

ESP 4 Zone Panel

Zone Control Panel

ZP4-ESP

iO
HVAC Controls

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.

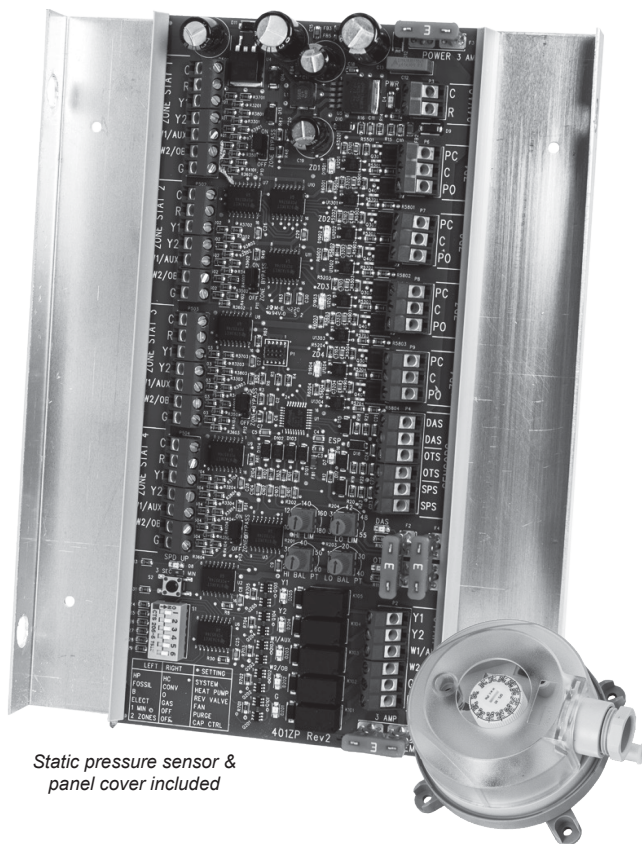
The panel can be used with single-stage, multi-stage, heat pump or dual fuel equipment. A wide range of control options provide ultimate application flexibility including adjustable high/low limits, adjustable high/low balance point, and 2 zone, 2nd stage capacity control.

NO BYPASS REQUIRED!

Features and Benefits:

- 4 zone universal panel with ESP capability
- Smallest universal panel offered by iO
- 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
- Works with 2 or 3 wire zone dampers*

Warranty: 10 years



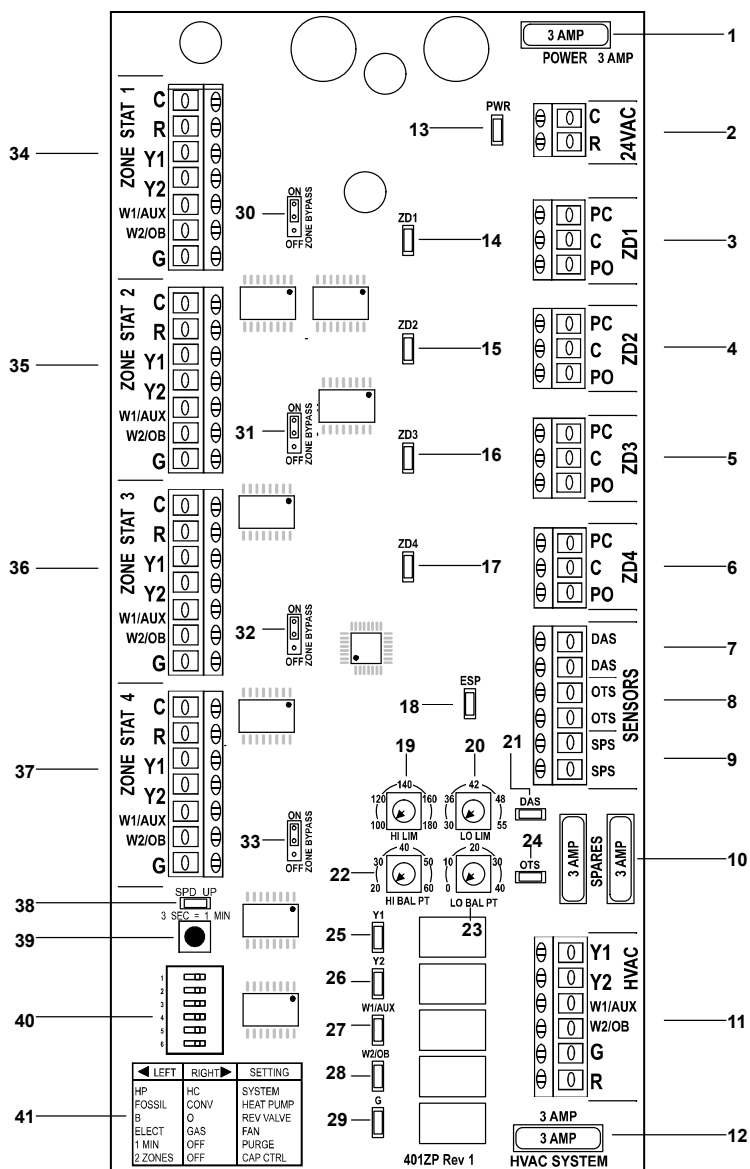
Static pressure sensor &
panel cover included

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

Specifications:

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

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 RELAYS LED |
| 5. ZONE 3 DAMPER TERMINALS | 26. Y2 RELAY LED |
| 6. ZONE 4 DAMPER TERMINALS | 27. W1/AUX LED |
| 7. DISCHARGE AIR SENSOR TERMINALS | 28. W2/OB LED |
| 8. OUTDOOR TEMPERATURE SENSOR TERMINALS | 29. G 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 1 LED | 35. ZONE 2 THERMOSTAT TERMINALS |
| 15. ZONE 2 LED | 36. ZONE 3 THERMOSTAT TERMINALS |
| 16. ZONE 3 LED | 37. ZONE 4 THERMOSTAT TERMINALS |
| 17. ZONE 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 | |



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