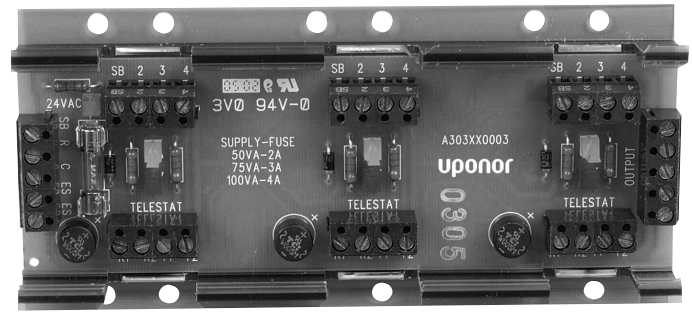

uponor

RADIANT HEATING SYSTEMS

ZONE CONTROL MODULE

INSTRUCTION SHEET

Introduction

The Uponor Zone Control Module is a printed circuit control and diagnostic device designed for use with Uponor Thermostats, Motorized Valve Actuators (MVAs), Thermal Actuators or Zone Valves.

The module provides the following.

- A connection to the power supply transformer
- Interconnections between the individual thermostats and their respective MVAs, thermal actuators or zone valves
- The connection between the end switches and the pump or boiler relay

The modules are internally fused for protection from over current or direct shorts from the power supply transformer. The end-switch circuit is also protected from over current and a 2 amp fuse is factory installed.

Note: Because the E/S terminals are completely isolated, the modules no longer require separate transformers on R and C and E/S terminals. Pay careful attention to transformer sizing if using only one transformer.

Part No.	Part Description	Width	Height
A3030003	Three-zone Control Module	6"	2"
A3030004	Four-zone Control Module	8"	2"

Table 1: Product Descriptions

Specifications

Power Input	24VAC
End-switch Circuit	Dry contact equivalent nominal 24VAC, 2A maximum
Recommended Thermostat Wire Size	18GA

Part No.	Part Description	50VA	75VA	100VA
A3020522	Motorized Valve Actuator	6	9	12
A3070526	1" Zone Valve	6	9	12
A3010522	Thermal Actuator	12	19	25

Table 2: Maximum Number of Zones on a Transformer

Zone Configurations

The Uponor Zone Control Modules are available in both three- and four-zone configurations. Boards can be ganged together to expand the number of zones.

Note: The new Zone Control Modules are note able to be ganged with older modules. The new modules have a black tint base; the old modules have a green tint base.

Display

Light-emitting diodes (LEDs) indicate various functions of control. Refer to **Table 3** for LED definitions.

Connecting Instructions

Refer to the following instructions to properly connect the module.

1. Connect modules in series via a module jumper (provided).
2. Fasten the jumper within the input and output blocks of the corresponding modules (see **Figure 1** on page 2).

LED	Definition
Green	Module has power
Yellow	Shows which zones are calling for heat
Red	Indicates which end switches are closed and completing the circuit for the pump or boiler relay

Table 3: LED Definitions

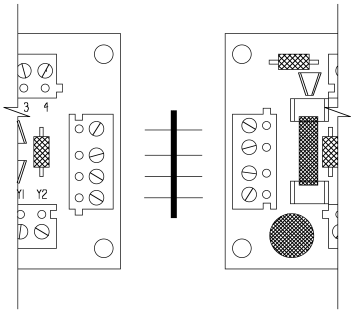

Figure 1: Module Jumper

Wiring Instructions

Refer to the following instructions to properly wire the module.

1. Strip ⅜" insulation from the wire.
2. Ensure the wire is fully seated in the terminal and that it does not short to adjacent wires.
3. Twist loose stranded wire tightly. Ensure no loose strands are present.
4. Tighten the terminal nut.

Note: Each terminal is equipped with a jamb plate for accommodating stranded wire. When reconnecting the terminal, it may be necessary to push the jamb plate back into place with a suitable round punch prior to reinserting the stranded wires. The maximum number of connections per terminal is four. If more than four wires are required at the terminal, bundle or wire nut the wires together and run one wire to the terminal.

Note: If using Uponor 500 Series controls, use a minimum of three-wire thermostat wire for proper functioning of the thermostat. (Five wire is recommended.)

Fuse Replacement

Replace fuses on the board following the guidelines below.

- 2A fuse for 50VA transformer
- 3A fuse for 75VA transformer
- 4A fuse for 100VA transformer

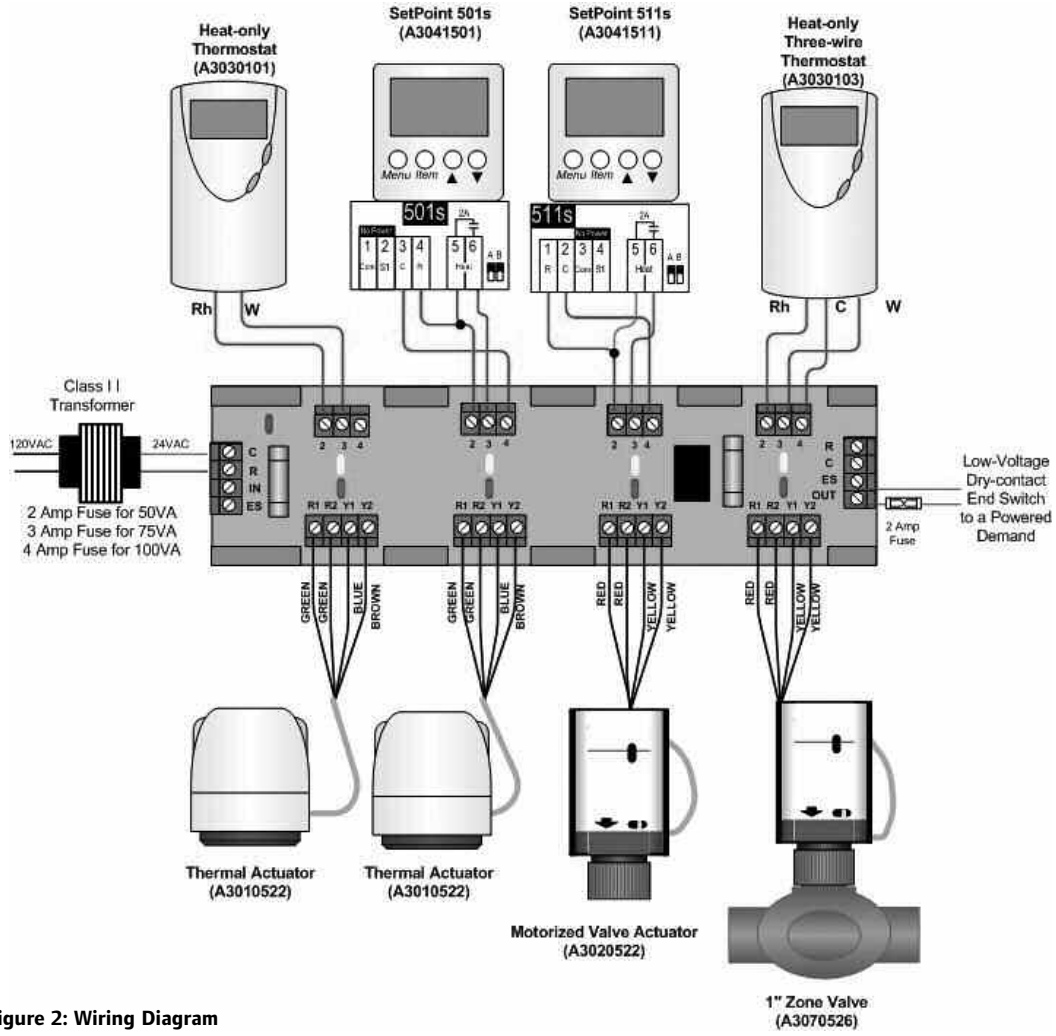

Figure 2: Wiring Diagram

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