

## 12.4 Error codes

When a safety device is activated, an error code will be displayed on the user interface.

A list of all errors and corrective actions can be found in the table below.

Reset the safety by turning the unit OFF and back ON.

In case this procedure for resetting the safety is not successful, contact your local dealer.

ERROR CODE	MALFUNCTION OR PROTECTION	FAILURE CAUSE AND CORRECTIVE ACTION
<i>E0</i>	Water flow fault(after 3 times E8)	<ol style="list-style-type: none"> <li>1.The wire circuit is short connected or open. Reconnect the wire correctly.</li> <li>2.Water flow rate is too low.</li> <li>3. Water flow switch is failed, switch is open or close continuously, change the water flow switch.</li> </ol>
<i>E2</i>	Communication fault between controller and indoor unit	<ol style="list-style-type: none"> <li>1.Wire doesn't connect between wired controller and unit. connect the wire.</li> <li>2.Communication wire sequence is not right. Reconnect the wire in the right sequence.</li> <li>3.Whether there is a high magnetic field or high power interfere, such as lifts, large power transformers, etc..</li> </ol> <p>To add a barrier to protect the unit or to move the unit to the other place.</p>
<i>E3</i>	Final outlet water temp.sensor(T1) fault	<ol style="list-style-type: none"> <li>1.Check the resistance of the sensor</li> <li>2.The T1 sensor connector is loosen. Reconnect it.</li> <li>3.The T1 sensor connector is wet or there is water in. remove the water, make the connector dry. Add waterproof adhesive.</li> <li>4.The T1 sensor failure, change a new sensor.</li> </ol>
<i>E4</i>	water tank temp.sensor (T5) fault	<ol style="list-style-type: none"> <li>1.Check the resistance of the sensor</li> <li>2.The T5 sensor connector is loosen. Reconnect it.</li> <li>3.The T5 sensor connector is wet or there is water in. remove the water, make the connector dry. Add waterproof adhesive</li> <li>4.The T5 sensor failure, change a new sensor.</li> <li>5.If you want to close the domestic water heating when T5 sensor do not connected to the system, then T5 sensor can not be detected, refer to 9.5.1 "<b>DHW MODE SETTING</b>"</li> </ol>
<i>E8</i>	Water flow failure	<p>Check that all shut off valves of the water circuit are completely open.</p> <ol style="list-style-type: none"> <li>1. Check if the water filter needs cleaning.</li> <li>2. Refer to "<b>8.6 Filling water</b>"</li> <li>3. Make sure there is no air in the system(purge air).</li> <li>4. Check on the manometer that there is sufficient water pressure. The water pressure must be &gt;1 bar.</li> <li>5. Check that the pump speed setting is on the highest speed.</li> <li>6. Make sure that the expansion vessel is not broken.</li> <li>7. Check that the resistance in the water circuit is not too high for the pump (refer to "<b>9.4 Setting the pump</b>" ).</li> <li>8. If this error occurs at defrost operation (during space heating or domestic water heating), make sure that the backup heater power supply is wired correctly and that fuses are not blown.</li> <li>9. Check that the pump fuse and PCB fuse are not blown.</li> </ol>
<i>Ed</i>	Inlet water temp.sensor (Tw_in) malfunction	<ol style="list-style-type: none"> <li>1.Check the resistance of the sensor</li> <li>2. The Tw_in sensor connector is loosen. Re connect it.</li> <li>3.The Tw_in sensor connector is wet or there is water in. remove the water, make the connector dry. Add waterproof adhesive</li> <li>4. The Tw_in sensor failure, change a new sensor.</li> </ol>

ERROR CODE	MALFUNCTION OR PROTECTION	FAILURE CAUSE AND CORRECTIVE ACTION
<i>EE</i>	Indoor unit EEPROM failure	<ol style="list-style-type: none"> <li>1. The EEPROM parameter is error, rewrite the EEPROM data.</li> <li>2. EEPROM chip part is broken, change a new EEPROM chip part.</li> <li>3. main control board of indoor unit is broken, change a new PCB.</li> </ol>
<i>H0</i>	Communication fault between indoor unit and outdoor unit	<ol style="list-style-type: none"> <li>1. wire doesn't connect between outdoor unit and main control board of indoor unit. connect the wire.</li> <li>2. Communication wire sequence is not right. Reconnect the wire in the right sequence.</li> <li>3. Whether there is a high magnetic field or high power interfere, such as lifts, large power transformers, etc.. To add a barrier to protect the unit or to move the unit to the other place.</li> </ol>
<i>H2</i>	Refrigerant liquid temp.sensor(T2) fault	<ol style="list-style-type: none"> <li>1. Check the resistance of the sensor</li> <li>2. The T2 sensor connector is loosen. Re connect it.</li> <li>3. The T2 sensor connector is wet or there is water in. remove the water, make the connector dry. Add waterproof adhesive</li> <li>4. The T2 sensor failure, change a new sensor.</li> </ol>
<i>H3</i>	Refrigerant gas temp.sensor(T2B) fault	<ol style="list-style-type: none"> <li>1. Check the resistance of the sensor</li> <li>2. The T2B sensor connector is loosen. Reconnect it.</li> <li>3. The T2B sensor connector is wet or there is water in. remove the water, make the connector dry. Add waterproof adhesive</li> <li>4. The T2B sensor failure, change a new sensor.</li> </ol>
<i>H5</i>	Room temp.sensor(Ta) fault	<ol style="list-style-type: none"> <li>1. Check the resistance of the sensor</li> <li>2. The Ta sensor is in the interface;</li> <li>3. The Ta sensor failure, change a new sensor or change a new interface, or reset the Ta, connect a new Ta from the indoor unit PCB</li> </ol>
<i>H9</i>	Outlet water for zone 2 temp.sensor (Tw2) fault	<ol style="list-style-type: none"> <li>1. Check the resistance of the sensor</li> <li>2. The T1B sensor connector is loosen. Reconnect it.</li> <li>3. The T1B sensor connector is wet or there is water in. Remove the water, make the connector dry. add waterproof adhesive</li> <li>4. The T1B sensor failure, change a new sensor.</li> </ol>
<i>HR</i>	Outlet water temp.sensor(Tw_out) fault	<ol style="list-style-type: none"> <li>1. The TW_out sensor connector is loosen. Reconnect it.</li> <li>2. The TW_out sensor connector is wet or there is water in. remove the water, make the connector dry. add waterproof adhesive</li> <li>3. The TW_out sensor failure, change a new sensor.</li> </ol>
<i>P5</i>	Tw_out - Tw_in  value too big protection	<ol style="list-style-type: none"> <li>1. Check that all shut off valves of the water circuit are completely open.</li> <li>2. Check if the water filter needs cleaning.</li> <li>3. Refer to "<b>8.6 Filling water</b>"</li> <li>4. Make sure there is no air in the system (purge air).</li> <li>5. Check on the manometer that there is sufficient water pressure. The water pressure must be &gt;1 bar(water is cold).</li> <li>6. Check that the pump speed setting is on the highest speed.</li> <li>7. Make sure that the expansion vessel is not broken.</li> <li>8. Check that the resistance in the water circuit is not too high for the pump. (refer to "<b>9.4 Setting the pump</b>" ).</li> </ol>
<i>Pb</i>	Anti-freeze mode	Unit will return to the normal operation automatically.
<i>PP</i>	Tw_out - Tw_in unusual protection	<ol style="list-style-type: none"> <li>1. Check the resistance of the two sensor</li> <li>2. Check the two sensors locations</li> <li>3. The water inlet/outlet sensor wire connector is loosen. Reconnect it.</li> <li>4. The water inlet/outlet (TW_in /TW_out) sensor is broken, Change a new sensor.</li> <li>5. Four-way valve is blocked. Restart the unit again to let the valve change the direction.</li> <li>6. Four-way valve is broken, change a new valve.</li> </ol>

ERROR CODE	MALFUNCTION OR PROTECTION	FAILURE CAUSE AND CORRECTIVE ACTION
<i>Hb</i>	Three times "PP" protection and Tw_out < 7°C	The same to "PP".
<i>E7</i>	Buffer tank up temp.sensor(Tbt1) fault	<ol style="list-style-type: none"> <li>1.Check the resistance of the sensor.</li> <li>2.The Tbt1 sensor connector is loosen,reconnect it.</li> <li>3.The Tbt1 sensor connector is wet or there is water in,remove the water ,make the connector dry.Add waterproof adhesive.</li> <li>4.The Tbt1 sensor failure,change a new sensor."</li> </ol>
<i>Eb</i>	Solar temp.sensor(Tsolar) fault	<ol style="list-style-type: none"> <li>1.Check the resistance of the sensor.</li> <li>2.The Tsolar sensor connector is loosen,reconnect it.</li> <li>3.The Tsolar sensor connector is wet or there is water in,remove the water ,make the connector dry.Add waterproof adhesive.</li> <li>4.The Tsolar sensor failure,change a new sensor."</li> </ol>
<i>Ec</i>	Buffer tank low temp.sensor(Tbt2) fault	<ol style="list-style-type: none"> <li>1.Check the resistance of the sensor.</li> <li>2.The Tbt2 sensor connector is loosen,reconnect it.</li> <li>3.The Tbt2 sensor connector is wet or there is water in,remove the water ,make the connector dry.Add waterproof adhesive.</li> <li>4.The Tbt2 sensor failure,change a new sensor."</li> </ol>
<i>HE</i>	Communication error between main board and thermostat transferboard	RT/Ta PCB is set to be valid on user interface but the thermostat transfer board is not connected or the communication between thermostat transfer board and main board is not effectively connected. If the thermostat transfer board is not needed , set the RT/Ta PCB to invalid. If the thermostat transfer board is needed , please connect it to the main board and make sure the communication wire is connected well and there is no strong electricity or strong magnetic interference.

 **CAUTION**

- In winter, if the unit has E0 and Hb failure and the unit is not repaired in time, the water pump and pipeline system may be damaged by freezing, so E0 and Hb failure must be repaired in time.