uponor

RADIANT HEATING SYSTEMS

# POWERED ZONE CONTROLLERS

**INSTRUCTION SHEET**

## Introduction

Uponor's Powered Four- and Six-zone Controllers feature transformers for low-voltage operations and relays to operate line voltage controls. Fully fuse protected, they also include an isolated end switch and built-in priority switch.

The indicator lights show full functionality of the products wired to the zone controllers. The green light indicates power is connected. When the thermostat calls for heat, both the appropriate actuator and yellow indicator light energize.

When the zone valve or actuators are fully open, the end switch relay and red indicator light energize. A three-amp delay fuse protects the Powered Four-zone Controller. A seven-amp delay fuse protects the Powered Six-zone Controller.

## Operation and External Diagnostics

When any thermostat calls for heat, the appropriate zone valve or actuator energizes and the yellow light illuminates. When the device is fully open, the red light illuminates and energizes the end-switch relay. The green light is always on, indicating power is connected.

## Priority Operation

When zone priority switches to the priority setting and actuates, all other zones stop operation until the priority zone is satisfied. When zone priority switches to off, all zones operate independently.

**Note:** When using a circulator on the priority zone instead of a zone valve, install a jumper between R1 and R2 of the priority zone.

## Features

- Built-in priority switch
- External indicator lights
- Simplified wiring
- Compact design
- Fuse-protected
- 100% factory tested
- Isolated end switch
- Extra set of dry contacts
- Contractor-friendly PC board layout
- Universal thermostat compatibility
- Works with 2-, 3-, or 4-wire actuators or zone valves
- Sturdy screw connections
- UL-approved
- Extended three-year warranty
- Made in the U.S.A.

## Physical Specification

| Part No. | No. of Zones | Width | Height | Depth |
|---|---|---|---|---|
| A3080404 | 4 with priority | 10¾" | 6¾" | 2¾" |
| A3080406 | 6 with priority | 11¾" | 7½" | 3" |

## Electrical Specification

| Part No. | Transformer Voltage | Max Output at 24VAC | Max No. of Actuators | |
|---|---|---|---|---|
| | | | MVA | Thermal |
| A3080404 | 120VAC | 40 VA | 5 | 8 |
| A3080406 | 120VAC | 80 VA | 11 | 16 |

**Figure 1: Typical Wiring for Powered Six-zone Controller (Four-zone board features a single transformer)**

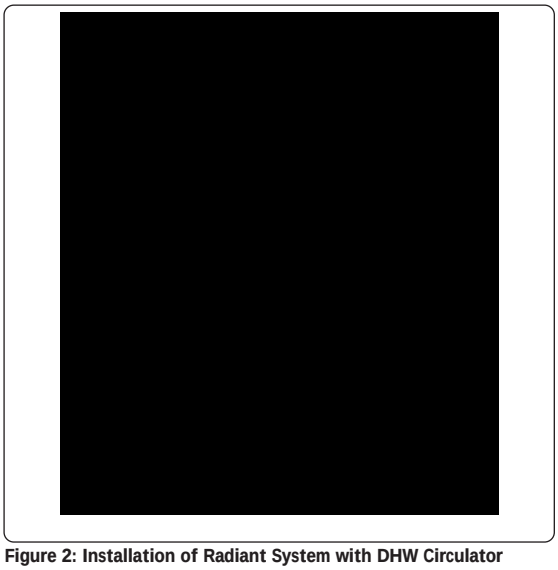


**Figure 2: Installation of Radiant System with DHW Circulator**

**Warning:** Make wiring connections in accordance with all applicable electrical codes. Use copper wire only. Failure to follow this instruction can result in serious personal injury or death and/or property damage. Uponor recommends using 10- to 18-gauge wire for 120VAC connections with 9 in. lbs. maximum torque, 12- to 22-gauge wire for thermostat connections with 9 in. lbs. maximum torque, and 12- to 22-gauge wire for 24VAC source with 5 in. lbs. maximum torque.

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