

Robertshaw 803A

Robertshaw 803A Line Voltage Thermostat (Cooling) Instruction Manual

Model: 803A | Brand: Robertshaw

1. INTRODUCTION

The Robertshaw 803A is a mercury-free line voltage thermostat designed specifically for cooling applications with an SPST (Single-Pole, Single-Throw) switch action. This thermostat incorporates bimetal temperature sensing technology to deliver enhanced thermal performance and accurate low voltage control. It is engineered for straightforward operation and reliable temperature management.

2. SAFETY INFORMATION

- Always disconnect power to the thermostat and HVAC system at the main service panel before installation, maintenance, or removal.
- Installation should be performed by a qualified electrician in accordance with all local and national electrical codes.
- Do not use this thermostat for heating applications. It is designed for cooling only.
- Ensure all wiring connections are secure and properly insulated to prevent electrical hazards.
- This device operates on line voltage (120V/277V). Improper installation can result in electric shock or fire.

3. PRODUCT OVERVIEW

The Robertshaw 803A thermostat offers a range of features designed for efficient and reliable cooling control:

- Mercury-Free Design:** Environmentally friendly, requiring no special disposal procedures.
- Bimetal Temperature Sensing:** Provides improved thermal performance and precise temperature control.
- Temperature Control Range:** Adjustable from 50°F to 90°F (10°C to 32°C).
- Positive-Off Switch:** Ensures assured shutdown of the HVAC system when set to the 'Off' position.
- J-Box Compatible:** Designed for easy installation and compliance with electrical codes.
- Universal Replacement:** Can retrofit most existing electric heat thermostats (when used for cooling applications).



Figure 1: Front view of the Robertshaw 803A Line Voltage Thermostat. This image shows the white thermostat with a clear temperature dial ranging from 50 to 90 degrees Fahrenheit, and the Robertshaw logo at the top.

4. SETUP AND INSTALLATION

Proper installation is crucial for the safe and efficient operation of your Robertshaw 803A thermostat. Always ensure power is disconnected before beginning any wiring.

4.1 Wiring Diagram



Figure 2: Back view of the Robertshaw 803A thermostat. This image displays the metal mounting plate and the red and black wires extending from the unit, ready for connection.

4.2 Installation Steps

1. **Disconnect Power:** Turn off the power to the cooling system at the main circuit breaker. Verify power is off using a voltage tester.
2. **Remove Old Thermostat:** Carefully remove the old thermostat from the wall. Note the wiring connections before disconnecting.
3. **Mounting:** The 803A is J-Box compatible. Secure the thermostat's mounting bracket to the electrical box using appropriate screws.
4. **Wiring:** Connect the line voltage wires from your cooling system to the appropriate terminals on the Robertshaw 803A thermostat. This is an SPST (Single-Pole, Single-Throw) thermostat for cooling applications. Refer to local electrical codes and the detailed wiring instructions provided with the product.
5. **Secure Thermostat:** Once wired, carefully push excess wires back into the electrical box and secure the thermostat to the mounting bracket.
6. **Restore Power:** Turn the power back on at the main circuit breaker.



Figure 3: Side view of the Robertshaw 803A thermostat. This image shows the depth of the thermostat and its metal mounting plate, highlighting its design for flush installation against a wall.

5. OPERATING INSTRUCTIONS

The Robertshaw 803A thermostat is designed for simple and intuitive operation.

1. **Adjusting Temperature:** Rotate the dial on the front of the thermostat to select your desired cooling temperature. The temperature range is 50°F to 90°F (10°C to 32°C).
2. **Positive-Off Switch:** To completely shut down the cooling system, turn the dial to the 'Off' position. This ensures the system remains off until manually reactivated.
3. **Temperature Display:** The thermostat features a convenient temperature display, allowing you to view the current comfort level at a glance.

6. MAINTENANCE

The Robertshaw 803A thermostat requires minimal maintenance to ensure continued optimal performance.

- **Cleaning:** Periodically wipe the exterior of the thermostat with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Airflow:** Ensure that the thermostat's vents are not obstructed by dust or debris, as this can affect temperature sensing accuracy.
- **No User-Serviceable Parts:** The internal components of the thermostat are not user-serviceable. Do

not attempt to open or repair the unit.

7. TROUBLESHOOTING

If you experience issues with your Robertshaw 803A thermostat, consider the following common troubleshooting steps:

- **No Power/System Not Responding:**
 - Check the circuit breaker for your cooling system and ensure it is in the 'On' position.
 - Verify that the thermostat dial is not set to the 'Off' position.
 - Ensure all wiring connections are secure. If unsure, consult a qualified electrician.
- **Incorrect Temperature Reading/System Not Cooling Properly:**
 - Ensure the thermostat is not exposed to direct sunlight, drafts, or heat sources, which can affect its accuracy.
 - Confirm the thermostat is set to a temperature lower than the current room temperature for cooling to activate.
 - Clean any dust or debris from the thermostat's vents.
- **Thermostat Mislabeled (Heating vs. Cooling):**
 - The Robertshaw 803A is specifically designed for cooling applications. If you require a thermostat for heating, ensure you have the correct model.

If problems persist after attempting these steps, contact a qualified HVAC technician or Robertshaw customer support for assistance.

8. SPECIFICATIONS

Specification	Detail
Brand	Robertshaw
Model Number	803A
Controller Type	Push Button (Dial)
Temperature Control Type	Cooling
Switch Action	SPST (Single-Pole, Single-Throw)
Temperature Control Range	50°F to 90°F (10°C to 32°C)
Electrical Rating	25 AMP at 250 VAC RES, 18 AMP at 277 VAC RES, 1 HP at 125 VAC, 2 HP at 250 VAC, 125 VA Pilot Duty
Voltage	120 Volts, 277 Volts
Special Feature	Temperature Display
Color	White
Material	Alloy Steel, Metal

Specification	Detail
Mounting Type	Wall Mount
Included Components	Mounting bracket
Item Weight	0.16 ounces
UPC	641517714853

9. WARRANTY AND SUPPORT

The Robertshaw 803A Line Voltage Thermostat typically comes with a**Limited 1-Year Warranty**. Please refer to the warranty card included with your product for specific terms and conditions.

For technical support, troubleshooting assistance, or warranty claims, please contact Robertshaw customer service. Contact information can usually be found on the product packaging or the official Robertshaw website.