9.2 Malfunction display section

Linge Wind D.C. Variable Frequency Series

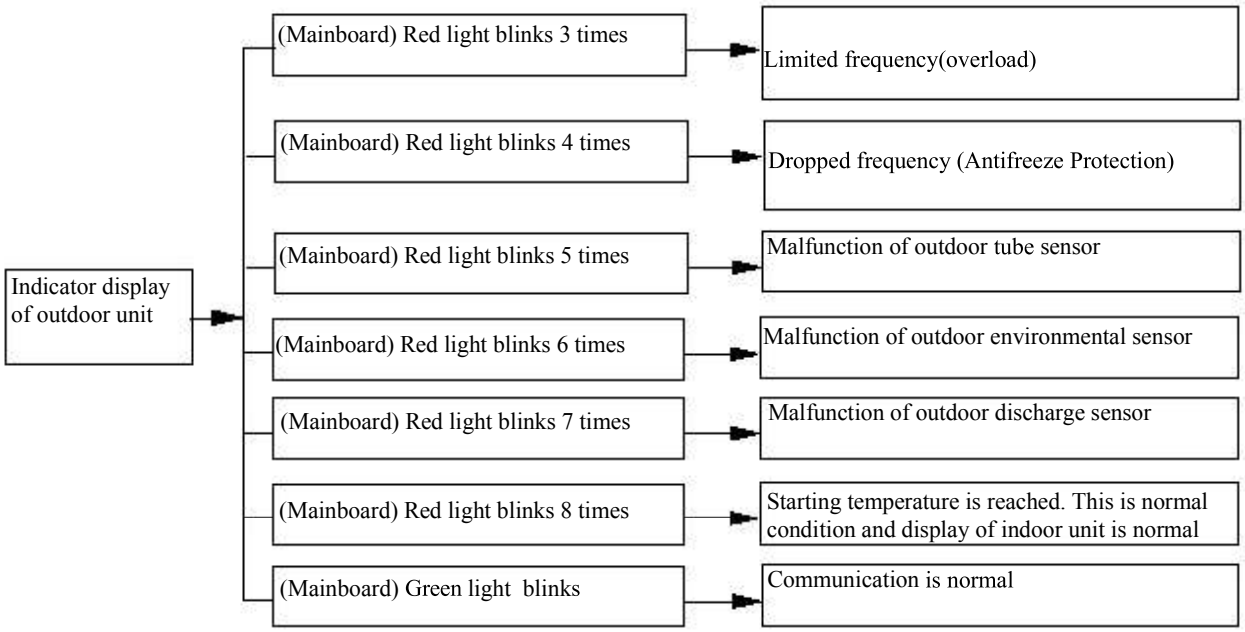
When malfunction or protection occurs in the air conditioner, corresponding code will be displayed on the screen of the indoor unit and the indicator of outdoor unit will blink accordingly as well. When protection or malfunction is eliminated, display will be back to normal

Display code and malfunction description of indoor unit

- E4: Compressor discharge protection
- E5: Low voltage overcurrent protection
- E6: Communication malfunction
- F1: Indoor environmental sensor open or short circuit (the malfunction is detected for 30s continuously)
- F2: Indoor evaporator sensor open or short circuit (the malfunction is detected for 30s continuously)
- F3: Outdoor environmental sensor open or short circuit (the malfunction is detected for 30s continuously)
- F4: Outdoor condenser sensor open or short circuit (the malfunction is detected for 30s continuously)
- F5: Outdoor discharge sensor open or short circuit (after the compressor runs for 3 min, the malfunction is detected for 3s continuously)
- H1: Defrosting
- H3: Compressor overload protection
- H4: System malfunction (i.e. overload protection)
- H5: IPM module protection

Indicator display of outdoor unit

(Mainboard) Yellow light blinks 1 time	Compressor is running (this is normal condition and the display of indoor unit is normal)
(Mainboard) Yellow light blinks 2 times	Defrosting (display H1)
(Mainboard) Yellow light blinks 3 times	Antifreezing protection (display of indoor unit displays is normal)
(Mainboard) Yellow light blinks 4 times	IPM module protection (corresponds to H5 of indoor unit)
(Mainboard) Yellow light blinks 5 times	Overcurrent protection (corresponds to E5 of indoor unit)
(Mainboard) Yellow light blinks 6 times	Overload protection (corresponds to H4 of indoor unit)
(Mainboard) Yellow light blinks 7 times	Discharge protection (corresponds to E4 of indoor unit)
(Mainboard) Yellow light blinks 8 times	Compressor overload protection (corresponds to H3 of indoor unit)
(Mainboard) Red light blinks 1 time	Limited frequency(current)
(Mainboard) Red light blinks 2 times	Dropped frequency (Discharge)



Note: Malfunction display : blind 0.5s; stop 0.5s, there is 2s' interval between two malfunction displays

Analysis or handling of some of the malfunction display:

1. Compressor discharge protection (E4):

   Possible reasons: shortage of refrigerant; blockage of air filter; poor ventilation or air flow short pass for condenser; the system has noncondensing gas (such as air, water etc.); blockage of capillary assy (including filter); leakage inside four-way valve causes incorrect operation; malfunction of compressor; malfunction of protection relay; malfunction of discharge sensor; outdoor temperature too high.

   Handling method: refer to the malfunction analysis in the above section.

2. Low voltage overcurrent protection (E5):

   Possible reason: Sudden drop of supply voltage.

3. Communication malfunction (E6):

   Handling method: Check if communication signal cable is connected reliably

4 Sensor open or short circuit (F1, F2, F3, F4, F5):

   Handling method: Check whether sensor is normal, connected with the corresponding position on the controller and if damage of lead wire is found

5. Compressor overload protection (H3):

   Possible reasons: insufficient or too much refrigerant; blockage of capillary and increase of suction temp.; improper running of compressor, burning in or stuck of bearing, damage of discharge valve; malfunction of protector.

   Handling method: adjust refrigerant amount; replace the capillary; replace the compressor; use universal meter to check if the contactor of compressor is fine when it is not overheated, if not replace the protector.

6. System malfunction (H4):

   i.e. overload protection. When tube temperature (Check the temperature of outdoor heat exchanger when cooling and check the temperature of indoor heat exchanger when heating) is too high, protection will be activated.

   Possible reasons: Outdoor temperature is too high when cooling; insufficient outdoor air circulation; refrigerant flow malfunction.
   please refer to the malfunction analysis in the previous section for handling method .

7. Module protection (H5):

Handling method:

