100 | 17.7 | — | — | 56,600 | 3.7 | — | — | 21.25" | 24" | 61" |
| ZS072 | COAX (208/230V 1PH) | PSC | 70,200 | 15.3 | — | — | 56,200 | 3.2 | — | — | 21.25" | 24" | 61" |
| ZS072 | COAX (208/230V 1PH) | ECM | 71,200 | 15.7 | — | — | 56,200 | 3.3 | — | — | 21.25" | 24" | 61" |
| Two Stage Models | | Blower | Cooling | | | | Heating | | | | Dimensional Data | | |
| | | | Full Load | EER | Part Load | EER | Full Load | COP | Part Load | COP | Height | Width | Depth |
| ZT024 | BPHE (208/230V 1PH) | ECM | 26,800 | 19.8 | 20,700 | 28.8 | 18,100 | 4.0 | 14,900 | 4.3 | 19.25" | 21.75" | 52" |
| | COAX (208/230V 1PH) | ECM | 26,400 | 18.3 | 20,000 | 25.0 | 18,300 | 3.9 | 14,500 | 4.1 | 19.25" | 21.75" | 52" |
| ZT030 | BPHE (208/230V 1PH) | ECM | 32,000 | 18.0 | 24,800 | 24.9 | 22,600 | 3.7 | 18,700 | 4.0 | 19.25" | 21.75" | 52" |
| | COAX (208/230V 1PH) | ECM | 31,500 | 17.5 | 23,900 | 22.7 | 23,300 | 3.7 | 19,300 | 4.0 | 19.25" | 21.75" | 52" |
| ZT036 | BPHE (208/230V 1PH) | ECM | 38,200 | 19.9 | 28,900 | 29.8 | 27,600 | 4.1 | 21,200 | 4.4 | 21.25" | 21.75" | 56" |
| | COAX (208/230V 1PH) | ECM | 36,700 | 17.9 | 28,100 | 26.6 | 27,100 | 3.8 | 22,000 | 4.3 | 21.25" | 21.75" | 56" |
| ZT042 | BPHE (208/230V 1PH) | ECM | 42,600 | 19.1 | 33,100 | 26.2 | 31,500 | 3.7 | 25,800 | 4.0 | 21.25" | 21.75" | 56" |
| | COAX (208/230V 1PH) | ECM | 43,000 | 18.0 | 33,500 | 25.3 | 32,900 | 3.6 | 26,400 | 4.1 | 21.25" | 21.75" | 56" |
| ZT048 | BPHE (208/230V 1PH) | ECM | 49,800 | 18.3 | 39,700 | 26.6 | 37,900 | 3.9 | 29,600 | 4.3 | 21.25" | 21.75" | 56" |
| | COAX (208/230V 1PH) | ECM | 48,700 | 17.3 | 38,000 | 24.4 | 36,900 | 3.6 | 29,300 | 4.1 | 21.25" | 21.75" | 56" |
| ZT060 | BPHE (208/230V 1PH) | ECM | 61,200 | 18.7 | 47,300 | 26.9 | 48,100 | 3.9 | 34,200 | 4.1 | 21.25" | 24" | 61" |
| | COAX (208/230V 1PH) | ECM | 59,000 | 16.9 | 45,800 | 23.7 | 46,800 | 3.6 | 36,400 | 4.0 | 21.25" | 24" | 61" |
| ZT072 | BPHE (208/230V 1PH) | ECM | 70,400 | 18.0 | 57,100 | 25.2 | 57,900 | 3.8 | 47,600 | 4.2 | 21.25" | 24" | 61" |
| | COAX (208/230V 1PH) | ECM | 69,500 | 15.6 | 56,000 | 21.3 | 55,500 | 3.4 | 44,400 | 3.8 | 21.25" | 24" | 61" |

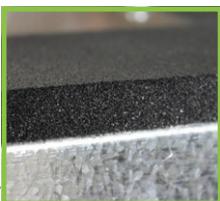
Notes:

2-stage models rated with ECM blower • Rated in accordance with AHRI/ISO standard 13256-1, which includes pump penalties • Heating capacities based on 68.0°F DB, 59.0°F WB entering air temperature
 • Cooling capacities based on 80.6°F DB, 66.2°F WB entering air temperature • Entering water temperatures Full Load: 32°F heating / 77°F cooling • Entering water temperatures Part Load: 41°F heating / 68°F cooling • Data subject to change



Available Voltages:
208/230V, 60Hz, 1Ph/3Ph
265V, 60Hz, 1Ph
460V, 60Hz, 3Ph
115V, 60Hz, 1Ph

Note: not all sizes are available in all voltages



High Density Closed Cell Foam insulation helps absorb sound. This insulation is UL GREENGUARD Certified, meaning improved air quality.

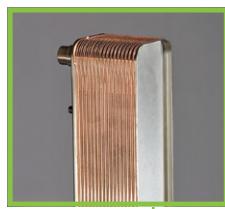


Variable Speed ECM Blower Motor matches to ductwork to deliver optimum airflow, plus has multiple CFM settings to fit any installation.

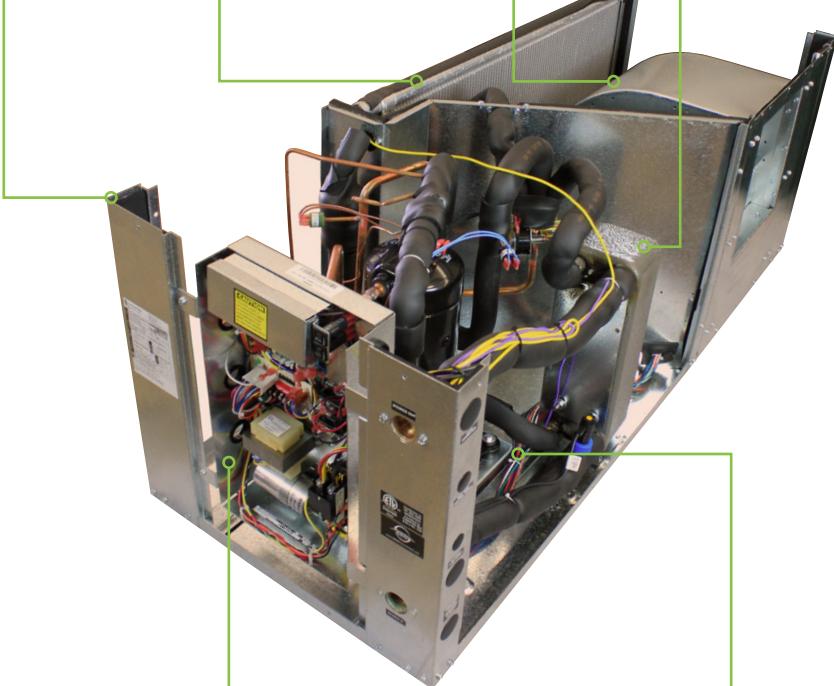
(Optional on single-stage models, standard on 2-stage)



All-aluminum microchannel air coil eliminates the potential for failure due to corrosion and improves heat transfer, which results in better efficiencies and lower operating costs.



Foam enclosed stainless steel Braze Plate Heat Exchanger boosts unit efficiency. It requires less refrigerant charge and reduces unit weight.



Digital Controls ensure proper operation, providing user-friendly diagnostics. Control box swings out for quick access to internal components.



Elastomeric Compressor Vibration Absorption Pads provide superior sound and vibration insulation, resulting in quiet operation.

Additional Features

Field convertible side or end supply air discharge with left or right hand return air.

Factory installed desuperheater (hot water generator) allows the capture of free unused heat, which is used to heat domestic water. This application can cut hot water costs by 25% - 40%.

Source side **1" FPT fittings**.

Stainless steel **brazed plate heat exchanger** (sizes 015 - 072) is protected by a sensor and flow switch. The BPHX is foam enclosed to prevent condensation. A **coax heat exchanger** is available for all sizes.

Standard **PSC motor** or optional ECM blower on single stage models. **ECM motor** standard on 2-stage models.

The **stainless steel drain pan** won't rust or corrode, while a **condensate overflow sensor** guards against clogged condensate drains.

Mechanical TXV (thermal expansion valve) for extended range operation.

Airtight blower section allows for refrigerant and electrical service work during operation.

Optional **DDC** (direct digital controls) with Modbus, Lonworks, or Bacnet protocols for building automation systems needs.

High density **UL GREENGUARD Gold certified foam insulation** reduces sound for quiet operation and improves air quality.

All **cabinet panels remove** for ease of installation and service.

Water and electrical connections conveniently located on front corner post.



Meets **ENERGY STAR® requirements** and qualifies for US federal tax credits. Other rebates and incentives may be available in your area.



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Greenville, IL ~ Mitchell, SD



GeoComfort geothermal systems are manufactured by Enertech Global and proudly built in the Heart of America – Mitchell, South Dakota. Enertech Global systems are built with stringent quality control standards and the most comprehensive testing within the geothermal heating and cooling industry.

Enertech Global is continually working to improve its products. As a result, the design, general information, and specifications of each product may change without notice and may not be as described herein. For the most up-to-date information, please visit our website, or contact our Customer Service department at info@enertechgeo.com. Statements and other information contained herein are not express warranties and do not form the basis of any bargain between the parties, but are merely Enertech Global's opinion or commendation of its products.

