

Model EST

Electric Solenoid Timer

ZURN
WILKINS

Installation Testing Maintenance Instructions

FEATURES

Input - 120 VAC 5A

Relay Power - 1.1 VA @ 24VAC

Low Voltage Power Supply - 24 VA @ 24VAC

Contact Closure - 3A @ 120VAC

120VAC Output - 3A

24VAC Output - 0.7A

5A Fuse maximum

Intended for use with 24vac solenoid control valve

OPERATION

When backflow relief valve monitor switch is closed for the time delay, the output relay will trigger, activating alarm light and latching output relay. Output relay switches 120 VAC terminals (T1A, T1B), 24VAC terminals (T3A, T3B) and alarm contact terminals (T5, T7). Turn power off and back on to reset relay. To adjust time delay turn knob on timer. Factory set at 10 seconds to avoid nuisance alarms. To test alarm or check time delay, press and hold TEST switch until red light comes on. Green light on timer should light when TEST switch is pressed.

INSTALLATION

Connect 120 VAC input to terminals T10-T12. Connect backflow relief valve monitor switch to T8 and T9. Connect a normally closed solenoid shut off valve to T3B and T4. Connect a normally open solenoid shut off valve to T3A and T4. The ZW206 solenoid shut off valve will turn the water supply off when the alarm triggers. Terminals T5 - T7 can be connected to an external alarm panel. T1A and T2 can be used to power an external high voltage alarm.

OUTPUT

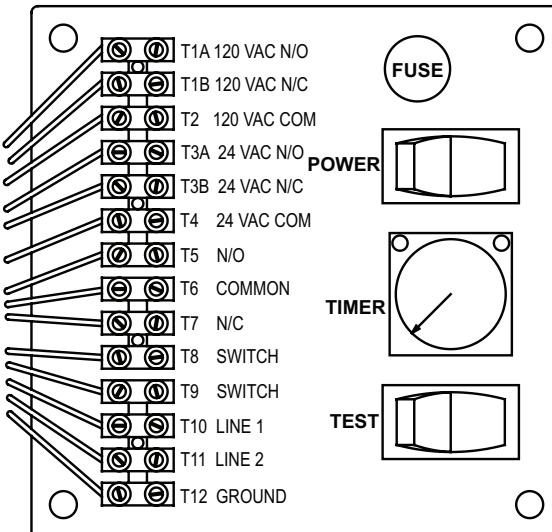
The 120VAC at T1A and T2 is normally open and will power an external alarm when the relay latches. The 24 VAC output can be used with a normally open or normally closed solenoid valve to turn off the water to the backflow.

A normally open valve will provide water during a power failure. A normally closed valve will turn the water OFF during a power failure. ZURN WILKINS recommends a 24 volt AC solenoid, but a 120 volt AC solenoid can be used on terminals T2 and T1A or T1B.

ADJUSTMENT

The time delay is factory set for a range of 1 to 10 seconds. The adjustment dial on top of the timer can be used to adjust this delay. Do not remove timer from socket while power is on.

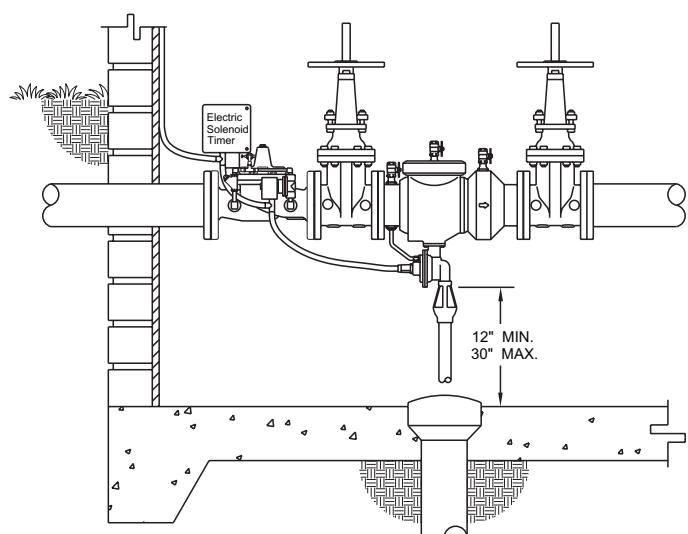
POWER LIGHT ALARM LIGHT



WARNING!

A solenoid shutoff valve should not be installed on a system that must be supplied with water at all times (i.e. hospital, processing plant, etc.) If water must remain on during a power failure, a normally open solenoid valve should be ordered.

If the downstream piping is above the backflow preventer, then a failed 2nd check could cause relief valve discharge to continue draining a system after the supply is off. For systems with large amounts of water, like a high-rise building, a single check should be installed after the backflow.



Model 375MS

with ZW206 Solenoid Control Valve and EST

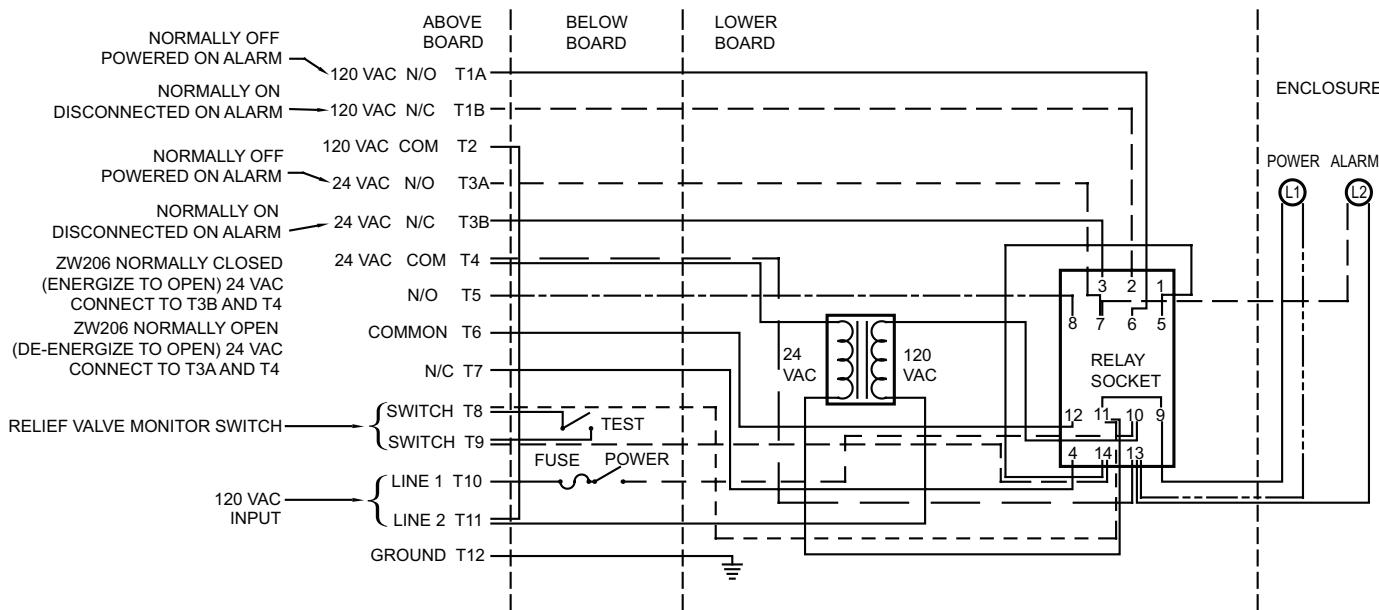
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Wiring Diagram



Troubleshooting

Problem

Solenoid buzzes and does not activate

Possible Solution

Solenoid voltage does not match wiring terminals.
Check solenoid voltage stamped on green coil.

No water to backflow

Check power connection and power light.
Turn power off and back on to reset solenoid.
Adjust timer delay so valve has time to re-pressurize before alarm triggers.
Check that normally open / normally closed solenoid has been wired to correct terminals (A or B).

WARRANTY: ZURN WILKINS Valves are guaranteed against defects of material or workmanship when used for the services recommended. If in any recommended service, a defect develops due to material or workmanship, and the device is returned, freight prepaid, to ZURN WILKINS within 12 months from date of purchase, it will be repaired or replaced free of charge. ZURN WILKINS' liability shall be limited to our agreement to repair or replace the valve only.

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⚠ **ADVERTENCIA:** Cáncer y daño reproductivo - www.P65Warnings.ca.gov

⚠ **AVERTISSEMENT:** Cancer et néfastes sur la reproduction - www.P65Warnings.ca.gov