

# HYDROZONE®

Model 6001

## Single Zone Switching Relay

120 VAC Input

## Installation Instructions and Operating Manual

- LED INDICATORS
- ZONE FAULT INDICATOR
- AUTOMATIC CIRCULATOR SHORT CYCLE PROTECTION
- AVAILABLE COMMON TERMINAL FOR SMART THERMOSTATS
- RESISTOR INCLUDED FOR POWER STEALING THERMOSTATS
- TEST BUTTON
- 10 VA TRANSFORMER TO PROVIDE THERMOSTAT POWER
- TWO SPDT RELAYS
- FUSED OUTPUTS WITH SPARES INCLUDED
- EXTRA L2 TERMINAL FOR EASE OF WIRING



### Ratings

Output relays ..... 6 Amps per contact

Combined outputs.. 12 Amps

RWC input ..... 24 VAC, 10 VA

Fuses ..... 16 A, slow blow

**NOTICE** Read these instructions completely before proceeding with the installation. Retain instructions for future reference.

**WARNING** **Electrical shock hazard.** To prevent electrical shock, death or equipment damage, disconnect power supply before installing or servicing control. Only qualified personnel may install or service this control in accordance with local codes and ordinance

**WARNING** **Frozen pipes/water damage.** Central heating systems are prone to shut down as a result of power or fuel outages, safety related fault conditions or equipment failure. Installation of freeze protection monitoring or other precautions is recommended for unattended dwellings in climates subject to sustain below-freezing temperatures.

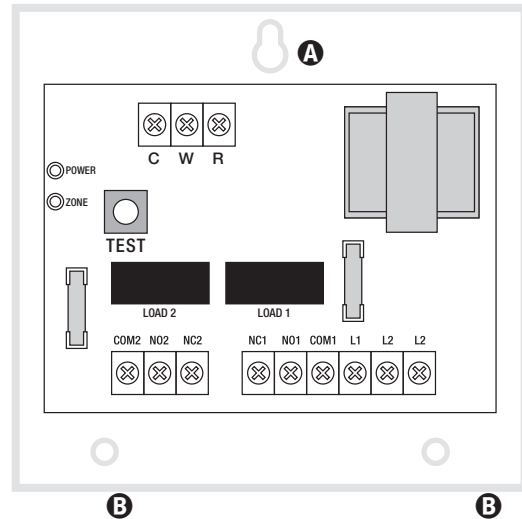
**HYDROLEVEL  
COMPANY**

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## MOUNTING INSTRUCTIONS

1. Position the enclosure against a flat wall surface or boiler jacket and mark the top center keyhole location **A**.
2. Start a screw in the marked location and hang the control on the screw.
3. Add screws to the lower right and lower left mounting holes **B** and tighten all three screws.

**NOTE:** Rubber washers included to reduce possible transformer hum and relay noise that is sometimes amplified by mounting surfaces such as sheet metal, and similar materials. If needed, rubber washers should be installed in between the case and the mounting surface at locations A, B and C.



## WIRING



**WARNING** Electrical shock hazard. To prevent electrical shock, death or equipment damage, disconnect power supply before installing or servicing control. Only qualified personnel may install or service this control in accordance with local codes and ordinances.

**NOTICE** All wiring must comply with the National Electric Code or any other state or local codes or regulations.

In order to power a “Power Stealing” thermostat from the HydroZone, a resistor needs to be installed between the C and W terminals of the switching relay. A resistor is included with this product, but any 1000 ohm 1/2 watt resistor can also be used.

### TERMINAL DESIGNATIONS

#### Low Voltage/Thermostat

**R** 24 VAC for the thermostat R terminal  
**W** 24 VAC for the thermostat W terminal  
**C** 24 VAC common for powered thermostats  
 Note: A closed switch between R and W will create a call for heat and energize the relay outputs.

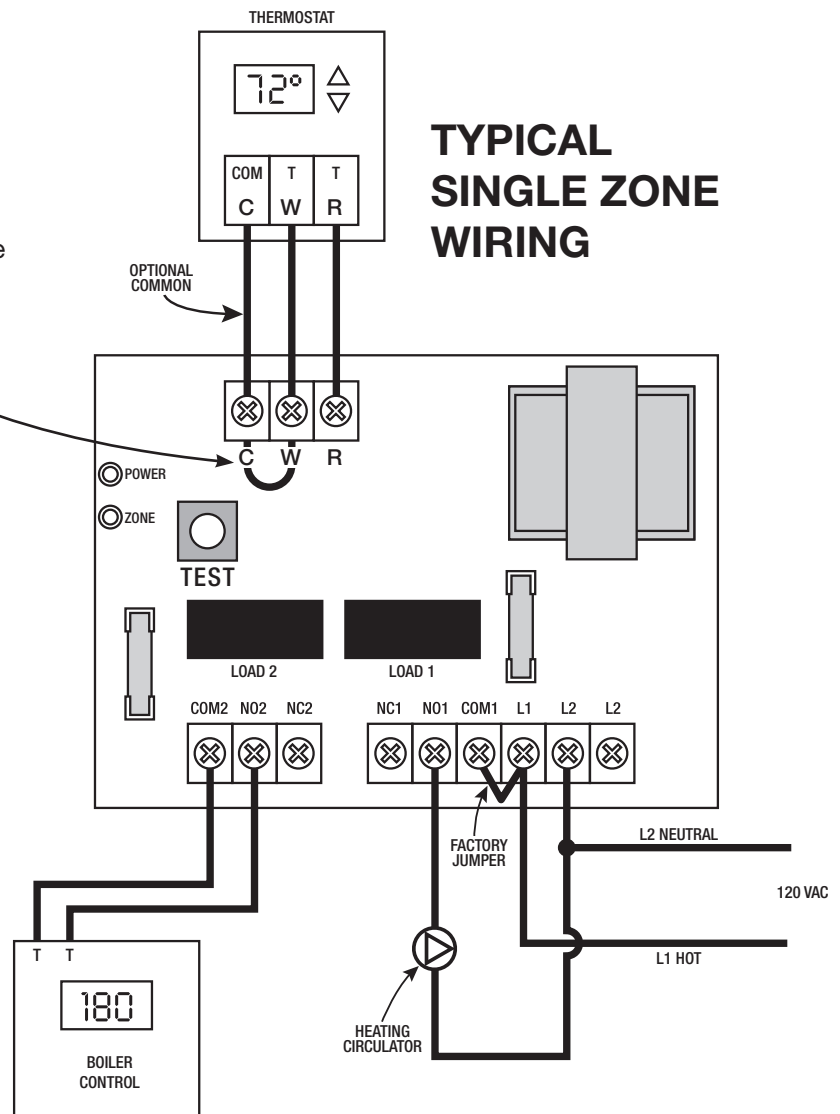
#### Line Voltage

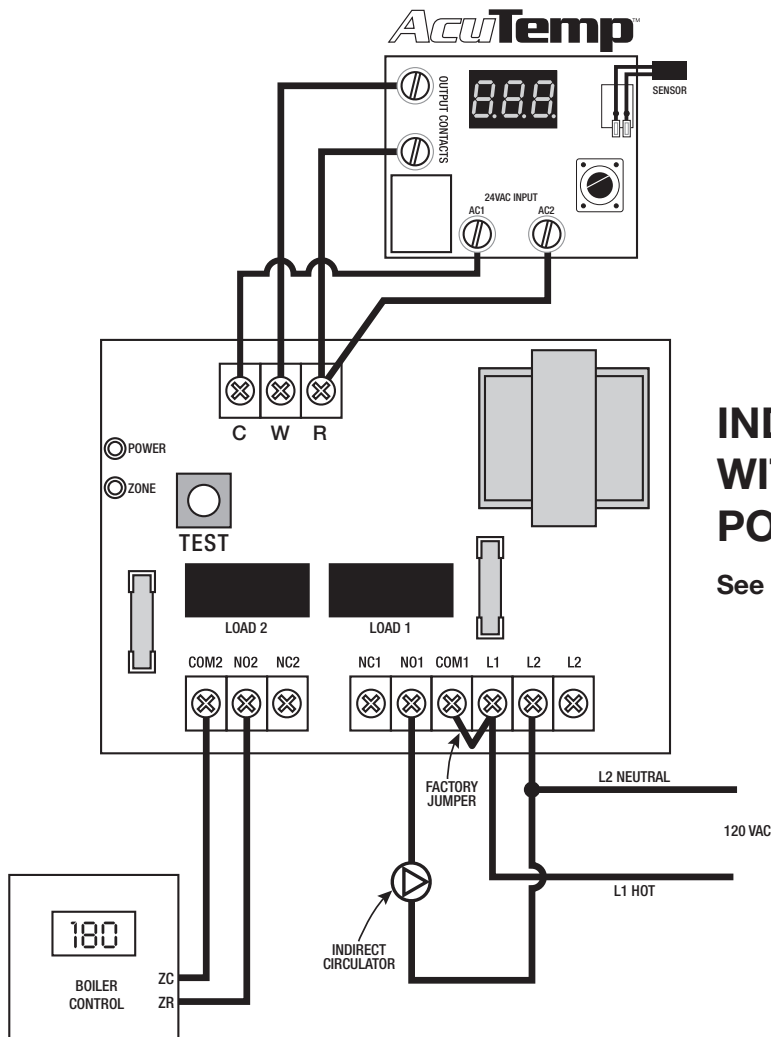
**L1** 120 VAC hot  
**L2** 120 VAC neutral

#### Switching Contacts

**COM1** Common terminal for load 1  
**NO1** Normally open terminal  
**NC1** Normally closed terminal  
**COM2** Common terminal for load 2  
**NO2** Normally open terminal  
**NC2** Normally closed terminal

### TYPICAL SINGLE ZONE WIRING



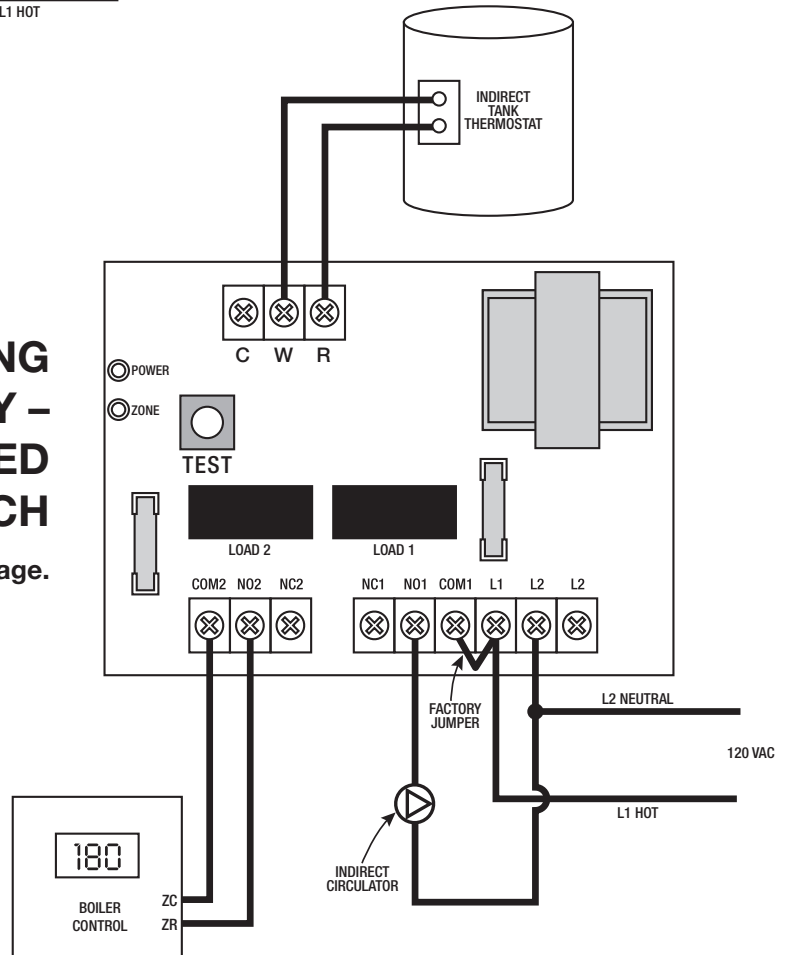


## INDIRECT TANK WIRING WITH PRIORITY – POWERED LIMIT SWITCH

See Terminal Designations on previous page.

## INDIRECT TANK WIRING WITH PRIORITY – NON-POWERED LIMIT SWITCH

See Terminal Designations on previous page.



## OPERATING INSTRUCTIONS

### Operation

A call for heat between terminals **R** and **W** will energize both relays at the same time.

LOAD 1 can be used to control a circulator. For convenience, a jumper has been factory installed between terminals **L1** and **COM1**.

LOAD 2 can be used as dry contacts to signal the boiler that there is a call for heat. Terminals **COM2** and **NO2** are the contacts that will close on a call to **R** and **W**.

Note: Both relay outputs are rated for 6 amps so either output, LOAD 1 or LOAD 2 can be used to control a circulator pump.

### Test Button

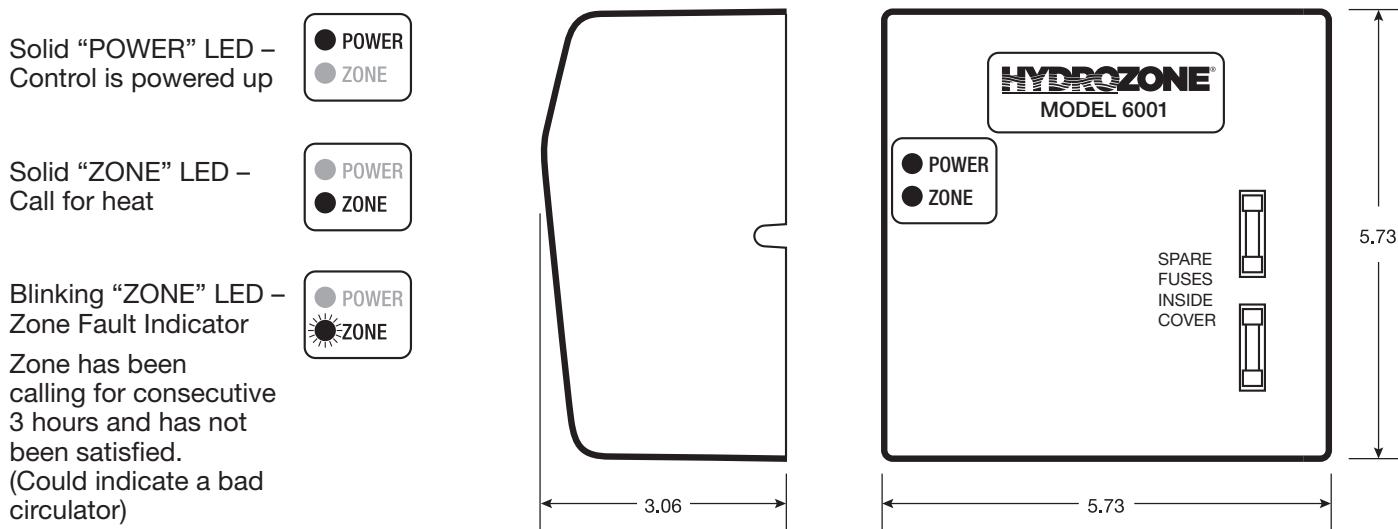
Push the test button on the circuit board to test the output terminal wiring. Pressing the test button will simulate a call on the thermostat input and turn on the "ZONE" LED. The relays will both close to verify the desired operation. When the zone is not calling for heat (by thermostat or test button), the "ZONE" LED will be off.

### Zone Fault Indicator

A Blinking "ZONE" LED indicates the zone has been calling for a consecutive 3 hours and has not been satisfied. This could indicate a bad circulator and should be investigated. If the "ZONE" LED is blinking but your circulator is operating per it's instruction manual, please contact tech support.

The LED will only blink when the zone call is a continuous 3 hours and the "ZONE" LED will return to normal operation when the zone call ends.

## DIMENSIONS AND LED INDICATORS



### LIMITED MANUFACTURER'S WARRANTY

We warrant products manufactured by Hydrolevel Company to be free from defects in material and workmanship for a period of two years from the date of manufacture or one year from the date of installation, whichever occurs first. In the event of any claim under this warranty or otherwise with respect to our products which is made within such period, we will, at our option, repair or replace such products or refund the purchase price paid to us by you for such products. In no event shall

Hydrolevel Company be liable for any other loss or damage, whether direct, indirect, incidental or consequential. This warranty is your EXCLUSIVE remedy and shall be IN PLACE OF any other warranty or guarantee, express or implied, including, without limitation, any warranty of MERCHANTABILITY or fitness for a particular purpose. This warranty may not be assigned or transferred and any unauthorized transfer or assignment thereof shall be void and of no force or effect.