

General Instructions For SPS

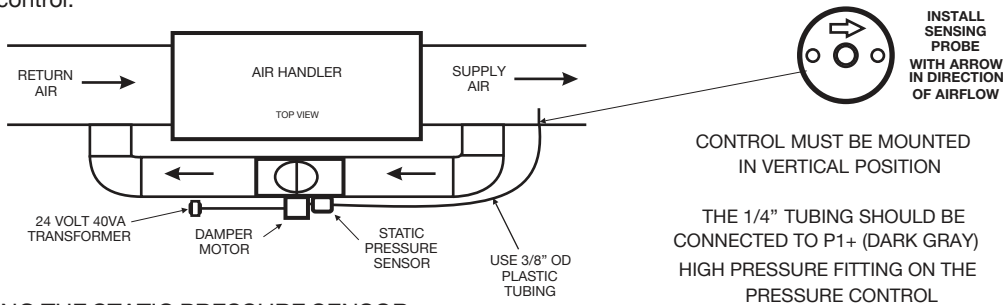
Static Pressure Sensor for use with Bypass Dampers

HOW THE BYPASS SYSTEM WORKS

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

INSTALLING THE BYPASS DAMPER AND STATIC PRESSURE SENSOR 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 sensor should be installed so that the diaphragm is in the vertical position. The high pressure side (P1+) of the static pressure control should be connected to the plastic sensing probe 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 sensing probe is 2.5" (6.35cm) x 1/4" (6mm) O.D. and is connected to the pressure control with 1/4" O.D. plastic tubing. The sensing probe should be installed with the arrow in the direction of airflow. The sensing probe, 6' of plastic tubing, and mounting hardware are furnished with static pressure control.



ADJUSTING THE STATIC PRESSURE SENSOR

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. Use the setpoint adjustment knob to set the static pressure by aligning with the arrow.

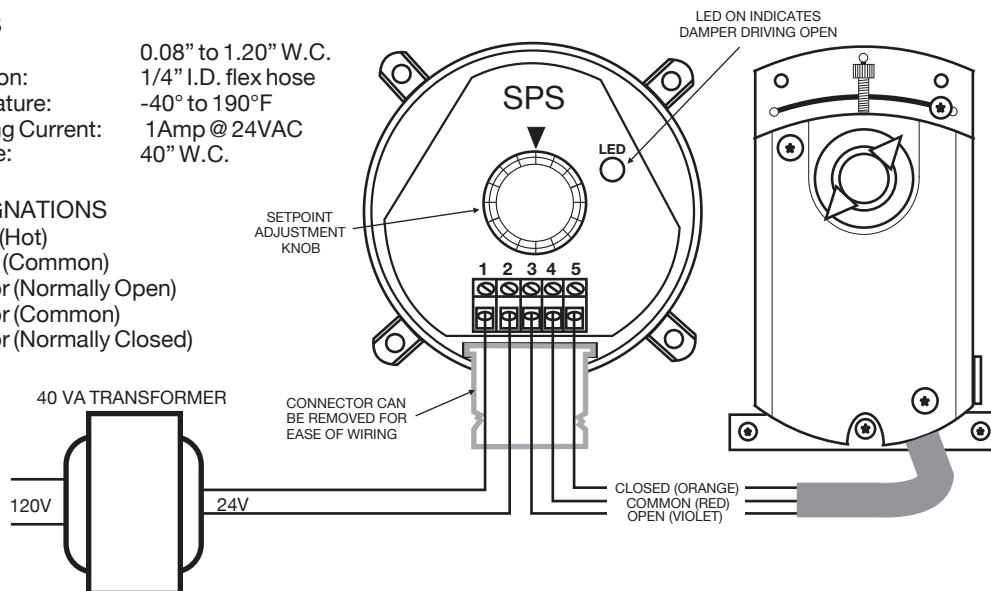
THE STATIC PRESSURE CONTROL HAS BEEN FACTORY SET AT 0.40" W.C.

SPECIFICATIONS

Pressure Range: 0.08" to 1.20" W.C.
 Pressure Connection: 1/4" I.D. flex hose
 Operating Temperature: -40° to 190°F
 Maximum Switching Current: 1Amp @ 24VAC
 Maximum Pressure: 40" W.C.

TERMINAL DESIGNATIONS

- 1 = 24 Volt (Hot)
- 2 = 24 Volt (Common)
- 3 = Actuator (Normally Open)
- 4 = Actuator (Common)
- 5 = Actuator (Normally Closed)



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