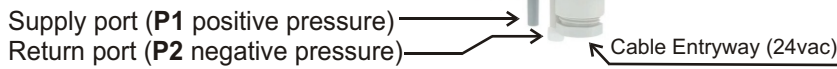


Package includes:

- 1 - Listed Differential Pressure Switch
- 2 - Integrated 1/4" OD connectors
- 1 - Motor actuator wiring harness
- 1 - Mounting bracket
- 1 - Mounting hardware
- 2 - Pitot tubes
- 1 - 16' length pressure tubing
- 2 - Wire connectors
- 4 - Plastic wire ties

The PS4 is normally factory mounted to an ND or URD style damper to create a model EBD by-pass damper. The PS4 can also be retro-fitted to an existing model ND or URD damper to create a model EBD in the field.

The completed assembly (EBD) can sense the total static pressure of the HVAC system and modulate bypass flow, to control the static pressure of the HVAC system during zoned operations.



PS4 (Dwyer #ADPS) Differential Pressure Switch

In order to measure the total static pressure of the HVAC system, you must reference the supply duct pressure along with the return duct pressure.

- * Mount the pitot tubes on the supply and return ducts and mount the PS4 in a suitable location.
- * The PS4 *must* be mounted level and plumb with the pressure connecting tubes pointing straight down, regardless of the damper orientation. It should not be oriented sideways or upside-down.
- * Connect the supplied pressure tubing from each pitot tube, to the pressure connecting tubes on the PS4. Use the supplied wire ties to secure the tubing.
- * Wire the PS4 to the bypass damper motor as shown on page 2. Remove the clear cover plate from the PS4 to make your field wiring connections.
- * Make sure the zoned HVAC system is operating at 100% BTU/CFM capacity, the air filter is clean and all zone dampers are in the full open position.
- * Power up the bypass damper assembly. The bypass damper should be fully closed when all zone dampers are open. If the bypass damper is partially open, adjust the PS4 set-point to a higher static pressure value, to achieve a full closed position when all zones are open/active.
- * Then, satisfy one or more zone thermostats in order to close down one or more zone dampers.
- * Observe the bypass damper as the PS4 senses the increased static pressure and modulates the bypass damper to maintain the static pressure set point you desire.
- * Reference the EBD submittal sheet #090377A0061 Rev. P for additional bypass duct setup



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P/N 090377A0063 REV. L 08.12.24

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SUBMITTAL FORM

SUBMITTED BY: _____
 JOB: _____
 ARCHITECT: _____
 ENGINEER: _____
 CONTRACTOR: _____
 LOCATION: _____

ULTRA-ZONE™

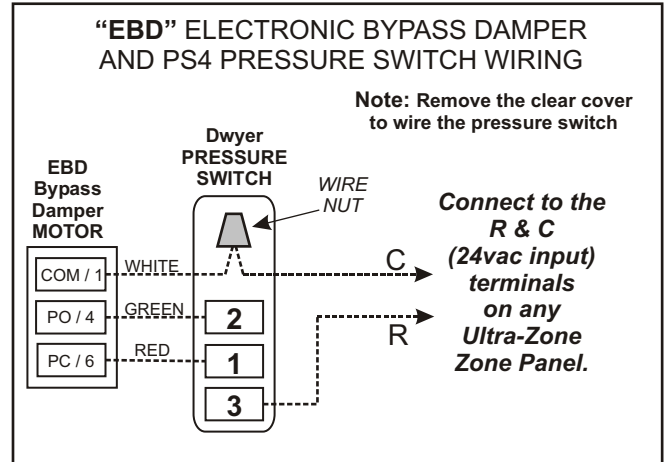
Forced Air Zone Controls

SUBMITTAL SHEET

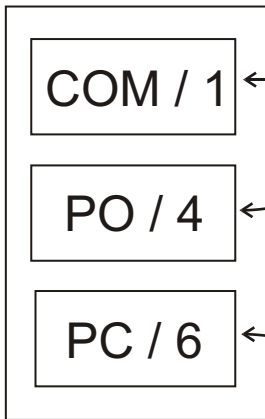
Model PS4
(Differential Pressure Switch)

Remove the frosted cover of the PS4 switch and route 24vac power into the wiring compartment. Connect the 24vac hot (R) wire to terminal 3. Wire nut the 24vac common wire to the factory (white) wire hanging loose in that area.

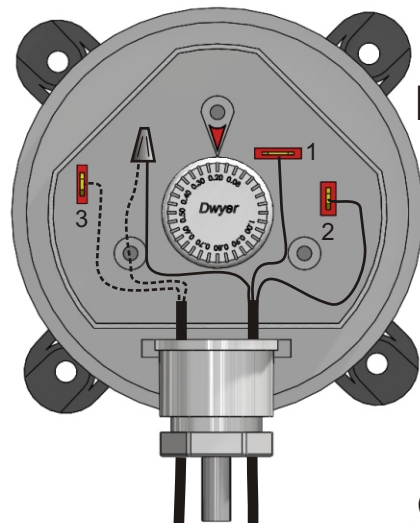
The PS4 is factory set to maintain 0.5"wc total external static pressure. If desired, turn the dial to the static pressure set-point of your choice.



MA-AC1 or MA-ND5 Damper MOTOR



Factory Cable (harness) from PS4 to the EBD Motor Actuator
(White = Com/1)
(Green = PO/4)
(Red = PC/6)



PS4
DP Switch

Field Cable from 24vac power to the PS4
(R = Connect to Terminal 3)
(C = Wire nut to factory white)

Connect to the R & C (24vac input) terminals on any Ultra-Zone zone system.

Field Wiring = - - - - -
Factory Wiring = _____