



BOSCH

Invented for life

Bosch Boiler New System Control

CZM100 | CRC200 | CRC100

Bosch controls make a big difference to your hydronic heating system. The controls communicate between each other and the boiler, learning the home's environment and providing a level of comfort you've never felt before.

Now with
outdoor reset
capability!





Why Use Bosch Controls

- ▶ **Programmable features to suit your lifestyle**
- ▶ **Increased efficiency, reliability & longevity of equipment**
- ▶ **Enhanced comfort**

Bosch Boiler Control System

Our control system is key to saving energy and will increase savings compared to your old standard on/off controls.

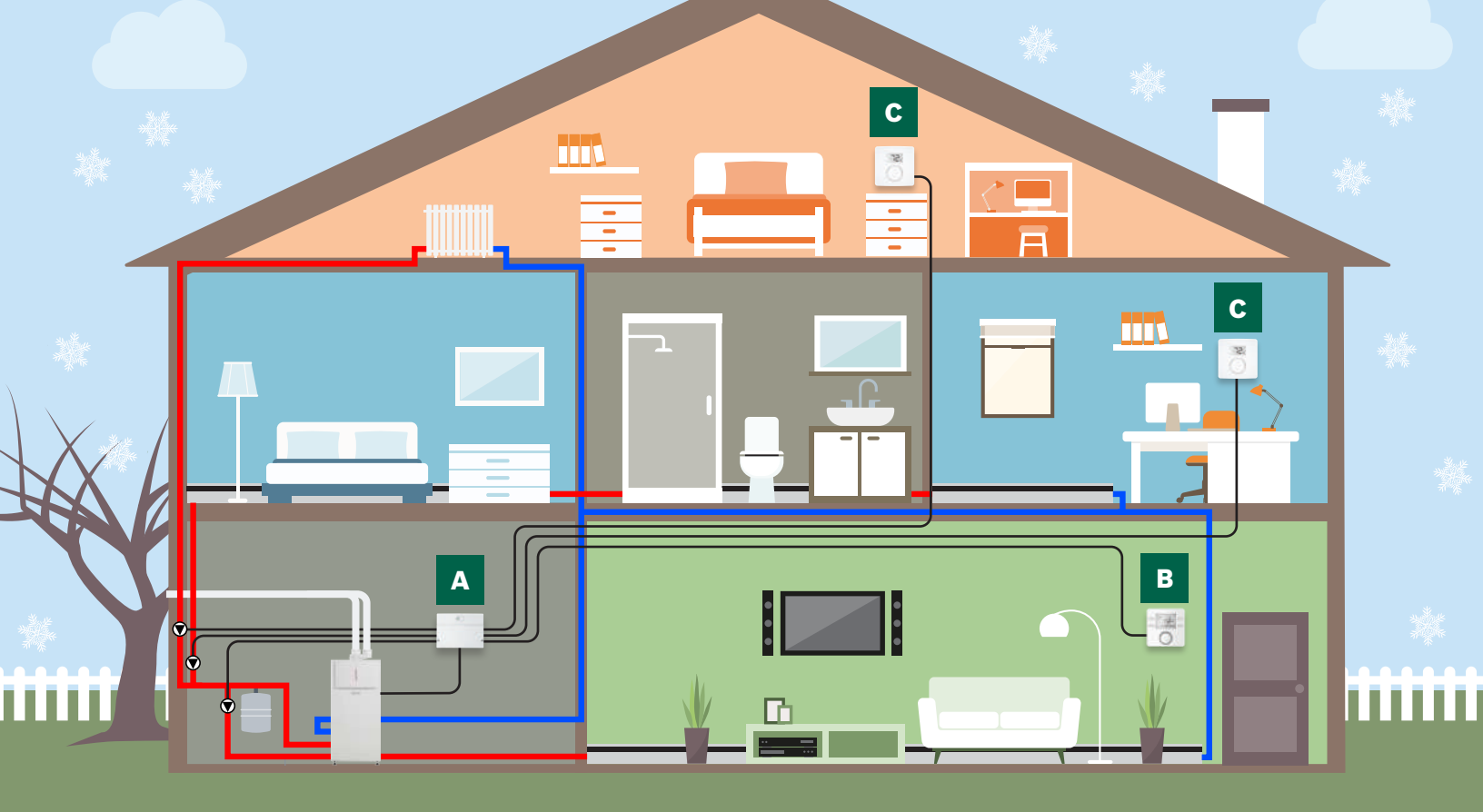
When paired with Bosch condensing boilers, Bosch controls will provide additional performance to your home's hydronic heating system. Bosch's New System Controls (NSC) provide the ability to precisely manage your home heating system through the Energy Management System (EMS) Bus interface. Opposed to other home control systems which simply turn the boiler on and off based on a room set point, the Bosch NSC work to deliver a steady comfort level using the built in logic and communicating with each other and the boiler to deliver an output based on the conditions, delivering consistent, efficient heating. Complete your Bosch boiler system installation with Bosch's New System Controls. You will fine tune your comfort levels, increase your boiler longevity, and experience a new level of comfort.

Room Temperature-dependent Control (Indoor Reset)

The comfort room controllers will actively monitor the temperature swings inside the house compared to the temperature set point. Using a Bosch developed algorithm, we develop our own controls for indoor reset functionality with boiler modulation internally to be part of a system communicating with the boiler. The boiler will then look at the incoming data and adjust its supply temperature to meet the systems needs. By knowing the time it takes the room to cool down and heat loss the controls will adjust the boiler output to make sure the zone will stay as close to the temperature set point as possible. For homes with multiple zones the boiler will always have a set output for each zone, and for times when multiple zones are calling for heat simultaneously, the highest set point will take priority so no room will ever be cool. This function results in fewer burner starts and shorter pump run times, saving energy and enhancing the longevity of the boiler and system equipment.

Outdoor Reset Control

The weather compensation feature adjusts the temperature of the heat going to your baseboard or radiators by monitoring the temperature outside. A sensor is placed outside and connected to the boiler that allows the CRC200 to monitor this temperature. As the temperature outside gets cooler the boiler will modulate up creating hotter water, ensuring that your house will stay comfortable. As the temperature outside rises and gets warmer the boiler will modulate the water temperature down. This control will allow your boiler to operate at its max BTU output when it is needed to keep your house warm, and during the warmer days only use the minimum energy needed to keep your house warm. This will end up reducing the energy consumption of the boiler saving the home owner money. Realize the maximum potential of your Bosch Greenstar heating system.



Ease of Installation & Set-Up

The New System Controls (NSC) consists of the Comfort Zone Manager (CZM) and any combination of the two Comfort Room Controller(CRC), providing installers with a simple, boiler integrated, innovative plug and play residential control platform.

The NSC are designed to communicate with the Greenstar boiler line using the Bosch developed EMS BUS, instead of the standard on/ off signal from traditional thermostats. Wiring and setup are similar to other control systems in the market. All communication wiring between the controls use a standard AWG18 wire



CZM100 Zone Manager

- ▶ One unit can control 3 zones with either circulators or zone valves
- ▶ System can be expanded by adding multiple CZM to control up to eight zones
- ▶ Reduces energy usage by adjusting boiler water temperature and firing rate due to feedback from CRC controllers
- ▶ Operates the system at the most efficient output in order to reduce room temperature swings, resulting in more consistent room temperatures and optimized fuel savings
- ▶ Warm weather shutdown, using an optional outdoor sensor



CRC200 Room Controller

- ▶ Used as the main controller & included with some boiler models; Allows for full boiler control
- ▶ Programmable time schedule, back lighting as well as push buttons for Menu, Auto-Run, Hold-Run and Back
- ▶ Will allow the boiler to operate on an outdoor reset or indoor reset control curve function
- ▶ Integrated temperature sensor that can be used as a boiler control or in conjunction with the CZM100 as a room controller
- ▶ Operate an indirect water heater in parallel with the clock program or continuously



CRC100 Room Controller

- ▶ Simple, easy to operate thermostat with integrated temperature sensor
- ▶ Added efficiency by communicating with the boiler through the Bosch EMS BUS. It provides information to increase comfort and decrease energy consumption
- ▶ Pre-programmed with default settings for the most common applications

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.



Heating



Cooling



Hot Water



Controls

Bosch Thermotechnology Corp.

Watertown, MA • Londonderry, NH • Ft. Lauderdale, FL
General Inquiries: 1-866-642-3198

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