Bosch Heat Pump

CDi Series: SM Model Rev C

The Greensource CDi Series SM Model geothermal heat pumps are our premium, most efficient units with quality that only Bosch can provide. SM Models now come standard with Bosch’s EasyStart service & diagnostic tool designed specifically for installers.

Local Wi-Fi Enabled
Configure up to 24 optional settings for customizable comfort. Plus view real time data for start-up, troubleshooting & diagnostics.

30% Tax Credit
For Geothermal Heat Pumps
Meet the CDi Series: SM Model

The SM Model is our premium, high efficiency, residential water source heat pump, available in sizes of 2 to 6 tons to suit your needs. ENERGY STAR certified for ground water and ground loop applications, the SM boasts a two-stage scroll compressor and ECM constant air motor for superior comfort and efficiency. All SM Model units are now equipped with our new local wifi connected service and diagnostic tool, the Bosch EasyStart.

Standard Features

Bosch EasyStart App & Local Wireless Communication
Installers can effortlessly start up and commission the unit using the app. While Service Technicians can easily service, monitor, and diagnose without ever having to open the unit.

Heat Pump Control Board (HPC)
New microprocessor-based control board which integrates with Bosch EasyStart app to provide real-time feedback of faults, component statuses, and more. The new HPC board has integrated control for configurable variable speed blower, 8 x temperature sensors, refrigeration system safeties, Smart HRP, loop pump/valve, auxiliary electric heat, heartbeat/power/critical diagnostic information (status) LED, compressor/brownout/blower protection, alarm output, condensate overflow detection, antishort cycling, and random start of unit.

Variable Speed ECM Constant CFM Motor
Maintains a constant and comfortable airflow by adjusting to external air pressure drop.

2 Stage Scroll Compressor Technology
Lowers operating costs while maximizing efficiency and comfort by adjusting to varying heating and cooling.

Air-tight and Quiet Cabinetry*
Includes close-cell foam insulation and compressor blanket which offers sound levels as low as 52 dB.

Stainless Steel Drain Pan
Improves indoor air quality by preventing standing water where mold, bacteria and viruses could grow.

Filter Drier
Removes moisture and contaminants from the refrigeration circuit, increasing reliability and product life.

Easy Access Filter Rack and 2” MERV-8 Filter*
Easily change your filter and remove 80-95% of airborne particles and other allergens as small as 3 microns.

Heat Recovery Package/Desuperheater
This feature enables your heat pump to heat domestic hot water, reducing the amount of electricity or fossil fuels otherwise used for your hot water.

Copper or Cupro-Nickel Coil
Option between copper or cupro-nickel heat exchanger, cupro-nickel recommended in conditions anticipating moderate scale formation or brackish water.

*Applies to vertical and counterflow orientations only
Limited Residential Warranty
Coverage for your Geothermal Heat Pump

You receive peace-of-mind knowing you will receive replacement parts protection for up to 10 years.

This warranty covers all components incorporated into the unit cabinet at the time of manufacture. Many units also come with a standard 10 year labor-allowance included for the replacement of any defective component to help offset labor expenses if a component should fail. For heat pump warranties and details visit boschheatingandcooling.com

30% Tax Credit Being Green Means Saving Green

Homeowners who install ENERGY STAR qualified geothermal heat pumps are eligible for a 30% tax credit* for systems placed in service by 12/31/2019, a 26% tax credit for systems placed in service after 12/31/2019 and before 01/01/2021, and a 22% tax credit for systems placed in service after 12/31/2020 and before 01/01/2022. All tax credits are on the cost of the geothermal system, including installation costs.

Additionally, many areas offer local incentives for utilities, counties, or states. Visit the DOE’s “Database of State Incentives for Renewable Energy” (DSIRE) at dsireusa.org to find out just what is in store for you!

Connected Solutions

Bosch has assembled a comprehensive suite of heating, cooling, water heating, and energy-efficient appliances. Pair your new Geothermal Heat Pump with The Bosch Connected Control to receive Alert Messages directly from your new WSHP. It is the perfect solution to help achieve maximum comfort from anywhere! Ask your Bosch contractor or go to BoschHeatingAnd Cooling.com to learn more about how Bosch products can work together for your ultimate comfort.

*All information here within is pending and subject to change upon release of the product.
Bosch Geothermal Systems bring your home in harmony with nature, while providing unmatched energy efficiency at a price that can’t be beat. Our geothermal systems work in concert with the stable earth temperatures to provide heating in the winter, and cooling in the summer.

Much like the way the roots of a tree exchange the essentials of life with their leaves and branches, a Bosch geothermal heat pump provides superior comfort and a more tranquil environment to your home and family via our system’s smooth operation and consistent temperatures. You will experience amazing peace and tranquility, and efficiency while your Bosch geothermal system saves energy for generations to come. That’s because Bosch is Invented for Life.

Operation Modes of a Heat Pump

Outside, temperatures fluctuate with the changing seasons, but underground temperatures don’t change nearly as dramatically, thanks to the mass of the earth. Four to eight feet below the ground, the temperature remains relatively constant year round. A Bosch geothermal system, which typically consists of an indoor heat pump and a buried system of pipes called a ground loop, and/or a well system, capitalizes on these constant temperatures to provide “free” energy.

**Summer Cooling Mode**

In summer time, the process reverses, and the cooler earth absorbs the heat from the home, returning cooler fluid to the Bosch geothermal heat pump. This fluid is typically cooler than the outside temperatures, providing a more efficient operation and energy savings.

**Winter Heating Mode**

In winter time, fluid circulating through the earth loop (or well) absorbs stored heat from the ground and carries it indoors. The Bosch geothermal heat pump compresses the heat to a higher temperature and distributes it throughout the home.
### SM Consolidation
The Bosch SM is now offered in a new consolidated list of part numbers, providing options suited for every homeowner's needs.

### Internal Electric Heat
The internal electric heat kit includes 5, 10, 15, or 20 kilowatt backup or an emergency heater can be used on the geothermal heat pump.

### Dehumidification Options
Dehumidification can be achieved with the Variable Speed CFM Motor combined with a Bosch humidity control thermostat.

### Horizontal (HZ) Discharge Air Conversion Kit
The horizontal (HZ) conversion kit allows end blow to straight through conversion of discharge air, as the straight through configuration for horizontal is no longer factory available.

### Optional Field Install Accessories

#### Smart Start Assist
This device reduces starting (inrush) current for compressors by 45% to 65%, minimizing "light flickering" during compressor starts and extending the life of the compressor. Designed for single phase scroll compressors.

#### Stainless Steel Hose Kits
Our kits are designed specifically for Geothermal/Water Source applications where high quality components are desired.

#### Flow Centers
Bosch Pressurized, Non-Pressurized and Dual Circuit Flow Centers are built for easy, time-saving installation and are available in a wide variety of combinations to suit the contractor or system designer's needs.

### Vertical (VT)

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Bosch EasyStart

The EasyStart App was developed to save time diagnosing & troubleshooting the new Bosch SM Model Geothermal Heat Pump.

Connect unit through local unit wifi, no need for Technicians to open the physical unit to configure. View real time status of components and system temperatures to aid in start-up, troubleshooting and diagnostics.

For troubleshooting purposes, thermostat demand can be viewed in real time along with operation mode and component status.

Technicians can set system to test mode to automatically run a troubleshooting sequence. Test Mode shortens all the timers to 10 seconds for each component.

View on/off status of component operation.

Click on Graph to see real-time temperature readings throughout system to aid in set-up and diagnostics.

Click on Components to get basic information.

Click on Data to see real-time temperature readings throughout system to aid in set-up and diagnostics.

Click on Graph to see real-time temperature readings throughout system to aid in set-up and diagnostics.

Click on Fault History to view up to the 70 latest faults that occurred.

At any time, if the user needs help, they can click on the question mark and a definition of the screen and what can be done is explained.

Technicians can see the Active System Timers for what the unit is processing.

Download App*

Download on the App Store

Android/iOS Tablet not included with unit

*Android/iOS Tablet not included with unit
### Unit Dimensions

<table>
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<th>Model</th>
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### VT Specifications

ASHRAE/AHRI/ISO 13256-1. English (I-P) Units

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### HZ Specifications

ASHRAE/AHRI/ISO 13256-1. English (I-P) Units

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1. All dimensions in inches unless otherwise noted. All dimensions within ±0.125". Specifications subject to change without notice.
2. Ratings based upon AHRI/ANSI 13256-1 with 1" disposable filter.
About Bosch

Bosch Group
The Bosch Group is a leading global supplier of technology and services in the areas of Automotive, Industrial Technology, Consumer Goods and Building Technology. The company was founded in Stuttgart, Germany, in 1886 and presently has more than 440 subsidiaries and is represented in over 150 countries.

In the U.S., Canada and Mexico, the Bosch Group manufactures and markets automotive original equipment and aftermarket solutions, industrial drives and control technology, power tools, security and communication systems, packaging technology, thermotechnology, household appliances and software solutions. The Bosch Group’s products and services are designed to improving quality of life by providing innovative and beneficial solutions. In this way, the company offers technology worldwide that is “Invented for life.” Additional information is available online at boschheatingandcooling.com and bosch.ca.

Bosch Thermotechnology in North America
Bosch Thermotechnology is a leading source of high quality water heating and comfort systems. The company offers gas tankless, electric whole house and point-of-use water heaters, Bosch and Buderus floor-standing and wall mounted boilers, Bosch and FHP geothermal, water-source and air-source systems as well as controls and accessories for all product lines. Bosch Thermotechnology is committed to being Simply Smart by offering products that work together as integrated systems that enhance quality of life in an ultra-efficient and environmentally friendly manner. For more information, visit boschheatingandcooling.com.

Bosch Water-Source Heat Pumps: Made in the U.S.A.
Bosch and FHP water-source and geothermal heat pumps are made by highly trained and skilled workers in our factory based in Fort Lauderdale, Florida. They are manufactured with rigorous standards and factory testing ensuring high efficient operation over the life of the unit. Bosch’s ISO 9001 and ISO 14001 certified facilities provide consistent quality in every unit built.