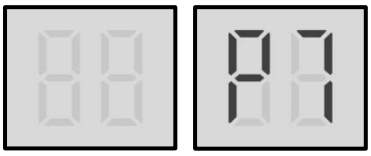
P7 Troubleshooting

1 Digital display output



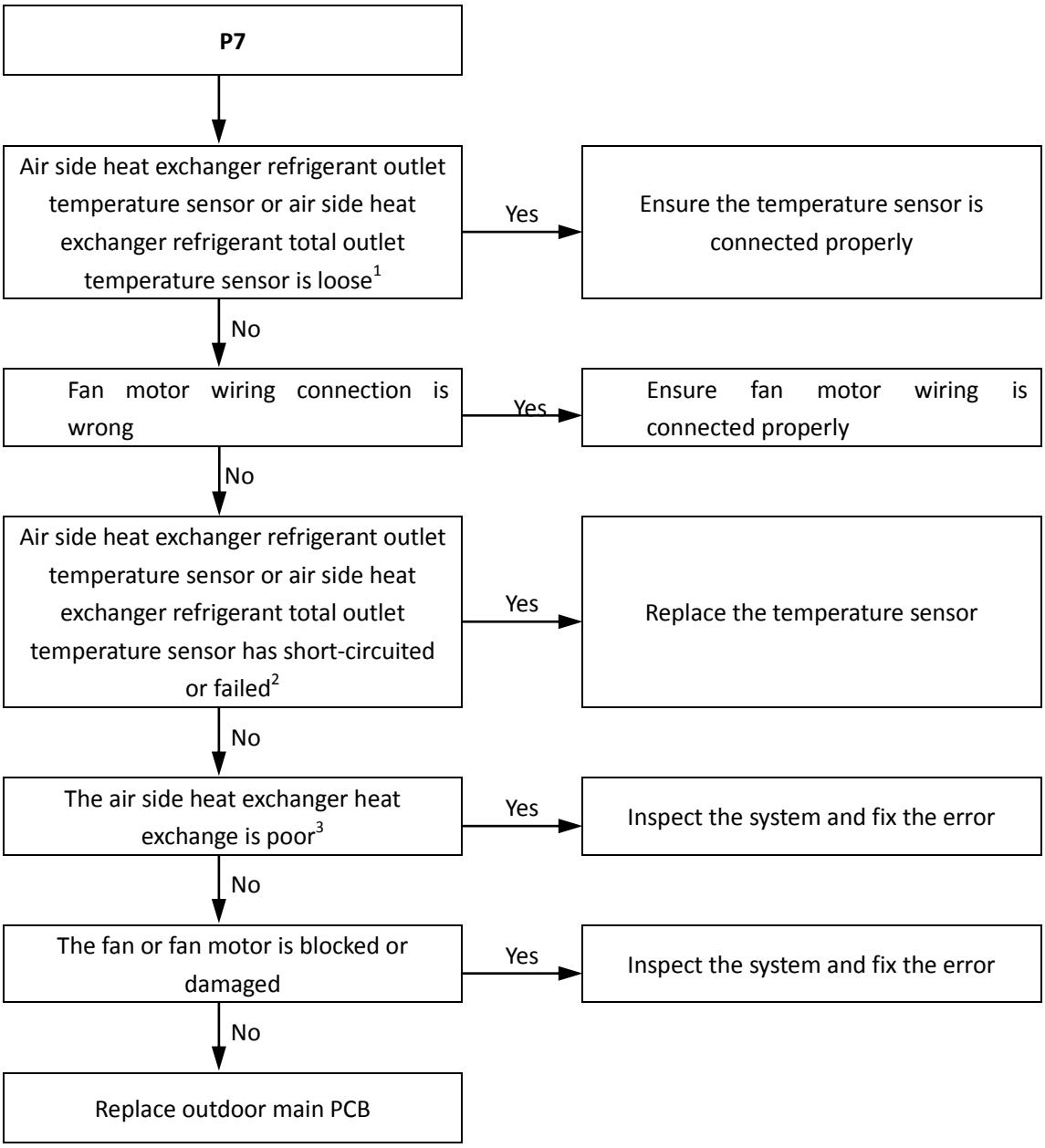
2 Description

- High temperature protection of air side heat exchanger refrigerant outlet temperature sensor or air side heat exchanger refrigerant total outlet temperature sensor in cooling mode. When the air side heat exchanger refrigerant outlet temperature is higher than 60°C or air side heat exchanger refrigerant total outlet temperature is higher than 61°C for more than 3 seconds, the system displays P7 protection and all units stop running. When the air side heat exchanger refrigerant outlet temperature drops below 50°C or air side heat exchanger refrigerant total outlet temperature drops below 58°C, P7 is removed and normal operation resumes.
- All units stop running.
- Error code is displayed on main PCB and user interface.

3 Possible causes

- Air side heat exchanger refrigerant outlet temperature sensor or air side heat exchanger refrigerant total outlet temperature sensor not connected properly or has malfunctioned.
- Fan motor wiring connection is wrong.
- Poor condenser heat exchange.
- Fan motor damaged.
- Main PCB damaged.

4 Procedure



Notes:

1. For 30kW and 60kW units, air side heat exchanger refrigerant outlet temperature sensor and air side heat exchanger refrigerant total outlet temperature sensor connection port is CN1 and CN69 on the main PCB.
2. Measure sensor resistance. If the resistance is too low, the sensor has short-circuited. If the resistance is not consistent with the sensor's resistance characteristics table, the sensor has failed. Refer to "Temperature Sensor Resistance Characteristics".
3. Check air side heat exchanger, fan(s) and air outlets for dirt/blockages.