WEIL-McLAIN
Zone Controllers

WMCR
Circulator Zone Controls

WMZV
Zone Valve Controls

WM-ODR
Outdoor Reset Control

WMR
Switching Relays

Applications:
- Residential
- Schools and Other Institutions
- Indirect-fired Water Heating
- Radiant Heating
  ... And Much More

Controllers for Circulator and Zone Valve Systems
Simple Installation & Wiring
Variety of Sizes and Options
Features ... Advantages ... Benefits

WMCR Circulator Controllers

- **Plug-in expansion ports** for easy addition of WM-ODR (outdoor reset control) and zone expansion modules WMCR-1E and WMCR-4E.
- **Advanced circuit board design with plug-in relays** provides long life and compatibility with most digital / programmable thermostats.
- **Isolated end switch (xx) rated for 10 amps** provides a single dry contact to energize the boiler, simplifying wiring. (WMCR-2 has a set of x,x,x contacts and a set of x,x,x contacts.)
- **Field selectable priority zone** overrides all non-priority zones ... perfect for installations with a zone dedicated to domestic hot water.
- **Priority interrupt** temporarily turns off the priority zone if activated for over 30 minutes, permitting other zones to operate if calling for heat.
- **LED indicator lights** for easy viewing of active zones.
- **100% factory-tested** for reliable operation.
- **5-Year limited warranty backed by Weil-McLain** covers most major parts for up to 5 years.

Product Description

The WMCR family of circulator zone controllers consists of 4 separate, stand-alone control panels designed to simplify the installation, wiring, and control of systems using zone circulators. Each control consists of a double-sided printed circuit board mounted in a heavy gauge metal enclosure. These panels provide control of 2 to 6 zones (WMCR-2 to WMCR-6) with the ability to expand to a total of 15 zones with the addition of the WMCR-1E or WMCR-4E expansion modules.

Each panel is supplied with a field selectable priority zone switch that temporarily turns off all non-priority zone circulators if the priority zone (typically domestic hot water) is activated.

The WMCR-3, 4, and 6 are equipped with ZC / ZR terminals for application to either a cold start boiler or a boiler with a tankless coil control.

An additional feature on the WMCR is the ability to add an outdoor reset control (WM-ODR) to the panel, thus resetting the boiler system water temperature based on a proportional change in outdoor temperature.

Electrical Specifications

<table>
<thead>
<tr>
<th>W-M Model</th>
<th>Zones</th>
<th>Transformer Voltage</th>
<th>Relay Switching Action</th>
<th>Thermostat Current Amps</th>
<th>Single Phase Motor Rating (Each Circuit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMCR-2</td>
<td>2</td>
<td>120V, 60HZ, 20VA</td>
<td>SPST</td>
<td>0.85</td>
<td>1/3 HP @ 240 VAC</td>
</tr>
<tr>
<td>WMCR-3</td>
<td>3</td>
<td>120V, 60HZ, 30VA</td>
<td>SPST</td>
<td>0.85</td>
<td>1/3 HP @ 240 VAC</td>
</tr>
<tr>
<td>WMCR-4</td>
<td>4</td>
<td>120V, 60HZ, 30VA</td>
<td>SPST</td>
<td>0.85</td>
<td>1/3 HP @ 240 VAC</td>
</tr>
<tr>
<td>WMCR-6</td>
<td>6</td>
<td>120V, 60HZ, 30VA</td>
<td>SPST</td>
<td>0.85</td>
<td>1/3 HP @ 240 VAC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>W-M Model</th>
<th>Added Zones</th>
<th>Transformer Voltage (24VAC)</th>
<th>Thermostat Current Amps</th>
<th>Relay Contact Rating (10 amps @ 120 or 240 VAC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMCR-1E</td>
<td>1</td>
<td>Supplied by Master</td>
<td>0.85</td>
<td>1/3 HP @ 120 VAC @ 120 VAC</td>
</tr>
<tr>
<td>WMCR-4E</td>
<td>4</td>
<td>Supplied by Master</td>
<td>0.85</td>
<td>1/3 HP @ 120 VAC @ 240 VAC</td>
</tr>
</tbody>
</table>
Features ... Advantages ... Benefits

- Quick connect clamp terminals for easy wiring of 2, 3 and 4-wire zone valves.
- 24 VAC constant power terminals for connection of 5-wire zone valves supplied with Weil-McLain indirect-fired water heater installation kits.
- Advanced circuit board design with plug-in relays provides long life.
- Isolated end switch (xx) rated for 10 amps isolates boiler from zone valve voltage.
- Field selectable priority zone overrides all non-priority zones ... perfect for installations with a zone dedicated to domestic hot water.
- Powerful transformer up to 75 VA to operate up to 6 zones.
- LED indicator lights for easy viewing of active zones.
- 100% factory-tested provides reliable operation.
- 5-Year limited warranty backed by Weil-McLain covers most major parts for up to 5 years.

Product Description

The WMZV-4 and WMZV-6 zone controllers are stand-alone panels designed to simplify the installation, wiring and control of systems using 2 to 5-wire zone valves. Each control consists of a printed circuit board mounted in a heavy gauge metal enclosure.

Each panel is supplied with a field selectable priority zone switch that de-energizes all additional zones when the priority zone calls for heat. Perfect for systems with a zone dedicated to domestic hot water production. Isolated end switch (xx) isolates the boiler from zone valve voltage to help overcome potential wiring problems.

The WMZV-4 and WMZV-6 zone controllers can also be combined with a Weil-McLain outdoor reset control (WM-ODR) to automatically reset boiler system water temperature based on a proportional change in outdoor temperature.

Electrical Specifications

<table>
<thead>
<tr>
<th>W-M Model</th>
<th>Zones</th>
<th>Transformer Output at 24 VAC</th>
<th>End Switch Contact Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMZV-4</td>
<td>4</td>
<td>40 VA</td>
<td>1/3 HP @ 120 VAC</td>
</tr>
<tr>
<td>WMZV-6</td>
<td>6</td>
<td>75 VA</td>
<td>1/3 HP @ 120 VAC</td>
</tr>
</tbody>
</table>
**Features ... Advantages ... Benefits**

**WM-ODR**
Outdoor Reset Controller

- **Reset system water temperature** to provide a higher level of comfort while potentially conserving fuel.
- **Quick connect screw terminals** allow for hard wire connection to Weil-McLain WMZV zone valve controllers.
- **Control ports** for simple hook-up to Weil-McLain WMCR circulator zone controllers using supplied ribbon cable.
- **Priority override** automatically disables reset feature when the priority zone calls for heat.
- **LED indicator lights** for viewing operational status
- **100% factory-tested** for reliable operation.
- **5-Year limited warranty backed by Weil-McLain** covers most major parts for up to 5 years.

**Product Description**
The WM-ODR outdoor reset control is designed to interact with the WMCR and WMZV controllers as a cost effective means to raise or lower boiler system water temperatures based on a corresponding decrease or increase in outdoor temperature. Resetting the system water temperature provides a better match to the actual heating requirements, potentially conserving energy. The WM-ODR is mounted in a heavy gauge metal enclosure.

<table>
<thead>
<tr>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adjustments</strong></td>
</tr>
<tr>
<td>Reset Ratio</td>
</tr>
<tr>
<td>0.5 to 1.5</td>
</tr>
</tbody>
</table>

**Features ... Advantages ... Benefits**

**WMR**
Switching Relays

- **Contact rating 10 amps for up to 240 VAC** can handle up to 1/3 hp motor at 120 VAC or 1/2 hp at 240 VAC.
- **Quick connect screw terminals with clamping plates** for easy installation.
- **LED indicator lights** for viewing control status.
- **100% factory-tested** provides reliable operation.
- **5-Year limited warranty backed by Weil-McLain** covers most major parts for up to 5 years.

**Product Description**
The WMR Switching Relays WMR-21 and WMR-22 are stand-alone relays enclosed in a heavy gauge metal enclosure. These versatile relays are designed to provide an easy method of controlling motors such as those used in circulators for hydronic systems.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>W-M Model</strong></td>
</tr>
<tr>
<td>WMR-21</td>
</tr>
<tr>
<td>WMR-22</td>
</tr>
</tbody>
</table>

In the interest of continual improvements in product and performance, Weil-McLain reserves the right to change specifications without notice.