Residential Geothermal Heat Pumps
Geo 6000 WA/WW

Geothermal Heating & Cooling
The Bosch Group has been a leading global supplier of technology and services in the areas of Automotive, Industrial Technology, Consumer Goods and Building Technology for over 100 years. The company was founded in Stuttgart, Germany, in 1886 and today has more than 300 subsidiaries in over 150 countries. Every Bosch product is built with one goal in mind; to enhance quality of life by providing innovative technological solutions. Bosch is highly regarded for its development of automotive braking and steering safety systems (ABS) which have been improving automotive performance for over 30 years, helping reduce the number of accidents on North America’s roads and highways. Environmental stewardship inspires and drives Bosch product development. Bosch is a leader in the development of next-generation technologies that deliver improved performance and efficiency while conserving natural resources. In the area of sustainable mobility, we’re helping reduce the fuel consumption and CO₂ emissions of new vehicles. Energy efficiency and environmental protection are also shaping our Industrial Technology, Consumer Goods and Building Technology products. Green technologies, such as gas tankless water heaters, heat pump electric water heaters, solar thermal systems, photovoltaics, wind power and geothermal heat pumps are perhaps the best examples of smart technologies growing in demand and shaping the future of Bosch.

Bosch Thermotechnology in North America
Bosch Thermotechnology is a leading source of high quality water heating and comfort heating systems. In particular, the company offers Bosch tankless, point-of-use water heaters, Bosch solar thermal systems, Buderus floor-standing and wall-hung boilers, Bosch geothermal heat pumps as well as controls and accessories for every product line. As illustrated in this catalog and at www.bosch-climate.us, Bosch Thermotechnology is committed to reinventing energy efficiency by offering smart products that work together as integrated systems which enhance quality of life in an ultra-efficient and environmentally friendly manner.

Visit www.125.bosch.com to learn even more about Bosch’s past, present and future.
Why Bosch Geothermal Heat Pumps?

Our Geothermal Heat Pump systems are the most energy and cost efficient systems on the market and therefore the greenest technology for heating and cooling applications. This technology uses the relatively constant temperature of the earth, which makes it extremely efficient all year long in virtually any climate.

Advantages of Bosch’s Geothermal Systems

**Environmentally Friendly**
Bosch’s green technology is the most environmentally friendly way to cool and heat your home. The system has no carbon dioxide emissions or any other negative effects on the environment. Bosch’s geothermal installations reduce greenhouse gas emissions which are responsible for climate change.

**Reliability**
Ground loop systems have a life expectancy in excess of 50 years. Your Bosch heat pump is manufactured with rigorous standards ensuring high efficient operation over the life of the unit. Our residential warranty offering is among the best you will find on the market.

**Lower Operating Cost**
Bosch’s technology helps to save up to 70% on your energy bills for heating, cooling and hot water because of its more efficient operation when compared to conventional systems. Simple payback could be as short as 5 to 7 years and you can experience costs savings from the beginning.

**Earth Coupling Options**
Geothermal systems use the earth as a heat source and heat sink. In order to transfer heat to or from the house, heat exchangers (ground loops) are installed in the ground. These consist of high density polyethylene plastic pipes. The loops are then connected to the heat pump and fluid is circulated between them transferring the heat between the heat pump and the earth.
TA Bosch Series

Benefits

More Value for your Money
The ultimate in performance! This luxurious two-stage unit features a black cabinet with silver brushed aluminum front and is available in Vertical, Horizontal, Counterflow and Split system configurations from 2 to 6 tons. Its energy efficiency makes this unit the best-in-class in operating cost savings. Requiring less energy compared to other manufacturers, these two-stage units achieve the same output to cool or heat your home, helping you reduce your energy costs.

Quiet Operation
To provide the best in quiet comfort, the TA Series is equipped with an exclusive sound package. The compressor is surrounded by a multi-density sound blanket and the units come standard with a floating base pan, which separates the vibrating compressor from the exterior cabinet. The compressor is mounted on a heavy-gauge steel base pan that floats on a unique high density, visco-elastic material, reducing sound and vibration to an absolute minimum.

Quality
A Comfort Alert Diagnostics module is standard to improve serviceability and to reduce maintenance compared to systems without this feature. The service tool monitors data from the thermostat and compressor and provides a record for the service technician of any malfunction in the system. Thorough factory testing combined with Bosch’s 40 years of experience in designing geothermal heat pumps are your assurance of a state of the art quality product. Bosch’s ISO 9001:2008 certified facilities provide consistent quality in every unit we build.

Tax Credit for Geothermal Heat Pumps
As of December 1, 2009, home owners who install ENERGY STAR qualified geothermal heat pumps are eligible for a 30% tax credit on the investment in the geothermal system including installation costs. There is no cap on the federal tax credit. New requirements for water-to-air and direct geo-exchange GHP models will take effect on January 1, 2011. Even more stringent levels will go into effect for water-to-water and water-to-air models on January 1, 2012.

30% Tax Credit Now Available
For more information please visit www.bosch-climate.us
Key Features

**TA SERIES**

**Standard**
- Coated Air Coils
- Four Sided Filter Rack
- Stainless Steel Drain Pan
- Filter Drier
- Foil Faced Insulation
- Floating Base Pan
- TXV Valve
- R410-A Refrigerant
- ECM Motor
- Coaxial Heat Exchanger Copper
- Geothermal
- Compressor Blanket
- Scroll Compressor 2 Stage
- Unit Protection Module 1
- Motor Control Interface
- Comfort Alert Diagnostic Module
- 2” MERV 11 Filter

**Optional**
- Coaxial Heat Exchanger Cupronickel
- Desuperheater
- Electric Heat

For full description of features please visit [www.bosch-climate.us](http://www.bosch-climate.us), where you will also find helpful tools like our savings calculator and learn more about the most efficient technology for heating and cooling your home.
### ARI/ISO 13256-1 Performance Data

#### Entering Water Temperatures

<table>
<thead>
<tr>
<th>Model</th>
<th>Fluid Flow Rate</th>
<th>Capacity and Efficiency Data</th>
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<tr>
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<td>Part Load</td>
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<tr>
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<td>Part Load</td>
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<td>Full Load</td>
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<tr>
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<td>Part Load</td>
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<td>Full Load</td>
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<td>Full Load</td>
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* Add 0.500” height on TA025 and TA035 for base rails on horizontal configuration.

### Dimensions TA

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<th>HZ Air Handler</th>
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### Energy Star Rated Products.
TW Bosch Series

Benefits

Extreme Efficiency
While Bosch’s TW Series with its exclusive design boasts industry leading efficiency at full load heating and cooling, it is even more efficient during part load operation. Unless peak capacity is required, the unit can run at roughly 2/3 capacity at significantly higher efficiencies than competitive products, maintaining maximum comfort with minimum energy use. This increases your energy savings even further, saving you money and providing you peace-of-mind.

Quiet Operation
These units employ Bosch’s sound package as standard to ensure that they provide peaceful, quiet operation. The entire refrigerant system is supported by a heavy gauge base that floats on a unique high density, visco-elastic sound barrier. The compressor is covered in a multi-density sound blanket and the heavy gauge steel cabinet is fully insulated. When employed as the heat source for radiant floor systems, this unit is the most efficient and has the quietest means available to heat and cool your home.

Quality
The unit is covered in a high quality and luxurious black cabinet with a silver brushed aluminum front. Rigorous factory testing along with Bosch’s 40 years of experience in designing geothermal heat pumps are your assurance of a state of the art quality product. Bosch’s ISO 9001-2008 certified facilities provide consistent quality in every unit we build.

Financing Information
The smarter way to heat and cool your home is more affordable than ever thanks to special financing options. Qualified homeowners can choose from a variety of loans with a low fixed rate or established fixed monthly rates towards the installation and purchase of Bosch Geothermal Heat Pumps. Depending on model and installation costs, homeowners may be able to borrow as little as $2,500 or up-to $20,000 with a 10-year repayment window. A Bosch approved contractor must perform the installation in order to be eligible for the financing. For a complete listing of Bosch installers in your area, log onto www.bosch-climate.us

Additional benefits of financing include:
- No lien requirements filed on your home
- No home equity required at the time of application
- No points, fees, or closing costs associated with the loan process
- No prepayment penalty
- Fast, preferred rate unsecured financing
- New homeowners welcomed

APR, actual rate and payment subject to credit approval by AFC First. Rates subject to change. All loans are made directly to the consumer by AFC First Financial Corporation or Nova Bank on behalf of AFC First.
Key Features

TW SERIES

Standard
- Geothermal
- Scroll Compressor 2 Stage
- R410-A Refrigerant
- Coaxial Heat Exchanger Copper
- Floating Base Pan

Optional
- Coaxial Heat Exchanger Cupronickel
- Solid State Water to Water Unit Control
- Desuperheater
- Unit Protection Module 1
- TXV
- Filter Drier
- Comfort Alert Diagnostics Module
- Compressor Blanket

For full description of features please visit [www.bosch-climate.us](http://www.bosch-climate.us), where you will also find helpful tools like our savings calculator and learn more about the most efficient technology for heating and cooling your home.
TW SERIES

ALL TWs are Energy Star compliant

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<tr>
<th>Model</th>
<th>Dimensions</th>
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<tr>
<td>TW071</td>
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Water Loop (WLHP) | Ground Water (GWHP) | Ground Loop (GLHP)

<table>
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<tr>
<th>Source Temperature</th>
<th>Load Temperature</th>
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<tbody>
<tr>
<td>86°F</td>
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<table>
<thead>
<tr>
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<th>Capacity and Efficiency Data</th>
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<td>Cooling Capacity</td>
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<td>TW035</td>
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<td>Part Load</td>
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<tr>
<td></td>
<td>Full Load</td>
</tr>
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</table>

Energy Star Rated Products.
Your Bosch Geothermal Heat Pump system is a smart investment not only in clean and renewable energy, but also in your future - which is the reason why our geothermal heat pump products, engineered with more than 40 years of experience, come with a warranty you can rely on.

With the limited residential warranty, you receive peace-of-mind knowing you will receive replacement parts protection for up to 10 years. This standard offering covers all components incorporated into the unit cabinet at the time of manufacture. Other components or parts that are purchased from FHP/Bosch and installed in the field have a 1 year replacement parts warranty from proof of certificate of occupancy date or proof of certified start up date.

Additionally, a standard 10 year labor-allowance is included for the replacement of any defective component to help offset labor expenses if a component should fail. This is the freedom customers expect when purchasing products listed in the Energy Star program.

After all, you bought the best - the ultimate freedom the Bosch brand offers.

**Bosch Group’s Limited Residential Warranty includes the following:**

**Components**
- Compressor: 10 years
- Refrigerant circuit: 10 years
- All other internal parts assembled by Bosch: 10 years

**Labor allowance**
- Refrigeration circuit parts: 10 years
- All other internal parts: 10 years

If you are ready for the peace-of-mind that Bosch’s warranty coverage provides, it is easy to get started. Take the first step and contact a Bosch Group certified representative near you. For a contractor listing go to [www.bosch-climate.us](http://www.bosch-climate.us).

For complete Warranty details please review the warranty card provided with the product.
Bosch Controls
We supply a wide selection of advanced controls to ensure that your heating and domestic hot water system delivers high efficiency and reliable heating year after year. Bosch controls give the heating engineer quick and easy access to all functions of the heating system and also allows the integration of multiple heating products.

Buderus Boilers
Our extensive boiler line includes energy efficient cast iron boilers, as well as the very latest aluminum condensing boilers and multiple boiler cascade systems for maximum energy efficiency.

Bosch Geothermal Heat Pumps
Our geothermal systems are the most energy and cost efficient systems on the market making them the greenest technology and the smartest investment for residential heating and cooling applications.

Bosch Tankless Water Heaters
Whether you are building your dream home or simply remodeling your current home, there’s a Bosch tankless water heater designed for your needs. Every unit delivers ultra high efficiency and is built to stringent Bosch quality standards. With a Bosch tankless water heater you will get an endless supply of hot water and can cut your current water heating bill in half.

Bosch Solar Thermal Systems
Bosch solar hot water solutions bring the first-class technology, innovation, reliability, quality and environmental sustainability that Bosch is known for world-wide, to the next level. These systems are designed for superior energy efficiency. This is especially true when combined with a Bosch high efficiency tankless water heater as a back-up system. There is no better choice for your home than a solar thermal system from Bosch to reduce your energy expenses and your carbon footprint.

Geothermal, solar, tankless and boiler solutions from Bosch
Bosch is committed to reinventing energy efficiency by offering smart geothermal, solar, tankless and boiler products that produce domestic hot water and indoor comfort solutions. Bosch products work alone or together as an integrated system to provide contractors, mechanical engineers and architects the opportunity to customize unique energy efficient systems for your home.

To learn more about these products and Bosch systems visit the Energy Efficiency Home at www.bosch-climate.us