

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.