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.

**Table 1: Product Descriptions**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Part Description</th>
<th>Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>A3030003</td>
<td>Three-zone Control Module</td>
<td>6”</td>
<td>2”</td>
</tr>
<tr>
<td>A3030004</td>
<td>Four-zone Control Module</td>
<td>8”</td>
<td>2”</td>
</tr>
</tbody>
</table>

**Table 2: Maximum Number of Zones on a Transformer**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Part Description</th>
<th>50VA</th>
<th>75VA</th>
<th>100VA</th>
</tr>
</thead>
<tbody>
<tr>
<td>A3020522</td>
<td>Motorized Valve Actuator</td>
<td>6</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>A3070526</td>
<td>1” Zone Valve</td>
<td>6</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>A3010522</td>
<td>Thermal Actuator</td>
<td>12</td>
<td>19</td>
<td>25</td>
</tr>
</tbody>
</table>

**Table 3: LED Definitions**

<table>
<thead>
<tr>
<th>LED</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Module has power</td>
</tr>
<tr>
<td>Yellow</td>
<td>Shows which zones are calling for heat</td>
</tr>
<tr>
<td>Red</td>
<td>Indicates which end switches are closed and completing the circuit for the pump or boiler relay</td>
</tr>
</tbody>
</table>

**Specifications**

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

**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).
Wiring Instructions

Refer to the following instructions to properly wire the module.

1. Strip \( \frac{3}{8} \)" 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