

| No | Name of malfunction                                  | Indoor unit display method |   |                          | Outdoor unit display (LED have 3 status)<br>□OFF ■ON ★ Blinks |                                      |         |          | AC Status | Malfunctions   |  |
|----|--|----------------------------|---|--------------------------|---|--------------------------------------|---------|----------|-----------|--|--|
|    |  | Double 8 code display      | Indicator display (LED blinks 0.5s-ON/0.5s-OFF) |                          |   | Only for the mode with this function |         |          |           |  |  |
|    |  |                            | Running LED                                     | Cooling LED              | Heating LED   | D40/ D5                              | D41/ D6 | D42/ D16 |           |  | D43/ D30   |
| 1  | System high pressure protection                      | E1                         | 3s off blink once                               |                          |   |                                      |         |          |           | Cooling, dehumidifying, except the indoor fan motor is running, others will stop to run. Heating; all stop running                   | High pressure of system might be:<br>1. Refrigerant is too much<br>2. Poor heat exchanging for units (Including heat exchanger is dirty and unit heating radiating ambient is poor)<br>3. Ambient temp is too high |
| 2  | Anti-Freezing protection                             | E2                         | 3s off blink twice                              |                          |   |                                      |         |          |           | Cooling, dehumidifying compressor, outdoor fan motor will stop running, indoor fan motor will keep running                           | 1. Poor indoor unit air returning<br>2. Indoor fan motor rotating speed abnormal<br>3. Ambient temp. is too high   |
| 3  | Computer air exhaust high temp protection            | E4                         | 3s off blink four times                         |                          |   |                                      |         |          |           | Cooling, dehumidifying compressor, outdoor fan motor will stop running, indoor fan motor will keep running Heating; all stop running | Please refer to trouble shooting (air exhaust protection, overload)  |
| 4  | AC overload protection                               | E5                         | 3s off blink five times                         |                          |   |                                      |         |          |           | Cooling, dehumidifying compressor, outdoor fan motor will stop, indoor fan will work. Heating; all will stop running                 | 1. Power supply is stable, fluctuation is too much<br>2. Power supply is too low, overload is too much   |
| 5  | Indoor and outdoor units communication malfunction   | E6                         | 3s off blink six times                          |                          |   |                                      |         |          |           | Cooling, compressor will stop, indoor fan motor works. Heating; all will stop  | Please refer to trouble shooting   |
| 6  | Anti-high temp protection                            | E8                         | 3s off blink eight times                        |                          |   |                                      |         |          |           | Cooling, compressor will stop, indoor fan motor works. Heating; all will stop  | Please refer to trouble shooting   |
| 7  | Indoor unit motor no feedback                        | H6                         | 3s off blink 11 times                           |                          |   |                                      |         |          |           | Whole unit stop running  | 1. Poor insert for GPF<br>2. Indoor control board AP1 malfunction<br>3. Indoor motor M1 malfunction  |
| 8  | Jump wire cap malfunction protection                 | C5                         | 3s off blink 15 times                           |                          |   |                                      |         |          |           | Whole unit stop running  | Indoor control board AP1 jump cap poor connection. Please insert or replace the jump cap.  |
| 9  | Indoor ambient sensor open circuit, short circuit    | F1                         |   | 3s off blink once        |   |                                      |         |          |           | Cooling, dehumidifying: indoor fan motor is running, other overloads will stop. Heating; whole unit will stop running                | 1. Room temp. sensor is not connected with the control panel AP1<br>2. Room temp. sensor is damaged.   |
| 10 | Indoor evaporator sensor circuit open, short circuit | F2                         |   | 3s off blink twice       |   |                                      |         |          |           | Cooling, dehumidifying: indoor fan motor is running, other overloads will stop. Heating; whole unit will stop running                | 1. Tube temp. sensor is not connected with the control panel AP1<br>2. Room temp. sensor is damaged.   |
| 11 | Outdoor ambient sensor circuit open, short circuit   | F3                         |   | 3s off blink three times |   |                                      |         |          |           | Cooling, dehumidifying; compressor will stop, indoor fan motor will work. Heat: all will stop.                                       | Outdoor room temp. sensor hasn't connected well, or damaged. Please refer to the sensor resistance value for checking  |
| 12 | Outdoor condenser sensor open circuit, short circuit | F4                         |   | 3s off blink four times  |   |                                      |         |          |           | Cooling, dehumidifying; compressor will stop, indoor fan motor will work. Heat: all will stop.                                       | Outdoor room temp. sensor hasn't connected well, or damaged. Please refer to the sensor resistance value for checking  |
| 13 | Malfunction of detecting plate (WIFI)                | JF                         |   |                          |   |                                      |         |          |           |  |  |

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|    |  | Double 8 code display      | Indicator display (LED blinks 0.5s-ON/0.5s-OFF) |   |             | □OFF ■ON ★ Blinks                        |         |          |          |  |  |
|    |  |                            | Only for the mode with this function            |   |             |  |         |          |          |  |  |
|    |  |                            | Running LED                                     | Cooling LED   | Heating LED | D40/ D5                                  | D41/ D6 | D42/ D16 | D43/ D30 |  |  |
| 14 | Outdoor air exhaust sensor open circuit, short circuit | F5                         | 3s off blink five times                         |   |             |  |         |          |          | Cooling, dehumidifying; after running for 3 mins, the compressor will stop to run, indoor fan will stop to run. Heating: after run 3 mins, all will stop running | 1. Exhaust temp sensor hasn't connected well, or damaged, please refer to the sensor resistance value for checking<br>2. Sensor head hasn't insert into the copper tube.   |
| 15 | Overload limit/ descending frequency                   | F6                         | 3s off blink six times                          |   |             |  |         |          |          | Overload normal operation, compressor is running, frequency descending   | Please refer to trouble shooting   |
| 16 | Over current need frequency descending                 | F8                         | 3s off blink eight times                        |   |             |  |         |          |          | Overload normal operation, compressor is running, frequency descending   | 1. Input power supply is too low<br>2. System voltage is too high, over is too much  |
| 17 | Air exhaust over high need frequency descending        | F9                         | 3s off blink nine times                         |   |             |  |         |          |          | Overload normal operation, compressor is running, frequency descending   | 1. Overload is too much, ambient temp. is too high<br>2. Refrigerant is short<br>3. Electric expansion malfunction   |
| 18 | DC generatrix voltage is too high                      | PH                         | 3s off blink 11 times                           |   |             |  |         |          |          | Cooling, dehumidifying, compressor stop running, Fan motor works. Heating: All will stop   | 1. Testing wire Terminal L and N Position. If higher than 265VAC, please cut off the power supply and restart until back to normal.<br>2. If input voltage is normal, testing the voltage of electrolytic capacitor on AP1 after turn on the unit. There may be some problem and replace the AP1 if the electrolytic capacitor voltage range at 200-280v |
| 19 | Complete unit current detection malfunction            | U5                         | 3s off blink 13 times                           |   |             |  |         |          |          | Cooling, dehumidifying; compressor stops running, indoor fan motor works; Heating: all will stop running   | The circuit on AP1 has malfunction, replace the outdoor unit AP1   |
| 20 | Compressor current overcurrent protection              | P5                         | 3s off blink 15 times                           |   |             |  |         |          |          | Cooling, dehumidifying; compressor stops running, indoor fan motor works; Heating: all will stop running   | Please refer to troubleshooting (IPM protection, compressor lose steps, compressor current overcurrent protection)   |
| 21 | Defrosting   |                            |   | Off 3s and blink once (during blinking, On 10s and OFF 5 s) |             |  |         |          |          | Defrosting will occur in heating mode. Compressor will operate while indoor fan will stop.   | It's the normal state  |
| 22 | Compressor overload protection                         | H3                         |   | 3s off blink three times                                    |             |  |         |          |          | Cooling, dehumidifying; compressor stops running, indoor fan motor works; Heating: all will stop running   | 1. Wire terminal OVCCOMP loosen or circuit has a problem, the resistance of SAT should be lower than 1 ohm.<br>2. Please refer to troubleshooting (exhaust/ overload protection)   |
| 23 | IPM protection   | H5                         |   | 3s off blink five times                                     |             |  |         |          |          | Cooling, dehumidifying; compressor stops running, indoor fan motor works; Heating: all will stop running   | Please refer to trouble shooting   |
| 24 | PFC protection   | HC                         |   | 3s off blink six times                                      |             |  |         |          |          | Cooling, dehumidifying; compressor stops running, indoor fan motor works; Heating: all will stop running   | Please refer to trouble shooting   |

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|    |   |                            | Only for the mode with this function            |             |                          |  |         |          |          |  |   |
|    |   |                            | Running LED                                     | Cooling LED | Heating LED              | D40/ D5                                  | D41/ D6 | D42/ D16 | D43/ D30 |  |   |
| 25 | Compressor lose steps                           | H7                         |   |             | 3s off blink seven times |  |         |          |          | Cooling, dehumidifying; compressor stops running, indoor fan motor works. Heating: all will stop running | Please refer to troubleshooting   |
| 26 | Heating, anti-high temp. declines               | H0                         |   |             | 3s off blink 10 times    |  |         |          |          | Overload normal works, compressor running, frequency declines  | Please refer to troubleshooting   |
| 27 | Start up fail                                   | Lc                         |   |             | 3s off blink 11 times    |  |         |          |          | Cooling, dehumidifying; compressor stops running, indoor fan motor works. Heating: all will stop running | Please refer to troubleshooting   |
| 28 | Compressor current testing circuit malfunction  | U1                         |   |             | 3s off blink 13 times    |  |         |          |          | Cooling, dehumidifying; compressor stops running, indoor fan motor works. Heating: all will stop running | Replace the outdoor control board AP1   |
| 29 | EEPROM malfunction                              | EE                         |   |             | 3s off blink 15 times    |  |         |          |          | Cooling, dehumidifying; compressor stops running, indoor fan motor works. Heating: all will stop running | Replace the outdoor control board AP1   |
| 30 | Capacitor charge malfunction                    | PU                         |   |             | 3s off blink 17 times    |  |         |          |          | Cooling, dehumidifying; compressor stops running, indoor fan motor works. Heating: all will stop running | Please refer to Part 3 capacitor charging fault of troubleshooting  |
| 31 | Module sensor circuit diagram                   | P7                         |   |             | 3s off blink 18 times    |  |         |          |          | Cooling, dehumidifying; compressor stops running, indoor fan motor works. Heating: all will stop running | Replace the outdoor control board AP1   |
| 32 | Module temp. over high protection               | P8                         |   |             | 3s off blink 19 times    |  |         |          |          | Cooling, dehumidifying; compressor stops running, indoor fan motor works. Heating: all will stop running | To check whether the ambient temp. of IPM is too high or the heat-sinhing of IPM is dirty else replace the outdoor board AP1  |
| 33 | DC Bus voltage dips                             | U3                         |   |             | 3s off blink 20 times    |  |         |          |          | Cooling, dehumidifying; compressor stops running, indoor fan motor works. Heating: all will stop running | Power voltage is not stable   |
| 34 | Low DC Bus voltage protection                   | PL                         |   |             | 3s off blink 21 times    |  |         |          |          | Cooling, dehumidifying; compressor stops running, indoor fan motor works. Heating: all will stop running | 1. Check the input voltage if the voltage is lower than 150VAC, restart the machine when the power supply is normal.<br>2. Check the reactor L connection.  |
| 35 | IPM temp. is too high limit/ decrease frequency | EU                         |   |             |                          |  |         |          |          | Overload normal works, compressor running, frequency declines  | Whole unit break for 20 mins and discharge, to check the outdoor control board AP1's IPM module coolant whether is short, the radiator is tightened. If above phenomenom is not OK, please improve or replace the control board AP1 |
| 36 | Four-way valve abnormal                         | U7                         |   |             |                          |  |         |          |          | This malfunction happened, only in heating mode, all will stop running                                   | 1. Power supply voltage is lower than AC175V<br>2. Wire terminal 4V loosen or wire break<br>3. 4V damaged, replace 4V   |
| 37 | Outdoor unit zero-cross detecting error         |                            |   |             |                          |  |         |          |          | Cooling: compressor will stop, indoor fan motor works. Heating: all will stop                            | Replace the outdoor control board AP1   |
| 38 | Outdoor DC fan motor malfunction                | L3                         | ●   | ●           | ●                        |  |         |          |          | Outdoor DC fan motor malfunction lead to compressor stop operation                                       | DC fan motor malfunction or system blocked or the connector loosed  |

Technical Information

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