

WEIL-McLAIN

an ISO 9001 Certified Company

Zone Controllers



WMCR

Circulator Zone Controls

WMZV

Zone Valve Controls

WM-ODR

Outdoor Reset Control

WMR

Switching Relays

- Controllers for Circulator and Zone Valve Systems
- Simple Installation & Wiring
- Variety of Sizes and Options

Applications:

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

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_1x_1 contacts and a set of x_2x_2 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.



WMCR-6 cabled to WMCR-1E

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

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

W-M Model	Added Zones	Transformer Voltage (24VAC)	Thermostat Current Amps	Relay Contact Rating (10 amps @ 120 or 240 VAC)
WMCR-1E	1	Supplied by Master Circulator Zone Control	0.85	1/3 HP @ 120 VAC 1/3 HP @ 240 VAC
WMCR-4E	4	Supplied by Master Circulator Zone Control	0.85	1/3 HP @ 120 VAC 1/3 HP @ 240 VAC

Features ... Advantages ... Benefits

WMZV Zone Valve Controllers

- *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.



WMZV-6
Shown

Electrical Specifications

W-M Model	Zones	Transformer Output at 24 VAC	End Switch Contact Rating
WMZV-4	4	40 VA	1/3 HP @ 120 VAC
WMZV-6	6	75 VA	1/3 HP @ 120 VAC

Features ... Advantages ... Benefits

WM-ODR Outdoor Reset Controller



- **Resets 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.



Ribbon Cable



Outdoor
Sensor
Housing



Outdoor and
System Water
Sensor

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.

Specifications

Adjustments			Technical Specifications	
Reset Ratio	Max Temp	Differential	Power Supply	Sensor (1000 ohms @70°F)
0.5 to 1.5	150° to 210°	5° to 15°	20-28 VAC, 2 VA	Accurate up to 500 ft. With 18 gauge wire

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.



Electrical Specifications

W-M Model	Transformer Voltage	Relay Switching Action	Thermostat Current	Single Phase Motor Rating	
				120 VAC	240 VAC
WMR-21	120V, 60HZ, 15VA	DPST	0.18	10 A, 1/3 HP	10 A, 1/2 HP
WMR-22	120V, 60HZ, 15VA	DPDT	0.18	10 A, 1/3 HP	10 A, 1/2 HP

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



Locate our Sales Offices by visiting our website:
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