

**11E79  
INTEGRATED WATER  
HEATER CONTROL  
INSTALLATION INSTRUCTIONS**

**FAILURE TO READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY BEFORE  
INSTALLING OR OPERATING THIS CONTROL COULD CAUSE PERSONAL  
INJURY AND/OR PROPERTY DAMAGE.**

**DESCRIPTION**

The 11E79 control is a solid-state thermostat control for gas fired commercial water heater applications. The 11E79 supplies a relay switched output for damper or inducer fan applications, and a “Call for Heat” signal or power to energize a gas valve. The 11E79 receives input signals from a temperature probe and Electrical Cutoff (ECO). It controls temperature with an integrated temperature control knob. The diagnostic features of the 11E79 make it easy to diagnose system faults and issues.

Replace a 11E79-XXX control with an approved model number as indicated on the cross reference table below:

11E79 Model Number Replacement Cross Reference Table		
OEM Model	Approved Replacement	Temperature Range
11E79-101	11E79-901	120°F to 180°F
11E79-301	11E79-901	120°F to 180°F
11E79-400	None	120°F to 185°F

**PRECAUTIONS**

**⚠ CAUTION**

Application of this type of control may cause flame rollout on initial startup and could cause personal injury and/or property damage.

Replace only with exact model number, including dash number. Failure to use exact replacement control could cause personal injury and/or property damage.

**⚠ CAUTION**

To prevent electrical shock and/or equipment damage, disconnect electric power system at main fuse or circuit breaker box until installation is complete.

This control is not intended for use in locations where it may come in direct contact with water. Suitable protection must be provided to shield the control from exposure to water (dripping, spraying, rain, etc.).

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

Following installation or replacement, follow appliance manufacturers’ recommended installation/service instructions to insure proper operation.

Do not exceed specified voltage of circuits. Higher voltage will damage control and could cause shock or fire hazard.

**⚠ WARNING**

Do not short out terminals on gas valve or primary control to test. Short or incorrect wiring will damage the comfort control and could cause personal injury and/or property damage.

**⚠ WARNING**



**FIRE, SHOCK AND EXPLOSION HAZARDS**

- Shut off main gas to appliance for service or until installation is complete.
- Disconnect electric power before servicing.
- Do not exceed the specified voltage.
- Replace this control with only the exact model number listed above.
- Protect the control from direct contact with water (dripping, spraying, rain, etc.)
- If the control has been in direct contact with water, replace the control.
- Label all wires before disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.
- Route and secure wiring away from flame.
- Ensure proper earth grounding of appliance.
- Ensure proper connection of line neutral and line hot wires.
- Do not take control apart, there are no serviceable parts inside.
- Do not use control if it has been flooded.
- Never stand on the control or use as a step.

# SPECIFICATION

## ELECTRICAL RATINGS:

**Input and Frequency:** 120 VAC, 60 Hz  
**XFMR Sec. Current:** 1.5A @ 24 VAC  
**Field Output (DD4,DD2):** 1.5A @ 24 VAC

## TEMPERATURE RANGE:

**Setpoint Range:** 120°F – 180°F or 120°F – 185°F

# INSTALLATION

## REMOVING THE OLD CONTROL

1. Turn off main electrical power to the water heater.
2. Shut off the gas to the water heater.
3. Note the temperature setting of the dial.
4. Remove any cover that may be surrounding the 11E79 control.
5. Remove the wire connectors that plug into the four locations on the control (see Fig. 1). Note that the connectors have latches which must be depressed. **DO NOT FORCE THE CONNECTORS. DAMAGE TO THE WIRING MAY RESULT.**
6. Remove the four screws that mount the control to the mounting plate and remove it from the water heater. (see Fig 2).

## INSTALLING THE NEW CONTROL

1. Position approved new control of model number as indicated on the cross reference table on the water heater and secure with the four mounting screws previously removed.
2. Replace the four wire connectors that were removed in step 5 above.
3. Set the temperature dial to the same setting as noted in step 3 above.
4. Restore gas and electrical power to the water heater.

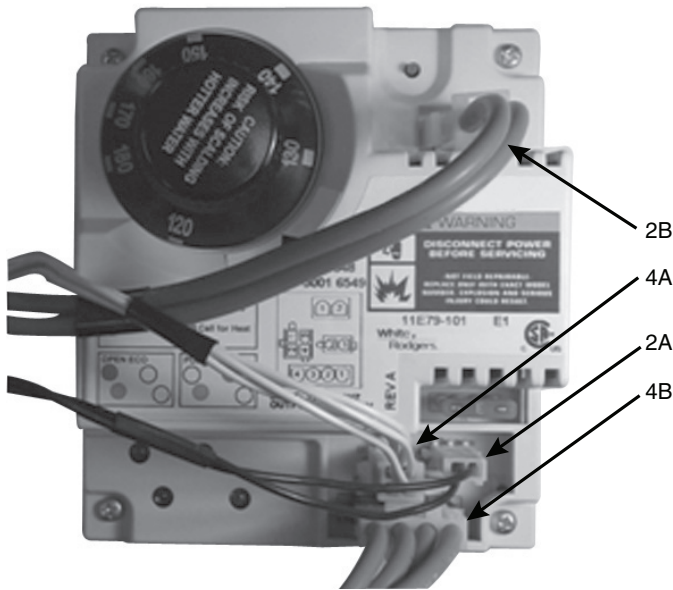


Figure 1 - Connectors

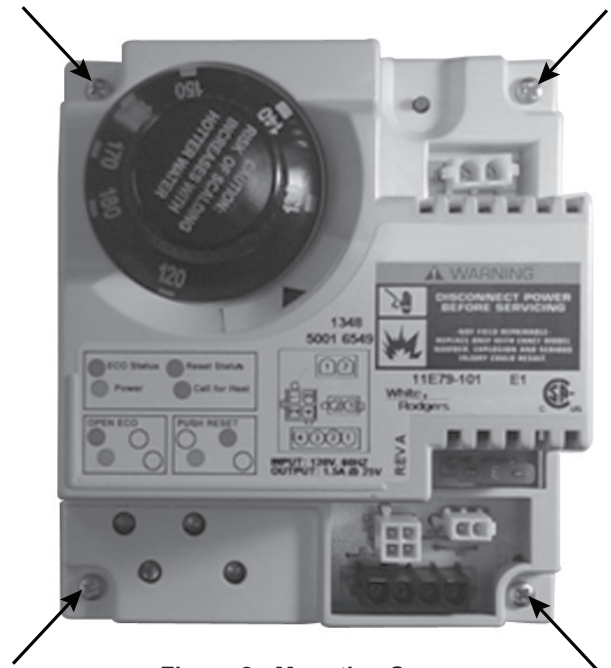


Figure 2 - Mounting Screws

# WIRING DIAGRAMS

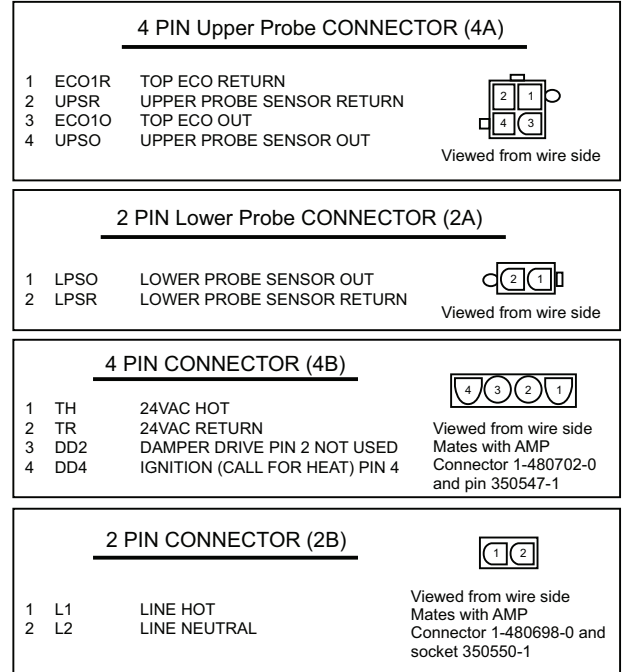
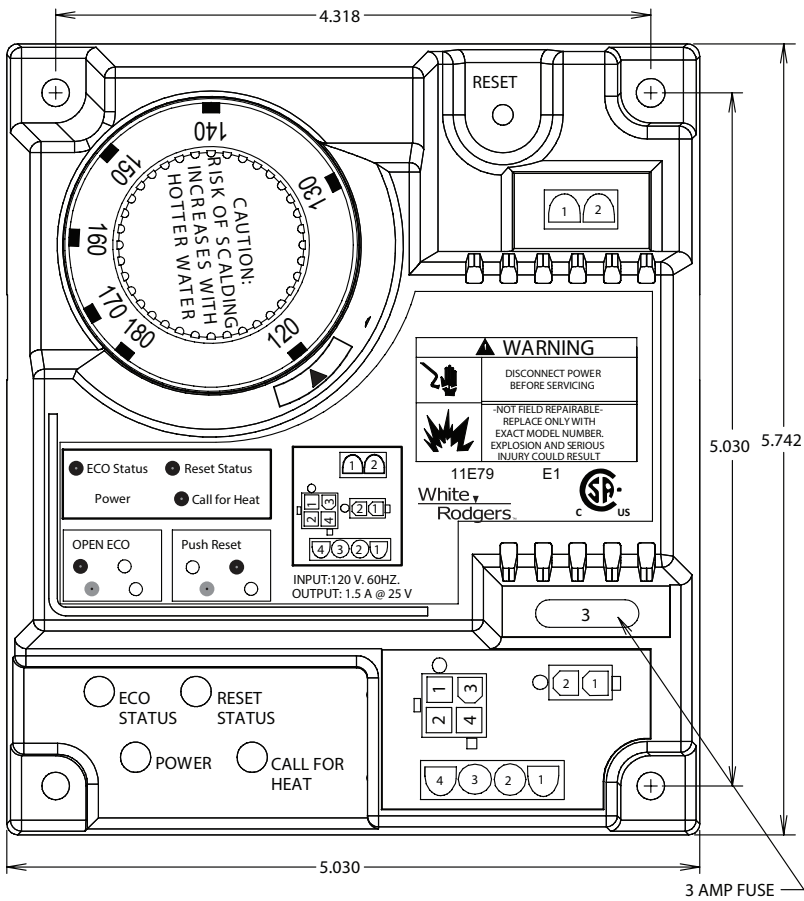


Figure 3 - 11E79-101

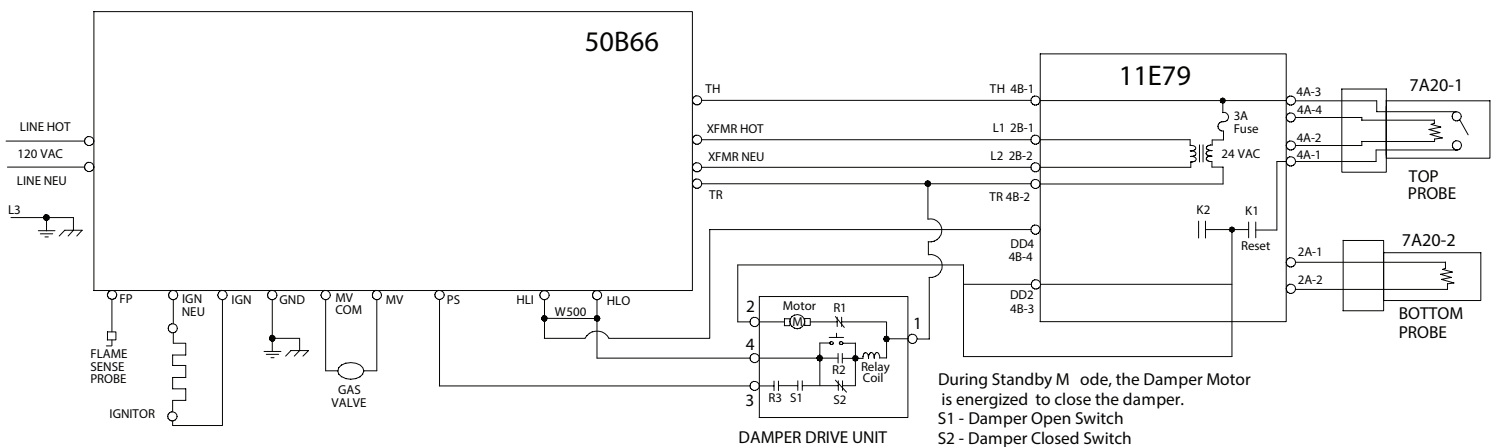


Figure 4 - Typical Wiring Diagram with 50B66

# WIRING DIAGRAMS

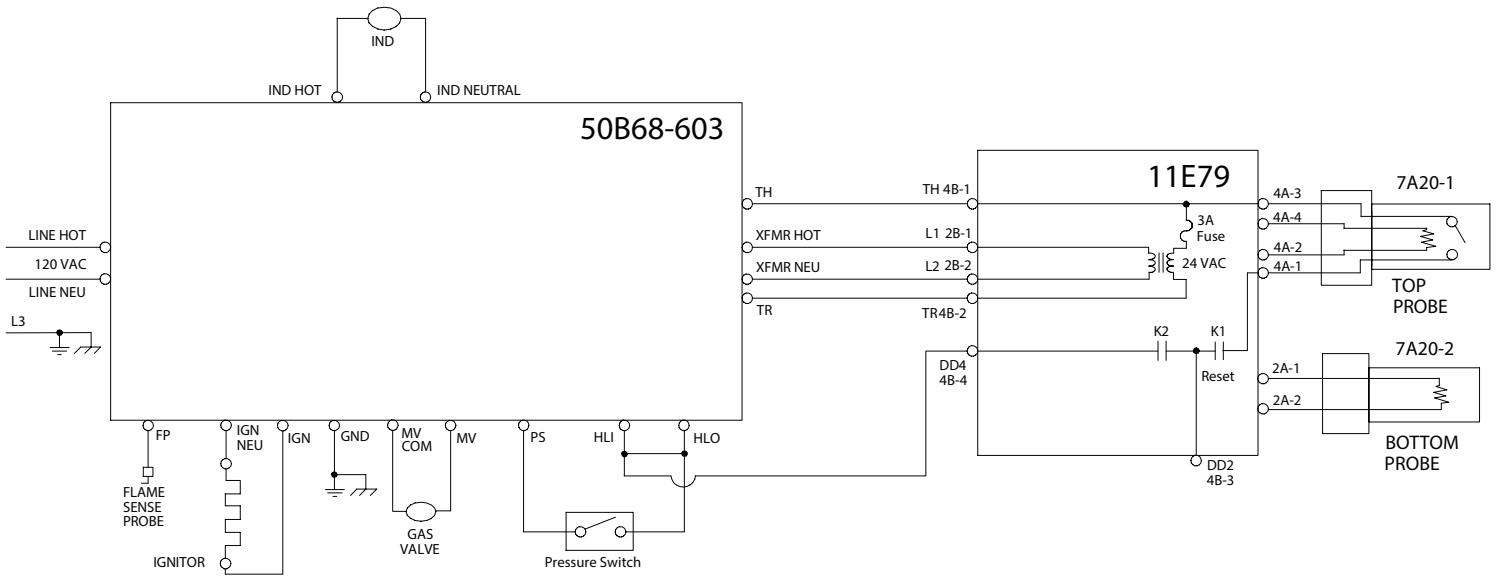


Figure 5 - Typical Wiring Diagram with 50B68-603

# TROUBLESHOOTING

LED's to the left of the wire connectors indicate status of the control. The table below shows indications and what to check.

Indicators	Problem	Corrective Action
○ ○ ○ ○	No Power	Check 2 pin connectors (2B) at top right of device for 120 VAC
○ ○ ● ○	Standby	Verify probe connections or set water temperature
○ ○ ● ●	Call for Heat	Control operating properly and 24 VAC supplied to gas valve terminals.
○ ● ● ○	Push Reset	Water temperature was detected above maximum limit. Push Reset button to re-enable
● ○ ● ○	Open ECO	Water temperature is above maximum limit. Allow water temperature to cool before pushing Reset button to re-enable

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