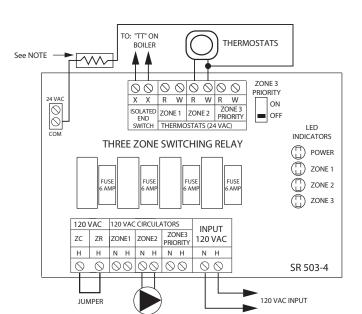


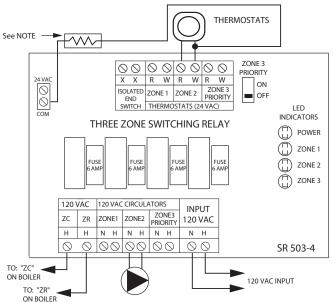
INSTRUCTIONS FOR 3 ZONE PUMP RELAY CONTROL

ARTICLE NO. 298726-001

For Cold Start Boiler Application



For Tankless Coil Boiler Application (Alternative Wiring)



Operation: When any thermostat calls for heat, the appropriate circulator is energized and the isolated end switch (X and X) will start the boiler.

Priority Operation: When zone 3 is switched to the priority setting and is actuated, all other zones will stop operation until zone 3 is satisfied. When zone 3 is not switched to priority, all zones will operate independently.

Priority Protection Operation: When the priority switch is set to ON, and if the priority zone calls continuously for more than one hour, power is returned to all the other zones, allowing each zone to function independently. Once the priority zone is satisfied, the control's auto-reset is activated and the priority zone is again allowed to have priority for up to one hour starting from when it calls next.

Jumper Placement: The jumper should be placed between terminals ZC and ZR. Connect the isolated end switch to the aquastat control on the boiler.

Power Input: Connect 120 volt ac power input to terminals N and H. Neutral wire to terminal N. Hot wire to terminal H.

Note: Resistor (1K Ω , 1/2W) may be needed between W and C terminals for powerstealing thermostats. This does not apply to any REHAU thermostat.

Operation: When any thermostat calls for heat, the boiler is given a signal to start. The appropriate circulator is energized only when the boiler temperature is above the

Priority Operation: When zone 3 is switched to the priority setting and is actuated, all other zones will stop operation until zone 3 is satisfied. When zone 3 is not switched to priority, all zones will operate independently.

Priority Protection Operation: When the priority switch is set to ON, and if the priority zone calls continuously for more than one hour, power is returned to all the other zones, allowing each zone to function independently. Once the priority zone is satisfied, the control's auto-reset is activated and the priority zone is again allowed to have priority for up to one hour starting from when it calls next.

Jumper Placement: REMOVE the jumper between terminals ZC and ZR. Connect terminal ZC to ZC on the aguastat control. Connect terminal ZR to ZR on the aguastat control. Confirm polarity is consistent between boiler aquastat and switching relay

Power Input: Connect 120 volt ac power input to terminals N and H. Neutral wire to terminal N. Hot wire to terminal H.



A WARNING: When using Alternative Wiring diagram, wiring instructions must be followed so power originates from the boiler aquastat. Failure to follow these wiring instructions may result in a secondary source of power being connected to the boiler that may activate it under certain circumstances, causing injury or death.

For updates to this publication, visit na.rehau.com/resourcecenter
The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained the using, the user will determine suitability of the information for user's intended use and shall assume all risk and liability in connection therewith.

www.rehau.com 855.615 07.2015

Specifications: Type 1 Enclosure Number Of Zones Voltage Combined Load Width Height Depth 10 3/4' SR503-4 3 With Priority 120/60/1 Vac 15 Amps 2 3/4'

All circulator relay connections, including ZC/ZR, are rated 1/3 hp (6 FLA, 36 LRA) at 120 VAC. End switch connections are rated 24 VAC, 1 amp. All thermostat connections supply a 24 VAC class 2 output.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

A WARNING: Wiring connections must be made in accordance with all applicable electrical codes. Use copper wire only. 120 VAC wiring must have a minimum temperature rating of 75°C. Failure to follow this instruction can result in personal injury or death and/or property damage. 12-18 gauge wire recommended for 120 VAC connections, 14-22 gauge wire for thermostat connections, and 14-22 gauge wire for 24 VAC source connections.

Troubleshooting:

Problem: Digital thermostats do not work correctly when connected to a switching

Solution: Some thermostats are a "Power Stealing" type which means they are powered by the switching relay with just 2 wires (R & W). A resistor may be needed in order to have the thermostat work properly. This resistor should be placed between $% \left\{ 1,2,\ldots ,n\right\}$ the W & C (common) terminals of the switching relay. If the thermostat manufacturer does not supply a resistor, a 1000 ohm $\ensuremath{\$ models and is readily available at electronic supply outlets. If the thermostat is battery powered, then check that the batteries are fresh and installed correctly.

Problem: No heat in a zone or room of building

Solution: LED diagnostic lights will help find a component that is not working properly. The green LED should always be on, indicating that power is connected and the fuse is good. When there is a call for heat, the yellow LED will come on indicating power to $\,$ the zone circulator. This indicates the thermostat is working correctly. If the red LED does not come on, then check the thermostat and thermostat wiring for errors.

Features:

External Indicator Lights Switchable Priority Priority Protection

Simplified Wiring Sealed Relays Fuse Protected Outputs Compact Design

100% Factory Tested Isolated End Switch Contractor Friendly PC Board Layout Universal Thermostat Compatibility

UL Approved 24 volt Power Input or Output Terminal

Two Standard Pump Relay Controls Connected Together (SR502 - SR506)

