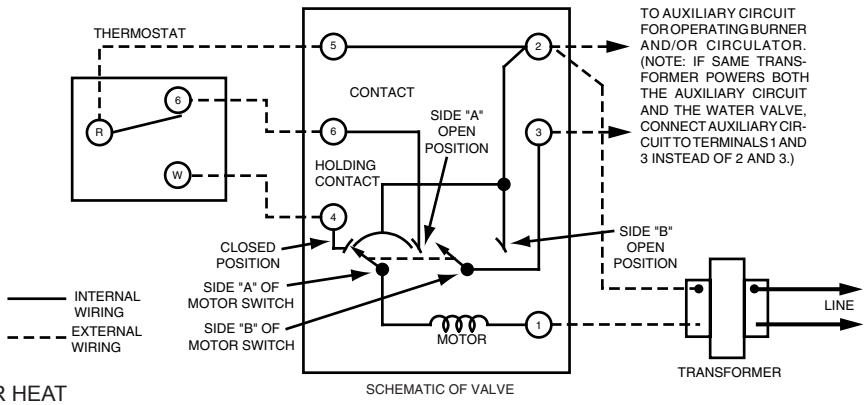
1311 Three Wire Zone Valve

TERMINALS 1, 2 = POWER TO VALVE
1= 24 VAC NEUTRAL
2 = 24 VAC HOT

TERMINALS 5,4,6 = SPDT THERMOSTAT
5 = POWER (SAME AS 2 INTERNALLY)
4 = OPENS VALVE
6 = CLOSES VALVE

TERMINALS 2, 3 = AUXILIARY SWITCH
2, 3 BECOME SAME POINT ON CALL FOR HEAT

TERMINALS 1, 3 = POWER OUT TO AUXILIARY CIRCUIT ON CALL FOR HEAT



TROUBLESHOOTING:

1) Attach a voltmeter to terminals 1 and 2. Power (24 volts) should always be present on 1 and 2. If power is interrupted check transformer or power source.

2) With a voltmeter attached as above, jumper terminals 5 and 4 to verify the valve opens. If power is present on 1 and 2 but the valve fails to open check connections. Replace motor assembly (replacement Motor # F19-0097) if condition persists. When the valve opens, break the connection between 5 and 4 and jumper between 5 and 6. The valve should close. If the valve fails to close replace motor assembly.

3) Terminals 2 and 3 (auxiliary circuit) become the same point electrically when the valve opens. Because terminal 2 is 24 volts hot, a voltmeter should read 24 volts between terminal 3 and terminal 1 (neutral) when the valve is open.

Note: If the auxiliary circuit terminals (2 and 3) are being attached to a control circuit with a separate transformer the transformers must be in phase or one transformer may be damaged. If phasing the transformers is not possible a 24 volt isolation relay can be installed with the coil attached to terminals 1 and 3 and the contacts can be used to operate the control circuit. The relay will energize when the valve opens.

For complete installation instructions visit our website.