Packaged Terminal Air Conditioner Technical Service Manual

32″ Series

Ⅰ Summary and Features

Features of PTAC:

Location of installation: The unit is installed in the hole pre-embedded in the wall, which is different from traditional installation and prettifies the room, without occupying the space.

Easy installation: Install the drainage pipe at first, and then push the unit into the installed cabinet assy. At last, turn the safety clamp for 90 degrees to finish.

Easy cleaning: Pull the unit out and unscrew the 6 screws used for fixing the cover plate to remove it. In this case, condenser can be cleaned with water. At last, lift the unit slightly to drain the water.

Factory Model	GC Model	Remarks
CPT-V09AGR1-DMA	GCDM09KAC2035HTUS5	1PH 230/208V 60HZ R410A
CPT-V12AGR1-DMA	GCDM12KCD3045HTUS5	
CPT-V15AGR1-DMA	GCDM15KCD3045HTUS5	
CPT-V09EGR1-DMA	GCDM09KAC2035CTUS5	
CPT-V12EGR1-DMA	GCDM12KCD3045CTUS5	
CPT-V15EGR1-DMA	GCDM15KCD3045CTUS5	
CPT-V09AGR1-DMB	GCDM09KAC2035HTUD5	
CPT-V12AGR1-DMB	GCDM12KCD3045HTUD5	
CPT-V15AGR1-DMB	GCDM15KCD3045HTUD5	
CPT-V09EGR1-DMB	GCDM09KAC2035CTUD5	
CPT-V12EGR1-DMB	GCDM12KCD3045CTUD5	
CPT-V15EGR1-DMB	GCDM15KCD3045CTUD5	

Ⅱ Specification and Technical Parameter

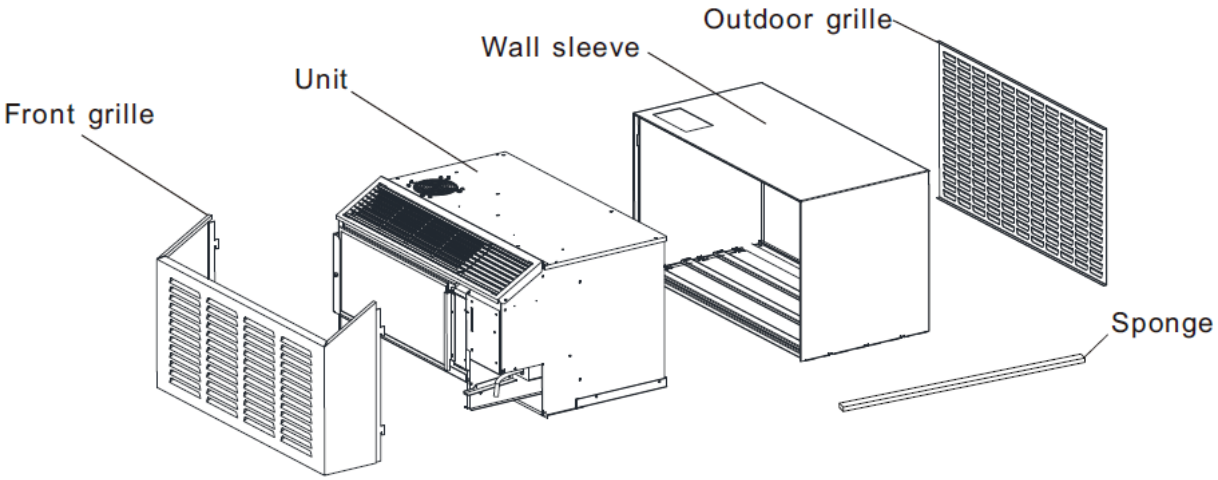
（1） R410A 208/230V-60Hz without Air duct

Factory model			CPT-V09AGR1-DMA	CPT-V12AGR1-DMA	CPT-V15AGR1-DMA	CPT-V09EGR1-DMA	CPT-V12EGR1-DMA	CPT-V15EGR1-DMA
Customer model			GCDM09KAC2035HTUS5	GCDM12KCD3045HTUS5	GCDM15KCD3045HTUS5	GCDM09KAC2035CTUS5	GCDM12KCD3045CTUS5	GCDM15KCD3045CTUS5
Power supply		V-Ph-Hz	230/208V~1Ph-60Hz	230/208V~1Ph-60Hz	230/208V~1Ph-60Hz	230/208V~1Ph-60Hz	230/208V~1Ph-60Hz	230/208V~1Ph-60Hz
Cooling	Capacity	Btu/h	9100/8900	11500/11000	13700/13300	9300/9000	12000/11700	13700/13500
	Input	W	885/860	1180/1150	1430/1390	880/850	1180/1150	1410/1390
	EER	Btu/h.W	10.3/10.3	9.7/9.6	9.6/9.6	10.6/10.6	10.2/10.2	9.7/9.7
Heating	Capacity	Btu/h	8500/8200	10800/10600	13200/128000			
	Input	W	800/780	1060/1020	1300/1260			
	COP	W/W	3.1/3.1	3.0/3.0	3.0/3.0			
Indoor air flow (Hi/Me/Lo) @230V		CFM	335/305/280	335/305/280	335/305/280	335/305/280	335/305/280	335/305/280
Indoor sound level		dB(A)(H/L)	55/51	55/51	55/51	55/51	55/51	55/51
Fresh air flow		CFM	30/27/25	30/27/25	30/27/25	30/27/25	30/27/25	30/27/25
		%	9	9	9	9	9	9
Outdoor air flow		m3/h	1100	1100	1080	1100	1100	1080
Outdoor sound level		dB(A)	67.9	68.5	70.2	67.9	68.5	70.2
Unit	Dimension(W*H*D)	Inch	32“ * 22 3/5” * 18”	32“ * 22 3/5” * 18”	32“ * 22 3/5” * 18”	32“ * 22 3/5” * 18”	32“ * 22 3/5” * 18”	32“ * 22 3/5” * 18”
	Packing (W*H*D)	Inch	34"16/25*25"49/50*20"3/5	34"16/25*25"49/50*20"3/5	34"16/25*25"49/50*20"3/5	34"16/25*25"49/50*20"3/5	34"16/25*25"49/50*20"3/5	34"16/25*25"49/50*20"3/5
	Net/Gross Weight	LBS	116.8/130	122.3/135.5	122.3/135.5	115.7/128.9	121.2/134.4	121.2/134.4
Charged refrigerant type		g	R410A/840	R410A/880	R410A/930	R410A/840	R410A/880	R410A/930
		oz	29.6	31.04	32.8	29.6	31.04	32.8
Throttle type			Capillary	Capillary	Capillary	Capillary	Capillary	Capillary
Ambient temp (Outdoor)	Cooling	℉	53.6-122	53.6-122	53.6-122	53.6-122	53.6-122	53.6-122
	Heating	℉	32-60.2	32-80.6	32-80.6	32-80.6	32-80.6	32-80.6

(2) R410A 208/230V-60Hz with Air duct

Factory model			CPT-V09AGR1-DMA	CPT-V12AGR1-DMA	CPT-V15AGR1-DMA	CPT-V09EGR1-DMA	CPT-V12EGR1-DMA	CPT-V15EGR1-DMA
Customer model			GCDM09KAC2035HTUS5	GCDM12KCD3045HTUS5	GCDM15KCD3045HTUS5	GCDM09KAC2035CTUS5	GCDM12KCD3045CTUS5	GCDM15KCD3045CTUS5
Power supply		V-Ph-Hz	230/208V~1Ph-60Hz	230/208V~1Ph-60Hz	230/208V~1Ph-60Hz	230/208V~1Ph-60Hz	230/208V~1Ph-60Hz	230/208V~1Ph-60Hz
Cooling	Capacity	Btu/h	9200/9000	11700/11500	13700/13300	9300/9000	12000/11700	13700/13500
	Input	W	890/870	1190/1170	1430/1390	880/850	1180/1150	1430/1390
	EER	Btu/h.W	10.3/10.3	9.8/9.8	9.6/9.6	10.6/10.6	10.2/10.2	9.7/9.7
Heating	Capacity	Btu/h	8500/8200	10800/10600	13200/128000			
	Input	W	800/780	1060/1020	1300/1260			
	COP	W/W	3.1/3.1	3.0/3.0	3.0/3.0			
Indoor air flow (Hi/Me/Lo) @230V		CFM	335/305/280	335/305/280	335/305/280	335/305/280	335/305/280	335/305/280
Indoor sound level		dB(A)(H/L)	55/51	60/58	60/58	60/58	60/58	60/58
Fresh air flow		CFM	30/27/25	30/27/25	30/27/25	30/27/25	30/27/25	30/27/25
		%	9	9	9	9	9	9
Air duct fan air flow @230V		CFM	75	75	75	75	75	75
Outdoor air flow		m3/h	1100	1100	1080	1100	1100	1080
Outdoor sound level		dB(A)	67.9	68.5	70.2	67.9	68.5	70.2
Unit	Dimension(W*H*D)	Inch	32“ * 22 3/5” * 18”	32“ * 22 3/5” * 18”	32“ * 22 3/5” * 18”	32“ * 22 3/5” * 18”	32“ * 22 3/5” * 18”	32“ * 22 3/5” * 18”
	Packing (W*H*D)	Inch	34"16/25*25"49/50*20"3/5	34"16/25*25"49/50*20"3/5	34"16/25*25"49/50*20"3/5	34"16/25*25"49/50*20"3/5	34"16/25*25"49/50*20"3/5	34"16/25*25"49/50*20"3/5
	Net/Gross Weight	LBS	118.8/131.1	123.4/136.6	123.4/136.6	116.8/130	122.3/135.5	122.3/135.5
Charged refrigerant type		g	R410A/840	R410A/840	R410A/880	R410A/930	R410A/840	R410A/880
		oz	29.6	29.6	31.04	32.8	29.6	31.04
Throttle type			Capillary	Capillary	Capillary	Capillary	Capillary	Capillary
Ambient temp (Outdoor)	Cooling	°F	53.6-122	53.6-122	53.6-122	53.6-122	53.6-122	53.6-122
	Heating	°F	32-60.2	32-80.6	32-80.6	32-80.6	32-80.6	32-80.6

Ⅲ Parts' Name



Wall sleeve: all our sleeves have industry standard dimensions of 32'' wide x 18-3/10'' high. The 16-1/2'' depth is the industry standard. Sleeves may be shipped separately to allow for installation during construction.

Outdoor grill: available in stamped aluminum louvered for application with wall sleeve.

Ⅳ Controller Function Manual and Operating Method

Controller Function Manual

This function manual is applicable to PTAC. The unit for temperature is centigrade. If there's Fahrenheit, their transition relations is T Fahrenheit =T centigrade *1.8+3.2.

1. Temperature Parameter

   - Indoor setting temperature (T_{peset})
   - Indoor ambient temperature (T_{amb})

2. System Basic Function

   In any circumstances, the compressor will delay 3 mins for protection once it's started up. Once the compressor is started up, the compressor won't stop with the change of the indoor temperature. While once the compressor is stopped, it can be started up only after 3mins delayed. (The compressor can be stopped immediately at the time of mode switchover, turning off the unit, adjusting setting temperature and turning to protection functions.)

   1) Cooling Mode

      Working conditions and process for cooling:

      When Tamb≥T_{preset}+2℉(1℃), the unit is running in cooling mode. Meanwhile, the compressor is running and the fan is running at the setting fan speed; When T_{amb}≦T_{preset}-2℉(1℃), the unit is turn to OFF status. Meanwhile, the compressor will stop, while the fan will run at the setting fan speed for 15s delay; When T_{preset}-2℉(1℃)<T_{amb}<T_{preset}+2℉(1℃), the unit keeps previous running status.

      ◇In this mode, the dual 8 nixietube displays the setting temperature and the cooling LED is bright. The setting temperature range is 60~90℉(16~32℃).

   2) Fan Mode

      In this mode, the compressor won't run and the temperature can't be adjusted (UP and DOWN are invalid). The fan can select high, and low fan speed to run. The dual 8 nixietube displays ambient temperature (32~99℉, when ambient temperature is higher than 99℉, it will display 99; when ambient temperature is lower than 32 ℉, it will display 32), and the fan LED is bright.

   3) Auto Mode

      Working conditions and process is auto adjusted by the indoor ambient temperature. When Tamb＞78℉(26℃), the unit is running in cooling mode. Meanwhile, the compressor is running and the fan is running at the setting fan speed. When Tamb ＜ 70℉(21℃), the unit is running in heating mode; If 70℉(21℃)≤ Tamb≤78℉(26℃), the unit is running in fan mode.

      If the unit is cooling only unit, it will run in fan mode when Tamb≤78℉(26℃).

   4) Heating Mode

      Working condition and process for heating:

      When Tamb≤Tpreset-2℉(1℃), the unit is running in heating mode. Meanwhile, the compressor is running and the fan is running at the setting fan speed; When Tamb≥Tpreset+2℉(1℃), the unit is turn to OFF status. Meanwhile, the compressor will stop, while the fan will run at the setting fan speed for 15s delay; When Tpreset-2℉(1℃)<Tamb<Tpreset+2℉(1℃), the unit keeps previous running status.

Electric heater can't work with compressor at the same time. When T3＜44℉(7℃), unit will run with Electric-heater, when T_{amb}≥44℉(7℃), unit will run with compressor.

5) Low Temperature Resistant Protection

This is valid in standby cooling and fan mode.

Entry condition: If dial-up chooses the low temperature resistant protection and it's detected that the indoor ambient temperature is lower than 50℉(10℃) for 3mins successively .

Quitting condition: When the indoor ambient temperature is raising more than 55 ℉ (13℃), the low temperature resistant protection will be stopped

After entering into the low temperature resistant protection, it can't be quitted by pressing any buttons ;(except the heating mode) others: In the low temperature resistant protection, the dual 8 displays "L0'".

6) Open circuit and short circuit of temperature sensor

If the temperature sensor is open circuit or short circuit, it must send the error signal. The error signal is displayed by the displayer "dual 8"(it won't display when turning off the unit, while the malfunction LED will display it). If the malfunction of temperature sensor is detected in continuous 30s, unit will turn off.

3. Buttons and Display

1) Buttons

There are ON/OFF, UP, DOWN, HEAT, COOL, FAN and FAN SPEED seven buttons in all...

In ON status, all the buttons are in valid.

①ON/OFF: After pressing the ON/OFF button, the unit can be switched between ON and OFF.

②COOL, HEAT, FAN: In ON status, after pressing the any one of the three buttons, the unit can be running in the mode you have choice; In standby mode, after pressing the MODE button, the controller will run at the running status.

③FAN SPEED: In ON status, after pressing the FAN SPEED button, you can select the high, low and auto fan speed.

④UP, DOWN: Adjust the setting temperature (60-90℉)(16~32℃) by pressing the UP and FAN SPEED buttons and you can also select other setting temperature range through configuration.

2) Dual 8 Display and LED Display

Two 8 segment nixitube and 7 LEDs (ON/OFF, HIGH, LOW, AUTO, HEAT, COOL, FAN).

①Mode LED display: when the A/C is running in a certain kind of mode, the corresponding LED is bight.

②ON/OFF LED: In ON status, the controller is in green color.

③Fan speed display: when the A/C is running at high, low and auto fan speed, the corresponding LED is bright.

④Dual 8 displays: In cooling and heating mode, it is default to the display the indoor ambient temperature.

⑤Malfunction Display

After energization, STATUS LED is bright, while when there's malfunction or protection, STATUS LED will display in any circumstances. The details are as below: priority is decreasing from 1 to 8.

1	Indoor ambient temp sensor failure	Dual 8 displays "E2 "
2	Indoor coil temp sensor failure	Dual 8 displays "E3"
3	High temperature protection of air outlet	Dual 8 displays "E4"
4	Outdoor coil temp sensor failure	Dual 8 displays "E5"
5	Air outlet temp sensor failure	Dual 8 displays "E7"
6	Overheating protection/defrosting	Dual 8 displays "E8"
7	High temp protection of outdoor coil	Dual 8 displays "E9"
8	EEPROM error	Dual 8 displays "EE"
9	Electric heater selection error	Dual 8 displays "EH"

4.Special Functions

1) Configuration that is easy for hotel personnel to repair (8 DIP switch, the configuration is valid only after power failure)

① Anti-cold air

ON- Enable; OFF- Disable; default-OFF

② Heat pump

ON- Heat pump function is valid; OFF- other heat function

③ E-heater

ON-Electric heater is valid; OFF- other heat function(without electric heater)

④ Heating priority

ON-Heat pump prior; OFF-other heat function(only available for panel control)

Remarks: IF ①、②、③、④ above are all OFF, the unit is cooling only.

⑤ Room freeze protection

ON- Allows the unit to ensure the indoor room temperature does not

fall below 40°F even when turned off; OFF- disable freeze protection; default—ON

⑥ Electric memory

ON- it's valid. OFF- it's invalid. Default-ON

⑦ FAN CONTINUOUS /CYCLE FOR COOL

ON- fan will be stopped according to the loads (COOL. COMP); OFF- fan is constantly running; default-OFF.

⑧ Electric heater logic

ON- Electric heater logic for 9K; OFF- Electric heater logic for 12K/15K.

2) Configuration mode

After the unit is turned on, we could change the modes blow by pressing different buttons:

Mode one: Fahrenheit / Centigrade display mode

Fahrenheit and Centigrade display mode can be switched by pressing Set point up or Set point down button for 3s.

Mode two: Display switchover between setting temperature and ambient temperature in heating and cooling mode

Press the Set point up button or Set point down button to display the set temperature, after finish setting, the dual 8 will flash for 5s, then display back to indoor ambient temperature.

Mode three: Display switch for different temperature set range.

Press up and Fan Speed button at the same time, dual 8 will circulatory display R1—R8, default is R8.

Mode four: exchange between 24V universal wire controller and control board.

Press the "HEAT" and "+" buttons for 5 seconds at the same time, the digital display tube will display "r" and buzzer will ring twice when it changes to 24V universal wire controller; it will display "p" and buzzer will ring once when it changes to control board.

1) Memory Function

Energizing after power failure, the controller is running according to the status before power failure.

2) Restore factory settings

Change the dipswitch 6 to OFF status, and then cut off the power supply, and then switch on the power supply, the unit will come back the default status except that temperature setting range.

5. Protection Functions

1) Indoor Coil Frost Protection in cooling mode

When compressor has run for 12 mins, and indoor coil temperature≤33℉（1℃），compressor and outdoor fan stop, and indoor fan keep running. When indoor coil temperature≥59℉（15℃）for 5 mins, or ambient temperature≤ set temperature or unit OFF or mode switch, it will quit protection mode.

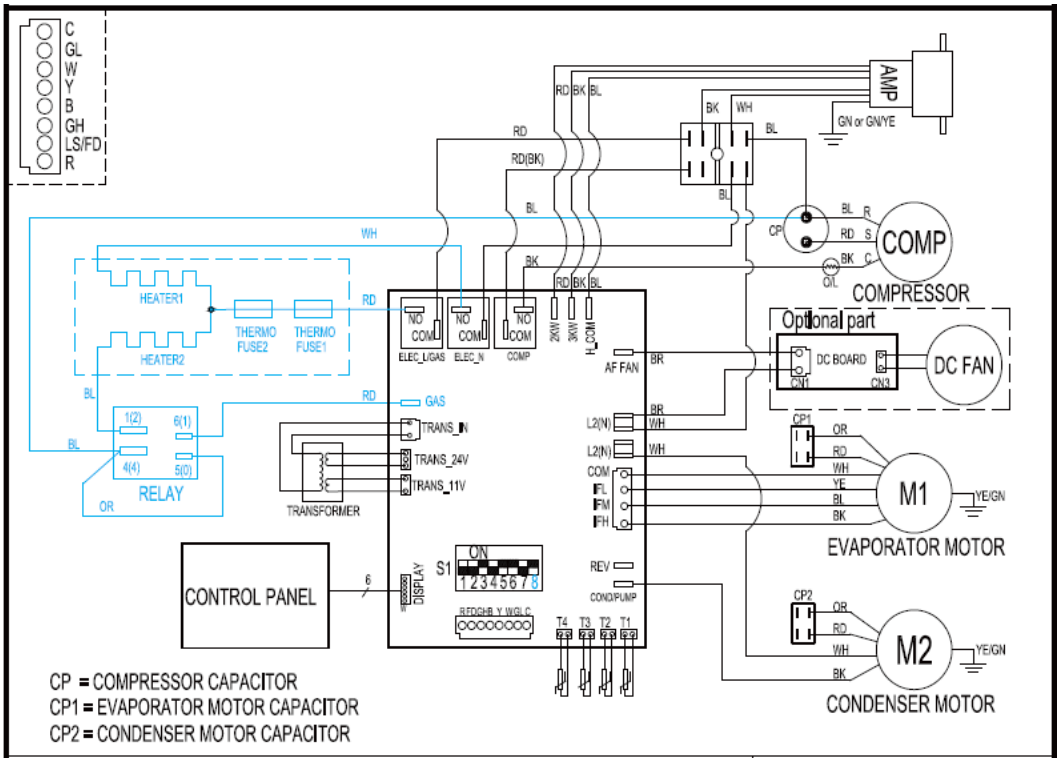
2) High pressure protection

When pressure is higher than normal condition, high pressure switch open for 3s, compressor、outdoor fan、4-way valve are in protection mode, if after 10 mins that

compressor has stopped, the system comes back to normal pressure condition, units quit protection mode.

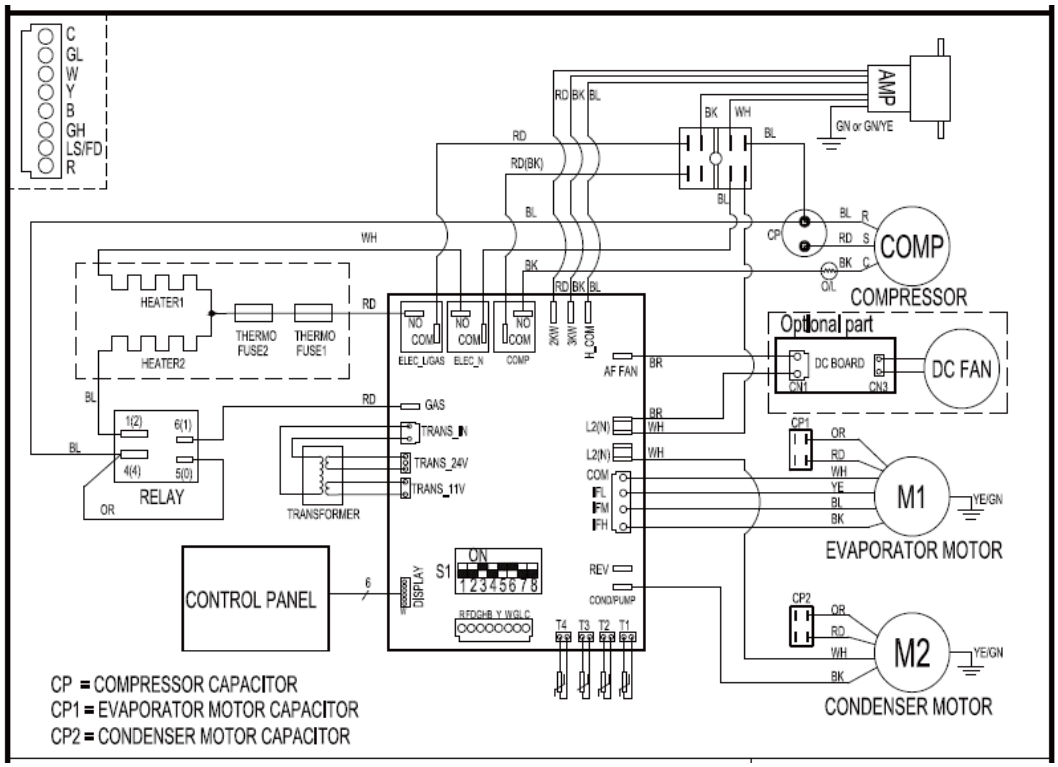
V Electric Circuit Diagram

(1) GCDM09KAC2035CTUS5 / GCDM09KAC2035CTUD5



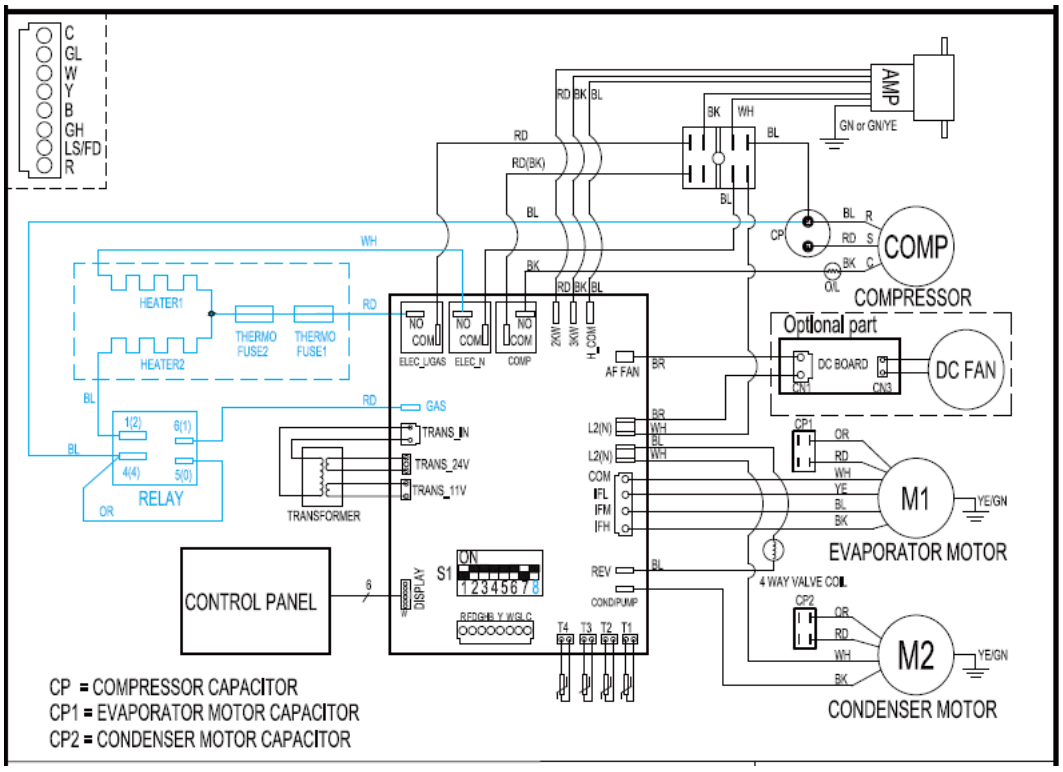
SELECTOR SWITCH（ON:■ OFF:□）						WIRE COLOR CODE
S1.1	Anti-cold air	■ Enable □ Disable	S1.5	Room Freeze Protection	■ Enable □ Disable	BL BLUE WH WHITE BR BROWN RD RED GN GREEN BK BLACK OR ORANGE YE YELLOW
S1.2	Heat Pump	■ Enable □ Disable	S1.6	Electric Memory	■ Enable □ Disable	
S1.3	Electric Heat	■ Enable □ Disable	S1.7	Fan CYC. For Cooling	■ Enable □ Disable	
S1.4	■ Heat Pump Prior □ Electric Heat Prior	Only panel Enable	S1.8	Electric heater logic	■ 9K □ 12K/15K	

（2）**GCDM12KCD3045HTUS5 /** GCDM15KCD3045HTUS5、GCDM12KCD3045CTUD5 / GCDM15KCD3045CTUD5



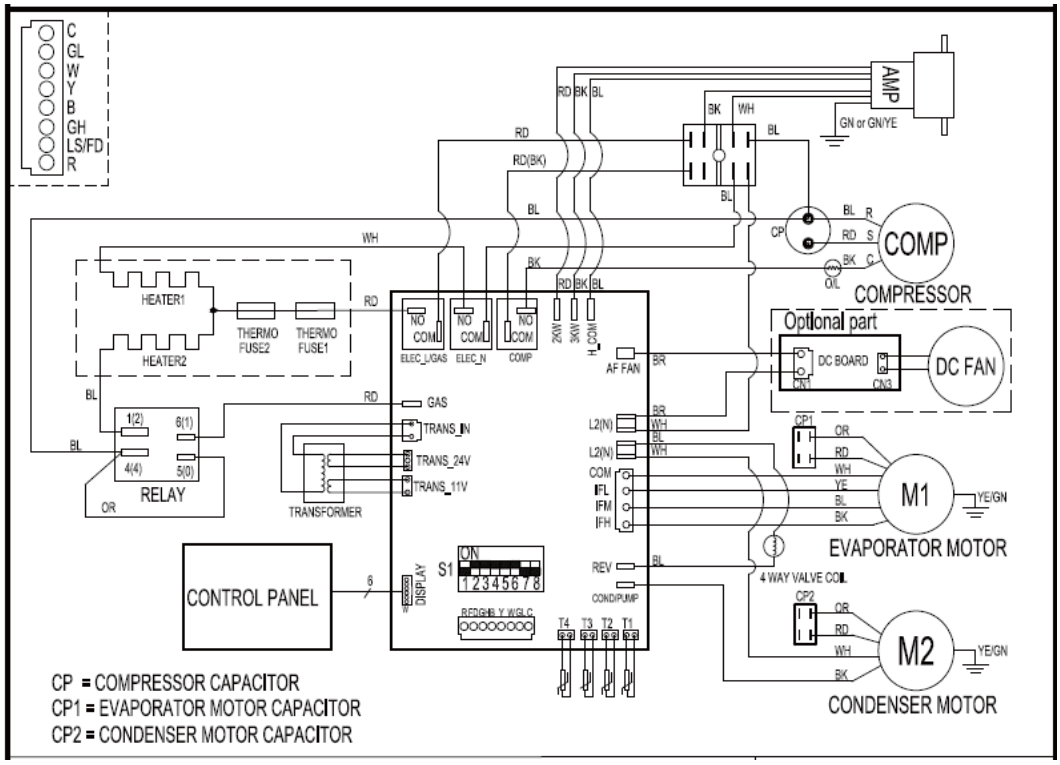
SELECTOR SWITCH（ON:■ OFF:□ ）						WIRE COLOR CODE
S1.1	Anti-cold air	■ Enable □ Disable	S1.5	Room Freeze Protection	■ Enable □ Disable	BL BLUE WH WHITE BR BROWN RD RED GN GREEN BK BLACK OR ORANGE YE YELLOW
S1.2	Heat Pump	■ Enable □ Disable	S1.6	Electric Memory	■ Enable □ Disable	
S1.3	Electric Heat	■ Enable □ Disable	S1.7	Fan CYC. For Cooling	■ Enable □ Disable	
S1.4	Heat Pump Prior Electric Heat Prior	■ Only panel □ Enable	S1.8	Electric heater logic	■ 9K □ 12K/15K	

（3）**GCDM09KAC2035HTUS5 /** GCDM09KAC2035HTUD5



SELECTOR SWITCH（ON:■ OFF:□ ）								WIRE COLOR CODE
S1.1	Anti-cold air	■ Enable □ Disable		S1.5	Room Freeze Protection	■ Enable □ Disable		BL BLUE WH WHITE BR BROWN RD RED GN GREEN BK BLACK OR ORANGE YE YELLOW
S1.2	Heat Pump	■ Enable □ Disable		S1.6	Electric Memory	■ Enable □ Disable		
S1.3	Electric Heat	■ Enable □ Disable		S1.7	Fan CYC. For Cooling	■ Enable □ Disable		
S1.4	Heat Pump Prior Electric Heat Prior	■ Only panel □ Enable		S1.8	Electric heater logic	■ 9K □ 12K/15K		

（4）GCDM12KCD3045HTUS5 / GCDM15KCD3045HTUS5、GCDM12KCD3045HTUD5 / GCDM15KCD3045HTUD5

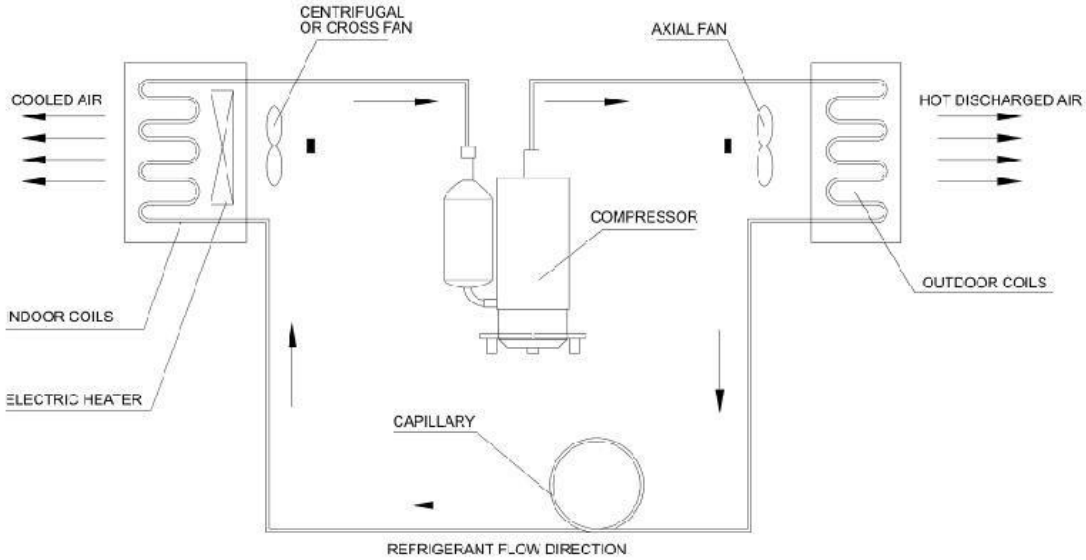


SELECTOR SWITCH（ON:■ OFF:□ ）							WIRE COLOR CODE
S1.1	Anti-cold air	■ Enable □ Disable		S1.5	Room Freeze Protection	■ Enable □ Disable	BL BLUE WH WHITE BR BROWN RD RED GN GREEN BK BLACK OR ORANGE YE YELLOW
S1.2	Heat Pump	■ Enable □ Disable		S1.6	Electric Memory	■ Enable □ Disable	
S1.3	Electric Heat	■ Enable □ Disable		S1.7	Fan CYC. For Cooling	■ Enable □ Disable	
S1.4	Heat Pump Prior Electric Heat Prior	■ Only panel □ Enable		S1.8	Electric heater logic	■ 9K □ 12K/15K	

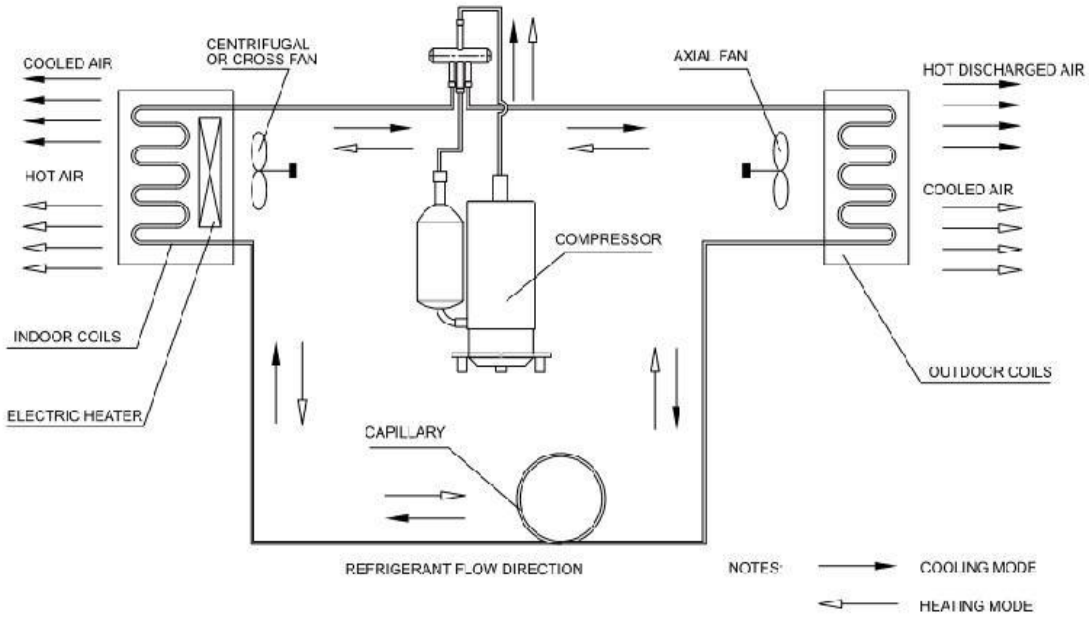
If the above electric circuit diagram has changed, please refer to it on the unit body.

VI Refrigerant System Diagram

（1）Cooling Modes



（2）Cooling Modes



Ⅶ Malfunction Analysis

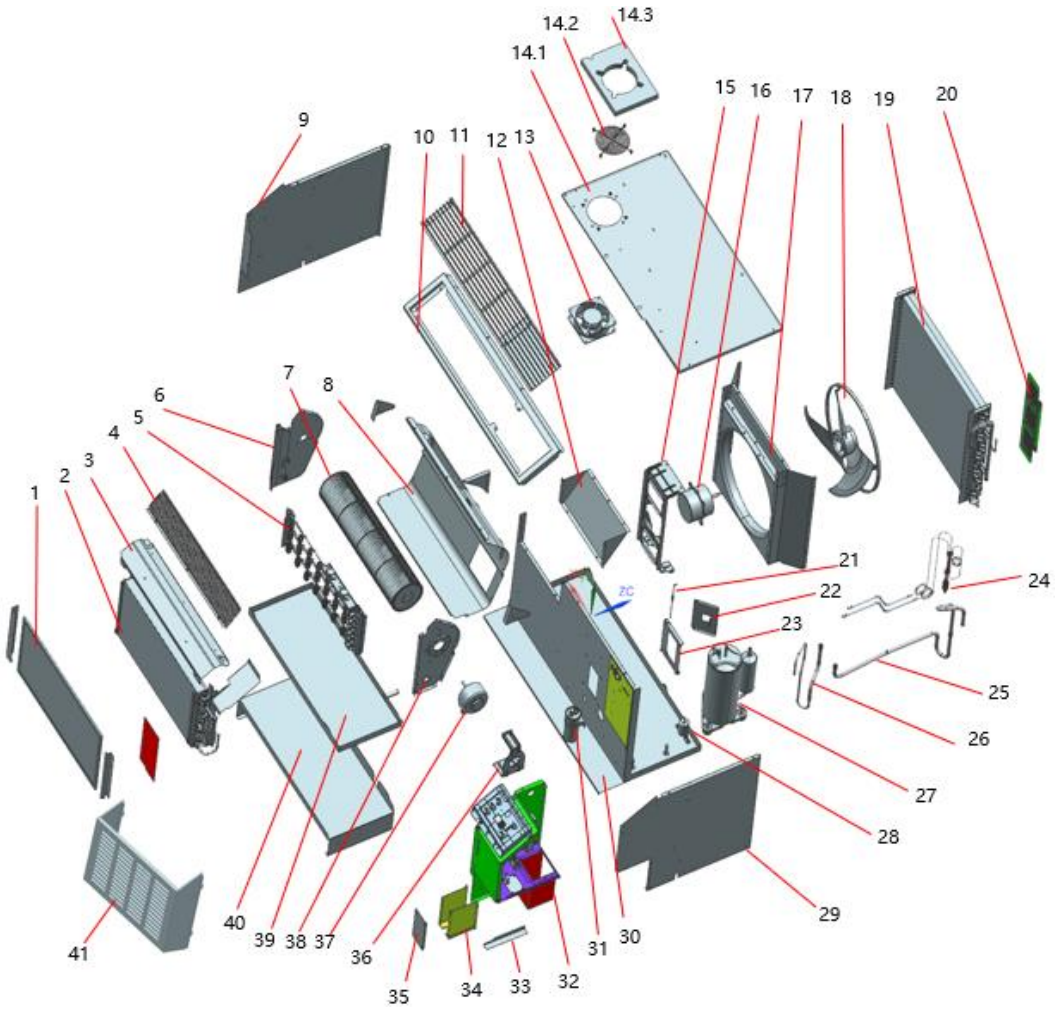
Malfunction	Reasons	Solve
Start Failure	Power line bad, units don't have power supply	Check the voltage on the output side, push the RESET button, if still don't have voltage, but power grid has output, you need to change the power line.
	Power line isn't fixed well	Check that whether power line is fixed well.
	PCB/power line fuse break	exchange the PCB fuse/power line
	Bad contact between PCB and control board	Check the contact, make sure that contact well
	Compressor delay start	It's normal, compressor will start after 3 mins
	Power cut	When power on, because of auto-restart, unit will start in 120~240s
	Power line protection trip	Check the wires that whether it comes cross plate or other metal, push the RESET button on the power line.
	Unit in protection mode	Please check the code in the manuals
	PCB or Control board is bad	Replace the PCB or control board
Control board/remote control not functioned	Connect wire controller, control board and remote controller, unit not functioned	If you need to use control board and remote controller, you need to unplug the wire controller
remote controller is not sensitive	Battery has been used for a long time; control board signal receiver is not assembled well; remote controller signal is blocked.	Replace new battery; check the signal receiver is well assembled, and no things block the remote controller.
Indoor fan/outdoor fan not functioned or run slowly	fan is locked by something or the connection wire is not fixed well, fan capacitor is not fixed well; fan capacitor is out of service life.	Check that whether fan can running normal, whether motor wire is fixed well; for the slowly running speed, you could change a new capacitor.
Not well cooling/heating	Something is blocked at the indoor air outlet.	Make sure that there are not anything at the indoor air outlet.
	Something is blocked at the outdoor air outlet.	Make sure that the grill is suitable for the unit, wrong grill will cause the compressor being protected; make sure that the grill has more than 70% turnover

	Set not suitable temperature	Set higher/lower temperature by the control board, remark: temperature setting restriction will restrict the setting temperature.
	Indoor air return filter is blocked.	Should clean the filter every month at least.
	Room is hot/cold	Let unit run a little longer that room temperature will be lower/higher
	Heat leakage between indoor and outdoor	Block the leakage place
	Indoor coil not cold/heat	Charge the refrigerant
Unit has noise	Fan blow to plate or something in the air flue	Make sure that all the fan assembly are fixed well, and nothing is in the air flue
Bad smell when heating	The dust on the E-heater is heating	The bad smell will disappear a little later
Outlet temperature is not always cooling/heating	Outlet temperature is not high enough when heating by compressor	It's normal phenomenon, it blows comfortable air when heating.
	Fan stops when cooling/heating.	It's normal phenomenon that fan stops when get to setting temperature (In new control board, could choice the different running status by the dipswitch)
Air outlet temperature is not high enough when heating.	Air outlet temperature is not high enough.	Change to E-heater mode.
Outdoor is dripping water.	Not install the drain pipe assembly.	Install the drain pipe assembly.
Indoor is dripping water.	Wall sleeve is installed incorrectly.	Install the wall sleeve according to the installation manual.
Indoor coil freeze.	Outdoor temperature is too low.	When outdoor temperature is low to 12.8℃（55℉）or lower than this point, it will cause that indoor coil freeze, open the fresh air, and running at fan mode.
	Filter is blocked.	Clean the filter.
E2 Indoor temperature sensor failure	Indoor temperature sensor open circuit or short circuit	Check the sensor by multi-meter.
E3 Indoor coil temperature sensor failure.	Indoor coil temperature sensor open circuit or short circuit	Check the sensor by multi-meter.
E4 High temperature protection of air outlet	Evaporator or condenser blockage/ Indoor fan motor is running normal	Remove dirt and keep it unobstructed; The indoor motor power cable should be firmly connected to power board
E5 Outdoor coil temperature sensor failure.	Outdoor coil temperature sensor open circuit or short circuit	Check the sensor by multi-meter.

E7 Air outlet temp sensor failure	Air outlet temp sensor open circuit or short circuit	Check the sensor by multi-meter.
E8 Overheating protection/defrosting	Indoor fan failure/refrigerating system failure/indoor coil temperature sensor failure.	Check the indoor fan/refrigerating pipe/indoor coil sensor.
E9 High temperature protection of outdoor coil	Outdoor fan failure/refrigerating system failure/high pressure switch failure.	Check outdoor fan/refrigerating pipe system
EE EEPROM error	Program selection failure/PCB failure	Check the model and power off and restart the unit to see if it is normal works
EH Electric heater selection error	Failure electric heater for 9K or 12/15K models	Check the model and select correct electric heater and power cord

VIII. Explosive views and part list

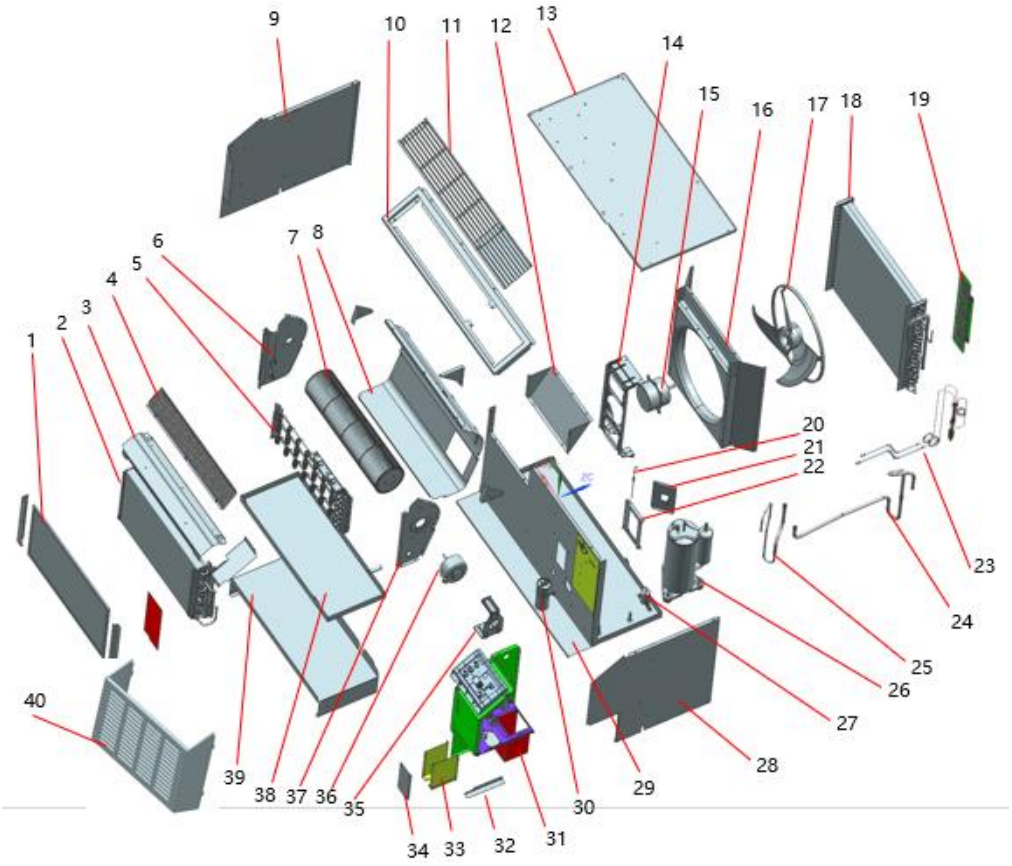
(1) Modes: Cooling with Air duct



No.	Part Name	Quantity
1	Filter	1
2	Evaporator assy	1
3	Air outlet assy	1
4	Outlet air metal mesh cover	1
5	Electric heater	1
6	Air duct right side panel sponge assembly	1
7	Cross-flow fan blade	1
8	Air duct body sponge assembly 2	1
9	Air duct left side panel sponge assembly	1

10	Air outlet bracket sponge assembly	1
11	Indoor side outlet grille assembly (metal)	1
12	Rear side panel sponge assembly of air duct	1
13	Ventilation fan assembly	1
14	Top cover plate sponge assembly 2	1
14.1	Top cover 2	1
14.2	Air outlet protective net	1
14.3	Special shaped sponge 2 (top cover plate)	1
15	Outdoor fan motor bracket	1
16	Outdoor fan motor	1
17	Air guide ring assembly	1
18	Axial-flow fan blade	1
19	Condenser assembly	1
20	Air grille	1
21	Fresh air door shaft	1
22	Fresh air door cover sponge assembly	1
23	Fresh air door fixing plate sticking cotton assembly	1
24	Capillary assembly	1
25	Air return pipe assembly of compressor	1
26	Exaust air pipe assembly of compressor	1
27	Compressor ASM135N1UEZ	1
28	Drain valve	1
29	Air duct right side panel sponge assembly	1
30	Chassis base pan sponge assembly	1
31	Compressor capacitor	1
32	Electric control box assembly	1
33	Fresh air door pull rod (sheet metal)	1
34	Power cord cover weldment	1
35	Power cord cover3	1
36	Indoor fan motor bracket	1
37	Indoor fan motor	1
38	Air duct right side panel assembly	1
39	Water tray sponge assembly (sheet metal)	1
40	Water tray support plate	1
41	Front panel(metal)	1
42	R410A refrigerant	840g/29.6oz

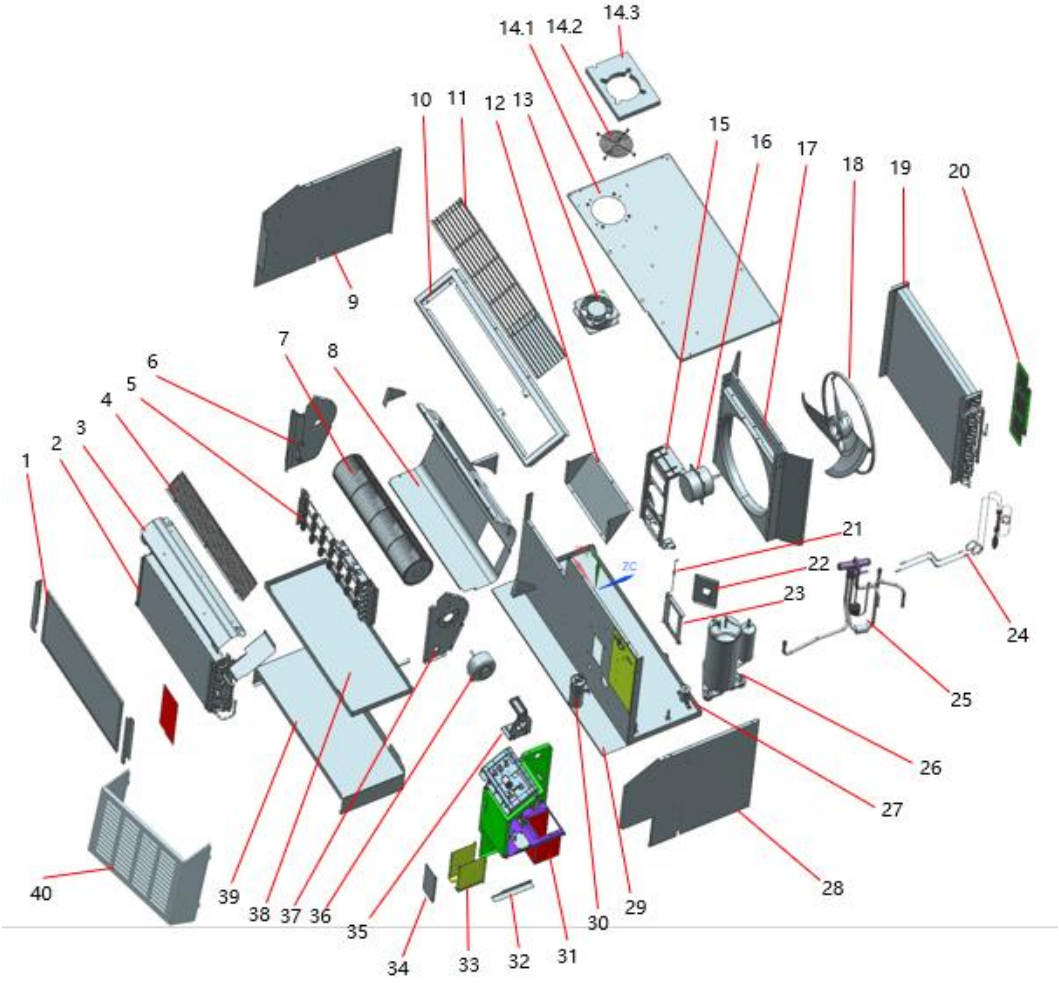
(2) Modes: Cooling without Air duct



No.	Part Name	Quantity
1	Filter	1
2	Evaporator assy	1
3	Air outlet assy	1
4	Outlet air metal mesh cover	1
5	Electric heater	1
6	Air duct right side panel sponge assembly	1
7	Cross-flow fan blade	1
8	Air duct body sponge assembly 2	1
9	Air duct left side panel sponge assembly	1
10	Air outlet bracket sponge assembly	1
11	Indoor side outlet grille assembly (metal)	1
12	Rear side panel sponge assembly of air duct	1
13	Top cover plate sponge assembly 2	1
14	Outdoor fan motor bracket	1

15	Outdoor fan motor	1
16	Air guide ring assembly	1
17	Axial-flow fan blade	1
18	Condenser assembly	1
19	Air grille	1
20	Fresh air door shaft	1
21	Fresh air door cover sponge assembly	1
22	Fresh air door fixing plate sticking cotton assembly	1
23	Capillary assembly	1
24	Air return pipe assembly of compressor	1
25	Exaust air pipe assembly of compressor	1
26	Compressor ASM135N1UEZ	1
27	Drain valve	1
28	Air duct right side panel sponge assembly	1
29	Chassis base pan sponge assembly	1
30	Compressor capacitor	1
31	Electric control box assembly	1
32	Fresh air door pull rod (sheet metal)	1
33	Power cord cover weldment	1
34	Power cord cover3	1
35	Indoor fan motor bracket	1
36	Indoor fan motor	1
37	Air duct right side panel assembly	1
38	Water tray sponge assembly (sheet metal)	1
39	water tray support plate	1
40	Front panel(metal)	1

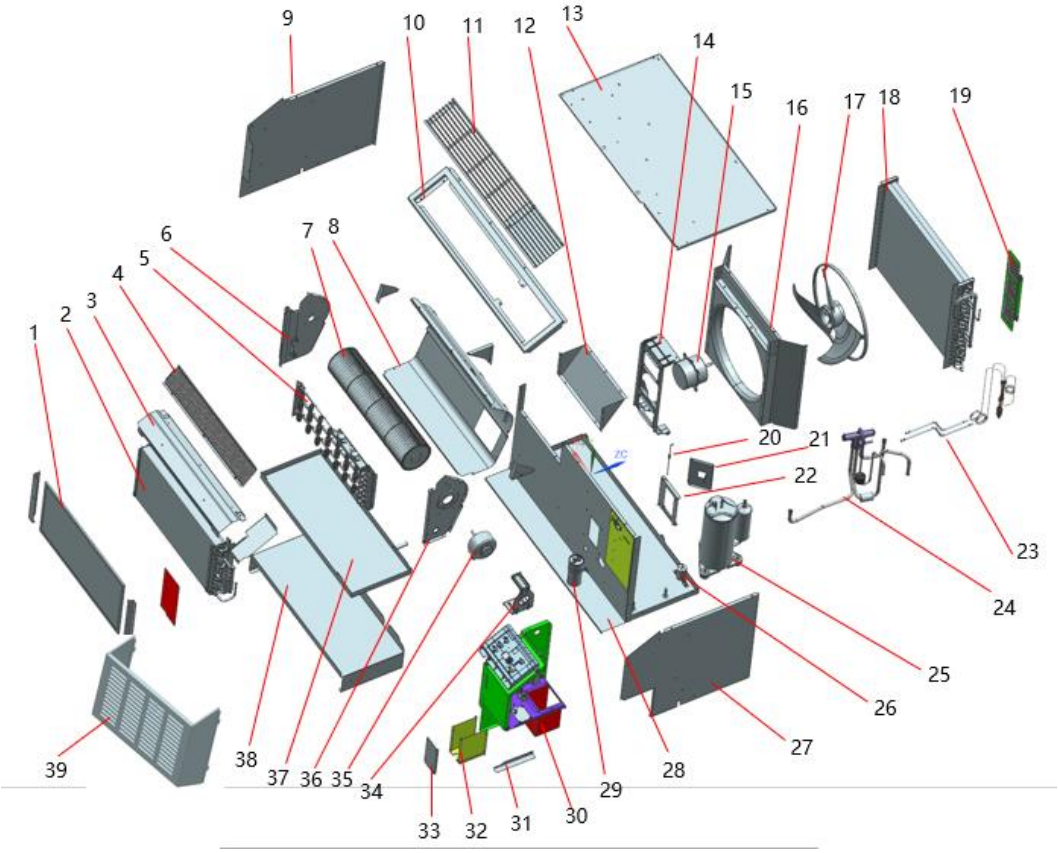
(3) Modes: Heat pump with Air duct



No.	Part Name	Quantity
1	Filter	1
2	Evaporator assy	1
3	Air outlet assy	1
4	Outlet air metal mesh cover	1
5	Electric heater	1
6	Air duct right side panel sponge assembly	1
7	Cross-flow fan blade	1
8	Air duct body sponge assembly 2	1
9	Air duct left side panel sponge assembly	1
10	Air outlet bracket sponge assembly	1
11	Indoor side outlet grille assembly (metal)	1
12	Rear side panel sponge assembly of air duct	1
13	Ventilation fan assembly	1
14	Top cover plate sponge assembly 2	1
14.1	Top cover 2	1

14.2	Air outlet protective net	1
14.3	Special shaped sponge 2 (top cover plate)	1
15	Outdoor fan motor bracket	1
16	Outdoor fan motor	1
17	Air guide ring assembly	1
18	Axial-flow fan blade	1
19	Condenser assembly	1
20	Air grille	1
21	Fresh air door shaft	1
22	Fresh air door cover sponge assembly	1
23	Fresh air door fixing plate sticking cotton assembly	1
24	Capillary assembly	1
25	4-way valve welding assembly	1
26	Compressor ASM135N1UEZ	1
27	Drain valve	1
28	Air duct right side panel sponge assembly	1
29	Chassis base pan sponge assembly	1
30	Compressor capacitor	1
31	Electric control box assembly	1
32	Fresh air door pull rod (sheet metal)	1
33	Power cord cover weldment	1
34	Power cord cover3	1
35	Indoor fan motor bracket	1
36	Indoor fan motor	1
37	Air duct right side panel assembly	1
38	Water tray sponge assembly (sheet metal)	1
39	water tray support plate	1
40	Front panel(metal)	1

(4) Modes: Heat pump without Air duct



No.	Part Name	Quantity
1	Filter	1
2	Evaporator assy	1
3	Air outlet assy	1
4	Outlet air metal mesh cover	1
5	Electric heater	1
6	Air duct right side panel sponge assembly	1
7	Cross-flow fan blade	1
8	Air duct body sponge assembly 2	1
9	Air duct left side panel sponge assembly	1
10	Air outlet bracket sponge assembly	1
11	Indoor side outlet grille assembly (metal)	1
12	Rear side panel sponge assembly of air duct	1
13	Top cover plate sponge assembly 2	1
14	Outdoor fan motor bracket	1
15	Outdoor fan motor	1
16	Air guide ring assembly	1
17	Axial-flow fan blade	1
18	Condenser assembly	1
19	Air grille	1

20	Fresh air door shaft	1
21	Fresh air door cover sponge assembly	1
22	Fresh air door fixing plate sticking cotton assembly	1
23	Capillary assembly	1
24	4-way valve welding assembly	1
25	Compressor ASM135N1UEZ	1
26	Drain valve	1
27	Air duct right side panel sponge assembly	1
28	Chassis base pan sponge assembly	1
29	Compressor capacitor	1
30	Electric control box assembly	1
31	Fresh air door pull rod (sheet metal)	1
32	Power cord cover weldment	1
33	Power cord cover3	1
34	Indoor fan motor bracket	1
35	Indoor fan motor	1
36	Air duct right side panel assembly	1
37	Water tray sponge assembly (sheet metal)	1
38	water tray support plate	1
39	Front panel(metal)	1
37	Air duct right side panel assembly	1
38	Water tray sponge assembly (sheet metal)	1
39	water tray support plate	1
40	Front panel(metal)	1