ZP4-ESP

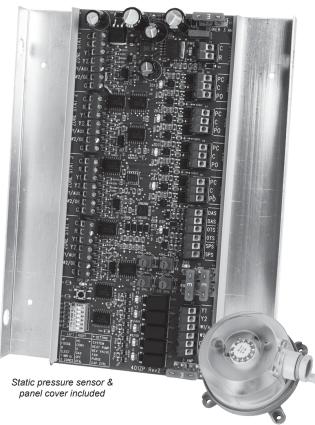
ESP 4 Zone Panel

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.



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*

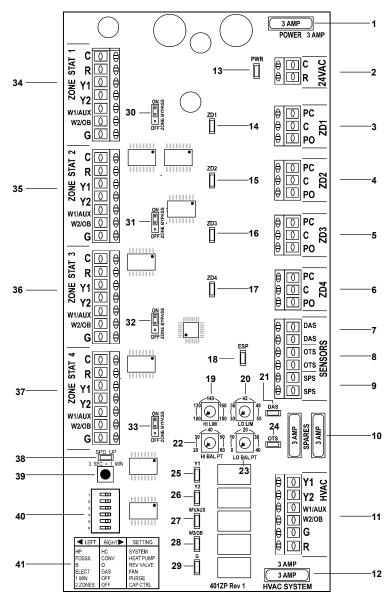
Warranty: 10 years

*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



- 1. 3 AMP FUSE PROTECTS PRINTED CIRCUIT BOARD
- 2. 24 VOLT TRANSFORMER TERMINALS
- 3. ZONE 1 DAMPER TERMINALS
- 4. ZONE 2 DAMPER TERMINALS
- 5. ZONE 3 DAMPER TERMINALS
- 6. ZONE 4 DAMPER TERMINALS
- 7. DISCHARGE AIR SENSOR TERMINALS
- 8. OUTDOOR TEMPERATURE SENSOR TERMINALS
- 9. STATIC PRESSURE SENSOR TERMINALS
- 10. SPARE 3 AMP FUSES
- 11. HVAC EQUIPMENT TERMINALS
- 12. 3 AMP FUSE PROTECTS THE RELAY CONTACTS
- 13. PANEL POWER LED
- 14. ZONE 1 LED
- 15. ZONE 2 LED
- **16. ZONE 3 LED**
- 17. **ZONE 4 LED**
- 18. ESP LED
- 19. HIGH LIMIT POTENTIOMETER
- 20. LOW LIMIT POTENTIOMETER
- 21. DISCHARGE AIR SENSOR LED

- 22. HIGH BALANCE POINT POTENTIOMETER
- 23. LOW BALANCE POINT POTENTIOMETER
- 24. OUTDOOR TEMPERATURE SENSOR LED
- 25. Y1 RELAYS LED
- 26. Y2 RELAY LED
- 27. W1/AUX LED
- 27. W1/AUX LEI 28. W2/OB LED
- 29. G LED
- 30. ZONE 1 BYPASS JUMPER
- 31. ZONE 2 BYPASS JUMPER
- 32. ZONE 3 BYPASS JUMPER 33. ZONE 4 BYPASS JUMPER
- 34. ZONE 1 THERMOSTAT TERMINALS
- 35. ZONE 2 THERMOSTAT TERMINALS
- **36. ZONE 3 THERMOSTAT TERMINALS**
- 37. ZONE 4 THERMOSTAT TERMINALS 38. TIME DELAY SPEED UP LED
- 39. TIME DELAY SPEED UP BUTTON
- 40. SYSTEM CONFIGURATION SELECTOR SWITCHES 41. SYSTEM CONFIGURATION SWITCH DEFINITIONS



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