

## ZONE CONTROL PANEL

The ZP4-ESP is a 4 zone panel that integrates our award winning ESP technology to completely eliminate the need to install a bypass damper. This 3H/2C zone panel comes with a static pressure sensor. The system works like any standard zone control system with one exception; a static pressure sensor continuously monitors the system static pressure. If the static pressure goes above setpoint, the ESP panel will power the selected non-calling zone dampers open just enough to relieve the excess pressure. Tests indicate that bleeding a small amount of conditioned air for a short time into non-calling zones has little to no impact on the zone temperature.

The panel can be used with single-stage, multi-stage, heat pump or dual fuel equipment. A wide range of control options provide ultimate application flexibility including adjustable high/low limits, adjustable high/low balance point, and 2 zone, 2nd stage capacity control.



Also available as kit including:

- ✓ Zone Panel
- ✓ Duct Temperature Sensors
- ✓ Static Pressure Sensor
- ✓ 40VA Transformer

## NO BYPASS REQUIRED!

### Features and Benefits:

- 4 zone universal panel with ESP capability
- Up to 2H/2C conventional or 3H/2C heat pump and dual fuel
- Auto changeover
- First call priority with time share
- 2 zone, 2nd stage capacity control
- Purge cycle option
- Adjustable high and low limits
- Adjustable high and low balance points
- Easy switch configuration
- Fused protected inputs and outputs

### Warranty:

- 10 Years

Static pressure sensor & panel cover included

*\*For ESP functionality, 3-wire MD dampers and static pressure sensor must be used*

## Specifications:

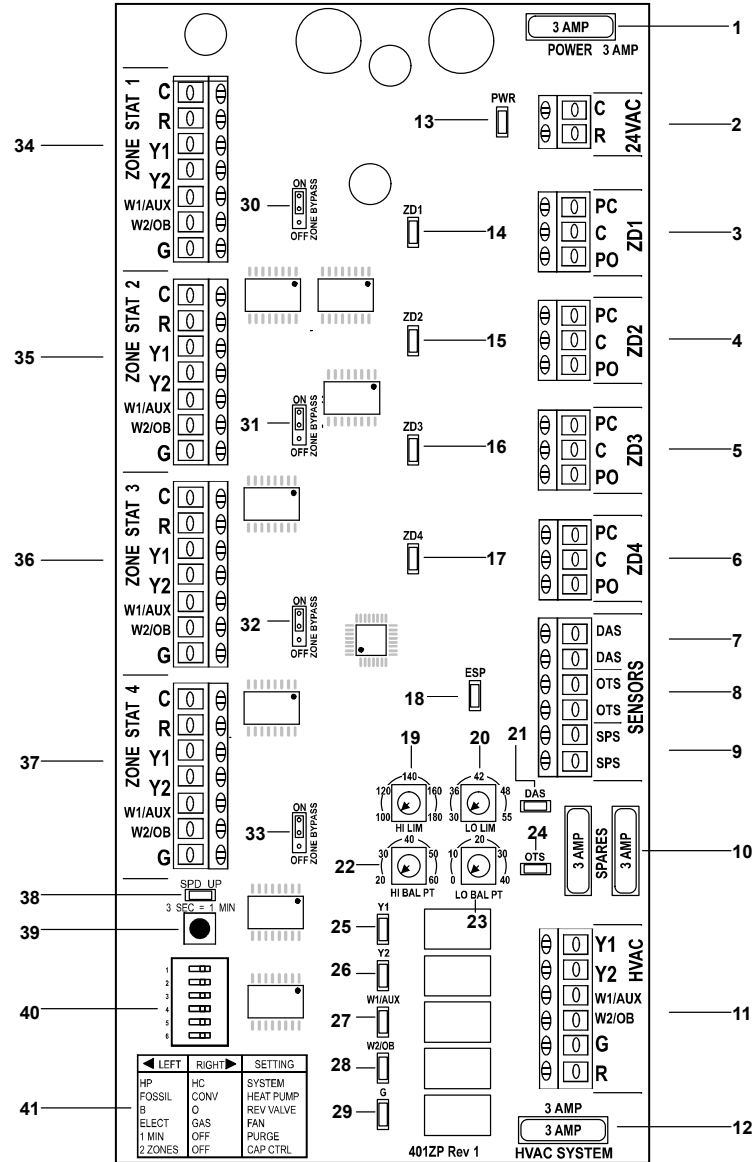
<b>Construction</b>	Plastic ABS enclosure with snap-on panel cover
<b>Mounting</b>	Snap track with 2 back plate screws
<b>Dimensions</b>	8.75" Height x 7" Width x 1.5" Depth
<b>Operating Temperature</b>	-40° F to 150° F
<b>Time Delays</b>	5 minute changeover; 3 minute off on high or low limit 20 minute time share
<b>Discharge Air Limits</b>	Low Limit (30° F to 55° F); High Limit (100° F to 180° F)



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# BOARD DIAGRAM



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|--|---|
| 1. 3 AMP FUSE PROTECTS PRINTED CIRCUIT BOARD | 22. HIGH BALANCE POINT POTENTIOMETER        |
| 2. 24 VOLT TRANSFORMER TERMINALS             | 23. LOW BALANCE POINT POTENTIOMETER         |
| 3. ZONE 1 DAMPER TERMINALS                   | 24. OUTDOOR TEMPERATURE SENSOR LED          |
| 4. ZONE 2 DAMPER TERMINALS                   | 25. Y1 RELAY LED                            |
| 5. ZONE 3 DAMPER TERMINALS                   | 26. Y2 RELAY LED                            |
| 6. ZONE 4 DAMPER TERMINALS                   | 27. W1/AUX RELAY LED                        |
| 7. DISCHARGE AIR SENSOR TERMINALS            | 28. W2/OB RELAY LED                         |
| 8. OUTDOOR TEMPERATURE SENSOR TERMINALS      | 29. G FAN RELAY LED                         |
| 9. STATIC PRESSURE SENSOR TERMINALS          | 30. ZONE 1 BYPASS JUMPER                    |
| 10. SPARE 3 AMP FUSES                        | 31. ZONE 2 BYPASS JUMPER                    |
| 11. HVAC EQUIPMENT TERMINALS                 | 32. ZONE 3 BYPASS JUMPER                    |
| 12. 3 AMP FUSE PROTECTS THE RELAY CONTACTS   | 33. ZONE 4 BYPASS JUMPER                    |
| 13. PANEL POWER LED                          | 34. ZONE 1 THERMOSTAT TERMINALS             |
| 14. ZONE DAMPER 1 LED                        | 35. ZONE 2 THERMOSTAT TERMINALS             |
| 15. ZONE DAMPER 2 LED                        | 36. ZONE 3 THERMOSTAT TERMINALS             |
| 16. ZONE DAMPER 3 LED                        | 37. ZONE 4 THERMOSTAT TERMINALS             |
| 17. ZONE DAMPER 4 LED                        | 38. TIME DELAY SPEED UP LED                 |
| 18. ESP LED                                  | 39. TIME DELAY SPEED UP BUTTON              |
| 19. HIGH LIMIT POTENTIOMETER                 | 40. SYSTEM CONFIGURATION SELECTOR SWITCHES  |
| 20. LOW LIMIT POTENTIOMETER                  | 41. SYSTEM CONFIGURATION SWITCH DEFINITIONS |
| 21. DISCHARGE AIR SENSOR LED                 |   |