Single and 2-Stage
Compact Vertical Packaged Unit

GEOTHERMAL HEAT PUMP

TECHNICAL OVERVIEW

GeoComfort®
by Enertech
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Single and 2-Stage Compact Vertical System

The GeoComfort® Compact Vertical Packaged geothermal system is built for drop-in installation. Its small footprint and enhanced serviceability features make it an ideal solution for retrofit applications or new construction.

Peace of mind is a standard feature with GeoComfort. Our products are manufactured with common components from reliable, proven suppliers. These supplier partners share our commitment to excellence, which is evident in the products we build.

Designed with the Installer in Mind

Ease of installation and service is one of the key features of GeoComfort products and the Compact Vertical Packaged system is no exception.

For example, most commonly accessed components for installation/service can be reached via the front cabinet, including:

|	
Desuperheater	Reversing Valve
Blower Motor	Refrigerant Ports
TXV	Filter Drier

Hinged control box easily tilts up and out of the way for access to internal components

Front-mounted plumbing and side-mounted electrical connections
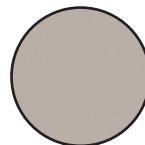
Inner front panel allows for refrigerant and electrical service work while unit is operational
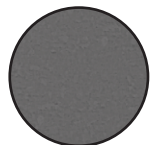
Unit Dimensions

006-012 = 21.5" w x 21.5" d x 30.0" h
015-036 = 22.5" w x 22.5" d x 37.3" h
042-072 = 25.0" w x 27.9" d x 41.0" h

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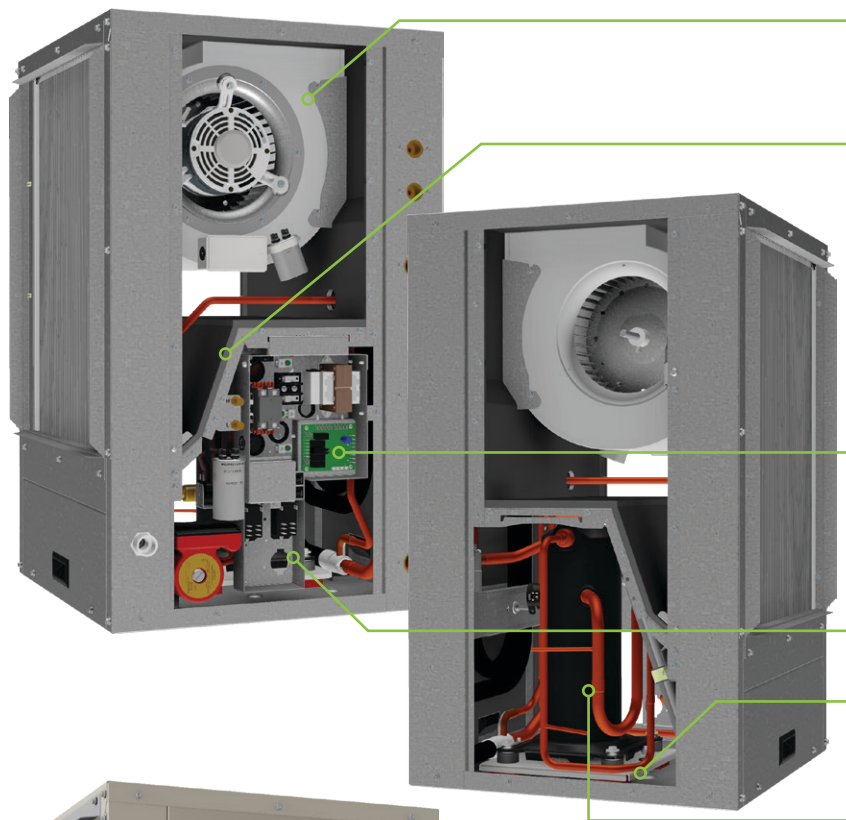
Available Cabinet Finishes:

Champagne
Residential Models

Galvanized
Commercial Series only

⚡ **Available Voltages:**
115V, 60Hz, 1Ph*
208/230V, 60Hz, 1Ph/3Ph
265V, 60Hz, 1Ph
460V, 60Hz, 3Ph
575V, 60Hz, 3Ph

The unique design of the **All-Aluminum Microchannel Air Coil** solves the issue of coil failure caused by formicary corrosion. Improved heat transfer and thermal performance results in increased unit efficiencies and lower operating costs. The coil uses 40% less material than a standard tube-and-fin copper/aluminum coil, reducing unit weight. Enhanced structural robustness reduces chance of coil damage during basic maintenance.
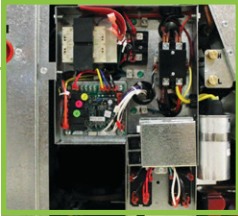
High-density closed cell foam insulation helps absorb sound. This insulation is UL GREENGUARD Certified, meaning improved air quality and no chemical emissions.
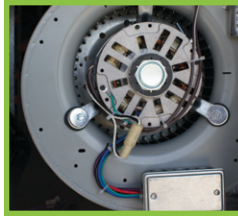
Standard PSC blower motor (single-stage) or ECM blower motor (2-stage) offer higher efficiency. ECM motors are an option on single stage models.
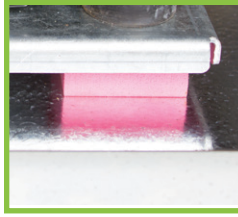
Digital controls ensure proper operation, providing user-friendly diagnostics. Advanced safety controls help protect the equipment.

Flow center and desuperheater use breakers instead of fuses, making service and repair faster

Copeland® scroll compressors ensure better reliability due to fewer moving parts

Elastomeric compressor vibration absorption pads provide superior sound and vibration insulation, resulting in quiet operation.

Additional Standard Features

Stainless steel drain pan with **condensate overflow sensor** protects against potential overflows due to clogged drains.

Flat wound enhanced surface coaxial heat exchanger improves heat transfer, improving efficiency.

Factory installed desuperheater (hot water generator) allows the capture of free unused heat, which is then used to heat domestic water. This application can cut hot water costs by up to 40%. *Optional on commercial systems.*

Front plate-mounted **refrigeration ports** give easy access to refrigerant circuit.

Optional field installed close-coupled **auxiliary heater**.

Rugged construction, **18-gauge galvanized steel cabinet.** Stringent design tolerances create a cabinet that minimizes air leaks.

Thermostatic Expansion Valve (TXV) metering for extended range of loop temperatures.

Small footprint allows for installation in restricted spaces and reduces shipping costs.

Meets ENERGY STAR®️ requirements and qualifies for the U.S. Federal tax credit. Other rebates and incentives may be available in your area.

Unit Performance – Single Stage Models
Ground Loop Heat Pump

Model	Capacity	Cooling		Heating	
		BTU/hr	EER	BTU/hr	COP
VS006	Full Load	7,200	18.6	5,600	3.7
VS009	Full Load	10,900	17.4	8,500	3.6
VS012	Full Load	11,900	18.1	9,400	3.6
VS015	Full Load	16,000	22.3	11,500	4.3
VS018	Full Load	21,700	22.2	15,400	4.0

*VS009 only. Not all models available in all voltages. Check engineering documentation for specific model availability.

Unit Performance – Two-Stage Models
Ground Loop Heat Pump

Model	Capacity	Cooling		Heating	
		BTU/hr	EER	BTU/hr	COP
VT024	Full Load	25,800	18.6	19,400	4.0
	Part Load	19,300	24.2	14,800	3.8
VT030	Full Load	32,200	18.4	24,300	3.8
	Part Load	25,500	25.8	20,000	4.2
VT036	Full Load	37,400	17.7	29,500	3.9
	Part Load	28,500	25.2	22,900	4.2
VT042	Full Load	45,900	18.5	32,400	3.9
	Part Load	35,100	26.0	25,500	4.2
VT048	Full Load	51,300	18.9	38,300	3.9
	Part Load	39,200	27.2	30,200	4.3
VT060	Full Load	60,900	17.6	46,300	3.8
	Part Load	46,500	23.6	36,600	4.2
VT072	Full Load	68,900	15.8	51,800	3.4
	Part Load	55,300	21.1	44,000	3.9

Notes: 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

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www.geocomfort.com | **info@enertechgeo.com**

Greenville, IL ~ Mitchell, SD

ENERTECH®
ENERGY + TECHNOLOGY

Built in Mitchell SOUTH DAKOTA

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.

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