



RADIANT HEATING SYSTEMS ACTUATOR CONVERSION

INSTRUCTION SHEET



Discontinued Parts

- Motorized Valve Actuator (MVA) (A3020522)
- ¾" MVA Zone Valve (A3070525)
- 1" MVA Zone Valve (A3070526)



Replacement Parts

- Uponor Two-wire Thermal Actuator (A3030522, A3030523, A3020416)



- Uponor Four-wire Thermal Actuator (A3010522)

Actuator Conversion Instructions

Uponor no longer offers the Motorized Valve Actuator (MVA) (A3020522), ¾" MVA Zone Valve (A3070525) and 1" MVA Zone Valve (A3070526). If the need arises to replace the actuator, there are two options that provide greater reliability, improved service life and cost savings. This instruction sheet details the options and provides supporting wiring schematics.

Replacing with a Two-wire Thermal Actuator

Uponor Two-wire Thermal Actuators (A3030522, A3030523, A3020416) typically require three (3) minutes to open versus 10 seconds for an

MVA. However, given the dynamics of a radiant system, the delay will be unnoticeable to end users. And because there are fewer connections, the Two-wire Thermal Actuators also greatly reduce wiring time and complexity.

Important! Two-wire Thermal Actuators are only compatible with the new Uponor Zone Control Modules (A3031003, A3031004).

Refer to the following instructions to replace an MVA with a Two-wire Thermal Actuator.

1. Remove the MVA and install the new Two-wire Thermal Actuator.

2. Remove power from the old Uponor Zone Control Module (ZCM) (A3030003, A3030004) and replace with a new ZCM (A3031003, A3031004).
3. Terminate brown and blue actuator motor wires to the Y1 and Y2 terminals.
4. Terminate the system end switch to the ES terminals on the new ZCM.
5. Connect 24-volt power to the new ZCM.

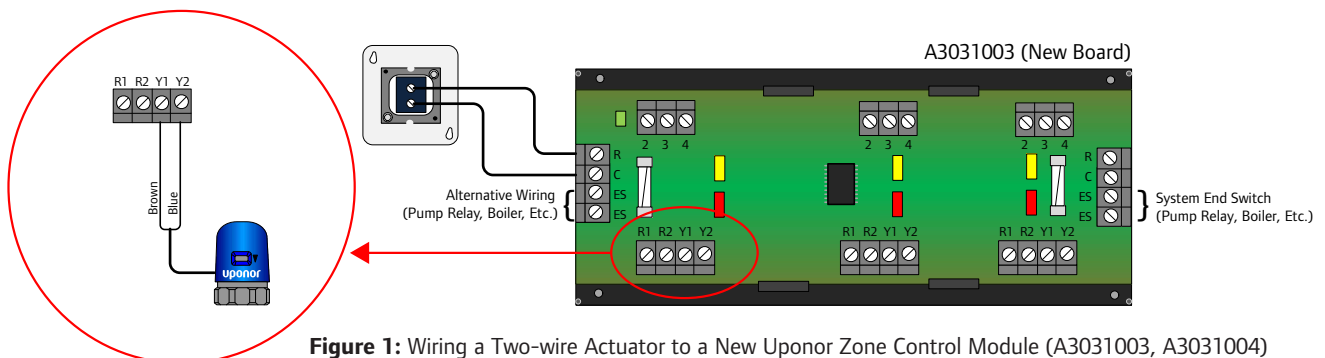


Figure 1: Wiring a Two-wire Actuator to a New Uponor Zone Control Module (A3031003, A3031004)

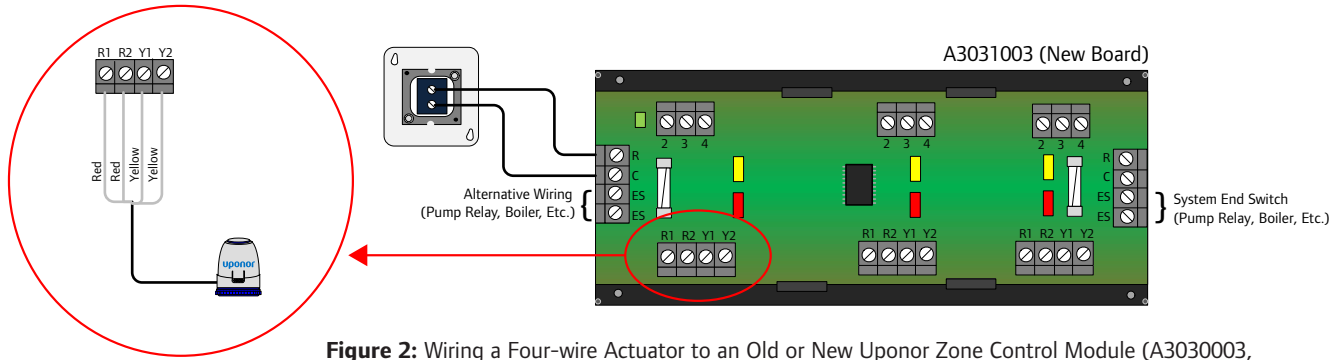


Figure 2: Wiring a Four-wire Actuator to an Old or New Uponor Zone Control Module (A3030003, A3030004, A3031003 or A3031004)

Replacing with a Four-wire Thermal Actuator

Uponor Four-wire Thermal Actuators (A3010522) typically require three (3) minutes to open versus 10 seconds for an MVA. However, given the dynamics of a radiant system, the delay will be unnoticeable to end users. Four-wire Thermal Actuators also provide greater reliability while greatly reducing wiring time and complexity. Note that the Four-wire Thermal Actuator

is compatible with both the old (A3030003, A3030004) and new (A3031003, A3031004) ZCMs.

Refer to the following instructions to replace an MVA with a Four-wire Thermal Actuator.

1. Remove the MVA and install the new Four-wire Thermal Actuator.
2. Remove power from the Uponor Zone Control Module (ZCM) (A3030003, A3030004, A3031003 or A3031004)

3. Terminate red end switch wires to the R1 and R2 terminals.
4. Terminate yellow actuator motor wires to the Y1 and Y2 terminals.
5. Terminate the system end switch to the ZCM.
6. Connect 24-volt power to the ZCM.

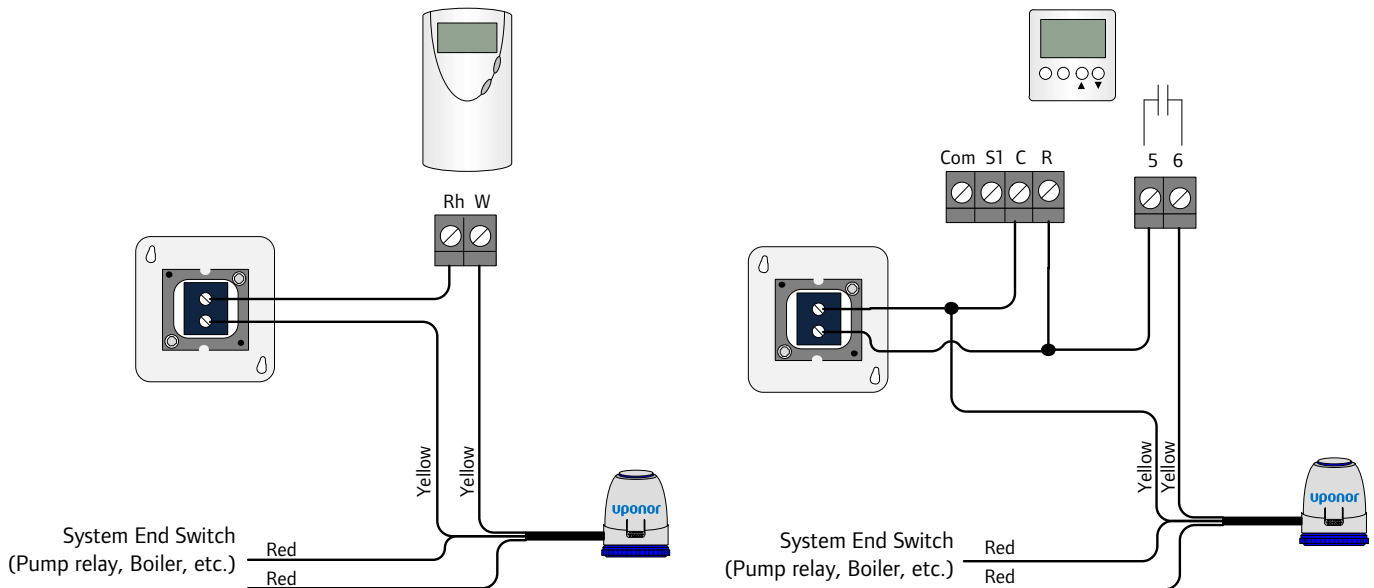


Figure 3: Hard Wiring a Four-wire Actuator

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