

## 12. Trouble shooting

### 12-1 Self-diagnosis

#### (1) Indoor unit's LED indication

No.	condition	content	LED
1	normal	standby	Operation lamp flashing at 0.5Hz.
2	normal	Power off	All lamps off
3	normal	Power on	Operation lamp on
4	normal	constraint cooling	Operation lamp flashing at 5Hz , timer lamp on
5	normal	Fan only	fan only indicator on (for cooling-only A/C)
6	protection	Defrosting or anti-cold air	Operation lamp on defrosting/pre-heating lamp on
7	error	Indoor temp. sensor check abnormal	timer lamp flashing at 5Hz
8	error	evaporator temp. sensor check abnormal	Operation lamp flashing at 5Hz
9	error	condenser temp. sensor check abnormal	defrosting/pre-heating lamp flashing at 5Hz
10	error	EEPROM error	Operation lamp and timer lamp flashing at 5Hz
11	error	Outdoor unit protection	All the lamps flashing at 5Hz

#### (2) LEDs' for the indication of outdoor trouble

This table is only suitable for the models with PCB.

Type	Item	LED1	LED2	LED3
Malfunction	Phase sequence	Flash	Off	Off
Malfunction	Missing phase* A,B+	Flash	Off	Off
Malfunction	Missing phase* C+	Off	Off	Off
Malfunction	Low pressure protection	Flash	Flash	Off
Malfunction	Current protection	Off	Off	Flash
Malfunction	Communication malfunction	Flash	Off	Flash
Malfunction	T3 open circuit, short circuit malfunction	Off	Flash	Flash
Malfunction	T4 open circuit, short circuit malfunction (Compressor discharge protection)	Off	Flash	Off
Malfunction	Condenser high temperature protection	Flash	Flash	Flash

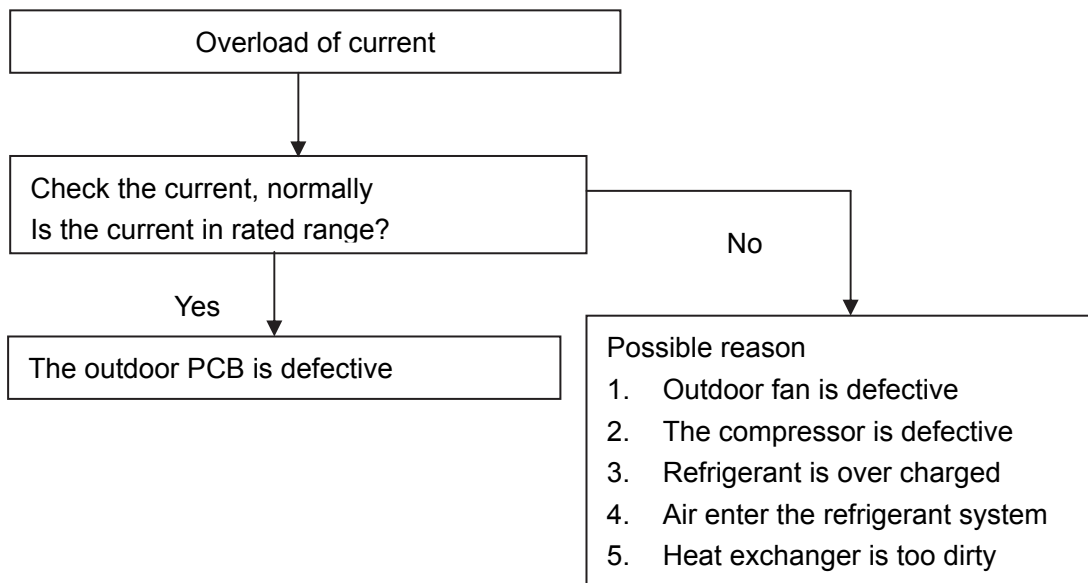
Remarks: It means the system in the stand-by when the LED1-LED3 lights flash slowly.

T3: Outdoor condenser's temperature

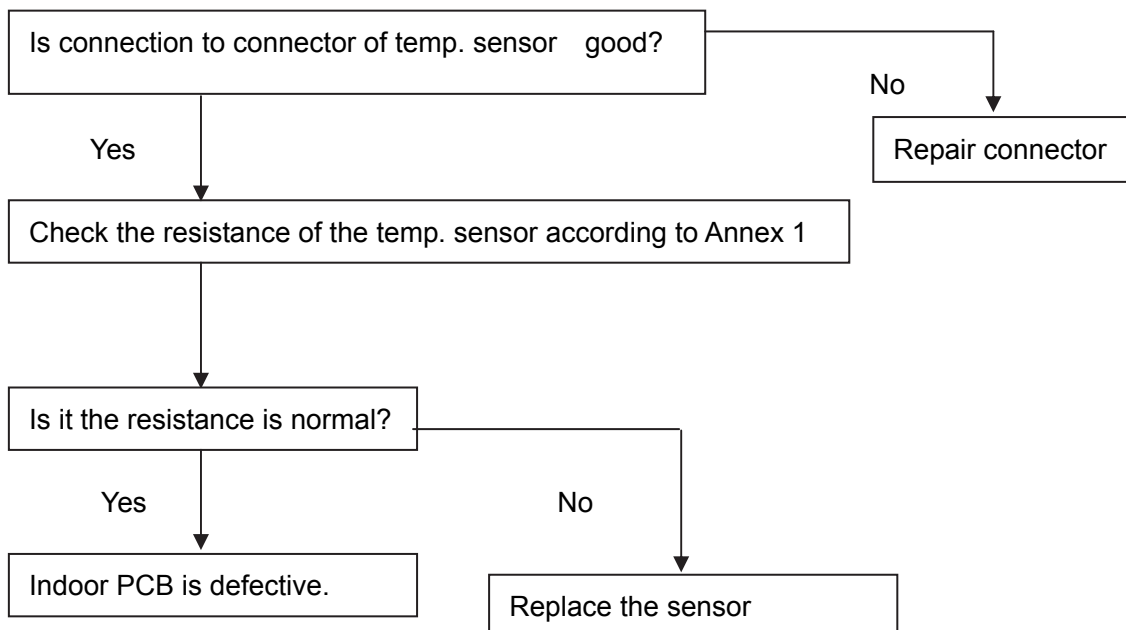
T4: Outdoor ambient temperature

## 12-2 Solving steps for typical malfunction

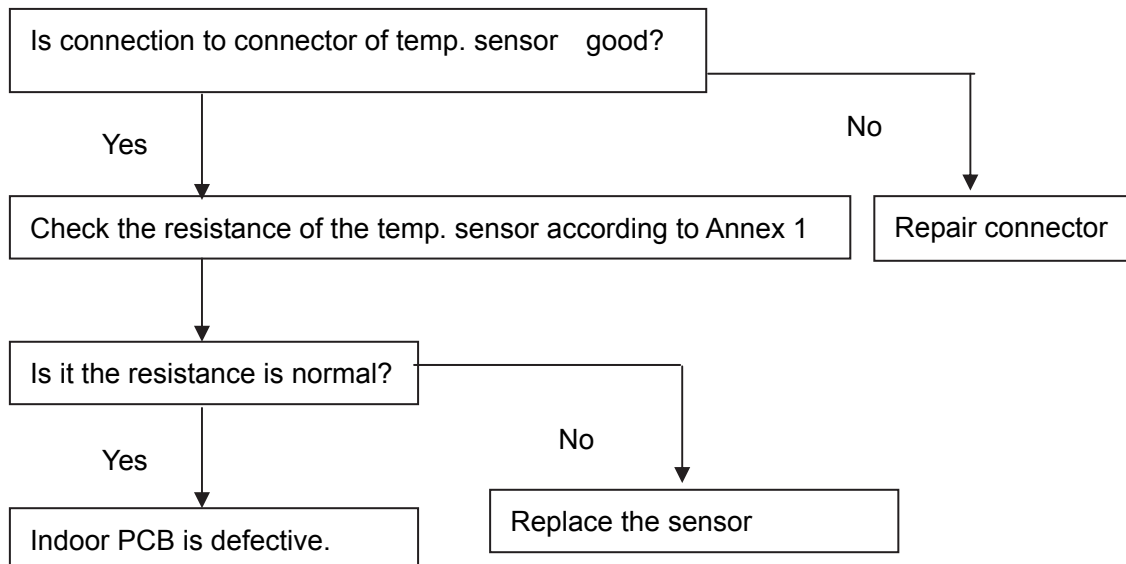
### a. Overload of current



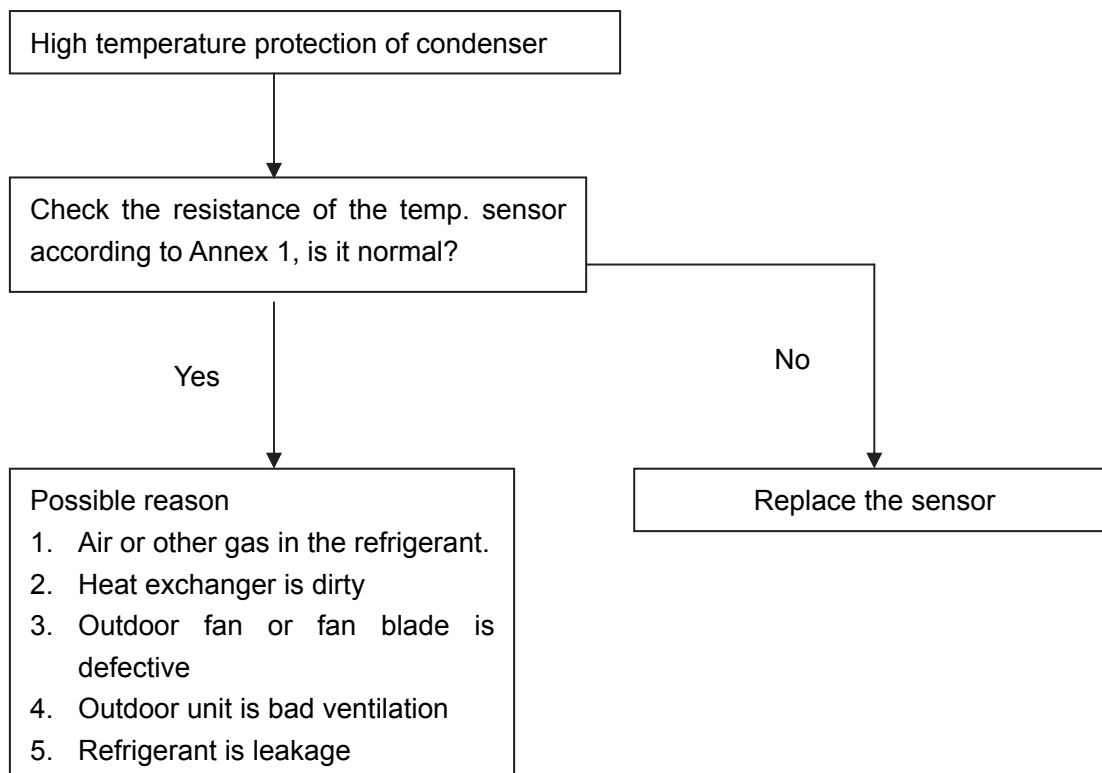
### b. Open-circuit and short-circuit trouble



c. Open-circuit and short-circuit trouble



d. High temperature protection of condenser



## 12-3 Servicing and Maintenance

### 1) Troubles and Solutions

If any the following abnormal conditions occur, turn off the power supply immediately. Please contact our dealer.

TROUBLES	Indicator lamps flash rapidly, after your disconnecting and connecting the unit, the situation is the same.
	Fuse or circuit breaker work frequently.
	Foreign matter or water has fallen into the unit.
	Remote controller is disabled or the switch is out of hand.
	Any other unusual conditioner is observed.

If any of the following conditions occur, check your unit and resolve corresponding problems referring to given remediation. If the trouble can't be settled contact our dealer.

Trouble	Cause	Solutions
Unit does not start	Power failure.	Wait for the comeback of power
	Power switch is open.	Switch on the power
	Fuse of power switch may have blown.	Replace the fuse
	Batteries of remote controller are exhausted.	Replace the batteries
	The time is not start-up time you have set.	Wait or cancel the time set.
Air flowing normally with low cooling effect	Temperature is not set correctly.	Set the temperature properly.
	Door or window is open.	Close door and window.
	Air filter is blocked with dust or dirtiness.	Clean the air filter.
	Inlet/outlet of indoor/outdoor units are blocked.	Clear all blockages.
	Inlet/outlet of indoor/outdoor units are blocked.	Clear the blockage, then restart your operation.
	Be in 3 minutes protection of compressor	Wait

NOTE: Do not replace electric wire or repair the air conditioner by yourself to avoid possible danger.

### 2) Troubles and solutions concerning the remote controller

Please make the following check before asking for repair or maintenance.

Trouble	Cause	Solutions
CAN NOT CHANGE THE FAN SPEED SETTING	Check if the mode display on the LCD is DRY	The Indoor Unit will select fan speed automatically when the unit is on DRY mode.
	Check if the mode display on the LCD is DRY	The Indoor Unit will select fan speed automatically when the unit is on DRY mode.

#### The transmission symbol does not flash

Symptom	Checking items	Cause
Press ON/OFF button, the remote controlling signals can not be transmitted	Check if the remote controller has run out of power	When the battery was out, transmission signals can not be sent

#### Temperature display disappear

Symptom	Checking items	Cause
Temperature Display does not light.	Check if the mode display on the LCD is FAN ONLY	You can not set the temperature when the unit is on FAN ONLY mode.

The Display Goes Off		
Symptom	Checking items	Cause
The indication on the display disappears after a lapse of time.	Check whether the timer operation has come to an end when the OFF TIMER is indicated on the display.	The air conditioner operation stops since the set time elapsed.
The ON TIMER indicators go off after a lapse of certain time.	Check whether the timer operation is started when the ON TIMER is indicated on the display.	When the time set to start the air conditioner is reached, the air conditioner will automatically start and the appropriate indicator will go off.

The Signal Receiving Tone does Not Sound		
Symptom	Checking items	Cause
No receiving tone sounds from the indoor unit even when the ON/OFF button is pushed.	Check whether the signal transmitter of the remote controller is properly directed to the receiver of the indoor unit when the ON/OFF button is pushed.	Direct the signal transmitter of the remote controller to the receiver of the indoor unit, and then repeatedly push the ON/OFF button twice.
Buttons on the remote controller don't work.		Press Reset button.

### 3) Clean

**CAUTION:** Please turn off your air conditioner and disconnect power supply before cleaning.

#### (1) CLEANING INDOOR UNIT

Use a dry to wipe the indoor unit.

A cloth dampened with cold water may be used if the indoor unit is too dirty.

It is allowed to remove the front panel of indoor unit and clean it with water, and ensure to wipe it up with a dry rag.

Note: Do not use a chemically treated duster for wiping or leave such materials near the unit for long.

Do not use benzene, thinner, polishing powder, or similar solvents for cleaning.

#### (2) CLEANING AIR FILTER

The air filter in unit can filter dust and other granules in air. It may reduce the cooling effect that the air filter is covered with dust. So please clean the air filter often.

## 12-4 Appendix IndoorTemp. and Pipe Temp. SensorResistance Value Table (C --K)

℃	K Ohm	℃	K Ohm	℃	K Ohm	℃	K Ohm
-20	115.266	20	12.6431	60	2.35774	100	0.62973
-19	108.146	21	12.0561	61	2.27249	101	0.61148
-18	101.517	22	11.5000	62	2.19073	102	0.59386
-17	96.3423	23	10.9731	63	2.11241	103	0.57683
-16	89.5865	24	10.4736	64	2.03732	104	0.56038
-15	84.2190	25	10.000	65	1.96532	105	0.54448
-14	79.3110	26	9.55074	66	1.89627	106	0.52912
-13	74.5360	27	9.12445	67	1.83003	107	0.51426
-12	70.1698	28	8.71983	68	1.76647	108	0.49989
-11	66.0898	29	8.33566	69	1.70547	109	0.48600
-10	62.2756	30	7.97078	70	1.64691	110	0.47256
-9	58.7079	31	7.62411	71	1.59068	111	0.45957
-8	56.3694	32	7.29464	72	1.53668	112	0.44699
-7	52.2438	33	6.98142	73	1.48481	113	0.43482
-6	49.3161	34	6.68355	74	1.43498	114	0.42304
-5	46.5725	35	6.40021	75	1.38703	115	0.41164
-4	44.0000	36	6.13059	76	1.34105	116	0.40060
-3	41.5878	37	5.87359	77	1.29078	117	0.38991
-2	39.8239	38	5.62961	78	1.25423	118	0.37956
-1	37.1988	39	5.39689	79	1.21330	119	0.36954
0	35.2024	40	5.17519	80	1.17393	120	0.35982
1	33.3269	41	4.96392	81	1.13604	121	0.35042
2	31.5635	42	4.76253	82	1.09958	122	0.3413
3	29.9058	43	4.57050	83	1.06448	123	0.33246
4	28.3459	44	4.38736	84	1.03069	124	0.32390
5	26.8778	45	4.21263	85	0.99815	125	0.31559
6	25.4954	46	4.04589	86	0.96681	126	0.30754
7	24.1932	47	3.88673	87	0.93662	127	0.29974
8	22.5662	48	3.73476	88	0.90753	128	0.29216
9	21.8094	49	3.58962	89	0.87950	129	0.28482
10	20.7184	50	3.45097	90	0.85248	130	0.27770
11	19.6891	51	3.31847	91	0.82643	131	0.27078
12	18.7177	52	3.19183	92	0.80132	132	0.26408
13	17.8005	53	3.07075	93	0.77709	133	0.25757
14	16.9341	54	2.95896	94	0.75373	134	0.25125
15	16.1156	55	2.84421	95	0.73119	135	0.24512
16	15.3418	56	2.73823	96	0.70944	136	0.23916
17	14.6181	57	2.63682	97	0.68844	137	0.23338
18	13.9180	58	2.53973	98	0.66818	138	0.22776
19	13.2631	59	2.44677	99	0.64862	139	0.22231