

White-Rodgers™

11B79-3
Combination Control
with E.C.O. Protection
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 11B79-3 combination control is a Hot Water Control utilizing a thermostat and an E.C.O. (Energy Cut-Off) device. The thermostat consists of a remote sensor and an integral sensor. It is a temperature regulating device for use in applications not exceeding 180°F (82°C). This model is designed for use as direct immersion. No immersion well is required.

The E.C.O. is a non-cycling manual reset device designed to limit the system temperature to 205°F. It is mounted in an integral well built into the immersion fitting.



PRECAUTIONS

If in doubt about whether your wiring is millivolt, line or low voltage, have it inspected by a qualified heating and air conditioning contractor, electrician, or someone familiar with basic electricity and wiring.

Do not exceed the specification ratings.

All wiring must conform to local and national electrical codes and ordinances.

This control is a precision instrument, and should be handled carefully. Rough handling or distorting components could cause the control to malfunction.

⚠ CAUTION

Do not short on circuits exceeding specified voltage. Higher voltage will damage control and could cause shock or fire hazard.

⚠ CAUTION

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

Shut off main gas to heating system until installation is completed.

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

Following installation or replacement, follow appliance manufacturer's recommended installation and/or service instructions to insure proper operation.

SPECIFICATIONS

THERMOSTAT

Electrical Rating:

24 VAC - 0.75 Amp
0.25 to 1.0 VDC - 0.25 Amp
10 F.L.A., 60 L.R.A., 120 VAC

Switch Action: Open-on-Rise

Range: Adjustable from 120° to 180°F (50° to 82°C)

Differential: Fixed, 4°F (2.2°C)

ENERGY CUT-OFF (E.C.O.)

Electrical Rating:

24 VAC - 0.75 Amp
0.25 to 1.0 VDC - 0.25 Amp, 120 VAC

Switch Action: Open-on-Rise at 205°F (96°C)

Differential:

Non-cycling
Manual reset

ELEMENTS:

Case Element:

3/4 NPT
2-3/4" shank, 4-5/8" beyond thread

Remote Element:

3/4 NPT
Compression fitting on 1-1/2" stud
5-1/4" beyond stud

INSTALLATION

CAUTION

When installing the control, take special care to avoid any kinds of sharp bends in the capillary tubing of the remote element.

Remove the control that needs replacing. The 11B79 control should be installed in the same location.

Apply pipe joint compound to the NPT threads of the control box hex fitting. Carefully thread the control box by hand at the desired location. As you thread the control box, **do not** allow the capillary and remote element to swing about. This could damage the control.

After threading the control box by hand, tighten the hex fitting on the back of the control with a wrench until secure.

REMOTE ELEMENT INSTALLATION

To install the remote element, unscrew the locknut from the hex nut (see fig. 1). Apply pipe joint compound to the hex nut and thread into the tank at the location where the original element was removed. With the compression fitting and locknut on the element, insert the remote element bulb through the centre of the hex nut.

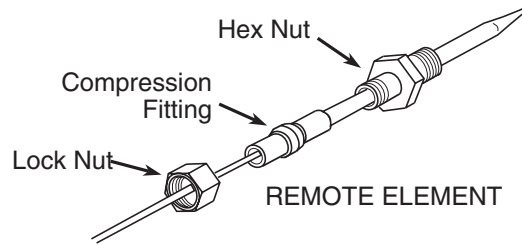


Figure 1

Screw the locknut into the hex nut until hand-tight. Do not apply joint compound on the compression fitting side of the hex nut. Tighten with a wrench to compress the compression fitting.

Excessive capillary should be coiled and secured close to the control to avoid any damage.

Wiring should be routed through the opened knockout on the bottom of the control. Connect wires beneath the screw terminals according to manufacturer's instructions.

WIRING

All wiring should be done in accordance with local and national electrical codes and ordinances.

Wire the new control the same as the control being replaced, or follow equipment manufacturer's instructions for wiring.

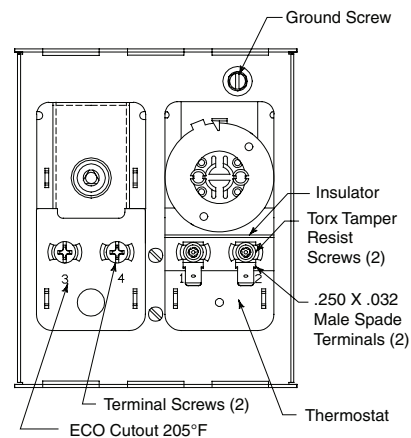


Figure 2 - View with cover removed

SETTING TEMPERATURE

The temperature adjusting dial is located in front of the switch mechanism on the control. As shown in Fig. 3, a pointer at the top of the dial indicated the temperature at which the thermostat is to open. To change the temperature, rotate the dial until the desired temperature is directly beneath the pointer. Do not attempt to force the dial beyond the built-in stop.

The cut-out temperature of the E.C.O. is preset and cannot be adjusted in the field.

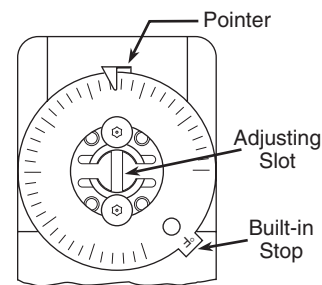


Figure 3

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