



# Bell & Gossett<sup>®</sup> ZoneTrol II<sup>™</sup> Model Z-1

LISTED

## **INSTALLER:** PLEASE LEAVE THIS MANUAL FOR THE OWNER'S USE.



This safety alert symbol will be used in this manual and on the unit safety instructions decal to draw attention to safety related instructions. When used, the safety alert symbol means ATTEN-TION! BECOME ALERT! YOUR SAFETY IS INVOLVED! FAILURE TO FOLLOW THE INSTRUCTIONS MAY RESULT IN A SAFETY HAZARD.

### DESCRIPTION

The Bell & Gossett ZoneTrol II is designed to control 120 VAC circulating pumps in hydronic systems.

Model	T-stat Current	Max. Number of Zones	Max. HP/Pump
Z-1	0.085	1	1/3

### LED DEFINITION

Power LED will illuminate when input power is applied to the controller. Zone LED will illuminate when relay is energized.

## MECHANICAL INSTALLATION INSTRUCTIONS

The pump controller should be securely mounted on a wall near the pumps using four #8 screws (not included).

## ELECTRICAL INSTALLATION INSTRUCTIONS

WARNING: Electrical Shock Hazard Electrical connections are to be made by a qualified electrician in accordance with all applicable codes, ordinances and good practices Disconnect and lock out the power before making electrical connections. Failure to follow these instructions could result in serious personal injury and/or death.

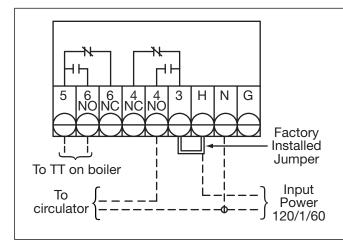
- 1. Disconnect the electrical supply to the pump before installing the controller.
- Refer to the applicable wiring diagram

   Figure 1: Cold Start Boiler
   Figure 2: Tankless Coil
- 3. Verify that the circulator(s) do not exceed the electrical rating of the controller.
- 4. Make electrical connections according to the applicable wiring diagram. Run the pump power through the holes in the controller chassis to the applicable L/N terminals. Keep 120 VAC and 24 VAC wiring separate. All 120 VAC wiring should be 14 AWG (minimum) copper electrical. Perform all wiring in accordance with applicable codes.
- 5. Run the thermostat wires through the grommet(s) in the controller chassis and connect to the appropriate R/W terminals. Keep 24 VAC wiring separate from 120 VAC wiring.

#### WARNING: Electrical Shock Hazard

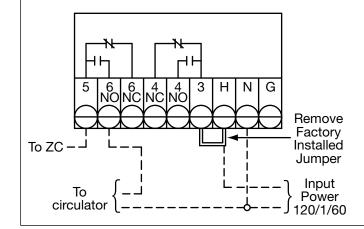
When wiring per the Tankless Coil Application, pump controller and boiler aquastat must be on the same circuit and have a common disconnect. Failure to follow these instructions may introduce a secondary source of power resulting in personal injury or death.

## **TYPICAL WIRING SCHEMATICS**



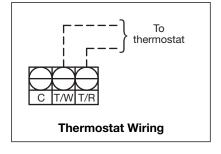
#### Figure 1: Cold Start Boiler

When a thermostat calls for heat, the corresponding circulator will start and the 5-6 NO end switch will close to enable the boiler.



#### Figure 2: Tankless Coil (Remove Jumper)

When a thermostat calls for heat, the corresponding circulator will start when the boiler temperature reaches the low limit setting





Xylem Inc. 8200 N. Austin Avenue Morton Grove, Illinois 60053 Phone: (847) 966-3700 Fax: (847) 965-8379 www.xyleminc.com/brands/bellgossett