

**Beckett 7610A0001U**

# Beckett AquaSmart Boiler Temperature Control User Manual

Model: 7610A0001U

## INTRODUCTION

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The Beckett AquaSmart is a universal boiler control designed for use on residential and light commercial boiler systems. This advanced control integrates temperature management for optimal boiler performance. It offers features such as dynamic temperature reset, which can contribute to significant fuel consumption savings.



Figure 1: The Beckett AquaSmart Boiler Temperature Control unit, showing the main control box and associated wiring components.

## SAFETY INFORMATION

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Always disconnect power to the boiler system before installing or servicing the AquaSmart control. Installation should be performed by a qualified technician in accordance with all local and national codes. Failure to follow these instructions could result in property damage, personal injury, or death.

- Ensure proper grounding.
- Verify correct voltage (120V) before connection.
- Do not operate if any part is damaged.

## SETUP AND INSTALLATION

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The Beckett AquaSmart is designed for straightforward installation on residential and light commercial boiler systems. Refer to the detailed wiring diagrams provided with the product packaging for specific connections.

1. **Power Disconnection:** Turn off all power to the boiler system at the main circuit breaker. Verify power is off using a voltage meter.
2. **Mounting:** Mount the AquaSmart control unit in a suitable location near the boiler, ensuring it is protected from

moisture and excessive heat.

3. **Wiring:** Connect the 120V power supply, boiler circulator, burner, and any other necessary components according to the wiring diagram. Pay close attention to line, neutral, and ground connections.
4. **Sensor Installation:** Install the temperature sensor into the boiler's aquastat well or other designated temperature sensing location.
5. **Initial Power-Up:** Once all connections are secure, restore power to the boiler system. The AquaSmart will perform a self-diagnostic check.

## OPERATING INSTRUCTIONS

The AquaSmart control operates automatically once installed and configured. It continuously monitors boiler temperature and manages burner and circulator operation to maintain desired heating levels and optimize fuel efficiency.

### Key Features:

- **Dynamic Temperature Reset:** This feature, when enabled, automatically adjusts the boiler's target temperature based on outdoor temperature, reducing fuel consumption.
- **Warm Weather Shut-Down:** Prevents boiler operation when outdoor temperatures are above a set threshold, saving energy during warmer months.
- **Circulator Control:** Manages the boiler circulator pump for efficient heat distribution.
- **Diagnostic Display:** The integrated display provides status updates and error codes for troubleshooting.

Consult the product's detailed manual for instructions on configuring specific settings and accessing advanced features via the control's interface.

## MAINTENANCE

The Beckett AquaSmart control is designed for minimal maintenance. Regular inspection of the boiler system, including wiring and sensor connections, is recommended as part of routine boiler servicing.

- **Annual Inspection:** Have a qualified HVAC technician inspect the entire boiler system, including the AquaSmart control, annually.
- **Cleaning:** Keep the exterior of the control unit clean and free of dust. Do not use abrasive cleaners or solvents.
- **Wiring Check:** Periodically check all wiring connections for tightness and signs of wear or corrosion.

Do not attempt to open or repair the control unit yourself. Refer all servicing to authorized personnel.

## TROUBLESHOOTING

If you experience issues with your Beckett AquaSmart control, refer to the following common troubleshooting steps. For complex issues or error codes not listed, consult a qualified technician or the full product manual.

Problem	Possible Cause	Solution
Boiler not firing	No call for heat, power issue, sensor fault.	Check thermostat setting. Verify power supply to control. Inspect sensor wiring.
Inaccurate temperature readings	Faulty sensor, improper sensor placement.	Ensure sensor is fully inserted into well. Replace sensor if damaged.

Problem	Possible Cause	Solution
Control display is blank	No power to the unit.	Check circuit breaker. Verify 120V power connection to the control.

SPECIFICATIONS

- **Model:** Beckett 7610A0001U AquaSmart Boiler Temperature Control
- **Voltage:** 120V
- **Application:** Residential and Light Commercial Oil Boilers
- **Features:** Dynamic Temperature Reset (Beckett HeatManager), Warm Weather Shut-Down, Circulator Control, Diagnostic Display
- **Item Weight:** 2.2 pounds
- **Package Dimensions:** 11.7 x 7.2 x 5.2 inches
- **Batteries Required:** No
- **ASIN:** B07TFMRP19
- **First Available Date:** June 20, 2019

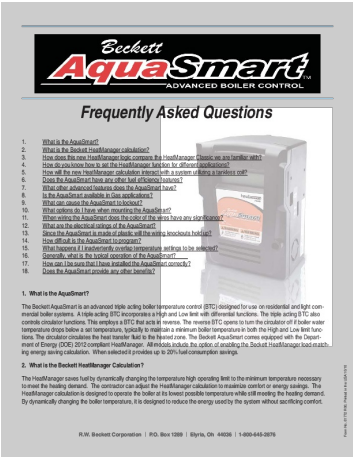
WARRANTY AND SUPPORT

For detailed warranty information and technical support, please refer to the documentation included with your Beckett AquaSmart control or visit the official Beckett Corporation website. Keep your proof of purchase for warranty claims. *Note:* Unauthorized modifications or repairs will void the product warranty.



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[pdf] Frequently Asked Questions

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Frequently Asked Questions 1. What is the AquaSmart 2. What is the Beckett HeatManager calculation 3. How does this new HeatManager logic compare the HeatManager Classic we are familiar with 4. How do you know how to set the HeatManager function for different applications 5. How will the new Hea... lang:en score:24 filesize: 126.28 K page\_count: 4 document date: 2018-04-26



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Product Specifications Beckett 7610B000LU AquaSmart Boiler Temperature Control 120 Vac Gas LESS

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Product Sheet - Model 7610 Boiler Control Features Benefits Up to 20 fuel savings while mainta ... 7610 Boiler Control Ordering Information: Contact Customer Service

at 1-800-645-2876 Part Number **7610A0001U** 7610B0001U 7610A000LU

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## Beckett AquaSmart 7610 Boiler Control: Product Sheet & Specifications

Comprehensive product sheet for the Beckett AquaSmart 7610 Boiler Control. Details features, benefits, HeatManager™ functionality, optional wireless reset, ordering information, wiring diagrams, electrical ratings, temperature specifications, and environmental ratings. Includes part numbers for sensors and accessories.

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