

Código de Erros – Split Piso Teto

| No. | Type | Description | Flash Blink | Code | Note |
|-----|------------|--|---|----------------|--|
| 1 | Failure | Indoor temp. sensor testing port warning | Timer led blinks on 1Hz frequency | E2 | Automatical clear after the failures are fixed |
| 2 | Failure | Evap. temp. sensor testing port warning | Operation led blinks on 1Hz frequency | E3 | |
| 3 | Failure | Cond. temp. sensor testing port warning | Defrosting led blinks on 1Hz frequency | E5 | |
| 4 | Failure | Water level protection | Alarming led blinks on 1Hz frequency | F5 | |
| 5 | Failure | Outdoor unit protection | Defrosting and alarm led blink on 1Hz frequency | F2 | |
| 6 | Failure | Communication failure | Operation LED and Defrosting LED flash on 1Hz frequency | E1 | Manual operation to clear |
| 7 | Failure | EEPROM communication mistake | Operation and Timer led blink on 1Hz frequency | P6 | Clear after power-off |
| 8 | Indication | Forced cooling (defrost) | Operation and Warning led blink on 1Hz frequency | No code | Automaticall y clear when out of the mode |

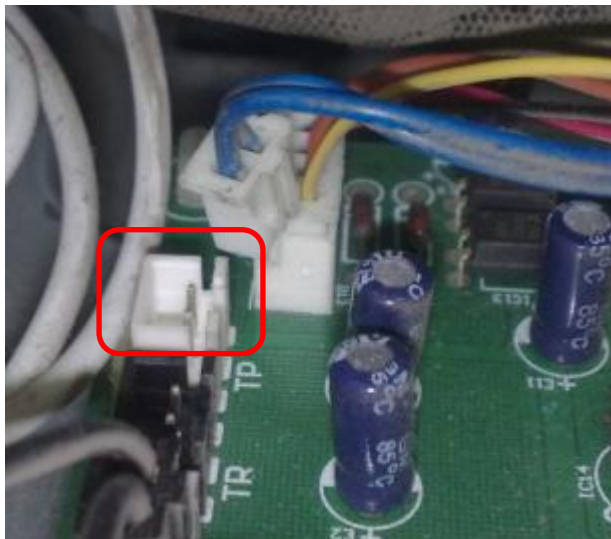
| | | | | | |
|---|------------|----------------------------------|------------------------------|----|--|
| 9 | Indication | Anti-cool air under heating mode | Defrost preheating led blink | P1 | Automatically clear when out of the mode |
|---|------------|----------------------------------|------------------------------|----|--|

Solution of Failures

Attention: When there is a failure, the units must be power-off first.

1. Indoor temp. sensor testing port warning(E2)

1.1 Check the connector is firm or not, as fig. below

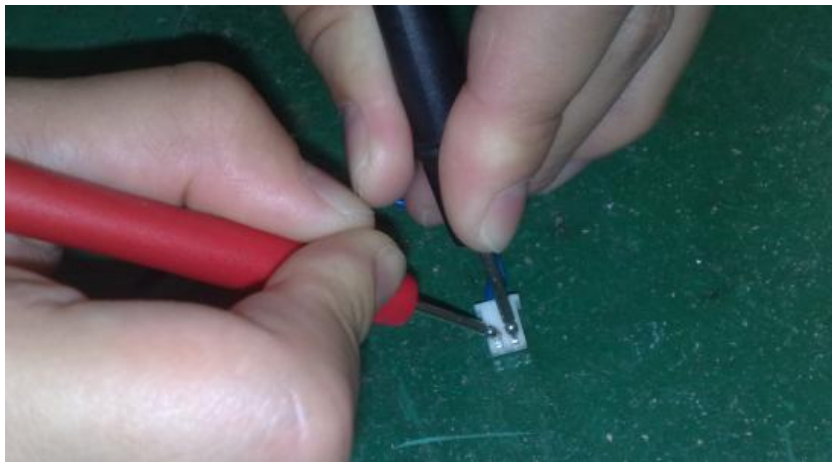


1.2 Check the resistance value of temp. sensor is normal or not (At normal temperature, the resistance value should be 5kΩ. Change the temperature to see whether the resistance value change with universal meter.)

Step: 1.2.1 Adjust the universal meter to the resistance mode, as fig. below



1.2.2 Use the test probes to test temperature sensor and see how much the resistance value is, as fig below



1.3 If the test results of above two steps are normal, then you should change the electrical control board.

2. Evaporator temp. sensor testing port warning (E3)

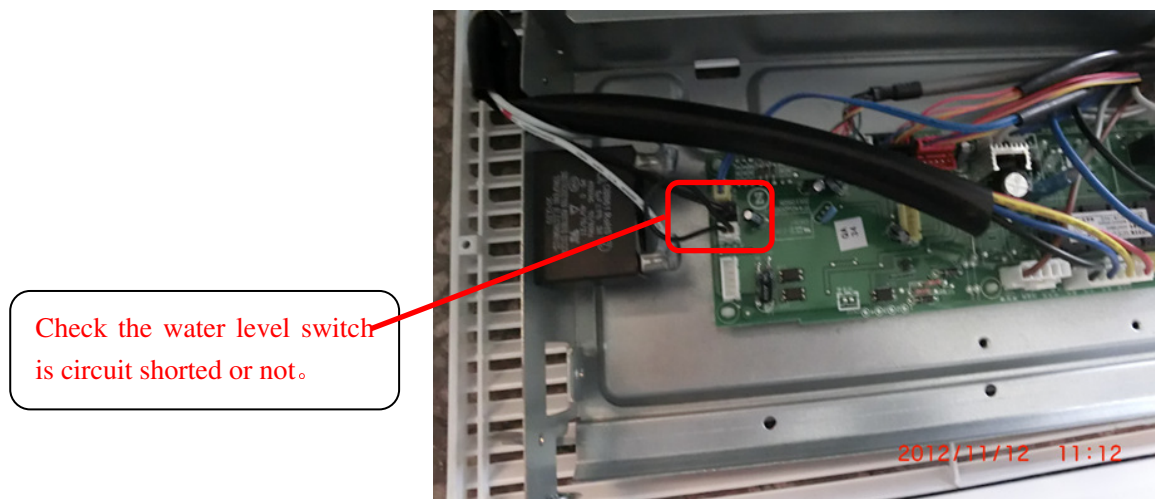
Same testing methods as instructed above

3. Condenser temp. sensor testing port warning (E5)

Same testing methods as instructed above

4. Water level protection (F5)

AS floor ceiling indoor unit has no water pump to drain condensate, so the water level switch is short-circuited. When there is F5 failure, check the connector is well-connected or not, shorting stub is firm or is short-circuited or not.



Cassette indoor unit has water pump to drain condensate. Please follow step below to check Cassette F5 failure.

4.1 Check water pump power is normal or not.

4.2 Check the connector between water pump and water level switch is firm or not.

4.3 Check water pump drain port is in good condition or not.

4.4 Check the water pump works normally or not.

If the power and drain port is normal and condensate still can't be drained, then change the water pump.

4.5 Check the water level switch works normally or not.

4.5.1 Use the universal meter to test the resistance of water level switch. If there is resistance value, it means the water level switch is on. If the resistance is infinite, it means the switch is off.

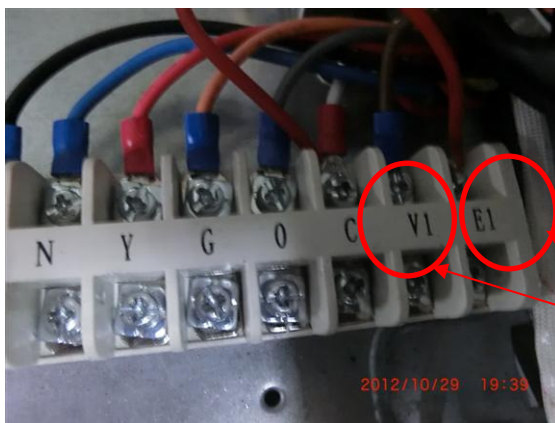
4.5.2 If the water pump works normally and the water level switch is off, it means the water level switch is broken down.

5. Outdoor unit protection (F2)

Outdoor unit protection (F2) includes outdoor high pressure protection, low pressure protection and air outlet protection.

5.1、 That combine the non-standard matched indoor and outdoor units is the common cause of F2 failure. If you connect the indoor unit with indoor protection to an outdoor unit without outdoor protection, then the lines to connect outdoor protection in the indoor electrical board must be shielded. Otherwise the indoor unit can't start and keeps alarming the F2 failure because it cannot connect outdoor protection lines.

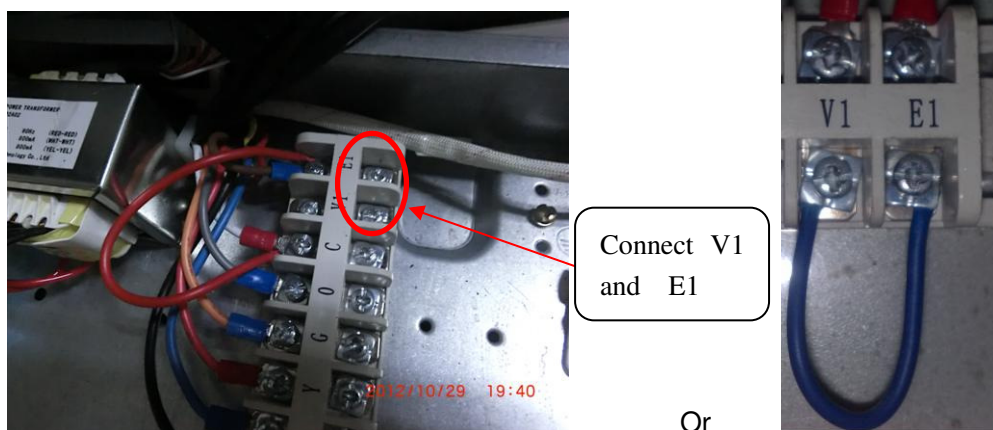
The two terminals V1 and E1 with outdoor protection feedback must be closed-circuit so that it can shield the outdoor protection.



V1 and E1 should be short circuit

Methods:

Loosen the connection lines in V1 AND E1 terminals with screw first and then overlap the heads of the two lines to fix in terminal E1 (as fig. below) Then the two lines are accessed, not affected by outdoor feedback.



Note: Figs above are only referred to 24V communication models, including the cooling only and heat pump type.

5.2、Solution for Failures during Operation

The cause of outdoor protection (F2) comes from two side—the electrical components and refrigeration system. If the system has been running for a while and then has the F2 failure, then first check the refrigeration system. If the units have not yet started and there is F2 failure, then check from the electrical components first.

5.2.1、Check Refrigeration System

The failure of refrigeration system mainly is mainly caused by bad heat exchange effect of condenser, insufficient refrigerant or leakage and blocking in throttle parts. Steps are as below:

- A、 Firstly, check condenser is dirty or not. Whether it is blocked by dirt, dust, small paper and as a result, the heat exchange effect is reduced.
- B、 Second, re-power on the unit and after 3 seconds, check the outdoor unit fan is working or not to confirm whether outdoor fan has failure.
- C、 Thirdly, check the outdoor fan: 1) Turn off the power to see whether the fan blade is blocked by some subjects. If yes, remove it. And then use a stick to drive fan blade to make sure it can move. 2) Check the connecting lines of fan capacitor is firmly connected. After re-power on, check the voltage between fan power line and motor power line. If the voltage value is normal, but

the fan still can't start, then change the capacitor. If the motor still can't start after changing the capacitor, then change an outdoor motor.



Check the fan blade can move or not



Fan capacitor

Contactor

Phase sequence board

D. Check the operation pressure

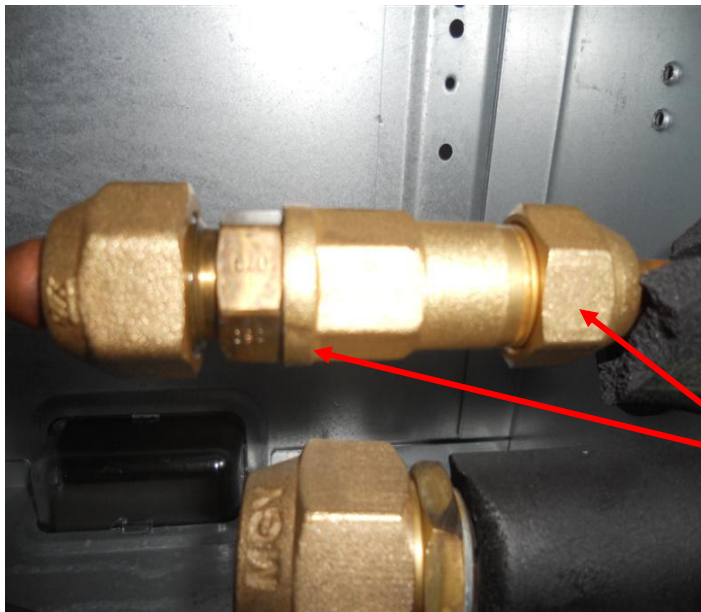
Before the unit starts, connect the high and low pressure gauge to the needle valve in stop valve of outdoor unit. Then check the tested pressure is normal or not. R22 refrigerant pressure should be within: high pressure (1.6~2.6Mpa); low pressure (0.3~0.6Mpa) .



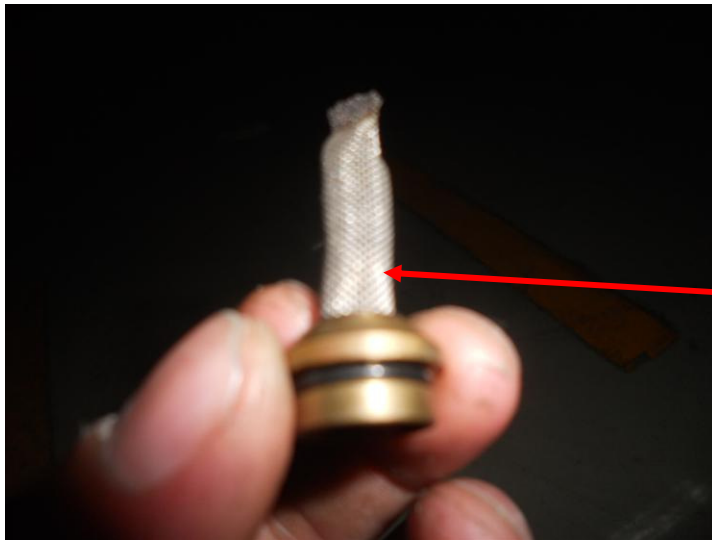
Connect the high and low pressure gauge to outdoor unit

If the low pressure gauge shows value lower than 0.3Mpa while high pressure gauge shows value lower than 1.6Mp, the cause may be insufficient refrigerant or refrigerant leakage. Use methods below to check whether it is refrigerant leakage.

If the high pressure is higher than 2.6Mpa, low pressure is lower than 0.3Mpa, it may be caused by the blockage in the throttle parts. We suggest to take out the throttle parts and blow with refrigerant to make the blockage out.



Connecting position of one way throttle parts of indoor unit



Take out the filter from throttle valve and blow with refrigerant to remove the blockage



If the high pressure is higher than 2.6Mpa and low pressure is lower than 0.6Mpa, it may be caused by exceeded refrigerant. Then click valve spool of needle valve to release part of refrigerant.

5.2.3、 Check electrical components

5.1 Check the connection lines are correctly connected or not

5.2 Check the outdoor protection connectors are firm

5.3 If the unit is 3 phase power, check the power phase sequence is correct or not.

5.3.1 If the flashes in the phase sequence board all blink, it means the sequence

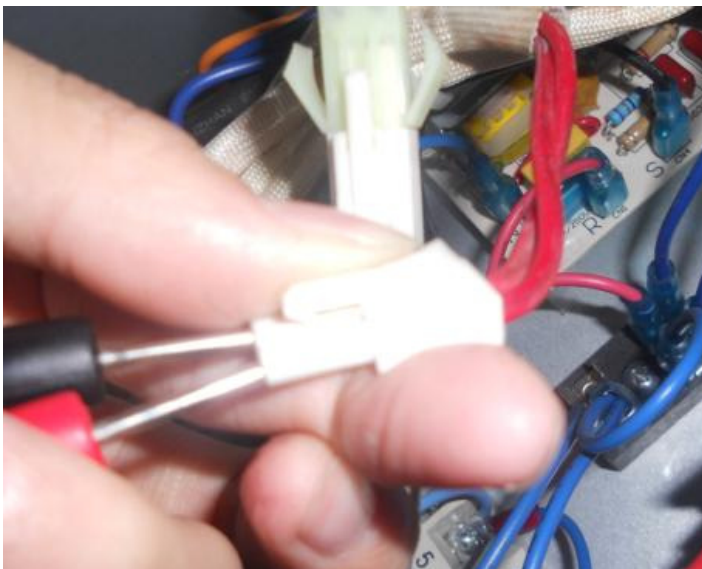
is correct. If the green flash blinks while red flash doesn't, it means the sequence is wrong.



5.3.2 The flash on the outdoor electrical board blinks four times every 5 seconds; it means the phase sequence is wrong

5.4 Check the high pressure is normal or not

When there is a failure, use the universal meter immediately to test the resistance of high pressure switch. If it shows value, that means the high pressure switch is on, indicating the high pressure is normal. If universal meter shows infinite, it means high pressure switch is off, indicating the high pressure is abnormal.



5.5 Check the low pressure is normal or not

When there is a failure, use the universal meter immediately to test the resistance of low pressure switch. If it shows value, that means the low pressure switch is on, indicating the low pressure is normal. If universal meter shows infinite, that means low pressure switch is off, indicating the low pressure is abnormal.



5.6 Check the outlet temperature is normal or not

When there is a failure, use the universal meter immediately to test the resistance of temperature switch. If it shows value, that means the temperature switch is on, indicating the outlet temperature is normal. If universal meter shows infinite, that means outlet temperature switch is off, indicating the outlet temperature is abnormal.



6. Communication Failure (E1)

6.1 Check the wired controller is correctly connected or not and whether the controller is matched to indoor electrical board.

6.2 Check the connection lines of wired controller is loose or not and connector is firm.

6.3 If the results of above 2 steps are OK, then change the wired controller. If it still doesn't work, then change the indoor electrical board.

7.EEPROM Communication Failure (P6)

7.1 Check the EEPROM chip is well-connected.

7.2 Then cut off the power and re-power on to see whether the failure stops.

7.3 If it still can't work, change a indoor electrical board.

8. Defrost (P3)

It is a normal indication. After the defrosting is finished, this warning will disappear.

9. Anti-cool air under heating mode (P1)

It is a normal indication. After anti-cool air mode, this warning will disappear.