NSC Residential Zone Control Package
Better Control. Better Comfort.
Better Efficiency.

BOSCH
Invented for life

The next generation in **comfort and innovation.**

New for 2015!

| Bosch Greenstar Wall Boiler | Bosch Greenstar FS | Buderus GB162 | Buderus GB142 |

Introducing:
NSC System Controls

Bosch's new systems control (NSC) package is the next generation in comfort and innovation. It is more than a room thermostat, or a zone control but a system designed to give the homeowner greater energy savings, and home comfort.

The NSC is an intelligent multi zone system designed to achieve increased comfort and efficiency by only using as much energy as required, the NSC control system reduces zone "on-off" cycling resulting in more consistent room temperatures and energy savings. The NSC package incorporates unique features and functions that make it a sensible choice for a comfortable energy efficent home.

More Comfort, Less Fuel.

Understanding modern heating systems and their applications is key to saving energy. Bosch / Buderus Boilers are among the elite high efficiency modulating condensing boilers on the market with an AFUE of 95%. So the first step to saving money is to get a Bosch or Buderus Boiler.

We all know in our everyday lives whether at home or at work communication is a key element. It's also true for modern heating systems. Combining a Bosch or Buderus boiler with the new control system (NSC) there is a two way communication designed to increase comfort and decrease energy cost compared to on/off systems. The second step to increase the comfort and fuel savings of a Bosch or Buderus boiler is to install an NSC multi zone system.

NSC controls
CZM100, CRC200, CRC100

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Energy efficiency starts with a new Bosch or Buderus Boiler. Combining it with the NSC system will increase the comfort level of your home while reducing your fuel costs.

Ease of **Installation & Set-Up**

The NSC provides installers with a simple, boiler integrated, innovative plug and play control. The NSC is similar to any other multi zone control system on the market when it comes to installation, wiring and set-up.

▶ Provides installers with a simple, boiler integrated, innovative plug and play control

▶ No need to set up complicated outdoor reset curves - Operates using indoor feedback / load compensation

▶ CRC100 Basic thermostat comes with default settings for the most common applications

▶ CRC200 includes CRC100 functions plus additional features such as: programmable time schedule, back lighting, push button menu, easy dial control, auto -run, hold-run and back functions
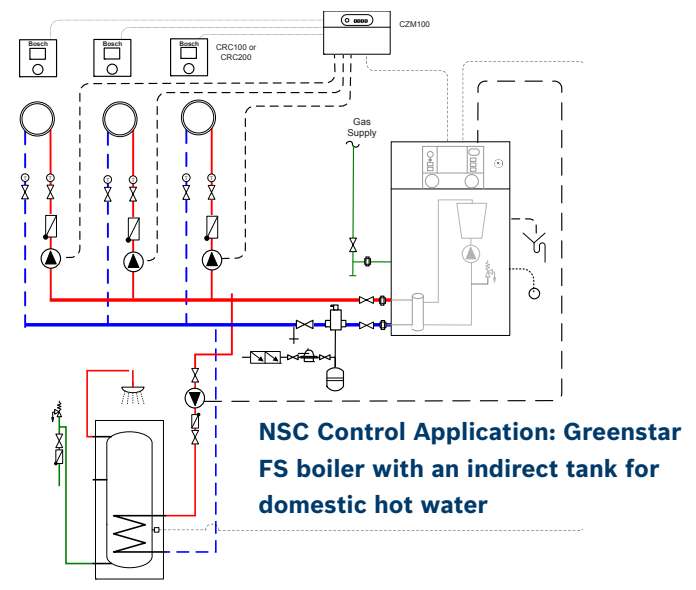
A variety of **Applications**

Bosch NSC package offers you the perfect control system for a variety of applications.

▶ The CZM100 controls up to three zones, and can activate either circulator pumps or zone valves, giving you application flexibility with only one device

▶ A multi-zone system uses a CZM100, and a CRC100 or a CRC200 room thermostat for each zone. CRC100 and CRC200 controls can be mixed in the system according to your needs

▶ A CZM100 multi-zone system can be expanded up to eight zones by using three CZM100s

▶ The CZM100 features a warm weather shut down (WWSD) function if an optional outdoor sensor is connected to the boiler. The WWSD value is preset to 70°F but can be adjusted when using a CRC200

▶ The CRC100 or the CRC200 can also be used as a boiler control in single zone application

Compatibility and
Peace of mind

Bosch peace-of-mind means no more guessing about compatibility. The Bosch NSC package was designed, developed and tested to increase the performance and efficiency of Bosch Greenstar heat only and combi boilers and Buderus GB series boilers.

NSC Control Application: Greenstar FS boiler with an indirect tank for domestic hot water

Bosch Thermotechnology Corp.

Londonderry, NH • Ft. Lauderdale, FL

General Inquiries: 1-866-330-2725
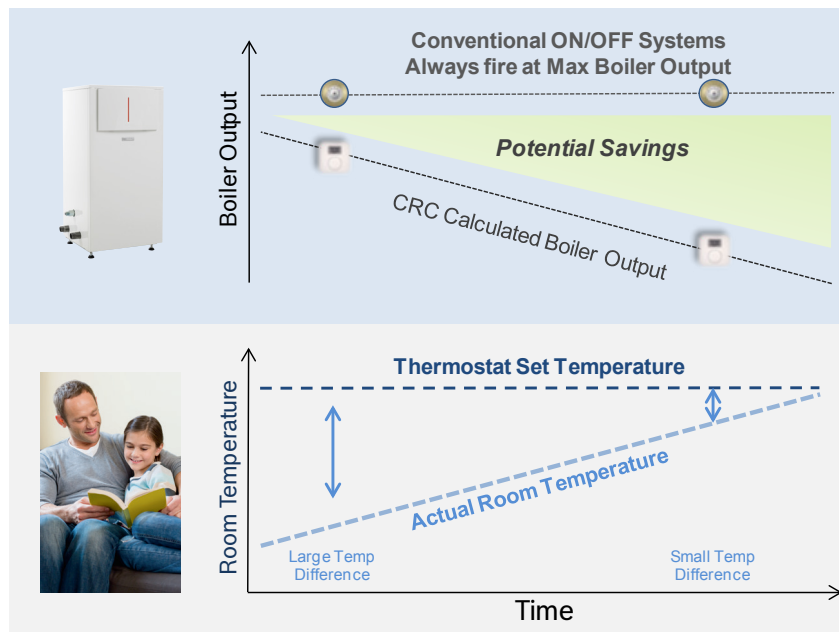Technical Support: 1-866-330-2730

www.boschheatingandcooling.com

NSC and **Energy Savings**

When actual room temperature is less than what the thermostat is set for, a request is sent to fire the boiler. In a conventional On/Off system the boiler is always firing at its maximum output.

Installing a Bosch boiler with the NSC, the controller measures the room temperature and uses intelligent proprietary two way communication to tell the Bosch boiler the exact needed output temperature.

If the difference between the actual room temperature and the thermostat set temperature is small the NSC requests the boiler to run at a smaller output range to supply just what is needed. This increases comfort by avoiding temperature swings and decreases the boiler water temperature, leading to lower energy costs when compared to conventional on/off control systems.

Examples only. Actual results may vary.

NSC Modules: Features and Functions

Comfort Zone Manager CZM100

► Three zone control, expandable up to eight zones, can activate either circulator pumps or zone valves

► Reduces energy by adjusting boiler water temperature & firing rate due to changes in room temperature

► Operates the system at the lowest possible output in order to reduce room temperature swings, resulting in more consistent room temperatures and optimized fuel savings

► Provides a fixed warm weather shutdown function at 70F when used with a CRC100, it is adjustable with the CRC200. An optional outdoor sensor is required for warm weather shutdown function

Comfort Room Controller - CRC100

► Simple, easy to operate thermostat with integrated temperature sensor

► Can be used in a single zone, or multi zone system. In multi zone systems CRC100 & CRC200 can be used in any configuration in conjunction with a required CZM100 module

► Added efficiency by providing the boiler with more than an on /off signal. It provides an exact supply temperature request to increase comfort and decrease energy consumption

► Preprogrammed with default settings for the most common application

Comfort Room Controller - CRC200

► Includes CRC100 function plus programmable time schedule, back lighting as well as push buttons for Menu, Auto-Run, Hold-Run and Back

► Offers additional functions and communication to the boiler: display of boiler temp, target temp, and outdoor temperature with optional outdoor sensor installed at boiler

► Integrated temperature sensor that can be used as a boiler control or in conjunction with the CZM100 as a room controller

► Operate the indirect water heater in parallel with the clock program or continuously

► Display outdoor temp when adding an optional outdoor sensor to the boiler