



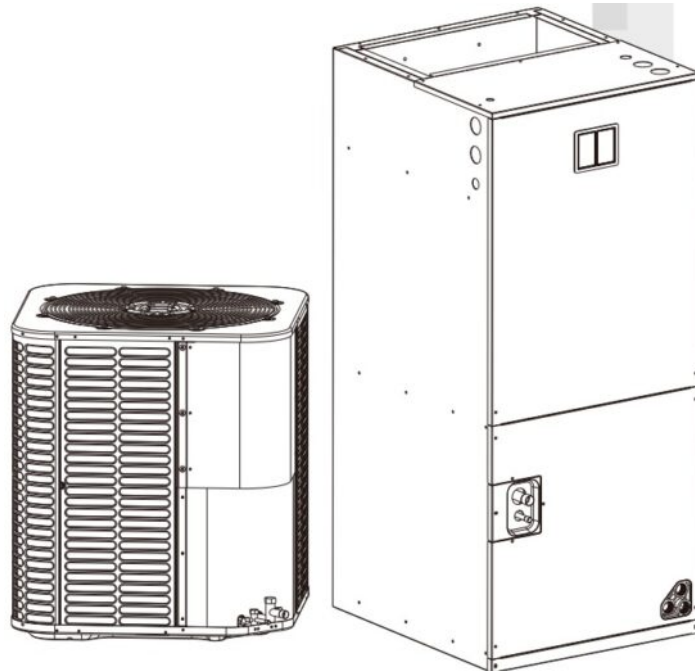
KEPLERX 18SEER Condensing and Air Handler Instruction Manual

[Home](#) » [KEPLERX](#) » KEPLERX 18SEER Condensing and Air Handler Instruction Manual 

KEPLERX

18SEER Condensing & Air Handler
Troubleshooting Manual

Model No.: 18S-EHVC*WD2V / 18S-EHVC*WD2H
18S-EHVH*WD2V / 18S-EHVH*WD2H



Thank you very much for purchasing our air conditioner. Please read this owner's manual carefully before using your air conditioner.

Contents

- 1 Troubleshooting
- 2 Exploded views and part list
- 3 Documents / Resources
 - 3.1 References

Troubleshooting

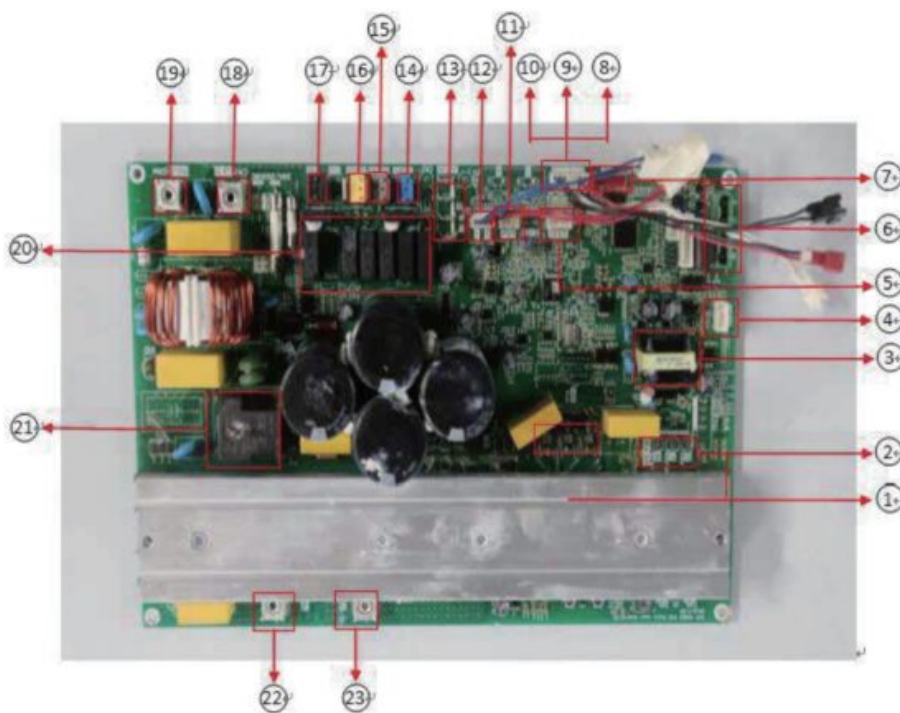
THANK YOU Congratulations on your purchase and welcome to the **KEPLERX** Family. Your new **KEPLERX** Air Conditioner combines high-efficiency operation with portable convenience. By following the operating and care instructions in this manual, your air conditioner will provide you with many years of reliable service. Please visit our website www.keplerx.net For any questions or Technical Support, please contact us by mail info@keplerx.net or by phone 1-866-466-3451.

TROUBLESHOOTING

Parameter point check table

1. Top discharge outdoor unit

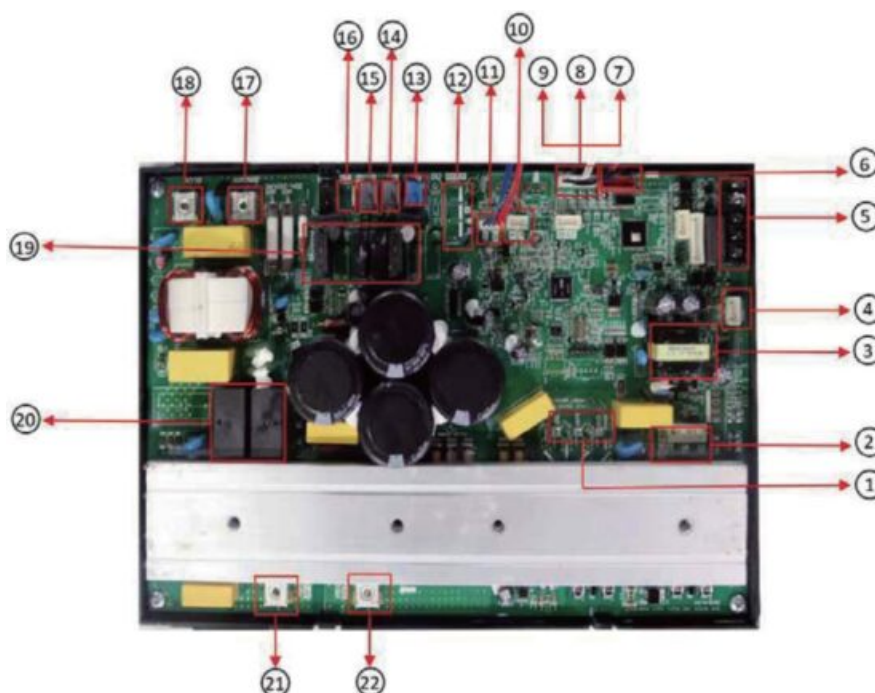
For 18S-EHV*24WD2V, 18S-EHV*36WD2V



Function description for the corresponding position:

No.	Content	No.	Content
1	Compressor wiring terminal	12	High/Low pressure switch ports
2	DC fan motor wiring terminal	13	AC fan motor wiring terminal
3	Transformer	14	Four-way valve control port
4	Outdoor display board wiring terminal	15	Crankcase Heating zone control terminal
5	Reserved	16	Chassis Electric Heater control terminal
6	24V wire controller interface	17	Solenoid valve2 control terminal
7	EXV drive port	18	Power supply connecting terminal
8	Exhaust temperature sensor port(T5)	19	Power supply connecting terminal
9	Outdoor ambient temperature sensor port(T4)	20/21	Relay
10	Condenser temperature sensor port(T3)	22	Inductor wiring terminal 1
11	Pressure sensors ports	23	Inductor wiring terminal 2

For 18S-EHV*48WD2V, 18S-EHV*60WD2V

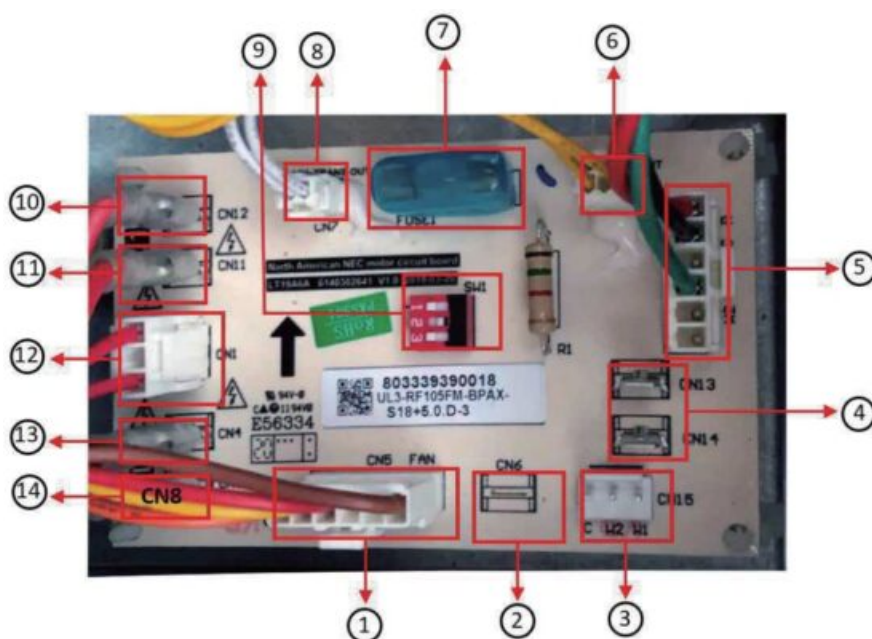


Function description for the corresponding position:

No.	Content	No.	Content
1	Compressor wiring terminal	12	AC fan motor wiring terminal
2	DC fan motor wiring terminal	13	Four-way valve control port
3	Transformer	14	Crankcase Heating zone control terminal
4	Outdoor display board wiring terminal	15	Chassis Electric Heater control terminal
5	24V wire controller interface	16	Solenoid valve control terminal
6	EXV drive port	17	Power supply connecting terminal
7	Exhaust temperature sensor port(T5)	18	Power supply connecting terminal
8	Outdoor ambient temperature sensor port(T4)	19	Relay
9	Condenser temperature sensor port(T3)	20	Relay
10	Pressure sensors ports	21	Inductor wiring terminal 1
11	High/Low pressure switch ports	22	Inductor wiring terminal 2

2. Air handing unit

For 18S-EHV*24WD2H, 18S-EHV*36WD2H 18S-EHV*48WD2H 18S-EHV*60WD2H



Function description for the corresponding position:

No.	Content	No.	Content
1	DC fan motor wiring terminal	8	Output port of transformer(11V)
2	Reserved	9	Dip switch to adjust fan speed
3	Chassis Electric Heater control terminal	10	Power supply connecting terminal(L1)
4	Reserved	11	Fan power cord input port(L1)
5	24V wire controller interface	12	Input power cord transformer port
6	Output port of transformer(24V)	13	Power supply connecting terminal(L2)
7	Fuse	14	Fan power cord input port(L2)

Error code

(1) The error codes for outdoor unit as follows:

Definitions of malfunction	Error code
T4 Outdoor ambient temperature sensor error	E4
T5 Discharge temperature sensor error	E5
T3 Condenser temperature sensor error	E6
AC under voltage protection	E9
EEPROM error	E10
IPM modular sensor error	E12
HLP Pressure sensor error	E13
T3 or T5 sensor disconnect error	E14
High pressure switch error	E15
Communication error of main chip and IPM chip	H0
T3 sensor high temperature error(In cooling mode, 20 times P5 error within 180mins)	H1
High pressure switch error(20 times P1 error within 150 mins)	H2
High pressure abnormal in heating mode (20 times P13 error within 180 mins)	H3
IPM modular high temp error (20 times P8 within 120 mins)	H4

Low pressure error (20 times P2 within 100 mins)	H5
Discharge temperature abnormal error(20 times P4 within 100 mins)	H6
Wet operation error (20 times P12 within 200 mins)	H7
T3 condenser sensor disconnect error (20 times E14 within 100 mins)	H8
Discharge temp sensor disconnect error(20 times E14 within 180 mins)	H12
High pressure protection	P1
Low pressure protection	P2
DC over current protection	P3
T5 Discharge temperature abnormal error	P4
T3 Condenser sensor high temp protection(In cooling mode)	P5
IPM module protection	P6
IPM high temperature protection (Ft)M high temperature protection (Ft)	P8
DC fan motor error	P9
Wet operation error	P12
High pressure abnormal error(In heating mode)	P13

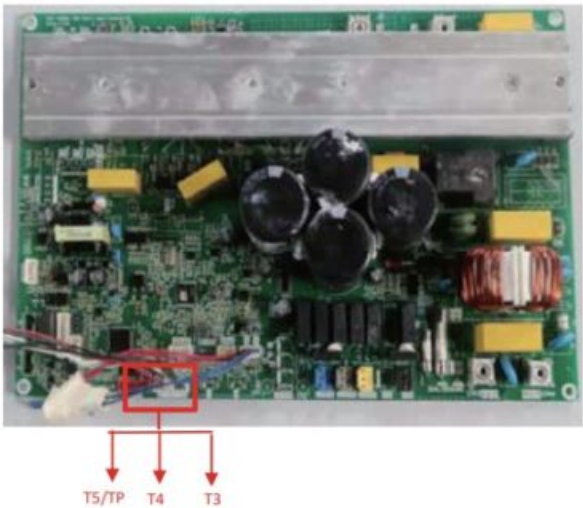
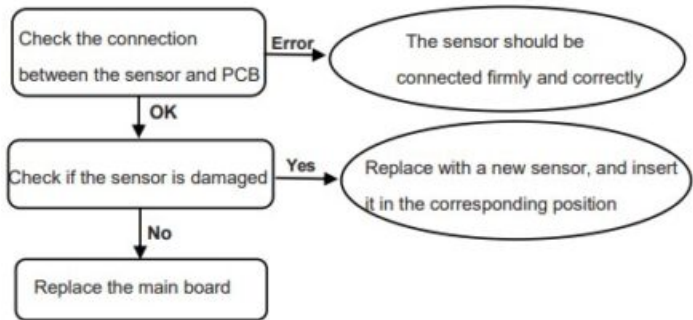
High compression ratio protection	P14
Low compression ratio protection	P15
DC cable bus low voltage protection	L1
DC cable bus high voltage protection	L2
MCE fault / sync / closed loop	L4
Zero speed protection	L5
Compressor phase loss protection ratio protection	L7
Compressor stalls	L8
Frequency limitation or decline by high pressure	L9
Frequency limitation by voltage	LA
Frequency limitation by condenser temp.	LC
Frequency limitation by discharge temp	LD
Frequency limitation by IPM modular high temp	LE
Frequency limitation by current	LF
Oil return	d0
Defrost	dF
Force cooling	dH

(2) Troubleshooting by error code

E4/E5/E6 (T4/T5/T3 temperature sensors error)

Diagnosis

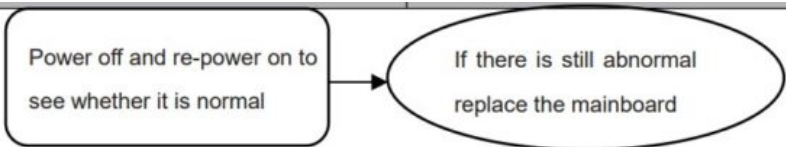
Handling



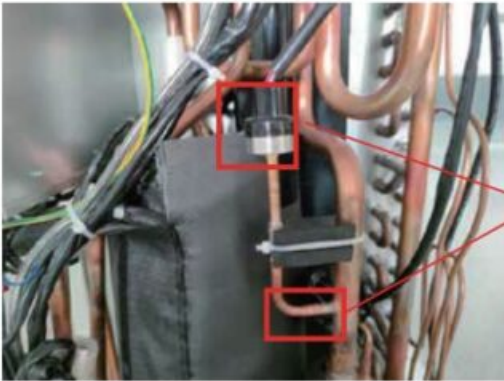
E10 (EEPROM failure)

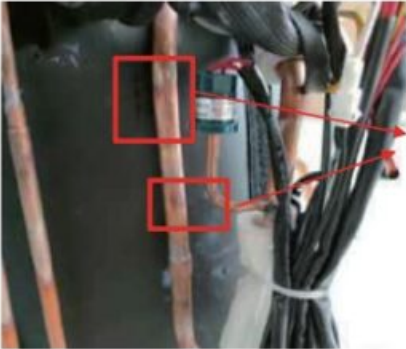
Diagnosis

Handling



E9 (AC under voltage protection)		
Diagnosis		Handling
<div data-bbox="630 219 1227 645"> <pre> graph TD A[Check if the power supply wire is reliably connected] -- No --> B([The power supply wire should be connected firmly and correctly]) A -- Yes --> C[Check if the wire diameter meets the requirements in the manual] C -- No --> D([Replace the power cord to the right diameter]) C -- Yes --> E[Check if the compressor wiring is correct] E -- No --> F([It should be connect correctly according to the wiring diagram]) E -- Yes --> G[Power off and re-power on to see whether it is normal] G -- No --> H([If there is still abnormal replace the mainboard]) </pre> </div> <div data-bbox="593 656 1372 1086"> </div>		
E12 (IPM modular sensor error		
Diagnosis		Handling
<div data-bbox="547 1249 1422 1395"> <pre> graph LR A[Power off and re-power on to see whether it is normal] --> B([If there is still abnormal replace the mainboard]) </pre> </div>		

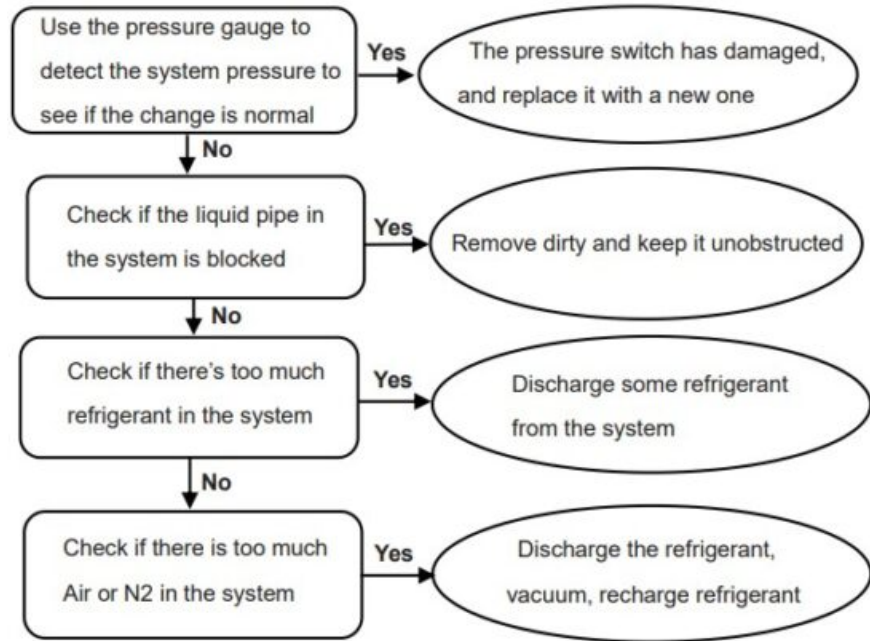
E13 (HLP Pressure sensor error)	
Diagnosis	Handling
<div data-bbox="643 219 1332 663"> <pre> graph TD A[Check the connection between the sensor and PCB] -- Error --> B([The sensor should be connected firmly and correctly]) A -- OK --> C[Measure the value of outdoor unit pressure sensor Compare it with the pressure value of the pressure gauge] C --> D([If the difference is large, replace with a new sensor, and weld in the correct position]) C --> E[If the difference is small, replace the mainboard] </pre> </div> <div data-bbox="582 707 1388 1086">  <p>The pressure sensor should be soldered in the correct position</p> </div>	
E14/H8/H12 (T3 or T5 sensor disconnect error)	
Diagnosis	Handling
<div data-bbox="549 1249 1422 1581"> <pre> graph TD A[Check the connection between the sensor and PCB] -- Error --> B([The sensor should be connected firmly and correctly]) A -- OK --> C[Replace the sensor] </pre> </div>	

E15 (High pressure switch error)	
Diagnosis	Handling
<div> <div> <div>Check the connection between the switch and PCB</div> <div>Error</div> <div>The switch should be connected firmly and correctly</div> </div> <div> <div>OK</div> <div>Try to short circuit the pressure switch</div> <div>If there is still abnormal, replace the mainboard</div> </div> <div> <div>If the error disappears, check if the switch is damaged</div> <div>If it is damaged, replace with a new one, and solder it in the correct position</div> </div> </div> <div>  <p>The high pressure switch should be soldered in the correct position</p> </div>	
H0 (Communication error of main chip and IPM chip)	
Diagnosis	Handling
<div> <div>Power off and re-power on to see whether it is normal</div> <div>If there is still abnormal replace the mainboard</div> </div>	

P1/H2 (High pressure switch protection)

Diagnosis

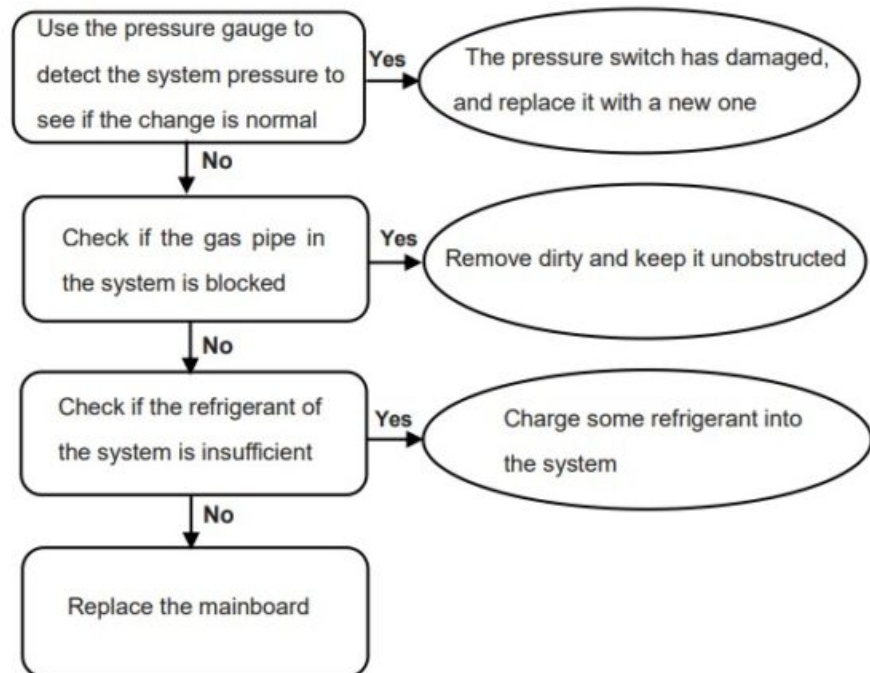
Handling



P2/H5 (Low pressure switch protection)

Diagnosis

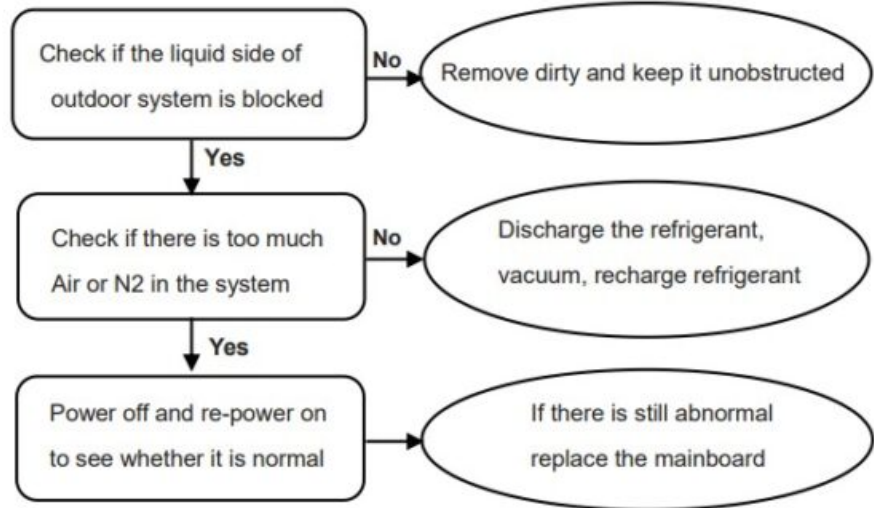
Handling



P5/H1(T3 condenser sensor high temp protection)

Diagnosis

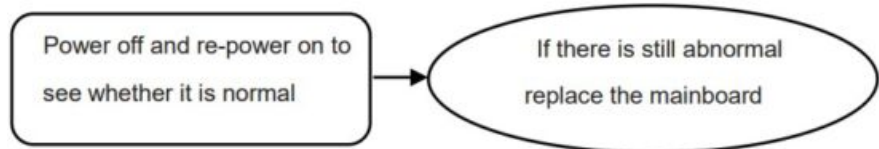
Handling



P6 (IPM module protection)

Diagnosis

Handling



P8/H4 (IPM high temperature protection)

Diagnosis

Handling

Re-power on to measure the temperature of the IPM board
Observe the temperature change

No

Replace the mainboard

If the temperature changes normally, but the final temperature is too high, remove the IPM heat sink cover plate, apply heat dissipation silicone grease evenly again, then tighten the screws to fasten the cover plate

IPM heat sink cover plate
should be fastened



P9 (DC fan motor error)

Diagnosis

Handling

Check if the DC fan motor wiring is correct

No

It should be connect correctly according to the wiring diagram

Yes

Power off and re-power on to see whether it is normal

No

Replace the mainboard

Yes

Check if the DC fan motor is damaged

If it is damaged, replace with a new one

The DC fan motor
wire interface



P5/H1 (T3 condenser sensor high temp protection)

Diagnosis

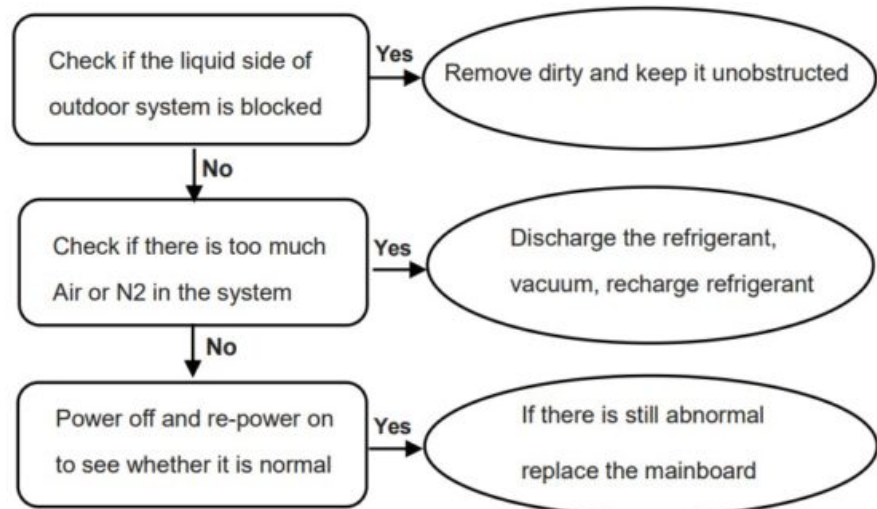
Handling

Power off and re-power on to see whether it is normal

P13/H3(High pressure abnormal error(In heating mode))

Diagnosis

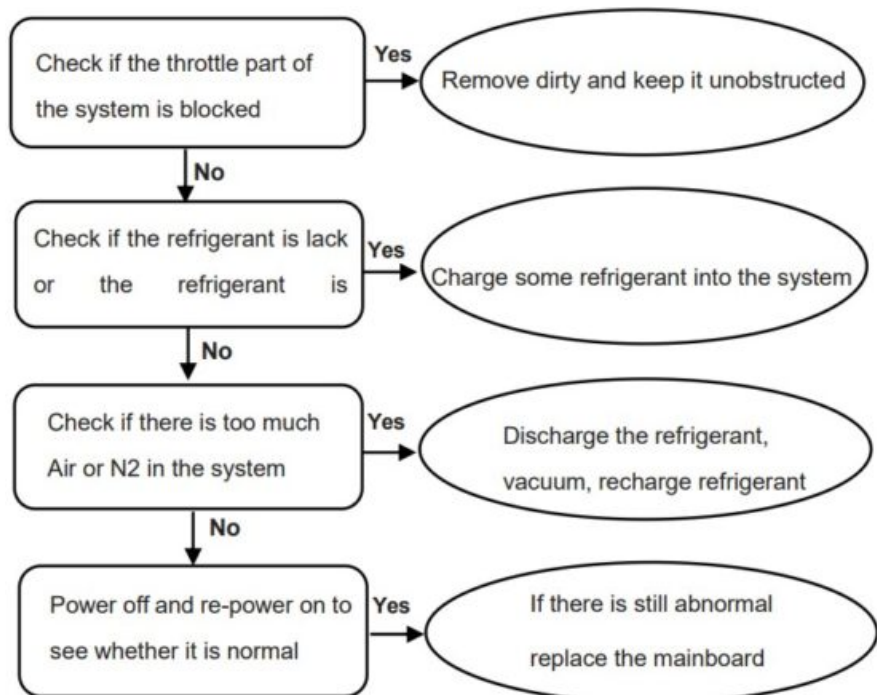
Handling



P14 (High compression ratio protection)

Diagnosis

Handling

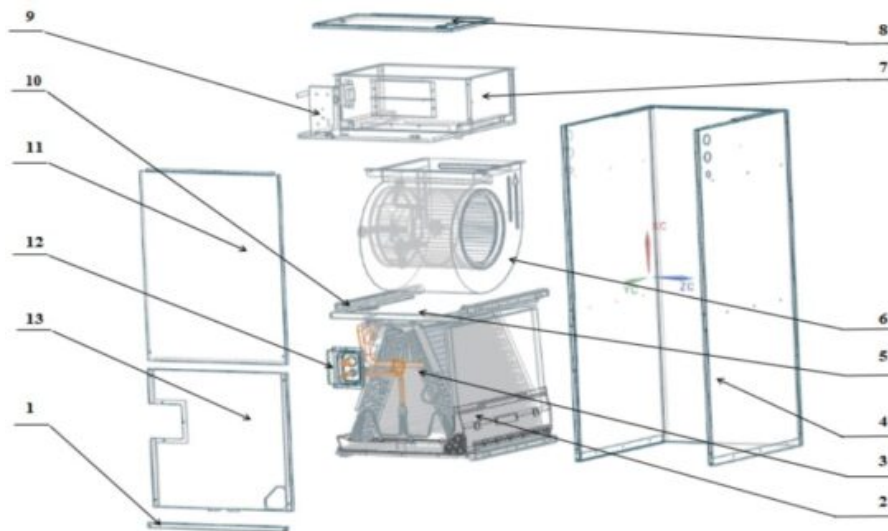


P15 (Low compression ratio protection)	
Diagnosis	Handling
<pre> graph TD A[Check if the throttle part of the system is blocked] -- Yes --> B([Remove dirty and keep it unobstructed]) A -- No --> C[Power off and re-power on to see whether it is normal] C --> D([If there is still abnormal replace the mainboard]) </pre>	

L1/L2 (DC cable bus low/high voltage protection)	
Diagnosis	Handling
<pre> graph TD A[Check if the voltage is normal] -- Yes --> B([Replace the mainboard]) A -- No --> C[The power supply is too low or too high] C --> D([Connect a transformer before connecting the unit to the power supply, then adjust the voltage to the normal operation range]) </pre>	
L4-L8 (IPM module subdivision protection)	
Diagnosis	Handling
<pre> graph TD A[Power off and re-power on to see whether it is normal] --> B([If there is still abnormal replace the mainboard]) </pre>	
L9-LE (Frequency limitation protection, not error)	

Exploded views and part list

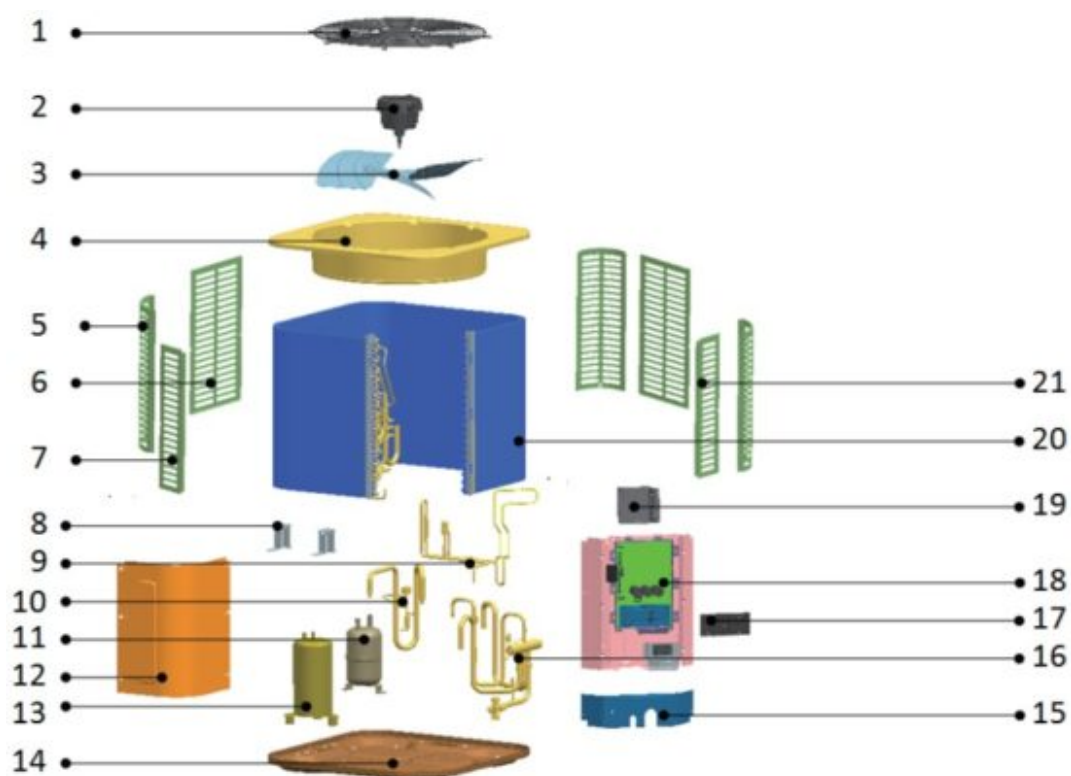
Air Handler Indoor unit



No.	Part Name	Quantity	No.	Part Name	Quantity
1	Filter Cover plate	1	3.8	Evaporator Bafle	1
2	Water pan components	1	3.9	Evaporator Water Bafle #1	2
2.1	Water pan# 1	1	3.10	Evaporator Water Bafle #2	1
2.2	Water pan# 2	1	3.11	Evaporator Water Bafle #3	1
2.3	Water pan fixed block	1	3.12	Evaporator Fixing Plate #1	1
2.4	Water pan brace	2	3.13	Evaporator Fixing Plate #2	1
3.1	Air header Assembly	1	3.14	Evaporator Junction Plate	2
3.2	Diverter Assembly	1	3.15	Evaporator Bafle weld assembly	1
3.3	TXV	1	4	Chassis assembly	1
3.4	Evaporator A	1	5	Supporter	2
3.5	Evaporator B	1	6.1	Right Volute Wind Wheel	1
3.6	Evaporator C	1	6.2	Indoor Motor	1
3.7	Evaporator D	1	7	Fan Motor Fixing plate assembly	1

No.	Part Name	Quantity	No.	Part Name	Quantity
7.1	Fan Motor Fixing plate	1	9.1	Electronic Control Mounting Plate	1
7.2	Wind Wheel Fixed Block	2	9.2	Main Board	1
7.3	Fixed plate on air duct	1	9.3	Transformer	1
7.4	Stator	2	10	Water pan supporter assembly	4
7.5	air duct left stationary plate	1	11	Upper side plate assembly	1
7.6	air duct right stationary plate	1	12	Pipe Cover plate assembly	1
8	Electric control cover foam assembly	1	13	Lower side plate assembly	1
9	Electronic Control Components	2			

Top discharge outdoor unit



No.	Part Name	Quantity	No.	Part Name	Quantity
1	Cover net	1	6	Rear side panel	1
2	Outdoor motor	1	7	Left side panel	1
3	Axial-flow fan	1	8	Piping support plate	2
4	Top cover assembly	1	9	Cooling pipe components of refrigerator	1
5	Support board	3	10	Return pipe welding assembly	1

No.	Part Name	Quantity	No.	Part Name	Quantity
11	Gas liquid separator	1	16.3.2.3	Pressure sensor	1
12	Top panel	1	16.3.3	Four-way valve connecting pipe #2	1
13	Compressor	1	16.3.4	Four-way valve connecting pipe #3	1
14	Chassis assembly	1	16.3.5	Coil of four-way valve	1
15	Left side panel	1	17	Radiator cover	1
16.1	High pressure valve welding assembly	1	18	Electronic components	1
16.1.1	High pressure valve connecting pipe	1	18.1	Outdoor communication display board	1
16.1.2	Square valve	1	18.2	Reactor	1
16.2	Electronic expansion valve assembly	1	18.3	Fan motor capacitance	1
16.2.1	Check valve	1	18.4	Electronically controlled mounting plate assy	1
16.2.2	Two-way filter	2	18.5	Reactor mount	1
16.2.3	Electronic expansion valve	1	18.6	Main control board mounting base	1
16.2.4	L-shaped tube	1	18.7	Communication board mounting base	1
16.2.5	Coil of electronic expansion valve	1	18.8	Terminal block mounting plate	1
16.3	Four way valve assembly	1	18.9	Terminal block	1
16.3.1	Four way valve	1	18.10	Reactor mounting cover welded parts	1
16.3.2	Four-way valve connecting pipe #1 assy	1	18.11	Outdoor inverter integrated board	1
16.3.2.1	Pressure Switch	1	20	Condenser parts	1
16.3.2.2	Four-way valve connecting pipe #1	1	20.2	Condenser assembly	1
16.3.2	Four-way valve connecting pipe #4 assy	1	20.1	Condenser input pipe assembly	1

16.3.2. 1	Square valve	1	21	Right side panel	1
16.3.2. 2	Four-way valve connecting pipe #4	1			



KeplerX Co.Ltd
120 US Route 46,
Parsippany, NJ 07054
Toll Free 1-[866-466-3451](tel:866-466-3451)

Documents / Resources

	<p>KEPLERX 18SEER Condensing and Air Handler [pdf] Instruction Manual 18S-EHVC WD2V, 18S-EHVC WD2H, 18S-EHVH WD2V, 18S-EHVH WD2H, 18SEER Condensing and Air Handler, 18SEER, Condensing and Air Handler, Air Handler, Handler</p>
--	--

References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.