

Logamatic Control R2107

- Microprocessor-Based Outdoor Reset Control
- Simple Operation with Digital Display
- Complete System Integration
- Modular Expansion Capabilities
 - Dual Boiler Firing Control
 - Multi-Temperature Control



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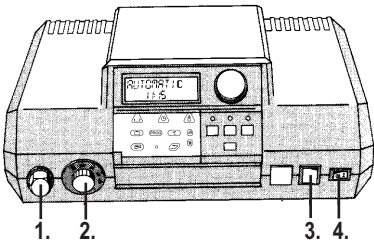
Logamatic R2107

Buderus Logamatic Control R2107 . . .

The R2107 is a microprocessor-based control for use with hydronic heating systems. The R2107 features weather compensation for *maximum comfort* and *fuel efficiency*. Using feedback from outdoor and indoor temperature sensors, the R2107 customizes the system water temperature to maintain consistent room temperatures. Space heating, domestic water production and programmable setback are all integrated in a single, intelligent source. The R2107 is suitable for use with any of today's forced hot water heating options, whether it is baseboard, panel radiators, hydro-air systems or radiant floors.

Easy, "plug-in" modules allow you to customize the R2107 to fit your application. Available options include a mixing valve control for radiant floor systems and a burner staging control to operate a 2-stage or modulating burner or for use in dual boiler systems.

Description of Control Functions

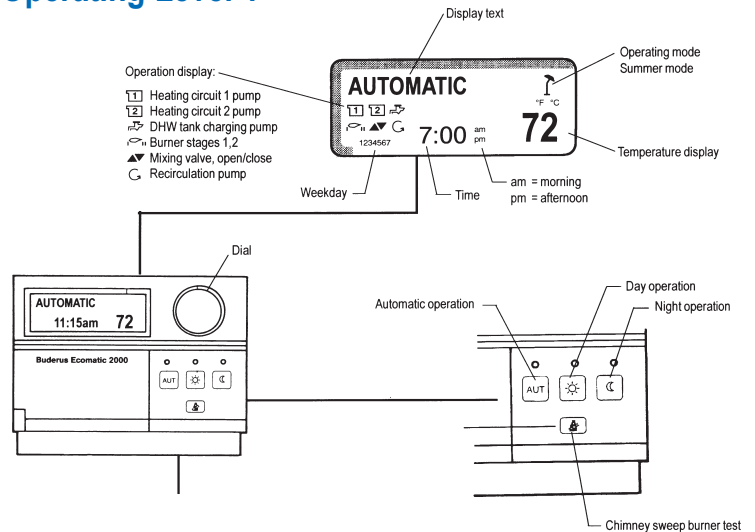


1. High limit reset button
2. Adjustable boiler aquastat
3. Emergency switch for space/DHW heating
4. Main switch

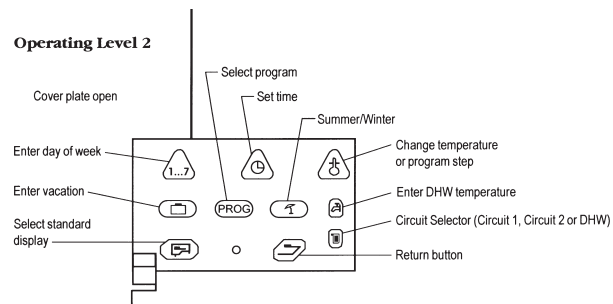
Standard Functions

- Outdoor reset controlling
- Domestic hot water priority
- Domestic hot water heating with intelligent post-purge feature
- Domestic hot water recirculation
- Programmable day/night setback
- System on/off switch
- Adjustable and high limit aquastats
- Outdoor, boiler and DHW sensors included
- Condensate protection
- Pump exercising
- Freeze protection
- Manual override switch for emergency operation
- Automatic summer/winter changeover
- LCD Display
- Self-diagnostics with error display
- Vacation mode

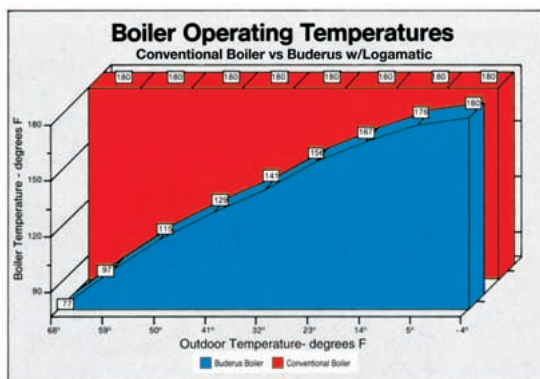
Operating Level 1



Operating Level 2

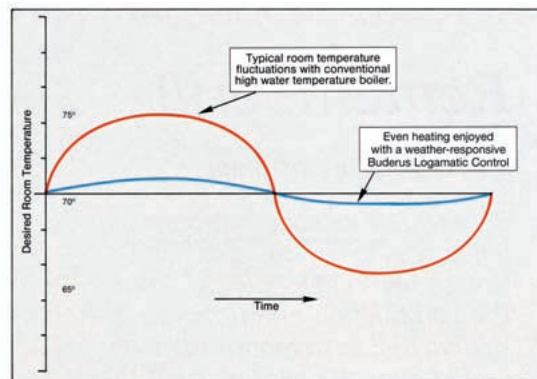


Lower Boiler Operating Temperatures



The difference between the constantly high operating temperature of a conventional boiler and the modulating water temperature of the Buderus boiler represents the fuel savings.

More Comfortable Room Temperatures



Buderus low temperature boilers provide greater comfort by evenly replacing the heat lost in a room, rather than playing catch-up like conventional boilers.

... The Next Generation of Intelligent Controls

Room Sensor: Fine-tuned temperature control for optimum comfort

Use a Buderus room sensor with indoor feedback on the main zone for optimum temperature control and maximum room comfort.

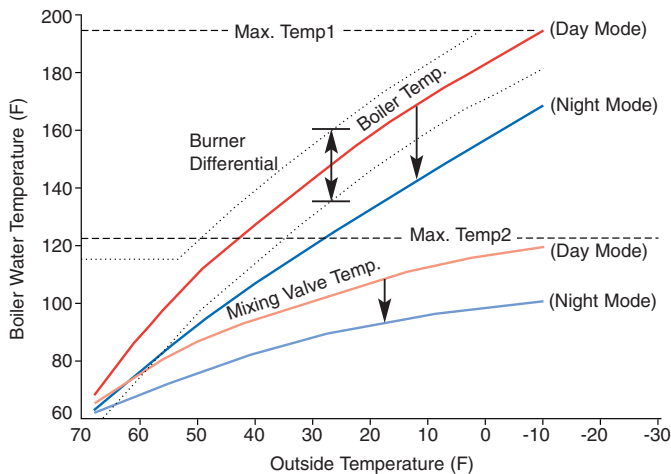
- Features:**
- Simple day temperature setting.
 - Manual day/night mode override buttons.
 - LED displays for system status.
 - Summer mode indicator light.
 - “Boost” function for faster system response during early morning operation.



Module FM241: Mixing Valve Control for Radiant Floor Applications

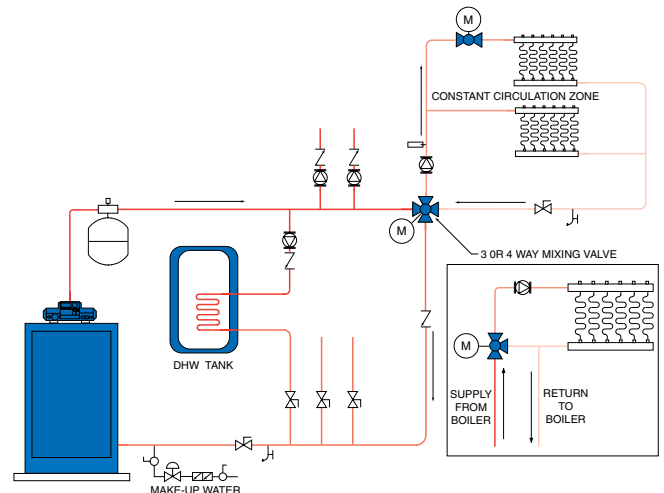
Module FM241 provides motorized control (24V or 120V) for a 3- or 4-way mixing valve for low temperature applications such as radiant floor systems. An optional indoor sensor is available for optimum control. Program a separate setback schedule for the low temperature system.

System Heating Curves:



High and low temperature heating curves with Module FM241

System Configuration:

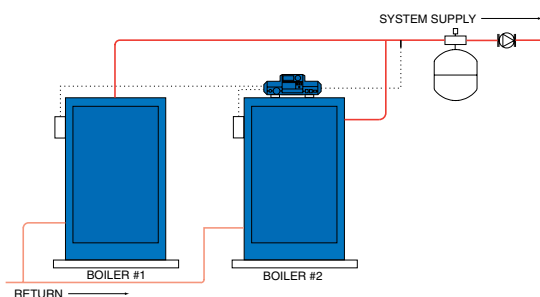


Complete system integration with the R2107 control

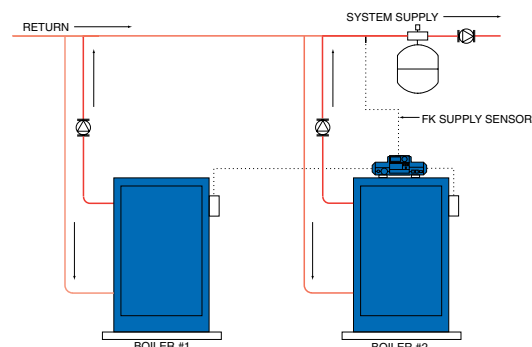
Module FM242: Firing Control for Dual Boiler Applications or Two-Stage Burners

- Features:**
- Burner staging on demand with dynamic burner differential.
 - Built-in burner hour runmeters.
 - Suitable for residential and commercial applications.

Parallel Near Boiler Piping



Primary/Secondary Piping



These illustrations are for conceptual purposes only; additional accessories may be required to comply with safety regulations.

R2107 Benefits: Energy savings, higher comfort level and high quality

Energy Savings through:

- Lower fuel consumption results from regulating boiler temperature and limiting burner operation based on outdoor temperature.
- Reduced standby and piping losses with complete system setback leads to more efficient system operation.
- Temperature anticipation for DHW heating purges retained heat from the boiler for increased efficiency.

Higher Comfort Level through:

- Even space heating without room temperature fluctuations as a result of outdoor reset.
- A system “in sync” with outdoor conditions: automatic shut down in Spring and Fall.
- Optional room sensors for customized operation and optimum comfort by monitoring indoor temperature.

High Quality through:

- Proven Buderus system technology from the leaders in forced hot water heating.
- All heating components furnished from a single manufacturer.
- All major control components for hot water heating integrated in a single, comprehensive control panel.

R2107 Benefits for the contractor

- Integration of all system control aspects with a single control.
- Modular configuration adaptable for various applications; customize to specific requirements.
- Simplified installation with color-coded plugs.
- Easy initial start-up through
 - Automatic module recognition.
 - Simple stepwise procedure to customize control.
 - Built-in relay test to verify system wiring.

R2107 Benefits for the homeowner

- Up to 30% lower fuel bills compared to ordinary systems.
- Unsurpassed heating comfort with increased efficiency.
- Quieter heating system operation with outdoor reset.
- Simple operation through “push and turn dial” concept and digital display.

The R2107 was developed for use exclusively with Buderus boilers and is to be installed and serviced only by trained personnel.
Application of the R2107 to non-Buderus equipment voids all warranties, expressed or implied.
The R2107 control is a listed device to the requirements of UL873. Subject to change without notice.

Buderus

HYDRONIC SYSTEMS

Buderus Hydronic Systems, Inc.
50 Wentworth Ave
Londonderry, NH 03053
Tel: (603) 421-2760 • Fax: (603) 421-2719
Toll Free: (800) 283-3787
Website: www.buderus.net