RESIDENTIAL PRODUCT CATALOG

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GooComfort

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Welcome to the Family

You've built your business by understanding what your customers need and want. You've set yourself apart with high quality, professional service.

You want to offer your customers products that meet their needs; innovative products that offers them more and saves them money. Many products do one or the other, but it is rare that one can do both.

GeoComfort dealers have access to an innovative and high quality product line. You join a network of experienced professional HVAC dealers and become part of the GeoComfort family. Best of all, we listen, because we recognize that nobody understands your business like you do. Your input is as critical to our success as it is to yours.

Whether you are looking to add a geothermal product to your product portfolio or are considering replacing an existing geothermal product line, the GeoComfort brand of geothermal, heating, cooling and domestic water heating systems is the right choice.

BUILDING THE BEST

Every GeoComfort geothermal heat pump is handcrafted with pride by our dedicated employees in Mitchell, South Dakota.





Enertech Manufacturing Facility Mitchell, SD

Enertech Headquarters Greenville, IL

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Enertech Global, LLC

Enertech Global manufactures GeoComfort, Hydron Module, and TETCO geothermal brands. Our corporate headquarters is located in Greenville, Illinois. Our units are made exclusively in the United States, with production facilities located in Mitchell, South Dakota.

Enertech was founded in 1996 as a geothermal heat pump distributor. Since then, we've delivered award-winning product innovations and experienced phenomenal growth. Our focus remains on designing outstanding products and setting a new standard in the geothermal industry.

We believe that our success is built on strong relationships, which is why our distributors, dealers and end users of our products are so important.

Our commitment to customer care, product excellence, and quality craftsmanship guides the decisions we make.

OUR FOUR CORE VALUES ARE:

- 1. To supply products that are of high quality and reliability
- 2. To produce products in a lead-time that meets our customers' expectations
- 3. To manufacture value-added products with the features and benefits that fit the needs of our customers
- 4. To offer products at a price point that is competitive in the marketplace that meet the first three objectives

By achieving these goals, Enertech Global is in a distinctive position to meet the needs of your customers and enhance the profitability of your business.



Steve Smith Enertech President & CEO

Our Philosophy

Enertech is a company with family values and beliefs. As such, we are committed to the following:

PARTNERSHIPS: We believe you don't have to be related to be family

EXCELLENCE: We believe our employees are our most valuable asset

LOYALTY: We believe in earning the trust and allegiance of those who sell our products. We believe that they deserve our best quality and service, which puts us in a distinctive position to enhance the profitability of our customers' businesses

CERTAINTY: We believe home and business owners deserve assurance of reliability, comfort, and savings. They should be our strongest advocates and an indicator of our company's success

OBLIGATION: We believe we are responsible for contributing to the well-being of the communities, cities, and countries where we do business

CONSCIENCE: We believe in improving the global atmosphere through environmental consciousness, a culture of care and enduring optimism



Enertech is proud to be a part of NIBE Industrier AB, an 8,000 employee strong European company and the largest geothermal heat pump manufacturer in the world. WWW.geocomfort.com GeoComfort Geothermal Systems This family has chosen to live comfortably.

Why Geothermal?

Residential geothermal awareness has never been higher. In today's chaotic economy, consumers have a social desire for green solutions, but they want something affordable. Environmentally and budget conscious homeowners are attracted to geothermal technology by its high efficiency and low operational and lifespan costs. In recent years, geothermal sales have increased in part due to a better understanding that geothermal systems are a viable and affordable option for existing homes as well as new construction applications.

Incentives for geothermal systems have also elevated the technology to top of mind. Consumers are seeking net-zero homes and buildings. In fact, the United States and Canadian governments are now promoting and encouraging the use of geothermal heat pump technology.

Now is the time to add GeoComfort geothermal heating and cooling systems to your product offerings.

Financial Incentives

In addition to the extensive benefits offered by a geothermal heat pump, there are also numerous financial incentives being offered across North America.



There is a **federal tax credit for residential geothermal systems and a 10% federal tax credit for commercial geothermal systems**, and many local municipalities, state entities,

and utilities offer further rebates or other financial incentives to home and building owners installing a geothermal heat pump. In the US, the online Database of State Incentives for Renewables and Efficiency is a helpful resource. Visit www. dsireusa.org or contact your local utility or electric cooperative to find out more about programs in your area.

Some Canadian provinces also offer rebate incentives for Canadian residents installing a geothermal system. Since these offerings vary by Province, interested parties should check their Province's rebates/incentives at **www.nrcan.gc.ca**.

Why GeoComfort?



QUALITY

Enertech Global's commitment to quality control is one of GeoComfort's greatest assets. Each unit coming off the assembly line is tested thoroughly. In fact, GeoComfort equipment testing is the most robust in the industry with a computerized run test station, featuring helium leak detection and waterside decay testing.

In the run test, each unit is tested in all heating and cooling modes, because we want every unit that leaves our factory to live up to the high standards we're known for.

To further demonstrate our commitment to customers, Enertech has been certified to ISO 9001 and ISO 14001 quality and environmental management standards.



WARRANTY

GeoComfort products are supported by the best factory warranty options the industry has to offer.

• The GeoComfort standard 10/10/5 warranty covers:

Entire unit for ten years

Select accessories for ten years

Labor allowance for five years

- Labor allowance becomes an industry leading 10-years with warranty registration
- Peace of Mind Warranty Option for compressor and all-aluminum microchannel air coil (consult price book for complete warranty details)



• Some of our multi-use water-to-water units (Variable-Speed Water-to-Water and High-Performance Water-to-Water) units have differing standard warranties. Please see these specific units for more detail.



COMPREHENSIVE PRODUCT OFFERING

The GeoComfort brand offers a broad model and application product assortment to fit most any installation. The GeoComfort model lineup includes:

Award-winning Element Series Compact Horizontal Packaged System featuring:

Smaller footprint for easier installation in 24" OC truss framed buildings

All-aluminum microchannel air coil

Field convertible for side or end discharge

• Navigator Series Multi-Positional Vertical Packaged System featuring:

Multi-positional cabinet design – field convertible to left or right return air

Foam insulated, enhanced surface coaxial heat exchanger

Elastomeric compressor isolation pads

UL GREENGUARD Gold Certified high density, closed cell foam insulation

• Award-winning Element Series Compact Vertical Packaged System featuring:

Small footprint allows for installation in restricted spaces and reduces transportation costs

Elastomeric compressor isolation pads

A hinged control box that easily tilts up and out of the way for access to internal components

- Award-winning Compass[™] Series Multi-Positional Vertical Packaged System
- AHRI matched air handlers and "A" coils matched and tested for use with our complete line of split compressor sections
- The GeoComfort Variable-Speed Water-to-Water system is powered by inverter-driven technology to provide efficient radiant heating, forced air heating and cooling, and 100 percent of the domestic hot water.
- Variable-speed and two-stage water-to-water units meet or exceed ENERGY STAR GLHP requirements
- Multi-positional combination units with microchannel air coils for forced air heating and cooling plus radiant heat all in one
- Award-winning indoor and outdoor split models
- Full line of Commercial Series models available (see commercial catalog)
- Accessories, flow centers, geothermal loop pipe, zoning and more

Geothermal Applications

Example Installations

When it comes to geothermal system applications, there are many different installation options and product configurations. GeoComfort has a full line of products to fit any residential application. The following illustrations highlight several common installation scenarios.



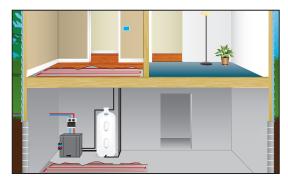
FORCED AIR

A Vertical or Horizontal Packaged System provides ducted heating and cooling. It also can provide a portion of domestic hot water.



OUTDOOR SPLIT

A Split System provides ducted heating and cooling using a remote air handler or gas/propane system. It also can provide a portion of domestic hot water. The geothermal unit is installed outdoors, making it ideal for retrofit applications.



SINGLE, TWO-STAGE OR VARIABLE-SPEED WATER-TO-WATER

Water-to-Water Systems can provide radiant heat and domestic hot water using a storage or buffer tank. If you choose the variable-speed water-to-water system, it can provide radiant heating, ducted heating and cooling and up to 100% of your domestic hot water needs.



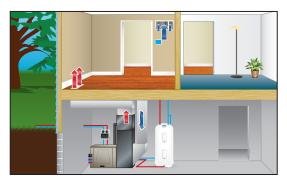
INDOOR SPLIT

A Split System provides ducted heating and cooling using a remote air handler or gas/propane system. It also can provide a portion of domestic hot water.



COMBINATION

Combination Systems provide ducted heating and cooling like a traditional Packaged System, and can also provide radiant heat using a storage or buffer tank. It can also provide a portion of domestic hot water.



DUAL-FUEL

A Split System can be used with an existing gas, electric or propane furnace and/or air handler to create a hybrid system. The Split System provides ducted heating and cooling and is ideal for rural and retrofit applications.

GeoComfort Product Matrix



PRODUCT FEATURES	GYT Models	GVS/VT Models	GXT Models	GZS/ZT Models	GCT Models	GBS/BT Models	GRT Models	GWV Models	GWT Models	GWS Models	GWD Models	GHP Models
Function	Forced Air	Forced Air	Forced Air	Forced Air	Combo	Split System	Split System	Hydronic	Hydronic	Hydronic	Hydronic	Hydronic
Cabinet Configuration	Multi- Positional Vertical	Compact Vertical	Multi- Positional Vertical	Compact Horizontal	Multi- Positional Vertical	Indoor Split	Outdoor Split	Water-to- Water	Water-to- Water	Water-to- Water	Water-to- Water	Water-to- Water
Compressor Stages	2	1/2	2	1/2	2	1/2	2	Variable	2	1	1/2	1
Sizes	2 - 6 Tons	.5 - 6 Tons	2 - 6 Tons	.5 - 6 Tons	2 - 6 Tons	1.5 - 6 Tons	2 - 5 Tons	1.5 min - 5 max	3 - 10 Tons	3 - 10 Tons	10 Ton	2 Ton
Refrigerant	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a	R-410a
Heating Efficiency (COP) ⁺	5.8 - 3.8	5.4 - 3.3	5.4 - 3.6	4.4-3.2	5.1 - 3.6	5.0 - 3.4	4.4 - 3.4	3.0-3.9	3.8 - 2.8	4.1 - 2.8	3.6 - 2.8	3.1
Cooling Efficiency (EER) ⁺	37.4 - 18.0	33.0 - 15.1	35.0 - 17.1	29.8 - 16.2	29.4 - 16.2	35.6 - 16.4	20.3 - 15.8	18.4-24.4	24.5 - 14.6	24.0 - 14.5	22.0 - 14.5	N/A
Copper HX	~	~	V	Braze Plate***	~	~	~	Braze Plate	V	Braze Plate	Braze Plate	~
Cupronickel HX	Optional	Optional	Optional	Future	Optional	Optional	Optional	N/A	Optional	Tube-in-Shell	Tube-in-Shell	Optional
HX Insulation	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Enclosed	Foam Tape	Foam Tape	Foam Tape	Foam Enclosed
Air Coil	Aluminum Micro- Channel	Aluminum Micro- Channel	Aluminum Micro- Channel	Aluminum Micro- Channel	Aluminum Micro- Channel	Tube & Fin*	Tube & Fin*	Tube & Fin*	Tube & Fin*	Tube & Fin*	Tube & Fin*	Tube & Fin*
Desuperheater	Standard	Standard ¹	Standard	Standard ²	Standard	Standard	Option	Indirect Hot Water	Standard	Standard	Standard	Vented Coax ⁸
Auxiliary Electric Heat	One-Piece Internal	One-Piece Internal ³	One-Piece Internal	External Duct Heater ⁴	One-Piece Internal	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**	One-Piece Internal**
Blower	Variable Speed ECM	PSC Standard, ECM Option⁵	Variable Speed ECM	PSC Standard, ECM Option ⁶	Variable Speed ECM	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**	Variable Speed ECM**
Selectable CFM	~	~	~	~	~	~	~	~	~	~	~	~
Freeze Protection	Digital	Digital	Flow Switch	Digital & Flow Switch	Flow Switch	Flow Switch	Flow Switch	Digital & Flow Switch	Flow Switch	Digital	Digital	Digital
Controls	Digital	Digital	Digital	Digital	Digital	Digital	Digital	Advanced Digital	Digital	Digital	Digital	Digital
Water Fittings	Double O-ring	Double O-ring	Double O-ring	3/4" - 1" FPT ⁷	Double O-ring	Double O-ring	Double O-ring	Double O-ring	Double O-ring	1" MPT	1.25 - 2" MPT	Double O-ring/3/4" - 1" FPT
Air Handler Match	N/A	N/A	N/A	N/A	N/A	~	~	~	✓▲	✓▲	✓▲	~
"A" Coil Match	N/A	N/A	N/A	N/A	N/A	~	~	✓▲	✓▲	✓▲	~	~
Warranty (Parts/Labor)	10/10/5	10/10/5	10/10/5	10/10/5	10/10/5	10/10/5	10/10/5	10/10/5	10/10/5	10/10/5	10/10/5	5/1
Lifetime Compressor & Lifetime MCHX	Optional	Optional	Optional	Optional	Optional	Optional	Optional	-	Optional	Optional	Optional	-

NOTES:

* Matched Air Handler & "A" Coil

** Air Handler Only

- *** ZS006-012 Coax
- † Part load/ full load range
- Optimized
 Desuperheater not offered for VS006-015
- 2 Not offered for ZS006-012
- 3 Aux. Heat not offered on VS006-018
- 4 Aux. heat not offered on ZS006-017
- 5 ECM Motor not offered on VS006-012
- 6 ECM Motor not offered on ZS006-012
 7 ZS006-017 3/4" FPT,
- ZSZT018-072 1" FPT
- 8 Vented Version Only





Multi-Positional Two-Stage Vertical Packaged Unit

The New Direction of Comfort

The GeoComfort Navigator Series is advanced geothermal to meet your changing needs. Each unit is built to the high standards of quality you expect from GeoComfort. This premier system is the ultimate solution for increased efficiency, exceptional reliability and unsurpassed comfort. We've transformed the concept of geothermal using state-ofthe-art technology to bring you a heating and cooling system that points to perfection.

Navigator Series Vertical Packaged systems provide forced air heating and cooling like most conventional systems – but the similarities end there. GeoComfort has utilized the most advanced geothermal technology, resulting in a heat pump that is built tough to perform season after season and so quiet that you may not even realize it's running.

Unit Features:

- 5 sizes: 024, 036, 048, 060, 072
- Copeland UltraTech® 2-stage scroll compressor
- Multi-position cabinet (left or right return)
- All-aluminum microchannel air coil
- Sound and vibration absorbing elastomeric compressor isolation pads
- ECM blower motor

- Side or back air discharge factory option
- Foam enclosed, enhanced surface coaxial heat exchanger
- UL GREENGUARD Gold certified foam
- cabinet insulationDigital controls with enhanced
- Top or side mount, eye level controls
- R-410a zero-ozone depletion refrigerant

unit protection

- Heavy gauge, painted steel cabinet and door panels
- · Factory installed desuperheater
- Optional cupronickel coax
- Standard 10/10/5 warranty + free warranty upgrade*
- Peace of Mind Warranty option available for the all-aluminum microchannel air coil and compressor*



Single & Two-Stage Compact Vertical Packaged Unit



GVS/GVT MODEL

Don't Sweat the Small Stuff

The Element Series VS/VT models showcase the quality, innovation, and attention to detail that go into every GeoComfort product. The Compact Vertical Packaged model combines many of the best features found throughout the GeoComfort product line with a smaller cabinet, making it perfect for installations where space is limited.

These systems deliver forced air heating and cooling like most conventional systems, but the list of benefits keeps going. GeoComfort has incorporated advanced features to create a heat pump that is remarkably efficient and whisper quiet. You'll marvel at how a small system produces such amazing comfort.





- 20 sizes: 006, 009, 012, 015, 018, 024, 030, 036, 041, 042, 048, 060, 072 (single stage); 024, 030, 036, 042, 048, 060, 072 (2-stage)
- Copeland single-stage or UltraTech®
 2-stage scroll compressor
- All-aluminum microchannel air coil
- Sound and vibration absorbing elastomeric compressor isolation pads
- Standard PSC or optional ECM blower motor (single-stage). ECM blower standard on 2-stage

- Foam enclosed, enhanced surface coaxial heat exchanger
- UL GREENGUARD Gold certified foam cabinet insulation
- Digital controls with enhanced unit protection
- Hinged control box lifts up for easy internal service
- R-410a zero-ozone depletion refrigerant
- Heavy gauge, painted steel cabinet and door panels

- Optional desuperheater
- Optional cupronickel coax
- Standard 10/10/5 warranty + free warranty upgrade*
- Peace of Mind Warranty option available for the all-aluminum microchannel air coil and compressor*



Multi-Positional Two-Stage Vertical Packaged Unit

High Technology Meets High Style

The Compass® Series vertical packaged model took the industry by storm winning multiple awards such as The NEWS 2010 Dealer Design Awards. The innovative multipositional cabinet that is field convertible to upflow/ downflow with right or left return makes life easier for both dealers and distributors to install and stock.

However, our innovation didn't stop there. GeoComfort, in its continual drive to be an industry leader, has solved another age-old issue: Formicary corrosion. In 2011, our XT models began production using an all-aluminum microchannel air coil.



- 5 sizes: 024, 036, 048, 060, 072
- Multi-position cabinet (left return, right return, upflow, downflow convertible)
- Copeland UltraTech® 2-stage scroll compressor
- Factory supplied 1" thick filter rack and MERV 8 pleated air filter
- · R-410a zero-ozone depletion refrigerant

- · All-aluminum microchannel air coil
- Composite, antimicrobial drain pan
- · Rugged steel cabinet
- Remote mounted controls
- ECM blower motor
- · Desuperheater with internal pump

- Double O-ring fittings (source side)
- Optional cupronickel coax
- Standard 10/10/5 warranty + free warranty upgrade*
- Peace of Mind Warranty option available for the all-aluminum microchannel air coil and compressor*

Single & Two-Stage Compact Horizontal Packaged Unit





New Found Flexibility

Meet the next generation horizontal geothermal system. The Element Series Compact Horizontal has an all new design that takes advantage of the best technologies. Its small cabinet is the most striking feature. ZS/ZT models are perfectly sized for tight spaces or suspending above a ceiling.

Internally, state-of-the-art components work together to reduce noise and vibration, resulting in ultra-quiet operation, while achieving high efficiencies. Ease of installation and service are features of every GeoComfort model, and the ZS/ZT horizontal is no exception. Its lightweight cabinet, removable panels, and hinged control box make this unit an HVAC technician's best friend.



NICROCHANNEL DE LA COMPACTION DE LA COMP

- 18 sizes: 006, 009, 012, 015, 017, 018, 024, 030, 036, 042, 048, 060, 072 (single-stage); 024, 036, 048, 060, 072 (2-stage)
- Copeland single-stage or UltraTech®
 2-stage scroll compressor
- All-aluminum microchannel air coil with foam enclosed braze plate heat exchanger
- Sound and vibration absorbing elastomeric compressor isolation pads

- Field convertible for side or end discharge with left or right return
- Airtight blower section
- Standard PSC or optional ECM blower motor (single-stage). ECM blower standard on 2-stage.
- UL GREENGUARD Gold certified foam cabinet insulation
- Digital controls with enhanced unit protection
- Hinged control box lifts up or out for easy internal service

- R-410a zero-ozone depletion refrigerant
- Heavy gauge, steel cabinet and door panels
- Optional desuperheater
- Optional cupronickel coax
- Standard 10/10/5 warranty + free warranty upgrade*
- Peace of Mind Warranty option available for the all-aluminum microchannel air coil and compressor*





Multi-Positional Hydronic Two-Stage Vertical Combination Packaged Unit

All The Comfort. All The Flexibility.

Our combination systems merge a forced air heating and cooling system with the indulgence of whisper-quiet radiant heating in a single unit. This system allows families to enjoy the comfort of floor-warming, hydronic heat in specific parts of their home while also delivering efficient forced air heating in other areas. As with all GeoComfort geothermal systems, air conditioning is also supplied by this single unit.

Enertech's continual drive of industry leadership and innovation has made a great unit even better. We've also solved another age-old issue: Formicary Corrosion. All Combo models are built with a standard all-aluminum microchannel air coil.

- 4 sizes: 036, 048, 060, 072
- Multi-position cabinet (left return, right return, upflow, downflow convertible)
- Copeland UltraTech® 2-stage scroll compressor
- Hydronic heating function
- Factory supplied 1" thick filter rack and MERV 8 pleated air filter
- R-410a zero-ozone depletion refrigerant

- All-aluminum microchannel air coil
- Composite, antimicrobial drain pan
- Rugged steel cabinet
- Remote mounted controls
- ECM blower motor
- Desuperheater with internal pump

- Double O-ring fittings (source side)
- Optional cupronickel coax
- Standard 10/10/5 warranty + free warranty upgrade*
- Peace of Mind Warranty option available for the all-aluminum microchannel air coil and compressor*

Single and Two-Stage Indoor Split Unit

GBS/GBT MODEL



Home Comfort, Made Better.

GeoComfort's next generation is built on a legacy of innovation and improvement. Our new award winning split unit was redesigned from the ground up incorporating the best elements from our newest models into a compact, efficient and ultra-quiet system.

The new split system is incredibly versatile making it well suited for replacement and new construction applications. The space-saving footprint of this unit makes it an excellent choice for homes with minimal space for mechanical equipment. When matched with an air handler, the split can provide ducted heating and cooling as well as domestic hot water. The split can also be paired with a conventional furnace to create an ultraefficient dual-fuel hybrid system.





- 6 sizes: 018 (single-stage); 024, 036, 048, 060, 072 (2-stage)
- Optional matched multi-position air handler
- Industry standard line set sizes
- Whisper quiet design. Only from Enertech

- Digital, diagnostic controls
- Copper coaxial water heat exchanger with optional cupronickel
- Copeland UltraTech® 2-stage
 scroll compressor
- Standard hot water generator/ desuperheater
- Standard 10/10/5 warranty + free warranty upgrade*
- Peace of Mind Warranty option available for the compressor*





Two-Stage Outdoor Split Unit

GRT MODEL

Easiest. Installation. Ever.

As retrofit installations become an ever-growing part of the marketplace, the need for simple and quick installation solutions grows as well. In most cases, homeowners don't want to wait for their new system to be installed, or are in a situation where a quick replacement is necessary.

This is where GeoComfort has yet again set an all-new direction in the industry with the Compass Series Outdoor Split.

Designed around years of geothermal installation expertise and feedback from customers, the RT has some of the most advanced features available. These features allow the installer to place the unit exactly where it needs to go as quickly and easily as possible.



The innovative design of the unit is centered on ease of installation. Shown below, the loop can easily be brought to the unit from almost any angle. Additionally, the unit could be rotated 90° counterclockwise if needed.

- 4 sizes: 024, 036, 048, 060
- UV protected outdoor cabinet
- Copeland UltraTech® 2-stage scroll compressor
- R-410a zero-ozone depletion refrigerant
- Factory installed freeze protection
- Side-mount flow center connection

- Uses standard flow center with installerselected configuration
- Standard size back-seated service valves
- Included outdoor installation kit (flow center sold separately, see unit accessories)
 - Flow center cover
 - Aluminum pipe shield
 - Pump wiring harness

- Hose kit
- 90° PE street elbows
- Optional factory installed connections for external desuperheater
- Standard 10/10/5 warranty + free warranty upgrade*
- Peace of Mind Warranty option available for the compressor*

Variable-Speed, Variable Capacity Water-to-Water Unit



GWV MODEL

Revolutionary Comfort and Efficiency: The First of Its Kind

Enertech engineers, dealers, and technicians worked together to create a hypothetical design so innovative that it would revolutionize home comfort; and that system is here! Introducing the future of geothermal water-to-water heat pumps: our variable-speed water-to-water.

Our new GeoComfort variable-speed, variable-capacity heating and cooling system adjusts the BTUH output to match the load profile for desired comfort settings. With the help of an outdoor temperature sensor, the modulating compressor adjusts to deliver the perfect water temperatures for a radiant or hydronic system application. This is vital because the efficiency of a water-to-water geothermal unit increases significantly with lower water temperatures.





- 2 Sizes: 040, 060 (variable speed compressor)
- Radiant, in-floor heating and cooling, forced air heating and cooling, and 100% of the domestic hot water in one compact unit
- High temperature performance, leaving water temperature up to 135° F
- Large easy-to-read high-mounted LCD control center

- Time saving, easy to commission startup wizard
- Direct readout of running conditions on the LCD control screen
- Electronic expansion valve
- Double o-ring connections
- Integrated variable-speed load pump

- Heavy gauge, painted, galvanized steel cabinets
- Hydronic options, cased / uncased coils / airhanders
- Standard 10/10/5 warranty + free warranty upgrade*





GHP MODEL

High Temperature Hot Water, Efficiently Delivered!

The GeoComfort High-Performance Water-to-Water geothermal system is the ultimate solution for heating only applications where standard 120 degrees Fahrenheit leaving water temperature is not sufficient. Its enhanced design increases water temperature output by 20 degrees.

A vented coax option can provide 100% of the home's domestic hot water supply, substantially reducing water heating costs without requiring a significant amount of space or installation time. Additionally, the non-vented coax option is ideal for radiant heating and pool heating applications.



- Size: 024
- · Vented and unvented options
- High density closed cell foam insulation
- Hinged control box swings out / removes for easy access
- Top and all side panels remove for service
- Triple mounted compressor isolation

- Foam insulated, enhanced surface coaxial heat exchanger
- Single-stage reliable reciprocating compressor
- Thermistor freeze-protection
- Side-mount water and refrigerant connections
- Standard ¾-inch fittings on vented coax model

- Unvented coax option features 1-inch fittings.
- Double o-ring fittings
- Meets ENERGY STAR® requirements for efficiency
- Standard 5/5/1 warranty

Two-Stage Water-to-Water Unit

GWT MODEL



The Best in Hydronic Comfort.

GeoComfort® Compass® Series geothermal systems are expertly designed to be technologically advanced and exceptionally efficient. The result is a heating and cooling system as beautiful as it is functional.

GeoComfort hydronic (water-to-water) units offer a unique set of system benefits, the most remarkable of which is radiant heating. This extremely comfortable heating solution warms your home from the floor up, allowing for constant and uniform heat distribution without hot and cold spots. Radiant heating is ductless heating. By eliminating the sound of forced air the total system noise is reduced. Compass Series water-to-water units are also reversible and capable of providing chilled water for air conditioning.



- 5 sizes: 036, 048, 060, 092, 120 (models 092-120 have two compressors)
- Optional hydronic air handler and "A" coils
- Digital controls
- Copper or cupronickel coaxial water heat exchanger
- High efficiency Copeland UltraTech® scroll compressor (036 - 092(2); 2 single speed scrolls on 120 & 144)
- Desuperheater standard
- Rugged steel cabinet
- Source side double O-ring fittings (sizes 026-060)
- · Radiant floor ready
- Standard 10/10/5 warranty + free warranty upgrade*
- Peace of Mind Warranty option available for the compressor*



Single-Stage Water-to-Water Unit

GWS/GWD MODEL

Maximum Comfort Plus Maximum Efficiency – Now in a Smaller Box.

Although the GeoComfort single-stage hydronic models are small in size, they're big in efficiency! The WS/WD models boast an overall smaller footprint and lighter weight than it's WT model siblings.

What's more, GeoComfort single-stage water-to-water models utilize stainless steel brazed plate heat exchangers, a time-proven technology that makes them incredibly efficient. The units are designed to supply heated or chilled water for use in a wide range of heating and cooling applications such as radiant heating or places where zones temperature or humidity controls are needed.

The WD 120 model features dual compressors for 2-stage operation.



- 6 sizes: 036, 048, 060, 072, 084, 120
- Copeland single-stage scroll compressor
- Front, top & rear access
- Electronic controls with safety lock out
- Stainless brazed plate heat exchangers (BPHX)
- Thermostatic expansion valve
- High and low access ports
- R-410a zero-ozone depletion refrigerant
- Desuperheater with internal pump
- Optional tube-in-shell cupronickel heat exchanger (source only)
- Standard 10/10/5 warranty + free warranty upgrade*
- Peace of Mind Warranty option available for the compressor*

MP Series Multi-Position DX Air Handlers

Unit Features:

- AHRI match for GeoComfort split systems
- Multi-position air pattern ships in upflow configuration
- Field convertible to downflow and horizontal configuration (downflow kit required for downflow operation)
- Variable-speed ECM fan motor
- Corrosion-proof plastic drain pan with primary and secondary drain connections
- Oversized copper tube/aluminum fin "A" coil for maximum efficiency
- Sweat refrigerant line set connections

- Factory-installed R-410a TXV
- Narrow width (25" maximum) for small closet installations
- Slide-out blower assembly
- Optional downflow kit
- Optional field-installed internal electric heat with circuit breakers
- Optional filter rack with standard size 1" filters
- Consult warranty page for coverage details





AC Series DX "A" Coils Unit Features:

- AHRI match for GeoComfort split
 systems
- Uncased design for maximum flexibility, especially on retrofit applications
- Factory-installed R-410a TXV
- Corrosion-proof plastic drain pan with primary and secondary drain connections
- Oversized copper tube/aluminum fin "A" coil for maximum efficiency
- Sweat refrigerant line set connections
- Consult warranty page for coverage details



MC Series DX Cased Coils Unit Features

• Same features as the AC DX "A" Coil, but enclosed in a rigid cabinet for easy installation, especially on retrofit applications.

MP Series Multi-Position Hydronic Air Handlers

Unit Features:

- Optimized for use with GeoComfort water-to-water heat pumps
- Multi-position air pattern ships in upflow configuration
- Field convertible to downflow and horizontal configuration (downflow kit required for downflow operation)
- Variable-speed ECM fan motor
- Corrosion-proof plastic drain pan with primary and secondary drain connections
- Oversized copper tube/aluminum fin "A" coil for maximum efficiency
- Sweat refrigerant line set connections

- Factory-installed R-410a TXV
- Narrow width (25" maximum) for small closet installations
- · Slide-out blower assembly
- Optional downflow kit
- Optional field-installed internal electric heat with circuit breakers
- Optional filter rack with standard size $1^{\prime\prime}$ filters
- Consult warranty page for coverage details





AC Series Hydronic "A" Coils Unit Features:

- Single coil for both chilled water and hot water
- Designed for 100°F to 120°F water in heating operation
- Optimized for use with GeoComfort water-to-water heat pumps
- Copper sweat water connections
- Corrosion-proof plastic drain pan with primary and secondary drain connections
- Consult warranty page for coverage details



AC Series Hydronic Cased Coils Unit Features

• Same features as the AC Hydronic "A" Coil, but enclosed in a rigid cabinet for easy installation, especially on retrofit and dual-fuel applications.

Unit Accessories Loop Piping and Fittings



LOOP PIPE

- Pre-assembled U-bend coils
- Straight pipe
- · Coiled pipe



FITTINGS

- Headers
- Elbows
- Unions
- Couplings
- Tees
- Bushings

Flow Centers & Replacement Pumps

COMPOSITE/BRASS VALVE DOUBLE O-RING FITTINGS

- Double o-ring fittings or 1" NPT connections
- Front flush ports
- Foam insulated cabinet stops condensation
- · High impact polystyrene cabinet will not rust
- Fully assembled and leak tested









NON-PRESSURIZED

- Double O-ring fittings or 1" NPT connections
- · Foam insulated cabinet stops condensation
- · Fully assembled and leak tested
- Variable-speed available

VARIABLE-SPEED

- Magna GEO pumps
- ECM motor technology
- 1" brass flush valves
- Built-in control
- · Graphic display



HOSE KITS & LOOP ADD-ONS

- GeoPrime reservoir tanks
- · Geo Booster
- Pressure batteries









GeoComfort Thermostats



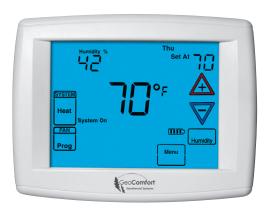
SENSI WI-FI

- Extreme temperature notification
- 7 day programmable
- · Remote access and contractor contact info with smartphone app
- 4 Heat / 2 Cool stages
- Keypad lockout
- Multi thermostat control



SENSI TOUCH WI-FI

- HD color touchscreen
- Can change temperature setting based on GPS location
- Smart home compatible
- Easy-click, no screwdriver terminals



TOUCH SCREEN

- Single-stage / multi-stage
- Programmable (7-day, 5/1/1 day) or non-programmable
- Hard wired or battery powered with power stealing assist
- Remote sensing indoor or outdoor and at the thermostat
- Programmable fan with comfort circulator fan option
- Enhanced dehumidification control
- Automatic daylight savings option
- Flow-through humidifier water-saving feature up to 50%
- Large, 12 square inch display with 10-second backlight
- Exclusive energy saving feature during peak A/C demand periods
- Dual-fuel heat pump logic program requires no outdoor sensor



NON-PROGRAMMABLE

- · Large easy to read screen with a bright backlit display
- · Adjustable temperature set point min. /max. limits
- Auto changeover
- Dual-fuel control
- Keypad lockout
- 4 Heat / 2 Cool stages

Unit Accessories EWC Zoning Dampers & Panels

URD

- Nylon blade shaft notched to indicate blade position
- Male crimped end to ease installation process
- Open and closed LEDs indicate blade position
- Nylon shaft provides thermal barrier to eliminate condensation
- Integrated seal eliminates loose gasket material
- Integrated door seal provides 97% shut off to 1" W.C.
- Min/max adjustable closed set points

ND

- Nylon blade shaft notched to indicate blade position
- Heavy gauge extruded aluminum frame
- Nylon blade bushings
 allow for smooth, quiet operation
- Open and closed LEDs indicate blade position
- Nylon shaft provides thermal barrier to eliminate condensation
- Overlapping blades provides 97% shut off up to 1" W.C.
- · Custom and odd sizes available

UZC : Compatible with all HVAC systems up to 4 stages of heat and 2 stages of cool

- Auto-changeover and fan control from any zone
- Computer watchdog circuitry prevents lock-ups from power failures and power interruptions
- Controls up to 20 zones
- LED display for complete diagnostic system readout
- Adjustable heating and cooling limits to protect equipment



BMPLUS : Compatible with all HVAC systems up to 3 stages of heat and 2 stages of cool

- Dual-fuel kits not required
- One zone mode
- Automatic changeover from any zone
- Computer watchdog
 circuit to ensure operation
- Supply air sensor included
- Optional outdoor air sensor



SID [Slip-In-Damper]

- Allows for up to 20 SID's on one EWC control panel
- More sizes available than any other component
- Optional end switch for additional interface



NCM : Single-stage, dual-fuel and heat pump compatible up to 3 zones

- Computer watchdog circuit
- Auto-changeover from any zone
- LED display for complete system read out
- Supply air sensor to protect equipment
- Adjustable purge time



Unit Accessories Auxiliary Heaters

INTERNAL AUXILIARY ELECTRIC HEATER FEATURES:

- Single piece design (no separately mounted control box)
- Heater staging (YT, XT & CT Series)
- Low voltage harness for direct connection to relay board
- Automatic high limit and auxiliary limit switches for over temperature protection
- Internal circuit breakers

EXTERNAL DUCT HEATER FEATURES:

- Used for horizontal units
- Left hand offset control box
- · Automatic limit switch for primary over temperature protection
- Energized magnetic control contractor per stage
- · Manual reset limit switch for secondary over temperature protection
- Removable hinged access door with latch
- Internal fusing where required by NEC and UL

Unit Accessories

ELECTRONIC DYNAMIC® FILTER

- High efficiency electronic air cleaners
- MERV equivalency rating of 13
- Disposable low static polarized media
- · Media contains activated charcoal

Sizes: 16"x 20"x 1" up to 28"x 34"x 1"

(see price book for actual sizes and compatibility)

ELECTROSTATIC FILTERS

- · Self charging media
- 3 filtration layers
- Washable filter
- Lifetime warranty

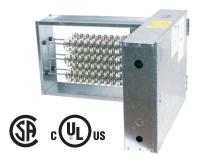
Sizes: 16"x 20"x 1" up to 38"x 36"x 1"

(see price book for actual sizes and compatibility)









Unit Performance Data

Model	Туре	Cooling PSC Blo BTU		Heating PSC Blo BTU		Cooling ECM Blowe BTU		Heating v ECM Blower BTU		Dim Height	ensional I Width	Data Depth	Height with Control Box	Unit Weight (Ibs)
Single-S	tage Compac	t Vertical	Package	d (PLEASE	E NOTE	PSC AND	ECM BLO	OWER LIST	INGS) 1	, 3, 4, 5, 6, 7,	8, 14			
VS006	Ground Water	7,800	25.8	7,000	4.6	_	-	-	-	30"	21.5"	21.5"	_	167
	Ground Loop	7,200	18.6	5,600	3.7	-	-	-	-		21.0	21.0		
VS006 PSC 115V, 265V	Ground Water	7,900	24.0	7,100 5,500	4.5 3.5	-	-	-	-	30"	21.5"	21.5"	-	167
Only	Ground Loop Ground Water	11,900	22.1	10,600	4.4	_	-	_						
VS009	Ground Loop	10,900	17.4	8,500	3.6	-	-	-	-	30"	21.5"	21.5"	-	234
VS012	Ground Water	13,400	24.1	12,100	4.3	-	-	-	-	30"	21.5"	21.5"	_	234
	Ground Loop	11,900 17,500	18.1 28.8	9,400	3.6 5.1	-	-	-	- E 4		-			
VS015	Ground Water Ground Loop	16,000	19.8	14,600 11,600	4.1	17,400 16,000	31.6 22.3	14,400	5.4 4.3	37.3"	22.5"	22.5"	-	234
VS018	Ground Water	23,200	27.5	20,100	5.0	23,200	30.5	19,600	5.3	37.3"	22.5"	22.5"	_	260
	Ground Loop	21,400	20.0	16,300	3.9	21,700	22.2	15,700	4.1	07.0	22.5	22.5	_	200
VS024	Ground Water Ground Loop	28,100 26,000	26.0 19.7	24,200 19,400	4.9 4.0	29,400 27,000	29.5 21.6	24,000 19,300	5.1 4.2	37.3"	22.5"	22.5"	-	265
	Ground Water	31,000	23.4	28,700	4.7	34,000	27.5	29,200	5.1					
VS030	Ground Loop	30,100	18.5	22,300	3.9	31,400	20.4	23,200	4.2	37.3"	22.5"	22.5"	-	285
VS036	Ground Water	40,500	23.5	37,600	4.6	41,600	25.5	36,900	4.8	37.3"	22.5"	22.5"	_	310
	Ground Loop Ground Water	37,800	18.0 22.3	30,200 38,900	3.9 4.1	38,800 43,000	19.2 23.6	29,600	3.9					
VS041	Ground Loop	38,700	17.1	31,100	3.6	39,800	17.8	31,200	3.7	37.3"	22.5"	22.5"	-	310
VS042	Ground Water	46,700	24.4	39,200	4.7	47,700	28.4	38,300	5.0	41.0"	25.0"	27.9"	_	357
10042	Ground Loop	43,600	18.6	32,000	3.8	44,400	21.2	31,100	4.1	41.0	25.0	21.5		557
VS048	Ground Water Ground Loop	53,400 50,500	22.6 17.6	48,100 39,600	4.4	54,900 51,600	26.4 20.1	47,500	4.8	41.0"	25.0"	27.9"	-	360
	Ground Water	63,300	21.3	58,700	4.3	65,000	22.8	58,100	4.6					
VS060	Ground Loop	60,000	16.9	46,900	3.6	61,500	18.2	46,300	3.8	41.0"	25.0"	27.9"	-	375
VS072	Ground Water	74,600	19.1	66,500	4.0	75,600	19.7	66,200	4.1	41.0"	25.0"	27.9"	_	367
	Ground Loop	70,100	15.1	53,200	3.3	70,900	15.7	52,900	3.4					
Model	Туре		Coolin	g BTU			Heatin	g BTU		Dim	ensional I	Data	Height with	Unit Weight
model	1,100	Full Load	EER	Part Load	EER	Full Load	СОР	Part Load	COP	Height	Width	Depth	Control Box	(lbs)
-														
Iwo-Sta	ge Compact \	/ertical Pa	ckaged	1, 3, 4, 5, 6, 7, 8										
	ge Compact V Ground Water	/ertical Pa 27,600	ckaged 23.8	1, 3, 4, 5, 6, 7, 8 19,900	28.4	23,900	4.6	16,800	4.4	27.2"	00 F"	22.5"		248
Two-Stag	1 1				28.4 24.2	23,900 19,400	4.6 4.0	16,800 14,800	4.4 3.8	37.3"	22.5"	22.5"	-	248
	Ground Water Ground Loop Ground Water	27,600 25,800 34,100	23.8 18.6 23.1	19,900 19,300 26,500	24.2 30.4	19,400 30,300	4.0 4.6	14,800 22,100	3.8 4.7	37.3" 37.3"	22.5" 22.5"	22.5" 22.5	-	248 265
VT024 VT030	Ground Water Ground Loop	27,600 25,800 34,100 32,200	23.8 18.6 23.1 18.4	19,900 19,300 26,500 25,500	24.2 30.4 25.8	19,400 30,300 24,300	4.0 4.6 3.8	14,800 22,100 20,000	3.8 4.7 4.2	37.3"	22.5"	22.5	-	265
VT024	Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100	23.8 18.6 23.1	19,900 19,300 26,500	24.2 30.4	19,400 30,300	4.0 4.6	14,800 22,100	3.8 4.7					
VT024 VT030 VT036	Ground Water Ground Loop Ground Water Ground Water Ground Loop Ground Loop Ground Water	27,600 25,800 34,100 32,200 40,000 37,400 49,200	23.8 18.6 23.1 18.4 22.8 17.7 24.0	19,900 19,300 26,500 25,500 29,500 28,500 36,500	24.2 30.4 25.8 29.8 25.2 31.4	19,400 30,300 24,300 36,900 29,500 40,100	4.0 4.6 3.8 4.6 3.9 4.6	14,800 22,100 20,000 25,700 22,900 28,800	3.8 4.7 4.2 4.7 4.2 4.7 4.2	37.3" 37.3"	22.5" 22.5"	22.5 22.5"		265 271
VT024 VT030	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Water Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5	19,900 19,300 26,500 25,500 29,500 28,500 36,500 35,100	24.2 30.4 25.8 29.8 25.2 31.4 26.0	19,400 30,300 24,300 36,900 29,500 40,100 32,400	4.0 4.6 3.8 4.6 3.9 4.6 3.9	14,800 22,100 20,000 25,700 22,900 28,800 25,500	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7	37.3"	22.5"	22.5		265
VT024 VT030 VT036	Ground Water Ground Loop Ground Water Ground Loop Ground Loop Ground Water Ground Loop Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5	19,900 19,300 26,500 25,500 29,500 28,500 36,500 35,100 40,600	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9	14,800 22,100 25,700 22,900 28,800 25,500 33,600	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.9	37.3" 37.3"	22.5" 22.5"	22.5 22.5"		265 271
VT024 VT030 VT036 VT042 VT048	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Water Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5	19,900 19,300 26,500 25,500 29,500 28,500 36,500 35,100	24.2 30.4 25.8 29.8 25.2 31.4 26.0	19,400 30,300 24,300 36,900 29,500 40,100 32,400	4.0 4.6 3.8 4.6 3.9 4.6 3.9	14,800 22,100 20,000 25,700 22,900 28,800 25,500	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7	37.3" 37.3" 41.0" 41.0"	22.5" 22.5" 22.5" 25.0"	22.5 22.5" 27.9" 27.9"	-	265 271 357 361
VT024 VT030 VT036 VT042	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9	19,900 19,300 26,500 25,500 29,500 28,500 36,500 35,100 40,600 39,200	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.9 4.3	37.3" 37.3" 41.0"	22.5" 22.5" 22.5"	22.5 22.5" 27.9"	-	265 271 357
VT024 VT030 VT036 VT042 VT048	Ground Water Ground Loop Ground Water Ground Loop Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 60,900 72,800	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7	19,900 19,300 26,500 25,500 29,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 4.7 4.2 4.3 4.7 4.2 4.3	37.3" 37.3" 41.0" 41.0"	22.5" 22.5" 22.5" 25.0"	22.5 22.5" 27.9" 27.9"	-	265 271 357 361
VT024 VT030 VT036 VT042 VT048 VT060 VT072	Ground Water Ground Loop Ground Water Ground Loop Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 60,900 72,800 68,900	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6	19,900 19,300 26,500 25,500 29,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.3 4.7 4.2	37.3" 37.3" 41.0" 41.0" 41.0"	22.5" 22.5" 22.5" 25.0" 25.0"	22.5 22.5" 27.9" 27.9" 27.9"		265 271 357 361 373
VT024 VT030 VT036 VT042 VT048 VT060 VT072	Ground Water Ground Loop Ground Water Ground Water Ground Water Ground Water Ground Water Ground Water Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 60,900 72,800 68,900 4,5,6,7	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8	19,900 19,300 26,500 25,500 29,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 44,000	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 4.3 4.7 4.2 4.3 3.9	37.3" 37.3" 41.0" 41.0" 41.0"	22.5" 22.5" 22.5" 25.0" 25.0"	22.5 22.5" 27.9" 27.9" 27.9"		265 271 357 361 373
VT024 VT030 VT036 VT042 VT048 VT060 VT072	Ground Water Ground Loop Ground Water Ground Loop Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 60,900 72,800 68,900	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7	19,900 19,300 26,500 25,500 29,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 4.7 4.2 4.3 4.7 4.2 4.3	37.3" 37.3" 41.0" 41.0" 41.0"	22.5" 22.5" 22.5" 25.0" 25.0"	22.5 22.5" 27.9" 27.9" 27.9"		265 271 357 361 373
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical I YT024	Ground Water Ground Loop Ground Water Ground Water Ground Water Ground Water Ground Water Ground Water Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 60,900 72,800 68,900 4,5,6,7 29,200	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7	19,900 19,300 26,500 25,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 44,000 17,500	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 4.7 4.3 3.9 5.5	37.3" 37.3" 41.0" 41.0" 41.0" 41.0" 41.0"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0" 23.0"	22.5 22.5" 27.9" 27.9" 27.9" 27.9" 26.5"	- - - - 53.25"	265 271 357 361 373 375 310
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical I	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Packaged 1.3. Ground Water Ground Water Ground Loop Ground Water Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 60,900 72,800 68,900 4,5,6,7 29,200 27,100 44,300 41,200	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7 19.9 25.7 19.9 27.0 20.9	19,900 19,300 26,500 25,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300 22,200 21,400 32,700 31,500	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6 28.2 37.4 31.3	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400 19,000 37,500 29,100	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4 5.3 4.3 5.5 4.5	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 44,000 44,000 17,500 15,200 26,600 23,300	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.9 4.3 4.7 4.2 4.3 3.9 5.5 5.5 4.8 5.8 5.1	37.3" 37.3" 41.0" 41.0" 41.0" 41.0"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0"	22.5 22.5" 27.9" 27.9" 27.9" 27.9"		265 271 357 361 373 375
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical I YT024	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Packaged 1.3. Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 60,900 72,800 68,900 4,5,6,7 29,200 27,100 44,300 41,200 57,100	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7 19.9 25.7 19.9 27.0 20.9 26.2	19,900 19,300 26,500 25,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300 22,200 21,400 32,700 31,500	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6 28.2 37.4 31.3 35.3	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400 19,000 37,500 29,100 49,500	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4 5.3 4.3 5.5 4.5 5.2	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 49,600 44,000 17,500 15,200 26,600 23,300 35,900	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 4.7 4.2 4.3 5.5 4.8 5.8 5.1 5.5	37.3" 37.3" 41.0" 41.0" 41.0" 41.0" 41.0"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0" 23.0"	22.5 22.5" 27.9" 27.9" 27.9" 27.9" 26.5"	- - - - 53.25"	265 271 357 361 373 375 310
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical YT024 YT036 YT048	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Packaged 1.3. Ground Water Ground Water Ground Loop Ground Water Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 60,900 72,800 68,900 4,5,6,7 29,200 27,100 44,300 41,200	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7 19.9 25.7 19.9 27.0 20.9	19,900 19,300 26,500 25,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300 22,200 21,400 32,700 31,500	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6 28.2 37.4 31.3	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400 19,000 37,500 29,100	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4 5.3 4.3 5.5 4.5	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 44,000 44,000 17,500 15,200 26,600 23,300	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.9 4.3 4.7 4.2 4.3 3.9 5.5 5.5 4.8 5.8 5.1	37.3" 37.3" 41.0" 41.0" 41.0" 41.0" 41.0" 54.0" 54.0"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0" 23.0" 25.4" 25.4"	22.5 22.5" 27.9" 27.9" 27.9" 27.9" 27.9" 26.5" 30.5" 30.5"	- - - - 53.25" 61.25"	265 271 357 361 373 375 310 405 450
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical I YT024 YT036	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Packaged 1.3. Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 60,900 72,800 68,900 4,5,6,7 29,200 27,100 44,300 41,200 57,100 53,300	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7 19.9 25.7 19.9 27.0 20.9 26.2 20.2	19,900 19,300 26,500 25,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300 22,200 21,400 32,700 31,500 44,100 42,600	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6 28.2 37.4 31.3 35.3 29.6	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400 19,000 37,500 29,100 49,500 39,900	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4 5.3 4.3 5.5 4.5 5.2 4.3	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 49,600 44,000 17,500 15,200 26,600 23,300 35,900 32,000	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 4.7 4.2 4.3 5.5 4.8 5.5 4.8 5.5 4.8 5.1 5.5 4.9	37.3" 37.3" 41.0" 41.0" 41.0" 41.0" 41.0" 54.0"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0" 23.0" 23.4"	22.5 22.5" 27.9" 27.9" 27.9" 27.9" 26.5" 30.5"	- - - - 53.25" 61.25"	265 271 357 361 373 375 310 405
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical YT024 YT036 YT048	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Brackaged 1. 3. Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 60,900 72,800 64,200 68,900 4,56,7 29,200 27,100 44,300 41,200 57,100 53,300 68,700 64,300 77,600	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7 19.9 27.0 20.9 26.2 20.2 24.8 19.3 23.2	19,900 19,300 26,500 25,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300 22,200 21,400 32,700 31,500 44,100 42,600 51,900 50,000 60,800	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6 28.2 37.4 31.3 35.3 29.6 33.4 28.0 29.5	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400 19,000 37,500 29,100 49,500 39,900 61,700 49,200 71,100	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4 5.3 4.3 5.5 4.5 5.2 4.3 4.9 4.1 4.6	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 49,600 44,000 17,500 15,200 26,600 23,300 35,900 32,000 42,900 37,700 52,100	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 4.7 4.2 4.3 5.5 4.8 5.5 4.8 5.5 4.9 5.2 4.6 4.8	37.3" 37.3" 41.0" 41.0" 41.0" 41.0" 41.0" 54.0" 54.0"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0" 23.0" 25.4" 25.4"	22.5 22.5" 27.9" 27.9" 27.9" 27.9" 27.9" 26.5" 30.5" 30.5"	- - - - 53.25" 61.25"	265 271 357 361 373 375 310 405 450
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical YT024 YT036 YT036 YT048 YT024 YT036 YT048 YT048 YT072	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Caround Water Ground Loop Caround Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 60,900 72,800 64,200 68,900 4,56,7 29,200 27,100 44,300 41,200 57,100 53,300 68,700 64,300 77,600 71,900	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7 19.9 27.0 20.9 26.2 20.2 24.8 19.3	19,900 19,300 26,500 25,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300 22,200 21,400 32,700 31,500 44,100 42,600 51,900 50,000	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6 28.2 37.4 31.3 35.3 29.6 33.4 28.0	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400 19,000 37,500 29,100 49,500 39,900 61,700 49,200	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4 5.3 4.3 5.5 4.5 5.2 4.3 4.9 4.1	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 49,600 44,000 17,500 15,200 26,600 23,300 35,900 32,000 42,900 37,700	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 4.7 4.2 4.3 5.5 4.8 5.5 4.8 5.1 5.5 4.9 5.2 4.6	37.3" 37.3" 41.0" 41.0" 41.0" 41.0" 41.0" 54.0" 54.0" 554.0" 58.4"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0" 23.0" 25.4" 25.4" 25.4"	22.5 22.5" 27.9" 27.9" 27.9" 27.9" 27.9" 26.5" 30.5" 30.5" 30.5"	- - - - - 53.25" 61.25" 65.65"	265 271 357 361 373 375 310 405 450 475
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical YT024 YT036 YT036 YT048 YT024 YT036 YT048 YT048 YT036 YT048	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Packaged 1.3. Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 64,200 64,200 64,200 64,200 64,200 27,100 44,300 41,200 57,100 53,300 68,700 64,300 77,600 71,900 4,5,6,7,8	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7 19.9 27.0 20.9 26.2 20.2 24.8 19.3 23.2 18.0	19,900 19,300 26,500 25,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300 22,200 21,400 32,700 31,500 44,100 42,600 51,900 50,000 60,800 58,500	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6 28.2 37.4 31.3 35.3 29.6 33.4 28.0 29.5 24.8	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400 19,000 37,500 29,100 49,500 39,900 61,700 49,200 71,100 56,200	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4 5.3 4.3 5.5 4.5 5.2 4.3 4.3 5.2 4.3 4.3 5.2 4.3 4.3 5.2 4.3 4.3 5.2 4.3 4.5 5.2 4.3 4.5 5.2 4.3 5.2 4.3 5.2 4.5 5.2 4.5 5.2 4.5 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 44,000 44,000 17,500 15,200 26,600 23,300 35,900 32,000 42,900 37,700 52,100 45,800	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 3.9 5.5 4.8 5.1 5.5 4.9 5.5 4.8 5.4 4.8 4.4	37.3" 37.3" 41.0" 41.0" 41.0" 41.0" 41.0" 54.0" 54.0" 554.0" 58.4"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0" 23.0" 25.4" 25.4" 25.4"	22.5 22.5" 27.9" 27.9" 27.9" 27.9" 27.9" 26.5" 30.5" 30.5" 30.5"	- - - - - 53.25" 61.25" 65.65"	265 271 357 361 373 375 310 405 450 475
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical YT024 YT036 YT036 YT048 YT024 YT036 YT048 YT048 YT036 YT048	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Packaged 1.3. Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 60,900 72,800 64,200 64,200 64,200 64,200 64,200 64,200 64,200 64,200 64,200 64,300 41,200 57,100 53,300 68,700 64,300 77,600 71,900 4,5,6,7,8 29,600	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7 19.9 27.0 20.9 26.2 20.2 24.8 19.3 23.2 18.0 26.9	19,900 19,300 26,500 25,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300 22,200 21,400 32,700 31,500 44,100 42,600 51,900 50,000 60,800 58,500	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6 28.2 37.4 31.3 35.3 29.6 33.4 28.0 29.5 24.8 35.0	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400 19,000 37,500 29,100 49,500 39,900 61,700 49,200 71,100 56,200	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4 5.3 4.3 5.5 4.5 5.2 4.3 4.9 4.1 4.6 3.8	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 44,000 44,000 26,600 23,300 35,900 32,000 42,900 37,700 52,100 45,800	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 4.7 4.2 4.3 3.9 5.5 4.8 5.1 5.5 4.8 5.1 5.5 4.8 4.4 5.4	37.3" 37.3" 41.0" 41.0" 41.0" 41.0" 41.0" 54.0" 54.0" 554.0" 58.4"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0" 23.0" 25.4" 25.4" 25.4"	22.5 22.5" 27.9" 27.9" 27.9" 27.9" 27.9" 26.5" 30.5" 30.5" 30.5"	- - - - - 53.25" 61.25" 65.65"	265 271 357 361 373 375 310 405 450 475
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical YT036 YT036 YT036 YT036 YT036 YT048 YT036 YT048 YT036 YT048 YT060 YT072 Vertical XT024	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Packaged 1.3. Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 64,200 64,200 64,200 64,200 64,200 27,100 44,300 41,200 57,100 53,300 68,700 64,300 77,600 71,900 4,5,6,7,8	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7 19.9 27.0 20.9 26.2 20.2 24.8 19.3 23.2 18.0	19,900 19,300 26,500 25,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300 22,200 21,400 32,700 31,500 44,100 42,600 51,900 50,000 60,800 58,500	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6 28.2 37.4 31.3 35.3 29.6 33.4 28.0 29.5 24.8	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400 19,000 37,500 29,100 49,500 39,900 61,700 49,200 71,100 56,200	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4 5.3 4.3 5.5 4.5 5.2 4.3 4.3 5.2 4.3 4.3 5.2 4.3 4.3 5.2 4.3 4.3 5.2 4.3 4.5 5.2 4.3 4.5 5.2 4.3 5.2 4.3 5.2 4.5 5.2 4.5 5.2 4.5 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 44,000 44,000 17,500 15,200 26,600 23,300 35,900 32,000 42,900 37,700 52,100 45,800	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 3.9 5.5 4.8 5.1 5.5 4.9 5.5 4.8 5.4 4.8 4.4	37.3" 37.3" 41.0" 41.0" 41.0" 41.0" 41.0" 54.0" 54.0" 58.4" 58.4" 58.4"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0" 23.0" 25.4" 25.4" 25.4" 25.4"	22.5 22.5" 27.9" 27.9" 27.9" 27.9" 27.9" 26.5" 30.5" 30.5" 30.5" 30.5" 30.5"	- - - - - - - - - - - - - - - - - - -	265 271 357 361 373 375 310 405 450 475 480 415
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical YT036 YT036 YT036 YT036 YT036 YT048 YT036 YT048 YT036 YT048 YT060 YT072 Vertical	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Packaged 1.3. Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 45,900 54,700 51,300 64,200 60,900 72,800 64,200 60,900 72,800 68,900 27,100 44,300 41,200 57,100 53,300 68,700 64,300 77,600 71,900 4,5,6,7,8 29,600 27,200	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7 19.9 27.0 20.9 26.2 20.2 24.8 19.3 23.2 18.0 26.9 20.3	19,900 19,300 26,500 25,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300 22,200 21,400 32,700 31,500 44,100 42,600 51,900 50,000 60,800 58,500	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6 28.2 37.4 31.3 35.3 29.6 33.4 28.0 29.5 24.8 35.0 29.1	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400 19,000 37,500 29,100 49,500 39,900 61,700 49,200 71,100 56,200 24,700 19,800	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4 5.3 4.3 5.5 4.5 5.2 4.3 4.9 4.1 4.6 3.8 5.2 4.3 4.3	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 44,000 44,000 26,600 23,300 35,900 32,000 42,900 37,700 52,100 45,800 18,500 16,600	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 4.3 4.7 4.2 4.3 3.9 5.5 4.8 5.1 5.5 4.8 5.4 4.8	37.3" 37.3" 41.0" 41.0" 41.0" 41.0" 41.0" 54.0" 54.0" 58.4"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0" 23.0" 25.4" 25.4" 25.4"	22.5 22.5" 27.9" 27.9" 27.9" 27.9" 26.5" 30.5" 30.5" 30.5" 30.5"		265 271 357 361 373 375 310 405 450 475 480
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical YT036 YT036 YT036 YT036 YT036 YT048 YT036 YT048 YT036 YT048 YT060 YT072 Vertical XT024	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Packaged 1.3. Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 54,700 51,300 64,200 60,900 72,800 64,200 68,900 4,5,6,7 29,200 27,100 44,300 41,200 57,100 53,300 68,700 68,700 64,300 77,600 71,900 4,5,6,7,8 29,600 27,200 42,200 38,900 53,100	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7 19.9 27.0 20.9 26.2 20.2 24.8 19.3 23.2 18.0 26.9 20.3 24.0 18.3 22.1	19,900 19,300 26,500 25,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300 22,200 21,400 32,700 31,500 44,100 42,600 51,900 50,000 60,800 58,500 22,400 21,400 31,100 29,900 39,400	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6 28.2 37.4 31.3 35.3 29.6 33.4 28.0 29.5 24.8 35.0 29.1 32.6 27.0 29.4	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400 19,000 37,500 29,100 49,500 39,900 61,700 49,200 71,100 56,200 24,700 19,800 37,000 29,200	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4 5.3 4.3 5.5 4.5 5.2 4.3 4.3 5.5 4.5 5.2 4.3 4.9 4.1 4.6 3.8 5.2 4.3 5.1 4.2 4.6	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 49,600 44,000 44,000 23,300 35,900 32,000 42,900 37,700 52,100 45,800 16,600 26,000 23,200 33,700	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 4.7 4.2 4.3 4.3 5.5 4.8 5.1 5.5 4.8 5.1 5.5 4.8 5.2 4.6 4.8 5.4 4.8 5.2 4.6 4.8 5.2 4.6 4.8 5.2 4.6 4.8 5.2 4.6 4.9	37.3" 37.3" 41.0" 41.0" 41.0" 41.0" 41.0" 54.0" 54.0" 58.4" 58.4" 58.4"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0" 23.0" 25.4" 25.4" 25.4" 25.4"	22.5 22.5" 27.9" 27.9" 27.9" 27.9" 27.9" 26.5" 30.5" 30.5" 30.5" 30.5" 30.5"	- - - - - - - - - - - - - - - - - - -	265 271 357 361 373 375 310 405 450 475 480 415
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical YT036 YT024 YT036 YT036 YT048 YT024 YT036 YT048 YT060 YT072 Vertical XT024 XT036	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Packaged 1.3. Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 54,700 51,300 64,200 60,900 72,800 64,200 68,900 4,5,6,7 29,200 27,100 44,300 41,200 57,100 53,300 68,700 64,300 77,600 71,900 4,5,6,7,8 29,600 27,200 42,200 38,900 53,100	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7 19.9 27.0 20.9 26.2 20.2 24.8 19.3 23.2 18.0 23.2 18.0 26.9 20.3 24.0 18.3 22.1 17.1	19,900 19,300 26,500 25,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300 22,200 21,400 32,700 31,500 44,100 42,600 51,900 50,000 60,800 58,500 22,400 21,400 31,100 29,900 39,400 37,400	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6 28.2 37.4 31.3 35.3 29.6 33.4 28.0 29.5 24.8 35.0 29.1 32.6 27.0 29.4 24.1	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400 19,000 37,500 29,100 49,500 39,900 61,700 49,200 71,100 56,200 24,700 19,800 37,000 29,200 47,400 38,200	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4 5.3 4.3 5.5 4.5 5.2 4.3 4.3 5.5 4.5 5.2 4.3 4.9 4.1 4.6 3.8 5.2 4.3 5.1 4.2 4.6 3.9	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 49,600 44,000 23,300 35,900 32,000 42,900 37,700 52,100 45,800 16,600 26,000 23,200 33,700 29,700	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 4.7 4.2 4.3 3.9 5.5 4.8 5.1 5.5 4.8 5.1 5.5 4.8 5.2 4.6 4.8 5.2 4.6 4.8 5.2 4.6 4.8 5.2 4.6 4.8 5.2 4.6 4.9 4.3	37.3" 37.3" 41.0" 41.0" 41.0" 41.0" 41.0" 54.0" 554.0" 558.4" 558.4" 556.1"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0" 25.4" 25.4" 25.4" 25.4" 25.4" 25.4" 25.4"	22.5 22.5" 27.9" 27.9" 27.9" 27.9" 27.9" 26.5" 30.5" 30.5" 30.5" 30.5" 30.5" 30.5" 30.2" 30.2"		265 271 357 361 373 375 310 405 450 475 480 475 480
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical YT036 YT024 YT036 YT036 YT048 YT024 YT036 YT048 YT060 YT072 Vertical XT024 XT036	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Packaged 1.3. Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 54,700 51,300 64,200 60,900 72,800 64,200 68,900 4,5,6,7 29,200 27,100 44,300 41,200 57,100 53,300 68,700 68,700 64,300 77,600 71,900 4,5,6,7,8 29,600 27,200 42,200 38,900 53,100	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7 19.9 27.0 20.9 26.2 20.2 24.8 19.3 23.2 18.0 23.2 18.0 26.9 20.3 24.0 18.3 22.1	19,900 19,300 26,500 25,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300 22,200 21,400 32,700 31,500 44,100 42,600 51,900 50,000 60,800 58,500 22,400 21,400 31,100 29,900 39,400	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6 28.2 37.4 31.3 35.3 29.6 33.4 28.0 29.5 24.8 35.0 29.1 32.6 27.0 29.4	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400 19,000 37,500 29,100 49,500 39,900 61,700 49,200 71,100 56,200 24,700 19,800 37,000 29,200	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4 5.3 4.3 5.5 4.5 5.2 4.3 4.3 5.5 4.5 5.2 4.3 4.9 4.1 4.6 3.8 5.2 4.3 5.1 4.2 4.6	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 49,600 44,000 44,000 23,300 35,900 32,000 42,900 37,700 52,100 45,800 16,600 26,000 23,200 33,700	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 4.7 4.2 4.3 4.3 5.5 4.8 5.1 5.5 4.8 5.1 5.5 4.8 5.2 4.6 4.8 5.4 4.8 5.2 4.6 4.8 5.2 4.6 4.8 5.2 4.6 4.8 5.2 4.6 4.9	37.3" 37.3" 41.0" 41.0" 41.0" 41.0" 41.0" 54.0" 554.0" 558.4" 558.4" 556.1"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0" 25.4" 25.4" 25.4" 25.4" 25.4" 25.4" 25.4"	22.5 22.5" 27.9" 27.9" 27.9" 27.9" 27.9" 26.5" 30.5" 30.5" 30.5" 30.5" 30.5" 30.5" 30.2" 30.2"		265 271 357 361 373 375 310 405 450 475 480 475 480
VT024 VT030 VT036 VT042 VT048 VT060 VT072 Vertical YT036 YT036 YT036 YT036 YT036 YT048 YT036 YT048 YT036 YT048 XT048	Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Ground Water Ground Loop Packaged 1.3. Ground Water Ground Loop Ground Water Ground Loop	27,600 25,800 34,100 32,200 40,000 37,400 49,200 54,700 51,300 64,200 60,900 72,800 64,200 68,900 4,5,6,7 29,200 27,100 44,300 41,200 57,100 53,300 68,700 64,300 77,600 71,900 4,5,6,7,8 29,600 27,200 42,200 38,900 53,100 49,000 67,700	23.8 18.6 23.1 18.4 22.8 17.7 24.0 18.5 24.5 18.9 22.0 17.6 19.7 15.8 25.7 19.9 27.0 20.9 26.2 20.2 24.8 19.3 23.2 18.0 23.2 18.0 26.9 20.3 24.0 18.3 22.1 17.1 22.4	19,900 19,300 26,500 25,500 28,500 36,500 35,100 40,600 39,200 48,300 46,500 56,900 55,300 22,200 21,400 32,700 31,500 44,100 42,600 51,900 50,000 60,800 58,500 22,400 21,400 31,100 29,900 39,400 37,400 50,800	24.2 30.4 25.8 29.8 25.2 31.4 26.0 33.0 27.2 26.5 23.6 24.5 21.1 33.6 28.2 37.4 31.3 35.3 29.6 33.4 28.0 29.5 24.8 35.0 29.1 32.6 27.0 29.4 24.1 29.8	19,400 30,300 24,300 36,900 29,500 40,100 32,400 46,900 38,300 57,500 46,300 64,700 51,800 23,400 19,000 37,500 29,100 49,500 39,900 61,700 49,200 71,100 56,200 24,700 19,800 37,000 29,200 47,400 38,200 60,000	4.0 4.6 3.8 4.6 3.9 4.6 3.9 4.6 3.9 4.5 3.8 4.1 3.4 5.3 4.5 5.2 4.3 5.5 4.5 5.2 4.3 4.9 4.1 4.6 3.8 5.2 4.3 5.1 4.2 4.6 3.9 5.2 4.3 5.1 4.2 4.6 3.9 5.2 4.3 5.1 4.2 5.2 4.3 5.1 5.2 4.3 5.1 5.2 5.2 4.3 5.1 5.2 5.2 4.3 5.5 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2	14,800 22,100 20,000 25,700 22,900 28,800 25,500 33,600 30,200 41,300 36,600 49,600 49,600 44,000 23,300 35,900 32,000 42,900 37,700 52,100 45,800 16,600 26,000 23,200 33,700 29,700 43,300	3.8 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.7 4.2 4.3 4.3 4.7 4.2 4.3 3.9 5.5 4.8 5.1 5.5 4.8 5.1 5.5 4.6 4.8 5.4 4.8 5.2 4.6 4.8 5.2 4.6 4.8 5.2 4.6 4.8 5.2 4.6 4.8 5.4 4.3 4.8 4.8 5.4 4.8 5.4 4.8 5.2 4.6 4.8 5	37.3" 37.3" 41.0" 41.0" 41.0" 41.0" 41.0" 54.0" 54.0" 554.0" 558.4" 558.4" 556.1" 556.1"	22.5" 22.5" 22.5" 25.0" 25.0" 25.0" 23.0" 23.0" 25.4" 25.4" 25.4" 25.4" 25.4" 25.4" 25.4" 25.4" 25.4"	22.5 22.5" 27.9" 27.9" 27.9" 27.9" 27.9" 26.5" 30.5" 30.5" 30.5" 30.5" 30.5" 30.5" 30.2" 32.2"		265 271 357 361 373 375 310 405 450 475 480 475 480 415 420 413

Unit Performance Data

Madel	Ture		Coc	oling			Hea	ting		Dim	ensional I	Data			Unit
Model	Туре	Full Load	EER	Part Load	EER	Full Load	СОР	Part Load	СОР	Height	Width	Depth			Weigh (Ibs)
Water-to	o-Water ^{2, 12}												Src. In Src. Out	Load In Load Out	
HP024	Ground Loop	-	-	-	-	23,000	3.1	-	-	21"	27.25"	24.5	1 1/4"	3/4"	248
Water-to	o-Water ^{2,5}												Src. In Src. Out	Load In Load Out	
WV040	Ground Loop	23,900	18.9	11,900	22.7	28,500	3.0	17,400	3.5	1	1				
WV060	Ground Loop	43,000	18.4	21,600	25.4	54,600	3.0	27,000	3.9	37.2"	25.1"	25.1"	1"	1"	320
		,	10.4	21,000	20.4	04,000	0.0	21,000	0.0				Src. In	Src. Out	
Water-to	-Water ^{2, 11, 12,}	13											Load In	Load Out	
WT036	Ground Water	44,300	20.6	34,600	24.5	44,900	3.6	33,300	3.5	24"	26"	34"	1"	1"	280
	Ground Loop	42,000	16.0	33,300	20.6	36,400	3.0	29,200	3.1		-	-	1"	1"	
WT048	Ground Water	54,300	19.8	40,800	23.0	55,100	3.6	40,500	3.4	24"	26"	34"	1"	1"	300
	Ground Loop	49,400	15.1	38,800	19.2	44,100	3.0	35,700	3.1				1"	1"	
WT060	Ground Water	62,300 57,900	20.7 15.8	47,900 45,800	23.1 19.2	66,900 52,400	3.9 3.1	50,100 44,300	3.7	24" 24"	26" 32"	36" 36"	1" 1"	1" 1"	350
	Ground Loop Ground Water	107,100	19.8	78,500	22.2	117,000	3.8	82,300	3.5	24	52	30	1"	1 1/4"	
WT092	Ground Loop	107,100	15.2	75,700	18.6	92,400	3.1	72,200	3.1	24"	30"	48"	1"	1 1/4"	550
	Ground Water	124,400	20.1	-	-	124.900	3.5	-	-				1"	1 1/2"	
WT120	Ground Loop	114,800	15.4	-	-	97,400	2.8	-	-	24"	30"	48"	1"	1 1/2"	670
Water-to	o-Water ^{2,11}												Src. In	Src. Out	
	Ground Water	37,300	22.6	_	-	41,100	4.0	_			1		Load In	Load Out	
WS036	Ground Loop	36,100	17.3	_	_	31,600	3.1	_	_	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	210
	Ground Water	52,000	21.9	-	-	57,200	3.9	-	-						
WS048	Ground Loop	49,400	16.6	_	-	45,700	3.2	-	-	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	260
	Ground Water	65,500	21.9	-	-	67,500	3.9	-	_	00.0"	00.4"	05.03			
WS060	Ground Loop	58,100	16.6	-	-	53,700	3.2	-	-	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	300
WS072	Ground Water	76,300	21.4	-	-	81,600	4.0	-	-	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	286
W3072	Ground Loop	72,500	16.7	-	-	62,800	3.1	-	-	29.2	23.4	25.0	1 1/4	1 1/4	200
WS084	Ground Water	92,000	20.5	-	-	91,100	3.9	-	-	29.2"	23.4"	25.8"	1 1/4"	1 1/4"	415
	Ground Loop	84,300	25.0	-	-	70,100	3.1	-	-						
WD120	Ground Water	109,100	18.1	65,800	22.0	111,900	3.4	59,000	3.6	27.5"	27"	26.1"	1 1/4"	1 1/4"	465
_	Ground Loop	104,600	14.5	63,500	19.8	100,100	2.8	57,500	3.4				Bef	Conn.	_
Single-S	stage Indoor s	Split ^{1, 3, 4}											Liq.	Suct.	
BS018	Ground Water	22,000	25.3	-	-	18,500	4.5	-	-	21"	26"	26"	3/8"	5/8"	190
_	Ground Loop	20,400	18.9	-	-	14,600	3.6	-	-				Ref.	Conn.	_
Two-Sta	ge Indoor Sp	lit ^{1, 3, 4}											Liq.	Suct.	
BT024	Ground Water	26,800	22.7	21,000	25.8	23,000	4.2	17,900	4.4	21"	26"	26"	3/8"	5/8"	190
01024	Ground Loop	24,900	17.3	20,300	22.2	18,200	3.4	15,400	3.9				0,0	0,0	100
BT036	Ground Water	35,400	21.0	27,700	30.4	36,200	4.5	25,900	4.8	21"	26"	26"	3/8"	5/8"	201
	Ground Loop	35,200	17.1	27,600	26.0	28,700	3.8	22,900	4.3						
BT048	Ground Water	55,700	26.2	42,100	35.6	45,700	4.6	34,200	5.0	21"	26"	26"	3/8"	3/4"	226
	Ground Loop	51,500	19.9	40,500	28.8	37,300	3.9	30,900	4.4						
BT060	Ground Water	66,200	22.7	50,900	30.1	57,000	4.2	42,300	4.5	21"	26"	26"	3/8"	7/8"	229
	Ground Loop Ground Water	62,300 73,900	17.6 20.8	49,200 58,800	25.5 27.5	45,900 64,800	3.7 4.0	37,800 49,300	4.1						
BT072	Ground Loop	69,900	16.4	56,700	27.5	52,000	3.4	49,300	3.8	21"	26"	26"	3/8"	7/8"	244
	[•] Split ^{1, 3, 4, 5, 6}	,		,		,		,			1		Ref.	Conn.	
Outdoor	opin												Liq.	Suct.	
Outdoor	Ground Weter	-	-	- 19,600	- 20.3	- 18,000	3.3	- 14,800	3.8	23.4"	32"	28.8"	3/8"	7/8"	180
Outdoor RT024	Ground Water	24 600			20.0	10,000		-							
	Ground Loop	24,600	15.8		-	_	_		_						
	Ground Loop Ground Water	-	-	-	- 25.3	- 27.200	3.8			23.4"	32"	28.8"	3/8"	7/8"	225
RT024 RT036	Ground Loop				- 25.3 -	_ 27,200 _	- 3.8	21,700	4.2						
RT024	Ground Loop Ground Water Ground Loop	- 36,000	- 16.7	- 27,800	25.3	27,200	3.8	21,700		23.4"	32" 32"	28.8" 28.8"	3/8" 3/8"	7/8" 7/8"	225 270
RT024 RT036	Ground Loop Ground Water Ground Loop Ground Water	_ 36,000 _	- 16.7 -	_ 27,800 _	25.3 -	27,200	3.8	21,700	4.2						

1. Rated in accordance with AHRI/ISO standard 13256-1, which includes pump penalties

2. Rated in accordance with ISO Standard 13256-2, which includes pump penalties

3. Heating capacities based on 68.0°F DB, 59.0°F WB entering air temperature

4. Cooling capacities based on 80.6°F DB, 66.2°F WB entering air temperature

5. Ground Loop entering water temp., Full Load: 32F heating/77F cooling.

Ground Loop entering water temp., Part Load: 41F heating/68F cooling

6. Ground Water entering water temp., Full Load: 50F heating/59F cooling

Ground Water entering water temp., Part Load: 50F heating/59F cooling

All Desuperheater connections are 3/4" FPT
 Width excludes filter rack (width with rack is 30.3")

8. Width excludes filter rack (width with rack is 30.3.)

9. ST072 with ACD060C is not ENERGY STAR rated for Open Loop Applications 10. For the source water fittings, WS open loop only ZSZT018-072 models use 1" EPT

10. For the source water fittings, WS open loop only, ZSZT018-072 models use 1" FPT fittings, ZS006-017 models use 3/4" FPT fittings.

11. Heating capacities based on 32°F EST & 104°F ELT

Cooling capacities based on 77°F EST & 53.6°F ELT

Entering load temperature over 120°F heating and under 45°F cooling is not permissible Floor heating is most gernally designed for 85°F entering load temperature

There are two IN connections, but only one OUT connection

Model 120 does not meet ENERGY STAR Tier 3 ratings

12. Source water loop has 1" double O-ring fittings

13. WT060 is the only model available with Side Water Connection option

14. VS060 with PSC blower, VS072 with PSC or ECM are not ENERGY STAR qualified models

 Water Loop entering water temp., Full Load: 68F heating/86F cooling Water Loop entering water temp., Part Load: 68F heating/86F cooling

Model	Туре	Cooling PSC Blo		Heating with PSC Blower		Cooling with ECM Blower Option		Heating ECM Blowe		Dim	ensional	Data		Ur Wei	
Model	Туре	BTU	EER	BTU	СОР	BTU	EER	BTU	COP	Height	Width	Depth		(lb	
Sinale Sta	age Compact	t Horizont:	al Pack	aned (PI I	EASE NO				BUST	· INGS) ^{1,}	3, 4, 5, 6, 7	, 10, 15			
	1								_			I	1		
ZS006	Water Loop	6,500	14.6	7,800	5.2	-	-	_	-	-			Add 2.4" to width		
208/230V ONLY	Ground Water	7,600	23.2	6,400	4.3	-	-	-	-	12.0"	20.0"	40.0"	w/ filter rack	14	
	Ground Loop	6,900	17.1	5,200	3.5	-	-	-	-	<u> </u>					
ZS006	Water Loop	6,200	13.9	7,400	4.9	-	-	-	-	_			Add 2.4" to width		
265/115V ONLY	Ground Water	7,200	22	6,100	4.1	-	-	-	-	12.0"	20.0"	40.0"	w/ filter rack	1	
UNLT	Ground Loop	6,500	16.2	5,000	3.3	-	-	-	-			ļ			
ZS009	Water Loop	9,200	14.3	11,700	4.9	-	-	-	-						
208/230V	Ground Water	10,500	22.9	9,500	4.2	-	-	-	-	12.0"	20.0"	40.0"	Add 2.4" to width w/ filter rack	1	
ONLY	Ground Loop	9,600	16.7	7,500	3.5	-	-	-	-						
ZS009	Water Loop	8,700	13.6	11,100	4.7	-	-	-	-						
265/115V	Ground Water	10,000	21.7	9,000	4.0	-	-	-	-	12.0"	20.0"	40.0"	Add 2.4" to width w/ filter rack	1	
ONLY	Ground Loop	9,200	15.9	7,100	3.3	-	-	-	-	1			w/ inter rack		
	Water Loop	11,000	12.5	13,600	4.3	_	-	-	-			İ			
ZS012	Ground Water	12,400	18.7	11,700	3.7	_	-	-	-	12.0"	20.0" 40.0		Add 2.4" to width		
	Ground Loop	11,300	14.1	9,500	3.2	_	_	_	_	-			w/ filter rack		
	Water Loop	14,600	16.3	17,100	5.4	14,600	17.3	16,700	5.5						
ZS015	Ground Water	-	-	-		-	-	-		17.0"	21.0"	40.0"	Add 2.4" to width		
BPHE	Ground Loop	15,300	19.2	11,100	3.8	15,200	20.3	10,900	3.9	- 17.0	21.0	40.0	w/ filter rack		
														<u> </u>	
ZS015	Water Loop	14,000	14.7	17,700	5.6	13,500	14.7	17,800	5.7	-			Add 2.4" to width		
COAX	Ground Water	16,100	24.4	14,300	4.7	15,600	24.9	14,300	4.8	17.0"	21.0"	40.0"	w/ filter rack		
	Ground Loop	14,500	17.1	11,300	3.9	14,200	17.6	11,200	3.9						
ZS017	Water Loop	17,000	15.8	21,000	5.3	17,300	17.4	20,400	5.6	_			Add 2.4" to width		
BPHE	Ground Water	-	-	-	-	-	-	-	-	17.0"	21.0"	40.0"	w/ filter rack		
	Ground Loop	18,300	18.6	13,400	3.7	18,100	20.5	13,000	3.8						
	Water Loop	16,900	14.7	20,900	5.3	17,000	15.6	20,600	5.5						
ZS017 COAX	Ground Water	19,200	22.5	16,900	4.5	19,400	24.9	16,700	4.7	_		21.0"	40.0"	Add 2.4" to width w/ filter rack	
	Ground Loop	17,900	17.1	13,700	3.7	17,800	18.2	13,500	3.9]					
	Water Loop	19,400	15.3	23,000	5.0	19,900	17.3	22,600	5.4			1			
ZS018 BPHE	Ground Water	-	-	_	-	_	-	_	-	19.2"	2" 21.7" 52'	52"	Add 2.4" to width w/ filter rack		
DFIL	Ground Loop	20,500	18.2	14,400	3.6	20,800	20.5	14,200	3.8	1			w/ inter rack		
	Water Loop	18,500	13.2	23,400	4.8	19,100	15.4	21,900	5.5						
ZS018	Ground Water	20,900	20.7	18,600	4.2	21,400	26.0	17,500	4.7	19.2"	21.7"	52"	Add 2.4" to width		
COAX	Ground Loop	19,400	15.5	14,800	3.5	20,100	18.7	14,100	3.7				w/ filter rack		
	Water Loop	24,100	15.8	29,700	5.0	25,000	17.9	29,300	5.6						
ZS024	Ground Water	-	-							19.2"	21.7"	52"	Add 2.4" to width		
BPHE	Ground Loop	25,200	18.7	18,600	3.7	26,100	21.5	18,600	3.9	13.2	21.7	52	w/ filter rack		
														-	
ZS024	Water Loop	24,600	14.9	29,300	4.9	25,300	16.9	28,500	5.5	-		501	Add 2.4" to width		
COAX	Ground Water	27,400	22.9	23,700	4.3	27,900	26.3	22,900	4.8	19.2"	21.7"	52"	w/ filter rack		
	Ground Loop	25,700	17.4	18,500	3.6	26,200	19.6	18,000	3.9						
ZS030	Water Loop	29,000	16.2	33,300	5.3	29,500	17.5	33,000	5.7	-			Add 2.4" to width		
BPHE	Ground Water	-	-	-	-	-	-	-	-	19.2"	21.7"	52"	w/ filter rack		
	Ground Loop	30,300	19.1	21,900	3.7	30,700	20.7	21,500	4.0						
76020	Water Loop	28,400	15.3	33,500	5.3	27,800	16.2	32,200	5.5	-			Add 2 4" to width		
ZS030 COAX	Ground Water	31,800	23.4	27,900	4.5	30,900	24.6	26,300	4.7	19.2"	217"	52"	Add 2.4" to width w/ filter rack	1	
	Ground Loop	29,700	17.7	22,900	3.6	29,000	18.8	21,700	3.8						
	Water Loop	35,900	15.6	43,400	4.9	36,800	16.8	43,300	5.3						
ZS036 BPHE	Ground Water	-	-	-	-	-	-	-	-	21.2"	21.7"	56"	Add 2.4" to width w/ filter rack	:	
	Ground Loop	37,600	18.1	27,800	3.7	38,400	19.5	27,600	4.0						
	Water Loop	35,100	15.4	43,800	4.9	35,300	16.0	42,600	5.1						
ZS036 COAX	Ground Water	39,500	24.1	34,800	4.4	39,500	24.7	33,600	4.6	21.2"	21.7"	56"	Add 2.4" to width w/ filter rack		
COAL	Ground Loop	36,600	17.9	28,300	3.7	37,200	18.8	27,500	3.9	1			w/ inter fack		
	Water Loop	41,700	16.9	50,400	5.4	42,500	17.7	49,600	5.4						
ZS042	Ground Water	-	-	-	-	-	-	-	-	21.2"	21.7"	56"	Add 2.4" to width		
BPHE	Ground Loop	43,400	- 19.8	32,800	3.9	44,100	21.1	32,200	4.1	21.2	21.7	00	w/ filter rack		
ZS042	Water Loop	39,500	15.4	47,900	5.2	39,100	16.4	46,300	5.0	04.01	04 7"		Add 2.4" to width		
COAX	Ground Water	44,200	23.7	38,900	4.5	43,700	25.6	37,500	4.5	21.2"	21.7"	56"	w/ filter rack	:	
	Ground Loop	41,100	17.9	31,700	3.7	40,700	19.2	30,200	3.8						

Unit Performance Data

	Water Loop	46,800	15.4	59,300	4.6	48,100	16.3	58,100	4.9					
ZS048 BPHE	Ground Water	-	-	-	-	-	-	-	-	21.2"	21.7"	56"	Add 2.4" to width w/ filter rack	293
	Ground Loop	48,500	17.8	38,500	3.6	50,400	19.1	37,800	3.8					
	Water Loop	46,600	14.7	57,100	4.7	47,300	15.1	56,300	4.9					
ZS048 COAX	Ground Water	52,100	22.4	46,800	4.2	52,900	22.6	45,600	4.3	21.2"	21.7"	56"	Add 2.4" to width w/ filter rack	293
	Ground Loop	48,600	17.0	37,800	3.5	49,300	17.4	36,200	3.6					
	Water Loop	58,400	15.4	75,700	4.9	59.300	17.0	74.700	5.3					
ZS060 BPHE	Ground Water	-	-	-	-	-	-	-	-	21.2"	24"	61"	Add 2.4" to width w/ filter rack	303
DITIE	Ground Loop	60,500	17.8	49,200	3.8	60,700	19.5	48,200	4.0	1			W Inter ruok	
	Water Loop	56,400	14.5	72,800	4.7	53,500	15.0	71,000	4.9					
ZS060 COAX	Ground Water	62,000	21.0	59,600	4.2	60,500	22.3	58,600	4.3	21.2"	24"	61"	Add 2.4" to width w/ filter rack	303
COAN	Ground Loop	57,000	16.1	48,400	3.5	57,000	17.5	46,200	3.6	1			W Inter ruok	
	Water Loop	68,600	15.1	88,400	4.6	69,700	15.5	88,400	4.7	1				
ZS072 BPHE	Ground Water	-	-	-	-	-	-	-	-	21.2"	24"	61"	Add 2.4" to width w/ filter rack	312
DITIE	Ground Loop	70,600	17.2	57,400	3.5	72,100	17.7	56,600	3.7	1			W Inter ruok	
	Water Loop	66,600	13.4	85,300	4.3	68,500	13.7	84,200	4.3	1				
ZS072 COAX	Ground Water	74,200	19.1	69,000	3.8	75,600	19.8	68,900	3.9	21.2"	24"	61"	Add 2.4" to width w/ filter rack	312
UUAA	Ground Loop	70,200	15.3	56,200	3.2	71,200	15.7	56,200	3.3	5			W/ Intel Tack	

Model	Tumo		Coolin	g BTU			Heatin	g BTU		Dim	ensional	Data		Unit
Model	Туре	Full Load	EER	Part Load	EER	Full Load	СОР	Part Load	СОР	Height	Width	Depth		Weigh (Ibs)
wo Stage	e Compact Ho	orizontal Pa	ckaged	1, 3, 4, 5, 6, 7, 10										
	Water Loop	25,600	17.0	18,700	19.3	30,000	5.5	21,300	6.0					
ZT024 BPHE	Ground Water	-	-	-	-	-	-	-	-	19.2"	21.7"	52"	Add 2.4" to width w/filter rack	236
DFIL	Ground Loop	26,800	19.8	20,700	28.8	18,100	4.0	14,900	4.3	1			Willeriack	
	Water Loop	25,300	15.9	18,200	17.4	28,800	5.2	21,000	5.6			[
ZT024 COAX	Ground Water	28,200	23.7	20,800	29.7	22,900	4.6	16,600	4.6	19.2"	21.7"	52"	Add 2.4" to width w/filter rack	236
	Ground Loop	26,400	18.3	20,000	25.0	18,300	3.9	14,500	4.1	<u> </u>				
77000	Water Loop	30,600	15.4	22,800	17.4	36,000	5.0	26,100	5.3					
ZT030 BPHE	Ground Water	-	-	-	-	-	-	-	-	19.2"	21.7"	52"	Add 2.4" to width w/filter rack	245
	Ground Loop	32,000	18.0	24,800	24.9	22,600	3.7	18,700	4.0					
ZT030	Water Loop	30,200	15.1	22,000	16.2	34,800	5.1	26,200	5.3				Add 2.4" to width	
COAX	Ground Water	32,600	21.6	24,700	26.5	28,800	4.5	21,400	4.5	19.2"	21.7"	52"	w/filter rack	245
	Ground Loop	31,500	17.5	23,900	22.7	23,300	3.7	19,300	4.0					
ZT036	Water Loop	36,500	17.0	26,100	19.5	43,300	5.3	30,800	6.0	_			Add 2.4" to width	
BPHE	Ground Water	-	-	-	-	-	-	-	-	21.2"	21.2" 21.7"	56"	w/filter rack	263
	Ground Loop	38,200	19.9	28,900	29.8	27,600	4.1	21,200	4.4					
77000	Water Loop	35,100	15.5	25,700	18.0	42,300	5.0	31,000	5.7					
ZT036 COAX	Ground Water	39,400	23.6	29,100	31.8	34,000	4.6	24,400	4.8	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	263
	Ground Loop	36,700	17.9	28,100	26.6	27,100	3.8	22,000	4.3					
	Water Loop	41,000	16.5	30,400	17.5	48,400	4.6	35,200	5.0					
ZT042 BPHE	Ground Water	-	-	-	-	-	-	-	-	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	280
	Ground Loop	42,600	19.1	33,100	26.2	31,500	3.7	25,800	4.0					
	Water Loop	41,200	15.5	30,500	16.9	49,500	4.7	35,800	5.2					
ZT042 COAX	Ground Water	46,000	23.4	34,800	30.5	40,100	4.4	28,900	4.6	21.2"	21.7" 56"	56"	Add 2.4" to width w/filter rack	280
	Ground Loop	43,000	18.0	33,500	25.3	32,900	3.6	26,400	4.1					
	Water Loop	47,600	15.8	36,200	17.8	58,300	4.9	42,000	5.5					
ZT048 BPHE	Ground Water	-	-	-	-	-	-	-	-	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	293
DITIL	Ground Loop	49,800	18.3	39,700	26.6	37,900	3.9	29,600	4.3]			Winter ruok	
	Water Loop	46,500	15.1	34,600	16.6	55,300	4.8	40,400	5.5					
ZT048 COAX	Ground Water	52,200	22.1	39,600	29.4	45,900	4.4	32,800	4.6	21.2"	21.7"	56"	Add 2.4" to width w/filter rack	293
OOAA	Ground Loop	48,700	17.3	38,000	24.4	36,900	3.6	29,300	4.1	1			Winter rack	
	Water Loop	59,400	16.3	42,900	18.3	74,600	5.1	51,400	5.8					
ZT060 BPHE	Ground Water	-	-	-	-	-	-	-	-	21.2"	24"	61"	Add 2.4" to width w/filter rack	30
DITIE	Ground Loop	61,200	18.7	47,300	26.9	48,100	3.9	34,200	4.1	1			Winter Tuest	
	Water Loop	55,100	14.6	42,000	16.5	70,700	4.7	50,900	5.4					
ZT060 COAX	Ground Water	62,000	21.2	47,300	27.9	58,500	4.2	41,300	4.5	21.2"	24"	61"	Add 2.4" to width w/filter rack	30
JOAN	Ground Loop	59,000	16.9	45,800	23.7	46,800	3.6	36,400	4.0	1			Willeriack	
	Water Loop	68,100	15.7	53,400	17.8	88,400	4.8	66,600	5.6					
ZT072 BPHE	Ground Water	-	-	-	-	-	-	-	-	21.2"	24"	61"	Add 2.4" to width w/filter rack	312
DFAE	Ground Loop	70,400	18.0	57,100	25.2	57,900	3.8	47,600	4.2	1			w/inter rack	
	Water Loop	66,600	13.7	50,700	15.2	83,200	4.5	62,700	5.1					
ZT072	Ground Water	73,500	19.2	58,100	24.8	67,500	4.0	49,200	4.2	21.2"	24"	61"	Add 2.4" to width	312
COAX	Ground Loop	69,500	15.6	56,000	21.3	55,500	3.4	44,400	3.8				w/filter rack	312

Model	Туре		Coolin	ıg BTU			Heatin	g BTU		Dim	ensional	Data		Unit Weight
wouer	Туре	Full Load	EER	Part Load	EER	Full Load	СОР	Part Load	СОР	Height	Width	Depth		(lbs)
Combina	ation Series ¹	, 3, 4, 5, 6, 7, 8											Height with Control Box	
CT036	Ground Water	41,700	23.5	30,400	31.9	36,700	5.0	25,600	5.2	56.1"	28"	32.2"	62.5"	420
C1036	Ground Loop	38,600	18.3	29,100	26.8	28,600	4.1	22,400	4.6	50.1	28	32.2	02.5	420
CT048	Ground Water	53,100	21.8	39,400	29.4	46,700	4.6	33,700	4.9	56.1"	28"	32.2"	62.5"	435
C1040	Ground Loop	49,000	17.1	37,400	24.1	38,000	3.9	29,700	4.3	50.1	20	32.2	02.5	435
CT060	Ground Water	65,600	20.8	49,200	27.6	60,000	4.3	43,400	4.7	60.1"	28"	32.2"	66.5"	535
C1060	Ground Loop	61,000	16.6	47,400	23.4	47,900	3.7	38,700	4.2	60.1	28	32.2	6.00	535
07070	Ground Water	73,400	19.3	57,600	24.1	69,400	4.1	51,500	4.3	60.1"	28"	32.2"	66.5"	550
CT072	Ground Loop	68,800	15.6	55,600	20.8	56,000	3.5	45,800	3.9	60.1"	28"	32.2"	00.5"	550

Notes:

- 1. Rated in accordance with AHRI/ISO standard 13256-1, which includes pump penalties
- 2. Rated in accordance with ISO Standard 13256-2, which includes pump penalties
- 3. Heating capacities based on 68.0°F DB, 59.0°F WB entering air temperature
- 4. Cooling capacities based on 80.6°F DB, 66.2°F WB entering air temperature
- Ground Loop entering water temp., Full Load: 32F heating/77F cooling. Ground Loop entering water temp., Part Load: 41F heating/68F cooling
- Ground Water entering water temp., Full Load: 50F heating/59F cooling Ground Water entering water temp., Part Load: 50F heating/59F cooling
- 7. All Desuperheater connections are 3/4" FPT
- 8. Width excludes filter rack (width with rack is 30.3")
- 9. ST072 with ACD060C is not ENERGY STAR rated for Open Loop Applications
- For the source water fittings, WS open loop only, ZSZT018-072 models use 1" FPT fittings, ZS006-017 models use 3/4" FPT fittings.

Model	Size	Din	nensional D	ata			Unit Weight
Model	(tons)	Height	Width	Depth			(lbs)
ND 0			• • • • • • • • •		Return Ai	r Opening	
MP Series Mu	ITI-Pos		Air Handle	rs	Width	Depth	
MPD024	2	43"	17.625"	21"	15.5"	19.75"	130
MPD036	3	48"	21.125"	21"	19.75"	19.75"	150
MPD060	4 - 5	58.875"	24.625"	21.75"	23.5"	20.75"	200
MPD072	6	58.875"	24.625"	21.75"	23.5"	20.75"	205
MD Carles Mu	H: Dee	ition Und	von Air Ho	ndlava	Return Ai	r Opening	
MP Series Mu	iti-Pos	sition Hydi	ron Air Ha	naiers	Width	Depth	
MPH024	2	43"	17.625"	21"	15.5"	20.25"	135
MPH036	3	48.25"	21.125"	21"	19"	20.25"	165
MPH048	4	58.75"	25"	22"	22.25"	20.5"	210
MPH060	5	58.75"	25"	22"	22.25"	20.5"	215

- 11. Heating capacities based on 32°F EST & 104°F ELT
 - Cooling capacities based on 77°F EST & 53.6°F ELT
 - Entering load temperature over 120°F heating and under 45°F cooling is not permissible
 - Floor heating is most gernally designed for 85°F entering load temperature
 - There are two IN connections, but only one OUT connection
 - Model 120 does not meet ENERGY STAR Tier 3 ratings
- 12. Source water loop has 1" double O-ring fittings
- 13. WT060 is the only model available with Side Water Connection option
- 14. VS060 with PSC blower, VS072 with PSC or ECM are not ENERGY STAR qualified models
- Water Loop entering water temp., Full Load: 68F heating/86F cooling Water Loop entering water temp., Part Load: 68F heating/86F cooling

	Size	Din	nensional D	ata			Unit
Model	(tons)	Height	Width	Depth			Weight (Ibs)
AC Series DX	"A" C	oils			Liquid	Suction	
ACD024	2	14.5"	16.625"	19"	3/8"	3/4"	27
ACD036	3	18.5"	19.625"	19"	3/8"	3/4"	34
ACD060	4 - 5	27.875"	23.75"	20.5"	3/8"	7/8"	52
AC Series Hy	dronic	"A" Coils				ection Size " Copper)	
ACH024	2	18.5"	16.63"	19"	3/4"	3/4"	36
ACH036	3	21"	19.63"	19"	3/4"	3/4"	43
ACH060	4 - 5	28"	23.92"	20.5"	3/4"	3/4"	64
AC Series DX	Cased	I "A" Coil	S		Liquid	Suction	
MCD024	2	20"	17.5"	21"	3/8"	3/4"	47
MCD036	3	24"	21"	21"	3/8"	3/4"	58
MCD060	4 - 5	34"	24.5"	21.5"	3/8"	3/4"	89
AC Series Hy	dronic	Cased "A	" Coils			ection Size " Copper)	
MCH024	2	20"	17.5"	21"	3/4"	3/4"	56
MCH036	3	24"	21"	21"	3/4"	3/4"	68
MCH060	4 - 5	34"	24.5"	21.5"	3/4"	3/4"	101

One of the Best Warranties in the Industry!

High quality products should have a warranty that reflects confidence in design and construction. The GeoComfort brand not only has excellent warranty coverage on its geothermal heat pumps, but also extends coverage to accessories for a comprehensive package. **Ten-year coverage on the entire unit and select accessories**, and a five-year labor allowance provide homeowners with peace of mind. Plus, GeoComfort now offers an **additional five years of labor allowance free of charge** when the unit warranty registration is submitted!

At Enertech, quality assurance is one of the guiding principles in the way we do business. We realize that successful business relationships are earned by providing superior products backed by the highest quality technical and customer support.

Standard Residential Warranty

10-Year Warranty on All Unit Components (where applicable):

- Cabinet
- Compressor
- Water-to-refrigerant heat exchanger
- Air-to-refrigerant heat exchanger (not applicable on hydronic units)
- All internal refrigerant circuit parts
- · All internal water circuit parts
- All internal controls/electrical parts

10-Year Warranty on Select Accessory Items: Must be purchased through GeoComfort and includes:

- Flow centers
- Internal plenum and closed coupled auxiliary heaters
- Air handlers and a-coils (for split system and hydronic applications)
- EWC Zoning

5-Year Labor Allowance* on the Following Items:

- All standard unit components
- Flow centers
- · Internal plenum and closed coupled auxiliary heaters
- Air handlers and a-coils (for split system and hydronic applications)

Additional Warranty Options

Free 5-Year Labor Allowance

Warranty registration provides an additional no charge 5-year Service Labor Allowance on the unit and select accessories (years 6-10). **Unit must be registered online** or via mail-in form within 60 days of installation, and all information on the warranty registration must be the original owner's accurate information.

Peace of Mind Warranty Option

The ultimate protection to complement our standard

warranty. This extended warranty covers a one-time component replacement of the compressor and all-aluminum microchannel air coil (if applicable) to the original homeowner after the standard 10-year coverage has ended. This coverage ends 18 years from the installation date.



Warranty Reductions

5/5/5 or ENERGY STAR minimums. Not available in combination with other warranty options. See Price List for complete details.

* HP Unit: 5 Year all unit parts, 5 Year select accessories, 1 Year labor allowance.



enertechusa.com/enertech-university



Enertech University curriculum is developed from our history and reputation as a leader in the geothermal heating and cooling industry. Stemming from the grass roots of geothermal technology, backed by manufacturing expertise, and supported by field experience, courses are designed to provide the knowledge and confidence of designing, selling, installing and servicing Enertech made geothermal systems.

Enertech University offers training for the complete geothermal industry. IGSHPA certification and NATE continued education hours are incorporated into our curriculum along with specific design and sales courses for Enertech manufactured equipment.

As further commitment to providing contractors with more tools to grow their business, Enertech University also offers PV solar training, supported by the PV solar brands we distribute. These trainings include design, sales, and installation of systems.

All training sessions are geared towards technicians, designers, or sales personnel specific to the HVAC and PV solar industry. Training will be coordinated through Enertech's corporate office and our distributing partners. AVAILABLE COURSES INCLUDE: Product Installation Fusion Training Basic Geothermal Troubleshooting Advanced Geothermal Troubleshooting Ground Loop & Flow Center Application & Installation Geothermal Hydronic Systems Variable Speed Hydronic Systems Design, Sizing & Software Sales & Marketing Product Introduction/Update IGSHPA/NATE Certified Installer Workshop Right-Suite® Universal PV Solar Design, Sales, and Installation

Training Provider



Our Guarantee



We guarantee 100% student satisfaction for every course led by an Enertech trainer.

Online Resources



Enertech University has a growing library of videos and workbooks that can be found online. They're great for geothermal installers who are eager to stay ahead of the curve!



)ENERTEC Geothermal Made		
lome Project	Utilities Loads Economics Operating Cost Summary	y Payment Analysis Graphs Print Help
Project Name	New Project]
Project Location (City, State)	Example	Add System
Prepared By (optional)	Mr. Geo	Delete System
	The Geo Experts	
Company (optional)		Pressure Drop Proposal
Weather Data	State BC :	
 United States Canada 	State BC = City Abbotsford =	
Date	1/1/2013	" Note: To perform a "Save As" function, simply change the project name on an existing project.

Features

- Ability to compare up to 5 other conventional systems
- Allows the user to save multiple utility files
- I.P. or S.I. utility cost choices (e.g. \$/gallon or \$/liter)
- 14 pre-configured ground loop choices, plus user-defined horizontal loop and open loop (well water)
- "Auto Size" option for sizing loops based upon minimum/maximum entering water temperature
- Economic analysis with simple payback, cashflow analysis, and financing options. Has the ability to include rebates/credits and print graphs
- Choice of HDPE, PEX or userdefined pipe

- Choice of ASHRAE, EPRI or userdefined soil types
- Includes calculations for waterto-water heat pumps and combination units (water-to-water/ water-to-air) for applications like radiant floor heating
- Bin data report and balance point calculation
- Includes the latest conventional equipment for comparisons (up to 21 SEER air conditioners/ heat pumps and 98% efficiency furnaces)
- Comprehensive system reports for geothermal and conventional selections
- Pressure drop calculation module for sizing flow center pumps (central pumps or pump(s) for each unit)

No other software has as many

features. Even more important, the loop sizing portion uses "pure" IGSHPA algorithms, not manufacturer-adjusted loop sizing formulas. The ease of use and configuration ability provides users with an accurate system analysis at a low annual maintenance fee, which includes free updates.

GeoAnalyst is continually updated with new features. 98% furnaces were recently added, as were 21 SEER air conditioners. Changes in equipment, enhanced features, and other usable upgrades are instantly available in the new online version. There is no longer a need to update the software.

- Calculates loop flushing requirements, antifreeze requirements, and Reynolds number
- Sales proposal module for creating a consumer-friendly sales proposal to explain the benefits of geothermal vs. the other compared systems
- All new bill of material generator simplifies the quoting and ordering process
- Allows reports to be customized with your company logo and contact information
- Dual-fuel system comparisons for geothermal and air-to-air heat pumps
- "Save as Default" option to use saved local conditions for a new project

Analysis	Sample Report
ENERTECH Gestherned Made Better System 1 - Geo System	GeoAnalyst® Geothermal System Report Sectored Design & Arglectore Software Geotennal Design & Arglectore Software Sectored Design & Arglectore Software Memory Data Location: Abdocstored BC
Loop Information 8 Feet Pond Mat Loop * Pump UP26-99	Heating Annual Heating Load: 50.5 MMBtu Cooling Annual Cooling Load 4.1 MMBtu Electricity (Tetco): 3949 kWh Electricity (Tetro): 195 kWh Electricity (Tetco): 2 kWh Average Efficiency: 21.1 Btu/Watt % by Tetco: 100.0 % Annual Cost: \$20 Annual Cost: \$395 Annual Cost: \$20 Hot Water Electricity: 64 kWh Sast Electricity: 64 kWh Total ^{12.3} \$479 % by Geothermal: 65 6 % Average Efficiency: 2.38 COP Annual Cost: \$84 Starp
Entering Water Temperature Pond - Mat Loop Desired Pond - Mat Loop Maximum (Summer) 100 Minimum (Winter) 25	Design Heating Load: 55714 Blur/hr Design Cooling Load: 21666 Blur/hr Indoor Design Temperature: 70 "F Indoor Design Temperature: 75 "F Outdoor Design Temperature: 12 "F Outdoor Design Temperature: 95 "F Heating Electric Rate: 0.10 5/kwh Cooling Electric Rate: 0.10 5/kwh Hot Water Electric Rate: 0.10 5/kwh Hot Water Electric Rate: 0.10 5/kwh Winter Peak Electrical Demand: 2.74 kW Summer Peak Electric 1.54 kW Model XT096 XT Series with hot water genore, Heat:: Emergency Heat: 8.56 kW Water Heater: Electric 0.30 kW 3° F Salance Point 13 ° F
Geo Unit Series XT Series ↓ Unit XT036	Loop Type / Soil: Two Vertical U-Tubes, Polyethylene SDR-11 34' Deep Earth Temp: 52 *F Bore Depth: Heavy Soil Phase Shift: 39 Days Total Bore / Pipe: 265 1060 ft Soil Conductivity: 1.4 Btu/n-ti-F Total Bore / Pipe: 265 1060 ft Soil Conductivity: 0.4 Btu/n-ti-F Maximum Loop Temp: 69 *F Pipe Conductivity: 0.226 btu/n-ti-F Average Heating Loop Temp: 60.6 *F * * * * ¹ Total estimated annual operating costs includes heating, cooling and hot water. Base electric use (electric use other than heating, cooling and hot water costs plus * *
Calculate Return to Project Page Help	² The operating costs shown above are considered to be an estimate due to the variability of Wing habits, weather, and system installation. ³ The operating costs shown above are considered to be an estimate due to the variability of Wing habits, weather, and system installation. ³ The software uses the labest algorithm from GSHPA (International Ground Society of Heating, Refrigerating, and Ar Conditioning Engineers) algorithms. All calculations are based upon Telos equipment, and may not be comparable for other manufacturer's equipment.

Ground Loop Sizing and Operating Cost Analysis

GeoAnalyst ground loop sizing and operating cost analysis is very intuitive with drop-down menus, and pop-up windows. All pre-configured loops have a picture of the cut-away section to help the designer understand the correct inputs. The "Auto Size" option sizes loops based upon the minimum and maximum entering water temperature selected. The designer may also key in the loop length, and allow the software to calculate the minimum and maximum loop temperatures.

ACCESS ONLINE

The web-based GeoAnalyst combines all the great features you've come to expect with the flexibility of accessing the software from a computer or mobile device anywhere, whether in your office, home or on the jobsite! Plus geoanalyst. net offers unlimited users for one low annual license fee. Visit www.geoanalyst.net to try out the demo software for free or register for a full license. Questions? Call 618-664-5860.

Visit **www.geoanalyst.net** to try the demo or to register - or call **618-664-5860** to learn more!

GeoComfort Marketing

Literature

We offer a complete assortment of GeoComfort consumer, technical, and dealer literature to assist with every step of the sales process. Available in both printed and electronic format, materials include general geothermal educational pieces to product-specific technical brochures.

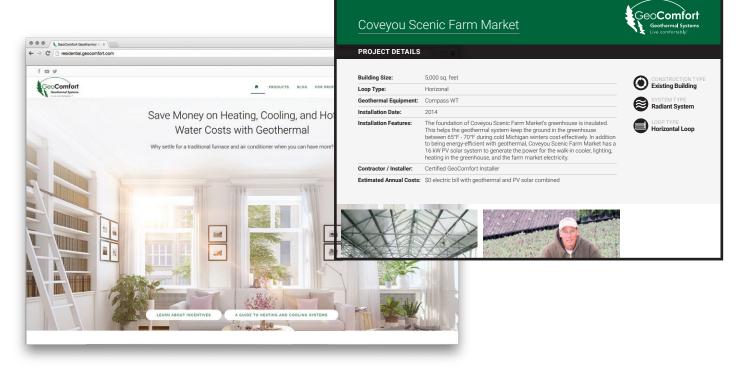
Homeowner Geothermal Guide Product Brochures Technical Brochures





Savings Tool

The Savings Tool guides homeowners through a step-by-step process that shows the energy cost comparison of a geothermal system over conventional equipment.





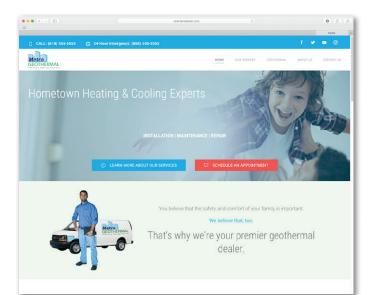
Marketing Materials

To further enhance the efforts of GeoComfort distributors and dealers, we have a wide array of merchandising, point-ofpurchase and sales tools available. We also offer a full range of traditional and digital advertising tools. New materials are in constant development.

Print Advertising Direct Mail Banners Apparel Trade Show Graphics Radio Scripts Digital Ads Fleet/Vehicle Graphics Giveaways







Dealer Website Program

Putting your best foot forward on the web and increasing brand awareness is easy and convenient with our Dealer Website Program. In fact, a geothermal-focused dealer website can be online and ready for homeowners just by answering a few simple questions. After completing, a team of designers and writers will organize the information into a beautifully impressive website featuring your business.

Lead Generation

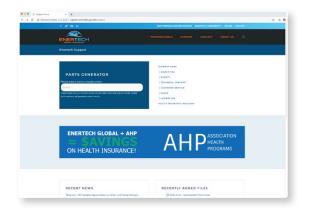
GeoComfort has sharpened its lead generation and lead nurturing efforts in recent years, implementing advanced tracking software to ensure each lead gets followed. We're always investigating new avenues to generate strong homeowner leads to provide to GeoComfort dealers.

Company Websites Home Shows Green Energy Websites Homeowner Communications Doug Rye Radio Agricultural Fairs Consumer Magazine Ads Digital Ads



Communications

At Enertech Global, we believe good communication can turn an ordinary relationship into an extraordinary one. That's why we make it easy for you to stay in touch and receive the information you need to effectively run your business.



Support Website

With our support website all the essentials are right at your fingertips. It features a convenient newsfeed displaying the most recent updates and information, plus you'll find a variety of online sales and marketing tools, including pricing, literature and branding support materials. This site also features a new Service Parts Generator, as well as a search box tool to help you find the information you need quickly.

Email Communications

We send out regular emails to provide dealers and distributors with product updates, reminders of tools to grow their business, and upcoming trainings.





Social Media

As a people-centric company, we understand the power and importance of social media. For industry news, company updates, and ideas on how to build your business, follow us on Facebook, Instagram, Twitter, LinkedIn, and our blog. Check our social pages regularly and never miss out on important Enertech Global company information.



GeoComfort Video

We know that sometimes seeing is believing. Help your customers learn more about the geothermal process, our family of products and the GeoComfort brand with our growing library of online videos. All of our video content is available for free, easy viewing on YouTube, and can be shared with your customers in a few quick clicks.

Financing



The market place has shifted, if you are not offering financing to all of your clients, you're missing out and so are we. To be successful, here's what Top Retail HVAC Dealers Know!

- By offering retail financing or "bridge" loans, their closing rates increase 25%!
- Average sell price is 20-25% HIGHER!
- · Financed jobs typically include higher-efficiency and more accessories

Myth Busters! The Truth about Retail HVAC Financing:

Most people pay with Cash: FALSE! The AVERAGE American has about \$3800.00 in Savings.

Nobody needs financing: FALSE! Fifty percent of home improvement jobs OVER \$5,000.00 are financed!

Nobody Offers Financing: FALSE! The top salesmen in our industry sell financing on sixty to seventy percent of their jobs.

Nobody Asks Me for Financing: TRUE! This is often the case, people will accept an offer of financing, but are reluctant to ask for it. People are not looking for long-term loans: TRUE! (mostly) Most loans are paid in full within 6 or 12 month! Consumers use the short-term loan as a "Bridge" loan until they receive any potential credits, rebates, or investment returns.

The program is complicated with lots of paperwork: FALSE! The consumer application is "paperless" and dealer funding is fast! It allows a portion of the loan to be paid upfront as a down payment to the dealer.

OUR MOST POPULAR LOANS

Bridge (or SAME-AS-CASH) Loans

Reduced Interest Loan. YOU select the rate and term!

Commercial Lease Program



We work with a Credit Union that offers a no-dealer

fee financing program, which means no risk or investment on your end. Ask us about it to learn more!

Ground Loop Fields

The heat exchanger, also known as the loop system, captures the stored solar energy in the ground and delivers it back to the geothermal system in the house.

The loop system is the heart of geothermal technology. There are four different types of loops. Installing a geothermal loop system is like getting up to a 70% discount on energy for the life of a home.

VERTICAL LOOPS

Vertical loops are used mainly when land area is limited in retrofit applications of existing homes. A drilling rig is used to bore holes at of depth of 150 to 300 feet per ton. A U-shaped coil of high density pipe is inserted into the bore hole. The holes are then backfilled with a sealing solution.

HORIZONTAL LOOPS

Horizontal loops are commonly used when adequate land area is available. Loop installers use excavation equipment such as chain trenchers, backhoes and track hoes to dig trenches approximately 6 to 8 feet deep. Trench lengths range from 100 to 300 feet per ton, depending on the loop design and application. Directional bore machines can also be used.

POND LOOPS

Pond loops are an option if a large body of water is available within approximately 200 feet of the home. A ½ acre, 10 to 12 foot deep body of water is usually adequate to support the average home. The system uses coils of pipe typically 300 to 500 feet in length. The coils are placed in and anchored at the bottom of the body of water.

OPEN LOOP

Open loop systems can be installed if an abundant supply of high quality well water is available. A typical home will require a well producing 4 to 8 gallons of water per minute. A proper discharge area such as a river, drainage ditch, stream, pond, or lake must be present. Check for local restrictions before selecting a specific discharge method.

Vertical Loop



Horizontal Loop



Pond Loop



Open Loop







NAT.

GeoComfort

Geothermal Systems

Installation Spotlights

Spotlight



This here was shall in 2006 and is located in the Wasash instructional Forst and Wasach Moustian Range. When built it was intended be a variation from, for variation renters, and that a restiment theoret for housen's. Since the home is built properly them made be another protection, and the properly them made be another protection. All senses are to be very environmental (Friend), with the basesful and coging on the property was used to create the basesful and coging the mean methods in the since of the since of the since of the homesoner hobbies include some single production of the homesoner hobbies include some single production of the protoming height and the overning simple project that all only.

Since the home is nestled in the mountains and near the ski slopes, cooling is actually not needed at all in the home so the homeowners chose to use radiant heating in the home only. This really saves humidity in the home as the mountains in UT are actually in the desert. The radiant tubing is nu throughout

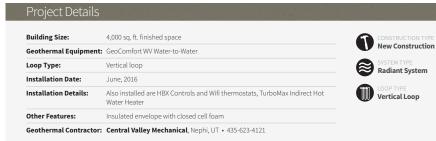
e home using a light concrete material called "gyp-crete" or in e concrete slabs themselves (basement, garage, and driveway

GeoComfort Geothermal Systems

The home is insulated extremely well with closed cell spray foam in all the wall and numpit to the root dieck. With the cazay amounts of 500° plus average snow fail per year; the temperature can get to subzero degrees frequently. A generator is needed in caze the homeoner would get unoaved in and be without power. Program is used to fault the generator and the three frequences in the home. Then the variable speed

> echanical space of the home is uniquely fit into the s lower level switch back staircase for a clean, tight, and saving approach.

Utah Ski Chalet



We feature our dealers' installations on our website as Installation Spotlights. This provides free advertising for dealers, and it's collateral to use in the sales process.





Greenville, IL - Mitchell, SD

info@enertechgeo.com | www.geocomfort.com

Industrial, institutional and commercial buildings often have unique heating and cooling needs. GeoComfort has a complete line of commercial models to fit most any project. Visit **geocomfort.com/commercial-products** to learn more!



Proudly built in Mitchell, SD by



Enertech Global is continually working to improve its products. As a result, the design, specifications, and general information 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 Relations department at customerrelations@enertechusa.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.

