



Uponor

RADIANT HEATING SYSTEMS

THREE-ZONE MULTI-PUMP RELAY

INSTRUCTION SHEET

Cold Start Boiler Operation

When the thermostat calls for heat, the appropriate circulator is energized and the isolated end switch (X₁ and X₂) will start the boiler.

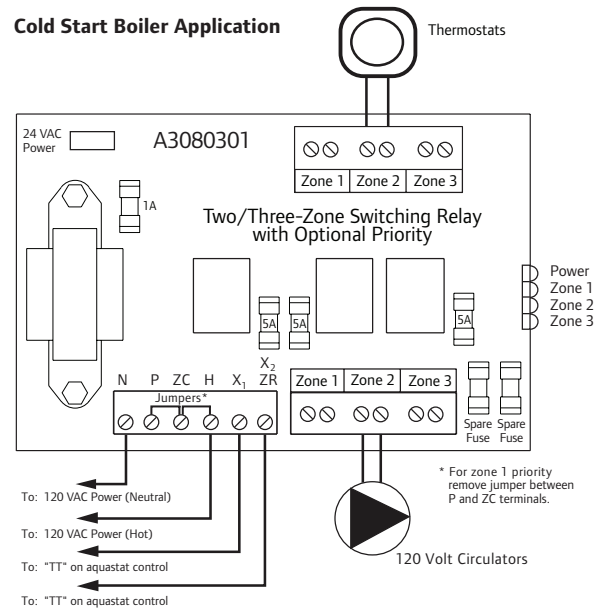
Jumper Placement

The jumper should be placed between terminals ZC and H. Connect the isolated end switch, X₁ and X₂ to the boiler aquastat control. (For zone 1 priority, remove jumper between terminals P and ZC.)

Power Input

Connect 120 VAC power input to terminals N and H, neutral wire to terminal N and hot wire to terminal H.

Cold Start Boiler Application



Tankless Coil Boiler 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 set low limit.

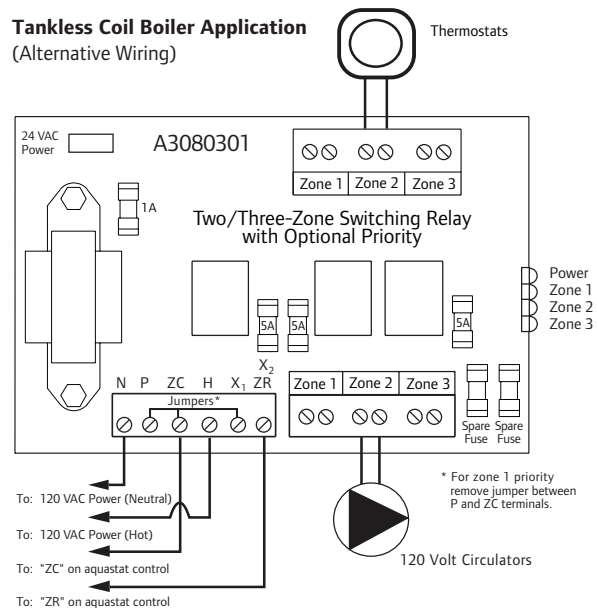
Jumper Placement

The jumper should be placed between terminals ZC and X₁. Connect terminal ZC to ZC terminal on the aquastat control. Connect terminal ZR to ZR terminal on the aquastat control. Confirm polarity is consistent between boiler aquastat and switching relay. (For zone 1 priority, remove jumper between terminals P and ZC.)

Power Input

Connect 120 VAC power input to terminals N and H, neutral wire to terminal N and hot wire to terminal H.

Tankless Coil Boiler Application (Alternative Wiring)



External Diagnostics

Externally visible lights show full functionality of the switching relay. The green light should always be on, indicating that power is connected. When the thermostat calls for heat, both the appropriate circulator and red indicating light are energized.

Features

- External indicator lights
- Priority
- Simplified wiring
- Fully enclosed snap-out relays
- Compact design
- Fuse-protected outputs
- 100% factory tested
- Isolated end switch
- Contractor-friendly PC board layout
- Universal thermostat

- Compatibility
- UL approved
- 24 volt power input or output terminal
- Extended three-year warranty
- Made in the United States



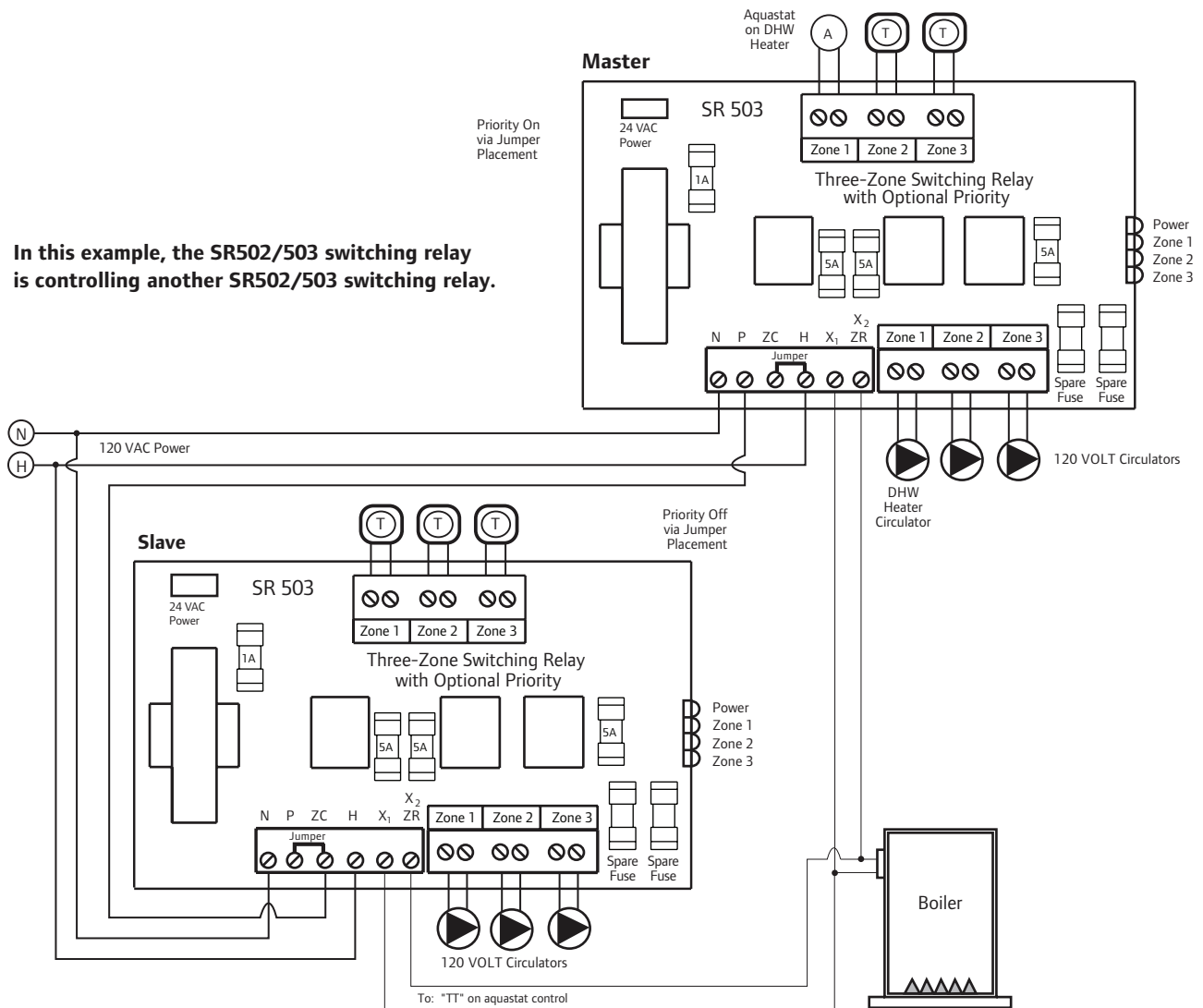
Warning: Wiring connections must be made in accordance with all applicable electrical codes. Use copper wire only with a minimum temperature rating of 60/75°C. Failure to follow this instruction can result in personal injury or death and/or property damage. 12-18 gauge wire recommended for 120 VAC connections, 14-22 gauge wire for thermostat connections and 14-22 gauge wire for 24 VAC source connections.

Specifications

| Product Number | Number of Zones | Transformer Voltage | Maximum Combined Load | Dimensions of Enclosure | | |
|----------------|-----------------|---------------------|-----------------------|-------------------------|--------|--------|
| | | | | Width | Height | Depth |
| A3080301 | 3 with Priority | 120 VAC Input | 15 amps | 10 1/4" | 6 3/4" | 2 3/4" |

All switching relays are relay type DPST, have a thermostat current of 0.18 and have a single-phase motor rating per zone of 1/3 hp (5.0A) at 120 VAC.

In this example, the SR502/503 switching relay is controlling another SR502/503 switching relay.



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