

21. Error Codes and How to Deal with Them

The HP will display an error code if it is unable to function normally.

Error codes are indicated by a red LED on the control panel. The control panel is visible via a small window at the right side of the heat pump and it can be accessed by removing the heat pump top cover (4 screws).



After a component is replaced or the inspection is completed, cycle power to the unit several times to confirm the error does not re-occur.

Below is the list of the error codes. If the corrective action does not solve the error problem, a malfunction of the PCB valve is highly likely.

| Error code | Reason for the error | Corrective action |
|------------|---|---|
| H9 | HP ambient (outdoor) temperature thermistor error | <ul style="list-style-type: none"> -Check the thermistor connectors on the main PCB or control PCB in the heat pump unit for any disconnection, fall-off, wire breakage or short circuit. - Measure resistance of the thermistor indicated by the error code. |
| HC | HP water outlet (outgoing) temperature thermistor error | |
| J3 | HP discharge temperature thermistor error | |
| J5 | HP suction temperature thermistor error | |
| J6 | HP defrost temperature thermistor error | |
| J8 | HP water inlet (return) temperature thermistor error | |
| H7 | Tank temperature thermistor error | <ul style="list-style-type: none"> - Check the thermistor cable on the terminal block in the heat pump unit for any disconnection, fall-off, wire breakage or short circuit. - Measure resistance of the thermistor indicated by the error code. |
| E6 | Compressor booting error | <ul style="list-style-type: none"> - Check the compressor connector. - Replace the main PCB or heat pump. |
| H6 | Compressor revolution error | <ul style="list-style-type: none"> - Check the supply voltage. - Measure resistance of each thermistor. - Measure resistance of coil of expansion valve to check open or short circuit. |

| Error code | Reason for the error | Corrective action |
|-------------------|---|---|
| | | - Replace the PCB or heat pump. |
| U0 | Refrigerant leakage error | - Measure resistance of each thermistor. - Measure resistance of coil of expansion valve to check open or short circuit. - Replace the main PCB or heat pump. |
| E1 | Main PCB error | - Replace the main PCB. |
| E2 L7 | Control PCB error | - Replace the control PCB. |
| F5 | Communication error between main PCB to control PCB | - Check the communication connector on the main PCB and control PCB. - Replace the main PCB or control PCB. |
| E8 | High inlet current error | - Check the installation location. - Check the supply voltage. - Replace the main PCB or heat pump. |
| H8 | Current error | - Replace the main PCB. |
| L4 | High temperature of module error | - Check the installation location. - Remove foreign objects from the evaporator coil (e.g. fallen leaves, grass, snow). - Check the fan motor is not flowing by dirt. - Replace the main PCB or fan motor. |
| L5 | High outlet current error | - Measure resistance of the discharged thermistor. - Measure resistance of coil of expansion valve to check open or short circuit. - Replace the main PCB or heat pump. |
| P4 | Module temperature thermistor error | - Replace the main PCB. |
| U2 | High voltage error | - Check the supply voltage. |
| HJ | Water circuit error | - Check the inlet water valve. - Check for any piping bend, blockage, kink or frozen. - Measure resistance of each thermistor. - Measure resistance of coil of expansion valve to check open or short circuit. - Replace the main PCB or heat pump. |
| EC | High water outlet error | - Check the water circuit is not flowing by air, dirt or scaling. - If the water circulation pump is not working, replace the pump. - Measure resistance of water outlet (outgoing) thermistor. - Replace the main PCB. |
| E9 | Water circulation pump error | - Check the water is full in the tank. - If the water circulation pump is not working, replace the pump. - Check the revolution of pump by controller. If the revolution is low, replace the pump. - Replace the main PCB. |

| Error code | Reason for the error | Corrective action |
|------------|------------------------------|--|
| E7 | Fan motor locked | <ul style="list-style-type: none"> - Remove foreign objects around the fan motor. - Check the fan motor connectors on the main PCB. - Replace the main PCB. |
| F3 | Discharged temperature error | <ul style="list-style-type: none"> - Measure resistance of the discharged thermistor. - Replace the main PCB or heat pump. |