

DIAGNOSTIC CODES FOR PTAC/PTHP ELECTRONIC CONTROL

The indicator blink codes on the power board will repeat approximately every 5 seconds with a delay between bursts. Blink codes and error codes are as follows:

PTAC Diagnostic Codes

LED Blinks Display Code Status

- 1 No Err Normal – no errors detected
- 2 E2 Indoor Air Temperature Probe failure – check that connector is secure, look for cuts or other damage to the cable, replace if necessary
- 3 E3 Outdoor Air Temperature Probe failure – check that connector is secure, look for cuts or other damage to the cable, replace if necessary.
- 4 E4 Communications failure – main board and display board are not communicating. Check interconnecting cable for cuts. Remove connectors and inspect to see if any terminals are being pushed back up into the connector body and not seating properly when inserted on connector blades. Replace connector cable if necessary.
- 5 E5 Keypad failure (key stuck) – membrane switch damaged or ribbon cable cut into causing shorting of conductive traces. Check that membrane connector is lined up exactly with connector pins on display board, as it can be put on incorrectly if not careful to properly align pin-for-pin. Or, display or board defective.
- 6 E6 Remote thermostat input failure – miswiring of thermostat connections, or incorrect thermostat logic being applied. For example, for Heat/Cool, energizing W only without a Gh or Gl will cause the code, because a fan signal must be present before heater is allowed to energize.
- 7 E7 Linesync timing failure. Power supply Frequency is too far off 60 Hertz – not a very likely occurrence. Replace board and display.
- 8 E8 Outdoor Coil switch open (only if heat pump configured). May be a normal condition if outdoor temperature is cold and below switch setting. Denotes disabled compressor operation - Look for open suction line thermostat or outdoor coil thermostat, or ensure that connections are secure at OD Coil Terminals on board. Or, if not a heat pump, check to make sure DIP switch is not set to “heat pump” because if it is, the board will have to pay attention to whether there is a signal or not at the OD Coil terminals.
- 9 E9 Hydronic switch open (if hydronic configured) – either the aquastat is defective, or the aquastat wiring is cut, or the aquastat is not present at all and the aquastat wires were not permanently connected together as per the set-up instructions.
- 10 E10 Configuration read failure – internal. There is a conflict between the DIP switch settings and what the unit is being asked to do. Check DIP settings and configure exactly as shown on the specific unit wiring diagram.
- 11 E11 Module mismatch error (power board connected to incompatible model / revision level display board) – always change board and display to ensure a match. The main board and display together, should be considered to be “the board”.

Any of the above, with the exception of item 1 could involve a defective main board or display board. If no obvious external causes of error can be detected, then it could very likely be a board and/or display failure and require replacement.