

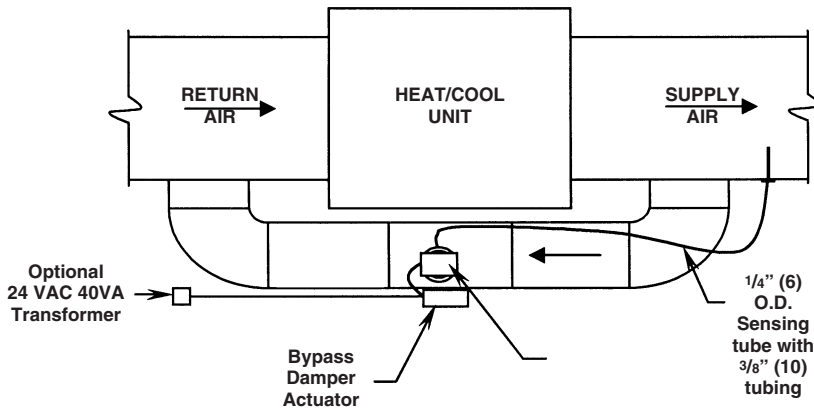
## INSTALLATION INSTRUCTIONS ZSPC200 BYPASS DAMPER STATIC PRESSURE CONTROL

### HOW THE BYPASS SYSTEM WORKS

As individual zone dampers open and close, the system static pressure rises and falls. In order to maintain proper airflow and static pressure through the HVAC system, a bypass system incorporating a reversible type motorized damper and a static pressure control should be used. The static pressure control is equipped with a solid-state switching and timing circuit to enhance operation and improve reliability.

### INSTALLING THE BYPASS DAMPER AND STATIC PRESSURE CONTROL ASSEMBLY

The bypass damper should be installed with the bypass air being discharged into the return air plenum (or above the ceiling if this area is used as a common return). The static pressure control should be installed so that the diaphragm is in the vertical position. The high pressure side of the static pressure control should be connected to the metal sensing tube and inserted in the main supply plenum, downstream of the bypass damper and at least 3 feet from the air handling unit in a straight section of duct at the center line. The furnished sensing tube is a 7" (18) length of 1/4" (6) O.D. rigid tubing and is connected to the pressure control with 3/8" (10) O.D. plastic tubing. The sensing tube should be inserted and sealed 6" (15) into the duct. The sensing tube, plastic tubing, and mounting fittings are furnished with static pressure control.



**CONTROL MUST BE MOUNTED  
IN VERTICAL POSITION**

**THE STATIC PRESSURE  
CONTROL HAS BEEN  
FACTORY SET AT 0.4" W.C.**

**NEVER TURN ADJUSTING SCREW  
MORE THAN ONE HALF  
TURN IN EITHER DIRECTION**

### ADJUSTING THE STATIC PRESSURE CONTROL

1. Confirm that the HVAC system has been properly balanced.
2. Confirm that all zone dampers are in the open position.
3. Confirm that the bypass damper is in the closed position.
4. Confirm that the fan is running.
5. Turn the static pressure adjusting screw SLOWLY counter-clockwise until green light comes on, then turn the adjusting screw SLOWLY clockwise just enough so that the green light goes out. The pressure control is now set at the pressure which the sensing tube is detecting.

Turning the adjusting screw counter-clockwise will bring on the

green light and will begin to drive the bypass damper open, which will lower the system static pressure. When turning screw counter-clockwise, stop when screw becomes difficult to turn.

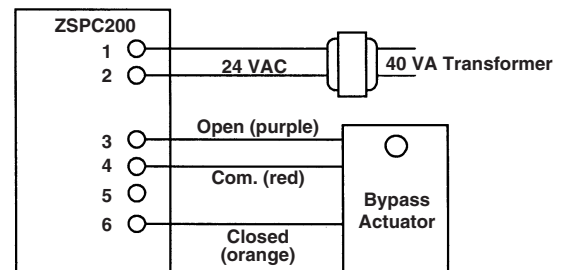
Turning the adjusting screw clockwise will turn off the green light and will begin to drive the bypass damper closed, which will raise the system static pressure. There is a ten second time delay after the green light goes out and before the damper starts to move. When turning screw clockwise, stop when screw becomes difficult to turn.

We recommend using a Dwyer #4001 pressure gage when setting the bypass control.

### SPECIFICATIONS

Pressure Range:	0.2" to 2.0" W.C.
Pressure Connection:	1/4" (6) I.D. flex hose
Operating Temperature:	-40° to 190° F
Maximum Switching Current:	1 Amp @ 24 VAC
Maximum Pressure:	0.5 PSI

### WIRING DIAGRAM



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