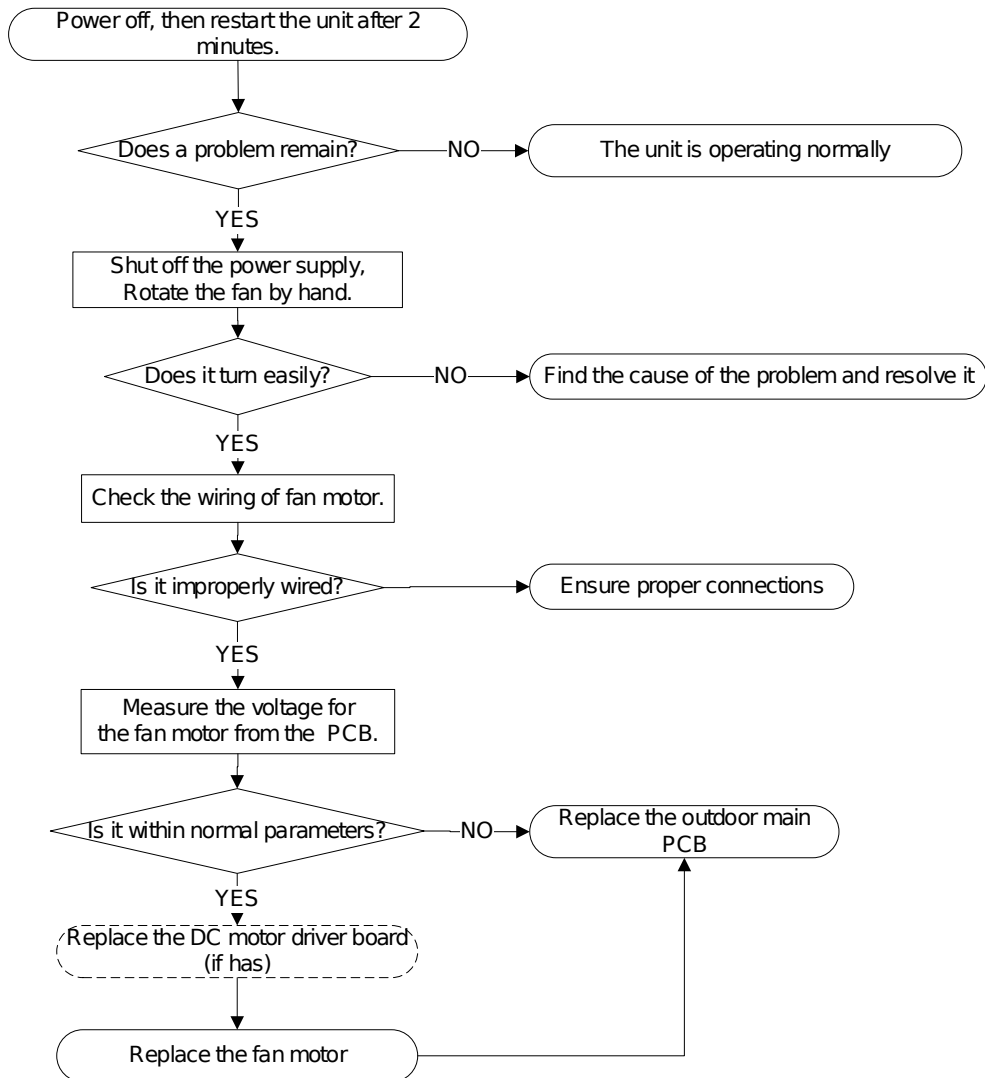


15.4.4 Fan speed malfunction diagnosis and solution

Error Code	F5/EC 07/EC 71
Malfunction conditions	When outdoor fan speed is too low or too high for a certain period of time, the unit ceases operation and the LED displays a failure code.
Potential Causes	<ul style="list-style-type: none"> ● Wiring mistake ● Faulty fan assembly ● Faulty fan motor ● Faulty PCB

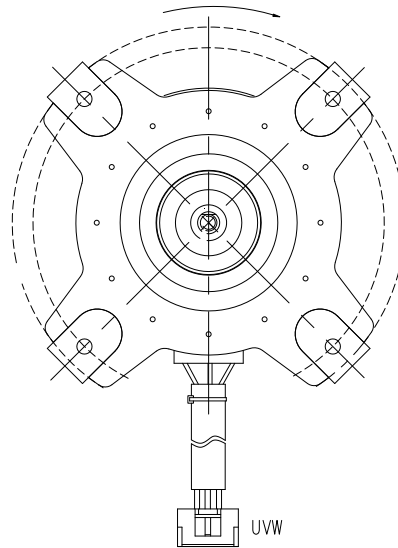
Trouble shooting:



Index 1:

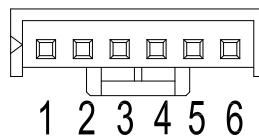
1. DC Fan Motor (control chip is in PCB)

Release the UVW connector. Measure the resistance of U-V, U-W, and V-W. If the resistances are not equal to each other, the fan motor may be experiencing problems and need to be replaced. Otherwise, the PCB must have problems and need to be replaced.



2. DC fan motor (Control Chip is in Fan Motor)

Turn power on and while the unit is on standby, measure the voltage between pin1 and pin3 as well as between pin4 and pin3 in fan motor connector. If the value of the voltage is not within the range shown in the following table, the PCB may be experiencing problems and need to be replaced.



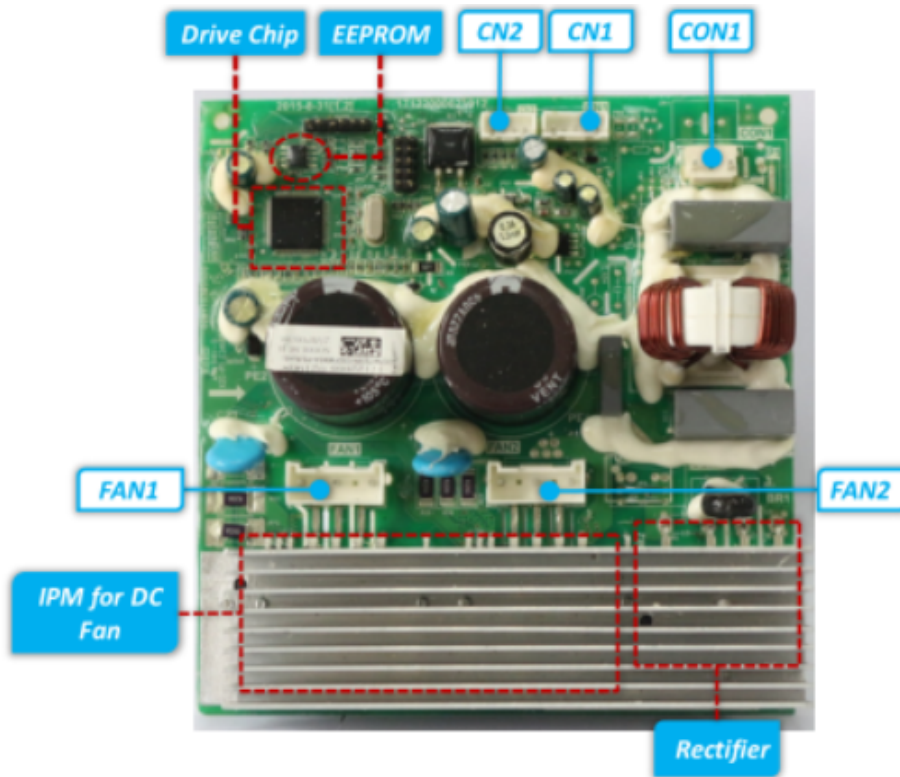
DC motor voltage input and output

NO.	Color	Signal	Voltage
1	Red	Vs/Vm	192~380V
2	---	---	---
3	Black	GND	0V
4	White	Vcc	13.5~16.5V
5	Yellow	Vsp	0~6.5V
6	Blue	FG	13.5~16.5V

3. DC Fan Motor(for some double fan models)

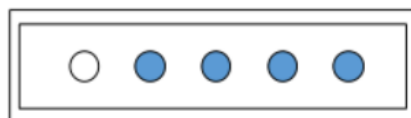
Power on and when the unit is in standby, measure the voltage of CON1,

pin1-pin2 and pin3-pin2 of CN1 in DC motor driver board. If the value of the voltage is not in the range showing in below tables, the outdoor main PCB must has problems and need to be replaced.



Port	Description	Parameter	Remark
CON1	Power input for the PCB	192-380V/DC	
CN1	Communication with main PCB	DC	
CN2	Test port	5V/DC	For debugging board
FAN1	UVW output for DC fan motor		
FAN2	UVW output for DC fan motor		

CN1 Communication with main PCB



5 4 3 2 1

NO.	Signal	Voltage
1	Vcc	+15V
2	GND	
3	TXD	0~6V
4	RXD	0~15V
5	--	--