



## SIEMENS

Siemens control valves use a 24VAC supply voltage and a 0-10VDC control voltage

### *MX SERIES*

The Siemens MX series valves are for use of less than 15psi supply pressure when using steam as the heating medium. The MX valve can be used with boiler water up to 250°F @145 psi. The valve uses an ASE-1 Top Module for ½” through 1- ¼” valve size. MX valve sizes 1- ½” and 2” use the ASE-2 Top Module. The valve series may be further identified as MXG or MXF. G for “Groove” or F for “Flange”. The Siemens MX series valves will fail closed upon loss of power due to spring tension.

### *MVF SERIES*

The Siemens MVF series valve are for supply pressures between 0 -130 psi when using steam as the heating medium. The MVF valve can be used with boiler water up to 356°F@188 psi. These valves use an ASE-12 control module for all the available sizes. The Siemens MVF series valves will fail closed upon loss of power due to spring tension.

### *M3P SERIES*

The Siemens M3P series valves use a ZM250 module for all available sizes. The M3P is used when the heating medium is boiler water up to 250°F@145 psi. The M3P valve sizes are 3” or 4”. It is important that when using an M3P control valve that the 24Vac hot is connected to the “24Vac out to control valve” on the controller and the 24Vac return is connected to the Ground position on the “24Vac to valve” on the controller. If the hot and return are reversed the valve will never completely close when power is applied. The 0-10Vdc used by the valve to determine operating position also has a ground position that is the same point electrically as the 24Vac to valve ground, so when the 24Vac is connected backwards you are creating a ground loop that adversely affects the performance of the actuator on the valve. The Siemens M3P series valves will fail closed upon loss of power due to spring tension.

## WARREN

### *ARIA and ILEA*

Warren ARIA and ILEA valves can be used with steam, boiler water, or high temperature hot water depending upon the valve body material and trim configuration provided. Warren ARIA and ILEA actuators use a 24VDC supply and a 0-10VDC control voltage (unless otherwise marked). The ARIA and ILEA actuators use a dedicated regulated 24VDC Power supply to provide the 24VDC so that the voltage



## CEMLINE® ELECTRONIC CONTROL VALVES EXPLAINED

does not ever fluctuate and less noise is able to make it to the actuator. The actuators used on these valves are susceptible to errors caused by electrical noise.

The ARIA actuator uses a 24VDC regulated power supply and a 0-10VDC control signal. The ARIA actuator is a PS Automation actuator that uses a spring to return the actuator to the closed position if there is a loss of power or loss of control signal.

The ILEA uses a PS Automation actuator that has capacitors within it that store a charge so that the actuator can return to the closed position upon loss of power or the control signal.

### *AMURACT*

Warren Amuract actuators use a 120VAC supply voltage and a 2-10VDC control signal. The 24Vac to the control valve is used to energize/deenergize a relay used to couple/interrupt the control signal on primary high limit. The F1, F2, F3, and F4 actuator motors are designed to fail closed on loss of power or control signal via capacitors that store charge to drive the motor closed.

## **CONTROL PRO**

### *R.E.V. SERIES*

Control Pro REV Valves use a 24VDC supply and a 0-10VDC control voltage. The Control Pro valves use a dedicated regulated power supply to prevent voltage fluctuation and also to prevent any electrical noise from reaching the actuators. The PS automation actuators are susceptible to errors caused by electrical noise. The REV1.5 actuator uses a spring to return it to the closed position upon loss of power or control signal. All of the other REV actuated valves use a PS Automation actuator that have capacitors within the actuator to store a charge used to close the valve upon loss of power or control signal

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